

SAMSUNG
presents

Knox

The Open Economy

The Experts

Acknowledgements

This report, commissioned by Samsung and based on research compiled by The Future Laboratory, seeks to define the Open Economy and the key trends which are impacting workplace culture.

Samsung would like to thank all our guest experts and additional contributors who have provided insight during the curation of the report.

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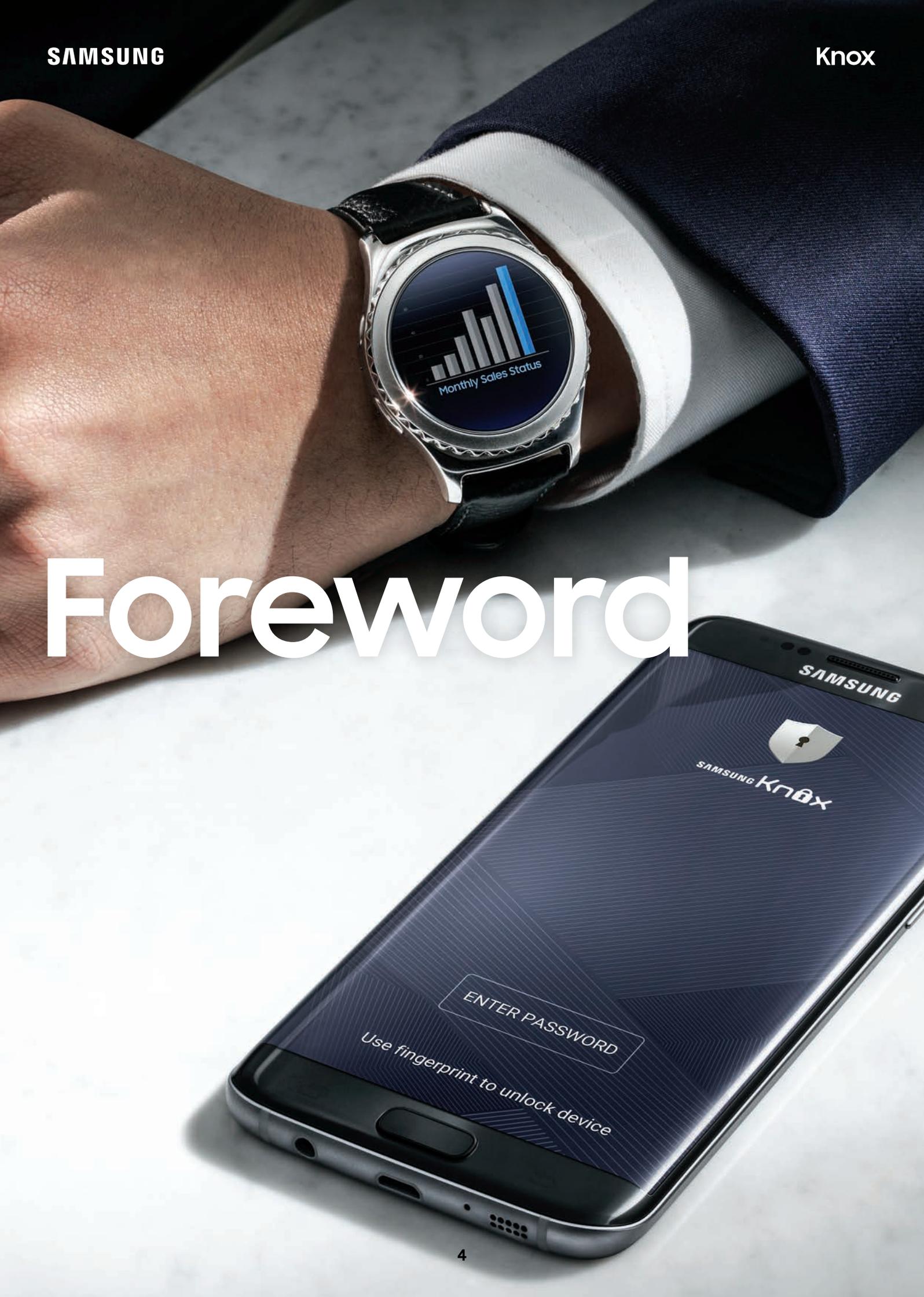
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Foreword

**Roger Enright**

Director of Mobile B2B
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We are on the brink of a profound revolution in our working lives. In the decade since the advent of the smartphone, business has changed beyond all recognition: today's workforces are more agile and more collaborative than they have ever been, thanks to the power of mobile technology.

But we still have a long way to go to fully realise the power of these new technologies. Concerns over security, in particular, have made companies reluctant to really open their borders to stakeholders, preferring instead to opt for closed platforms, limiting their opportunities to exploit the full collaborative power of new technology and enforcing restrictions. Walls that are designed to keep data safe are, in fact, holding businesses back. But a new generation of security platforms such as Samsung Knox, a key component of the company's device strategy, is starting to enable the transition to a more open and collaborative future – what Samsung calls the Open Economy.

This report, commissioned by Samsung and compiled by global trend forecasting consultancy The Future Laboratory, examines the likely impact of the trends underlying the Open Economy, and looks at their impact on the entire business community. Based on interviews with experts on everything from artificial intelligence to human resources, it addresses the key ideas that organisations will need to embrace to stay competitive in a new world much less restricted by technical or human boundaries, a world in which people, data and ideas can be integrated into current business models more freely and more securely. In particular, it looks at the specific ways in which newly advanced security platforms will be the keys that unlock the Open Economy for every business.

Aimed at business leaders, technology professionals and human resources practitioners, it summarises the driving forces behind the emerging trends and models. It also recommends some actions they can take to ensure that they embrace them smoothly, particularly with regards to security, still perceived by many as a barrier to productive business today, but an enabler for it tomorrow.

Introduction

A digital revolution has radically reshaped global business over the past two decades. The advent of the web and the ubiquity of the smartphone have changed forever where, when and how we work. Every aspect of business, from supply chain management and office infrastructure to human resource planning and customer relations, has seen old certainties overturned by the disruptive power of technology.

At the same time, the distinction between work and leisure is blurring rapidly. A new cohort of talent, often described as 'millennials' and fast becoming the default key decision makers within organisations, has come to expect consumer-driven technologies and ideas in their working lives too: everything from virtual and augmented reality to an emerging generation of personal artificial intelligences.

This is not just an issue for business. Governments and local authorities, too, are facing radical shifts in everything from commuter transport patterns to city planning as the concept of the workplace expands beyond the traditional office. But this will not happen on its own. There are stumbling blocks in the way, not least the lack of reliable, coherent and consistent security platforms that will protect every stakeholder in the Open Economy and enable true freedom of openness and integration.

The meaning of work

For businesses and governments to thrive in this new world, they will need to completely rethink the meaning of work in the 21st century: who does it, where they do it and how they share information openly but safely. That in turn will force them to fundamentally rethink the way that they build their business models and the technologies they depend on.

In this new world, innovation will emerge from new sources. Already, so-called reverse innovation tactics are appearing across large organisations everywhere as they invite independent startups into the heart of their business. In the near future, though, these will no longer be optional adjuncts to their daily operations. As the Open Economy develops, they will become critical strategic elements of every successful organisation – not just a few brilliant entrepreneurs, but a powerful driving force for innovation that embeds itself into every corner of the business.

Many challenges await organisations as they make their transition to the Open Economy. They will have to embrace not just new technologies but fundamentally new ideas about how their businesses work. Samsung is ideally placed to help them do it. Its rich consumer heritage and deep understanding of how people really use their mobile devices give it unrivalled perspective on exactly how organisations can maximise competitive advantage from new mobile technologies. In addition, Samsung's ecosystem of mobile devices and its Knox security platform give customers a perfect starting point for building the new, open and inclusive working practices that will allow them to prosper in the future.

01

Unlocking the Open Economy

Key findings

- European countries are at the forefront of the move to Open Economy models, occupying eight of the top ten slots in WIPO's Global Innovation Index.
- Current workplace security systems are not yet ready for truly open working practices. Cyber-crime cost the global economy £335 billion in 2016, and the number is rising.
- Tomorrow's organisations will not tolerate contractors, companies or partners who rely on outdated security models and sub-standard device security.

Advances in technology are already signalling the arrival of a more open and collaborative business future. But companies and governments will still need help in balancing the desire for openness with the ongoing need for security.

The pace of Open Economy trends is gathering fast. By 2020, according to Samsung forecasts, most of the building blocks for these new models will be in place. European companies, in particular, are adopting the infrastructure and human capital that will power the next stage of this digital workplace revolution at impressive speed. Today, eight out of ten of the world's most innovative countries are in Europe, according to the World Intellectual Property Organisation's 2016 Global Innovation Index.¹

This, according to experts such as Louis-Pierre Guillaume, Knowledge Management Officer at Schneider Electric, puts Europe ahead of any other global region, in pole position to harness the open and ultra-flexible workforces and businesses that will come to the fore over the next decade. "At a government level, countries that embrace the foundation stones of an Open Economy in this way will see high rates of return across society and business," says Guillaume.

It is not just countries that need to worry about embracing these new foundation stones. Relying on yesterday's business thinking and structures will be deeply counter-productive, argues Marcos Eguillor, founder of innovation and digital transformation consultancy BinaryKnowledge. "Relying on past certainties will not foster the creativity that businesses will need to compete in tomorrow's global market place," he says. "Companies will need to adopt the technologies that allow them to be fast and flexible enough to spot and understand their next competitive advantage, and recognise when it's time to disengage from the previous one."



Solving the puzzle

How ready are organisations to make these transitions? The reality is that in many cases, they are still well behind the curve in terms of the speed at which they adopt the key new technologies that will ease their passage into more open ways of doing business. “The pace of change of technology is far exceeding the speed at which many organisations are changing their behaviours and working practices at the moment. Businesses need to wake up to that now,” says Jonathan Tate, UK and EMEA Technology Consulting Leader at PwC.

Security, in particular, is a serious concern to companies already overwhelmed by threats to their business from outside attackers. Their desire for more open approaches often conflicts with the critical need to maintain high levels of security at all times and across all devices. Driven by a rapidly evolving threat landscape and enforced by new European regulatory mechanisms, such as the General Data Protection Regulation (GDPR), organisations are faced with many new challenges as they strive to protect their data and maintain privacy across their entire estate. New platforms for addressing security are thus key pieces of the Open Economy jigsaw that must be slotted into place before widespread adoption of new models is possible.



A growing threat

Evidence suggests that most current workplace security systems are not yet ready for these challenges. Cyber-crime cost the global economy £335 billion in 2016, according to the World Economic Forum’s Global Risks Report.² Juniper Research predicts the overall cost of corporate data breaches will rise to \$2.1 trillion by 2019.³ The dangers posed to business by such casual attitudes to cyber-security are in full view today; almost 70% of millennials openly admit to breaching IT policies and using apps not sanctioned by their employer, according to a survey conducted by TrackVia.⁴



70%
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“Stopping breaches of online security will become crucial as companies in the future face a shifting workforce, with many different people wanting to work in many different ways with many different devices,” says Dave Palmer, Head of Technology at cyber-security innovator, Darktrace. “They will want to use their own mobile technology to interact with your business data, and engaging with them safely and seamlessly will be vital.”

Such interactions are still seen by most organisations as being inherently risky, according to Nick Dawson, Global Director Knox Strategy at Samsung. “Finding ways to safely empower new waves of future freelance workers and collaborators to use their own advanced mobile devices and wearables at work is probably the greatest of all the major challenges facing companies trying to prepare for this open future. That’s the rationale behind the power and flexibility we’ve built into Knox.”

¹ World Intellectual Property Organisation. Global Innovation Index 2016.

² World Economic Forum. Global Risks Report 2016.

³ Juniper Research. Cybercrime and the Internet of Threats.

⁴ Trackvia. Millennials AT WORK research. June 2014.



02

The age of predictive business

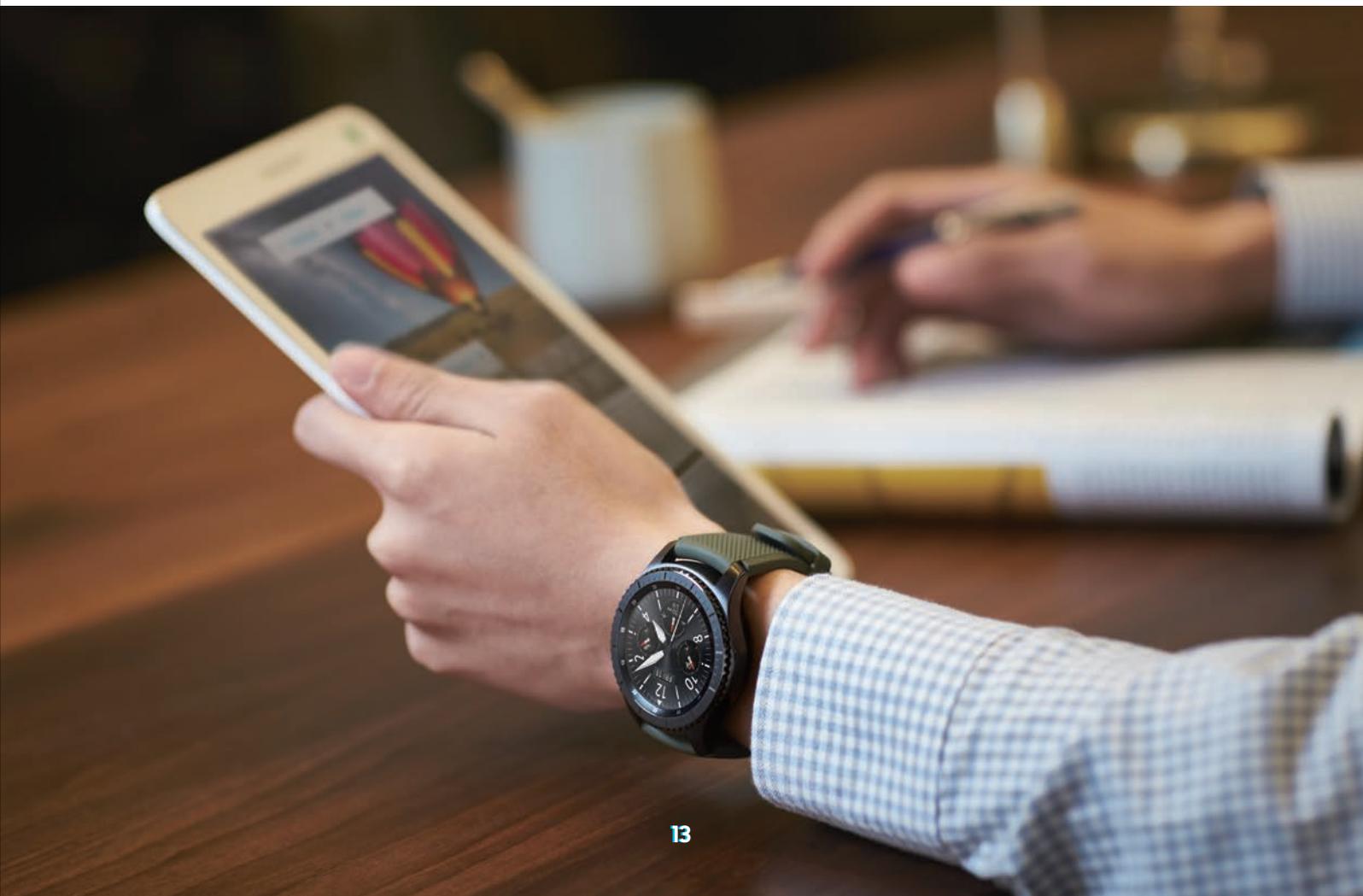
Key findings

- Machine intelligence will have a profound impact on every aspect of future business, in every industry sector.
- Companies are already preparing for these advances, spending \$9.2 billion on the underlying technologies by 2019.
- Machine learning and AI technologies present enormous opportunity, but also levels of risk that have not yet been fully quantified. Companies need to be prepared to protect themselves.

Tomorrow's organisations will use AI and machine learning technology to accurately predict – and make better decisions about – their futures. But they will need better tools to help them make those decisions safely and confidently.

It is not just today's devices that present risk to organisations. Already, new machine intelligences are being widely deployed in the commercial world that are orders of magnitude more sophisticated than today's data analytics technologies, self-organising, self-adapting and capable of far more accurate predictions about the future state of the businesses they serve. Using vast streams of real-time data from multiple sources, business AIs will be able to accurately identify future opportunities and challenges long before they arise. In turn, this will enable businesses to forge profound changes in the way they plan ahead.

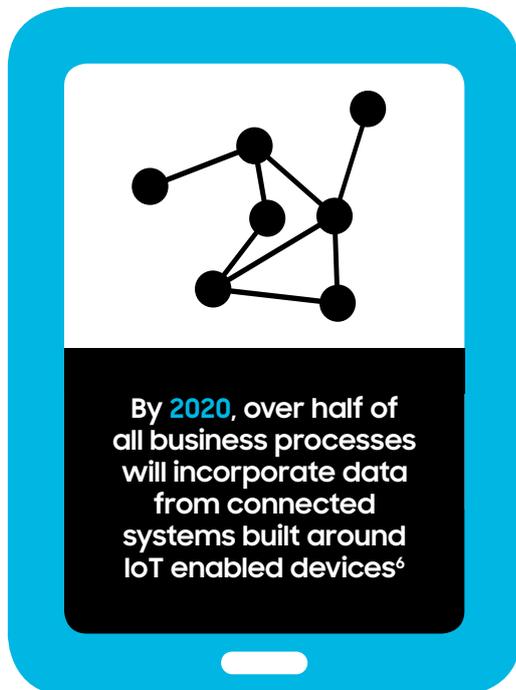
Advanced machine intelligences will give the companies that adopt them unprecedented power to plan ahead and optimise their business models. Retailers can respond immediately and automatically to spikes in demand driven by social media, for example, adjusting manufacturing orders and processes in real time. Already financial services organisations such as Ant Financial, part of the Alibaba e-commerce group, are using AI to make instant decisions about lending based on likely future spending patterns, mining hundreds of millions of data records to assign instant credit scores.



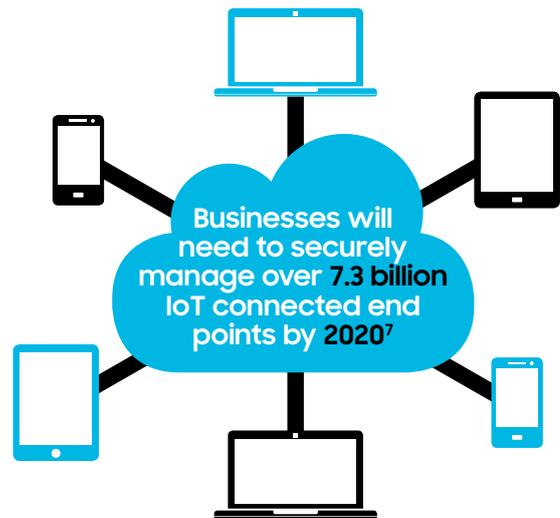
Investing for the future

Investment patterns show that businesses everywhere are already preparing themselves for these sorts of innovations and opportunities. Technology analyst IDC forecasts that the global market in content analytics, discovery and cognitive systems software will more than double from \$4.5 billion in 2014 to \$9.2 billion in 2019.⁵ By 2020, more than half of all business processes and systems will incorporate data from connected systems built around Internet of Things (IoT)-enabled devices, according to technology analyst Gartner.⁶

The technology infrastructure that will drive the new Open Economy is already being deployed widely around the world. So significant is this phenomenon that some of the world's largest technology providers are investing heavily in the predictive business market. One major alliance, between Google, Facebook, Amazon, IBM and Microsoft, has been formed to develop AI and machine learning systems that can operate across any platform or operating system, while Samsung itself is investing substantially in AI technologies that will automate many daily tasks for handset users.



Such rapid development by technology brands will see the equally rapid evolution of businesses fit for the Open Economy, says Brian Solis, founder of digital disruption consultancy, the Altimeter Group. "We are looking at a future in which companies will indulge in digital Darwinism, using IoT, AI and machine learning to rapidly evolve in a way we've never seen before."



Many unknowns remain as companies start to realise their visions of more productive futures. Machine learning and AI technologies present enormous opportunity, but also levels of risk that have not yet been fully quantified. That makes simultaneous investments in secure platforms that open borders to new technologies even more critical. By making those investments now, organisations will be able to safely integrate any new entity into the business environment - not just machines, but a new generation of people too.

⁵ IDC. Worldwide Content Analytics, Discovery and Cognitive Systems Software Forecast, 2015-2019

⁶ Gartner, Predicts 2016: Algorithms Take Digital Business to the Next Level

⁷ Gartner Inc, Internet of Things (IoT) Study 2015



03

The rise of the digital workforce

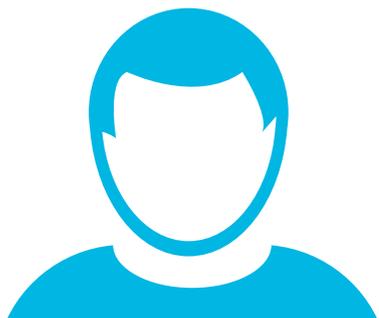
Key findings

- BYOD strategies are just the beginning of a much deeper and more inclusive trend towards worker autonomy and freelance workforces.
- The connected recruitment market will be worth \$63 billion by 2020, of which \$10bn will come from freelance workers.
- Advanced AI technologies will automate systemic and repetitive processes across multiple industries, freeing workers to fully realise their talent.

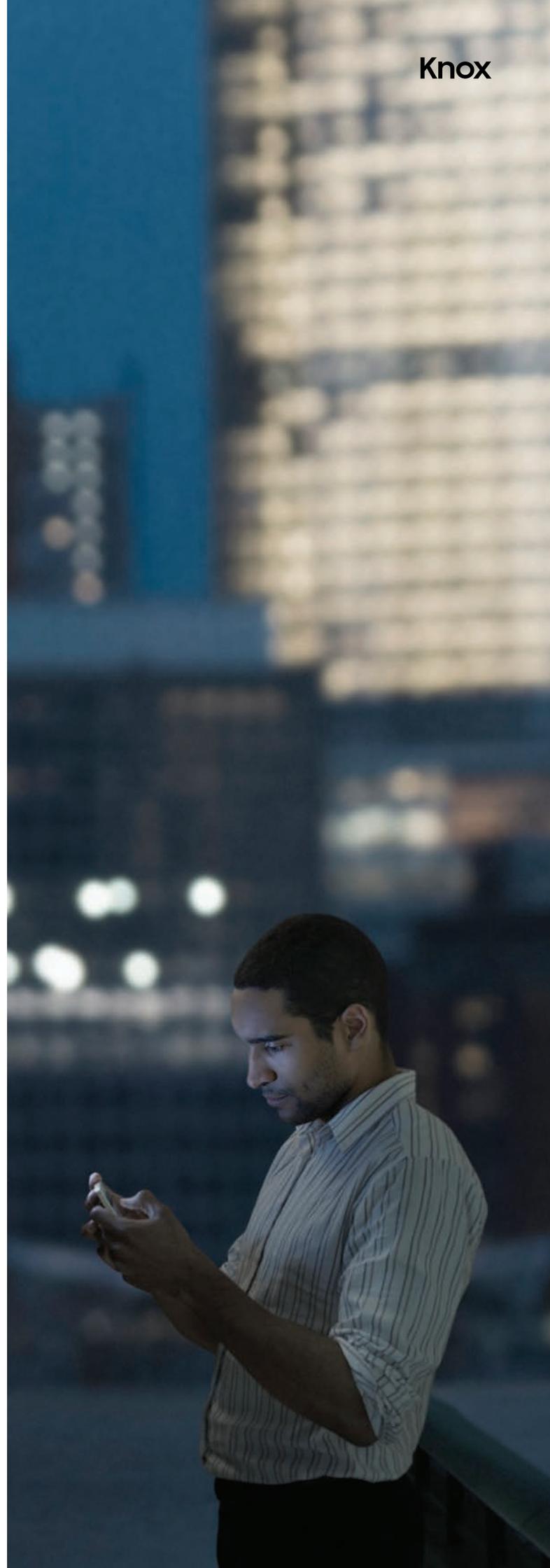
A new breed of ultra-flexible freelancers will prosper in the Open Economy. Their advent will present great opportunities for the organisations that embrace them, but significant challenges too.

It is not just the machines that will change beyond all recognition. Workforces, too, are undergoing radical transformations that will have an equally profound impact on the nature of every business.

Some of these transitions are already well under way. Bring-your-own-device (BYOD) strategies that allow workers to use the tools of their choice in the office are a growing trend in many parts of the world. As the Open Economy unfolds, though, the choice of device will be just be one of the demands workers will make. Increasingly, they will insist on a kind of autonomy that will transform the way in which organisations must approach their workforce and human resources (HR) strategies. Instead of being paid employees, they will increasingly become self-employed freelancers who connect deeply within multiple organisations simultaneously, working with multiple corporate data sets but fiercely protective of the privacy of their own data. This so-called gig economy is already a force within many creative industries today, but it is rapidly evolving to encompass every other kind of business too.



40% of workers
will be self-employed by
2020
making the value of
the HR freelance
market worth
\$10 billion⁹



Autonomy rules

The gig economy is still in its infancy. Today the so-called connected work market, comprising both digital recruitment and remote working technology components, accounts for a small fraction of the total recruitment market. But by 2020 it will be worth nearly \$63 billion globally, according to a 2016 study by PwC, with \$10bn of that accounted for by freelancers.⁸ Some estimates are even more optimistic. 40% of workers will be self-employed by 2020, according to a recent Intuit report,⁹ and many organisations are already rebuilding themselves in readiness.

These findings are strongly backed up by existing opinions among young workers. A report by McKinsey, a consulting firm, found that there is a strong desire for an autonomous working future amongst today's millennial workforce. According to their research, 60% of independent workers in Europe are highly satisfied with the flexibility that being a freelancer offers, and just 14% would prefer a traditional nine-to-five job. At the same time, more than three-quarters (78%) of employees think being able to determine their own schedule is a positive thing, 71% think positively of being paid in real time for their work and 64% think that doing away with hierarchy would be beneficial.¹⁰

Independent European workers:
14% prefer 9-5 jobs
60% highly satisfied with freelance flexibility¹⁰



Few of these workers will visit an office every day, according to BinaryKnowledge's Marcos Eguillor. "In the future, companies will shrink their numbers of salaried staff in a major way, becoming a core executive team who design high level strategy and integrate different elements of that strategy on a day-to-day basis," he says. That core team will deploy the skills of teams of what he terms radical freelancers, people who trade their talents with many different companies at the same time.

Great expectations

"In ten years, we will see a generation entering the workplace which has very different expectations of what an organisation is, what an office is, and how they transact their work," says Anthony Bruce, Partner in PwC's UK Human Resource Consulting practice.

Dr. Marie Puybaraud, Head of Research at property company JLL, agrees. "Just as there will be a major shift in what a company is, there will be huge changes in company culture to accommodate the expectations of future workforces," she says. "Ultimately, this is going to have a profound effect on the way we work, and how we plan the spaces that we work in."

One other major shift is in the balance between work done by machines and people. Despite a widely-held belief that the advent of robots and automation will have a destructive effect on human jobs, many experts think that such fears will prove to be largely unfounded over the next decade. Automation will undoubtedly create great change in many industries, but it will also release human workers from mundane and repetitive tasks, liberating them to focus on tasks requiring judgment and creativity. "Most workers spend far too much time mindlessly processing data or drowning in paperwork," says Roger Enright. "Businesses need to find a way to automate a lot of this work and free up their real talent."

This is already happening in many industries such as banking, where firms are replacing many time-intensive roles such as data collection and compliance management with highly automated and increasingly AI-driven technologies. Many legal firms, too, are deploying so-called "robot lawyers" to automate tasks such as analysing and understanding contracts. Legal management consultancy Jomati Consultants believes that robots will eventually replace lawyers in some firms, as they take on all of the systemic work now done by people.¹¹ The big question is what they do with the human talent that becomes free as a result.

⁸ PwC My Life, Connected report, 2016.

⁹ Intuit 2020 Report: Twenty trends that will shape the next decade.

¹⁰ McKinsey. Independent work: Choice, necessity, and the gig economy.

¹¹ Jomati Consultants. Civilisation 2030: The Near Future for Law Firms.



04

The New HR Powerhouse

Key findings

- Understanding the whole technology trend landscape will be a core strategic skill for HR professionals and the businesses they represent in the Open Economy.
- Human judgment and intuition capabilities will form the basis for whole new job categories, as machines take over traditional human tasks.
- Employer brands will depend heavily on the technology they deploy, not just the benefits they offer.

Tomorrow's HR professionals face huge challenges as they seek ways to integrate a wholly new kind of workforce. The ones that get it right will be critical to business strategies of the future.

All of these developments present huge challenges for HR departments in the future. They will have to understand not just the capabilities and potential of new machine-based workers, but also factor in the newly independent nature of their human workers too. Understanding the interplay between the human and digital worlds will no longer be an optional extra but a core skill that redefines entire organisations, giving HR professionals the opportunity to help define entire corporate strategies and stage-manage internal performance and agility. As they acquire these skills, HR departments will rapidly emerge among the most interesting and fast-paced places to work within organisations in every sector.

One of their jobs will be to fundamentally rethink the evaluation of new workers. Breadth of experience across many different sectors is one example of a factor that will become a bonus, rather than the question mark it often raises today. Increasingly, it will mark a potential employee out as someone with a usefully diverse skillset, rather than a person who can't settle into a rigid career path. "Instead of questioning why you left your last job after six months, a business will note that over the past five years you have had five different, very interesting experiences and environments, and so bring a multitude of problem-solving skills to the workplace," says Patty McCord, HR Consultant and former People Manager at Netflix.

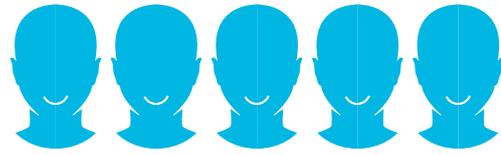
PwC's Anthony Bruce agrees, and says that softer skills will have a particularly important role to play as technology automates more business processes. "Human judgement and capabilities will be more important than ever in the future", he says. "Using data to address critical business challenges and opportunities will not be an IT issue, it will be leadership issue."



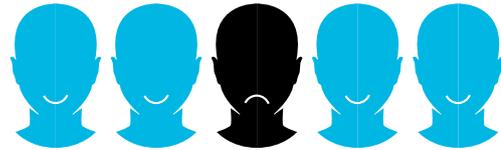
Judgment day

Automation may destroy careers in sectors such as administration, driving and low-skill manufacturing, where a machine can practically and affordably replicate the work involved. But whole new job categories will be created around skills such as intuitive and strategic judgment, creativity and imagination. “As machine intelligence improves, the value of human prediction skills will decrease because machine prediction will provide a cheaper and better substitute for human prediction, just as machines did for arithmetic,” Ajay Agrawal, Professor of Entrepreneurship at the Rotman School of Management, University of Toronto, tells the Harvard Business Review. “However, this does not spell doom for human jobs, as many experts suggest. That’s because the value of human judgment skills will increase. We’ll want more human judgment.”¹²

Traditional management structures and strategies will need to be jettisoned, too, for a generation of workers who will refuse to work within a hierarchical organisation. “By doing away with all the structure, bureaucracy and rules, we’ll allow these people to unleash their real potential and initiative for the benefit of our businesses,” says McCord. “So we’ll see less and less obsession with structure and process from HR teams, and more and more education around business economics and how freelancers can contribute effectively to them.”



Almost **9/10** employees feel having the right mobile technology has been positive for business performance¹³



The underlying technology infrastructure, too, will make a big difference to the way that organisations are perceived. It’s already clear that ensuring a business provides ultra-fast connectivity for future AI-powered mobile devices will be a key recruitment tool in the years ahead: nearly nine out of ten (89%) employees feel that adoption of the right mobile technology has had a positive impact on their company’s overall performance, according to market analyst CCS Insight.¹³

“Brands will need to transit from being the owners of the work dungeons to the providers of business technologies that allow a much bigger and more powerful gig workforce to do their best work,” says Eguillor, of BinaryKnowledge. “Being at the forefront of the transition to this recruitment approach will spell the difference between success and failure for a company in the Open Economy of the decades ahead.” Their next big challenge will be to help rethink the places where people actually do their work.

¹² Harvard Business Review. The Simple Economics of Machine Intelligence.

¹³ CCS Insight. Predictions for 2017 and Beyond



05

The rebirth of the office

Key findings

- The entire concept of the office is shifting rapidly, as freelance workers move away from static corporate environments.
- Mobile technology will be at the heart of new workplace developments, enabling workers to use any flat surface as a screen and embrace new virtual presence technologies.
- New security platforms are the keys that will unlock the office of the future, allowing any new devices or applications to work together without fear of compromising data or corporate assets.

Nine-to-five office locations will soon be a relic of the past. Today's static office environments are giving way to distributed workplaces housing a highly dispersed workforce – one that operates from anywhere, at any time, on any device. What those devices look like will matter much less than how they are secured.

As the back-end systems that drive modern enterprises evolve to incorporate this kind of advanced technology, so too will the front-end environments where work gets done by humans. Perhaps the biggest impact of the Open Economy on people's working lives over the next decade will be a complete change in how we think about what an office is. Today's static workplaces, so long the nexus of our working lives, will fade in importance besides flexible working – not just the valuable perk it is still seen as today, but the prevailing model across the business landscape.

The ways in which those people communicate with each other will change dramatically, integrating everything from conventional mobile devices to new, immersive technologies that recreate physical environments. Workers will be able to transform a wide variety of surfaces – from a table in their kitchen or a wall in their local coffee shop – into interactive screens, activated by gesture, voice, touch, or command from a mobile device. "The workers and businesses of the future will be able to transform any environment into a workspace, using mobile technology to enable them to become consumers of space on demand," says Marie Puybaraud, head of research at property company JLL.

The key to accessing this next generation of interactive user interfaces will be a worker's mobile device. "Your personal device, whatever form it takes, be it smartphone, watch or key fob, will be your ultra-portable central processing unit," says Nick Dawson, Global Director Knox Strategy at Samsung. "We are developing scenarios where your smartphone enables you to work from any screen that's in front of you, whether it be a monitor, a TV, or a VR headset. Those scenarios even include items less associated with the word device, such as kitchen and home appliances."



Virtually there

Powerful new tools are already available that help realise these visions. Several banks, for example, are testing Samsung technology that allows customers to connect with remote mortgage advisors using virtual reality headsets, enabling much more effective conversations than via static web pages.

Increasingly, the power of these tools will be significantly augmented with artificial intelligence. One example of such technology is Viv, an AI-based digital assistant, which was acquired by Samsung in 2016. It offers a single conversational interface to any device, ensuring that workers have a consistent experience regardless of the tools they choose. Elsewhere, US start-up Magic Leap is developing wearables that can project a virtual reality environment directly on to a user's retina, while UK-based Ultrahaptics is developing a system to enable hand gestures to control interfaces while simultaneously giving the user the feel of having pressed a button.

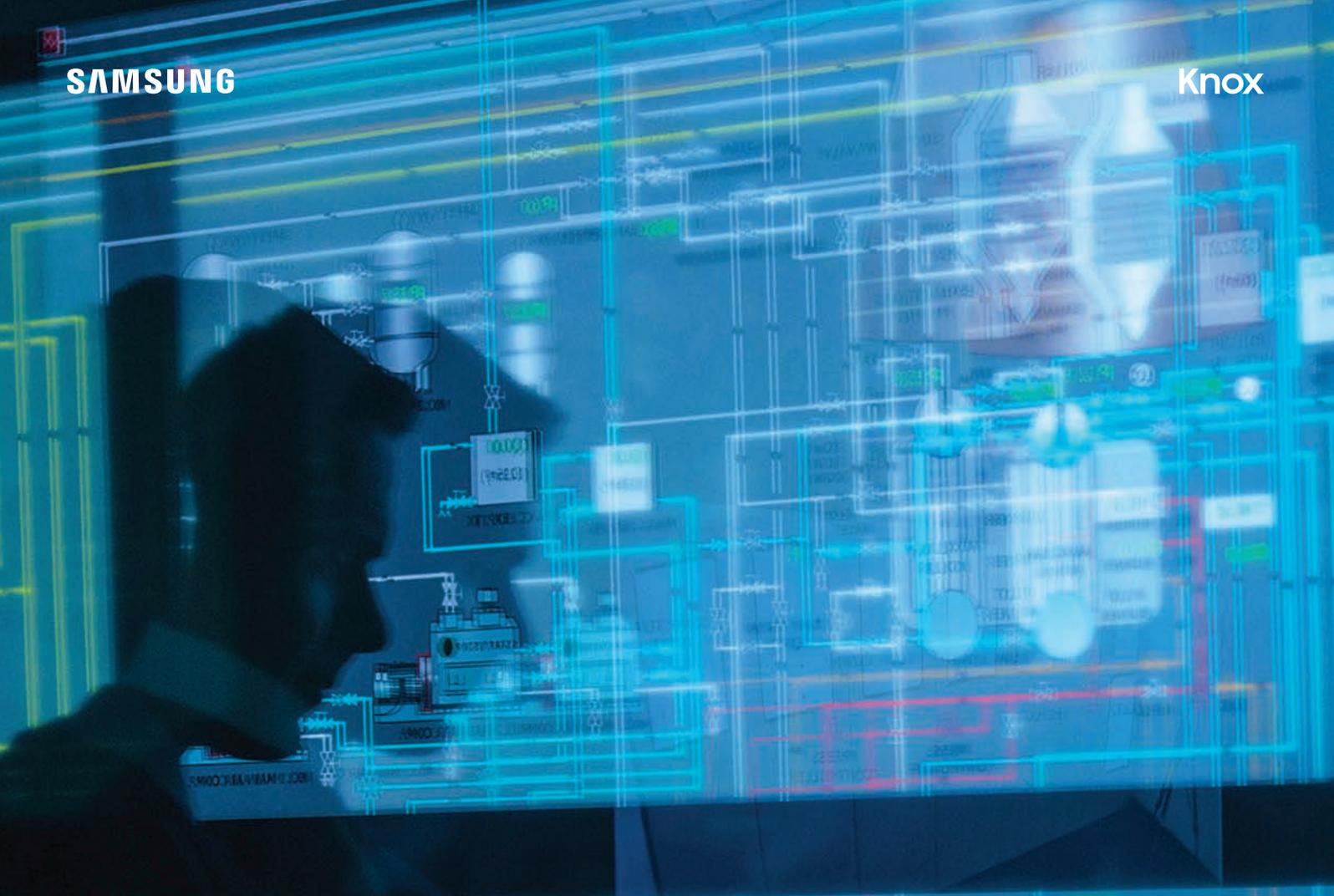
All of these developments will require a new approach to security. As smart offices become the norm and literally everything in them is connected to the network, the need to secure every endpoint becomes critical, whether it's a TV or a toaster. Darktrace's Palmer believes that AI will be a huge asset to organisations trying to adapt to new devices and behaviours on corporate networks. "In a few years, the machines will get better and better at spotting the unusual and the unexpected, and at allowing you to investigate that. Biometrics and behaviour analysis will allow corporate security systems to interact with feedback in real time, notice if a worker is trying to engage in way that's out of the ordinary, and take measures to avoid data breaches."

Realising the vision

One consequence of these developments is that mobile bandwidth usage will escalate dramatically as video applications become truly pervasive across mobile devices. Today's mobile service providers are already building the seamless and ubiquitous smart grids that will provide the high-bandwidth, high-availability levels of wireless connectivity necessary to make such applications possible. By 2020, at least one major European mobile operator will invest 10% of its capital into smart city infrastructure, taking pole position in the race to become a market leader in the next stage of the connected society, according to CCS Insight.¹³



Reshaping conventional offices to embrace the technology of the Open Economy will be a challenge for many organisations, but it is one that they must take seriously today. Exactly which of the tools they choose will vary widely, but there will be some common factors, not least the urgent need for a platform that supports literally any device or application securely. Only then will they be able to properly open their borders to new workers and partners - and in particular, to a new source of innovation embedded directly into the organisation itself.



06

The embedded innovators

Key findings

- More than half of the world's 500 biggest public companies are already working with startups in their pursuit of innovation.
- Platforms that engage securely with any device or platform will allow large companies to embed expertise and innovation from smaller startups deep into their organisations.
- Collaboration, not competition, will define much of the success of organisations in the Open Economy.

Today, many organisations are already opening their doors to small startups in the pursuit of innovation. In the near future, the security platforms central to the Open Economy will allow that innovation to become deeply embedded in every layer of their business.

The pursuit of innovation has been a hallmark of corporate culture for decades. But the ways in which businesses think about where they find it, and how they maximise its value, are about to change beyond recognition. Integrating hungry young startups as independent entities into existing business structures is already becoming a standard mechanism for organisations to identify innovative new ideas and technologies. More than half of the world's 500 biggest public companies already work with startups, according to a 2016 report by EU-funded organisation OpenAxel, and European businesses are particularly active in their approach to finding innovation via the startup community; out of the five countries with the highest number of big companies engaged with startups, four are in Europe. Already, 97% of European corporations surveyed have carefully analysed the need for open innovation, even if not all have yet acted on their findings.¹⁴

Just as offices and technology are morphing radically, then, so too are innovation mechanisms. In particular, the adoption of secure platforms will not merely strengthen barriers to cyber-criminals. Increasingly, they will foster a sense of confidence in organisations to open up their borders to new sources of innovation and support. But as security is enforced more holistically, those startups will become much more deeply embedded in organisational culture.

“Having cyber-security systems that engage securely with any device or platform will allow large companies to cross boundaries, calling on expertise from smaller startups to work within their business and add momentum to their drive to innovate,” says Marcos Eguillor at BinaryKnowledge.

Integrating such entities looks easy in theory. Nevertheless, Samsung's Roger Enright thinks that it will require more than just another office space full of laptops and whiteboards. “Technology has always been a major barrier to merging organisations efficiently,” he says. “It's always one of the biggest problems in mergers and acquisitions; in many cases, it's actually the factor that causes them to fail. Organisations need to rethink the way that they deploy technology, and make sure that they have the right platform for incoming teams to mesh with seamlessly.”



Competitive instincts

At the same time, the need to tackle research and development challenges that are too expensive for one company alone to handle will see businesses reviewing traditional ideas around competition. In their place, they will favour mutually beneficial collaborations with former sector rivals – collaborations that will inevitably need to take place across secure open platforms.

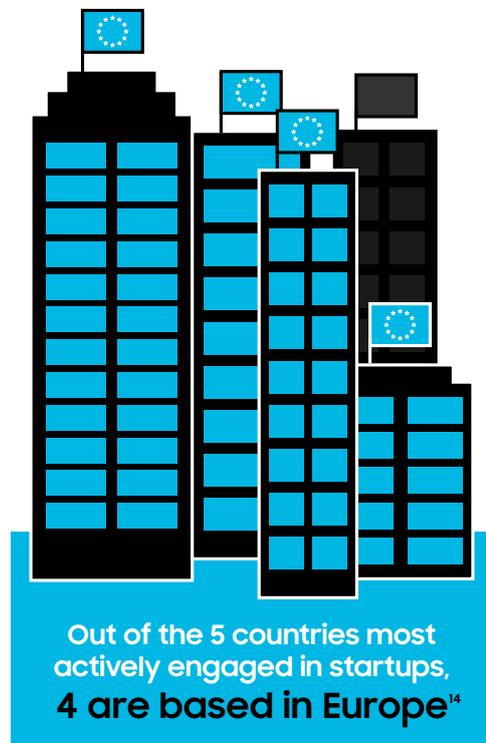
Anthony Bruce, of PwC, believes that future businesses will drop their in-built suspicions of outsiders and competitors to remain innovative and competitive on the global stage. “At a corporate level, it will be absolutely critical to be open-minded about where the next opportunity and the next big idea is going to come from, even if it’s coming from a competitor.”

This will require a radical rethink of the way in which a business functions, and how it thinks about the future. As the Altimeter Group’s Brian Solis says: “In order to compete for future business, the entire infrastructure of business has to be reimagined. We’re still using business models that were designed for the 20th century, at best, and the 21st century requires a new paradigm that incorporates new mobile technologies and new ways of working and innovating.”



More than half of the world’s 500 biggest public companies already work with startups¹⁴

Solis thinks that organisations will have to completely rethink their approach to risk in order to reinvent themselves. “Most organisations have a cognitive bias that favours existing work streams and processes. This is why creating new teams and bringing in new expertise will help create new value,” he says. “But it is impossible to be innovative within the confines of a risk-averse organisation. Future business leaders will have to create a culture and infrastructure that incentivises people to take risks and make mistakes,” he says.



For the organisations willing to rethink their approach to risk, then, the Open Economy offers powerful new models to embrace entrepreneurship and innovation – not just as a satellite to their existing business, but as a driving force deep within it. However, to deploy them, they will need to think hard about how they embrace today’s outsiders with open arms. Like every other aspect of the Open Economy, that will force them to completely re-evaluate the way that they secure their businesses.

¹⁴ OpenAxel. Opening Acceleration Across Europe.



Conclusion

The advent of the Open Economy raises many questions about how organisations should approach every aspect of their business. In the 20th century, most business change and innovation happened slowly and incrementally. Today, it happens swiftly and unforgivingly. By 2020, according to Samsung forecasts, the Open Economy will have arrived in force. By then, it will already be too late for unprepared organisations to keep pace with it. Existing conventions and processes are so deeply entrenched, and so carefully protected, that changing them often looks utterly impossible from the inside. The real challenge for businesses is to find new ways to address these apparent impossibilities today.

As this report has shown, many European companies have already started to make radical changes to their business in preparation for fundamental shifts in their markets and opportunities. They are adopting intelligent new technologies that drive the core of their business, integrating new kinds of workers and devices, finding new ways to manage rapidly shifting human resources and embedding sources of innovation deeply within their borders. But many others are struggling to find ways to take new paths to the Open Economy, and they need help to make their first steps.

Samsung is at the forefront of helping organisations make these changes. Its rich consumer heritage and deep understanding of how people really use their mobile devices give it unrivalled perspective on exactly how organisations can maximise their advantage from new mobile technologies. Its consulting practices are at work today within the world's largest organisations, helping them identify and embrace new opportunities in the new, more open business environment. In particular, it is building customisable security platforms that span the entire ecosystem of products and allow companies to open their borders to new opportunities more confidently.

Samsung Knox is just such a platform. Today, it is the most powerful defence against mobile security threats in the workplace, thanks to an adaptive, modular design that embeds encryption and security keys in a secure, chipset-based hardware container. That allows the creation of secure, completely isolated work and personal identities on the same mobile device, ensuring that corporate data is always inaccessible to personal apps and processes - and, critically, that personal privacy is always respected and maintained. As such, it is a critical building block as organisations start to create the foundations for a new kind of business - a doorway to a more open, inclusive and productive business culture.

Identifying and adopting these building blocks is just one step on the road to the Open Economy. Many new ideas must also be absorbed, and many new business processes put into place. But the organisations that start to think about them today will be the ones that prosper tomorrow. Samsung is ideally placed to help them do so.

The experts

Nick Dawson leads Samsung's Global Mobile Enterprise team. His particular focus is defining secure mobile solutions that incorporate Knox and Samsung's broad product and service range for Enterprise and Business customers.

Nick joined Samsung in the spring of 2014 after having spent nine years in various sales leadership positions within BlackBerry's enterprise sales group leading North American public sector and corporate sales teams. Prior to that, since 1995, Nick has held progressively senior sales and business development roles in the technology industry with a focus on large-scale software integration projects.

Roger Enright leads Samsung's Europe Mobile Enterprise team focused on planning and partnerships for this region. His particular focus is defining secure mobile solutions that incorporate both Knox and Samsung's broad product and service range for enterprise and business customers.

Roger joined Samsung in 2014, after spending four years with BlackBerry in several Global and EMEA senior positions. Prior to that, Roger spent 10 years with Vodafone at Global and UK level, predominantly focused on Enterprise, devices and service launches. Roger started his telecomms career with Ericsson, where he held a number of technical and business development roles across a four-year period. Roger holds a PhD in Telecommunications.

Marcos Eguillor is the Founder and Managing Partner of Madrid-based BinaryKnowledge_ (www.binaryknowledge.com), an innovation and digital transformation consultancy. An active proponent of digital transformation since the dot.com era, and an authority on the subject, Eguillor's expertise has been recognised by the European Commission for whom he provides independent consultancy under the Horizon 2020 programme. Eguillor, who holds a professorship at the entrepreneurship-focused IE Business School, has been an advisor, mentor and interim manager for more than thirty startups since 2006. At BinaryKnowledge, where his clients include tier-one international organizations, as well as mid and small size businesses, he is head of corporate, business development and talent management.

Dave Palmer is Head of Technology at Darktrace, a cyber-threat defence company that uses machine learning to detect and respond to previously unidentified threats. Palmer was formerly Head of Internet Capabilities for the UK Civil Service, where he gained over ten years' experience at the forefront of government intelligence operations, working across agencies including GCHQ & MI5. He has long experience of delivering mission-critical infrastructure services, including the replacement and security of entire global networks, the development of operational internet capabilities and the management of critical disaster recovery incidents.

Dr. Marie Puybaraud is Global Head of Research at JLL Corporate Solutions and a recognized thought leader on workplace innovation, technology, futures and trends. At JLL, she is responsible for driving the real estate services company's thought leadership agenda and works closely with global clients to provide research tailored to their geographies and sectors on-demand. Born in France, Dr. Puybaraud holds a PhD in operational engineering from Heriot Watt University, UK; a post-graduate certificate (PGCert) in teaching in higher education from Oxford Brookes University, UK; and a degree in building economics and quantity surveying from LETP Cantau, France.

Patty McCord, founder of Patty McCord Consulting and former chief talent officer at Netflix, is a global authority on HR futures. She is recognised for 14 transformative years at Netflix HQ where she challenged accepted thinking around people management and core business objectives. Her statement of intent, "Netflix Culture: Freedom & Responsibility" has been described by Sheryl Sandberg as "the most important document ever to come out of the Valley," and has over 13 million shares on Slideshare. As an independent consultant to CEOs she provides executive coaching on leadership and company culture.

Louis-Pierre Guillaume is Knowledge Management Officer at Schneider Electric, a French multinational corporation specialising in energy management and automation solutions across hardware, software, and services. As KMO, Louis-Pierre leads the strategy, governance and global implementation of knowledge management and social collaboration within the company. He is responsible for the evolution of both external Enterprise Community Management and internal collaborative programmes, including a small team of cross-departmental intrapreneurs.

Jonathan Tate, as PwC's UK and EMEA Technology Consulting Leader, leads a team of over 3,000 IT professionals. A seasoned consulting professional with over 20 years' worth of client experience across a range of sectors including, industrial, retail, consumer goods, energy and utilities, Tate specialises in delivering technology enabled transformation projects underpinned by a range of enterprise application systems and newer digital platforms.

Anthony Bruce is a Partner in PwC's UK Human Resource Consulting practice and leads PwC's market-leading workforce analytics business Saratoga, he also sits on the UK analytics leadership team. He has over 15 years' experience of global HR consulting experience in the areas of HR transformation, HR strategy, technology, outsourcing and shared services. Anthony has led some of PwC's largest and most complex global transformation programs in the financial services, pharmaceuticals, aerospace and defence and industrial products sectors.

Brian Solis is Principal Analyst at Altimeter, an open digital research firm owned by management consultancy Prophet. A global influencer in new media and best-selling author, Brian's thought leadership in new technology, digital marketing and cultural shifts has gained Solis a substantial following and far-reaching accolades. His blog, BrianSolis.com, is consistently ranked in the Top 10 of the Ad Age Power 150, and ranks among the top 1% of all blogs tracked by Technorati. At Altimeter, he leads research into disruptive technology.

Open your business securely

To find out how Samsung can help you get ready
for the Open Economy, please get in touch:

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