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MAY 2019

THE CHANGE TO FUTURISTIC BUSINESS

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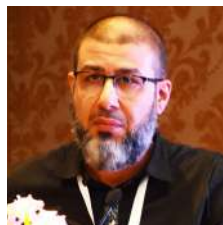
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BUSINESS TRANSFORMATION
THE CHANGE TO FUTURISTIC BUSINESS

Dear Readers,

Global cloud platform vendor, ServiceNow recently completed its annual customer and channel partner event in Las Vegas. Their strategy is to focus on rolling out both, cloud-based platforms and products, with the emphasis on the former. Focusing on cloud platform innovation appears to have more appeal than cloud-based products. Once released by ServiceNow, both ServiceNow channel partners and end-customers can customize the ServiceNow cloud platform, also called the Now Platform, to make it work towards reducing their internal and external pain points.

For ServiceNow, the traction appears to be clearly in serving internal customers by integrating silo applications and making the data appear in various templates, whether for human resources, call centre operations, customer services, IT services management. As well as serving external customers by enhancing their experiences through better integration of their touch points as captured through multiple customer facing applications. Top business and IT executives from global customers including United Airlines, Shell, Vodafone, Virgin Rails, presented both internal and external customer facing use cases, using the ServiceNow cloud platform.

While this may seem like an old story followed by a plethora of previous vendors, what was striking at the ServiceNow convention was how well the vendor has orchestrated its channel partner programme to meet this go to market objective, while delivering transformative solutions. Channel partners can innovate using the Now Platform to meet customer expectations and deliver by vertical market expertise or by scale of the organization or by degree of customization required.

The ServiceNow Cloud platform is delivering transformative solutions because of its high level of integration with other cloud applications as well as the capability of its top channel partners including Accenture, Deloitte, KPMG, Infosys, DXC, Cognizant, and a host of other middle level channel partners.

Moving ahead, an interesting report on how the process of taxation can be improved in the GCC region appears in our Market Outlook section. Prepared by global management consultancy, Oliver Wyman, the report points out that tax collections systems can be automated and digitized to ensure that GCC countries rapidly meet the same levels of remittances and collections as their Western counterparts. Moreover, analytics and data driven decision making can help to increase the tax collection database by identifying peripheral tax payers. Another regional perspective by PwC, titled Navigating the New Retail Reality, appears in our Research section and highlights the challenges faced by Middle East retail CEOs in transforming their business models, to avoid the meltdown of brick and mortar shopping. In the report, retail CEOs in the region identify their top three challenges and that includes coping with the onslaught of digital technologies, managing and optimizing their operational costs, and recruiting talent that are skilled in data and analytics.

In our invited blogs section, Gartner's Graham Waller, points out that CIO's mindsets are not necessarily ready for digital business. He advises that they go through a self-administered programme of reorienting their way of thinking. And in another piece of writing, RBBi's Amol Kadam, attempts to remove the hype around a few key buzzwords and adds his sense of pragmatism to them covering blockchain, chatbots, augmented and virtual reality, analytics, and search.

Ramadan Kareem and wishing you the best.

Arun Shankar
arun@gecmediagroup.com

TRANSFORMATION SUCCESS DEPENDS ON CULTURE AND EMPLOYEES

Organisations embarking on transformation need to take a hard look at their strengths and decide where they want to reach, writes Sami Esber.

SAMI ESBER,
President MIDIS System Integration Group and Board Member MIDIS Group.

KEY TAKEAWAYS

- Business and technology decision makers need to collaborate so that transformation is homogenised internally.
- Businesses may need to partner with specialist firms to kick start transformation.
- Transformation leaders almost always leverage technologies that are not being used by incumbents and stalwarts.
- Business models leverage disruptive technologies that are not being used by incumbents.

Across the Middle East, digital transformation is becoming increasingly familiar to business decision-makers and business owners. It is worthwhile to take a deep breath and reflect on what this is supposed to mean for someone outside the information technology industry.

Whether digital or business transformation, these are all-encompassing terms, and refer to those organisations that are embarking on a path of innovation, that has been rolled out by bringing digital technologies into the center of the organisation's business.

On a broader scale, such organisations would have adopted digital technologies and rebuilt their sales models, in a particular vertical market, offering completely new products or services and customer experiences, while significantly influencing an extended eco system of supplier partners.

Another reason why such innovators, disruptors, or leaders in business and digital transformation, do not get picked up on the radar of incumbents is because they are usually off their radars. Transformation leaders, innovators and disruptors, almost always leverage technologies that are not being used by incumbents and stalwarts. Their innovative business models, services and products, leverage disruptive technologies that are not being used by incumbents.

According to IDC, the Middle East and Africa region is now poised at the tipping point, where all accelerators are pointing forward, towards rapid adoption and increased spending. These include digital technologies like cloud, mobility, big data, analytics, as well as Internet of Things, blockchain, artificial intelligence, 3D printing, and virtual and augmented reality.

In order to survive, traditional businesses will have to start asking themselves:
- How can we become the Uber of our industry
- Can we really become an Uber of our industry
- Does the organisation foster an innovative climate
- Does the Board have appetite to survive digital challenges
- Does the organisation have strengths to reskill itself
- Can the organisation reengineer business processes

Going forward disruptive, digital technologies will only become better and better in improving the customer experience and customer journey. They will become more and more experiential, opening up new opportunities to discover the customer and their expectations. Thanks to cloud platform delivery, they will also become less challenging to use and apply. The real challenge in transformation will increasingly turn towards the organisation, its people and its leaders.

Internally, business and technology decision makers need to collaborate strongly so that transformation is homogenised internally and works end to end. Often times, businesses may also need to partner with specialist firms to kick start transformation in organisations and to accelerate them in their journeys. ◼

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YOU WILL BE AUTOMATED OUT OF EXISTENCE IN IT

Technology cycles make jobs in IT infrastructure redundant and professionals should look at customer value creation writes Dave Wright at ServiceNow.

DAVE WRIGHT,
Chief Innovation Officer,
ServiceNow.

KEY TAKEAWAYS

- IT organisations can play a far more strategic role today than they have traditionally
- They can be measured not by operational efficiency but on how well they help the people and the businesses they serve
- Instead of simply maintaining infrastructure, IT can focus more on creating valuable new customer experiences

When I took my first IT job in my early 20s, I found myself working as a tape monkey, shuttling storage cartridges to the high-tech masters who ran the company mainframe. Mercifully, my job was automated out of existence by a cartridge-picking robot. No great loss, because I was not creating value for my company.

A quarter-century later, that is still what most IT workers do. Rather than judge performance by how IT helps people do their jobs better, managers focus on ROI and keeping the lights on. Yet there is overwhelming evidence that IT can play a far more important role. According to a 2018 survey of 20,000 Microsoft customers, just 22% of employees said they felt highly productive on the job.

We are on the cusp of a new era today, when IT departments can be measured not on how efficiently they operate but on how well they help the people and the businesses they serve. I predict that five years from now, success will be measured on the IT department's ability to:

PREVENT IT FAILURES WITH SELF-HEALING SYSTEMS

Rather than wait for a problem to arise, systems will use sophisticated analytics to diagnose themselves. Your failing storage arrays and network switches will be replaced before they fail. When problems do occur, machine learning technology will take a first pass at resolving them by analysing what measures have worked in similar conditions in the past.

BECOME TRUSTED ADVISORS TO BUSINESSES

Companies will achieve a new yin-yang of tactical and strategic balance, where technologists work in unison to produce continuous software for the always-on world

of cloud. The businesses will get greater control, transparency, security, agility, flexibility and governance.

ELIMINATE THE NEED FOR LEVEL 1 TICKETS

Talented people will no longer spend their days resetting passwords, fixing printers or unfreezing PCs. Of course, more complex problems such as cybersecurity breaches will still occur. But companies will have developed repeatable processes to deal with the simple fixes that cause employee headaches.

CREATE ENTIRELY NEW CUSTOMER EXPERIENCES

As time spent on basic care and feeding of the infrastructure declines, IT will be able to spend more time taking advantage of emerging technologies such as mobile, virtual- and augmented-reality, voice and gesture-based interfaces.

All this is good news for the people that IT supports. By 2024, businesses will rightly expect their experience at work to be as simple, convenient and cool as the experience they already enjoy from their favorite consumer apps and services.

By the time I was 24, I had been automated out of three jobs. While I was too young to be particularly worried about my future at the time, looking back it is clear all these skills contributed to my ability to build a fulfilling, rewarding career for myself. ■

TRANSFORMING THE IT ORGANISATION TO A PROFIT CENTRE

Innovation and transformation are added responsibilities for performing CIOs and transform IT into profit centre, explains Christian Reilly at Citrix.

CHRISTIAN REILLY,
Vice President and Chief
Intelligence Officer, Citrix.

84% of top CIOs now have responsibility for areas outside traditional IT. The most common are innovation and transformation. For modern CIOs, success is not about the technology. It is about using technology to drive business innovation and value. It is about providing an always-on, secure digital workspace, without a costly outlay of capital. And it is about efficiently and securely expanding into new markets and regions.

In other words, success is defined by strategic technology investments that enable the business and drive innovation. Success is, of course, easier said than done.

Today, a large part of success is about reining in costs while extending services to a wider array of people, devices, and things. The modern IT organisation must become a partner to the business, not a cost center, integral to competitive value and strategic investment.

How are you standing up to the challenge? Inventorying and controlling fixed assets only under-scores potential waste. With a complete understanding of the physical servers, data, devices, and applications in your purview, you have taken measures to manage, control, and secure them.

It is now time to focus critical resources on accelerating business outcomes instead of managing day-to-day IT tasks. And you have made moves in that direction by adopting a cloud strategy that accelerates innovation and agility while ensuring flexibility and control. So, what now? There are three ways to focus IT investment.

#1 LEVERAGING ADVANCED ANALYTICS

In an IDG survey, close to 80% of CIOs said they would prioritise spend on data analytics in 2018 and 2019. Though the vast majority of business processes are still governed by and carried out by people, advanced analytics, such as machine learning, uses data to automate work that was once considered people-dependent. This improves the speed, accuracy, and efficiency of computing processes so workers can focus on higher-value tasks.

#2 SIMPLIFYING HYBRID-CLOUD NETWORKING

According to a recent IDC InfoBrief, enterprises are embracing multi-cloud solutions to gain organisational agility, accommodate existing and new applications, and ensure applications reside in optimised environments. But IDC also reports that 82% of businesses believe complex network infrastructure hinders their ability to migrate applications to the cloud. When you simplify, secure, and optimise your networks for performance, you give your users simple secure access to the applications and data they need — from any device, anywhere.

#3 IMPLEMENTING DIGITAL WORKSPACES

A digital workspace unifies access to the all of the applications users rely on — Windows, mobile, web and SaaS — with performance and security that adapts to user context. Engineered to increase visibility and simplify management of all your applications, data, users and devices, a digital workspace helps you realise the full benefits of hybrid- and multi-cloud strategies.

With careful planning and alignment with business goals, these investments can position IT as a change agent and prepare the business for the future. ■

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RAMADAN KAREEM

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SIX TIPS ENSURING SUCCESS IN INDUSTRY 4.0 MIGRATION

Andy Coussins at Epicor elaborates on six areas that manufacturing companies need to assess before any Industry 4.0 transformation project.

ANDY COUSSINS,
Head of International, Epicor
Software.

According to a 2016 PwC report, 62% of Middle East organisations expect to have advanced levels of digitisation and integration by 2021. While this indicates a strong appetite in the region for Industry 4.0, it is worth pointing out that the transition from initial pilot stage to the large-scale roll-out of an Industry 4.0 and digital transformation project is no easy task.

In its Digital Manufacturing Global Expert Survey 2018, McKinsey highlights how even successful pilot projects often fail to make it into everyday industrial life.

According to McKinsey, there are three main reasons for this:
- No clear change vision or detailed implementation road map.
- No executive leadership of the transformation project.
- Technical infrastructures that hinder roll-out.

From our practical experiences, we have found that taking a critical look at the existing technical environment is a vital first step. It is an evaluation process that can help organisations to gauge well in advance exactly how simple or complex it will be to transfer promising Industry 4.0 pilot projects into everyday operations.

Assessing the following six capability areas can help regional organisations shine a spotlight on where additional work on the IT infrastructure needs to be undertaken, and which of the options for action on the path to digital transformation should be prioritised.

#1 ABILITY TO SCALE IT INFRASTRUCTURES, CLOUD

Any digital transformation, Internet of Things, machine learning, artificial intelligence or robotics, will require IT services and performance that is only technically achievable and economically viable via cloud infrastructures.

Cloud services ensure that applications are available quickly and are demand-oriented and scalable, whether for pilot projects, test environments, peak loads or standard processes. Adopting a cloud strategy also ensures that the IT team can focus on tasks that add strategic business value, rather than being caught up managing operational routines.

#2 ABILITY TO REACH CONSENSUS, CENTRAL DATA, ANALYTICS

Industry 4.0 solutions will affect a wide number of different business areas, so everyone involved must be able to participate in making decisions on the viability of any proposed innovation-driven change. Enabling these joint decisions means everyone in the decision-making circle will need cross-departmental access to all relevant data and a consolidated view of all relationships and consequences.

Today's integrated ERP systems

are key to enabling these vital decision-support capabilities. Centrally capturing and analysing information from operational, finance and corporate management areas of the business, these platforms make it possible to identify dependencies and model different scenarios. This ensures that decisions can be made using comprehensive and reliable data that is supported by all parties involved.

#3 ABILITY TO CHANGE PROCESSES, BUSINESS PROCESS MANAGEMENT

Inflexible business processes can hamper a firm's ability to grow or evolve and from experience, this is often down to the business software which organisations use.

Either processes are controlled via multiple individual solutions, which means that process changes to an isolated system can trigger a whole cascade of follow-up measures and interface problems. Or the central management system is so complex that the overview of processes and interfaces is missing. As a result, processes cannot be designed flexibly, and changes can only be made by specialists at great expense.

#4 ABILITY TO CONNECT FROM PRODUCTION TO MANAGEMENT, MES INTEGRATION

Improvements in manufacturing generated from Industry 4.0 solutions can only be fully exploited if all business units are able to benefit. This means that as soon as the Manufacturing Execution System, MES is directly connected to the ERP system, the advantages of a smart factory can also be applied to business processes such as sales, service and support, purchasing, or business development.

The ERP-MES connection is also essential for directly evaluating the return-on-investment generated by Industry 4.0 measures in a financial context, so as to support future

investment decisions.

#5 ABILITY TO ANALYSE PERFORMANCE, KPIS

From intelligent control systems to new human-machine interfaces with voice-controlled technologies or data glasses, the implementation of Industry 4.0 technologies has a far-reaching impact on familiar processes and performance values.

To obtain precise figures from the outset and understand the influence of innovative technologies on business results, an integrated Enterprise Performance Management, EPM will be helpful.

As an integrated element of modern ERP systems, EPM provides industry and role-specific key performance indicators KPIs. This enables all hierarchies and areas of responsibility to be transparently represented, so that weak points can be identified and KPIs achieved. Leveraging an integrated EPM, enables organisations to pinpoint which individual digital transformation measures have had an impact on value creation and business development as a whole.

#6 ABILITY TO COOPERATE, ECOSYSTEMS

Digital transformation is often accompanied by new business models and services that require close cooperation with partners and customers. According to a recent study by PwC, manufacturing digital champions are highly adept at connecting people, systems and partners across the extended value chain, as well as enabling multichannel customer interactions, either directly, or through third parties.

The process of assessing current technical capabilities and identifying potential Industry 4.0 implementation hurdles will help Middle East companies define a future strategic direction for growth more clearly, to make investment decisions accordingly. ■

KEY TAKEAWAYS

- Transition from pilot stage to large-scale roll-out of an Industry 4.0 project is no easy task.
- Industry 4.0 solutions will affect a wide number of different business areas, so everyone involved must be able to participate.
- Enabling joint decisions means everyone in the decision-making circle will need cross-departmental access to relevant data.
- Inflexible business processes can hamper a firm's ability to grow and this is often down to the business software.
- Manufacturing digital champions are adept at connecting people, systems and partners across the extended value chain.
- If an ERP system lacks integration capability, the IT environment will become complex and the advantages of Industry 4.0 will not be realised.

WHY CIO MINDSETS ARE NOT SUITABLE FOR DIGITAL BIZ

Gartner's Graham Waller, explains CIOs will need to follow a planned programme of challenging and rebuilding mindsets to fit into digital businesses.

GRAHAM WALLER,
Distinguished VP Analyst,
Gartner.

It is an accepted fact at your company that your customers prefer to deal with the organisation in person, and that human interaction is critical to the business. But what if the opposite is true? What if customers prefer digital interactions and the first priority should be a customer experience that meets customer needs?

A new take on an old mindset presents a world of potential business opportunities in the context of the digital world. CIOs cannot deliver needed digital capabilities without adapting their thinking to new market realities. Continuously changing digital markets will require continuously adapting leadership. Like any human, CIOs struggle giving up leadership mindsets that served them well in the past. But CIOs cannot deliver needed digital capabilities without adapting their thinking to new market realities.

To move the company toward a new mindset, CIOs must understand and evangelise digital dexterity. A recent Gartner study found that employees are 2.6 times more likely to have high digital dexterity if their leader sets the tone and role-models the behavior, yet only 17% of organisations have leaders who do so consistently.

Gartner provides five steps that CIOs can follow to cultivate the digital dexterity needed to become effective digital business leaders. The five steps form two mutually reinforcing loops:

Loop #1 Reframing mindset enables CIOs to increase awareness of how their existing mindset must evolve, given a new leadership context, and lays the groundwork for sustainable change.

Loop #2 Remastering behaviors reinforces the new thinking via routines, culture hacks and new practices that sustain digital dexterity leadership well-suited to new market realities.

Remember this is not a one-time, check-the-box process — it will be iterative and continuous.

STEP #1 CHALLENGE CORE BELIEFS AND REFRAME PERSPECTIVES

Many leaders have deeply ingrained core beliefs about their organisations. But these core beliefs can create blind spots. Challenge those beliefs to make sure they still stand in the current business climate. CIOs who do not do this run the risk of maintaining the status quo to the detriment of progress.

Conduct a Challenge What You Know workshop and flip each core belief to the opposite. For example, our customers want to own the product and will buy and upgrade via a transactional model, becomes our customers want the product's benefits and will embrace a subscription as a service model.

Identify how and when the new belief could work, check this against competitors' actions and use this exercise to figure out which core beliefs can be modified or dropped.

STEP #2 DEFINE YOUR NEW DIGITAL-ERA LEADER MINDSET

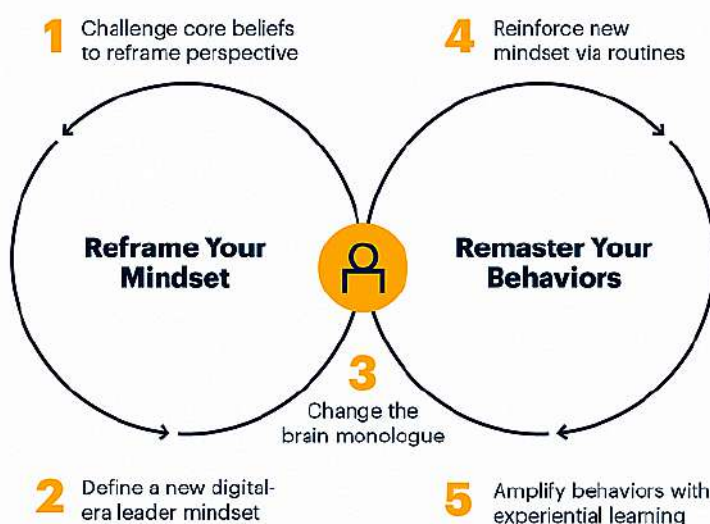Digital leaders have to have the right mindset for today's context.

Successful digital leaders have six traits:
1 Thrive despite uncertainty
2 Quest for breakthrough business outcomes
3 Exploit new digital-era competitive levers
4 Start, experiment, learn and iterate
5 Cultivate creativity and a culture of innovation
6 Attract top-notch digital dexterity talent

Rate yourself on a scale of 1–5,

Five Steps to Evolve Mindsets and Cultivate Digital Leadership

1 Challenge core beliefs to reframe perspective

4 Reinforce new mindset via routines

Reframe Your Mindset

Remaster Your Behaviors

3 Change the brain monologue

2 Define a new digital-era leader mindset

5 Amplify behaviors with experiential learning

Rebuilding the CIO mindset is both looped and iterative. Source Gartner.

KEY TAKEAWAYS

- To move the company toward a new mindset, CIOs must understand and evangelise digital dexterity.
- Continuously changing digital markets will require continuously adapting leadership.
- CIOs struggle giving up leadership mindsets that served them well in the past, similar to any other human.
- CIOs cannot deliver digital capabilities without adapting their thinking to new market realities.
- Many leaders have deeply ingrained core beliefs about their organisations.
- Core beliefs can create blind spots.
- Challenge core beliefs to make sure they still stand in the current business climate.

with 1 as the skill is irrelevant and 5 as it is a core mindset and focus on the skills you ranked as 2 or 4.

STEP #3 CHANGE YOUR BRAIN MONOLOGUE

Once new the mindsets have been identified, it is time to internalise them. Throughout this process, you will often hear two voices in your head, the old and new mindsets in conflict. For example, one may say, let us move forward despite uncertainty, and then continue or pivot based on what we learn. The other will say, let us study it and wait until we are certain we can do this. It is critical to change that brain monologue.

Try scheduling 15 minutes on your calendar to assess where you used the new mindset versus the old one. Take the time to really think and acknowledge choices to avoid reverting back, and ask trusted coworkers to help keep you on track.

STEP #4 REINFORCE THE NEW MINDSET VIA ROUTINES

To ensure your new mindset sticks,

create small, achievable routines or culture hacks to reinforce them. For example, to further ingrain quest for breakthrough business outcome, set aside 30 minutes each Friday to review the week. Ask yourself if you were thinking safe next steps or bold leaps. Once a month, visit a new startup or different industry using different business models and consider how you could use them in your own organisation.

STEP #5 AMPLIFY BEHAVIORS WITH EXPERIENTIAL LEARNING

A development program should include 70% experiential learning, 20% mentoring or coaching, and 10% formal education. The best way to ingrain a new mindset is by dedicating time and resources to action. Experiential learning can be used to strengthen a specific trait. For example, for cultivating creativity and innovation, consider hosting hacking events or touring companies that are known for those traits. ■

5G RELEASE WILL ACCELERATE DIGITAL TRANSFORMATION

5G is not just another communication G and is expected to release a deluge of transformation use cases according to Jean Pierre Brulard at VMware.

JEAN PIERRE BRULARD, SVP and General Manager, VMware EMEA.

2019 has so far been the year of 5G. For telecoms operators or communication service providers, it is a time bursting with opportunity – from upgrading capacity to delivering new services, content and interactions in ways previously simply not possible. Using 5G to enable the Internet of Things and edge computing, they now have an amazing opportunity that was unimaginable just a couple of years ago.

But it means 5G is at a massive inflection point. Planning decisions made today will have far reaching financial and operational ramifications for CSPs, from being able to beat competitors to market with new value-added services, to significantly improving the performance and operational efficiencies of their networks.

Yet to think of it as only a telecoms opportunity is to miss the point. Any organisation in any sector that uses networks, in short, everyone, should be planning for the 5G rollout and thinking about how they can use it to achieve their business goals.

That is not to say that it is all plain sailing, many still view 5G as just another network. It is an attitude which could make it harder initially for some organisations to make the case for the up-front investment required. Enterprises will need to work to convince both internal and external stakeholders that the costs are justified.

How is it not just another G? Put simply, 5G delivers much faster speeds, far lower latency and significantly higher density than 4G.

INSIDE THE REALM OF 5G

If we want to realise the potential of the likes of Internet of Things-enabled services, robotics, autonomous vehicles, smarter cities and utility services and break throughs in telemedicine, then each of these elements need to be in play. What, however, do they actually mean?

Speed is relatively straight forward. The 5G example often used is being able to download a high definition film in ten seconds, compared to at best about twenty minutes currently depending on local broadband services.

Latency is slightly different, reflecting the time required for data to travel between two points. We are in fact talking less than a millisecond delay, which becomes significant for surgery, for example, and combined with speed is also a factor for many gamers who might want to pay for this type of fast, low latency service.

Density becomes significant with the sheer number of devices connected to a network at any one time. We are already in a world where there are more than 23 billion connected devices and growing, with

> ## 5G HAS THE POWER TO TRANSFORM OPERATIONS AND BUSINESS MODELS OF ORGANISATIONS BEYOND RECOGNITION.

KEY TAKEAWAYS

- 5G has the potential to dramatically improve performance of existing 4G networks.
- 5G delivers much faster speeds, far lower latency and significantly higher density than 4G.
- The ability to be flexible and agile as we continue to automate network operations could only be achieved through software-defined infrastructure.
- Density becomes significant with the sheer number of devices connected to a network at any one time.
- That is not to say that it is all plain sailing, many still view 5G as just another network.

greater mobility and IoT use cases.

We have all been in situations where speeds drop dramatically as everyone logs in, and as we become increasingly connected, we need networks that can cater for significantly more devices than ever before. In each of these instances, 5G has the potential to dramatically improve on the performance of existing 4G networks. This can then be used to deliver new services and applications, exactly the level of connectivity the digital world requires.

DAILY USE CASES

5G introduces a concept called network slicing. A network slice has technical characteristics important for delivering a particular service. In this case, a network slice could be used to deliver a service with low latency to ensure that actions are taken in real time and without delay, high throughput to ensure quality high-definition images and sound.

Or take retail. Augmented and virtual realities have long been touted as a way to arrest some of the challenges the sector faces – with 5G's low latency, they can become mainstream offerings, rather than niche innovations, by easily allowing customers to view purchases in local environments or on themselves.

With high density, networks will be able to support huge numbers of aerial vehicles while enabling remote operators to coordinate movements and avoid collisions along the way. The knock-on benefits would mean less congestion, particularly in

urban areas, as well as reaching far-flung locations previously lacking the infrastructure to support all deliveries.

To deliver all this is going to require a significant amount of investment in network infrastructure. For CSPs, it is a major undertaking, which is why it is likely that rather than a pure 5G network, the majority of people will see a blended approach, where 4G is available to deliver basic services, and 5G introduced for specific tasks.

It is therefore critical to have what is known as the telco cloud. This is software-defined technology that supports both current 4G and lays the ground work for 5G, something much prized by operators. The ability to be flexible and agile as we continue to automate our network operations and management could only be achieved through a software-defined infrastructure.

We have not even begun to realise what the possibilities of 5G are yet. So much needs to happen before we see full adoption, yet enterprises must start thinking now about how they can harness the power of these new networks for their own competitiveness. Simply thinking about it as another G risks not being prepared when it does come along and missing out on the huge opportunities available. ∎

Knowledge 2019 attracted 20,000 ServiceNow customers, partners, developers and employees from 78 countries and covered 600 learning sessions over three days.
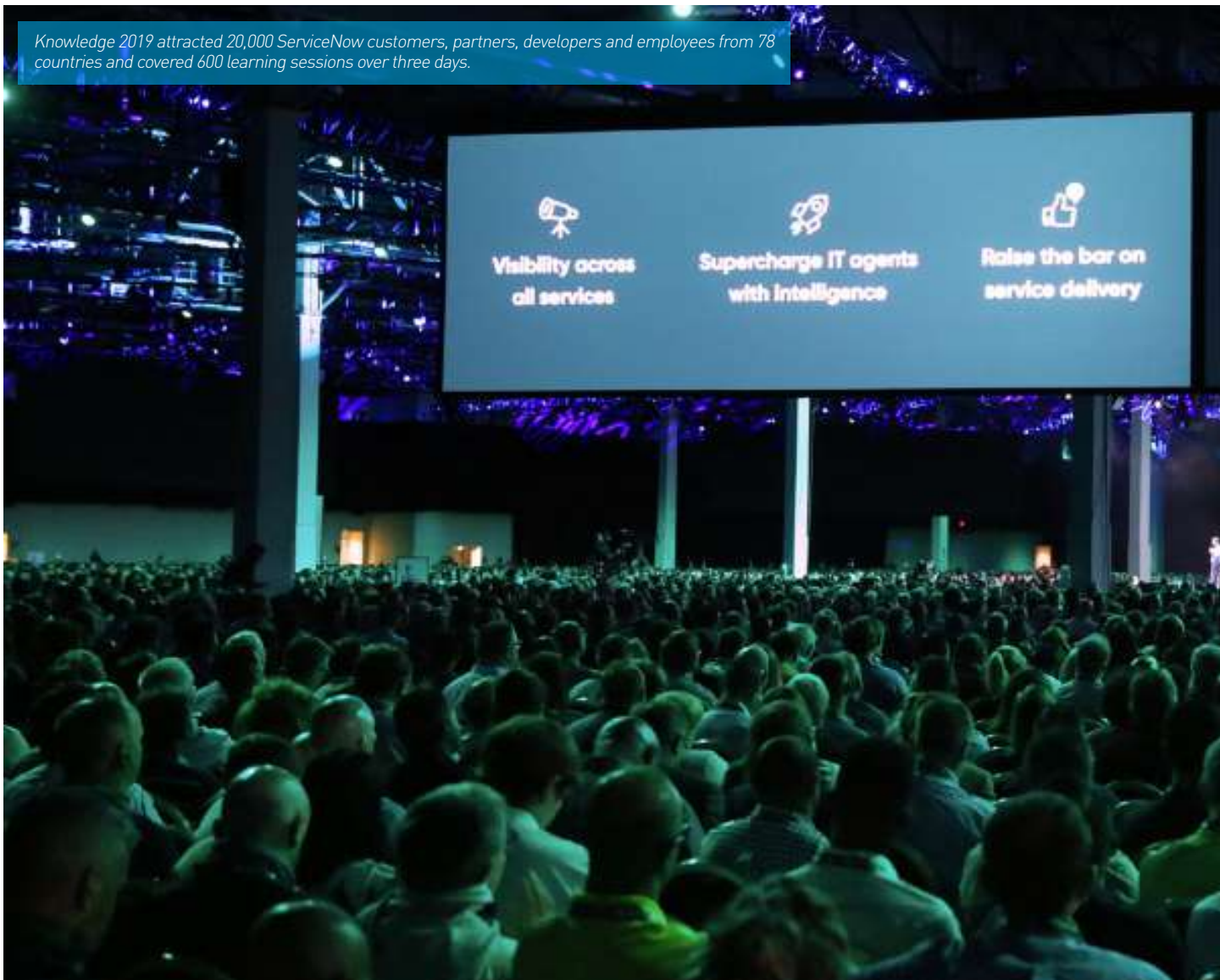
SERVICENOW TARGETS SIMPLIFICATION OF WORK EXPERIENCES USING NOW CLOUD PLATFORM

What if our lives at work could be no different than our lives at home? With that question, ServiceNow CEO and President John Donahoe kicked off the company's annual Knowledge conference with a keynote address to more than 20,000 ServiceNow customers, partners, developers and employees from 78 countries. The annual Knowledge conference is a grassroots incubator for knowledge sharing across ServiceNow's customer base. Knowledge 2019 features 600 learning sessions over three days, 90% of which will be taught by customers.

It is a question that speaks to the heart of ServiceNow founder Fred Luddy's original mission: use leading-edge digital technologies to make people's lives on the job far easier, more productive and more meaningful. Fred deeply believes

*JOHN DONAHOE,
CEO and President,
ServiceNow.*

that it is technology in the service of people, and not the other way around, said Donahoe.

Donahoe invited participants to consider the stark contrast between the complexity of our work lives and the simplicity of our experiences at home. In our lives at home, mobile technology allows us to get what we want, when we want and how we want it, Donahoe said. Underlying those easy experiences are digital systems and workflows whose complexity is invisible to users.

By contrast, business applications and systems tend to leave much of that underlying complexity exposed to end users. In order to provide the great experiences that customers and employees expect, they must

take that complexity and tame it, said Donahoe. Companies can use the ServiceNow platform to offer the same simple, intuitive experiences that we get from consumer applications.

Chief Product Officer CJ Desai highlighted several new features that will launch with ServiceNow's New York release in the third quarter of 2019. They include:

● Guided Application Creator, which allows developers to create new enterprise apps in a few minutes without writing a line of code.

● Integration Hub and Action Designer, which makes it simple to integrate systems with or without code across apps, systems and

CJ DESAI,
Chief Product Officer, ServiceNow.

FARRELL HOUGH,
Senior Vice President of Customer Workflow Products, ServiceNow.

CHRIS POPE,
Vice President Innovation, ServiceNow.

MARK ACKERMAN,
Regional Director Middle East and Africa, Service Now.

The Now Platform®: the intelligent and intuitive cloud platform for work.

IT Workflows
Unlock productivity and transform IT across your enterprise with a unified platform.

Employee Workflows
Deliver next-gen employee experiences with intelligent workflows and effortless service.

Customer Workflows
Resolve complex customer issues from end to end with predictive intelligence and automated self-service.

Build your own workflows
Use the Now Platform to build new workflow apps and extend ServiceNow solutions.

The Now Platform.

software.
● Operator Workspace, which provides one dashboard for systems operators to monitor and manage all services.
● Service Owner Workspace, which offers a 360-degree view of service health to track real-time performance and generate cost and consumption reports quickly.

Desai said ServiceNow customers can already benefit from platform innovations in the current Madrid release, including better systems integration and voice-assistance functionality. He also charted

ServiceNow's roadmap beyond the Q3 release, hinting at more transformative features in the works for the Orlando and Paris releases, coming in the first and third quarters of 2020.

Next, Desai introduced Linda Jojo, Executive Vice President and CIO at United Airlines. United, which served 160 million passengers last year, is teaming with ServiceNow on companywide digital transformation. "Running an airline is one of the most complex jobs in the world because so many things can go wrong," said Jojo. "We have armed 60,000 of our employees with mobile technology. Our employees needed more tools in their toolkit, and ServiceNow is helping us empower them."

Virgin Trains CIO John Sullivan shared a similar success story with ServiceNow. CIO John Sullivan described how Virgin, which transports 100,000 passengers daily in the UK, is working with ServiceNow to connect employees and customers with proactive, end-to-end service features. Employees who were previously siloed in different departments can now connect and share integrated data via a mobile application.

They can report a maintenance issue or incident and contact other team members directly from the application using voice commands. Using machine-learning capabilities, the system automatically suggests workflows that resolve issues without impacting customers.

"It is all about monitoring systems and preventing issues before they occur," Sullivan said. Virgin Trains' consumer-facing mobile application is also helping the company deliver a great customer experience with automated self-service features that use ServiceNow's Virtual Agent technology to manage train cancellations and other travel issues in real time.

The Now Platform is
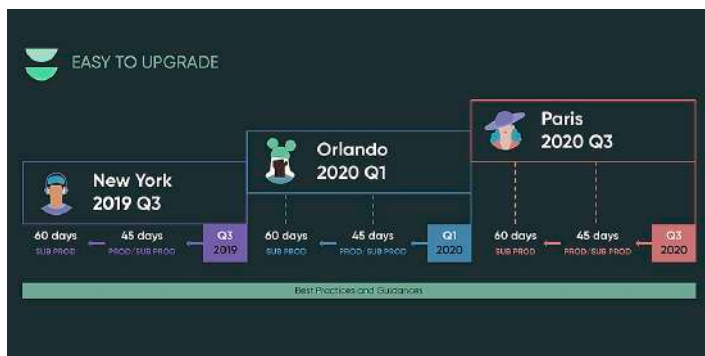
ServiceNow follows a six-month upgrade and release cycle to facilitate feature optimisation and avoid over congestion.
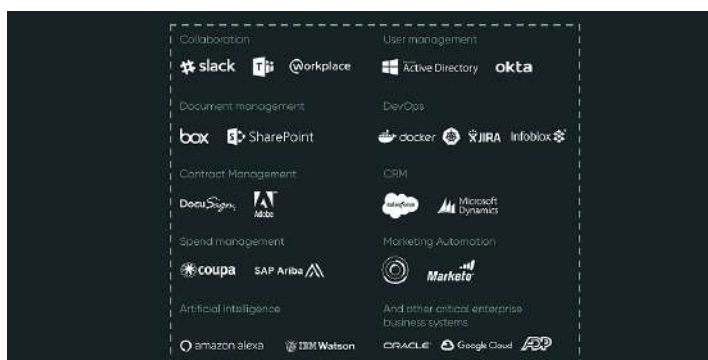
The Now Platform has a high degree of interoperability with other cloud platforms, which is a key reason for its rapid adoption in a multi-cloud environment.

ServiceNow's Farrell Hough and key customer John Sullivan, CIO and Project Director at Virgin Trains.

Another key global customer, Christopher Holmes, Head of Digital Experience, Vodafone Business.
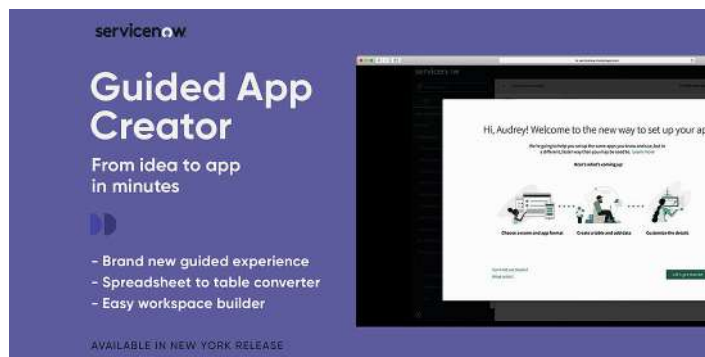
Future versions of The Now platform will allow business to build their own applications through a zero-code approach.
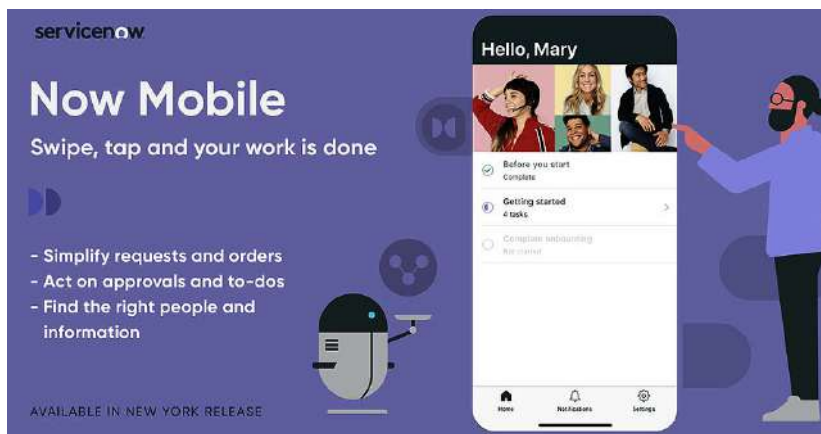
Mobile applications will be included in future versions of The Now platform.

ServiceNow's intelligent and intuitive cloud platform for work. It consists of the following platforms:

- IT Workflows: Unlock productivity and transform IT across your enterprise with a unified platform.
- Employee Workflows: Deliver next-gen employee experiences with intelligent workflows and effortless service.
- Customer Workflows: Resolve complex customer issues from end to end with predictive intelligence and automated self-service.
- Build your own workflows: Use the Now Platform to build new workflow apps and extend ServiceNow solutions. ■

How Virgin Trains is transforming employee efficiencies using ServiceNow

JOHN SULLIVAN,
CIO Virgin Trains.

DEAN UNDERWOOD,
Head of IT Services, Virgin Trains.

Virgin Trains is determined to transform the rail experience into a reliable source of enjoyment and pleasure. The company wants to deliver a consistently positive experience that keeps customers happy, and keeps them coming back.

"We are moving toward a digitised, automated, personalised rail experience that puts customer satisfaction first. All of that starts with a foundation of streamlined internal processes and excellent IT service delivery, and that is exactly what ServiceNow brings to the table. Eventually, we will be able to use the same system to integrate data and automate processes across the enterprise, in just about any business function," says John Sullivan, CIO Virgin Trains.

Modernising ITSM infrastructure and apps to create a single source of truth and visibility allowed the Virgin Trains IT team to take

ownership of and continuously improve processes. For Virgin Trains, the first milestone on the journey to service excellence was modernisation of the underlying IT Service Management infrastructure and applications. The company's legacy ITSM platform was aging and had limited capabilities.

The focal point initially was transparency. Virgin Trains has also streamlined core processes so that they take less time, making it possible for staff to focus on higher-value tasks. The modernisation effort was also accelerated by the ease of implementation of the Now Platform.

"Fundamentally, ServiceNow gives us the data we need to improve the service desk and overall service delivery. In the past, we made changes based on what we felt needed changing. Now we have the data to drive

KEY TAKEAWAYS

Strategy
- Virgin Trains is looking at innovative ways to deliver the rail experience of the future.

Execution
- Modernising ITSM infrastructure to create a single source of truth allowed Virgin Trains to improve processes.
- The first milestone was modernisation of the underlying IT Service Management infrastructure and applications.
- The modernisation effort was accelerated by the ease of implementation of the Now Platform.
- The next phase of transformation is currently underway with the implementation of ServiceNow Customer Service Management.

For Virgin Trains, the benefits are 75% reduction in hiring timeframes, £50,000 cost savings, while staff can focus on higher-value tasks.

better decisions," says Sullivan.

"Everything we do for customers starts with great support for employees. If you do not have infrastructure and processes in place that can improve service delivery and grow and evolve with you, transformation is just not possible. We had no visibility into processes and we had very limited data on which to base decisions that would improve service delivery. With ServiceNow we have data and visibility into processes, so we can take ownership of those processes and continuously improve them," says Dean Underwood, Head of IT Services for Virgin Trains.

At a previous company, Underwood experienced the Now Platform in action and saw that it could integrate applications and data from multiple sources, thereby creating not only a single source of the truth but also

new ways to streamline a broad array of ITSM processes. Equally important, the Now Platform gave Virgin Trains insight into core IT processes such as incident management, change management, and more.

"We can quickly understand where failures are occurring, what is causing failures, average resolution times, and so on—and we can monitor our progress in both preventing outages and minimising their impact to employees," says Underwood.

"We have automated tasks and simplified processes, for example making it easier and faster to get needed approvals for changes. In some cases, what used to take a month now takes a day. The core functionality is all built in. It is relatively easy to activate the specific modules and functionality you require. And the platform is cloud-based so scale-up is not an

issue."

The result of the modernisation efforts has been a radical improvement in the quality of IT service delivery. But that is just the beginning of the transformation journey for Virgin Trains. By radically improving their employees' experience, Virgin Trains saw significant increases in their customer satisfaction metrics, going from mid-20s to averages between 70 to 80.

"Richard Branson has a saying if we look after our staff, they will look after our customers. And so, a key part of our transformation journey is constantly improving the service we provide to employees, and measuring their satisfaction levels. We saw a 44% improvement in the first eight weeks with ServiceNow, just from improved hiring processes. To us, that score is a measure of how much lost time we are

giving back to employees, and how much more they are able to focus on what matters most — constantly improving the customer experience," says Sullivan.

Sullivan adds, the increases in CSAT were attributable to many factors, but the acceleration of processes enabled by ServiceNow was critical. Employees do not always analyse why service seems better — they just perceive that they are getting what they need faster. Automating common customer service tasks with Customer Service Management saves time for both Virgin Trains agents and its customers by resolving issues faster. The next phase of transformation is currently underway with the implementation of ServiceNow Customer Service Management.

"Customer Service Management will help us automate common customer service tasks and save both agents and customers a lot of time. We get thousands of inquiries, suggestions, and requests each year. With Customer Service Management we can issue reference numbers, track cases more easily, and get important data about our customers that will drive future improvements."

In addition, Virgin Trains will use Customer Service Management to connect departments internally and further expedite customer service. With Customer Service Management, it will be possible to route work from customer service to field service, engineering, operations, finance, legal, so questions raised by customers can be quickly routed to the appropriate staff. Creating an end-to-end service value chain for its suppliers extends the efficiencies that Virgin Trains achieved and further enhances service and satisfaction

Recognising that the overall customer experience also depends on partners, Virgin Trains has launched an initiative to create

an end-to-end service value chain that extends to its base of suppliers. "We are on track to save 20% of our operating budget, and we want to invest some of those savings into our supply chain," says Sullivan.

More specifically, Virgin Trains is restructuring its RFP process so that suppliers are highly motivated to use the Now Platform for their own service management processes. Sullivan says, "We want to extend the efficiencies we have achieved internally to our supply chain to further enhance service and customer satisfaction."

Virgin Trains is looking at innovative ways to deliver the rail experience of the future. "We want to provide digital entertainment, easy access to up-to-date schedule information, simplified booking and payment capabilities, the list goes on," says Underwood. "The Virgin brand has always been about innovation, and we are trying to be inventive in improving the entire train experience."

The reason ServiceNow is a partner is that their platform is extensible to any business process. ServiceNow is capable of true enterprise service management — bringing service improvement not just to IT but to security operations, HR, finance, legal, compliance, and more. ■

KEY TAKEAWAYS

Cash
- 75% reduction in hiring timeframes, £50,000 cost savings, staff can focus on higher-value tasks.

People
- Improvement in customer satisfaction attributes within first eight weeks.
- Employees do not always analyse why service seems better, they just perceive they are getting what they need faster.
- Automating common customer service tasks saves time for both Virgin Trains agents and customers by resolving issues faster.

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RheinBrücke to drive transformation by launching localised Epicor ERP in the cloud

I T consultancy firm RheinBrücke has entered a partnership with Epicor Software, to offer Epicor ERP in the RheinBrucke ME cloud to the Middle East market. The new offering enables businesses to innovate, reduce costs, and boost operational efficiencies. The solution offers several advantages, such as lower capital requirements to access innovation, scalability, shorter deployment times for better returns on investment, reduced infrastructure costs, trimmed operating expenses, and world–class security.

In attendance at the launch event were His Excellency Sheikh Mohammed Bin Faisal Bin Khalid al Qassimi, His Excellency Jamal Saif Al Jarwan, Secretary–General of the UAE International Investors Council, and His Excellency Sheikh Mohammed bin Saqr Al Nuaimi, Undersecretary for Support Services at the Ministry of Human Resources and Emiratisation and other dignitaries across the region. RheinBrücke and Epicor also signed an agreement to offer products for Ajman Chamber of Commerce and its members.

The latest forecast by Gartner projects IT spending in the EMEA region to total $973 billion, AED3.6 trillion in 2019, an increase of 2% on the estimated spending of $954 billion AED3.5 trillion in 2018, as more organisations experiment with new technologies in a bid to spur innovation and revolutionise the customer experience. In the GCC region, the UAE is the most active adopter of cloud computing. Research firm IDC predicts spending on public cloud services in the country will almost quadruple over the next four years, surging from AED439 million in 2017 to AED1.51

Registration desk at RheinKontakt 2019.

Supporting social causes through participation of Al Noor Training Centre at RheinKontakt 2019.

billion in 2022.

His Excellency Mohamed Hassan Al Noman, Chairman Rheinbrucke Middle East said at the event: "Across the world, we are witnessing the adoption of cloud computing as an enabler of new technologies, such as artificial intelligence, big data analytics, and the Internet of Things. We are excited to launch a new cloud–based ERP offering with Epicor, a leading software provider with a proven track record, over 20,000 global customers and 70 products that span the entire value chain. The partnership between Epicor and RheinBrucke will open new

opportunities for growth, especially in this region that is ripe for digital transformation and keen to stay ahead of the curve in today's digital age."

Vetri Selvan, Managing Partner and CEO of RheinBrücke, said: "Partnering with Epicor was a strategic decision as this alliance means both parties can achieve more not just in the immediate term, but looking ahead. We look forward to supporting businesses in the Middle East in their digitisation journeys, so that they remain competitive and agile in today's competitive global landscape."

Andy Coussins, SVP and Head of

Ecosystem of ERP partners at RheinKontakt 2019.

Data is the new oil, MC opens RheinKontakt 2019.

Welcome speech by HE Mohamed Hassan Al Noman, Chairman, RheinBrücke Middle East Infrastructure.

Andy Coussins, SVP and Head International, Epicor talks about regional cloud hosting and adoption initiatives.

Government dignitaries, top executives, and other industry delegates at RheinKontakt 2019.

HE Marwan Hareb, Director of Investments and Promotions, Ajman Chamber of Commerce and Industry and Vetri Selvan, Managing Partner of RheinBrücke IT Consulting, sign a Memorandum of Understanding.

Left to right Suresh Chandrasekharan, Chief Solutions Architect at RheinBrücke; Rich Murr, Chief Information Officer at Epicor; Anders Sulbæk, General Manager at FLSmidth; Andy Coussins, SVP and Head of International Sales, Epicor; Miguel Angel Villalonga, VP Cloud and Data Centre at Etisalat Digital.

Vote of thanks by HE Ali Almuwaijei, Board Member, RheinBrücke Middle East Infrastructure.

International Sales at Epicor, said: "All industries today need digital solutions to remain relevant and drive growth. We are delighted to support RheinBrücke as it launches Epicor ERP in the RheinBrücke ME Cloud. This partnership further extends our Cloud offering for the Middle East and helps support the UAE's transition towards a knowledge-based economy in line with the UAE Vision 2021."

In addition, the RheinBrücke Pinnacle Awards of Excellence were held to pay tribute to individuals and companies. The awards were selected by a panel of top executives including Jürgen Bauer, Dr Ing Harry Hezel, Dr Ing Michael Mezger, Dr Ing Jörg Pirron, Ing Vetri Selvan and Dipl Ing Peter Bertagnolli. Six winners were chosen for the 2019 RheinBrücke Pinnacle Award of Excellence from an outstanding list of 118 nominations.

The winners are as follows: Outstanding Contribution to Society category: His Excellency Sheikh Mohammed bin Saqr Al Nuaimi, Assistant Undersecretary of Support Services at the Ministry of Human Resources and Emiratisation.

Contribution to the Economic Ecosystem category: His Excellency Jamal Saif Al Jarwan, Secretary General of UAE International Investors Council and His Excellency Mohamed Amiri, CEO of Ajman Bank.

Excellence in Technology category: His Excellency Abdulqader Obaid Ali, Smartworld CEO and His Excellency Muammar Al Rukhaimi, Etisalat Technology CEO.

Outstanding Contribution to Society category: Dr Ahmed Emara, Psychologist, Motivational Speaker and Happiness Expert.

The launch event featured a panel discussion, entitled Data is the New Oil. Anders Sulbæk, General Manager at FLSmidth, Rich Murr, Chief Information Officer at Epicor, Suresh Chandrasekharan, Chief Solutions Architect at RheinBrücke, and Miguel Angel Villalonga, VP Cloud and Data Centre at Etisalat Digital, joined Epicor's Andy Coussins on the panel.

The event was concluded with a vote of thanks by HE Ali Almuwaijei, Board Member, RheinBrücke Middle East Infrastructure. ■

Siemens using MindSphere and IoT to build cloud-based dashboard for Expo 2020

When the application has built enough historical data from sensors, a model can be constructed for learning and predictions can be made.

A new cloud-based application which will support Expo 2020 Dubai in becoming a blueprint for future smart cities is being developed by Siemens, and has already connected part of the site's infrastructure to the Internet of Things. The application is designed to digitally optimise Expo 2020 Dubai, enhancing the visitor experience and reducing energy and water use during the six-month event.

Initially operating across two domains – environmental monitoring and irrigation – the application will collect, monitor, correlate and analyse data from the site, and visualise it to allow real-time monitoring and control of infrastructure from static and mobile devices.

Currently under development in close collaboration with Expo 2020 Dubai, the application is running in a test phase at the Expo Site Project Office. It will be scaled up as infrastructure is completed.

In addition to environmental monitoring and irrigation, further urban domains will be added in subsequent phases including Sustainability, Electric Vehicle Charging Monitoring and other data lake use cases, incorporating multiple smart city elements into a single application.

Eventually it will be connected to the full Expo ecosystem, creating

the most connected Expo in history and demonstrating its ability to integrate a city's infrastructure into the Internet of Things.

The new application will grow with the Expo 2020 Dubai site, incorporating the ability to make use of machine learning and artificial intelligence to support predictions. When the application has built enough historical data from sensors, a model can be constructed for learning and predictions can be made.

For example, when connected to a weather station the application can make use of historical and real-time weather and air quality data to predict the likelihood of a sandstorm, and make appropriate preparation recommendations for site infrastructure. The application can integrate data from any manufacturer's sensors, reducing its dependence on specific sensors and gateways.

The application runs on MindSphere, Siemens' open, cloud-based operating system for the Internet of Things, and has been fully designed and developed within the MindSphere ecosystem. At login, the application's user interface gives a graphical visualisation of the Expo's infrastructure performance, and has been designed so that a non-technical person can understand and use the application intuitively.

Siemens is the Infrastructure Digitalisation Partner of Expo 2020 Dubai, and is implementing one of the world's largest installations of its digital building technologies at the site. The Expo is expected to attract 25 million visitors over six months, and the Siemens solutions will connect, monitor and control more than 130 buildings using MindSphere, supporting Expo 2020 Dubai's targets for energy efficiency, visitor comfort, safety and security. ■

KEY TAKEAWAYS

- The application is designed to digitally optimise Expo 2020 Dubai, enhancing visitor experience, reducing energy and water use.
- Operating across two domains, environmental monitoring and irrigation, the application will collect, monitor, correlate and analyse data from the site.

Oracle launches technology hub in Saudi Arabia to drive digital transformation

The hub is dedicated to driving implementation of Artificial Intelligence; Blockchain; Machine Learning; Internet of Things.

In line with its commitment to support the Ministry of Communications and Information technology's strategic objectives to drive the implementation of Saudi Vision 2030, Oracle announced opening of its first innovation hub in Saudi Arabia. The new hub is dedicated to driving the implementation of latest digital technologies including Artificial Intelligence; Blockchain; Machine Learning; Internet of Things IoT across the country's public sector, corporate entities and academia.

Located at Oracle's Riyadh office, the new innovation hub was inaugurated by His Excellency Vice Minister of Communications and Information Technology Eng Haitham Abdulrahman Al-Ohali at an event that was attended by key dignitaries and executives. Oracle Cloud offers a complete suite of integrated applications for Sales, Service, Marketing, Human Resources, Finance, Supply Chain and Manufacturing.

His Excellency Eng Haitham Abdulrahman Al-Ohali, Vice Minister of Communications and Information Technology said, "Digital transformation is a vital part of the Kingdom's Vision 2030. We live in an age where data is the new oil and given the rapid global economic changes that are unfolding around us, we are constantly moving ahead to keep Saudi Arabia up to pace with the fourth industrial revolution."

He added: "There is no doubt that spreading the culture of digital transformation will enhance the growth and development of the Kingdom and will enable Saudis to harvest the opportunities and benefits that come with it in the near future. A digital Saudi Arabia can only be created through seamless collaboration amongst all stakeholders. We welcome Oracle's initiative to establish an innovation hub in Riyadh to support our vision and enable the country's tech entrepreneurs to enter the digital economy."

"Digital transformation is at the heart of strategic government programmes like the Vision 2030 and NTP 2020, as digital solutions are helping create an automated infrastructure for the implementation of these initiatives", said Abdul Rahman Al Thehaiban, Senior Vice President – Technology, MEA and CEE, Oracle. "Organisations in Saudi Arabia now understand the importance of digital transformation and this is reflected in IDC's ICT spend estimate of $35 billion in Saudi Arabia. Oracle's innovation hub will help raise awareness levels of key stakeholders, encourage an innovative approach and also support the skills development of next generation of Saudi leaders."

"Oracle's innovation hub in Riyadh will serve as the ultimate platform for experimentation and implementation of digital technologies in Saudi Arabia", said Fahad Al Turief, Country Leader, Oracle Saudi Arabia. "The launch of this new hub, announcement of a new data centre in Saudi Arabia and a host of training programmes with leading Saudi universities and start up hubs are solid evidence of Oracle's commitment to continuously invest in enhancing our local capabilities in Saudi Arabia." ◼

KEY TAKEAWAYS

- The hub is dedicated to driving implementation of Artificial Intelligence; Blockchain; Machine Learning; Internet of Things.
- The hub is located at Oracle's Riyadh office.

MAF uses Schneider's EcoStruxure to transform power consumption in Carrefour Egypt

Schneider Electric has deployed EcoStruxure Facility Advisor solution, which helps monitor energy use and asset availability, across 19 Majid Al Futtaim, MAF Carrefour stores in Egypt. In a competitive retail environment, Carrefour is constantly seeking ways to improve quality, choice and prices, while implementing sustainable business practices. The company has deployed Schneider Electric's Facility Advisor suite of services in 19 hypermarkets and supermarkets and is planning to roll it out additionally.

Carrefour started collaborating with Schneider Electric in 2016 to find solutions to reduce power consumption.

Key goals included:
- Measuring energy consumption across stores to identify both high and low-performing stores
- Using energy dashboards and performance reports to continually optimise power usage
- Ensuring protection against downtime threats such as equipment malfunctions or power outages
- Maximising uptime for power, lighting, ovens, refrigerators, and other business-critical assets

Facility Advisor is a cloud–based platform which provides insights on consumption and alerts on electrical distribution quality. It helps eliminate power losses by detecting abnormal energy consumption of the connected assets and allowing actions to minimise unplanned breakdowns. It also assists in validating electrical costs on invoices by providing details on facility loads.

By logging onto a dedicated web portal, Carrefour can check the

JEAN LUC GRAZIATO,
Country Head for Carrefour
Egypt at Majid Al Futtaim Retail.

KEY TAKEAWAYS

- EcoStruxure Facility Advisor provides insights on energy consumption and on power usage.
- Installed in 19 Carrefour stores it has helped achieve 7% energy savings and reduced carbon footprint
- MAF is planning to deploy the solution across all stores
- Facility Advisor is a cloud–based platform which provides insights on consumption and alerts on electrical distribution quality.
- By logging onto a dedicated web portal, Carrefour can check the consumption levels of each store.

consumption levels of each store. Schneider's engineering team analyses data from the Facility Advisor dashboards and detects abnormal activities to provide in-depth reports, which are provided to Carrefour Egypt twice a year, and will serve as action plans to optimise energy use.

EcoStruxure Power is an open, IoT enabled, interoperable architecture using low and medium voltage equipment. EcoStruxure Power leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity. This includes Connected Products, Edge Control, and Apps, Analytics and Services.

Jean Luc Graziato, Country Head for Carrefour Egypt at Majid Al Futtaim Retail said, "This project with Schneider, is aligned with Majid Al Futtaim's wider strategy to become net positive by reducing its energy consumption and carbon emissions. Apart from the environmental benefits, the cost effectiveness of implementing Facility Advisor also allows us to redistribute savings to enhance various aspects of our business, making our offering even more compelling for customers."

"EcoStruxure Power solutions enable our customers to leverage digital intelligence in their facilities to unlock the full potential of their power distribution system. Our engineers and Majid Al Futtaim's team co-partnered in innovation. We have been continually working together to enhance the technology, strengthen the partnership, and uncover new ways to save energy," commented Walid Sheta, Zone President for Schneider North-East Africa and Levant. ■

Standard Chartered planning next level customer engagement with Avaya's OneCloud

(Left to right) Ayman Majzoub, Senior Director, Private Cloud and Managed Services, Avaya International; Stuart Beaumont; Nidal Abou-Ltaif, President, Avaya International; Mark Meehan, Client Executive, Avaya International; and Sami Ammous, Managing Director ASEAN, Avaya.

Avaya is partnering with Standard Chartered to deliver a multi-year client experience transformation project that will enable the Bank to more fully align its services with clients' fast-paced, digitally connected lives. The Avaya OneCloud Private solution enables organisations such as Standard Chartered to hit the ground running with unified communications and contact centre solutions delivered on their own private cloud.

Avaya offers standard reference architectures—or customers can team up with Avaya global experts to design a custom solution. The Standard Chartered Avaya implementation is designed to enable the Bank to effectively service its clients, while building a foundation that anticipates contact centre channels that have not yet emerged. Avaya OneCloud Private provides the global platform that Standard Chartered needs and deploys it securely within the Bank's environment.

KEY TAKEAWAYS

Strategy
- Avaya OneCloud enables organisations to use contact centre solutions delivered on their private cloud.
- Avaya offers standard reference architectures or customers can team up with global experts to design a custom solution.
- Standard Chartered Avaya implementation is designed to build contact centre channels that have not yet emerged.

Execution
- Standard Chartered is experiencing an increase in digital adoption, with 49% now actively using online or mobile banking compared to 45% in 2017.

As Standard Chartered continues to invest in its digital capabilities, the global banking group is experiencing an increase in digital adoption, with 49% of clients now actively using online or mobile banking compared to 45% in 2017. The Bank is committed to delivering an easy, convenient and secure digital banking experience across multiple channels, while still offering the human touch through its client contact centres.

"Our partnership with Avaya will enable us to offer a truly seamless experience for our clients by consolidating all our interactions with them in one place," said Stuart Beaumont, Global Head, Voice and Virtual, Standard Chartered. "This creates greater efficiencies in our structure, with agents being able to transition between all channels, benefiting from the context of previous conversations. Avaya's platform also offers us the flexibility of engaging third party organisations so that we can continue to evolve and offer best in class channels and a great experience for our clients."

Nidal Abou-Ltaif, President, Avaya International, said: "Standard Chartered is creating more convenient ways of banking for its clients, ensuring security, privacy and full-service across any channel. Avaya is proud to be supporting this venerable financial institution as it continues to evolve and transform to meet the needs of its clients. This partnership is a ringing endorsement of the next-generation possibilities afforded by Avaya's cloud offerings."

"As it shows with its commitment to its clients, Standard Chartered has shown a preference for strategic partner relationships, and that is a value that we at Avaya share," continued Nidal. "Our technology roadmaps are well aligned with Standard Chartered's evolving requirements, and we're extremely proud to be helping this 160-year-old institution continue delivering incredible client experiences." ■

Smart solutions from Microsoft, Johnson Controls used in Bee'ah new office

Using Digital Vault offering built on Microsoft Azure, Johnson Controls will outfit the new building with intelligent edge systems.

Bee'ah, the Middle East's sustainability pioneer, announced that its new Sharjah-based headquarters is set to become the first fully-integrated artificial intelligence office building in the UAE and MENA region, upon its opening in Q4 2019. The announcement was made in Redmond, Washington, on the sidelines of an agreement between executives from Bee'ah, Microsoft, Johnson Controls and Evoteq. As part of the agreement, the new Bee'ah headquarters will be equipped with an array of artificial intelligence and smart building solutions powered by Microsoft.

Using its Digital Vault offering and extended capabilities built on Microsoft Azure, Johnson Controls will work with Microsoft to outfit the new building with intelligent edge systems, devices and software designed to optimise energy efficiency, make the best use of available space and help the building's occupants be more productive through a virtual artificial intelligence persona.

Evoteq, Bee'ah's digital venture, will serve as the technical project management partner for this unique project, deploying integrated solutions and enhanced digital capabilities for greater operational output.

From digital workspaces to smart back-office integration, and from smart lobby-visitor management to smart security, employees and visitors at Bee'ah's new headquarters will experience a diverse range of cutting-edge artificial intelligence features through multiple touchpoints across various functions including HR, customer care, procurement, administration, and multiple building management systems. Microsoft has been able to reduce energy consumption by 20% on its campus in Redmond by using machine learning on edge devices and in the cloud.

Designed by the renowned Zaha Hadid Architects, Bee'ah's futuristic new headquarters will be fully-powered by renewable energy and optimised for the sustainable use of resources to have zero net energy consumption and achieve a LEED platinum certification — the highest recognition awarded to green buildings.

Under the agreement, Johnson Controls will deploy a technical infrastructure for the building capable of monitoring its entire environment virtually with Microsoft Azure Digital Twins and IoT technologies. The solution will enable Bee'ah to analyse volumes of data to optimise building operations and drive efficiency.

As Bee'ah's exclusive cloud provider, Microsoft will optimise the experience of the building for people through technology and solutions powered by Microsoft Azure. Intelligent concierge capabilities will engage visitors and employees to help locate available meeting spaces, book appointments, give directions, hail rides and support day-to-day tasks. These artificial intelligence-powered personal concierge services will be the first in the Middle East designed specifically for building occupants.

Johnson Controls' Digital Vault offering takes advantage of the capabilities of Azure Digital Twins, Azure IoT and Azure Container Registry to provide a complete virtual representation of data from connected devices and systems throughout the building. ■

> ## KEY TAKEAWAYS
> *Strategy*
> - Bee'ah new smart office building to go live in Q4 2019.
> - Digital workspaces, smart back-office integration, smart lobby-visitor management, smart security, at Bee'ah new office.

Nexign leverages blockchain marketplace to enable transformation in telecos

(Left to right) Yuri Morozov, CEO and Founder of Bubbletone Blockchain for Telecom; and Loukas Tzitzis, Chief Products and Marketing Officer at Nexign.

Nexign, a Business Support System and Internet of Things platform provider, announced new capabilities to its product portfolio that will empower communications service providers to build digital partnerships and collaborate more efficiently. This will enable CSPs to create new business models, accelerate time-to-market for new advanced products and services and reduce total cost of ownership by up to 25%, while improving the user experience. As a result, end-users will benefit from personalisation, optimisation and expanded service offerings from CSPs.

Facing disruptive changes in classic roaming and SIM distribution model due to eSIM, Nexign has entered in to an exclusive partnership with Bubbletone. The two companies aim to create a global marketplace for telecom operators, giving them the ability to collaborate with each other and consequently offer individually determined volumes and qualities of

KEY TAKEAWAYS

Strategy

- The blockchain-based BSS solution from Nexign and Bubbletone has the potential to revolutionise the way operators do business
- The solution will enable roaming users to instantly purchase service packages using their existing SIM card.
- Operators will benefit from BSS with embedded blockchain, enabling them to increase the efficiency of their business.
- Once operators join the platform, they will be able to expand their customer bases through distribution of digital value-added services.
- Blockchain in the telecom market is predicted to grow at a CAGR of 84.4% between 2018-2023.

services to end users—an option that has not previously existed.

"I believe that this is Nexign's competitive advantage. If regional operators are to make the transition from CSPs to digital service providers, it is imperative that they align with a BSS vendor that addresses key themes such as cloud, partnerships, customer experience, digital channels, self-care and new monetisation streams for 5G, blockchain and IoT. At the same time, the BSS vendor needs to be agile, adopt best practices for product development and delivery and offer a transparent, partnership-based engagement model," said Ahmad Sayed, Regional Director, Middle East and Africa, Nexign.

By facilitating seamless and secure exchange of financial and identity information between mobile network operators, phone users and service providers, the solution will enable roaming users to instantly purchase service packages, at local operator rates, using their existing SIM card. As a consequence, operators will benefit from BSS with embedded blockchain, enabling them to increase the efficiency of their business through rapid and seamless joining of the Bubbletone platform.

According to Research and Markets, blockchain in the telecom market is predicted to grow at a CAGR of 84.4% between 2018-2023, driven in large part by increasing support for OSS BSS processes.

The blockchain-based BSS solution from Nexign and Bubbletone has the potential to revolutionise the way operators do business and monetise services, for three key reasons:

- The platform creates a global marketplace where operators can publish and share product information as well as buy and resell.
- With full support for e-SIM and IoT Apps tokens operators can now publish their own tokens and sequences.
- The blockchain network acts as a clearing house, checking all transactions and mitigating any settlement risks. ■

HIGHLIGHTS

200 delegates

Breakout sessions on automation

Vendor presentations

End user presentations

Three award categories

INAUGURAL BTX SHOW RECOGNISES TRANSFORMATION CHAMPIONS AND ENABLERS

GEC Media rolled out its inaugural BTX Show 2019 road show in Riyadh highlighting transformation use cases, solutions, and star players in Saudi Arabia.

The inaugural BTX Show 2019, brought to you by Dell Technologies, was held on 23 April at the Al Faisaliah Hotel in Riyadh, Saudi Arabia. GEC Media Group, publishers of Business Transformation, Enterprise Channels MEA, The Titans, Cyber Sentinels, has chosen to launch its inaugural BTX Show 2019 in Riyadh, which is a testament and recognition of the exemplary lead being taken by the Kingdom of Saudi Arabia in transforming its economy, its citizen services, and encouraging all other enterprises to follow in similar footsteps.

The sponsors of BTX Show 2019 include Dell Technologies as Title Sponsor; Sage and Al Jammaz Distribution as Platinum Sponsors;

RSA and Arrow as Gold Partners; Aruba Networks HPE and Global Technologies as Silver Partners; Toshiba as Supporting Partner; Appian as Intelligent Automation Partner; and PayTabs as Online Payment Solutions Partner; as well as Nutanix.

GEC Media Group's, Business and Technology Transformation Road Show 2019, is an exercise to bring forward the winning duo combination of CIOs and their CEOs and to bring them into the limelight. This is an event that top business and technology heads and their top management heads cannot afford to miss. For the first time in the region the role of the CEO as an enabler of transformation will be brought into the limelight.

Business transformation around digital technologies can no longer be left to the heads of technology. Every business decision maker also needs to work closely towards aligning their processes with what technology can now offer. Job roles need to be redefined to take advantage of what digital can offer. Team workers need to be redeployed where the best digital value can be generated. Business heads need to look and relook and continue to relook at what digital experiences their existing and new customers are going through.

It is for this reason that GEC Media Group created BTX Show 2019 road show, to recognise these new fundamentals that are driving business. BTX Show 2019 brings to this forum three very exciting first-time awards, that recognise the role of the CEO in driving transformation, the role of teams in rolling out transformation, and the role of technology partners in enabling that transformation.

These awards are:

BTX CEO AWARDS
This award recognises breakthrough CEOs who are preparing their organisation for next generation business models and digital technologies. They must have a passion for building a healthy employee and work culture and must be champions of adopting technologies and best practices to

enable their business. They are a select breed indeed and are able to work effectively in generating opportunities from business transformation and can tackle the challenges of transformation.

Winners of BTX CEO Awards
#1 Loai Mousa, CEO Saudi Governance Center.

#2 Ahmed el Banna, CEO Saudi German Hospitals Group.

#3 Paul Melotto, CEO AlRaedah Finance.

#4 Fadi Kreiker, CEO Prime Lands Investment Group.

#5 Fahad Hassan algahmdi, CEO Power Network Company.

#6 Abdulaziz Al Jouf, CEO PayTabs.

#7 HE Fahad Hussain Al Sudairi, CEO Saudi Electricity Company.

#8 Wail Bamhair, CEO Taqnia Energy.

#9 Ahmad AR BinDawood, CEO Danube and BinDawood.

BTX TEAM EXCELLENCE AWARDS
This award recognises the various multi-department executives involved in a digital or business transformation exercise. Typically, this covers executives in sales, marketing, human resources, front office, operations, administration, manufacturing, logistics, supply chain, information technology, information security, amongst others. These executives are recognised for their ability to work across the organisation, across departments, with a forward-looking agile outlook.

Winners of BTX Team Excellence Awards
#1 Roc Arquiza Escosio, Al Faisaliah Hotel.
#2 Yazeed AlMarshoud, Saudi

Ceramics.
#3 Qasim Nadeem, Abana Enterprises.
#4 Faisal Alfohaid, AlKhorayef Group.
#5 Mushtaq Khan, Obeikan Investment Group.

#6 Meshal M AlFouwis, Saudi Electricity.

#7 Sulaiman AlKharashi, Tatweer Buildings Company.

#8 Jaffer Sadiq, Movenpick.

#9 Mohammad Hamza Sheikh, National Factory for Can Ends.

#10 Dr Mustafa Hassan Qurban, King Fahd Military Medical Complex.

#11 Rajeh Albogamy, King Saud bin Abdulaziz University for Health Sciences.

#12 Abdullah hamidah, Elite Hospital.

#13 Hamdi Aljadani, JGPC GIC.

BTX SOLUTION PROVIDER AWARDS
This award recognises efforts by in-country channel partners, specialist integrators, consultants and vendors to act as enablers and trusted advisors for digital and business transformation projects in their respective countries. Specialist partners and vendors located in-country are best suited to deliver such solutions. Such solutions can be straight from the vendor box, others may be custom built and value added by specialised partners.

Winners of BTX Solution Provider Awards
#1 Al Jammaz Distribution
#2 Dell Technologies
#3 Aruba HPE
#4 R&M
#5 RSA
#6 Sage
There were various end users and

vendor key notes presented. These included:
Breakout session: Digital transformation in business management applications by Mansoor Sarwar, Director Technical Services and Pre-sales, SAGE.
Breakout session: Intelligent Automation by Mohammad Abusinnah, Account Executive Middle East, Appian.
Transformation landscape of Saudi Arabia and Vision 2030, by Mohamed Mahnashi, ICT Adviser, Ministry of Foreign Affairs.
The digital transformation roadmap by Fuad Mehdawi from Dell Technologies.
Security and networking transformation by Abdullah ALSaadoun, Regional Manager, Saudi Arabia and Bahrain, RSA.
Business applications and the new digital user experience by Mansoor Sarwar, Director Technical Services and Pre-sales, SAGE.
Digital and business transformation journey of Gulf Stevedoring, by Hossam El Masry, Head of Information Technology, Gulf Stevedoring.
Smart applications and edge of networking, by Makki Al-Kurdi, Networking Account Manager, Aruba HPE.

The inaugural BTX Show 2019 came to an end with Ronak Samantaray, CEO GEC Media Group, expressing his vote of thanks to all the government dignitaries, top executives, participants and sponsors for helping to make the event a success.

GALLERY OF BTX SHOW 2019 PRESENTATIONS

Breakout session: Digital transformation in business management applications by Mansoor Sarwar, Director Technical Services and Pre-sales, SAGE.

Breakout session: Intelligent Automation by Mohammad Abusinnah, Account Executive Middle East, Appian.

End user keynote: Transformation landscape of Saudi Arabia and Vision 2030, by Mohamed Mahnashi, ICT Adviser, Ministry of Foreign Affairs.

Vendor solutions: The digital transformation roadmap by Fuad Mehdawi from Dell Technologies.

Vendor solutions: Security and networking transformation by Abdullah ALSaadoun, Regional Manager, Saudi Arabia and Bahrain, RSA.

Vendor solutions Smart applications and edge of networking, by Makki Al-Kurdi, Networking Account Manager, Aruba HPE.

End user keynote: Digital and business transformation journey of Gulf Stevedoring, by Hossam El Masry, Head of Information Technology, Gulf Stevedoring.

Vendor solutions: Business applications and the new digital user experience by Mansoor Sarwar, Director Technical Services and Pre-sales, SAGE.

Close to 200, government dignitaries, top executives, industry professionals, end users, attended the inaugural BTX Show 2019 in Riyadh, Saudi Arabia.

GALLERY OF BTX SHOW 2019 AWARDS

Winnners of the BTX Show 2019 CEO Awards, Team Excellence Awards, Solution Provider Awards.

Ahmed el Banna, CEO Saudi German Hospitals Group, Winner of BTX CEO Awards.

Paul Melotto, CEO AlRaedah Finance, Winner of BTX CEO Awards.

Wail Bamhair, CEO Taqnia Energy, Winner of BTX CEO Awards.

Saudi Ceramics, Winner of BTX Team Excellence Awards.

Tatweer Buildings Company, Winner of BTX Team Excellence Awards.

Movenpick, Winner of BTX Team Excellence Awards.

National Factory for Can Ends, Winner of BTX Team Excellence Awards.

King Saud bin Abdulaziz University for Health Sciences, Winner of BTX Team Excellence Awards.

Elite Hospital, Winner of BTX Team Excellence Awards.

JGPC GIC, Winner of BTX Team Excellence Awards.

Al Jammaz Distribution, Winner of BTX Solution Provider Awards.

Dell Technologies, Winner of BTX Solution Provider Awards.

Aruba HPE, Winner of BTX Solution Provider Awards.

RSA, Winner of BTX Solution Provider Awards.

R&M, Winner of BTX Solution Provider Awards.

Sage, Winner of BTX Solution Provider Awards.

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- Big Data / IoT
- Business Intelligence & Analytics
- Enterprise Content Management
- Governance, Risk & Compliance
- HCM Solutions & Services
- Infrastructure Management

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BRITANNIA TRANSFORMING EXPORTS WITH SMART FACTORIES

$1.5B Britannia is investing in regionally distributed smart factories to drive its global exports out of India, according to MD Varun Berry.

VARUN BERRY,
Managing Director,
Britannia Industries.

Britannia Industries has a good connection with Indians outside India, but its brands are not so well known to other populations. Inside India, the business of Britannia is growing at 12–13%, with the key driver for its growth, being the growth of the Indian population.

The Britannia brand is well known inside the Indian subcontinent but outside there is still work to be done to build the brand. Britannia is not yet a global brand like Coke.

"Outside of India, Britannia does not have a local footprint," explains Varun Berry, Managing Director, Britannia Industries. "It is important for us to establish a local footprint. If we had a manufacturing footprint in more places it would help us to expand. If we had a set-up in Nigeria for example, we could reach African markets. From Egypt we could reach parts of Africa as well as Arabia."

Globally, Britannia does not intend to follow a hub and spoke model for its supply chain distribution. It will follow a regionally distributed, production and delivery network. "Having a distributed footprint enables and accelerates our vision of a total foods company," emphasizes Berry.

For its regional expansion into other countries, Britannia requires a local partner to assist with the network and market knowledge.

"Our distribution network involves 5.2 million outlets. This number of outlets is higher than the population of some of the countries in the region. Having said that, our export business has also grown from 5 to 8% and we are interested in growing it further," says Berry.

Britannia invests more in the technology around manufacturing than in the supply chain. The manufacturing form factor is high volume, low value, and light weight. Britannia invests in growing its green footprint with sustainable practices such as recycling water, less waste, burning less fuel, and using the right fuel.

This is making the company more cost-effective in manufacturing. "Today's consumer is looking for these initiatives," points out Berry.

Britannia is also investing in manufacturing technology. In terms of Industry 4.0, smart factories are the way of the future. They will deploy digital and smart technologies and will ensure efficiency in distribution, movement, delivery, production, resource utilization.

To grow exports, Berry intends to follow a three-pronged strategy. The first prong is to invest in a 100% export-only factory, getting access to duty free commodities and export driven incentives. The second prong, is to enter one new geography every year for the next five to six years, setting up a production plant in that geography. Currently, the second largest factory after the Indian sub-continent is being commissioned in Nepal.

The third prong is to identify technology platforms that work for Britannia. For example, e-commerce is very successful inside China, but less so in other countries. The final objective to become a global total foods company. ■

UNIFIED NETWORKING KEY FOR BUILDING TRANSFORMATION

Migrating to a unified networking platform is essential to build transformative building integration solutions explains Valerie Maguire, at Siemon.

VALERIE MAGUIRE,
Director of Standards and
Technology, Siemon.

Digital transformation is fueled by the evolution of the Internet of Things and artificial intelligence that creates a platform for any and every business to leverage data in a way that allows them to make faster, strategic decisions while increasing efficiency, reducing errors and improving the overall customer and employee experience.

With more devices and sensors than ever connected to IP-based networks and communicating via common protocols, systems and applications of all types can share and analyse information to drive strategic reasoning and response at both the human and machine level, enabling businesses to achieve real digital transformation.

Too many network infrastructures are underutilised, and the industry as a whole need to realise the potential of converging and powering multiple low-voltage devices and systems on a single unified structured cabling system that supports common communication protocols and enables sharing information from one system to another.

Those that continue to deploy disparate platforms are preventing themselves from transforming both their buildings and their business. Only those that embrace data-driven reasoning and response across a range of machines, applications and systems are truly prepared for a successful digital and business transformation.

A dream transformation project is one that starts early in the planning stages and where all stakeholders—from the business and building owner, and the system integrators and vendors, to those designing and deploying the systems—are of the same mindset. The mindset is that the building must be designed in a way that supports the convergence and integration of building systems while delivering the performance and bandwidth to support emerging and future IoT and AI technologies that will ultimately enable true digital transformation.

A key part of this mindset involves the unanimous belief that investing in the right underlying network infrastructure is an absolute.

Twisted-pair copper cabling systems create the foundation for connecting and enabling communication to and from all types of low-voltage devices and sensors. Most of these devices are now powered using DC power also transmitted over copper cabling via power over Ethernet PoE technology, eliminating the need for expensive, laborious AC power connections. At the same time, bandwidth needs continue to grow, and applications like audio-visual over IP and the latest Wi-Fi 6 require 10 Gigabit per second speeds.

As the sheer amount of information being generated continues to grow, an underlying fibre infrastructure that is both dynamic and scalable is required to transmit, store and process all of this Big Data. The increasing number of fibre links within data centres are under immense pressure to handle extreme data volumes. ■

TRANSFORMING TAX ADMINISTRATION USING TECHNOLOGY

Data driven decision making, analytics, automation, and integration, can help build new tax administration systems in the GCC green field environment, according to a report by Oliver Wyman.

Governments of the six Gulf Cooperation Council, GCC states have long relied on oil to balance their budgets. But this model will have to come to an end at some point, following recent years' price falls and the global shift towards alternative energy and electric cars. Government debt is on the rise and budget deficits remain elevated. As much as $2 trillion may be required to balance the budgets of the six GCC countries by 2030. To maintain fiscal stability and continue to fuel major national transformations, the countries will have to raise funds through taxation.

Implementing this change is a complex task, one which took decades in developed economies. The experiences of several developed economies show that implementing revenue-generating reforms and achieving a robust fiscal balance take a decade to design, build, and gain social acceptance. They need to be introduced gradually so as not to overwhelm the private sector. To be successful they should act as enablers for the economy rather than shackles, while also efficiently redistributing wealth to different parts of society.

In Saudi Arabia, for example, just 16% of government revenue is derived from taxes, with much of the rest coming from oil. In contrast, OECD countries get an average of 90% of their revenues from taxation. To raise greater tax revenues, GCC countries will need to set up new collection systems that gather payments from individuals and businesses throughout the economy.

A range of new technologies make now a particularly good time to design an effective tax system. Transaction taxes, such as VAT, can be facilitated by digital invoices and automatic payment systems. Technological innovations will have to be backed up by legal and regulatory infrastructures. Approached in the right way, new taxation systems are an opportunity for GCC countries to leapfrog more-established agencies in other parts of the world, where legacy systems are often a barrier to the adoption of new techniques.

The region urgently needs new tax agencies to manage the complex interplay of taxpayers, other government agencies, and the public. If implemented correctly, it is estimated that GCC governments could achieve 80% of their targeted non-oil revenues with just four taxes. These tax agencies should see this transformation as an opportunity to leapfrog the world's more mature tax systems by building world-class, integrated systems without the legacy of complexities, inefficiencies, and existing technology.

The GCC countries – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, are at an economic crossroads. To transform, tax agencies in GCC countries must derive lessons from the struggles of those mature tax systems. They should focus on fewer but larger taxes rather than become bogged down in the administration of small taxes and fees. And they should keep regulations simple so that compliance is economical for the taxpayer and enforcement for the tax agency.

DIGITISING THE TAX PAYMENT EXPERIENCE

Tax agencies are exploring new, disruptive technologies to integrate taxpayer transactions and tax reporting. These can take the form of electronic exchange of standardised tax data and automated cash registering, or more advanced solutions such as digitised taxpayer platforms and systems based on blockchain technology. GCC tax administrations should be early adopters of these cutting-edge technologies, by simplifying and standardising the technical

The GCC states are at an economic crossroads with significant efforts in place to diversify revenue streams. There is huge potential for tax-related initiatives and a once in a generation opportunity to transform public administration: said Ibrahim Ghoul, Partner Oliver Wyman.

interfaces connecting taxpayers and the agency. These measures will lead to smooth operations and cement constructive, long-term partnerships with the private sector.

Using combinations of tax data and third-party data, tax agencies are developing advanced analytical models to shine a light on the shadow economy. They will become more able to detect identity theft, identify colluding parties in fraud, and maximise value extracted from every taxpayer touchpoint. New tax agencies can circumvent legacy operating models and use their fresh start to build a centralised operating model based on data-driven decision making.

Improvements can be made in user experience, compliance, and administration by creating a unified public sector beyond the tax agency. Because it operates in silos, public administration has often earned a reputation for being inefficient, counter-intuitive and generally frustrating. The challenge is to provide taxpayers with an efficient, integrated journey so that taxes do not become an additional administrative burden on their business, and thus negatively impact the ease of doing business of that country. Tax agencies can take the lead across the public sector through digitisation and advanced uses of data.

DIGITISING THE TAX GAP

The tax reporting process is usually disconnected from the activities on which levies are imposed, increasing both taxpayers' administrative burden and compliance risks. The problem arises because of the countless ways in which transactions are documented, reported and transmitted to the tax agency. Each decision made by the taxpayer adds a burden for those willing to be compliant and creates evasion opportunities for those who are not.

At each step of the taxpayer journey there are varying levels of compliance and tax leakage. In particular, improper taxpayer reporting constitutes a major part of the tax gap, the difference between the total amount of tax owed to government and the amount they actually receive. For example, in the UK incorrect reporting accounts for around 80% of the overall tax gap.

To address this challenge, leading tax agencies in Europe, the Americas, and elsewhere are using disruptive technologies to enhance integration and data collection. These allow tax agencies to improve their matching of declarations to liabilities, which in turn enhances overall compliance levels. Systematic data collection also offers critical benefits, such as a reduction in compliance cost for the taxpayer, a decrease in evasion risk, and the identification of hidden taxpayers.

The data can also provide details on taxpayers' financial positions, which can inform collection strategies – such as the choice between installment arrangements, settlement, and desk or field collections. Detailed data points and risk analytics enable tax agencies to make better-informed decisions: They can whitelist or blacklist certain taxpayers, for example, or optimise the audit rate for taxpayer declarations. Data and analytics can also help to choose the right action for potentially non-compliant taxpayers and to streamline reviews of taxpayer

liabilities, such as audits and inspections.

DIGITISING COLLECTION OF TAX DATA

To collect data in a standardised and streamlined manner, established tax agencies have developed data formatting schemes and digital enablers that facilitate integration with the private sector. The use of standardised data formats allows the collection of uniform data points from a wide range of different taxpayers. It can also ease taxpayers' burden of filing and compliance by enabling the pre-population of fields in tax return filing forms. Uniform formats and collection of data also make it easier for tax agencies to match, corollate, and analyse data points that generate insights into taxpayers and their compliance habits.

Some tax agencies also employ data source enablers for the secure transmission of data from taxpayers. These systems facilitate integration between the tax agency and the private sector, enabling seamless sharing of data between them. Data source enablers may include electronic cash registers, electronic invoices, and digital invoice customs exchange. Electronic cash registers store customer transactions automatically, ensuring they are accurate and can be processed and transmitted quickly.

In Austria, Mexico, and Brazil, standardised electronic invoices have incentivised businesses to digitise their operations, facilitating their interaction with tax agencies and making their business activities more transparent. As a result, compliance has increased significantly, and fraud declined.
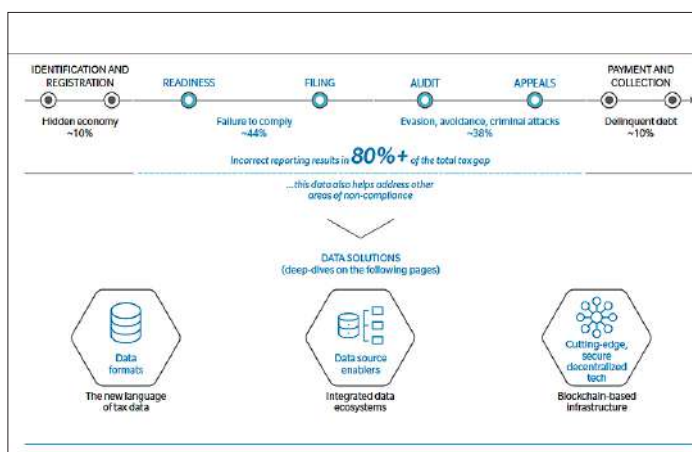
A digital invoice customs exchange, DICE can track cross-border transactions, identifying and solving missing trader fraud, for example, and reduce international tax evasion. A technology-intensive tax compliance system, DICE utilises invoice encryption
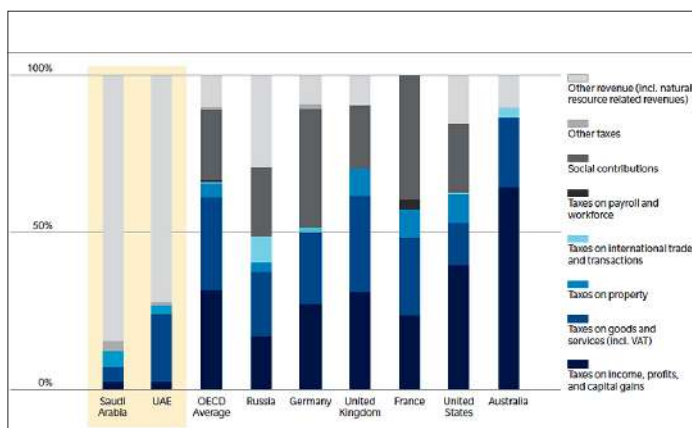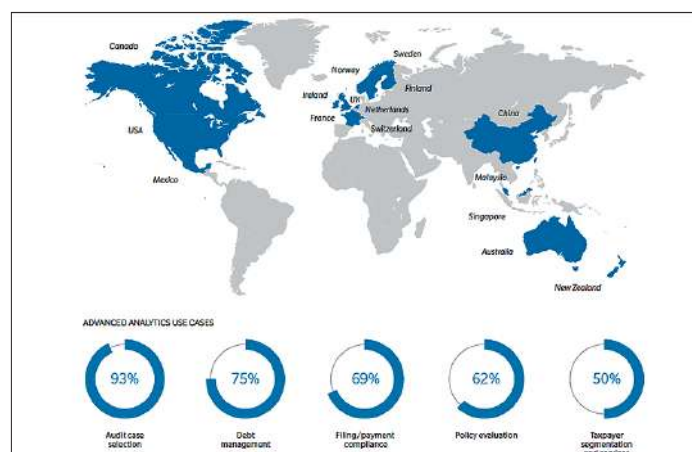
Composition of government revenue for selected countries.
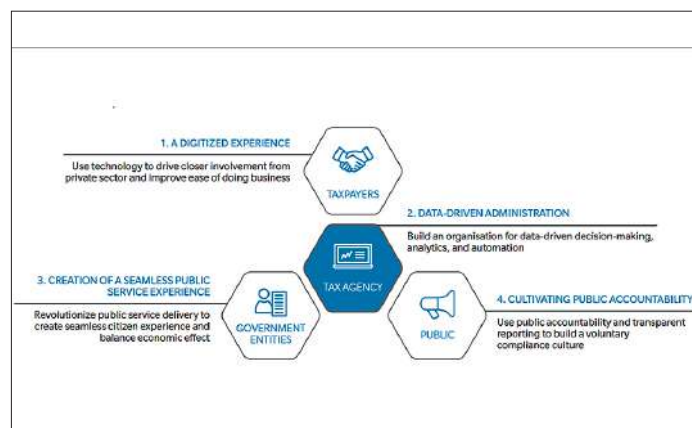
Interdependency in tax administration.

Origin of the tax gap in the tax-payer journey.

Global usage of advanced analytics by tax agencies in various countries.

to safeguard data exchanged between sellers and buyers for both domestic and import-export transactions. It simultaneously passes the transaction details to the agencies concerned. New decentralised technologies, such as blockchain, promise to simplify the mechanics of data-source enablers and revolutionise tax automation in the long term.

CHALLENGES OF DIGITISING TAXATION

Automating tax functions is a long-term project that requires several years of phased implementation. Successful execution will depend on the broader pillars defining the country's legal and commercial systems, including the legal and regulatory environment, the use of technology in government

and the private sector, taxpayer maturity, and the overall system of government and tax. So, tax agencies will need to work closely with other governmental entities, including legislative agencies, as well as with the taxpayers themselves.

To adopt an automated, analytics-driven approach, GCC tax agencies must first define their target operating model across several dimensions, including applicability, purpose, data, and technical infrastructure.

Historically, governmental institutions, and in particular tax agencies, have operated in silos with disconnected interfaces and minimal data sharing. However, new integration technologies and data-sharing practices, along with rising expectations from the public, are pushing these institutions

towards a greater degree of collaboration and integration.

Lessons from established tax agencies highlight that decisions today can affect operations for decades. For instance, nearly all surveyed agencies call embedding analytics into everyday operations a significant challenge, often due to changes in longstanding work practices. They also face significant IT and data management issues over the types of data to collect. However, GCC tax agencies can circumvent these problems if they take advantage of the greenfield environment, they are working in. ∎

TRANSFORMATION CHALLENGES IN REGIONAL RETAIL SECTOR

Regional retailers are being challenged by transformational enablers including e-commerce, digital talent, analytics, and have to use survival tactics.

- How to develop agility to respond quickly to market changes and new customer demands
- How to attract and retain talent
- How to keep up with the pace of advances in digital technology

Retail CEOs have experienced a softer market in recent times and most said they were targeting low single-digit growth this year, at best. While this would be considered acceptable in mature markets, it is a far cry from the region's double-digit growth of years gone by. Some believe the sector is in decline: macro issues such as oil prices and geopolitical instability have created unpredictability, which has had a direct impact on retailers.

According to PwC's recently launched 22nd CEO Survey, Middle East Findings, 28% of Middle East CEOs across all sectors believe the global economy will improve over the next year, a decline from 52% in the prior year. This cautious outlook is reflected in the fact that more than two-thirds, 68% of regional CEOs put operational efficiencies at the top of their list of planned activities to drive profitability in the next 12 months. Retail CEOs are focused on streamlining costs, however they also identified expanding areas giving them plenty to be optimistic about.

One online retail CEO said 2018-19 would mark the coming of age for online retail in the Middle East and expects e-commerce to account for close to 40% of the market in the future. This view is further supported by Amazon's recent announcement to create a Middle East marketplace.

TOP PRIORITIES

The three top priorities for retail CEOs in the survey are digital 88%, followed by cost optimisation and restructuring 50%, then talent and training 50%. As a retail CEO highlighted, competition is coming from everywhere, the region's retailers are battling global e-commerce sites, social sellers and influencers, as well as rival stores, to win sales and brand loyalty. As a result, there is no five-year plan, companies must be continually ready to respond to change.

Better last-mile logistics to meet customer demand for fast, flexible deliveries to and returns from a convenient location at a reasonable price is also a crucial part of broadening e-commerce in the region. PwC's 2018 Global Consumer Insights Survey highlights approaches taken in more mature online shopping markets, such as delivery by drone to remote parts of the UK or package collection from lockers in Germany. Amazon has even trialled enabling delivery people to access customers' homes when they are out, using a smart lock and camera to leave the package securely inside.

ONLINE LANDSCAPE

In the Middle East, online retail still accounts for a smaller share of the market, at an estimated 2-3% compared with 10-15% in developed western economies, yet that share is growing quickly. PwC's 2018 Middle East Total Retail consumer survey for example, found that 53% of respondents now shop with Amazon, up 4% since 2016. Using the site also influences customers broader shopping habits: 45% start their product search on Amazon, and 41% use it to check prices.

Demographics in the region also support the growth of online: 60% of the population in the Middle East and North Africa is aged under 30 and this young population is eagerly adopting new technology. In the Gulf Cooperation Council, smartphone penetration was at 77% in 2018, according to the mobile-phone industry body GSMA.

Online retail growth is also being boosted by global e-commerce giants competing

C hange is the one constant for retail CEOs in the Middle East. Like retail leaders across the world, they must keep pace with new technology that is changing the way people consume products and services. But in the region, the changes go far beyond the disruption of online retailing: consumers are more price sensitive, they are less brand loyal, and economies are reforming.

Despite the breadth of their experience and the products they sell, retail CEOs identified similar concerns.

The CEOs we interviewed this year all identified very similar concerns, with one common denominator: the need to adapt to change. How to develop agility to respond quickly, how to attract and retain talent, how to keep up with pace of digital technology: Norma Taki, Consumer Markets Leader, PwC Middle East.

KEY TAKEAWAYS

Strategy

- 2018-19 will mark coming of age for online retail in Middle East and e-commerce will account for 40% of the market in the future.
- Top priorities for retail CEOs are digital 88%, cost optimisation and restructuring 50%, talent and training 50%.
- In the Middle East online retail accounts for an estimated 2-3% compared with 10-15% in developed western economies.
- PwC´s 2018 consumer survey found 53% of respondents now shop with Amazon, up 4% since 2016.
- 45% start their product search on Amazon, and 41% use it to check prices.
- There is no five-year plan and companies must be continually ready to respond to change.

for shoppers' attention and spending. Amazon bought Souq.com in 2017 to become the biggest e-commerce platform in the region at that time, and its recent announcement to launch a new marketplace here will no doubt ramp up the level of online competition. Noon.com, a local online retail start-up backed by Saudi Arabia's sovereign wealth fund, has partnered with eBay this year and offers a platform for local and international franchise brands to sell online without them having to invest in their own e-commerce presence in the region.

Creating a multi-channel experience that includes online is a priority for all the retail CEOs. They are committed to continuous investment in their digital channels; this investment should not only provide another way to reach consumers, it should build on the experiences retailers provide to their customers. Hybrid retail has created an empowered consumer: they know what they want, where they can get it and how much they can get it for. As a result, loyalty is diminishing, making it more difficult and somewhat expensive to retain customers. Value is also becoming an important trend in the region.

REGIONAL RESPONSES

One answer is to create a more vibrant experience within physical stores. Chalhoub Group, for example, is working to reduce pain points, such as arriving at a store and finding products out of stock, by focusing on the hybrid journey – making it simple for people to order or reserve a product online and collect it in-store. The company's Greenhouse accelerator programme is an opportunity to support entrepreneurship and answer the retail challenges by bringing tech solutions to the brands.

The 2019 Global Consumer Insights Survey, highlights the need for companies to focus on

return on experience, ROX as well as the longstanding measure of return on investment ROI. The experience customers have in a store or using the company's website, and the feedback they share online, now affects the buying decisions of all its other potential customers too. Some 32% of survey respondents said they bought a product because of positive reviews on social media.

Notable growth areas in the Middle East, according to the retail CEOs surveyed, include expansion in the beauty sector, driven by the era of the social-media influencer, ath-leisure wearing workout clothes outside the gym and healthy eating, spurred by millennial interest in wellness.
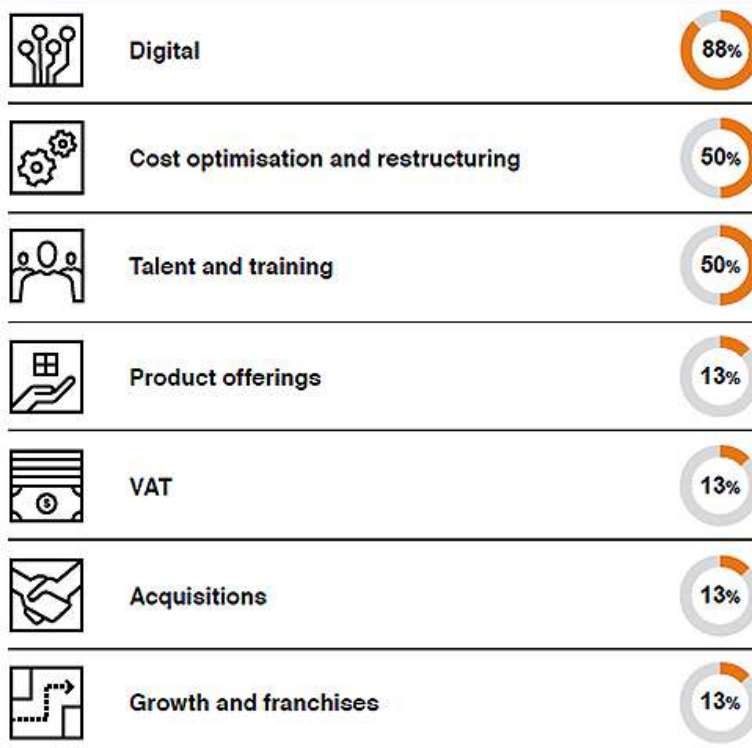
Another trend having an impact is Black Friday discounting. The November sales event, which began in the US, is becoming more and more popular with Middle East consumers. Mumzworld said it had its best week of the year in the Black Friday period, with revenue growth five times higher than the year before. Yet the event is creating unpredictability for some retailers as consumers tend to hold off spending until they see what mega discounts or promotions are on offer, resulting in knock on effect to December sales.

Building a sustainable business for the future also means prudence, according to most of the retail CEOs interviewed. There is a need to focus on cash flows and optimise costs – one retailer has opened a shared service centre in Jordan to manage its back-office and staff costs. With few stores showing like-for-like growth in revenue, some retailers are looking into new markets and new investment opportunities outside the region to help them continue to expand their portfolio.

Economic and social reforms in the Middle East are moving at an unprecedented pace, as the Global CEO Survey notes. Retailers have

Key priorities for Middle East retail CEOs

Digital	88%
Cost optimisation and restructuring	50%
Talent and training	50%
Product offerings	13%
VAT	13%
Acquisitions	13%
Growth and franchises	13%

The three top priorities for retail CEOs in the survey are digital 88%, followed by cost optimisation and restructuring 50%, then talent and training 50%.

also weathered the impact of an oil price slump and now partial recovery, and geopolitical threats in parts of the region. These macro factors contribute to the following issues highlighted by the retail CEOs in the survey.

ROLE OF TECHNOLOGY

Challenges around the lack of digital talent in the market, include recruitment of people with data analytics and artificial intelligence skills. This is part of a broader issue in the region with more than a quarter of Middle Eastern CEOs across all sectors believe hiring outside of their industry is a potential solution to address the skills gap.

Traditional bricks-and-mortar retailers and mall operators have hired data scientists skilled in gathering and analysing the vast amount of data generated by sales online and offline in order to offer the most personalised experience and best value to customers. Following several years of a tough

macro-economic environment in the region, retailers are also scrutinising every opportunity closely and trying to keep the organisation as lean as possible. We are choosing our battles well and we are not scared to close down a store, which is not profitable enough.

Delivery and logistics continue to be a challenge for some retailers. While service is improving, change is happening slowly. Same-day delivery is no longer something that can be ignored as some retailers are delivering orders purchased online within 2-4 hours. Some retailers are investing in local logistics firms to improve their customer journey and create a competitive advantage. Retailers urgently need to pursue technological solutions to allow consumers quick and easy return options for unwanted goods bought online.

Managing stock and the volume of products to buy is a challenge when an excess of supply is available online. Customers

seeking greater value are opting to use delivery platforms such as Aramex's shop and ship to purchase the same item outside of the Middle East more cheaply. Mobile access to online information such as new product offerings, product reviews and price comparison sites continue to influence customers' buying decisions and retailers need to be on their toes, monitoring these trends to stay relevant. Replica items or designs are being sold online for a fraction of the price, are creating price wars and undermining quality.

The response to PWC's retail CEO survey makes clear that Middle Eastern retailers want to build sustainable businesses for the future; this means retailers embracing the hybrid retail model by providing a fully integrated and seamless experience through all touchpoints of the consumer journey. ∎

GETTING HYPE OUT OF REGIONAL TRANSFORMATION TRENDS

RBBi's Amol Kadam takes a deep dive into some of the over-hyped regional transformation buzzwords and offers an objective perspective.

*AMOL KADAM,
Co-Founder RBBi.*

The discussion of digital transformation or technology transformation started more than a decade ago. We are now in the second generation of transformation, and the most encouraging part of it is to see that technology is taking a back-seat. Today's digital transformation is not only about the technological transition, but it is also about an organisational transformation empowered by technology, business, and people.

Customers, culture and employees and business continuity are all at the heart of digital transformation successes. It is about creating a holistic experience for the end user. In simple words, the future of transformation is about experience.

Let us look at some of the most discussed concepts going around since the last couple of years.

BLOCKCHAIN

A misunderstood and often overused as a term. Forget everything magical everyone ever said about blockchain. As most of us on this side of the table and most of the organisations continue to be in awe of this concept, we have come to realise that blockchain is kind of a mess. It is too niche, closed and complicated for lay people to use for some real, every day and experience-enhancing applications right now.

Everyone is trying to use it their own way. In the process, it looks like everyone wants to create their own blockchain framework, which in my opinion is against the fundamental idea of the blockchain. The only logical way to get mass blockchain adoption is to create a plug-and-play version that all of us can use and understand.

Organisations need to be open for collaborations and cross-integration for a true blockchain implementation that is useful for users. However, to this point, it seems more of a marketing ploy than a matured technology decision.

CHATBOTS AND VIRTUAL ASSISTANTS

In our personal lives, we have become comfortable with the idea of conversational interaction which is now moving to a variety of systems ranging from mobile devices to thermostats to automobiles. It is supposed to be a very natural way to interact with systems, both with voice and chat.

Today it is still work in progress. The good news is that many developments are happening in this field. Natural language processing, conversational UI and sentiment analytics. One study shows that natural language processing will shake up the entire service industry in ways we have never imagined.

Think about the services that can be rendered without humans — such as fast food lines, loan processors, job recruiters! Some predict that 40% of large businesses would have or would be adopting natural language processing in their operations by the end of 2019.

DATA, ANALYTICS, MACHINE LEARNING

Data and insights have been at the core of any transformation as a whole. And it is not a new trend at all. Data has always been a key to companies being able to make decisions about products, services, employees, strategy and more. The form of this data and the formats have changed over the last few years.

KEY TAKEAWAYS

- Digital transformation is about organisational transformation empowered by technology, business, and people.
- Customers, culture, employees, business continuity are at the heart of digital transformation success.
- Digital transformation is about creating a holistic experience for the end user.
- The future of transformation is about experience.
- We have come to realise that blockchain is kind of a mess.
- Blockchain is too niche, closed, complicated for lay people to use for every day applications.
- Only logical way to get blockchain adoption is to create plug-and-play version that all of us can use.
- Organisations need to be open for collaboration and cross-integration for a true blockchain implementation.

So, we will not see a slowdown anytime soon. We have created 90% of the world's data in the past year, but we are only using 1% of the data effectively.

Old ways of looking at data are not going to help us anymore. More and more of our digital transformation engagements with clients are starting with major data engineering exercises. It is about breaking the so-called big data into small but actionable insights. A lot of data in organisations is not structured appropriately for analysis. They have data they do not need, and need data they do not have.

As technology innovations continue to evolve, it is impossible to ignore that data is key to making lucrative business decisions. There is much to be done about promoting data to be built into meaningful business analytics and realising the full potential of the data being collected.

VIRTUAL AND AUGMENTED REALITY

Will virtual reality stay on or will it stagnate in 2019? I am starting to feel bad for virtual reality because it appears so cool, but it has just not been feasible beyond gaming and highly specialised applications in today's marketplace. Most of the applications you see around for virtual reality are forced rather than being natural and seamless. Even the demand is not growing at a pace it was supposed to.

Mixed reality on the other hand which combines augmented reality and virtual reality—continues to be the name of the game in 2019 digital transformation trends. It has found tons of use cases in enterprise workforce training, and it is not just cool, it is useful. And that is what technology is supposed to do. There are even rumors that we will hear something about a new augmented reality or mixed reality product and developer kit from Apple soon.

Lack of compatibility, dependence on hardware, cost and customer apathy are some of the factors that this concept is fighting with. So, we will see it maturing into a new generation of virtual reality, which is more standard across platforms and surely at a lower cost which could then change the future success of virtual reality and augmented reality.

As and when it is integrated seamlessly with the user's natural behavioral pattern it will start to become invisible, and that is the tipping point for every technology towards success and growth.

TAKING THE PAIN FROM DISCOVERY

Search is reaching a tipping point and becoming invisible to human behavioral patterns. From a small box in the corner of the web-page to visual and voice, search, and assistance search is going mainstream. Will we expect it to become a standard item in digital strategy. One study says, visual and voice search would amount to 50% of all the searches done by 2020.

What does this mean for digital transformation that is B2C focused and the e-commerce industry?

As I stated at the beginning of this article, transformation is becoming more about the experience. With the overdose of data, technology, platforms and digital; what we have forgotten, was the human. The human being, who was and should always be at the centre of it. This year, more organisations will jump on this and you will see many service providers and agencies also doing the same.

Purpose, relevance, experience, empathy, ethical and responsible are some of the terms starting to grow back in our minds through the clutter of digital.

We have started to understand that technology and everything around it cannot be the differentiator it is just a facilitator. Which technology or platform you choose is becoming less relevant but what you do with it, how you become relevant to your users, how do you keep the human element and experience in-tact and how do you enhance the experience, is becoming the leading metric. Gone are the days of transformation being inside out. Now it is about how do you make a true transformation which is outside-in. ■

THE PRACTICE OF NOW

The Practice of Now 2019 survey includes findings of independent research commissioned by Sage and conducted by Viga.

83%
of accountants say their clients expect more now than five years ago

42%
of clients expect their accountant to provide business advice

This is why
2/3rds
of accountants are turning to AI for automation

Fewer repetitive tasks and fewer mistakes means...

...better interactions with clients and improved service offerings.

THE PRACTICE OF NOW

The Practice of Now 2019 survey includes findings of independent research commissioned by Sage and conducted by Viga.

Heads in the cloud

67% of accountants believe that cloud technology makes their role easier by enabling collaboration with clients. With 53% having already adopted a cloud-based practice management solution.

Artificial intelligence

More than half of all accountants plan to use artificial intelligence to automate tasks and improve the way they run their business. Letting technology take care of the manual, repetitive tasks frees-up the accountant's time.

Competition

67% of accountants feel that the profession is more competitive than ever. Standing out by offering a greater range of services and business advice has never been so vital.

Advisory services

83% of accountants think that clients expect more from them today in terms of services and resources than they did five years ago. Keeping-up with evolving client needs should be a priority for all practices.

Service excellence

Accountants remain focused on using technology to provide excellent service to clients, with the majority saying they want best-in-class technology to offer the best services to clients.

Smart accountants are turning to technology to drive improvements to their businesses, and to create the space to become time-efficient business advisors for their clients. Accountants were originally concerned that technology was going to take away from their core service offerings, but what it has actually done is free them up to do more higher value services for clients. They are now doing what their customers always wanted them to do. The Practice of Now 2019 survey includes findings from 3,000 accountants across US, UK, Canada, Spain, France, Australia in January 2019.

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