



ENTERPRISE VERTICALS

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Enterprise Verticals



Kieran Hines Head of Industries

Enterprises in every industry are facing challenges which are unique to the market, product, and regulatory and competitive situation of their vertical. However, while the journey that each needs to make will be influenced by the specific industry dynamics, the outcome – successfully navigating the route from analogue to digital business – and the core technologies that will underpin this remain the same. Our research agenda addresses the key challenges facing enterprises in each of our verticals, matching business needs to technology-led outcomes.

Telecoms Operations and IT

The Market Challenge

CSPs know that they need to transition to a Digital Service Provider model. However, they are often daunted by the scale of the IT systems, operations, and business changes they need to implement.

Transformation needs to span customer and business enablement, service development, automation, and cloud-based delivery models; and it must be underpinned by intelligent operations involving AI and advanced analytics tools. Next-generation networks and the imminent arrival of 5G add urgency to the situation.

To address all of this, CSPs need to understand which technologies and operations changes will work, and vendors need to understand both the capabilities to deliver and the opportunities to target. How Ovum helps you

Help CSPs understand their business and digital transformation needs, and prioritize the appropriate technology investments.

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

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

Help CSPs leverage the right vendors to assist with their network analytics and automation needs.

Understand the main growth opportunities across the complex telecom 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.



"Creating a personalized customer experience is a top business priority for CSPs, with over 90% considering it important."

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- **A coordinated** set of forecasts covering Telecom IT (incl. OSS/BSS) revenues, vendor services revenues in the telecom sector, and Telecom IT spend.



- **Research** on the role of AI, analytics, automation, and blockchain in improving CSP operational efficiency, security, and network monetization.
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- **Strategies** for managing and monetizing the growing CSP customer and partnership ecosystem using improved customer engagement and customer journey management tools, and partner management systems.
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Ovum Decision Matrices – evaluating leading telecom IT solutions, including customer engagement platforms.

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

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OSS/BSS contract analytics interactive tool with global coverage as well as annual analysis of OSS/BSS contract trends.

Themes for 2019

Successful CSP strategies for digital transformation

Digital transformation has become a necessity for CSPs, but many are still uncertain of which enabling technologies and operational changes to prioritize. Through a series of industry case studies and thought leadership pieces, we will explore how CSPs can transition to Digital Service Providers. This will include digital transformation research from across Ovum identifying technology and operational priorities spanning customer and business enablement, service delivery, intelligent operations, automation, and cloud-based delivery models.

Intelligent operations as a source of innovation

Intelligence is playing an increasingly important role in automating and transforming CSP operations. We will explore the impact of AI, analytics, and blockchain on customer experience, operational efficiency, and security in the telecom sector, as well as their role in supporting new business models and technologies linked to IoT, 5G, and digital services. We will profile technologies, strategies, and use cases focused on the telecom sector.

Radically improving customer and partner management

CSPs need to improve customer engagement and invest in customer management solutions that deliver a personalized customer experience. CSPs will also need to better manage a rapidly expanding partner ecosystem with partner management systems. We will also explore how CSPs can leverage data from OSS, BSS and other sources such as IoT to better manage and personalize the customer journey and improve engagement with B2C and B2B customers. Ovum will provide thought leadership on strategies, technologies, and the vendor landscape.

Preparing telecom IT for the arrival of 5G and next-generation networks

Next-generation networks and the imminent arrival of 5G add urgency to the need to transform telecom IT and operations. These will have to be capable of supporting dynamic scaling, network slicing, and helping to monetize new business models. Topics will include cloud-based delivery models, service management and orchestration, automation, open APIs, and collaborative working, as well as how to coordinate charging, policy, and analytics to better manage and monetize the network. We will explore CSP strategies and the changing role of vendors and services companies in supporting this new environment.

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What's new

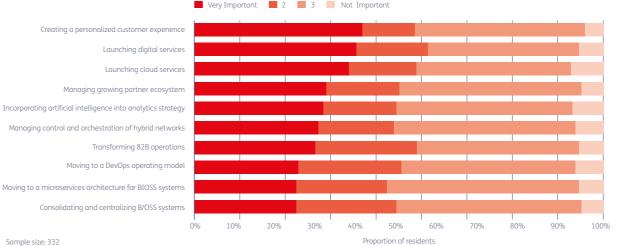
Digital transformation insights – including research from across Ovum focused on the technology and operations changes CSPs need to make to support their transition to Digital Service Providers.

Preparing telecom IT and operations for the arrival of 5G and next-generation networks.

Using AI to streamline and automate BSS systems and revenue management processes.

Telecom IT forecast – increased breadth and granularity, including expanding the OSS/BSS coverage to encompass telecom analytics.

Creating a personalized customer experience and launching digital services are considered to be a top business challenge facing CSPs



Business Challenges

Sample size: 332 Question. How important are the following business challenges', Vertical: Telecom

Media

The Market Challenge

Building cost-effective, personalized, life-time engagement is fast becoming the core business challenge for media enterprises. A second wave of personalization – personalization 2.0 – will require premium content providers to deliver a highly tailored experience at multiple touch points across the customer journey.

Top business priorities include improving operational productivity and streamlined delivery, partly driven by the surge in audience acquisition costs. Unified user experience on multiple devices anywhere and everywhere is also key in today's highly competitive multi-screen video services segment. Last but not least, real-time monitoring, tracking, and protection of digital assets is essential, because the rising cost of premium digital asset acquisition means that media companies need to safeguard content across the content supply chain.

How Ovum helps you

Delivering key insights on media technology adoption trends in order to aid our clients with their investment and development plans.

Helping media companies to leverage the right vendors for their workflow unification, automation, and orchestration needs.

Identifying appropriate user experience and user interface technologies to deliver personalization.

Evaluating partner ecosystems in the personalization 2.0 era.

Assisting media enterprises with business and technology roadmaps across the media content supply chain.

Identifying new market opportunities in niche media segments such as travel & tourism, business TV, and theme parks.

Identifying strategies to address piracy revenue leakage.





Kedar Mohite Principal Consultant

"The global TV and video anti-piracy services segment is already worth \$1.1bn, but with strong yearon-year growth it is expected to more than double in size by 2021."

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Innovation case studies across premium media asset segments, including coverage of broadcast TV & video, sports franchises, and digital service providers (cable TV, satellite TV, and telecommunication media services business.)

On the Radar deliverables around TV & video piracy detection and prevention technologies, along with ad fraud.

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Media transformation ICT Services forecast encompassing TV & video broadcasters, sports franchises, and digital service providers, as well as new theme parks and video gaming segments.

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Strategic assessment, and SWOT analysis of vendors in the workflow unification and orchestration segments.

Opinion and short research notes on personalized recommendation, content search, syndication, and data discovery vendors in the media & entertainment vertical.

Themes for 2019

Unification of the media content supply chain

Ovum research suggests that one of the top three business challenges facing media enterprises is the creation of a single media content supply chain. The unification of linear and non-linear TV & video workflows is necessary to reduce the inefficiencies stemming from multiple, unstructured approaches. New technologies are required to enable synergy between multiple customer engagement channels.

Change will also be driven by the arrival of 5G which, in order to deliver on its promise of new business models, will require streamlined digital user lifecycle management and well-trusted partner management.

Delivering personalization and a converged user experience

Creating a highly tailored experience at multiple touch points across the customer journey is a complex and capitalintensive process, but it is one capable of delivering clear long-term benefits for premium content owners. Media companies will need to leverage new technologies to support real-time user experience customization for digital users. Delivering a unified user experience across multiple devices will also be essential.

Managed Security as a Service across the value chain

Building a horizontally integrated, secured content supply chain will help not only in lowering revenue leakage but also in improving returns on premium media assets. Ovum estimates that in 2018, digital TV & video piracy losses amounted to over \$37bn. Continuous real-time tracking, detection, and prevention of security breaches will be crucial if media enterprises are to strengthen their market penetration in the highly competitive multi-screen video services market. Managed security as a service will play a strong role.



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What's new

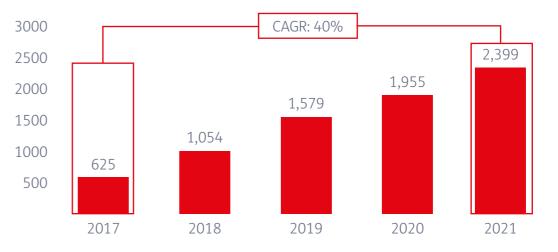
Analysis of personalized recommendation technologies in time-bound areas such as sports and live events.

SWOT analysis of new technology stacks based around the unification and orchestration of linear and non-linear TV & video workflows.

Forecast of global TV & video anti-piracy services – including segments such as video games, film, and sports franchises.

Forecast of global premium media content protection technologies – including technology stacks such as DRM, watermarking, fingerprinting, and paywalls.

Global TV & video anti-piracy services spend (2017-2021) \$mn



Government

The Market Challenge

While the government sector has traditionally been considered a conservative one, world governments will come under increasing pressure in 2019 to transform and modernize. As the pressure for digital transformation continues to gather pace, traditional thinking about IT as an internal provider of services to the business will no longer be sufficient. Successful CIOs will need to consider a much broader policy and people context. Governance and internal cultural change will become increasingly challenging as the IT function scrambles to meet growing citizen expectations. Cloud, analytics, and cyber security will play an important role as governments strive to be seen as more responsive and trustworthy. Cognitive computing will continue to grow in importance in driving both efficiency and effectiveness in government.

How Ovum helps you

Understand how automation, analytics, and cloud strategies will drive ICT investment priorities for 2019.

Maximize 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.



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Kevin Noonan Lead Analyst

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

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- **ICT Enterprise Insights** a global survey of government agency pain points and IT buying intentions for 2019-20.

ICT Spending Forecasts – global five year projections for government IT spending, segmented by country, source, and line of business.

Ovum Decision Matrix – analysis of the leading vendor solutions in key areas.

Themes for 2019

Managing the real opportunities for cognitive computing and process automation

As the government sector continues to look for productivity improvements, many are looking more closely at potential opportunities for cognitive computing. Next-generation technologies offer significant potential to governments, but the hype has sometimes exceeded the reality. Ovum will take a close look at government case studies, and practical lessons learned.

Executive leadership in the digital government era

Many governments have already moved beyond high level digital strategies and statements of intent. The big challenge for 2019 will be to deliver practical outcomes and provide clear leadership at a time when expectations are already high. Much has already been written about the theory of digital leadership, but more work needs to be done looking at lessons learned and practical leadership strategies.

Moving from agile methodologies to agile organizations

Agile initiatives are already growing in popularity as a key component of government modernization plans. However, many government agencies are encountering difficulties when contemporary technologies are applied to traditional organization structures; particularly where these organizations are reluctant to change. Ovum will investigate which technologies and business processes are delivering successful outcomes.

Education

The Market Challenge

The higher education sector has reached a point of profound change. This change is being driven as much by increased competition, changing demographics, new patterns of employment, and the changing needs of employers as it is by the innovative use of technology to deliver education services. These forces for change present new opportunities for institutions that can construct better, more engaging, and more compelling learning experiences for its students. The ability of technology to marry administrative, classroom and, increasingly, consumer technology, is critical to improving the flow of information which is required to inform and support the delivery of superior learning experiences.

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 2019.

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.



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Richard Palmer Principal Analyst

"Global spending on education IT will reach \$34bn by 2021."



ICT Enterprise Insights – a global survey of educational institution pain points and IT buying intentions for 2019-20.

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Ovum Decision Matrix – analysis of the leading vendor solutions in key areas, including student success solutions and online learning platforms.

Themes for 2019

Connecting the campus through data analytics

While analytics for teaching and learning or analytics used for institutional research purposes have undeniable benefits in their respective realms, creating a cohesive analytics ecosystem can drive insights across the campus and build better outcomes for all constituents. Accruing data from sources across the campus – connecting devices, systems, and data sources – can improve operational efficiency for the institution. In addition, it can enhance the overall constituent experience by personalizing the student journey and improving staff workflows.

Personalizing the education experience

Whether on-campus or online, the modern student demands a modern and personalized learning experience. Learning tools and applications need to match the sophistication of their consumer experiences, from video platforms used to deliver accessible and engaging content to augmented reality and virtual reality (AR/VR) applications that can provide a more hands-on, immediate experience. A university's learning management system (LMS) should not be used merely as a content repository, but rather it should be utilized as a next-generation digital learning environment (NGDLE) that provides greater opportunities for collaboration and personalization.

The Education Ecosystem

A new generation of Student Management and education ERP systems has emerged in recent years. Enhanced analytics capability, process automation tools, and AI capabilities feature broadly across these offerings. We will follow early adopters as they gain value from these new capabilities; chart the progress of university technology and information architecture; and we will also examine how these contribute to a re-conceptualized education ecosystem for a flipped and blended world.

Aligning the IT organization to education and research

Digital maturity, cloud services, and supporting a constant flow of business change are themes for higher education as much as any other industry. Delivering education and undertaking research, however, have unique characteristics that are not shared by manufacturing, telecommunications, financial or retail services. We will chart the progress of digital maturity in education and will offer insight into how IT organizations can better align leadership styles, skill sets, structure, culture, processes, and governance with the emerging needs of a mid-21st century university.

Retail banking

The Market Challenge

While interest rates are slowly moving closer to historic norms, achieving top-line revenue growth will remain challenging, and encouraging efficiency improvements will persist as the key driver for stimulating financial returns. 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. The imperatives of regulatory compliance and efficiency remain, but driving through digital transformation and delivering innovation has shifted from important to critical, with artificial intelligence and automation the next big technology waves for the sector to enable this change.

How Ovum helps you

Understand how regulatory imperatives and digital transformation strategies will drive ICT investment priorities for 2019.

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Maximize your market impact by using Ovum's independent research to understand exactly what is driving retail bank IT investment agendas at both 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.



Daniel Mayo Director, Ovum IT Data Tools & Insights



RESEARCH AGENDA 2019

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- **ICT Enterprise Insights** a global survey of retail bank pain points and IT buying intentions for 2018-19.
- **ICT Spending Forecasts** global five 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.

Themes for 2019

Delivering the digital customer experience

Attention to the digital experience has shifted to a realization that actual customer experience in the digital economy extends to all channels and customer-facing processes that support these. Delivering a seamless experience which supports the wider customer journey is critical, but requires platforms that can manage the user-experience, taking advantage of the potential of open API initiatives, new technologies in biometrics, augmented reality, natural language processing, and AI-based services to enhance both human and direct customer engagement.

Driving intelligent digital transformation through AI

As banks realize that 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 role of automation technologies, particularly robotic process automation and artificial intelligence is crucial not only in driving efficiency, but also in allowing banks to interact more intelligently in the digital world.

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, with criminals increasingly innovative in their fraud attacks (for example using synthetic identities.) 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.



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What's new

Banking ICT Spending Predictor – understand institution specifics across digital banking, payments, and other business function areas. Extended to cover both retail and corporate banking in 2019!

Understand bank focus – priorities for deploying AI across the institution

Payments

The Market Challenge

The payments industry is in the midst of huge change. The need to deliver on the growing expectations of retail, SME, and corporate customers is putting a renewed emphasis on new product development and wider service enhancements, with the challenges posed by new entrants and challengers in the ecosystem providing further highlighting the need for change and innovation. While many of the challenges facing today's market incumbents are not new, the market landscape has set the scene for considerable disruption. In particular, the combination of new real-time payments infrastructure and open banking initiatives will be at the heart of many technology investment decisions in 2019. The ability to support the industry in delivering innovation and new revenue sources through partnerships with third parties will be critical for service providers.

How Ovum helps you

Maximize your market impact by using Ovum's independent research to understand exactly what is driving payments and IT investment agendas at both 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.



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Kieran Hines Head of Industries

> "Total IT spending on payments-related software and services will reach \$56 billion in 2021."

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- **ICT Enterprise Insights** a global survey of payment provider pain points and IT buying intentions for 2019-20.

ICT Spending Forecasts – global five year projections for payments and IT spending, segmented by country, source, and line of business.

Ovum Decision Matrix – analysis of the leading vendor solutions in key areas, including card management platforms, white label digital wallets, and payment switch.

Themes for 2019

Open Banking and the future financial services value chain

The concept of Open Banking has rapidly grown in prominence as a rising number of national regulators and individual institutions look to take advantage of the opportunities this presents to accelerate the pace of competition while revolutionizing the way banks and third parties consume and deliver banking services. While the impact of these changes will remain reasonably limited in the short-term, Open Banking will accelerate the pace of competition and new entries in the medium-term, leading to entirely new service offerings for corporate, retail, and SME customers. Understanding where and how to prioritize investments in this area has never been more important.

Delivering the next generation of payment services through core systems enhancement

The need to respond to the increasingly complex market and competitive landscape will continue to drive investment in modern, flexible systems and architecture to deliver both greater efficiency and support growth. In addition to delivering headline initiatives around areas such as open banking and real-time payments, security, product development, and continued enhancements to the digital experience are all important focus areas. As a consequence, investments in areas such as automation, machine learning, NLP, and distributed ledger will remain high, with cloud coming into greater prominence for both infrastructure and software consumption.

Maximising the potential of real-time payments

As the roll-out and adoption of new real-time payments infrastructure continues apace, unlocking the potential to deliver new and enhanced customer propositions is a key topic. For banks, layering new services on top of real-time payments infrastructure is the biggest opportunity in a generation to respond to the growing importance of third party players in the retail payments space; particularly in P2P and ecommerce. On the corporate side, cross-border real-time payments, supply chain, customer disbursements, refunds, and the billing experience are major opportunities to grow revenues and improve the customer proposition. In some cases, this will require discrete investments, while others must be viewed as part of the Open Banking opportunity.

Insurance

The Market Challenge

The insurance sector has experienced major change over the last decade through regulation, radically changed customer expectations, and technology. This pace of change, particularly around technology, is set to accelerate further in the next five years. In Ovum's view, the global insurance industry is entering a distinct new phase characterized by very different insurance products, new ways of interacting with customers, and challenged by a host of new entrants. The challenges for today's insurance industry are to understand the potential threats and opportunities posed by technology, how it can be effectively exploited, and who are the most appropriate partners.

How Ovum helps you

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

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

Stay ahead of the competition by understanding how to effectively position technology offerings to the business needs of insurers.



Charles Juniper Principal Analyst

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"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."



ICT Enterprise Insights – a global survey of insurer pain points and IT buying intentions for 2018-19.

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ICT Spending Forecasts – global five 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.

Themes for 2019

IoT 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 propositions 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.

Delivering value engagement

As competition increases, 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 answering this question will be the role played by technologies such as RPA, machine learning, natural language processing, and augmented reality, to deliver a highly personalized and contextually relevant insurance proposition. Small and medium-sized 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 the cloud, SaaS, blockchain and advanced 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.

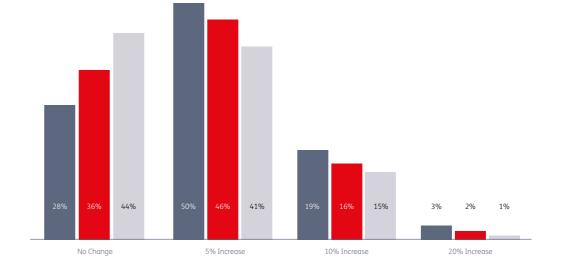
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What's new

A 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 – a 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?



Get in Touch

Want to learn more? <u>Click here</u> to request a callback.