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SEARCH

ANALYSIS

# Enterprise Decision Maker

# Enterprise Decision Maker

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**Spencer Izard**

Chief Analyst

“ As digital transformation gathers pace, enterprises face the twin challenge of transitioning both the IT function and the technology environment to an as-a-service model ”



## The Market Challenge

Enterprises are faced with two seemingly conflicting drivers: meeting regulatory demands for the tight control of information, and the business pull to liberate that same information for use in value-adding analytics. However, these objectives need not be at odds. Comprehensive control of data has downstream benefits for the entire enterprise, delivering both analytics-led business value and compliance.

It is not just a technology problem, culture is at the heart of the issue as well. As the enterprise looks towards digital transformation and the implementation of new technologies like artificial intelligence, the culture of the enterprise will need to be receptive before business value can be realized. By managing data at the source, whether on-premises or in the cloud, business drivers can be aligned and data leveraged equally both reactively and proactively.



**Tom Pringle**  
Head of Applications Research

## How Ovum helps you

**Explore** and understand how compliance can be a driver to business value not just a matter of ticking boxes.

**Learn** best practices for building a data-driven enterprise culture that does not compromise governance.

**Marshal** the march to the cloud with a multi-cloud approach to delivering data and analytics.

**Evaluate** emerging data science & artificial intelligence technologies that can augment and improve everyday business processes.

**Understand** why mobility is a vital digital transformation pillar and how it can be exploited in modernizing legacy systems and optimizing business processes.

## Key Deliverables

**Protecting information for business value** – best practices and hands-on advice for effective protection of information to help achieve compliance and business value

**Cloud platforms for data and analytics** – market landscapes and vendor assessments of key cloud data and analytics solutions to successfully navigate the transition to the cloud

“

Cloud bi & analytics software spend across industry verticals will hit \$7.1Bn by 2021

”

**Data science and AI** – practical thought leadership tackling the challenge of new AI-powered capabilities and data science, their adoption and finding enterprise value

**Building the digital workspace** – frameworks and blueprints for building the data-driven digital workspace

## Themes for 2018

### **Compliance as a source of competitive advantage**

Compliance has traditionally been approached in a reactive manner, missing the business benefits that compliance can achieve. Most regulatory imperatives, such as the EU's GDPR, are about driving better enterprise control and accountability for data. Compliance and information management technology are intertwined, tools like metadata management, NLP, machine learning, cataloging, and data masking/protection are all critical to making sense of an enterprise's data. Compliance goals, when closely integrated with business strategy, can amplify analytics outcomes and drive profitability.

### **Defining a viable multi-cloud strategy for data management and analytics**

As enterprises move business-critical workloads and the data that powers them to the cloud, they will be making de facto platform decisions. They are facing a repeat of the same generational platform migrations decisions that enterprises faced when they conducted their "open systems" migrations. This strongly influences data management & analytics because, increasingly, analytics are being pushed into the data tier. The goal should be implementing viable multi-cloud strategies that maximize the benefits of data and analytics in, and out of the cloud, while minimizing the risk of cloud platform lock-in and creating new data silos.

### **Using AI and data science to accelerate digital transformation**

The future of AI – and the data science that is its foundation – in the enterprise is a story of integration and orchestration across enterprise applications. Digital transformations have begun, powered by the transition to cloud and a proliferation of connections: from and between consumer to business to device or application. These connections generate reams of data – consuming, analyzing and acting upon such vast and fast-moving data is beyond human capability. Integrating AI into enterprises' applications will tackle this opportunity through automation. For those who can orchestrate multiple AI, a benefit greater than the sum of its component parts is waiting.



## Fostering a strong data culture for effective enterprise analytics

Enterprises must establish and nurture a strong data culture to harness and profit from the wealth of data, and the myriad tools to access and analyze it. Data management technology and governance frameworks are required to mitigate risk, and successfully integrate data-driven decision making into enterprises' everyday business – freeing users to seek and find value without compromising corporate or compliance standards. Data initiatives – whether technology, people or process related – demand sponsorship at the C-level, helping foster a sense of business ownership of data. The tools for non-expert users to source and explore data are here, enterprises must now make what they can achieve part of their culture.

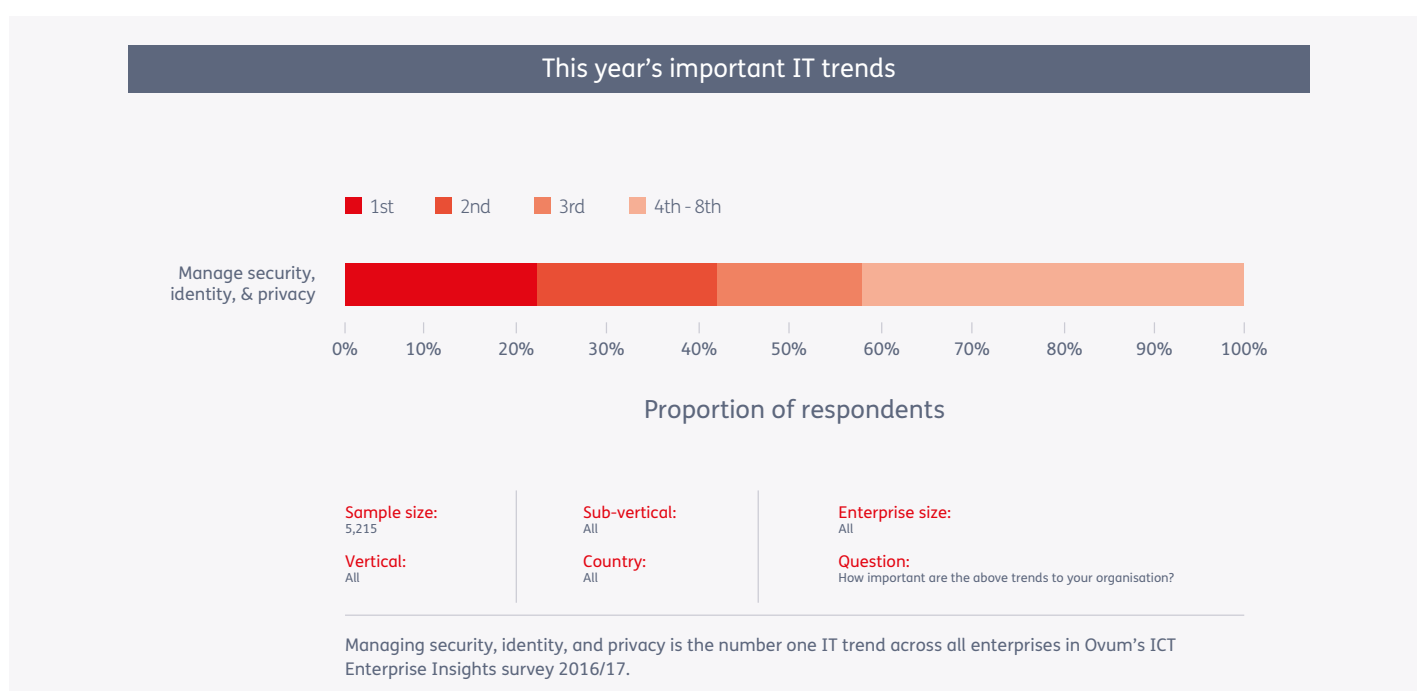
## What's new

**Track the transition to the cloud** – with new cloud market forecasts covering data & content management, BI, analytics and big data

**New topic packs of research covering key enterprise challenges** – including GDPR and Artificial Intelligence

**Understand enterprise investment plans for cloud deployments** – in Information Management with an expanded ICT Enterprise Insights survey

**Managing security, identity, and privacy is the number one IT trend across all enterprises in Ovum's ICT Enterprise Insights survey 2016/17**



## The Market Challenge

Software needs to be front and centre for every enterprise today. Organizations that cannot move fast enough to modernize their platforms and systems, provide everything on demand, and compete with cloud-native rivals will suffer.

While at an early stage of adoption for many, a cloud-centric approach is the future. The shift to cloud continues to gather pace and is very much a story of how to exploit and manage multiple clouds.

If software is at the heart of the organization, then data is very much its life blood and most valuable resource. Data must be protected and meet compliance needs when at rest, in motion, and in use.



**Mark Blowers**  
Practice Leader

## How Ovum helps you

**Bolster** network and data protection with an end-to-end proactive security architecture

**Make** software development a core capability

**Improve** the speed of service/software delivery through the use of agile and DevOps

**Understand** the impact of digital transformation on the IT function

**Develop** a strategy to modernise core systems

**Define** the criteria to use when selecting cloud-based services

**Understand** and adopt the latest integration approaches

**Meet** compliance obligations across all technology deployments

## Key Deliverables

**Ovum Decision Matrix** – Comparative evaluation of the leading enterprise technology solutions.

**Market Radar** – Solution capability comparisons for emerging technology areas.

“  
70% Of  
companies  
with 10,000+  
employees are  
modernising  
legacy software  
”

**Case Study** – Recommendations, best practice, and advice from real-world solution deployments.

**Software Market Forecast** – A five-year view on growth in the infrastructure software markets, segmented by vertical, region, and function, and updated annually.

## Themes for 2018

### Increasing cyberattacks impacts data protection and network security

In every industry, security breaches are increasingly inevitable which means capability that enables data protection is a priority, especially with GDPR in 2018. The effectiveness of a signatures-based approach to security continues to wane and distributed denial-of-service (DDoS) attacks get bigger and more frequent. Organizations need to upgrade network security to counter the onslaught of more, and more varied, forms of exploits.

### Adopting a cloud-native approach is the new differentiator

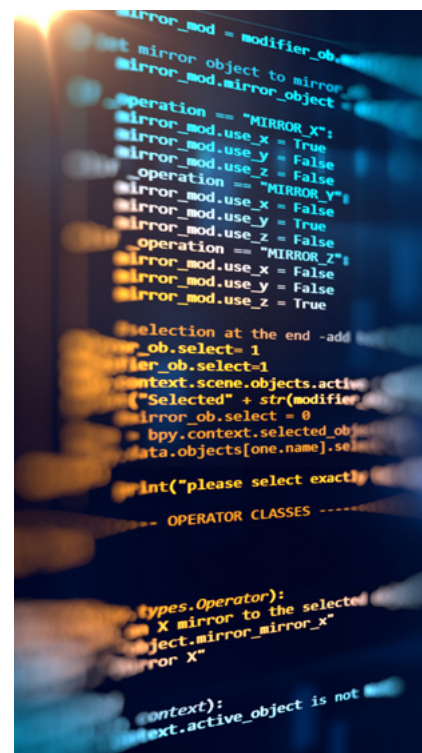
Becoming cloud-centric means the use of microservices, and containers, as well as exploiting multiple clouds and everything-as-a-service to improve flexibility, and reducing waste by only paying for what is used. Organizations also need to assess their strategy for developing and deploying software in the wake of the new paradigms that are sweeping through IT. Digital transformation, has turned the spotlight on software, and integration.

### Utilizing intelligent software to foster innovation in IT

The adoption of AI technology continues to grow rapidly with the fast pace of technology transfer from research into products and services. AI encompasses a number of technologies with software robotics and machine/assisted intelligence making waves at the moment, of which deep learning is gaining traction within machine learning algorithms.

### Modernising core systems by breaking up the monolith

One of the biggest challenges for traditional businesses is how to exploit cloud technologies and platforms with monolithic core applications. Many organizations are adopting software architecture that comprises of many independent and loosely coupled parts, alongside an API-centric approach. Once inside containers, these applications can gain some benefits, such as portability, and can use continuous delivery and infrastructure-as-code styles of development.





## Mitigating the impact of IoT on platforms and infrastructure

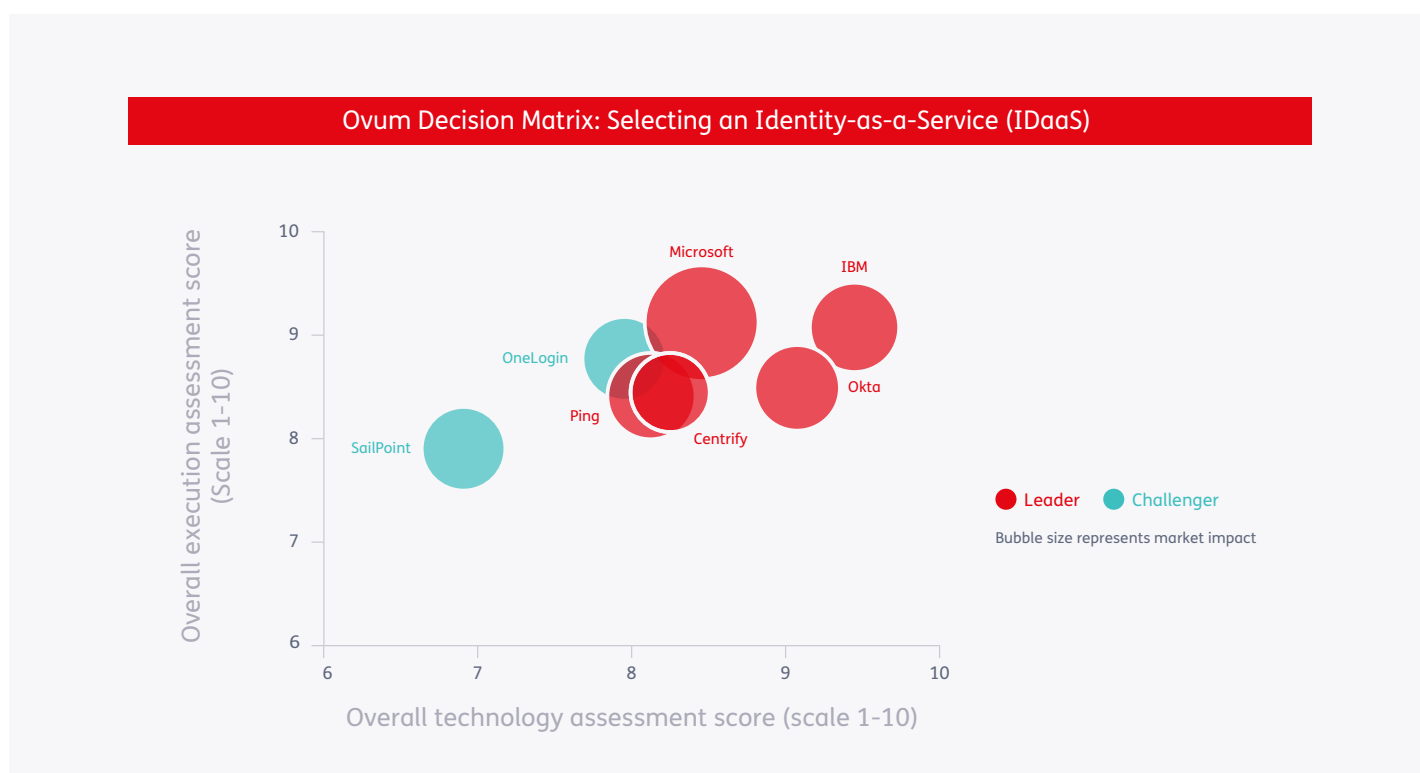
IoT represents a paradigm shift for security challenges, as potentially billions of new devices connect to the web. It has created an urgent need for scalable and secure platforms to support the increased data volumes. IoT is also a big driver for the use of automation and edge computing in the IT environment.

## What's new

**New Ovum Decision Matrix** – Selecting a Network Security Solution

**Expanded** – coverage of enabling technology for artificial intelligence

**Ovum Decision Matrix: Selecting an Identity-as-a-Service (IDaaS)**



## The Market Challenge

Ovum continues to witness the evolution of the CIO's role in terms of delivering IT services at a faster and more flexible pace for business outcomes. Digital transformation is unlike prior technology trends because the need to address it comes from an ongoing evolution in how consumers/clients/citizens engage holistically with organizations. This continues to exert pressure on organizations to adapt and react quicker to this external shift in business engagement across industries and countries. Suppliers can no longer position their value purely in terms of technology capability alone but rather messaging, and engagements, must be primarily focused on how they support business level outcomes through technology and/or services. It is essential for suppliers to understand how IT leaders are evolving IT functions and service delivery in support of digital agendas to address increased levels of business change occurring across industries.



**Spencer Izard**  
Chief Analyst

## How Ovum helps you

**Gain** insight into how Ovum is advising enterprise decision makers to enhance how you engage with enterprises.

**Learn** how enterprise decision makers are structuring their IT organizations in response to their digital journey.

**Understand** the major technology and organizational trends impacting enterprise decision makers to provide insight for how suppliers should improve their engagements with enterprises.

**Discover** how IT management best practices are being applied to maximize the value of IT-enabled business investments.

## Key Deliverables

**Trends to Watch** – reports for major industry and technology domains.

**Enterprise Case Studies** – explain how peers have used technology to solve business challenges.

**ICT Enterprise Insights** – shows key trends based on over 6,000 interviews.

“

90% Of enterprises have started creating a clearly articulated strategy but only 22% consider themselves well advanced in their digital journey

”

**Ovum Decision Matrices** – provide comparative evaluation of the leading enterprise solutions and services.

**On the Radar** – reports highlight new solutions and providers of emerging technologies.

**How-to-Guides and Maturity Models** – help you to understand best practices for technology deployment and management.

## Themes for 2018

### Pivoting IT to support digital business goals

No matter which direction an organization chose to orient its business strategy, with regard to digital, very few organizations analysed their IT function to determine how it would need to evolve. Leading to many organizations trying to achieve their perception of digital without having an IT function that was fully prepared to deliver and manage services from both operational and cultural perspectives.

### The journey from producing solutions to delivering services

Bespoke technology deployments should not be considered the norm for a modern IT function but rather the last resort where a commodity technology will not suffice, where the cost of bespoke versus commodity over the lifetime of the IT service is lower, and/or where tangible competitive business advantage can be demonstrated. IT functions no longer need to operate internally in a manner akin to an external cloud or outsource service provider. The majority of IT services required by an organization are common across all organizations.

### Refining the perception of the CIO's role

At the heart of creating, realizing, and managing an organization's digital agenda is the role of the Chief information officer (CIO). It can be debated whether the title needs to change from information to digital, or another label, but the role of the CIO is essential to the success of digital. However, for many CIOs the challenge is how to refine the perception of the role at the C-suite level to become a valued digital leader.

### Using enterprise architecture to avoid digital chaos

Research shows that as businesses adopt digital strategies, the complexity of the technology landscape can increase significantly, with increased integration points and a proliferation of services. Enterprise architecture can provide a valuable framework in which to set digital



initiatives, improving the degree of coordination across digital services and core systems.

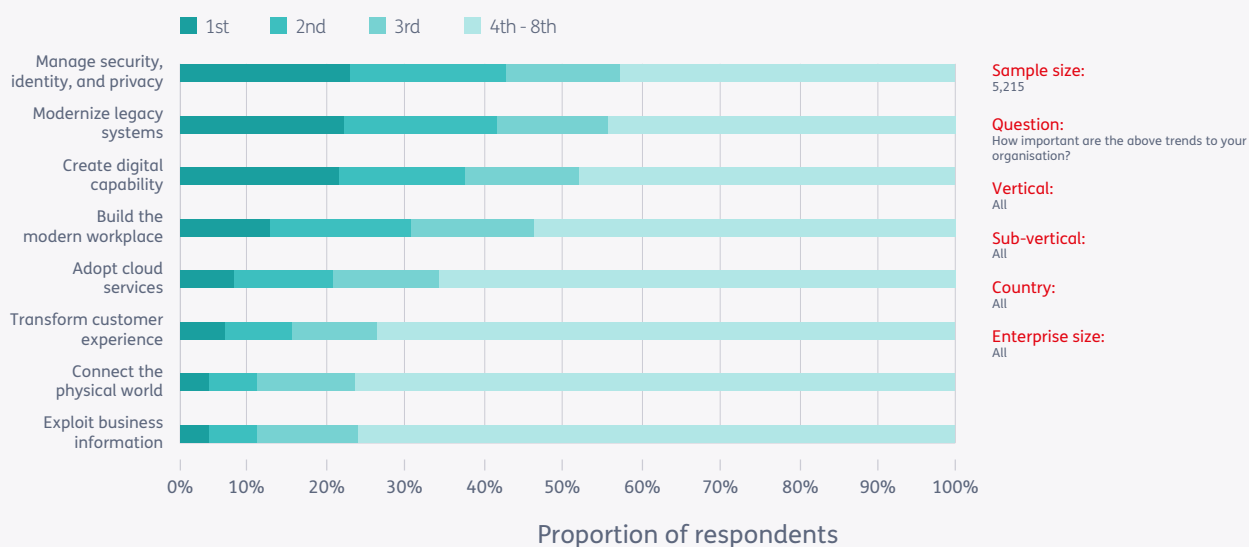
## What's new

**Expanded** coverage of the vital role the CIO provides to an enterprises ongoing digital journey.

**Updated** enterprise IT spend benchmark.

**Identifying** the differing dynamics of industry trends in relation to how, and when, they provide the most benefit and relevance for enterprises.

### How the Ovum 'Super Themes' are globally impacting IT leaders





## The Market Challenge

The fundamental challenge for any enterprise is to meet the expectations of its customers, patients, citizens or students. This perennial challenge is getting harder, as customers, empowered by technology and digital experiences demand more. Enterprises which fail to meet this challenge run the risk of irrelevancy.

To keep pace with technology and meet customers' expectations, enterprises must continuously evolve their approach to service delivery. They must build an agile architecture that allows them to quickly scale, enables frictionless experiences across all channels and devices, and be able to respond in real time to customers when and where they need assistance. No enterprise can afford to be a customer service follower, and to remain relevant should strive to engage with the customer proactively, not reactively.



**Tom Pringle**  
Head of Applications Research

## How Ovum helps you

**Understand** – and act on the challenge of moving beyond omnichannel to maintain relevancy in the digital age.

**Learn** – about continuous innovation and the culture required to support it to deliver on customers' expectations.

**Explore** – and plan for a customer-centric architecture that composes unique customer experiences without compromising standards.

**Identify** – and evaluate practices and technologies for keeping up with constantly evolving customer behaviors.

**Understand** – enabling technologies and vendors which can help enterprises orchestrate customer engagement across any combination of channels.

## Key Deliverables

**How to building the omnichannel foundation** – analysis and guidance on developing the omnichannel foundation

**How to create the conditions for rapid adaptation** – through innovation in products, services and business models

“

90% Of enterprises are failing to create and deliver new digital services yet top line growth is the number one business challenge

”

**The role of ecosystems in continuous innovation** – how to develop an effective ecosystem of partners for continuous innovation

**Leadership roles in digital transformation** – who should help the CEO transform the enterprise?

## Themes for 2018

### **Building an omnichannel platform foundation for customer engagement**

Enterprises must proactively engage with customers along their digital and physical journeys at the right time, place, and device. This can be achieved with the building blocks of an omnichannel foundation; including integrating modern CRM platforms with back office, logistics and systems of engagement, and deploying technologies to enhance in-context collaboration and create personalized experiences. With this foundation in place, omnichannel can be augmented with supporting technologies from Robotic Process Automation to eliminate repetitive tasks and integration of AI and machine learning to dynamically orchestrate the customer experience, through Virtual Assistants to support intelligent customer self service.

### **Developing a customer-centric culture for the adaptive enterprise**

Enabling omnichannel must begin by developing a cultural and organizational orientation around the voice of the customer before architecting the customer journey. For a customer-first enterprise to take hold, enterprises must align people, processes, and technologies via the vehicle of digital transformation, to deliver proactive customer engagement. Customer-first thinking must be infused into every aspect of the organization, standards and policies must deliver on CX, and culture must link to the mission. Unification and open access of technologies must occur through unified interfaces, customer engagement hubs, and cloud-based workforce management so the customer journey is always in view.

### **Designing a flexible, scalable architecture for composing personalized customer experiences**

Changes in the fundamental structure of customer engagement – hardware to software, on-premises to cloud, live-agent assistance to artificial intelligence-powered chat bots, analytics, and mobile everything – is driving change in the architecture and processes of customer engagement. Global reach and scale is a necessity as customers expect standardization across international organizations:



they also expect a tailored experience. To achieve this requires a flexible architecture, built upon a concert of services which allow for constant technology evolution, and the delivery of a market, geographic, and enterprise-specific “composable” personalized experience in real-time – while adhering to the framework of corporate standards and compliance requirements.

## Customer engagement solutions must prioritize superior security and privacy to build customer trust

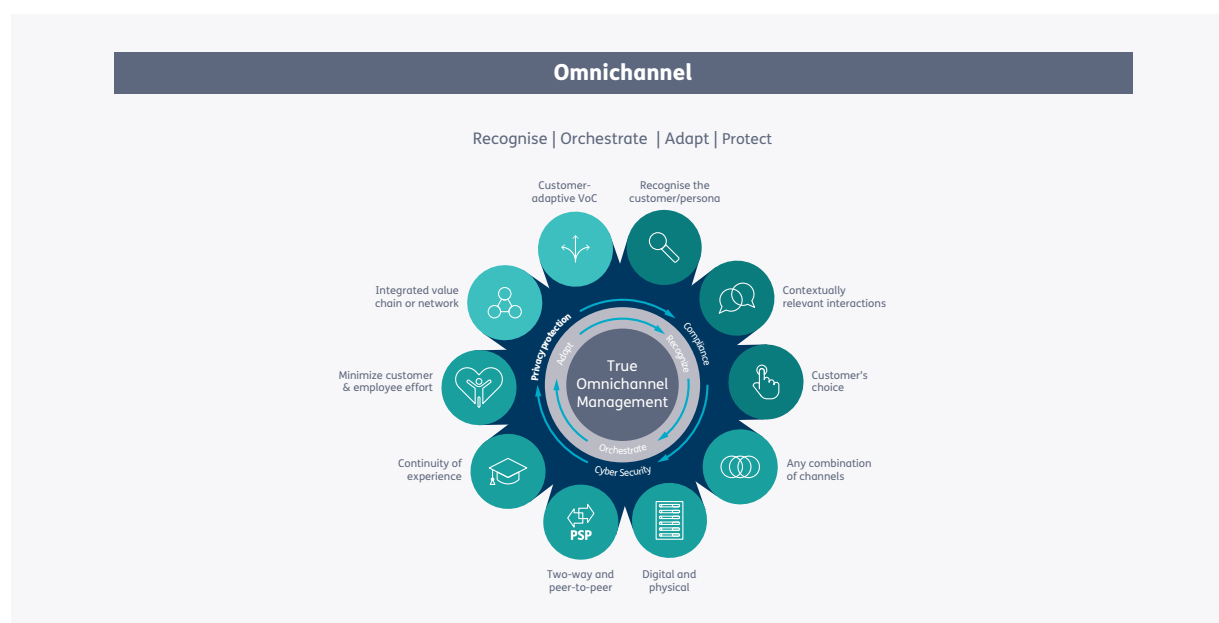
Whether through accident or malfeasance, sensitive data can be exposed through holes in the expanding digital marketplace, with potentially great harm to customer and enterprise alike. Enterprises must ensure compliance with regulation regarding customers’ identifying data, such as GDPR, and respect privacy choices. Taking this approach will realize the benefits of being a trusted brand. Technological answers for enterprises need to cover considerable ground, from applying big data analytics and machine learning to fraud detection, through implementing unified privacy standards across multiple databases, applications and a growing device landscape encompassing the IoT.

## What’s new

**Understand** how CX microservices can be consumed to adapt and augment omnichannel customer engagement

**Consider** Robotic Process Automation and how it can be used to boost customer engagement capabilities and improve the working environment for employees

**Explore** the possibilities to harness a portfolio of feedback mechanisms to drive customer relevance and rapid adaptation



## The Market Challenge

Enterprises looking to transform business processes typically want to improve employee productivity, enhance customer service and reduce costs. The introduction of new workplace technology and services goes hand-in-hand with new ways of working. Businesses are looking for service providers that can help them make this difficult and complex transition.

Service providers are building on their traditional enterprise mobility, UC&C, workspace virtualization and managed security capabilities. They need to build their capabilities beyond these services into new areas of technology and into a professional services-led approach if they are to be successful partners for enterprises. It is an increasingly complex play.



**Pauline Trotter**  
Practice Leader

## How Ovum helps you

**Ovum's research will help service providers build their workspace services offers and help enterprises select service provider partners that meet their needs.**

**Identify the growth markets for workspaces** – size the market opportunity and identify which verticals and geographies will be key

**Build the portfolio** – the important technologies and services identified through our research with enterprises

**Transform services** – advice on where to partner and where to build expertise, how to improve delivery and support

## Key Deliverables

**Ovum Decision Matrix** – aimed at enterprises selecting a service provider partner for workspace services.

**Enterprise CIO surveys** – covering both large enterprises and SMEs in multiple geographies and industries.

**Forecasts for enterprise communication services** – enterprise mobility and unified communications and collaboration forecasts split by company size, country, and industry vertical.

**Case studies** – real enterprise experience in evaluating, selecting,

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North America will remain the top market for UC services, valued at \$12bn by 2021

”



implementing, and measuring benefits from advanced communications services.

**Tracker** – workspace services tracker keeps you up to date on market events, new services, partnerships and deals.

**Service Provider strategy updates** – provide insight and analysis on new workspace services and new business models for of the top providers.

## Themes for 2018

### Evolution of mobile workspace services

Service providers have been evolving their mobile workspace offers to incorporate UC&C services, workspace virtualization, adding managed security, service delivery and end user support. As this market evolves, we expect service providers (including telcos, SIs, ITSPs and specialist managed service providers) to focus on helping enterprises deliver on their mobile workspace strategies. This includes building up their professional services skills, integrating new technologies, applications and tools into their services and bringing in new types of partner.

### Workspace services for SMEs get more sophisticated

Service providers have traditionally served their SME customers with unsophisticated communications services. Many are now focusing strongly on the SME opportunity and are building richer services, adding messaging, collaboration, conferencing and other functionality to voice. We expect offers to mature further as SMEs, like their larger counterparts, look to improve their competitiveness through the introduction of new technology. This will meet the demands of a younger workforce looking for more flexible and mobile ways of working.

### Enterprise priorities in workspace services

As enterprises worldwide continue to act on their digital transformation strategies we anticipate continued investment in services and technologies to support employees with new flexible and mobile ways of working. Many companies are interested in what place new technologies – such as workplace IoT, mixed reality, machine learning and automation – can have within their organisations in driving innovation, greater productivity, and improved customer service.

### Evolution of enterprise communications

How businesses consume communications services and deploy communications technology will considerably over coming years. Solutions dedicated to communications and collaboration will continue to be sold to businesses. But more and more communications will



be embedded into a diverse set of software. For example, CPaaS will integrate communications into business apps, IoT will trigger communications events based on alerts, and natural language interfaces will provide new ways for employees and customers interface with collaboration apps.

## Mobilizing the workforce

Technology evolutions and continuously changing employee needs are driving new approaches to how enterprises manage and secure devices, apps, identity, and the data that runs across them. Enterprise mobility solutions are evolving, offering new capabilities such as cognitive analytics, identity management and single-sign on, unified endpoint management features, and advanced group policy management functionality. These advancements will support enterprises in more effectively managing a more diverse device, OS, and data estate.

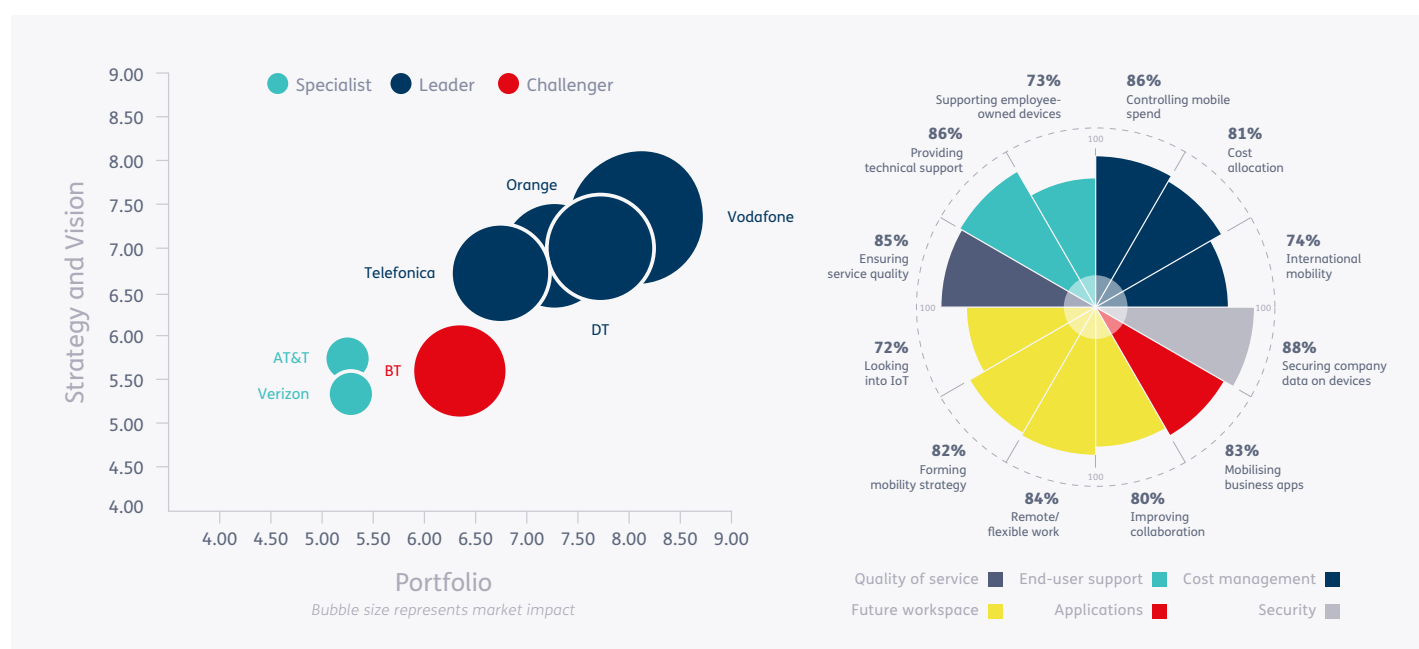
## What's new

**The place of new technologies in the workplace** – extended coverage into new areas

**Service provider strategy updates** – case studies of new services and business models from service providers

**Whole market view** – the enterprise workspace market in the context of the whole market

**New provider types** – coverage of new entrants and SI competitors



## The Market Challenge

For years, cost management, network resilience, and security have been the overriding priorities in enterprise network investment. Variations on these themes have appeared as top three user priorities every year in Ovum's research. That focus has changed as the driver for enterprise IT investment has switched from operational criteria to business outcomes. Now, next-gen services such as cloud computing, mobility, and the digitization of business processes are setting the pace for business productivity. But how do enterprise buyers decide priorities for technology investment?



**David Molony**  
Practice Leader

## How Ovum helps you

**Showing** how enterprises can undertake to be agile, cloud-based, and increasingly automated as part of their digital business transformation.

**Identifying** new developments in enterprise digital services, and show where enterprises can get support for applications modernization and migration to cloud.

**Growing** digital connectedness makes multinational enterprises an appealing target for cybercriminals. We look at where enterprises can get help in managed security services like threat intelligence.

**Transforming** customer experience and place the customer at the heart of decisions about business process and new product/service development.

## Key Deliverables

**Ovum Decision Matrix** – helping enterprises selecting a service provider partner for managed security.

**IT services contracts analytics** – weekly updated tool covering contracts signed by major service providers.

**Enterprise CIO surveys** – covering services priorities for large enterprises and MNCs, in multiple geographies and industries.

**Forecasts for digital and cloud services** – enterprise IT services and cloud services forecasts split by company size, country, and industry vertical; telco-managed ICT services forecasts by service type, to geographic region and industry vertical.

“

More than 40% of large businesses have outsourced applications modernization in 2017/18 for core workloads, overtaking data center and end-user compute

”

**Service provider strategy updates** – analysis of new digital services and business services models from top providers, with a particular focus on strategies in applications services and managing customer experience for multinationals.

## Themes for 2018

### Application services modernization

Business applications modernization and agile process transformation go hand in hand when it comes to building the adaptive enterprise. We examine how global systems integrators and other service providers are changing the way they deliver and maintain offers in managed business applications, especially Oracle, SAP and Salesforce. At the same time, we evaluate the features of these applications vendors' own platform-based offers and assess whether they are competitive with service providers and SIs, or will require new forms of partnership.

### Application of automation technologies

We examine how service providers are putting automation technologies to use where it matters. Their tools may be RDA, RPA, AI and cognitive techniques, chatbots and intelligent assistants, but what they use is less important than the proof points and use cases for improved services. We track and evaluate service providers' automation capabilities and their ability to serve customers with industry-specific requirements.

### Successful service management

Service provider success depends on placing the customer at the heart of decisions about business process and new product/service development. In this stream we examine how service providers are building out infrastructure and services to support the business customer throughout their digital transformation.

### Securing the hybrid organization

Cyber-attacks have sent many enterprises into disaster recovery mode, and are a particular concern in C-suites. In this stream we describe service provider efforts to combat malware and data theft by deploying advanced cybersecurity analytics and threat intelligence as part of a managed security services portfolio that includes security operations centers (SOCs) for central monitoring and customer relationship management to support response teams, process compliance management, and conduct real-time risk analysis across the business.

### Analyzing global services contracts

We track the evolution of ICT managed services as these expand to





include applications services and performance management, and cloud-based service delivery. Ovum maintains an IT services contracts database (ITSCA) as well as uniquely monitoring global services deals from telcos. Together, these provide the most comprehensive picture of the changing shape of the deal in enterprise managed services, in region and globally.

## What's new

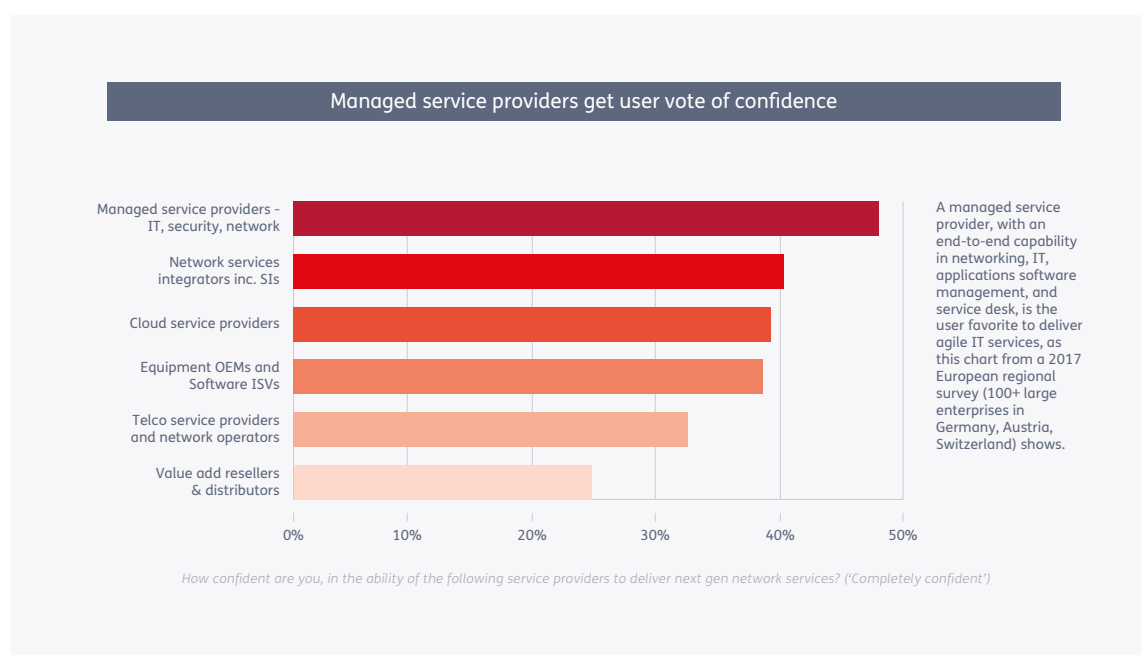
**Cloud innovation services out of Asia-Pac** – extending our case studies to examine the overall market impact of new cloud services

**SI strategies in IoT integration services** – most SIs are betting big on IoT as they recalibrate their strategies. How will partner ecosystems change and what can a vendor do to adapt?

**Digital platforms** – tracking the emergence of digital platform-based service models

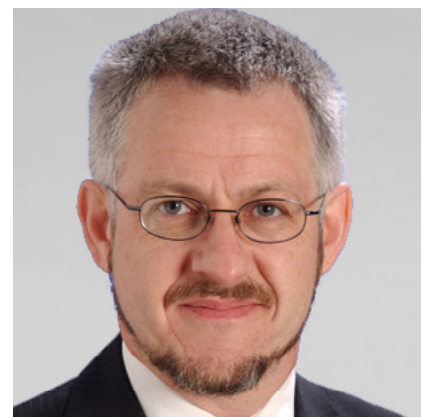
**The convergence of provider types** – changing partnership and competitive models between telcos, systems integrators, and webscale players

**A managed service provider, with an end-to-end capability in networking, IT, applications software management, and service desk, is the user favorite to deliver agile IT services, as this chart from a 2017 European regional survey (100+ large enterprises in Germany, Austria, Switzerland) shows.**



## The Market Challenge

For years, cost management, network resilience, and security have been the overriding priorities in enterprise network investment. Variations on these themes have appeared as top three user priorities every year in Ovum's research. That focus has changed as the driver for enterprise IT investment has switched from operational criteria to business outcomes. Now, next-gen services such as cloud computing, mobility, and the digitization of business processes are setting the pace for business productivity. But how do enterprise buyers decide priorities for technology investment?



**Richard Palmer**  
Principal Analyst

## How Ovum helps you

**Learn** why institutions are focusing on improving institutional agility, flexibility, and capacity for innovation, and what this means for ICT investment priorities for 2018

**Gain** insight into the best ways to combine systems that contain student information with management and communication tools to create better student experiences

**Stay** ahead of the competition, by understanding how to effectively position technology offerings to the business needs of educational institutions

“

Global spending on education it will reach \$34Bn by 2021

”

## Key Deliverables

**ICT Enterprise Insights** – Global survey of educational institution pain points and IT buying intentions for 2018-19

**Ovum Decision Matrix** – Analysis of the leading vendors solutions in key areas, including student success solutions and online learning platforms

## Themes for 2018

**Tailoring to the individual: Using data insights to personalize the education experience**

Higher education is at a pivotal point. The combination of trends in college attendance, completion rates, and rising student debt mean that colleges need to provide enhanced experiences to students. This means looking beyond information held in learner management systems to

include administration, connected devices (IoT) and other data sources too. Institutions then need to harness this data and exploit it using analytics to build better experiences and outcomes for students.

### **Driving institutional transformation through the cloud migration of mission-critical enterprise applications**

The higher education industry stands on the precipice of profound change, with a myriad of forces calling into question established beliefs about its role in society. In order to thrive or even survive in this environment, colleges and universities must reconsider how they deliver education services and support back-office operations to set themselves apart. The adoption of cloud deployment models and new, cloud-native solutions will be a critical part of achieving this goal. However, important questions remain about effective cloud migration strategies, including ones about solution and partner selection, in what order to take the CRM, ERP, LMS, and SIS to the cloud, and how to manage relations between IT and line of business leadership in a post cloud world.

### **Managing student experience to support life long learning**

The ability to demonstrate value to students is a difficult conundrum for institutions to solve, and can include a range of factors. Key to this though is the student experience. Student expectations of the learning experience continue to evolve, making it difficult for institutions to ensure specific cohorts do not experience worse access to core services. Managing the student lifecycle is an important part in student success, and in turn the profitability of colleges. Technology supports better engagement with students, even before they have set foot on the campus. Responsibility for the student experience does rest with alumni alone. Institutions need to focus on joining the dots between the different information and interaction points to ensure consistency and increasingly personalization of services.

### **Video as a disruptive force in higher education**

Institutions preference for traditional learning technology systems is slowly being replaced by learning experience platforms that combine tools to delivery content and learning materials through new mediums, such as video. Video, while a slow burn, is starting to disrupt the delivery of education content by replacing lectures, one-to-one interactions between alumni and students, and making content available in digestible chunks.

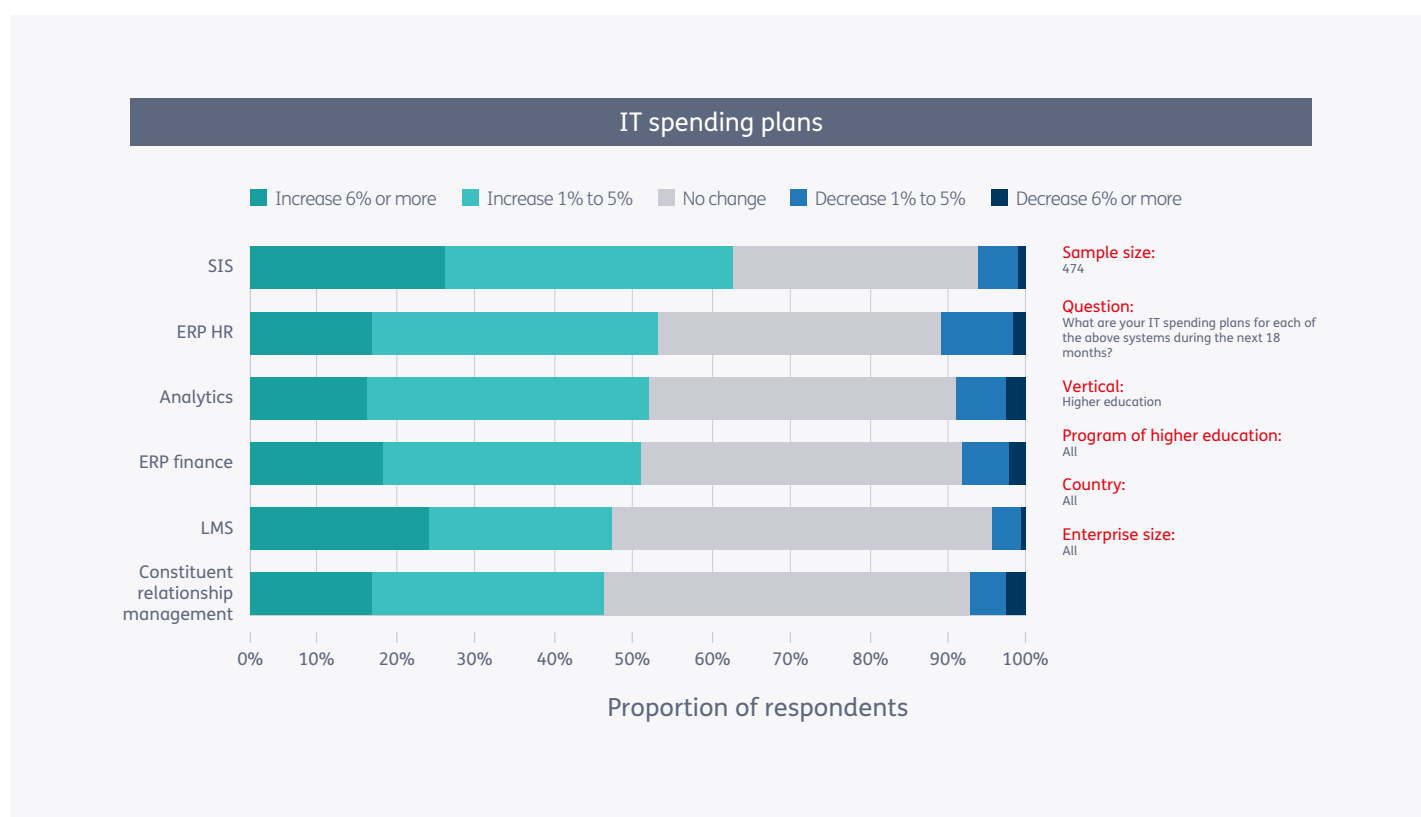
As the volume of learning materials available through video rises, institutions must consider ways to integrate video into their strategy for network services. Investment into technologies such as POL (Passive Optical LANs) can bring fibre into every classroom at a lower cost point than traditional services.



## What's new

ICT Spending Forecasts – Global 5 year projections for education IT spending, segmented by country, source and line of business.

**Transforming higher education core business services is already underway**





## The Market Challenge

The payments industry is in the midst of huge change, driving considerable acceleration in IT investment. The need to deliver on growing customer expectations and regulatory-driven infrastructure and competition initiatives is driving institutions to create the capabilities for rapid innovation in their offerings for corporate, retail, and SME customers. Open banking and immediate payments, are the most important catalysts for change, with many institutions now looking to develop significant new capabilities across the middle and back office to support the future of their customer facing offering. Distributed ledger technology and blockchain continues to prove its worth in niche areas, and will become a more important part of serious discussions about the future of certain areas of market infrastructure in particular. However, it is the opportunities that open APIs present to deliver entirely new products, services, and business models is the area that will dominate investment priorities in 2018.



**Kieran Hines**  
Head of Industries

## How Ovum helps you

**Maximise** your market impact, by using Ovum's independent research to understand exactly what is driving payments IT investment agendas at a country and regional level

**Benchmark** against your competition, with independent verification of the market leaders, challengers and followers in Ovum's Decision Matrix series

**Stay** ahead of the competition, by understanding where and how new entrants, digital service providers and established vendors are bringing new products and services to market

## Key Deliverables

**ICT Enterprise Insights** – Global survey of payment provider pain points and IT buying intentions for 2018-19

**ICT Spending Forecasts** – Global 5 year projections for payments IT spending, segmented by country, source and line of business

**Ovum Decision Matrix** – Analysis of the leading vendors solutions in key areas, including card management platforms, white label digital wallets, and payment switch

“

Total IT spending on payments-related software and services will reach \$56 Billion in 2021

”

# Themes for 2018

## **Payments and Open Banking: Gateway to the future value chain**

With institutions in all territories now actively formulating their open API strategies (the majority regulator-driven), the focus is turning to what this will mean for industry. In the short term, implementation strategy, service innovation (both in retail and corporate), security, data protection and standards are key issues, and will drive the majority of investment decisions. However more essential questions remain, most critically around what open banking really means for revenues, the value chain and future role of banks within it.

## **Infrastructure to Innovation: Investing to deliver the next generation of payment services**

Growing complexity in the payments industry will increasingly require modern, flexible underlying systems and architecture to support growth. In addition to the investment needed to deliver against customer expectations for real-time and digital first services, major initiatives such as immediate/real-time payments and steady growth in the development of blockchain/distributed ledger technology across correspondent banking and trade finance in particular will be key drivers of activity.

## **Identity, security and payment fraud threat: Finding opportunities in risk mitigation**

Managing the risks around fraud and financial crime are core to the business model, but the evolving nature of the threat and growing challenge of cyber-security put these high on the industry agenda. In retail payments, the need to balance risk against the customer experience means that biometric authentication, artificial intelligence, predictive analytics, and the technologies like 3D Secure 2.0 will prove critical. At the same time, interest in supporting digital identity assurance will provide clear opportunities to provide new solutions to customers.

## **Reducing frictions and driving transactions: The changing role of payments in an omnichannel world**

With the customer experience now the focal point for innovation, if not outright survival in many merchant segments, payments has a key role to play in how businesses of all types interact with their customers. Merchants will increasingly demand payment services that can be seamlessly embedded within any number of commerce experiences, devices and contexts. For the industry, the need to support this diversity of options will require new thinking and particularly around security. Developments in high growth markets such as China and India will provide important lessons for the rest of the world.



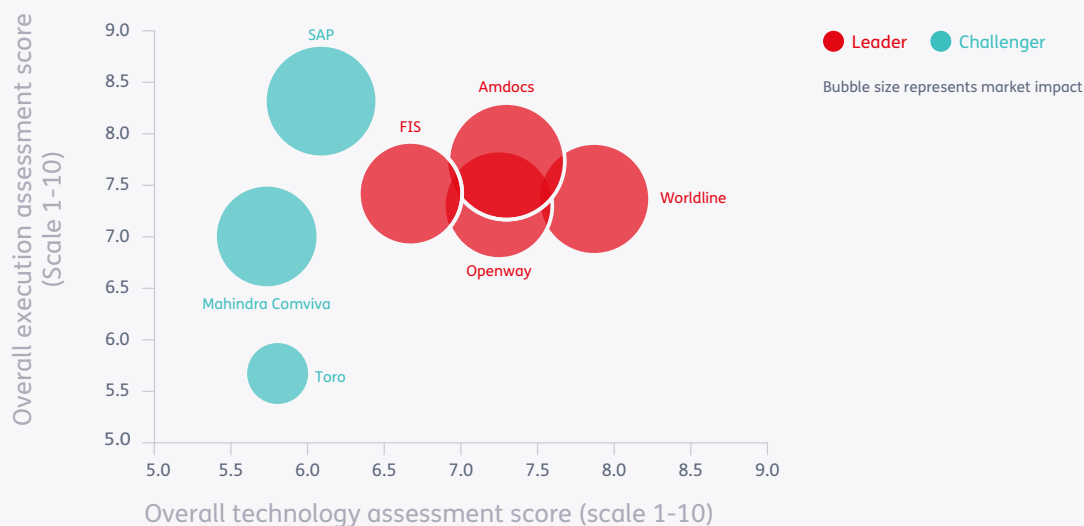
## Analyzing global services contracts

We track the evolution of ICT managed services as these expand to include applications services and performance management, and cloud-based service delivery. Ovum maintains an IT services contracts database (ITSCA) as well as uniquely monitoring global services deals from telcos. Together, these provide the most comprehensive picture of the changing shape of the deal in enterprise managed services, in region and globally.

## What's new

**Payments Software Contracts Analytics** – Global analysis of packaged software deals, segmented by institution, vendor and solution area

White-label mobile wallet solutions, 2016–17



## The Market Challenge

The speed of regulatory and commercial change in the sector continues to drive the need for innovation. The drive towards value-based care and the changes to reimbursement models are accelerating the need for greater insight into how healthcare is delivered. Aligned to this is the need for the better use of communication channels to prevent chronic health issues from developing, and the use of data to inform AI initiatives. The commercial value of healthcare information coupled with inadequate security measures are enticing an increasing number of cyber attacks and there continue to be reasonable questions around security and the handling of healthcare data that needs to be addressed.



**Kevin Noonan**  
Chief Analyst &  
Global Practice Leader

## How Ovum helps you

**Identify** the areas where investment in cloud services, automation and use of data analytics/AI, and what this means for ICT investment priorities in 2018

**Maximise** your market impact, by using Ovum's independent research to understand exactly what is driving healthcare IT investment agendas at a country and regional level

**Stay** ahead of the competition, by understanding how to effectively position technology offerings to the business needs of healthcare providers

“

Global spend on healthcare it will reach \$208bn by 2021

”

## Key Deliverables

**ICT Enterprise Insights** – Global survey of healthcare provider pain points and IT buying intentions for 2018-19

**ICT Spending Forecasts** – Global 5 year projections for healthcare IT spending, segmented by country, source and line of business

**Enterprise Case Studies** – Highlighting global best practice and innovation in the healthcare sector

# Themes for 2018

## **Machine learning and automation: Transforming the provision of care**

The need to remove waste, inefficiencies and raise productivity are driving interest in AI and automation across healthcare markets. Many processes in healthcare are repetitive and structured, perfect for automating. The combination of analytics, machine learning, and the rise in IoT/connected devices and sensors is providing healthcare providers with the opportunity to drive advances in effective care delivery at the patient level.

## **De-risking IoT in healthcare: Ensuring Security in the Medical Internet of Things**

The number of medical connected devices continues to grow, to such an extent that we are on the cusp of an era that will see the rise of the Medical Internet of Things (MIoT), giving rise to distinct threats and security issues. Most Healthcare providers approach to security continues to be tactical in approach rather than strategic, with providers only taking a strategic approach once they have been the subject of a successful attack. Beating cyber criminals requires collaboration across the various stakeholder silos and an understanding of the use of connected medical devices across the estate.

## **Personalised care for the masses: Using IoT and patient engagement tools to unlock outcomes**

The use of population healthcare management practices is increasing the need to for healthcare providers to engage more deeply with consumers and patients. Sometimes these are one in the same, in others they are not. Some consumers, with the right communication, will never become patients. Consumers and patients cannot be segmented into tidy groups, they require personalised and targeted communications. The adoption of Patient Relationship Management (PRM) tools and the ability to leverage mobile and other connected devices as part of personalised care programs are being pursued as a means to addressing these challenges. Facilitating the interaction between existing and future patients of the healthcare provider, and helping to organize and automate the activities that support the patient experience.

## **Transforming outcomes with data: Using AI and advanced analytics to enhance diagnostics, clinical trials and drug development**

As the delivery of healthcare expands beyond the traditional confines of hospitals and doctors surgeries, and treatments become increasingly personalized the gap between pharmaceutical companies and healthcare providers is shrinking. At the same time the use of digital



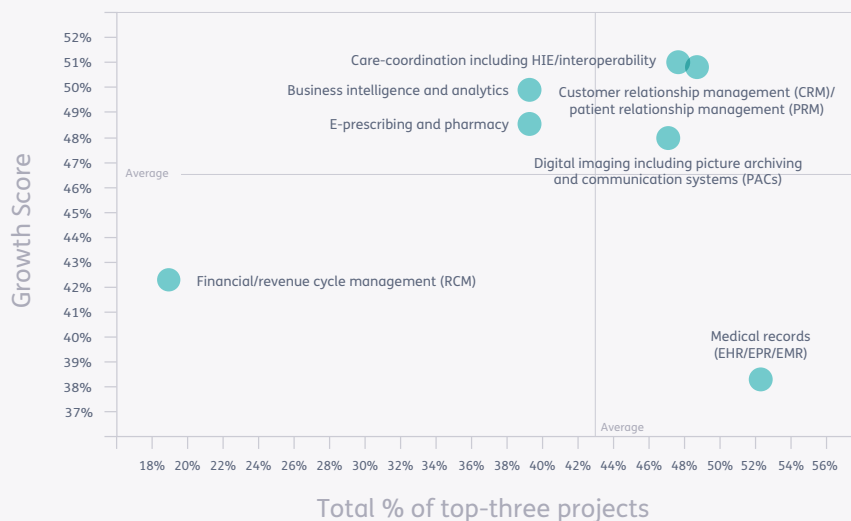


tools, automation, analytics, data, etc., is enabling the creation of healthcare markets that connect groups of consumers with providers and supports the expansion of wellness and population health management activities. This approach is supported by the shift to focus on outcomes from healthcare. This requires greater co-operation between pharma companies and healthcare providers to enhance clinical trials and drug development, create more targeted and personalized care choices, including preventative care.

## What's new

**PRM Adoption Framework** – to help providers better understand the opportunities

### IT prioritization



**Sample size:**  
461

**Question:**  
X-axis - What are your top-three IT projects (in terms of total investment value) for the next 18 months?

Y-axis - What are your IT spending plans for each of the above domains during the next 18 months? (Growth score = % increasing - % decreasing)

The bubble size represent the relative investment priority.

**Vertical:**  
Healthcare

**Healthcare establishment type:**  
All

**Country:**  
All

**Enterprise size:**  
All

## Government

The adoption of digital services has been driven out of necessity rather than choice due to the fiscal challenges that have shaped the world since 2008. As the fiscal pressure eases a new challenge has risen, that of an electorate that is increasingly dissatisfied with the value that is being delivered by their governments. In response, governments are looking for improvements into the way services are joined up across the back office, increasing the use of analytics to help focus resources, and allowing for greater automation and self-service. The time has come for digital government to deliver more substantial outcomes for citizens.



**Kevin Noonan**  
Lead Analyst

## How Ovum helps you

**Understand** how automation, analytics and cloud strategies will drive ICT investment priorities for 2018

**Maximise** your market impact, by using Ovum's independent research to understand exactly what is driving government IT investment agendas at a country and regional level

**Stay** ahead of the competition, by understanding how to effectively position technology offerings to the policy and service needs of government agencies

## Key Deliverables

**ICT Enterprise Insights** – Global survey of payment provider pain points and IT buying intentions for 2018-19

**ICT Spending Forecasts** – Global 5 year projections for payments IT spending, segmented by country, source and line of business

**Ovum Decision Matrix** – Analysis of the leading vendors solutions in key areas

“

The three biggest barriers to agencies undertaking digital programs are security, lack of internal skills, and too many other programs on the go

”

# Themes for 2018

## **AI and automation: Making government smarter**

Adoption of AI and automation technologies is increasing, and not just within large federal departments; smaller agencies are experimenting with these emerging technologies to aid improvements to service delivery. Yet, many agencies struggle to know where to start, and are held back by concerns on where to make investments that drive efficiencies and productivity change. Uncovering the hidden insights requires agencies to better understand and manage their data, ask the right questions, and augment existing data with new information.

## **Building the foundations for change: Digital transformation 2.0**

As governments digital agendas move from the front office to the back office the use of automated, flexible open, cloud-native platforms is becoming increasingly widespread. Integrating these with existing IT architecture, managing security and user access is a challenge for government agencies. Strategic picks on which platform to adopt have to be made. Help is needed with identifying which service is best suited to which platform and how agencies develop a culture that supports agile approaches to development of cloud services.

## **Journey to the cloud: The cloudification of government networks**

Thanks to the connected world of today, government networks can no longer be viewed simply as the plumbing that transports data from one data centre to another. In the digital world, networks built with rigid architectures to support legacy systems and are no longer fit for purpose. CIO's and CTO's are having to consider how the network can support transformation of public services, while addressing the demands for better performance, agility, security and delivering efficiencies.

## **Smart Cities – The power to transform the citizen experience**

Cities must combine data from devices and services with citizen engagement if they are to realise the potential of smart city projects. The platforming of cities is tied to the adoption of “as-a-service” approach to IT that can support an array of sensor and information sources, such as from the IoT, to create new models for providing services. Success in platforming cities requires a measured approach that allows agencies to develop good practice, retain security over data and access, and supports the deliver of unified view of services within vertical towers such as transport, lighting, and environmental services.



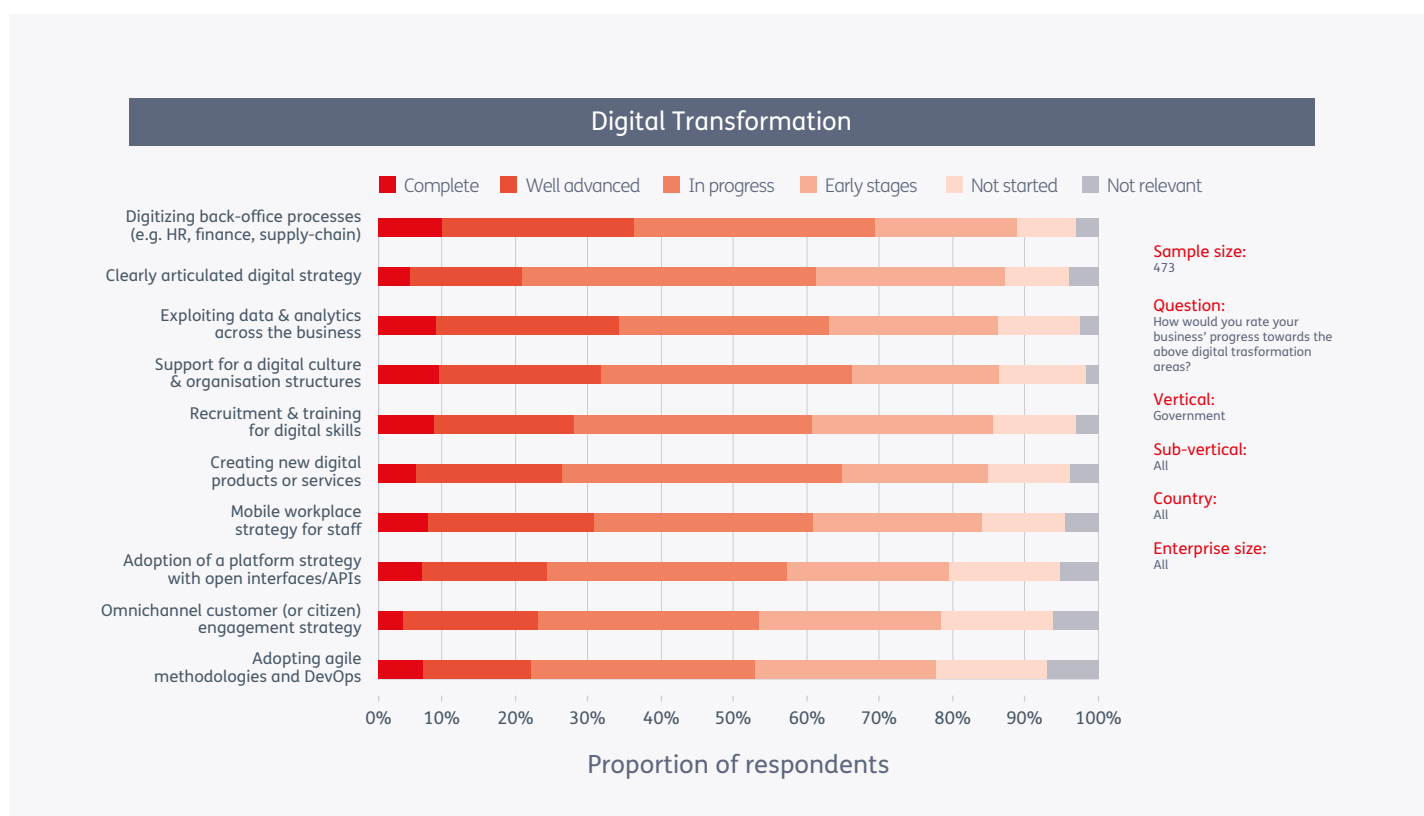
## What's New

**Digital Transformation Maturity Framework** a structure that allows agencies to benchmark current and future strategies, and helps getting the balance right between people, process, technology

**Strategic** reports that provide insight into how digital government policy is helping to drive improvements to service delivery

**Case studies** that will provide insight into how the four roles of government: purchaser of services, provider of services, regulator, policy maker are changing thanks to digital tools

**Set of line** of business forecasts for government



## The Market Challenge

In Ovum's view the global insurance industry is entering a distinct new phase characterized by the emergence of innovative new insurance products, novel ways of interacting with customers, and the threat of new entrants. As an insurer, your organization must respond to these challenges.

Having already experienced major change over the last decade through regulation, radically changed customer expectations and new technology, how do insurers respond as technology change continues to accelerate yet further over the next five years?

The imperatives for today's insurer are to understand the potential threats and opportunities posed by technology, how it can be effectively exploited and who are the most appropriate partners when addressing these challenges?

## How Ovum helps you

**Understand** how key technologies will impact your particular insurance sector, region and organization

**Maximise** your market impact, by using Ovum's independent research to understand exactly what is driving insurer IT investment agendas at a country and regional level

**Stay** ahead of the competition, by understanding how to effectively align technology offerings to your customers' needs

## Key Deliverables

**ICT Enterprise Insights** – Global survey of insurer pain points and IT buying intentions for 2018-19

**ICT Spending Forecasts** – Global 5 year projections for insurance IT spending, segmented by country, source and line of business

**Ovum Decision Matrix** – Analysis of the leading vendor solutions in key areas, including IoT Insurance Service Providers



**Charles Juniper**  
Principal Analyst



71% of North American and European insurers see companies like Google, Amazon and Facebook as a more significant competitive threat than their peer insurers in terms of delivering an IOT-based insurance proposition





# Themes for 2018

## IoT and the move to Insurance 2.0

The vehicle insurance sector has used telematics and IoT to offer usage-based insurance (UBI), but now insurers need to build on this to not only enhance today's vehicle offerings, but also to deliver IoT based proposition across other sectors such as home, commercial and life insurance. IoT insurance 2.0 will allow insurers to move from today's product-focused, retrospective compensation offerings, towards that of a proactive and personalized risk management proposition characterized by an ongoing dialogue that adds value for the policy holder.

## Value-based engagement and the future of the customer experience

With increasing competition, how can the insurance industry deliver a seamless, convenient and innovative digital customer experience that is seen to be of meaningful value by the customer? Critical to this will be the role played by technologies such as RPA, machine learning , natural language processing, and augmented reality, to deliver a highly personalised and contextually relevant insurance proposition. Small and mid-size insurers in particular need to find ways to effectively exploit new technology and to not get left behind in the 'technology race' by large well-resourced carriers or agile 'insurtech' start-ups.

## Becoming the digital insurer

Carriers need to fully utilize technologies such as cloud, SaaS and RPA at the core of their operations to provide the organizational agility needed in response to the changes demanded by customers, regulators, competitors and emerging competitive threats.

As the market dynamics continue to exert pressure on insurers, resolving the perennial issue of legacy modernization becomes even more critical. Ovum's research can help insurers to understand how best to deploy these technologies and map a route to becoming a digital insurer.

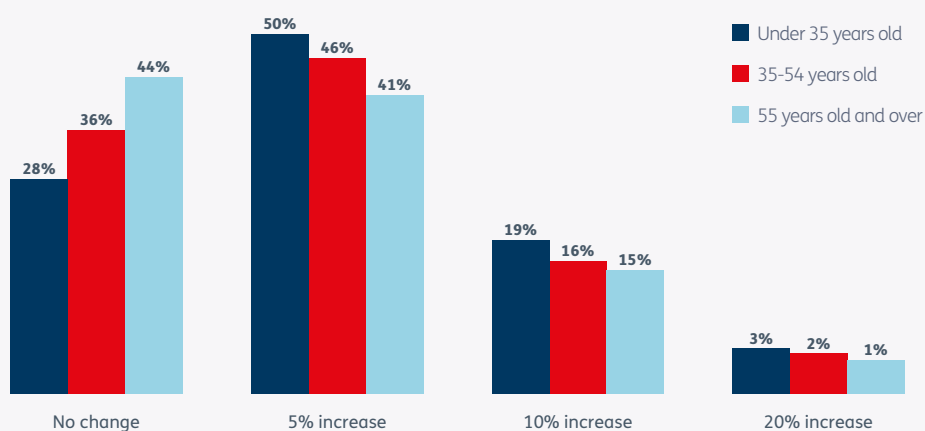


## What's New

**Deep focus** on the opportunities presented by artificial intelligence and IoT technology; the biggest drivers for change across the global insurance industry

**Insurance Software Contracts Analytics** – monthly analysis of insurer and vendor partnerships

If an insurer provided the most important services you selected, how much additional premium would you be prepared to pay?



## The Market Challenge

With the economic backdrop of ultra-low interest rates set to continue, achieving top-line revenue growth will remain a challenge and driving efficiency improvement will persist as key driver for driving financial return. However, the industry itself is being disrupted. Regulatory change is forcing banks to expose their systems through APIs, challenging banks as to where they play in the value chain, which is also being cherry-picked by FinTechs benefiting from the cost advantages of cloud and reach of mobile-based models.

This while the imperatives of regulatory compliance and efficiency remain, driving through digital transformation and delivering innovation has shifted from important to critical.



**Daniel Mayo**  
Director Ovum IT Data Tools & Insights

## How Ovum helps you

**Understand** how regulatory imperatives and digital transformation strategies will drive ICT investment priorities for 2018

**Maximise** your market impact, by using Ovum's independent research to understand exactly what is driving retail bank IT investment agendas at a country and regional level

**Stay** ahead of the competition, by understanding how to effectively position technology offerings to the business needs of retail banks

## Key Deliverables

**ICT Enterprise Insights** – Global survey of retail bank pain points and IT buying intentions for 2018-19

**ICT Spending Forecasts** – Global 5 year projections for retail bank IT spending, segmented by country, source and line of business

**Banking Software Contracts Analytics** – Global analysis of packaged software deals, segmented by institution, vendor and solution area

**Ovum Decision Matrix** – Analysis of the leading vendors solutions in key areas, including digital channel platforms, and financial crime

“

The top 1,000 retail banks will spend over \$125bn on technology in 2018

”

## Themes for 2018

### Delivering the digital customer experience

Attention to the digital experience has focused on mobile and online channels for most banks, however, this has shifted to realization that actual customer experience in the digital economy extends to all channels and customer-facing processes that support these. Delivering a seamless, straight-through experience that supports the wider customer journey is critical, but requires platforms that can manage the user-experience, taking advantage of new technologies in biometrics, augmented reality, natural language processing and AI-based services to enhance both human and direct customer engagement.

### Driving through digital transformation

As banks realize digital is about the bank itself rather than a channel, there has been increasing assessment of how culture, governance, processes, and structures enable banks to operate in a digital world. While such transformation must occur at the business level, this is also driving significant change for technology, requiring platform modernization, new approaches to delivery, and ability to source and adopt new technologies and systems more effectively. The ability to leverage cloud and extract value from data will be critical.

### Managing risk, security and compliance

The basics of banking – managing risk and providing security – remain core tenets of the digital world, with challenges intensifying as connectivity and external threats increase. Simultaneously, regulatory demands around financial crime and compliance management continue to escalate in breadth and reach with GDPR an important project for institutions with customers in Europe. Technology advances with Big Data, Artificial intelligence, data streaming processing and security offer potential solutions to balance the pressures of mandatory requirements and cost, but understanding real use cases and developing strategies to ensure these fit together effectively is critical for actually delivering potential benefits.

### Embracing the API revolution

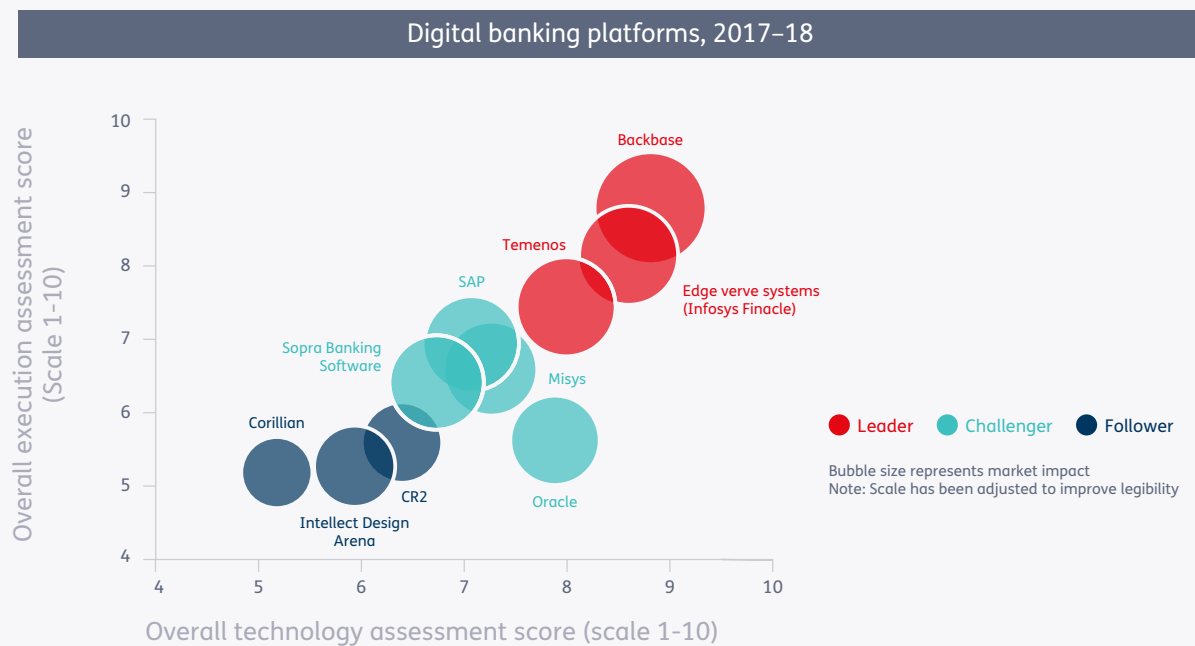
With regulatory interest in driving open APIs in banking quickly pervading across the globe, banks are realizing that open banking is not just another compliance requirement, but one that potentially will have significant impact on the industry itself. At an operational level, there is important considerations to be made around API management, but it is also driving wider focus around potential to create new services and work differently with the emerging FinTech ecosystem.



## What's New

**Banking ICT Spending Predictor** understand institution specific across digital banking, payments and other business function areas

**Understand bank focus** and priorities for deploying AI across the institution





## The Market Challenge

Premium media asset owners are undergoing major change as they shift to a digital first strategy.

Broadcast TV & video providers, ICPs and digital service providers are grappling with two core business priorities – how to enhance operating margins and extend their reach into new growth areas. This is forcing media providers to respond by migrating their audience engagement ecosystem to IP, unifying the content supply chain and leveraging big data and AI technologies. Major change is required to support the launch of real-time digital services and exploit new monetization avenues such as the enterprise video and sports franchise segments.



**Kedar Mohite**  
Senior Analyst

## How Ovum helps you

**Helping** media enterprises to compare business and technology road-maps

**Showing** media companies how to re-engineering their partner ecosystem

**Providing** media transformation journey support and assisting with the selection of technology vendors and ICT service providers

**Market** and competitor assessment across the media content supply chain

**Delivering** insights on media technology trends and changing adoption cycles

**Identifying** new market opportunities in the video space across diverse segments such as sports franchise, broadcast TV & video, and digital service providers

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The media transformation ict services market is forecast to reach \$27.4Bn by 2022. The sports franchise segment will be one of the fastest-growing, with cagr of 5.3%

”

## Key Deliverables

**Media transformation ICT Services forecast (2017-2022)** with addition of publishing companies such as newspaper, magazine, and B2B to existing database encompassing sports franchises, digital service providers (cable TV, satellite TV, and telecommunication multimedia services business) and TV & video broadcasters.

Extending On the Radar deliverables across new technologies enabling the media transformation journey, especially those supporting the end to end content supply chain

Strategic viewpoint and competitive benchmarking of vendors offering media AI and big data solutions, and analysis of technology vendors serving this space

Research notes and short reports on the proliferation of media technology vendors in the enterprise video space

Extending innovative case studies on media transformation projects with special emphasis on ICT services deployments across the sports franchise segment.



## Themes for 2018

### **The media content supply chain shifts to IP**

An increasing number of media enterprises are migrating aspects of their content supply chain to IP. The shift to IP is a highly complex transformation. Ovum will analyse the areas of the content supply chain leading the push, such as media acquisition and distribution, as well as emerging areas such as media preparation. We will investigate migration roadmaps and identify what technology partners need to offer in order to enable the transition

### **The next wave of personalization in media technology**

As media enterprises move from a first to a second wave of personalization this will create demand for more granular data insights. Customer retention will become a key concern due to the proliferation of distribution channels, so driving media enterprises to adopt technologies that help to create in-depth and contextual audience engagement. These will be key drivers for the adoption of big data and AI technologies and recommendation services in the media sector over the next 18-24 months.

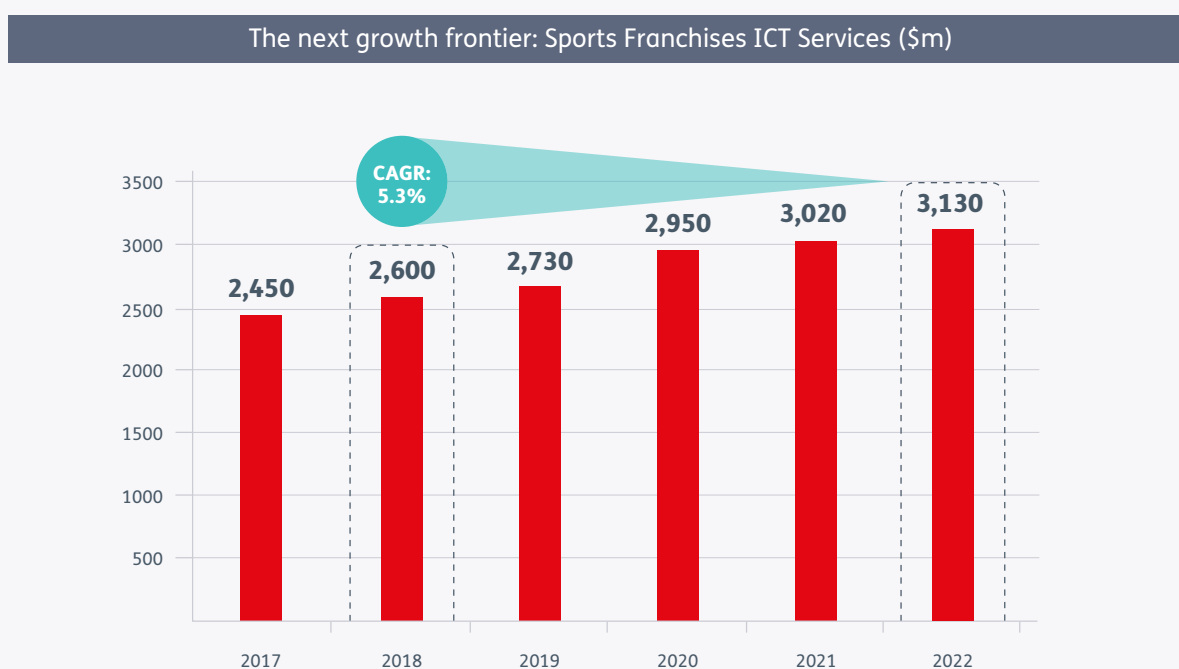
## Video will drive convergence in the media and entertainment sector

Video is a key driver of convergence within the media and entertainment sector as well as across multiple vertical sectors. Video is becoming the primary engagement tool, creating new opportunities for both media providers and media & broadcast technology vendors. These vendors are seeking to re-engineer their go-to-market strategy, and technology road-maps to target new vertical segments. Ovum will analyse this technology transformation. We will also investigate growth areas such as sports franchises, exploring how companies in this space are embarking on a hyper personalization wave, and assessing how ICT services will support this growth.

## What's New

**Ovum Decision Matrix** on live streaming services enabling enterprises to quickly select the right project partner for their premium media assets especially sports content

**Managed video logistics forecast (2017-2022)** – extended to encompass seven major sectors leveraging video as the core engagement tool i.e. education, healthcare, BFSI, Government, consumer products, Utilities & Energy, and media & entertainment



## The Market Challenge

Smart metering, smart grids and smart home services are just some of the examples of emerging new business models that are driving transformation amongst utilities and creating more complex relationships with customers. For the majority of utilities the reality is that they are just beginning the journey to adopting digital tools that will allow them to take advantage of opportunities presented by these changes. These new complex relationships require more complex but flexible administration and customer communication systems to support new business models. However, the risk and cost of replacing these are holding many utilities back from adopting platforms that would support new business models. Replacing these is likely to be one of the biggest and most risky projects for utilities over the next few years.



**Kieran Hines**  
Head of Industries

## How Ovum helps you

**Understand** how utilities are investing to improve the customer experience and to meet the challenges of this rapidly evolving industry, and what this means for ICT investment priorities in 2018

**Maximise** your market impact, by using Ovum's independent research to understand exactly what is driving the IT investment agendas of utilities at a country and regional level

**Stay** ahead of the competition, by understanding how to effectively position technology offerings to the business needs of utilities

## Key Deliverables

**ICT Enterprise Insights** – Global survey of pain points and IT buying intentions among utilities for 2018-19

**Enterprise Case Studies** – Highlighting global best practice and innovation in the utilities sector

“

Data management is a core investment area for the industry, with 41% of utilities prioritising as a top three it priority for 2018

”

# Themes for 2018

## Rethinking data in support of transformation

The traditional utilities business model is no longer fit for purpose. An increasing focus on customer experience, IoT, electric transport, and the growth in distributed energy technologies are just some of the major drivers of change. Data management aspects of transformation are a particular challenge to utilities. The industry has to improve governance and quality, especially as the number of smart devices grows. Data management and security should not be afterthoughts in a digital transformation.

## Putting 'relationship' back into CRM for utilities

The clock is ticking for today's utilities. Disruption from technology is changing the business model, lower barriers to entry, developments in IoT and Smart spaces (homes, businesses, cities) are presenting opportunities for new services. If utilities are to withstand the changes they need to adapt their approach to customer engagement and management, an area that has suffered from under investment despite the increasing level of competition. No longer though, investment is rapidly increasing, especially around digital channels.

## Utilities rethink IT service delivery with adoption of "as a service" model

Digital transformation does not just occur. It is a lengthy, and sometimes painful process. The adoption of "as a service" model by utilities is a case in point. Given the conservative nature of utilities, it is no surprise that some of the biggest barriers to adoption have not always been technical, in many cases they have been cultural. However, things are changing, and "as a service" delivery of IT services are starting to be adopted more widely across utilities estates, especially as reliance on in-house IT services diminishes as utilities start to look towards self-service capabilities for provisioning IT.

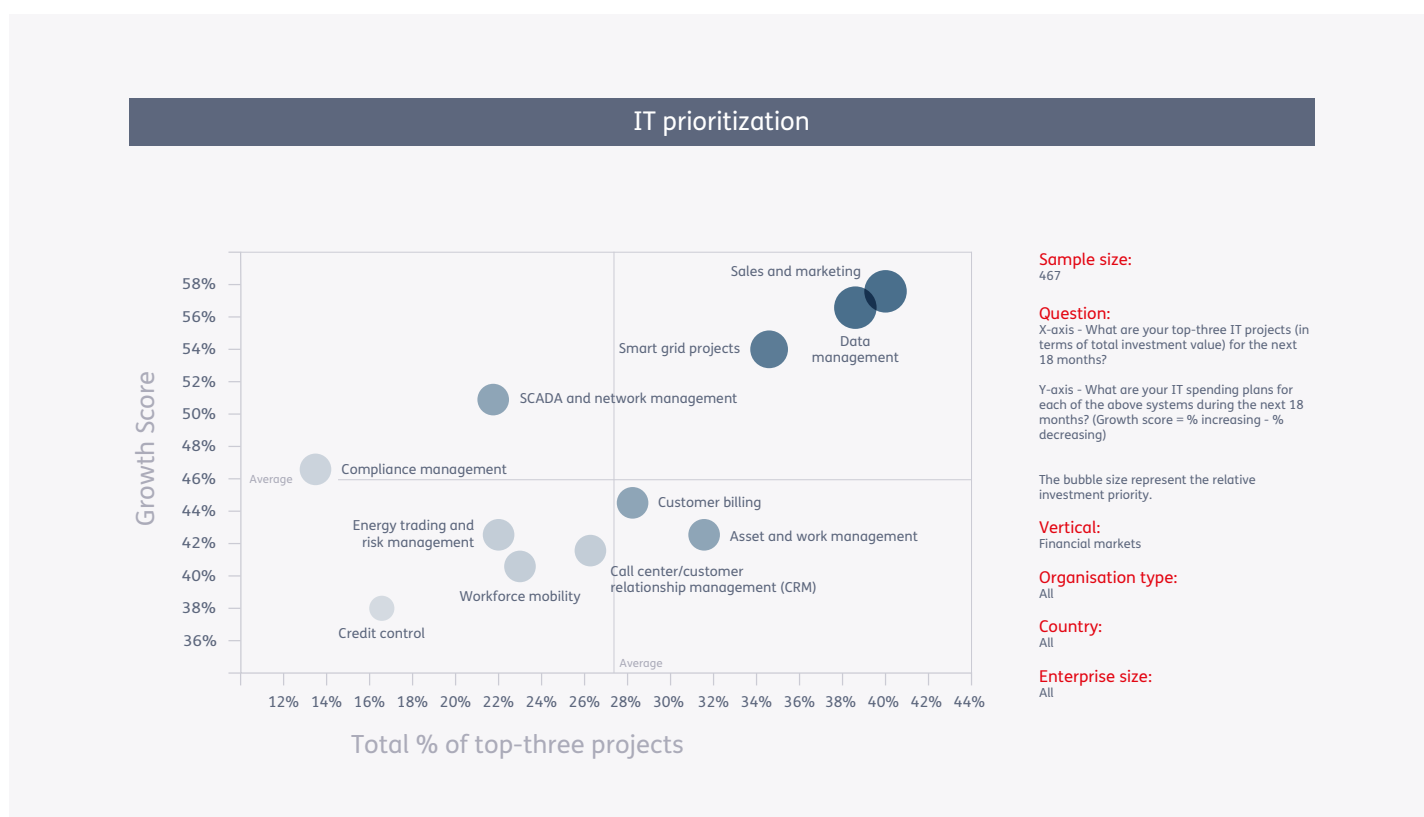




## What's New

**ICT Spending Forecasts** – Global 5 year projections for education IT spending, segmented by country, source and line of business.

**Utilities are unshackling themselves from legacy systems**



## The Market Challenge

Communications service providers (CSPs) are under intense pressure to transform their IT systems, software and business processes to compete in the digital world.

CSPs will need to deliver a personalized and contextual customer experience, bolstered by improved partner management systems, customer journey mapping and omnichannel strategies. Digital transformation will also require the adoption of SDN/NFV and cloud-based delivery models. To support these CSPs will need to streamline and automate telco IT systems and make effective use of AI and advanced analytics tools. These changes will also have a fundamental impact on CSP operations as they shift to DevOps, microservices and cloud native practices.



**Kris Szaniawski**  
Practice Leader

## How Ovum helps you

**Help** telcos understand their business and digital transformation priorities and position themselves against their peers.

**Support** telcos with their IT investment and buying decisions, including product assessments.

**Identify** telcos' decision criteria for selecting platform and service partners to enable digital transformation.

**Understand** the main growth opportunities across the complex telco IT landscape.

**Evaluate** vendor competitive position in key solution areas versus peers from NEP, ISV, and CSI backgrounds.

**Identify** new product, service, and partnering opportunities in a rapidly changing and increasingly complex ecosystem.

“  
Launching digital services and creating a personalized customer experience are top priorities for over 80% of CSPs  
”

## Key Deliverables

**Coordinated** set of forecasts covering Telco IT (OSS/BSS) revenues, telco vendor services (network and IT services) revenues and Telco spend.

**Research** on changing telco operations, including the impact of SDN/NFV on telco IT systems, preparing CSPs for the transition to microservices and making the move to DevOps.

**Research** on improving the customer experience, including strategies for managing and monetizing the growing telco partnership ecosystem and customer journey management.

**Ovum Decision Matrices** evaluating leading telco IT solutions, including BSS and analytics.

**ICT Enterprise Insights in the Telecoms Industry** CIO insights and investment plans in key telco IT areas.

**OSS/BSS** contract analytics interactive tool with global coverage.



## Themes for 2018

### Successful strategies for digital transformation and the impact on telco IT

Digital transformation is a priority for telcos, but many are still unclear how to undertake this journey. Through a series of industry case studies, thought-leadership pieces, and surveys; Ovum will provide guidance on how CSPs can make the transition to DSP and identify vendor opportunities.

### Making the move to intelligent telco operations

Intelligence and automation will play an important role in the transformation of CSP operations as they aim to “work smart”. Ovum will explore the potential of technologies such as AI and analytics to enhance and automate CSP operations and will evaluate vendor solutions for the telecoms industry. Ovum will also explore the changes telcos need to make to support IoT, 5G and digital services.

### Strategies and technologies for the delivery of a personalized telco customer experience

CSPs must deliver a personalized and contextual customer experience to compete in the digital services market. Ovum will explore how CSPs can leverage OSS, BSS, and intelligence to understand and personalize the customer journey. Focus will be placed on how CSPs can improve customer experience for both B2C and B2B customers and the impact of

emerging areas such as IoT on the growing CSP partner ecosystem. Ovum will provide thought-leadership on strategies for improving the customer experience and vendor analysis.

### Vendor services evolve to support new modes of telco IT operations

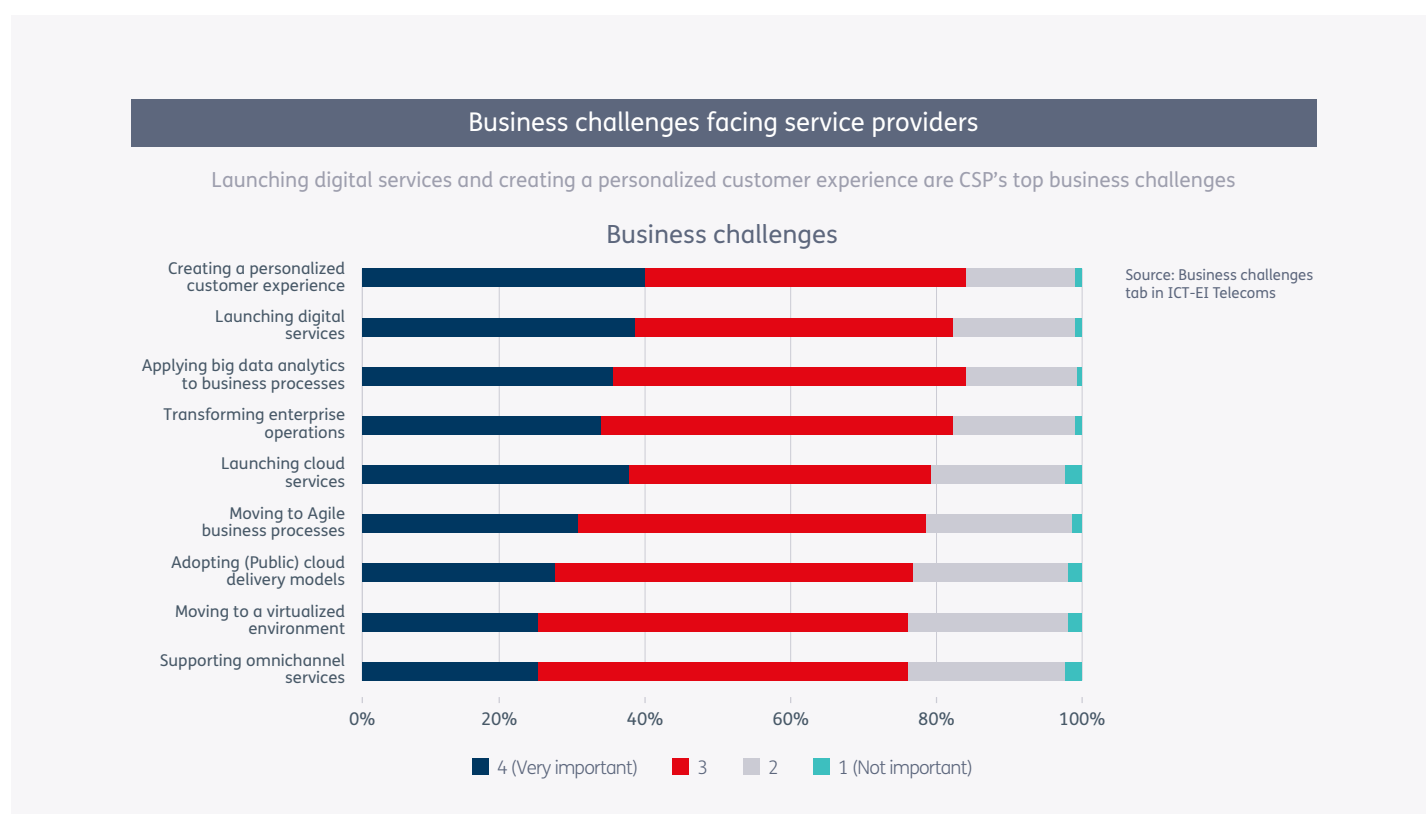
Vendor services portfolios and capabilities will evolve to support new types of operations. Vendors and professional services partners will need to help telcos with the shift to DevOps, SDN/NFV and microservices, as well as support telcos' digital transformation journey. Ovum will explore the changing role of vendors in the telecoms industry as services such as SaaS and consulting grow in importance. We will provide analysis of changing vendor service portfolios, market share and forecasts.

## What's New

**Digital transformation insights** – including CSP case studies, surveys and insights

**Vendor product reviews** – assessments of product, vendor positioning, customers, use cases and market context. These focus on offerings supporting digital transformation e.g. cloud based telco IT solutions

**New forecasts and increased granularity** – new Telco IT spend forecast and new segments in OSS/BSS forecast



## The Market Challenge

For digital service providers, reaching the small business universe presents unique challenges: they often look like mass market customers, but have more complex needs. Their technology requirements vary by industry but their internal IT is often under-skilled or absent. They crave support, but don't have the customer lifetime value to justify a dedicated account manager.

Most irritating, these realities add up to a customer that – for now at least – won't usually self serve.

Cracking this profit conundrum demands the right channel mix, a value proposition calibrated to the right buyer persona and a pitch with a light industry-specific veneer.

## How Ovum helps you

**Empower** – identify compelling, profitable digital services that help smaller businesses thrive.

**Simplify** – craft integrated propositions that overcome digital service providers' internal silos to address customers' validated needs.

**Engage** – determine the correct blend of physical and virtual channels to engage different buyer personas.

**Support** – help bridge the digital skills gap between small and large businesses, and accelerate transformation.



**Camille Mendler**  
Practice Leader

“

Nine of 10 SMEs believe digital services can improve their business – but half say they are digitally illiterate

”

## Key Deliverables

**SoHo and SMEs Insights** – digital demand perspectives across developed and growth economies.

**Profiles and case studies** – highlighting success and key learnings in addressing the small business universe.

**Telecom Cloud Monitor** – tracking key cloud-related activities among 400 CSPs around the world.

**Forecasts across major B2B services** – consistent segmentation for SoHo and SMEs across core cloud, UC, broadband services.

**Rapid analysis** – the implications of key market happenings.

## Themes for 2018

### Virtualizing the SME

Small businesses are increasingly dependent on the capex light, as-a-service model. But deploying the right blend of digital services remains a challenge for buyers and sellers alike. Ovum continues to deliver pragmatic guidance which match service bundles – such as cloud apps, collaboration tools, security, SD WAN, etc – to the right customer through ongoing end-user research and supply side analysis.

### Superfast SMEs

New superfast services based on G.Fast, FTTP, dark fiber unbundling – and not least 5G – should transform small businesses productivity. Through end-user research and market benchmarking, Ovum will help service providers develop compelling value propositions that go beyond high speed and low prices in order to capture attention and loyalty.

### Architecting the B2B channel

Sales through partner channels are rising, but so is competition to sign up the best partner. Service providers must identify the best fit of partner to complement their portfolio and deliver the client intimacy that small businesses demand. Not least, they must also develop value propositions, tools and systems to make their channels loyal and productive. Ovum assesses partners and partner programs focusing on the small business universe.





## Digital engagement with small businesses

Nine out of 10 service providers identify delivering a personalized customer experience as a top business challenge. Extending this aim to the small business segment – a difficult hybrid of consumer and business needs – presents special problems. Ovum can guide on best practice based on end-user research and case studies addressing key themes in digital engagement, online reputation building and self service.

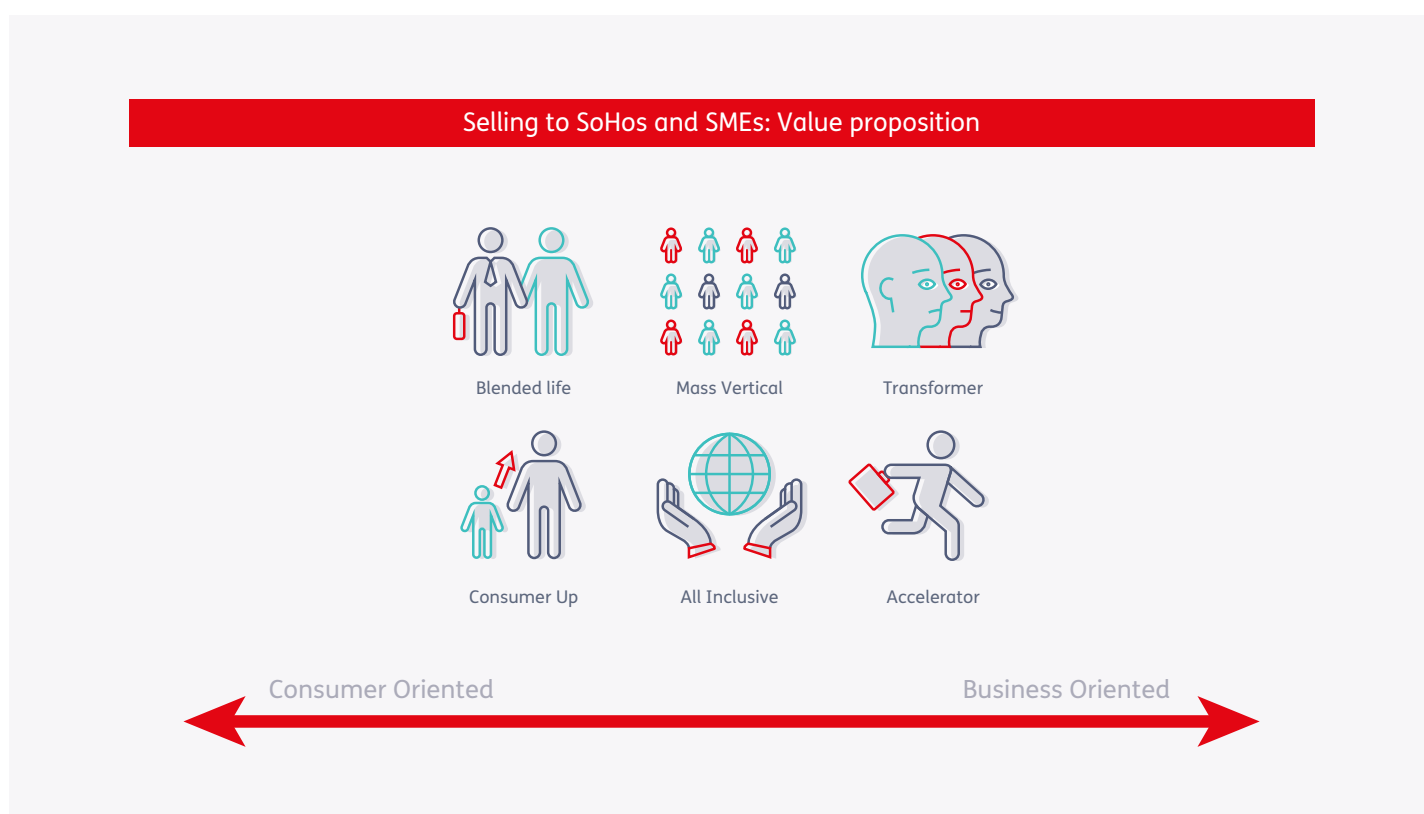
## Monetizing the informal economy

The informal economy of traders, craftsmen and other unconventional entrepreneurs is a potentially vast opportunity for service providers in emerging markets. Based on field research and benchmarking, Ovum offers practical approaches to mining this shadowy segment.

## What's New

**Channel programs** – identifying the right partner, comparing approaches to boosting productivity and loyalty.

**Global B2B Demographics Tool** – a Rosetta Stone to the global B2B universe to support targeting and opportunity sizing – will be upgraded with additional countries, and estimates on the informal economy.



## The Market Challenge

Network and cloud combined let enterprises bond together local and remote IT resources. But providers' big and bold top-down attempts to force cloud and network together so far have gone badly. Cloud computing is led by a few dominant providers that let enterprises centralize, virtualize and automate IT infrastructure efficiently. Network providers are separately wrestling with fundamental changes, as their logical and physical networks must migrate to software and greater automation. Evidence shows that cloud and network do succeed together when they consider customer needs, and provide services that secure, remove complexity and lower costs for enterprises' highly complex heterogeneous IT environments.



**Brian Washburn**  
Practice Leader

## How Ovum helps you

**Understand** how competing service providers are re-engineering their networks to provide more adaptable, software-based WAN services

**Determine** the customer requirement for evolving network services and invest accordingly

**Identify** the partners required to deliver a transformational network service

**Compare** the managed services strategies of leading cloud service providers

**Explore** enterprise decision-maker managed and hybrid requirements

“

Together, both increased adoption of public cloud services and the need to drive more insight out of enterprise and customer data using analytics are identified by over 50% of enterprises as key drivers of further network investment

”

## Key Deliverables

**Network Service Provider Update** – track the emergence of transformational network services from leading providers

**Cloud Service Provider Update** – understand the complex provider landscape for managed hybrid services

**VPN and SD-WAN forecasts** – size the market for evolving network services and plan for growth by segment

**Cloud and Network CIO Insights** – get into the heads of key enterprise decision makers

**Service provider innovation case studies** – short insights into leading-edge providers deploying new technologies and services



## Themes for 2018

### Emerging multi-cloud and programmable network environments

Enterprises consume services from a range of providers. Cloud providers and integrators are looking to manage and orchestrate enterprises' multi-cloud and hybrid IT environments. Network providers aim to participate, assigning bandwidth and other resources on-demand. We focus on the provider models and enterprise services that justify investment, while keeping in focus the counter-strategies of commodity services.

### Security and resilience to protect enterprise assets

Enterprise customers have grown more confident in the security and resilience of public cloud platforms. The challenges we cover include how to architect secure enterprise-class solutions for those platforms; how enterprises integrate those elements within their wider IT estate; and how they maintain and manage security of IT assets in an environment where perimeters are no longer fixed.

### Innovative Commercial and Operational Service Models

Enterprises demand simplified ways of buying, operating and managing their cloud and network resources. We follow the best practices adopted by service providers to streamline their operations, identify and engage customer leads, partner strategically to deliver against customer needs, and provide high-quality support.

## Successful Service Models for Virtualization

Virtualization is the future, but providers must build their own roadmap for effective resource usage, whether their goal is building software defined data centers or the software defined network. We monitor the inflection points for providers to orchestrate and manage applications and workloads in a flexible hybrid IT environment.

## End-to-end Transaction Performances

Enterprise buyers have been increasingly interested in turnkey services, driven by the applications platform. We assess best practices of service providers aiming to deliver end-to-end transaction performance for applications, workloads and micro-services.

# What's New

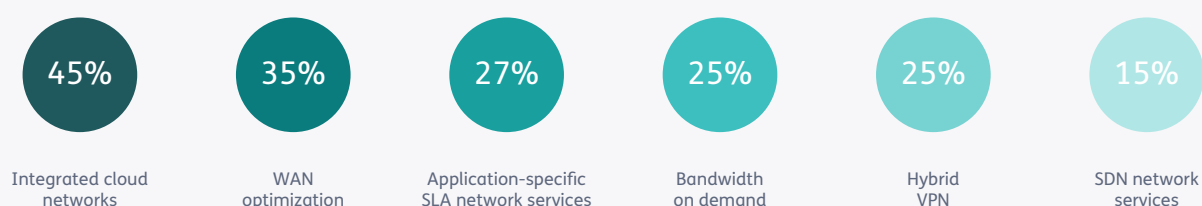
**Increased** coverage of transformational network services (SD-WAN)

**Enhanced** focus on network and cloud services management

**Improved** insight into service provider evolving commercial models

Will any of the following network services be more important to your organization?

(Top 6 below; respondents picked top 2)



High levels of public cloud adoption will lead to increased adoption of converged network/cloud services, such as those enabled by Amazon Direct Connect or Azure Cloud Connector.



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# About Ovum



Ovum is a market-leading research and consulting firm focused on helping digital service providers and their technology partners thrive in the connected digital economy.

Through our 150 analysts and consultants worldwide, we offer expert analysis and strategic insight across the telecoms, media and technology industries. Founded in 1985, Ovum has one of the most experienced analyst teams in the industry and is a respected source of guidance for business leaders, CIOs, vendors, service providers, and regulators looking for comprehensive, accurate, and insightful market data, research, and consulting.

With 23 locations across six continents, Ovum offers a truly global perspective and works with organizations on every continent. We can also help you create business advantage by supporting your business planning, product development and go-to-market initiatives.

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