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DIGITAL CONNECT

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INSIDE

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Abdulla Hashim, Senior Vice
President, Digital Services, Etisalat

Digital future

Within a number of years, we will live in the age where everything is digital. The extent to which our society is currently digitalised will pale in comparison to what lies ahead. As well as systems, buildings and things, even humans will become digitalised. Everything from electronic devices to the clothes on our backs will transmit electronic signals as part of the all-encompassing Internet of Things.

This in turn will increase the need for an organisation's processes to be digitalised. The emergence of digitalisation will bring a disruption of the market, and there is every chance that if elite vendors do not stay ahead of the game, they will lose their dominance within a few years. The same goes for CIOs. With the lines between hardware and software becoming increasingly blurred, it is essential that IT leaders take a bold leap and embrace the promise of digitalisation, rather than burying their heads in the sand and ignoring it.

Those who lack the bravery and the vision to venture into digitalising their business processes could jeopardise their authority. Gartner has predicted that in the near future, there will be three times as many Chief Digital Officers within organisations. This means that CIOs will not only have to forge strong working relationships with these CDOs, but will also have to remain on their toes in to ensure their position remains a prominent - and not a secondary - part of an IT team.

Additional trends such as 3D printing and automated judgment will further transform business, and serve to reinforce the idea that digitalisation is a cornerstone of the future. The Internet of Things promises a value-add to the world of technology that is worth trillions of dollars, and in the long term it is important to confront the reality that with the rise of smart technology that generates so much data, digital machines will take over a lot of roles previously occupied by people.

Etisalat is a leader in this journey into digitalisation. Our M2M and cloud services are cutting-edge third platform offerings, while the development of our Enterprise Application Store 'Appsouk' is due for completion in June. I hope you enjoy reading this issue of Digital Connect, as you join us in the journey into digitalisation.

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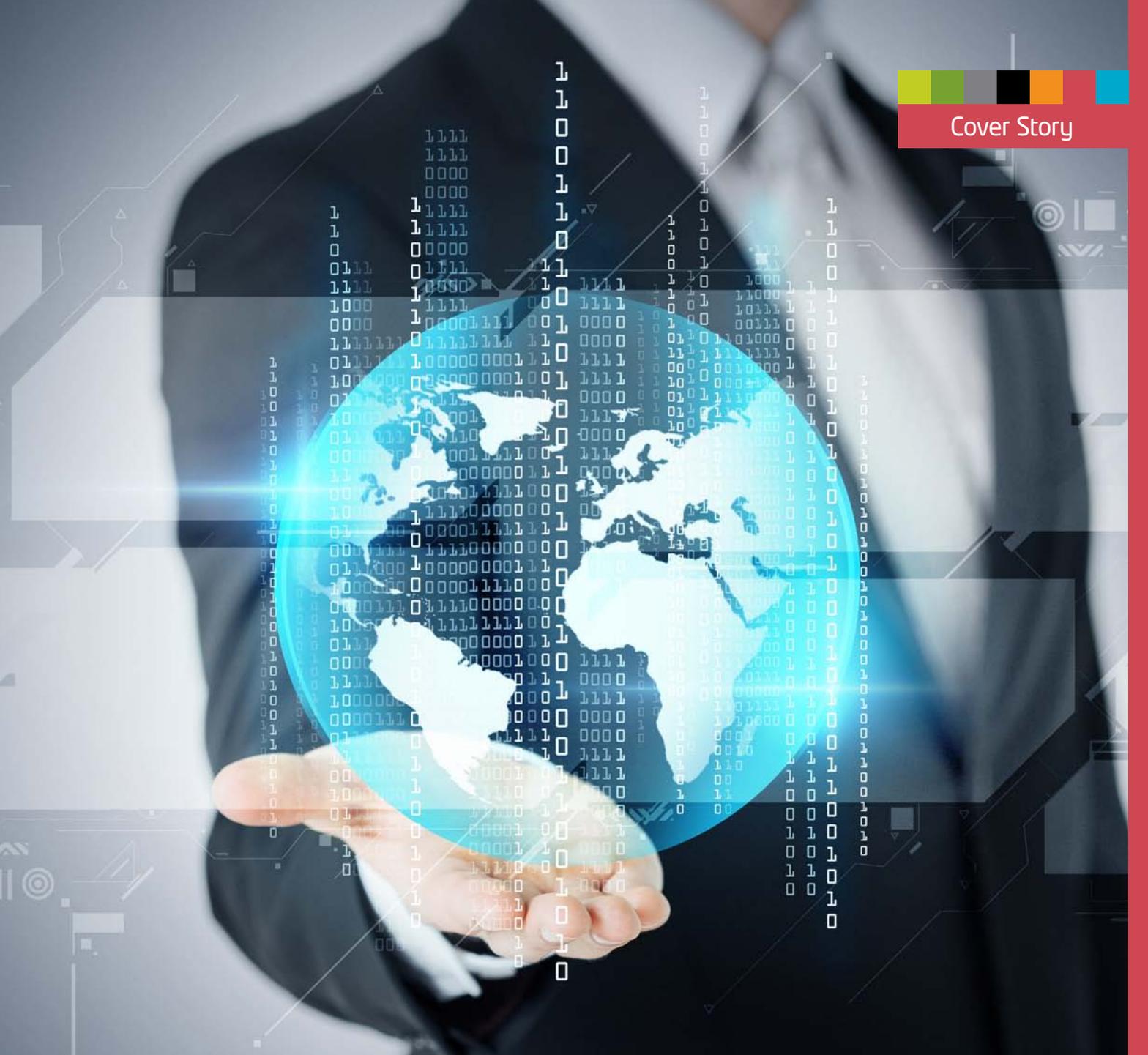
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Leading in a digital world

Although the impact of digitalization is not new, the digital economy is entering a new age that presents unprecedented challenges for all CXOs, says Mehdi Quraishi, Senior Director of Digital Services, Etisalat.

Digital tools are invading the business environment, provoking significant changes in the way we work, communicate, and sell. This has given rise to new opportunities and challenges, and has triggered the Digital Transformation of enterprises.

Big data, cloud computing, social business, and mobility are causing digital disruption across many industries. Social media and mobile technologies have shifted the balance of power and influence to the consumer. Engaging effectively with the ecosystem to drive ROI requires a shift in both technology and culture.

Harnessing the disruptive force of digital requires

a holistic view of the enterprise, encompassing both technology and culture. Digital must be ingrained and integrated across sales, customer service, marketing, and human resources, affecting the entire universe of business operations. Don't create a digital department. All of your departments will be digital soon.

Despite growing acknowledgment of the need for digital transformation, most companies struggle to get clear business benefits from new digital technologies. They lack both the management temperament and relevant experience to know how to effectively drive transformation through technology.

Even companies where leadership has demonstrated it can effectively leverage technology can run into challenges with new digital technologies. Today's emerging technologies, like social media, mobile, analytics and embedded devices, demand different mindsets and skill sets than previous waves of transformative technology.

There is no one factor that impedes digital transformation. Lack of vision or sense of urgency plagued many companies, culture at others, and organizational constraints problems at still others.

Digital transformation has become the ultimate challenge in change management because it impacts not only industry structures and strategic positioning but all levels of an organization (every task, activity, process) and its extended supply chain. Leaders must constantly challenge their organizations to ensure that this technology-enabled change can unlock productivity gains and significant competitive advantage and understand where and how the fundamentals of their current operations could be unsettled by agile new entrants or new business models.

“ Digital transformation has become the ultimate challenge in change management because it impacts not only industry structures and strategic positioning but all levels of an organization (every task, activity, process) and its extended supply chain. ”

“ Companies that effectively manage digital technology can expect to gain in one or more of three areas: better customer experiences and engagement, streamlined operations and new lines of business or business models. ”

Companies that effectively manage digital technology can expect to gain in one or more of three areas: better customer experiences and engagement, streamlined operations and new lines of business or business models. Though innovative new business models are what every CXO dreams of, companies more often see digital technologies help transform their customer experience or operations.

Given the novelty and cross-functional nature of leading digital transformation at an enterprise, settling on the key qualifications for the role can be a challenge in itself. Opinion is split as to whether leading digital transformation is better understood as an evolution of the roles of the CIO or CMO. The explosion of interest in a new executive role the Chief Digital Officer (CDO) reflects a debate as to whether experience leading traditional IT or marketing functions is adequate preparation for leading digital transformation.

Digital transformation in enterprises has built intense pressure on CXOs to redefine and rethink their interactions with customers, business process, and business models. Leveraging the full potential of digital technology is the new imperative before the enterprises looking to gain a competitive edge in the market.

To fully exploit the potential business opportunities inherent in going digital, enterprises need to build and execute a digital transformation framework powered by digital platforms and technologies.

The adaption and integration of mobility, cloud and social networks can make the digital transformation journey profitable and successful for enterprise. The Digital trinity can help enterprises save cost, grow in scale, reduce time to market, and increase mobility, with the ultimate goal of driving innovation around products to ensure market leadership.



Ready for the future

Etisalat's Appsook is set to revolutionise the way software is being bought and sold.

In 2010, Etisalat had published a RFI for pure play cloud, which was Platform-as-a-Service (PaaS) and software-as-a-service (SaaS). Etisalat already had utility computing which was on its way then to becoming a fully-fledged infrastructure-as-a-Service (IaaS). To fill in certain gaps, the application layers needed careful consideration. Following the RFI, in 2012 the RFP for the application platform had been awarded to NEC's Saudi Arabian branch.

Soon after, Etisalat began the development of Appsook on a brokerage model. "Being a telco company, we knew that it is difficult and virtually impossible for us to build and operate a full-fledged Application Store all by ourselves, and also have all the services within our own development team," says Ramesh Krishna Bhandari, Manager/Product Marketing, Hosting and Cloud Services, Etisalat. "As such, we knew from the very beginning that the only way for us to get into the market was to go via a brokerage model."

Etisalat began inviting independent service vendors to come in with their software, cloud enabled applications & services and integrate them as part of Appsook, which was technically known as the Cloud Unified Platform (CUP).

"We've done a lot of research to determine what customers are expecting from us, what kind of applications they want, and what their pain points are," Bhandari says. "Taking all that on board, we've decided what apps should constitute Appsook."

Appsook will run on a B2B model, with some services running on B2B2C and B2B2B models with resellers selling to end users.

Etisalat is initially launching seven applications as part of Appsook. Three more will follow once the first offering is up-and-running, and by the end of Q3 2014 there will be 12.

Etisalat is offering an appointment scheduling application, which Bhandari describes as being "ideally suited to healthcare professionals," and is due to gather steam following its anticipated release for professionals in other verticals too in June. Tally.ERP 9 has been incorporated as the Enterprise Resource Planner application, and McAfee SaaS Endpoint protection service is also on offer. Etisalat is also introducing a 'Cloud Secretary' application, which is a virtual assistant application that provides a 'Secretary-as-a-Service.' This can filter off calls, direct calls to certain numbers, take messages and can record and forward personal messages.

Sugar CRM is an, open source platform, and LibreOffice is an office automation software, a free software offered with either standard or premium paid support.

The emBlue email marketing application is an email marketing campaign manager which offers a transparent, step-by-step insight into the campaign process. "It allows you to see which emails have landed in the target inbox, which ones have been read, which ones have been forwarded, and also those that have bounced back,"

Bhandari says. "This can provide companies with valuable insights as to what campaigns have been successful, the ones that haven't, and basic information such as the need to clean out a database if emails are bouncing back. This provides an ROI on each email marketing campaign"

Bhandari is mindful of the need for end users to have a smooth, hassle-free experience. Etisalat realises the process of choosing the right applications can be a pain point, and that's why the selection process for Apsouk has been rigorous. "The most important thing for any customer is to automate business processes and move workloads into the cloud," Bhandari says. "They have to do a lot of tedious and often murky jobs, like finding out who caters for these processes, and then evaluate each of them. Here, Etisalat has done all these processes; we've gone to the extent of evaluating multiple services, and multiple brands within the same service type. Look at ERPs, there are so many on the market getting into cloud. A lot of them are not in the cloud in the real sense, they are not able to cloudify the entire ERP, and there are a lot of ifs and buts over cloud specifications."

He is also confident over the clear advantages that Etisalat offers with Tally.ERP 9, "It's a pure cloud-based product," he says. "Customers have the reassurance of knowing that when their applications run through our data centres, all these centres are based in the UAE, which means they're on Etisalat's backbone. If Dubai's power were to ever suffer, our data centres would still be up-and-running. While we have the strongest and the most resilient network in the Middle-East, we cater to our customers with alternate routes especially when a catastrophe like a submarine cable is damaged. Our customers have been faced with such catastrophes before and have commended us for providing such alternate means and routes on Datacenter power and Internet access."

Etisalat's decision to bring applications under their brand name was not taken lightly. The company's move to the cloud was gradual, and now Bhandari feels Etisalat is in a stronger position to deliver the cloud. "We were studying how a telco company could get into all layers of the cloud, and we thought 'should we ask somebody to consult and do everything for us,'" he says. "As telcos, we used to own IPRs which are no longer paying. Things have changed drastically over time; losing voice revenues to Internet calls being an example. With the amount of innovation around technology nowadays, we didn't think it prudent for us to develop all our applications, instead we thought we'd have a mix of various applications."

“ The most important thing for any customer is to automate business processes and move workloads into the cloud. ”

Apsouk is an appropriate platform for businesses, small and large. "In the Middle East, there is currently no central SMB - or even enterprise - app store," Bhandari says. "Although we are currently setting sail into the SMB market, we believe Apsouk could drive enterprise apps too. The platform can take both consumer and enterprise applications. We'll test the water with what SMEs are looking to adopt in the cloud, as in the enterprise sector they're generally looking for private cloud. We don't see much traction happening there. There might be a few non-critical apps but that can be catered to by an SMB package. From an enterprise perspective, Etisalat's numbers differ drastically to those of companies in Europe or the US; an enterprise here would be the size of an SMB in Europe by employee strength. Our services cater to the SMB and to the enterprise sectors."

Etisalat will also be giving small companies and young entrepreneurs the opportunity to develop their own applications, which could be adopted into Etisalat's Applications ecosystem. Once Etisalat has seen tangible proof of added business value, they will be inducted into the system as Independent Service Vendor entrepreneurs after passing through a proper due diligence process. "The whole idea is to bring in young brains, and budding software companies by giving them the opportunity to expose their services to our catalogue on our platform, and vice versa, and we could resell their applications. However this would be in phase 2 of Etisalat's pure-play cloud initiative," Bhandari says.

Some of Etisalat's apps will be customisable, and many will cater to mobile platforms. "What we've seen recently is most ISVs developing apps, and a lot of innovation happening in CRM and ERP," Bhandari says. "ERPs used to be charged on per user per module, but now we can provide all of the modules, and charge on a per user, per month basis. Most application vendors provide all features, let the customer decide what they want and then charge accordingly. These apps may require customisation for integrating with the back ends of customers, we can study their environment and provide professional services to integrate with their backend applications for them."



Strategic sourcing: How enterprises can achieve excellence

The strategic sourcing market is maturing rapidly. Etisalat's experience in working with the industry shows that organisations are now far better negotiating and implementing strategic sourcing agreements than they were.

However, getting successfully to a signed agreement isn't the end of the story - do these deals then go on to deliver the value that was expected from them? If not, why not?

Cost reduction and service improvement are of course the staple requirements from strategic sourcing for most organisations. Most identified these upfront in their initial planning and approach to outsourcing. However, it is not the only key requirement and for many other benefits such as continuous improvement and identification of new value adding opportunities, potential for transformation etc. were also highly important. What is concerning is

that many of the organisations entered strategic sourcing selection exercises without having properly identified these other requirements and therefore may have entered a process without properly considering what they wanted and how best to source it - hence they may have followed unsuitable sourcing approaches, without the most appropriate supplier shortlist.

Strategic sourcing goes beyond the simplistic formula of "outsourcing what isn't core". Instead, a strategic approach to sourcing connects the company's operational base to its business aspirations. It ensures that the service

delivery model is not only aligned with, but can also help to drive forward, the critical operational and IT aspects of the business strategy. This approach means going back to basics by considering the direction in which the business is heading and using sourcing options to help take it there.

A well-constructed sourcing strategy should address three fundamental questions:

1. Where are we? How effective and efficient are our current capabilities?
2. Where could we be? What are the incremental opportunities?
3. How can we get there? What is the roadmap that will allow us to move forward?

Like many things in business, ambition is a moving target.

Developing and implementing a strategic sourcing strategy is complicated by changes in executive leadership, market pressures, shareholder expectations for near-term results, and the like. Yet, when designed and implemented properly, the benefits of sourcing programmes are compelling.

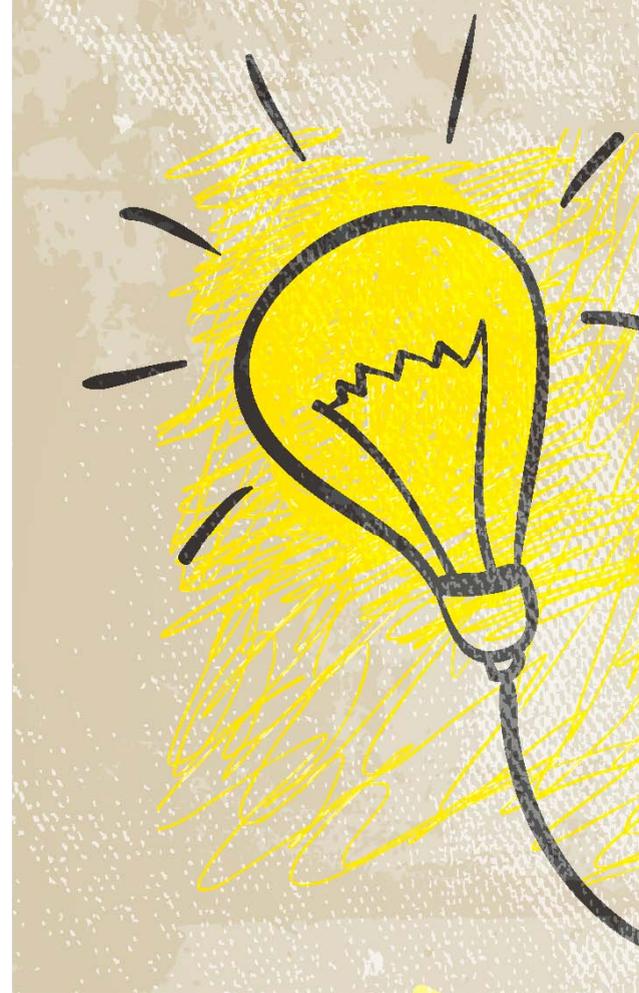
A sourcing strategy is a process, not an isolated decision. It continuously:

- balances internal and external activities, services and know-how;
- aligns business strategy, business processes and IT services; and
- balances the results that must be achieved and the future options available.

In today's fast moving, competitive environment, all major projects need to be aligned with corporate objectives. Sourcing has the potential to deliver significant benefits but large projects require substantial effort and often result in considerable change in the organisation. These projects demand resources and management attention that, depending on corporate priorities, may be better directed elsewhere.

Good contracts often founder because alignment with the corporate operating model is not adequately addressed. All these factors need to be considered prior to initiating sourcing activities.

A sourcing strategy shares many of the characteristics



of an enterprise strategy. In particular, it takes a broad view of both an institution's operational and IT processes and its deliverables. This broad view encompasses a number of dimensions:

Horizontal: strategic sourcing is multi-departmental, spanning all functional areas and customer channels

Vertical: strategic sourcing considers the drivers across the value chain when determining the best ways in which to approach business processes, technologies, platforms and applications

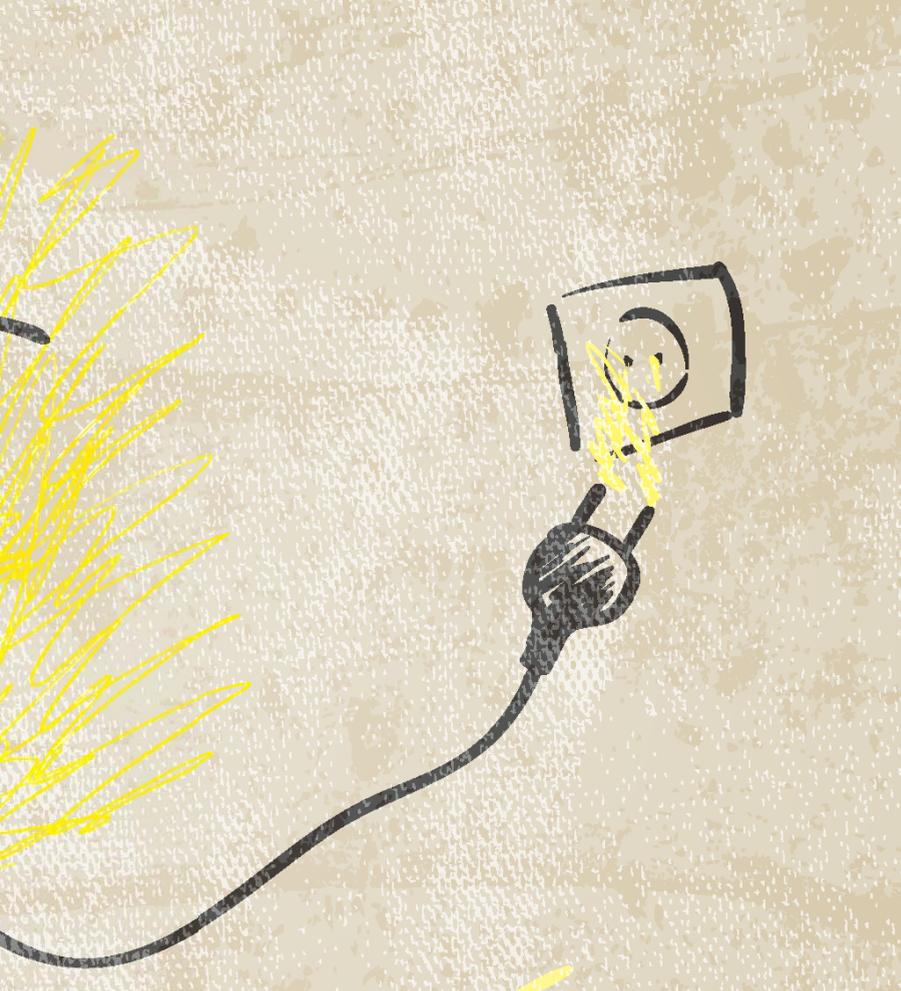
Temporal: strategic sourcing takes a long-term view and considers not only current operational performance, but also future trends in best practices and expected structural changes in service provision. These changes may be due to competitive pressures, market realignment, changes in volume, new technologies, automation needs, consolidation opportunities, and the longer-term capabilities of strategic partners.

Strategic sourcing brings a number of key benefits, which are unattainable by employing a purely tactical approach. These include:

Benefits of scope

- More chance of picking the right solutions - Too often, sourcing decisions at the local, tactical level end up with simple binary options: to outsource or not to outsource. In contrast, strategic sourcing takes a broader view and

“ Organisations have got to get a better handle on their existing costs and how they compare to the industry average. ”



encourages the consideration of a wider set of choices. Outsourcing will often be one of these, but so too will other potential solutions, such as expanding internal service and competence centres, or partnering with others through Joint Ventures, Buying Committees or a Build Operate Transfer (BOT) approach. Sometimes the best sourcing solution will involve in-sourcing in order to leverage a cross-industry platform or enable service delivery to multiple clients.

- More chance of picking the best provider - Taking a wider geographic view brings a greater number of potential suppliers into consideration. Suppliers are increasingly building up their global service delivery capabilities and are ready to invest to enter new markets. This brings opportunities for cheaper and better solutions.
- Higher levels of benefit - Sourcing at the organisation-wide or enterprise level provides the opportunity to benefit from greater economies of scale. In contrast, piecemeal, tactical sourcing, even if done well, often leads to duplication and inefficiency across the enterprise and “money left on the table”.
- More stable, longer-term benefits - Strategic sourcing tends to take a longer-term view than more tactical approaches, with a greater readiness to contemplate a longer contract term. This brings with it both a greater degree of cost certainty and lower absolute costs, since suppliers can invest to deliver transformational change

and reduce the price and risk premiums they demand for short-term contracts.

- More opportunities for ongoing process improvement - By sourcing complete end-to-end processes rather than components of processes, there is a greater opportunity for service providers - whether internal or external - to achieve continuous process improvement through Six Sigma and related methodologies than where only part of the value chain is addressable.
- Benefits of flexibility - A sourcing strategy that is integrated and aligned to the business strategy results in an operating model that is more flexible and responsive to change than the operational hotchpotch that arises from a piecemeal, transaction-focused approach.

By aligning the operating model with strategic goals, the organisation can be more agile in responding to changes not only in customer requirements, but also in the supplier market. Such changes include the emergence of new services and sourcing models, as well as developments in price points and value offerings.

In this way, the sourcing strategy can help drive the organisation forward, rather than simply act as an interface with day-to-day operations.

- Benefits of co-ordination - Finally, further benefits are associated with a greater degree of co-ordination at an enterprise level. As one example, fewer resources should be required to execute and manage a co-ordinated strategic change than a series of isolated, tactical projects.

Conclusion

Strategic sourcing is an instrument for flexibility. Neither a rigid decision nor a static contract, sourcing, should, and increasingly is, being viewed as a “top-down” tool - connecting strategy with implementation.

It means moving away from providing services, on a function by function or business unit by business unit basis, to managing services on a company-wide scale. Designing and implementing service propositions that capture enterprise scale and maximise synergies is not easy and requires that a company addresses inter-connected needs and capabilities across often far-flung global operations. However, Enterprises across all industries that can move in this direction will enjoy better performance and cost efficiencies than organisations which persist with a function-by-function approach and redundant, sub-scale services.

Many executives fall into the trap of thinking of sourcing initiatives as merely tactical or technical projects, rather than long-term, significant strategic programmes that fundamentally change the profile of the organisation. It is vital that companies do not underestimate the strategic value of their sourcing relationships as the foundation for ongoing success.

Demystifying BLE Beacons

The next big thing in mobile communications is likely going to be tiny Bluetooth beacons, which use short-range communication to great effect.

It is undeniable that modern, smartphone-toting humans spend most of their time indoors, but indoor spaces often block cell signals and make it nearly impossible to locate devices via GPS. This is where beacons come to the rescue. With the right app installed on smartphone, beacons can exchange data with the app on the phone, allowing the app to pinpoint precise location, down to a meter.

What are beacons?

The simplest way to think about beacons is as a kind of indoor GPS. Beacons are a low-cost piece of hardware – small enough to attach to a wall or countertop – that use battery-friendly, low-energy Bluetooth connections to transmit messages or prompts directly to a smartphone or tablet. Unlike the original Bluetooth, BLE can be left on all the time without draining your phone's battery.

The beacons come in different formats, colors and shape including small coin cell powered devices, USB sticks and software versions, even the latest smartphones can do the job.

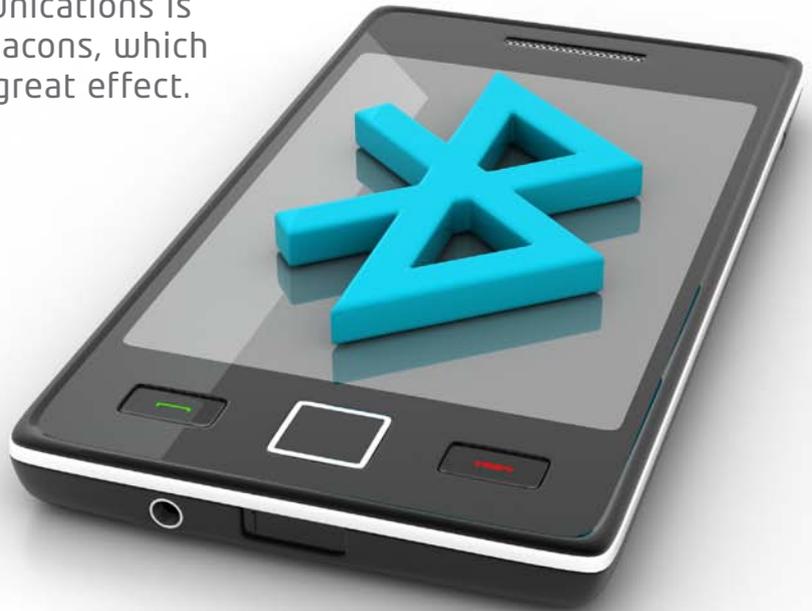
The technology involved – BLE – is already available for use in hundreds of millions of devices. Most new Android smartphones have the capacity to use BLE. Nokia has included the capacity in all its Windows phones and it has been present in Apple products since the iPhone 4S and iPad 3. Beacons continually transmit a 2.4 GHz Bluetooth signal, which can be picked up by an increasing number of smartphones that pass anywhere between few centimeters to 10 meters.

Inside most beacon cases are powerful ARM processors. Models can include storage capacity, accelerometers, temperature or other sensors that don't take up too much space or battery power. Most beacons can run for up to two or three years on a single battery or draw power from nearby computer systems or wall outlets, leading to indefinite operations beyond the years that most offer today.

A beacon has three approximate ranges that can be weakened by many obstacles such as walls, furniture, or people.

- Immediate: a few centimeters
- Near: a few meters
- Far: approximately 10 meters

Beacon already got attention of the big guys -Apple, PayPal, Qualcomm, Samsung already have beacon solution



in various stages of implementation. There are numerous companies offering beacon management and consulting on top of hardware or software platforms like Swirl, Estimote, Gelo, Roximity beacons.

As with any implementation, there are a number of benefits and challenges with this approach:

Advantages:

- Compatibility with wide range of devices
- No specific pairing (standard Bluetooth) or joining access points (Wi-Fi) is required
- Minimal battery impact
- Works without cloud connectivity (unlike 3G, WiFi etc)
- Works indoors (unlike GPS)

Disadvantages:

- Merchants must install BLE infrastructure (beacons)
- Merchants (or 3rd parties) must change mobile apps to incorporate support for BLE
- BLE allows for approximate pinpointing location in store, but is not granular enough to bypass individual authentication
- When used for payment using a linked cloud wallet, merchant will be paying card-not-present rates (higher than card present)

Beacon use cases:

Beacons are poised to transform how retailers, event organizers, transit systems, enterprises, hospitals, governmental agencies, educational institutions communicate with people indoors.

Retail

Most discussion of beacons has focused on retail, for fairly obvious reasons. Any technology that offers more insight into consumer behavior is interesting. There is big potential here when data collected via beacons is coupled with data from customer loyalty schemes. Because beacons can tell exactly where a person is in-store, stores will be able to see not just what people buy, but the journeys they make on the way – how they navigate the shop; how much time they spend in each section, whether they buy – allowing stores to adjust displays and promotions accordingly. Offers and other advertising messages could be delivered to the customer's phone at relevant points in the shop. The app could notify the store of the customer's presence in the shop and remind a shop assistant of that customer's purchase history, to allow the assistant to give personalized advice. It could also be used for follow-up marketing when people don't buy.

In theory beacons could be used for contactless payment, and Apple and PayPal are pushing this model. Shopkick and Apple are currently testing beacons in the US. The technology may also be taken up by existing third party apps like Vouchercloud.

Events management

Beacon use is being tested in stadiums now, notably in Major League Baseball stadiums in the US. Beacons can offer visitors a personalized navigation system (find the toilets/bar/exit), some relevant history and context around the game, and also to deliver offers for food and drinks.

Thinking beyond this, a social element could be introduced. A group of friends could choose to form a network, so that, for example, they can find each other easily among the many thousands of people in a stadium. 'Find your friends' could span both real and virtual worlds. A competitive/gaming element could be introduced (who has attended the most games, seen the most home runs) with the potential for a highly evolved secondary experience, based in an existing social network like Foursquare or Facebook, or on an entirely different platform.

Museums, Public offices

The potential for delivering context-based information in museums or at public offices is considerable. Visitors could use beacons as navigation systems and to curate their own visits based around their own interests and needs. Beacons will eliminate the pain of not knowing which office to enter and in which sequence, decrease queuing and increase efficiency and transparency of public offices.

Beacons can also be used to remind people to switch off

“ There is big potential here when data collected via beacons is coupled with data from customer loyalty schemes. ”

their phones when they enter secure areas of an office building or hospital. They can be used for emergency rescue signals and to take temperature readings in offices or data centers.

Airports:

At the airport, beacon will provide the traveler with indoor way finding, and nearby promotional offers based on their proximity. This enhances the traveler's overall experience by directing them to their gate (indoor GPS), informing them how much time they have (alleviating stress), security wait times, and also serving them promotional discounts and information based on their proximity to various areas and vendors.

Airlines and/or airports will receive immense value through a wealth of captured data such as behavior analytics, purchasing activity, luggage stats, customer feedback.

Where does this leave NFC?

It's human nature to want to pick winners and losers. This industry frequently creates news, confusion, and uncertainty by viewing all incremental technology as replacements for existing technology, ignoring the fact that technologies often coexist or even complement each other.

BLE supports functionality that NFC does not (location pinpointing, data transfer over more than a few ms, etc.). Similarly, NFC supports functionality that BLE can't (authentication in a specific location, support for card-present fees etc).

Will beacons take off?

We think the potential is huge in many settings, from airports to retail to restaurants, but the technology is not without problem. Indeed, in a recent PYMNTS.com podcast interview, Troy Land, Try Land, FIS Vice President of Emerging Commerce, cited some of the downsides to the technology.

"It has the potential to be very cool, very innovative. But in the same regard, if it's not executed properly, it could be interpreted as a violation of privacy," Land said. "So it's really going to be a matter of how merchants, or organizations of any type for that matter, look to deploy it."

Even though beacon technology is absolutely telecom operator agnostic, Etisalat is well positioned to introduce Beacon for both internal (office buildings, Etisalat shops) as well as external (SME, enterprises, government agencies) customers as a stand-alone offer or integrated with mPos solution. Technical demo solution is already available and further commercialization activities are under way.



Keeping customers close with mPOS

Etisalat and National Bank of Abu Dhabi (NBAD) have entered a partnership to offer mobile point of sale (mPOS) solution to merchants in the UAE enabling quick and efficient processing of card payments for all existing and new customers.

This innovative service will offer mPOS a branded Card Reader (dongle) connected to the Mobile Phone or Tablet via audio jack or Bluetooth, enabling merchant to accept customer payments for goods/services via preinstalled on Merchants' device Etisalat-Branded Mobile application.

Communication with the partner bank, NBAD, to complete financial transactions is executed via Etisalat

GSM/LTE network utilizing data or encrypted SMS media channels. As Merchant authentication and transactions security is executed via SIM card based algorithms and applications, service will be initially restricted only to the Merchants utilizing Etisalat SIM cards. Once linked up to NBAD's merchant account, vendors will be able to accept payments within minutes.

Convenience and simplicity of Merchant on-boarding process will be main Etisalat's USP (Unique Service Proposition) for mPOS service. A careful balance should be achieved between fast and efficient Merchant on-boarding while at the same time not sacrificing the security component and CDD (Customer Due Diligence) requirement imposed by the Central Bank. User friendliness and intuitiveness of application complements the overall experience.

Customer journey:

Customer selects desired item(s) in the merchant's store and the price (amount due) is agreed between merchant and the customer

- Merchant enters amount due directly on his mobile device application
- Merchant swipes customer's Credit/Debit card through the device dongle
- Customer validates amount due by entering his PIN directly on the dongle or Merchant's Mobile Phone
- Mobile Device on the background automatically sends required communication to the bank, requesting to authorize the transactions. On successful authorization, approval message comes directly to the merchant's Mobile Device in the form of SMS
- Merchant is given an option to send electronic receipt from the mobile device to consumer via SMS or email

The mPOS solution is particularly well suited for small and medium businesses that were previously unable to deploy the infrastructure to process card payment payments and any businesses operating outside of traditional retail environments, such as fast food and other kinds of delivery service. The service will bring merchant additional revenue stream, ability to accept payments "on-the-go" and outside of the main



office. There will be no need to make a substantial upfront investment for the POS device or commit to monthly rental fees. The mPos application will also offer complimentary cash management and reporting capabilities to the merchant.

Also, dongle can be unplugged at any time, and mobile phone can continuously be used for communication purposes. Additional controls over cash and inventory management will be offered free of charge.

mPos is equally enticing for Enterprises who seek to create selling opportunities everywhere, provide convenience and security for customer, reduce cost and risk of cash and management, reduce fraud and misuse of funds and create transparency and operating efficiencies with reporting capabilities.

mPOS dongle (Wise Pad Model #: MIBP-1307) selected for this project, complies with the payment acceptance requirements issued by the Central Bank of the UAE (including physical interface for entering PIN) and combines sophisticated MSR (Magnetic Stripe Reader) and SCR (Smart Card Reader) technology for EMV (Europay, MasterCard and Visa - Global Standard) chip reading.

Solution is already completed all EMV and PCI certifications as well as published as "VISA-ready" and "MasterCard Global Best practices" offerings by respective payment schemes.

Product packaging ("SME/SOHO payment proposition in the Box") will include dongle, as well as optional Etisalat line with data and voice subscription tariff and optional handset/tablet.

At the second phase of the project rollout the package can be extended to include Merchant's Debit card linked directly to the account in the partner bank, cloud-based Inventory management and/or CRM applications.

Distribution strategy will focus on targeted SME/Enterprise business vertical segments through combination of 3rd party, Direct Sales, and Etisalat and NBAD Business Center Channels.

For the purposes of efficient service commercialization an automated two level sales commission mechanism will be introduced and include fixed per successful sales/on-boarding commission and variable transactions revenue based sharing commission.

Based on consultations with the partner Bank (NBAD) and project plan, the market rollout can start during second week of June.

We are looking forward to share with you good news on the launch and onboarding numbers shortly.

“ The mPOS solution is particularly well suited for small and medium businesses that were previously unable to deploy the infrastructure to process card payment payments and any businesses operating outside of traditional retail environments, such as fast food and other kinds of delivery service. ”



The digital oil field

In an increasingly competitive, fast-changing environment, managing offshore and onshore operations creates serious challenges for oil and gas companies. Up-to-the-minute information spanning their resources is vital.

Without it, companies are unable to leverage their people and assets as efficiently as they should. This inefficiency has a negative impact on their productivity and undermines the effectiveness of their environment, health, and safety (EH&S) procedures.

The oil industry has seen an evolution of digital oil fields in the last decade thanks to advances in technology and digitalization that have enabled operators to extend the monitoring of assets and flows throughout their operations. However, as the industry contends with more complex challenges, it now recognizes that more

integrated models and business processes are required to enable digital oil field technology to tackle emerging operational challenges.

How can professionals in these organizations access information when and where it is most needed? Is there a way to improve operational capabilities and reduce costs?

The digital oilfield is about “integrating operations” using IT to change work processes for better decision making, to manage and control equipment and processes remotely, and to move functions and personnel onshore. Integrated operations enable digitally facilitated interactions that

deliver business value while simultaneously reducing business, health, safety, and environmental risk.

The digitalization will facilitate the seamless integration of data, information, and work processes. It creates a virtual environment where effective communication and collaboration among experts can occur, regardless of where the experts are physically located or to which organizations they belong. A digitalization means the connected oilfield knows no internal, limiting boundaries, and delivers information that will result in the improved recovery of hydrocarbons, more efficient oilfield operations, and increased productivity. At the most basic level, the ability to recalibrate a pressure gauge remotely imparts data that can be shared and incorporated in the decision-making process in a matter of minutes instead of hours, days, or weeks.

Benefits of digitalization - the fact that oil and gas companies are turning to digital technology because of its fundamental capabilities to:

- Reduce cycle time - by speeding up work and data capture during repetitive or time-consuming activities such as rounds, inspections, repairs, and calibrations. This reduction in process cycle time brings major payoffs in labor costs, customer satisfaction, and product quality.
- Facilitate the flow of information - by extending the use of company information and tools to more employees, bringing information to workers where they need it and helping them capture data as they work. This bilateral flow improves the efficiency of field and office employees and helps companies populate their information-driven systems with the data they need to make informed decisions and confirm regulatory compliance.
- Production Increase - Real-time interaction between involved activities and disciplines. For example, engineers monitoring compressors or wells from land can contact the field if they discover matters requiring action. Use of analysis tools in critical work processes, where the tools extract and present available information from operating data (both historic and near-real-time data). The use of interaction rooms to support work processes between land and sea, and between operator and

supplier (the measure also includes drilling, operations, and maintenance).

Etisalat expects the digital oilfield market to grow and develop substantially over the next few years. By bringing to bear over a decade of experience in the fixed and mobile world, and our extensive expertise within enterprise mobility and Machine to Machine communications (M2M), we are working with the industry to deliver the quality coverage and high levels of support needed to help oil and gas companies' network their remote assets and people.

Our deep insight into the opportunities offered by the digital oilfield is enabling us to align our solutions directly to the growth strategies of today's progressive oil and gas businesses. One important aspect of future proofing will be the capacity to keep abreast of developments in the wider mobility and wireless communications environment as they occur.

Etisalat enterprise mobility and M2M capability and expertise, which provides a managed platform with an available, reliable and secure network, managing connectivity and communications even in the most remote and hostile environments.

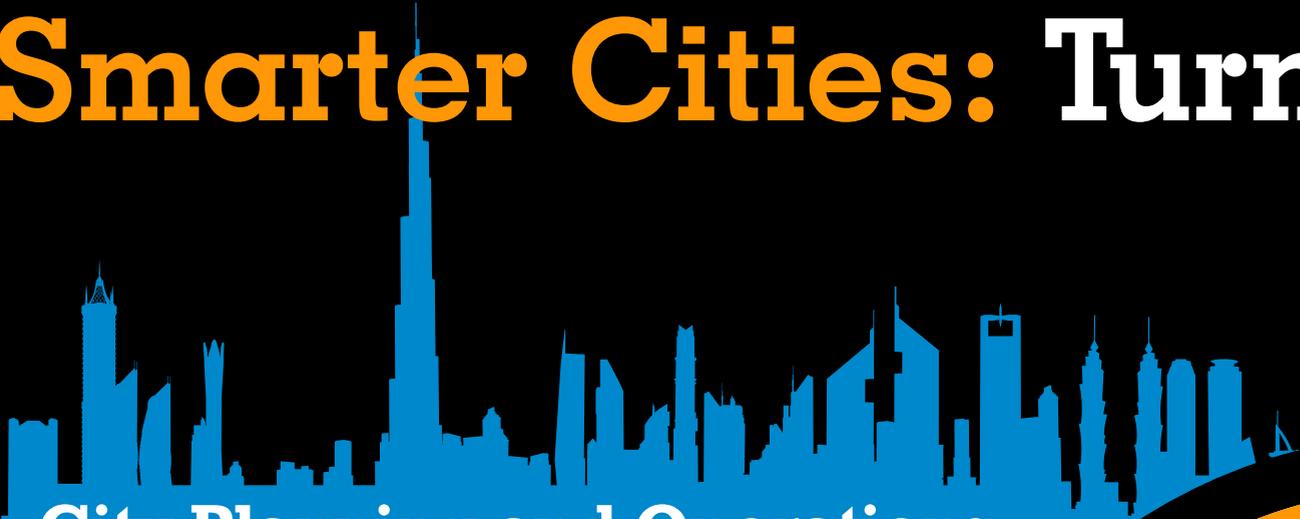
We can support organisations in their transition to the digital oilfield with mobility solutions that offer:

- Our communications network enables us to act as the single provider for cross all services
- Scalability - with the capacity to support billions of connections between assets and people
- Accurate and secure real-time data transfer
- A M2M Service Platform that enables devices and assets with a M2M SIM to communicate securely with back-end systems
- The integration of mobile devices with back-office operating systems to provide live updates to information flow, remote connectivity and control
- NFC technology on smartphones for fast user authorisation and access
- Location based services for people and property to provide enhanced safety and security
- Unified communications and collaboration solutions to connect geographically distributed workforces

Etisalat's portfolio helps customers build network communications infrastructure, remote production monitoring systems, data centres and production management and office application systems. It is also able to manage long distance gas pipelines, ensuring the smooth operation of important functions, such as seamless communication, emergency dispatch and safety testing. Focusing on enhancing user experience and improving communication efficiency, its solutions provide oilfield-wide converged communication services that can integrate voice, video and data and support secure access to terminals at anytime and anywhere.

“ Our deep insight into the opportunities offered by the digital oilfield is enabling us to align our solutions directly to the growth strategies of today's progressive oil and gas businesses. ”

Smarter Cities: Turning



City Planning and Operations

\$1 Trillion

global annual savings could be attained
by optimizing public infrastructure

Source: McKinsey

\$57 Trillion

in infrastructure investments
will be needed between
2013-2030

Source: McKinsey



Cloud is driving cities in

Water Management

60%

of water allocated for
domestic human use
goes to urban cities

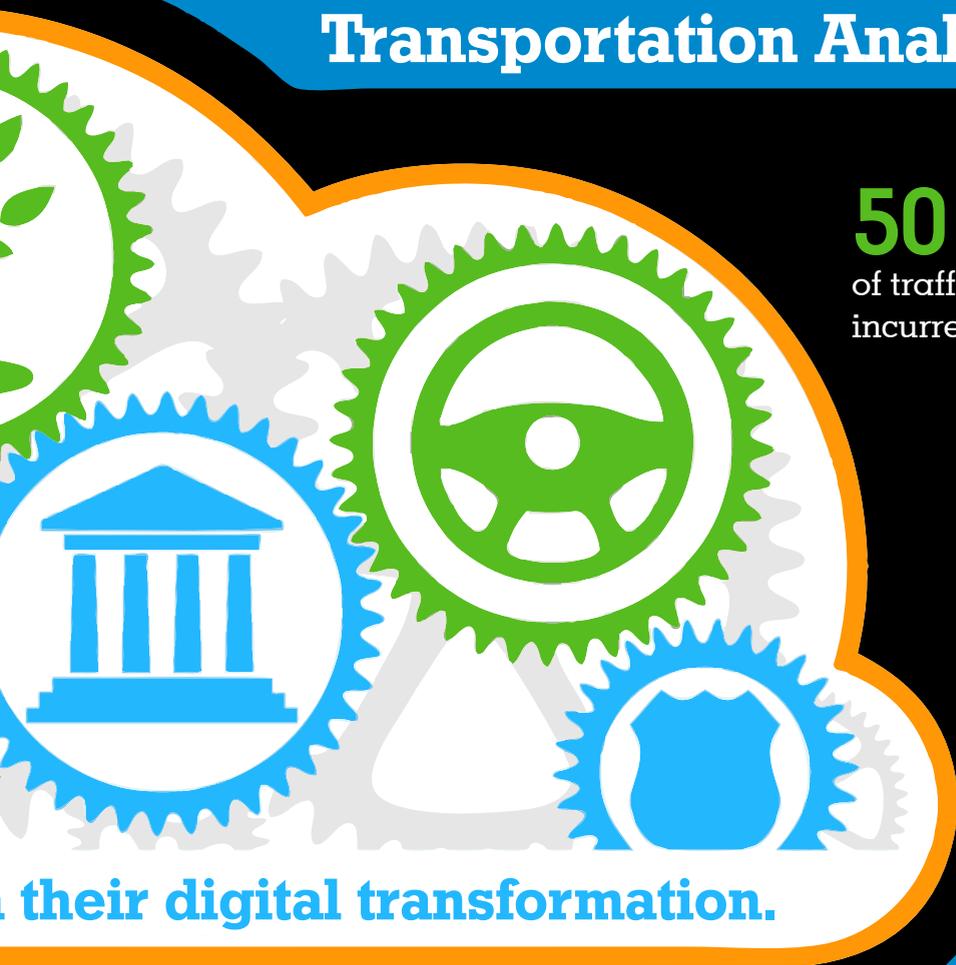
\$14 Billion

in potable water is lost every year because
of leaks, theft and unbilled usage

Source: World Bank

g Big Data Into Insight

Transportation Analytics



50 Hours

of traffic delays per year are incurred, on average, by travelers

30 Billion

people all over the world travel approximately 30 billion miles per year. By 2050, that figure will grow to over 150 billion miles

their digital transformation.

Open Cloud

37,000

cloud experts support IBM's industry team alone

\$6 Billion

has been invested by IBM in more than a dozen acquisitions to accelerate its cloud initiatives



Safeguard your content and secure your business with **Managed Secure Connect**

Managed Secure Connect provides your business with an end-to-end security solution with complete management. This includes supply, installation, configuration, onsite support, and 24x7 remote monitoring to managing security features by qualified professionals that protect your business against emerging threats and strengthen web security.



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Etisalat Business
Business Simplified

Etisalat participates in ISNR Exhibition



Etisalat, leading telecom operator in UAE, participated in International Security, Safety and National Resilience Exhibition (ISNR) along with their strategic partner Abu Dhabi Police.

During the event, Etisalat showcased its latest digital and security solutions including Managed DDoS mitigation,

Managed Web Security and Managed Email Security.

Organized by the Ministry of Interior, the conference received great support and attention from the ministry's officials. It witnessed significant participation by senior experts that specialize in security and safety, in addition to police chiefs who discussed

the methods for international cooperation to support security and national stability.

Abdulla Al Ahmed, Senior Vice President, Business Sales, Etisalat UAE said, "Security is an amalgamation of technology, people and processes. We at Etisalat are committed to provide best of breed in all these three

realms to protect our customers and help enterprises focus on their core business.

"Such events provide a platform for businesses to gain a better understanding of the security ecosystem. Etisalat's participation signifies that we keep pace with the market and will continue to launch cutting-edge services that minimize the risks of data compromise as well as allow businesses the flexibility to manage organisational and security requirements."

The conference discussed topics related to the protection of national border and road monitoring, and the various fields of law enforcement. Specialized security experts from around the world participated by presenting studies and papers.

Abu Dhabi Police is one of Etisalat's top 10 strategic clients to incorporate digital and security solutions in their network.

Etisalat upgrades hosting portfolio

Etisalat, the UAE's leading telecom provider, has upgraded its hosting services as part of its commitment towards offering better value to customers.

Etisalat is the leading provider of web hosting, co-location and cloud services in the region via its digital services arm. The telecom major currently offers 16,000 sq metres of floor space, with plans to increase capacity by 5000 m2 to accommodate the growing needs of its customers.

As a trusted hosting partner, Etisalat has been awarded several quality and process certifications. These include: ISAE 3402 Type

II (formerly SAS 70 type II) for operating control effectiveness at service organizations, ISO 27001:2005 for information security management systems, ISO 22301 for conformance with International Business Continuity standards and ISO 14001 for compliance with standards for environmental management systems.

Etisalat currently operates two certified "Tier III" data centres with five more planned to undergo "Tier III" certification later this year. The Uptime Institute's Tier Classification System provides a consistent method

to compare facilities based on expected site infrastructure performance, or uptime.

Etisalat is launching new colocation packages inclusive of space, power, Internet bandwidth and onsite storage in all its locations across the UAE. The new packages have been specifically tailored and priced to the needs of customers and will soon offer online monitoring and self service capabilities at no extra charge.

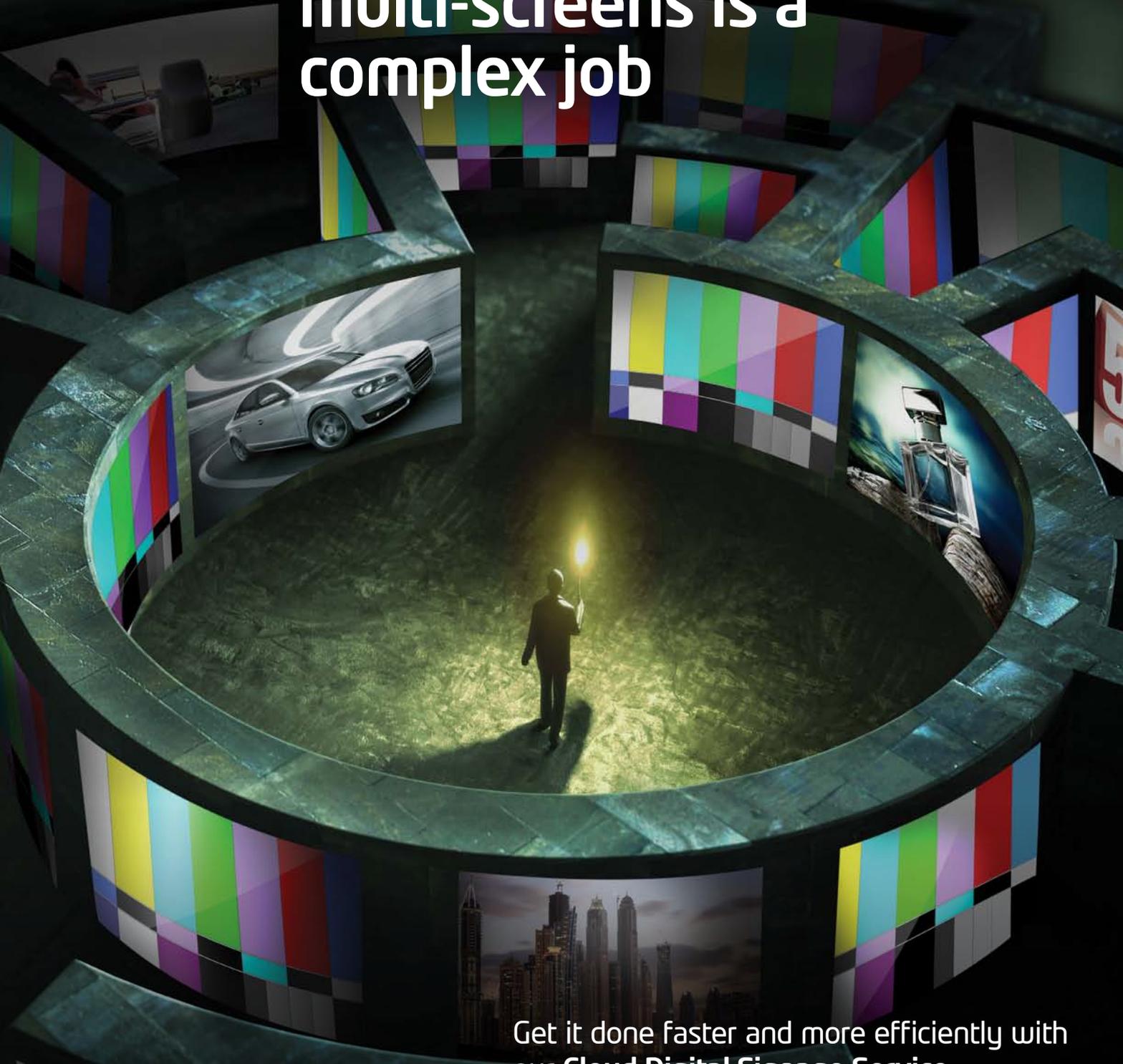
Commenting on the announcement, Abdullah Hashim, Senior Vice President Digital Services, Etisalat UAE

said: "Businesses today operate on a 24/7 basis and expect their partners to follow suit. By enhancing our data centre services, we are reinforcing our commitment to operating facilities that meet rigorous standards and compliance needs of businesses.

"We are confident that our rich portfolio, which includes competitively priced web hosting, co-location and cloud services coupled with our certifications and unprecedented international connectivity via Smart Hub transit, will meet the demands of discerning businesses."



Managing your multi-screens is a complex job



Get it done faster and more efficiently with our **Cloud Digital Signage Service**

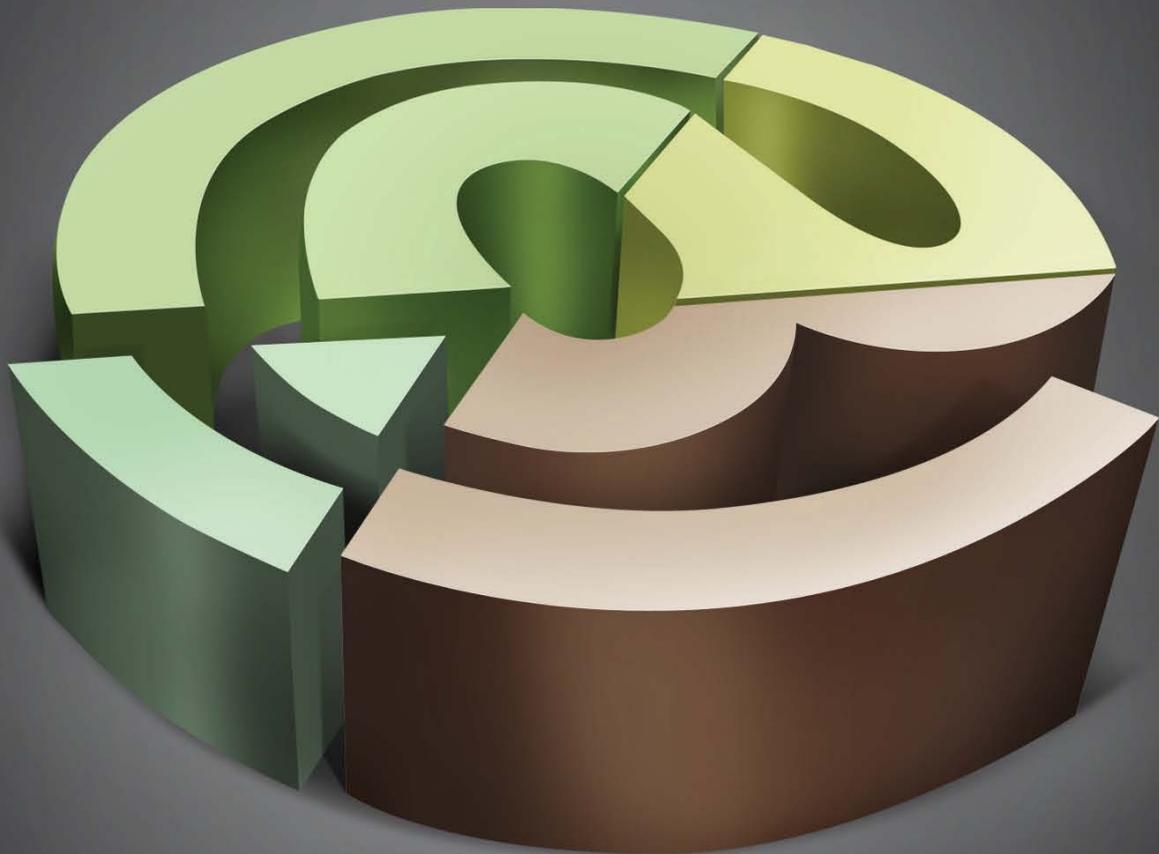
Managing an entire array of digital screens is a huge job, but it doesn't have to be thanks to our Cloud Digital Signage Service. Powered by cloud technology, Etisalat mobile broadband service and LG Electronics, it's the one-stop service that allows you to manage the contents of your digital screen without having to physically go to their locations.

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