Next Mobile Economy

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Introduction

s the world settles into 2018, the impact that mobile technology has made on business over the past decade is irrefutable. In 10 years, we've gone from doubt about the utility of mobile tech in the workplace to a world where mobile devices and platforms are not only common they are continuing to proliferate.

With the emergence of game-changing technologies – from Cloud computing, data and AI to VR, AR the IoT and the promises of 5G – businesses have never had a more robust palette of tools with which to empower their workforces and engage and serve their customers.

"All signs point to a huge transformation," says DJ Koh, president of Samsung Electronics. "Because we are no longer just reacting to new mobile technologies as they appear. Today, all the great ideas are born mobile. Our task is to be ready to seize the moment. At Samsung, we call it the Next Mobile Economy. It is full of tremendous opportunity, but also risk and disruption."

As businesses come to terms with the risks and opportunities that an accelerated mobile evolution is bringing, business and technology leaders are facing inescapable

For business leaders the Next Mobile Economy brings two choices: disrupt or be disrupted

questions. Perhaps even more urgent than the question of how companies leverage the Next Mobile Economy is the question of what they stand to lose if they fail to do so. The answer? The opportunity to amplify the people power, productivity and profit of their business.

By the 2020s, the Next Mobile Economy will be characterised by a persistent consumer and workforce reliance on mobile devices and open systems, supported by greater advances in connectivity, bandwidth, Cloud services and big data analysis. The Next Mobile Economy will also herald new dimensions in mobile for business, from AR and VR to voiceled interfaces, and IoT connectivity that makes use of AI and data – all supported by 5G connectivity. It will redefine enterprise logistics, internal processes, and workforce collaboration as well as product and service offers and customer service.

Ultimately, those businesses willing to integrate smart, open and innovative mobile systems into their operations will be at the forefront of change and growth in the Next Mobile Economy.

But for CEOs and CIOs not yet taking the crucial steps to deeply integrate mobile into their businesses, the writing is on the wall: fail to keep up with the pace of change and the 2020s could mark your tipping point into obsolescence. Even today, established companies are falling out of the Standard & Poor (S&P) 500 at a rate of one every two weeks – meaning 75% will be replaced by 2027, according to a study by Innosight¹.

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he speed at which mobile is affecting businesses is unprecedented by any recent technological development. The Next Mobile Economy is already upending entire industries as enhanced devices, superfast connectivity and open systems are harnessed by forward-looking businesses with disruptive approaches to customer engagement and new business models.

Across sectors, from healthcare to government and financial services to retail, organisations that embrace mobile solutions will thrive. Trusted and flexible Cloud storage, customisable applications, VR, and intuitive IoT devices will become the building blocks for companies determined to lead in the Next Mobile Economy.

By 2025, digitalisation is forecast to contribute \$2.2 trillion (£1.6 trillion, €1.8 trillion) to annual GDP in the US market alone, reports McKinsey Global Institute (MGI)². Already, a clear correlation exists between successful mobile integration and business growth. A 2017 study by Sapio Research for Synchronoss Enterprise reveals an average 15% greater productivity and 29% more profitability for businesses using advanced mobile devices and apps in business processes than enterprises using mobile for basic functions such as email, calls and calendars³.

This is in line with workforce attitudes. A recent report by Adobe reveals that 85% of US office workers say technology makes them more productive, while 81% of millennials cite state-of-the-art technology as paramount to their ideal working environment⁴.

Mobile-driven business transformation will be the key to winning in all sectors in the Next Mobile Economy. However, currently the transformation maturity gap is significant: financial, media and manufacturing companies are leading, producing workforces that are 13 times more digitally engaged than the rest of the global economy, reports MGI⁵.

"Mobile is an enabler and a valuable information-collector for businesses," states Ross Rubin, principal analyst at Reticle Research. "And today, we see more business people doing the kinds of things on their smartphones that they once did on laptops."

Plus, the gap between personal tech and workplace tools is becoming more pronounced. Mobile, apps, AI, VR and voice-controlled devices now sit in many homes and hands, and are used for myriad daily tasks. Increasingly, employees are expecting the same seamlessness and ease of operation from the tools they are provided by their employers.



Boston Consulting Group reports a notable divergence between businesses that lead and those that lag in their attitudes to investing in and using mobile technology. According to its report, The Most Innovative Companies 2018, the world's leading business innovators are prioritising mobile products and capabilities much more (42%) than low-innovating companies (16%)⁶. They also demonstrate a focus on big data analytics and are quick to adopt and integrate new technologies, such as VR and open systems, relying on these platforms as catalysts for greater business innovation.

"I regularly speak to CEOs who want workplace technology to feel like that of the home, in particular because of the potential productivity it can produce," says Tim Ringo, vice-president EMEA at SAP SuccessFactors. "Ultimately, through the use of such technology, be it mobile or voice-controlled devices, the future workforce will be more industrious and they will start to feel more engaged," he adds.

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² Digital America: A tale of the haves and have-mores www.mckinsey.com/industries/high-tech/our-insights/digital-america-a-tale-of-the-haves-and-have-mores

 $^{{\}bf 3}\ {\bf The}\ {\bf State}\ {\bf of}\ {\bf Enterprise}\ {\bf Mobility}\ {\bf www.synchronoss.com/wp-content/uploads/The_State_of_Enterprise_Mobility_Whitepaper.pdf}$

 $^{{\}tt 4}\ {\tt Future\ of\ Work\ www.adobe.com/content/dam/acom/en/aboutadobe/pdfs/Future-of-Work-2016.pdf}$

⁵ Which Industries Are the Most Digital (and Why)? www.hbr.org/2016/04/a-chart-that-shows-which-industries-are-the-most-digital-and-why

⁶ The Most Innovative Companies 2018 www.forbes.com/sites/louiscolumbus/2018/01/20/apple-leads-bcgs-2018-list-of-the-most-innovative-companies/#570af2b55a94

'Closed can't do the Next Mobile Economy - it's time



n the Next Mobile Economy, C-suite business leaders and IT decision-makers will strategically harness the power and potential of open mobile devices, platforms and systems, like the Android mobile operating system, to shape working processes.

This will mean abandoning closed systems in business, which are increasingly seen as outmoded and characterised by 'walled gardens' that impede interoperability. Put simply, for a business to be agile in the Next Mobile Economy, it must march in step with the progressive shift towards open eco-systems and software. As Paul Trueman, senior vice-president of global enterprise risk and security at Mastercard, notes: "It's about businesses being wholly interoperable."

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Open systems increasingly form the foundation of flexible working approaches. As a recent study of US office professionals by Wakefield Research and Citrix reveals, 57% of respondents from companies with a flexible work environment use Cloudbased systems, compared to only 38% of companies with an inflexible or closed work environment.

In response, mobile devices and software must support this flexible and open approach to work. And device manufacturers are not excluded. Anticipating the trend toward open, Samsung has been working to make all Samsung products IoT ready by 20208, creating an IoT eco-system that can be controlled via the Samsung SmartThings app, providing digital connections between devices used for work or play, in the home or in the office.

For sectors that have long relied on outmoded or laborious workplace systems – government, healthcare and retail, for example – a move towards open solutions will demonstrate ambition to move with the changing global business landscape. "There is even direct correlation between mobile access and national prosperity, as seen in China since 2005," says Mastercard's Trueman. "Such economies have

become increasingly open and digital because consumers have found mobile easier to adopt. This leads to greater trust, which brings greater connectivity and data, which in turn affords businesses with greater opportunities."

The Next Mobile Economy means businesses respond and evolve in real time, driving faster product development cycles and shortening customer feedback loops. One example is Grab, Southeast Asia's equivalent to Uber, which has used Red Hat's open software solutions to grow more than 300 times its initial size, operating more than 3.5m app-booked rides every day, while increasing app uptime to 99.99%°.

Dharmarth Shah, site reliability engineer at Grab, says: "We wanted to empower every engineer with the autonomy to make positive changes as fast as possible, and to contribute to open-source communities."



Such open and adaptable systems will foster equally open attitudes to business growth and strategic partnerships in the 2020s, fuelled by the powerful impact of global 5G connectivity. By vastly improving and facilitating business communications and processes, 5G will enrich both employee and customer engagement and lead to new service models.

In an industry first, Samsung partnered with Cisco and Verizon to deploy the first multivendor end-to-end 5G network field trial. As interoperability and open standards become increasingly important to realising the potential of the Next Mobile Economy, Samsung is at the forefront, embodying the open attitude.

Through such partnerships, and the use of cutting-edge open systems and mobile tools, future-focused businesses will explore new and as yet-unimagined opportunities, new paths to growth and new ways to compete and thrive in the Next Mobile Economy.



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The Open Pillars of the Next Mobile Economy

The advent of the Next Mobile Economy will challenge businesses large and small to rethink what success looks like in a mobile-first world. Working against the four pillars of the Next Mobile Economy – Open Collaboration, Open Customisation, Open yet Controlled, and Open yet Secure – pioneering businesses of the 2020s will be those equipped with devices and open systems that enable them to disrupt, adapt, innovate, and grow.





n our future of hyperconnected working, Open Collaboration through mobile systems will inspire greater closeness between businesses and their partners. Start-ups will empower multinationals and erstwhile rivals will find common ground for shared co-creation, innovation and problem solving, fuelling new opportunities through cross-sector open partnerships, services and eco-systems.

The Next Mobile Economy will open dialogue between companies, allowing them to respond swiftly to their customers' feedback or requirements. As research by McKinsey & Company shows, the world's top-performing

B2B companies are those utilising systems to better understand their B2B partners' needs – and those with the best understanding are using mobile to capture key in-field insights and analytics¹⁰.

Moving from transactional, one-size-fits-all systems to collaborative, open platforms, businesses will forge strong and strategic partnerships in the Next Mobile Economy. As Irene Greif, head of the Collaborative User Experience Group at IBM, notes: "Collaboration is most meaningful when you are creating something together, to the extent that it is helping to build trust [between businesses]11."



Samsung is passionate about the philosophy of collaboration, exemplified in the development of DeX Pad. Building upon the first generation of DeX product, DeX Pad improves portability and mobility with new features like touch pad. Also through a partner ecosystem, Samsung DeX supports leading Office suite and VDI solutions.

In our future of hyperconnected working, Open Collaboration through mobile systems will inspire greater closeness between businesses and their partners

Open Customisation







the need for devices and software that evolve with the changing needs and ambitions of business. Put simply, to compete in the Next Mobile Economy, off-theshelf solutions won't do.

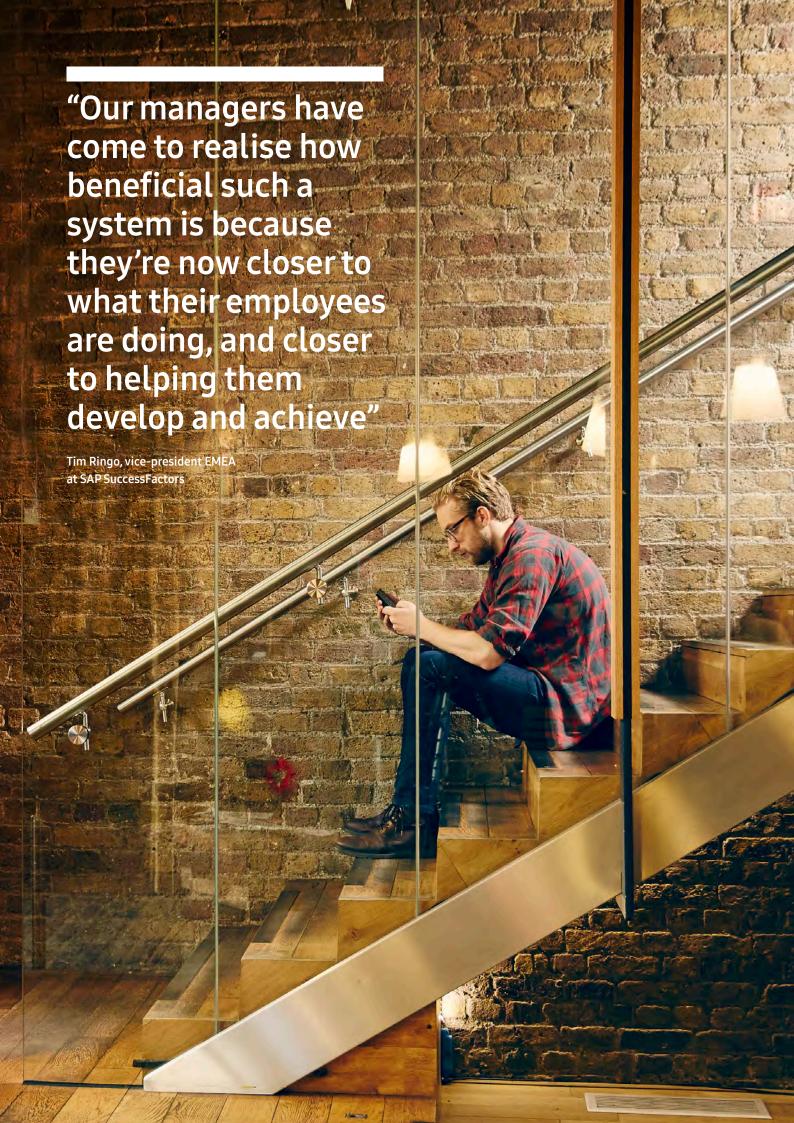
The answer is Open Customisation through systems that empower businesses to adapt and develop to meet the requirements of their company, their employees, and their customers. And in turn, swiftly supersede the competition.

Demonstrating how customisation will shape the Next Mobile Economy, Samsung's partnership with Alignment Healthcare (AHC) has produced an enhanced, bespoke system for sophisticated 12 remote health monitoring of high-risk patients. With patients equipped with Samsung Galaxy tablets, AHC and remote care platform Vivify Health can capture daily biometric data, monitor and communicate with patients via video calls, access patients' health status 24/7, and arrange instant medical intervention if required. It's a powerful blend of technology and human care.

Bolstering the creation of customised mobile solutions, Samsung's Knox Customisation software development kit provides enterprises with access to more than 1,000 APIs¹³, giving enterprises the freedom and flexibility to modify solutions to best suit their business functions and workforce requirements. As Reticle Research's Rubin notes: "Businesses feel more confident and comfortable when they can tailor solutions based on their workforce or business needs with a partner that can deliver the level of support, stand behind the product, and continues to invest in R&D."

Beyond the customisation of devices and apps for business, the future physical workplace will also undergo transformation through mobile and open systems, becoming sentient and responsive to workers' individual working styles through customisation of their workplace environment.

In the case of SAP SuccessFactors, device-based customised apps are enabling managers to take on HR responsibilities and enrich internal working. "Our managers have come to realise how beneficial such a system is because they're now closer to what their employees are doing, and closer to helping them develop and achieve," says SAP SuccessFactors' Tim Ringo.



999 Open yet Controlled

ith the Next Mobile Economy fuelling a hypermobile workforce, there will be an even greater need for Open yet Controlled systems that ensure enterprise mobile empowerment doesn't come at the expense of control over the business' fleet of devices.

In fact, by 2020, the average person will habitually have access to around seven connected devices, according to Cisco, challenging CIOs and IT decision-makers to integrate systems that maintain control of such devices, their OS updates and Cloud access, while being open and adaptive to inspire business growth¹⁴. "There is both a responsibility and opportunity for organisations to ensure that corporate assets such as mobile devices are secure and up to date," states Rubin.

Whether the workforce is using smartphones, wearables, VR or voice-controlled systems, enterprises advancing in the Next Mobile Economy will expect, if not demand, their technology partners provide seamless bulk integration and configuration of mobile devices and software.

Answering them, solutions such as Samsung's Knox Mobile Enrollment and Configure¹⁵ allow IT managers to efficiently and securely set up scores of mobile devices on behalf of the workforce. "Indeed, employees themselves shouldn't have to become IT technicians to be able to run their working lives," says Mastercard's Trueman. "Therefore, mobile management solutions that drive greater ease and convenience for IT managers, and more secure lives for employees, will be critical."

Therefore, to keep pace in the Next Mobile Economy, businesses must be ready to proficiently maintain and update device OSs and apps, working with partners that offer seamless maintenance integration with companies' Enterprise Mobile Management (EMM).

Samsung's Enterprise Firmware-Over-The-Air (E-FOTA) management system¹⁶, for example, enhances mobile device OS management and enterprise security through its flexible approach to individual and blanket device updates. Such updates can be tested, applied in bulk or to particular teams' devices, and timed to ensure they do not disrupt daily working processes.



6.58

connected devices per person by 2020 according to Cisco

¹⁵ Samsung Knox www.samsung.com/uk/business/mobile-solutions/knox-solutions

¹⁶ Samsung E-FOTA www.samsung.com/uk/business/mobile-solutions/samsung-e-fota/



n the Next Mobile Economy, increasing dependency on mobile devices, apps and Cloud systems will mean confidential information moves faster than ever, heightening the need for Open yet Secure platforms and software that protects both individuals and their employers.

Cisco forecasts that by 2021, the amount of data stored on devices will be 4.5 times higher than data stored in data centres, at 5.9 zettabytes¹⁷. Gartner, meanwhile, predicts that by the same year, 27% of corporate data traffic will bypass perimeter security entirely, flowing directly from mobile devices to the Cloud¹⁸.

For CIOs and IT decision-makers, then, the security of tomorrow's devices and business software is paramount. "Because mobile devices and apps tend to be closely identified with the location and actions of human beings, that can give rise to security concerns – and certainly a potential lack of privacy," Rubin warns.

Tellingly, the threat posed by cyber attacks continues to be a major concern for 62% of global CEOs, according to PwC^{19,} an issue exacerbated by the myriad mobile and IoT devices, and Cloud platforms that employees will connect to in the years ahead – often without thought to the risks. In fact, only 10% of businesses currently feel confident that their IoT and mobile devices are secured against hacking, reports an AT&T survey of 5,000 enterprises²⁰.

In order to thrive in the Next Mobile Economy, businesses must be fortified with devices that are secure from the chip-up through integrated platforms such as Samsung Knox, defence-grade security that's already trusted by many governments and corporations around the world²¹. Not only does Knox protect mobile devices and tablets with real-time monitoring, it is pioneering in its usability.

Similarly, new innovations in mobile security will ensure that device users are protected better than ever. For example, Samsung's Iris and Facial ID recognition provides convenient device access, bolstered by fingerprint, pattern, PIN or password security.

Indeed, Open yet Secure systems will be particularly important for those using the same devices for business and personal matters, with increasing numbers of organisations citing employees using their own devices, software, or Cloud applications to do business as an internal security challenge.

Providing a solution, Samsung's Knox Workspace software allows users to conveniently carry just one device to securely protect both facets of their lives²². Like operating two separate phones in one, the Knox container system keeps personal and workplace data separate, isolating work applications and files from personal content on mobile devices, protecting company files, while limiting IT admin access to employees' personal information.



¹⁷ Cisco Global Cloud Index: Forecast and Methodology, 2016–2021 www.cisco.com/c/en/us/solutions/collateral/service-provider/global-cloud-index-gci/white-paper-c11-738085.html

^{18 5} Steps to Closing SaaS Security Gaps www.gartner.com/smarterwithgartner/five-steps-to-closing-saas-security-gaps-2/

 $^{19 \,} For \, CEOs, \, cybersecurity is \, both \, rising \, concern \, and \, significant \, opportunity \, http://pwc.blogs.com/resilience/2017/03/for-ceos-cybersecurity-is-both-rising-concern-and-significant-opportunity. \, html$

 $^{{\}bf 20}\ {\bf IoT}\ evolution: Security\ trails\ deployment\ www.business. att.com/cybersecurity/archives/v2/iot/security/archives/security/archives/v2/iot/security/archive$

²¹ Samsung Knox www.samsungknox.com

²² Knox Workspace www.samsung.com/us/business/solutions/samsung-knox/mobile-security-solutions/knox-workspace/

Conclusion

The Next Mobile Economy is coming. And it's changing everything.

So now is the time for business leaders to see how partners like Samsung can help you understand the challenges and opportunities you face in an era of relentless technological disruption.

After all, succeeding in the Next Mobile Economy isn't just about integrating mobile devices into your business practices, it's about re-imagining your entire enterprise as mobile-first.

Not only to protect your business from disruption. But to also put your business in a position to do what can't be done.

Samsung 'opens up' the Next Mobile Economy for business.

Discover how your business can succeed in the Next Mobile Economy: Visit www.samsung.com/business to get in touch with one of our sales team.

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