The Next Normal: Reshaping the Future Generation of Mobile Workers



Table of Contents

03 T	he Next	Normal
------	---------	--------

- 04 Futurescaping the Next Distributed Workforce
- 06 Futurescaping the Next Field Services
- 08 Futurescaping the Next Supply Chain and Last-Mile Delivery
- 10 Futurescaping the Next Retail
- 12 Futurescaping the Next Healthcare
- 14 Futurescaping the Next Education

"Even working at record speed, Fauci predicts that wide availability of a vaccine against COVID-19 is 12-18 months away."

Rich McManus (March 20, 2020 NIH Record, Vol. LXXII, No. 6) - "FIRST CAMPUS VISIT: Trump Gets Update on Coronavirus Research". National Institutes of Health. Published online at https://nihrecord.nih.gov/2020/03/20/trump-gets-update-coronavirus-research

r, Anthony S. Fauci is the Director of the National Institute of Allergy and Infectious Diseases.

The Next Normal



As the world faces a new normal in the era of the coronavirus pandemic, working from home or remote working arrangements have become an unavoidable consideration for most businesses and organizations. However, this is only possible for certain industries and professional services, and unfortunately not feasible for essential services such as supply chain, delivery, and healthcare.

Furthermore, faced with economic oblivion of an indefinite shut down, countries have no choice but to gradually reopen their respective economy before the virus can be completely eradicated. This presents a huge challenge for businesses, as companies are expected to enforce social distancing, minimize traveling for their employees, as well as limiting physical contact in our common fight against the virus.

The next normal may well persist for years to come even after the world vaccinated. As people return to work, the possibilities of new outbreaks increase in tandem. Any efforts bringing our operations back to full swing can be stopped abruptly, by possibly new waves of outbreak during the intermediary, forcing countries and states back into new lockdowns and quarantine measures.

With this horizon, companies especially those dealing with essential services must relook and revise their Business Continuity Planning (BCP) to adapt to this unprecedented need for mobility and flexibility as business norms.

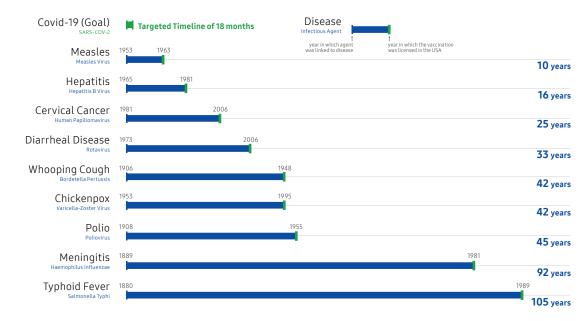
How Long Will This New Normal Last?

Dr. Anthony S. Fauci, the top infectious disease expert in the United States of America's coronavirus task force, estimated that a vaccine would take at least 12 to 18 months. However, according to a typical timeline to develop a vaccine, it may take up to 16 years.

If we look back in history, the fastest developed vaccine, for measles, still took 10 years to develop.

As such, a 12 to 18 months horizon for a vaccine would indeed be on the very optimistic side. As such, it would be essential for us to prepare and adapt to this new normal as the "next normal", be set for the long haul.

Vaccine Development Horizon



Samantha Vanderslott, Bernadeta Dadonaite, and Max Roser (Dec 2019) - "Vaccination' Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/vaccination' [Online Resource

Futurescaping the Next Distributed Workforce

As the world undergoes the biggest remote working experiment ever, it is not inconceivable that at least partial remote working will be accepted as one of business/working norms in a post-pandemic world, as everyone will eventually understand what remote working constitutes and how to manage it.

However, remote working is not a new trend. The percentage of the US workforce working off-site at least some of the time had been increasing steadily over the past years. With the pandemic, in the first half of April 2020, the majority of the workforce now works from home.

One of the surprising benefits of adopting remote working routines is increased productivity. According to research by Stanford University, working from home led to a 22% gains for the company, with improved work satisfaction and their attrition rate halved.¹

Furthermore, researches before the pandemic had also shown that companies that offer flexible work schedules were able to attract and retain talent in a time of increased competition in the labor market. And with the Gen Z due to fully enter the workforce by 2030, the demand for remote working is expected to significantly increase. Alleviating stress with commuting reduction, location-independent hiring, and potential savings from downsizing the office space will also drive demand and acceptance for remote work.

Thus, with the pandemic enforced lock downs and social distancing measures, developing the capability to allow employees to work anytime, anywhere will not only help to reinforce a company's ability to stay resilient in the face of possible new outbreaks and changing business travel restriction orders but also set the company up to be future-ready.

Share of US jobs that could be done from home, by industry

82.6% Educational services

80.3% Professional, scientific, and technical services

76.2% Finance and insurance

41.5% Federal, state and local government (excluding schools, hospitals, and US Postal Service)

37% Utilities

25.3% Healthcare and social assistance

22.5% Manufacturing

18.6% Transportation and warehousing

18.6% Construction

14.3% Retail trade

3.5% Accommodation and food services

Source: "Does Working from Home Work? Evidence from a Chinese Experiment"

icholas biooni, 3anies Elang, 30nii Roberts, 211chdh 3enny 1111g ne Quarterly Journal of Economics, Volume 130, Issue 1, February 2015, Pages 165–218, https://doi.org/10.1093/qje/qju032

Home Office with DeX

Employees can connect their phone to a monitor, keyboard, and mouse to access productivity apps in an intuitive desktop environment.



15% of employees regularly traveled or worked from home on a regular basis.

Future of Work: Device Convergence **Empowering Next-Generation** Mobile Workers. IDC, 2020

8 in 10 employees in Singapore wish to continue working from home at least half the time or more after Singapore's COVID-19 Circuit Breaker.

A survey conducted by EngageRocket, the Institute for Human Resources Professionals and the Singapore Human Resources Institute, reported on TODAY newspaper on 29th April 2020.

Prepare/Manage Continuity **RESPOND**



Blending Virtual and Native Computing Worlds Communication & Virtual Desktop Infrastructure (VDI)

users can connect to their virtual Turn the smartphone into a desktop from any location using their smartphone, making it easy for employees to access all their files & applications and work remotely from anywhere in the world.

Samsung devices are uniquely

Platform

RECOVER

A Secure Mobility

suited for business because they are built on Samsung Knox, which is a combination of a proven device-level security foundation and a mature suite of business solutions leveraging this security platform.



Mobile-Only Strategy

Smartphones to replace laptops and desktops to deliver a complete computing solution - one that not only offers performance and applications but also addresses the security concerns of enterprises.



Prepare for the Next Normal

Collaboration

secured desk phone. By leveraging collaboration and communication tools from our partners, organizations can quickly connect with other team members or customers globally.



The Next Distributed Workforce

Futurescaping the Next Field Services

Social distancing is now a norm for the foreseeable future and this has become a huge challenge for the field services industry.

Service contractors had to weigh the risk facing the health and welfare of their highly trained and indispensable technicians, against their job nature which requires them to attend to their customers' needs at the service locations in person.

Fortunately, technology advancement in augmented reality, communication, and mobile devices in recent years made innovative solutions possible, like remote assistance and augmented reality (AR) driven smart assistance, that could allow technicians to do their job remotely and effectively.

Not only can the service providers offer their services remotely without dealing with the challenging travel and social distancing restrictions that in-person servicing would encounter, but this also opens new market possibilities and remote training solutions while maximizing the potential and utilization of their human capital.

Hence, instead of pandemic-induced slowdown, perhaps this is the ripe opportunity for every field service company to transit into the future of field services today.

60% of global enterprises will be testing smartphones as their company's singular IT-supported 3-in-1 device* and 15% will have adopted it already by 2021.

IDC InfoBrief, sponsored by Samsung, FoW Device Convergence Empowering Next Generation Mobile Workers, February 2020

* 3-in-1 device is a device that replaces or takes on more of the



he Next Normal The Next Distributed

The Next Field Services

The Next Supply Chain and Last-Mile Delive

The Next Ret

The Next Healtho

The Next Education

Workers' Health and Safety

With the use of wearables, employers can monitor the health vitals of workers, track check-in/check-out of the workplace, and perform contract tracing more effectively. Each wearable has its unique ID and this ensures wearer's personal information not being exposed.

Workforce Management

By equipping field workers with mobile devices, it allows the manager to know workers' current and historical location information which can then be matched against outbreak information for contact tracing purpose. Workers can also send distress call with a push of a button whenever they are feeling unwell such as high fever.

RESPOND

Prepare/Manage Continuity



Remote Assistance

Turn the smartphone into a secured desk phone. By leveraging collaboration and communication tools from our partners, technicians can easily conduct virtual training and help with repair and troubleshooting through interactive video calls

Safe Distancing

Alerts (ie. vibration, visuals or beeps) when staffs are in close proximity (breach of social distancing guidelines) especially in an enclosed area such as warehouse.



Augmented Reality (AR) Driven Smart Assistance

The technology engages both the remote expert and the on-site worker through an app on a mobile tablet. The device's camera acts as a window into the real-time situation on the ground. Workers can also telestrate (draw with a pen) on the screen so both parties can precisely pinpoint the steps needed for a solution.

THRIVE Prepare for the Next Normal



Raising Responsiveness with Task Management

Managers can use wearables with task management software to signal workers via haptic alerts on their wrists when there is an urgent need to attend to a machinery breakdown or change of customer's appointment. This helps to prevent delays and enhances productivity.

Automated Work Order Management

Traditionally workers called into a customer service center to update progress, they can now save time by seamlessly attending to all the administrative tasks associated via voice-powered automation. They also no longer need to call to get information about the next job, it just shows up on the mobile device. This saves time and improves worker productivity.

Push-to-Talk

RECOVER

When operating in the field, the need for accurate communications and effective information-sharing is paramount. With rugged devices such as XCover Pro, with a push on a button, field workers can initiate and continue those communications while wearing gloves.

The Next Norma

The Next Distributed Workford

The Next Field Services

The Next Supply Chain and Last-Mile Deliv

The Next Re

The Next Health

The Next Educat

Futurescaping the Next Supply Chain and Last-Mile **Delivery**

As many people are now forced to stay home more often than usual, as part of practicing social distancing and working from home, people are looking to get their shopping done online to avoid the crowd.

As consumers lean harder on e-commerce than ever for their day-to-day needs, at a time where supply chains are already struggling to keep itself operational, a myriad of new challenges present itself. Increased orders also increase the number of frauds, hurting struggling companies further.

The urgency of the situation demands rapid solutions that can only be fulfilled immediately with cutting edge technologies, that will undoubtedly benefit the industry as a whole moving forward.

Support Engineer Sydney NSW, Australia You have checked in to Office. Monday, May 30 at 8.30AM.

John Smith

You have checked out from Office.

Monday, May 30 at 10.00AM.

You have checked in to Warehouse.

Monday, May 30 at 10.30AM.

10:30

Virtual Check-in

Using smart devices like the Samsung Galaxy S20, employees can securely check-in to work and record safe distancing protocols (ie. facilitate contact tracing)

40.7% of retailers are concerned with fraud losses such as merchandise and chargeback fees when the customer disputes a purchase.

Therefore, it is important for merchants to implement a foolproof contactless delivery process to combat the increasing cases of friendly fraud.

Source: 451 Research's "Voice of the Enterprise: Customer Experience & Commerce Merchant Study 2020"

>6 feet

The Next Supply Chain and Last-Mile Delivery

Worker's Health and Safety

With the use of wearables, employers can monitor the health vitals of workers and perform contact tracing more effectively since workers' location will be tracked and monitored.

Advanced Barcode Scanning

Identify a parcel to pick up quickly and able to scan multiple barcodes simultaneously.



THRIVE

Prepare for the Next Normal

Automated Proof of Collection / Delivery

Customer will be notified of shipment status, package pickup and estimated date/time of delivery.



Set reminders to remind employees to follow healthy hand wash habits to ensure clean hands.

Gamification features help to ease the formation of the new habit.







Voice Driven Workflow

Transform existing manual (often paper-based) workflows into voice-powered automation. Staff can simply check inventory and fill reports using voice commands.

Proactive Contact Tracing

employees interact.

Quickly identify close contacts proactively. Gain valuable insights into how

RESPOND

Prepare/Manage Continuity



Contactless Delivery

SMS / text notification / contactless recipient to sign on their device.

signature to be triggered automatically when the driver indicates he is already at the recipient's location - allowing the **Safe Distancing**

Alerts (ie. vibration, visuals

or beeps) when workers are

in close proximity (breach of

social distancing guidelines) especially in an enclosed

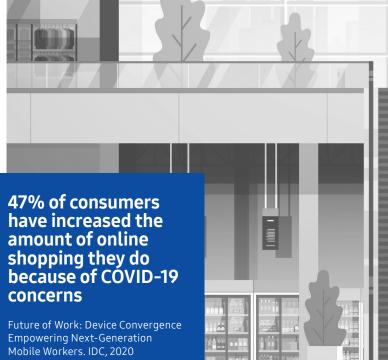
area such as warehouse.

Futurescaping the Next Retail

Physical stores retailing had been struggling to adapt to rising e-commerce trends over the past few years and their plight are now made worse by a pandemic that forced most of them to shutter during the lockdowns and drove consumers to shop online instead.

And as consumers realized through the pandemic that they can do most of the shopping online, physical stores will now be increasingly rendered irrelevant or outdated if they are unable to reinvent themselves to cement their place in a post-pandemic world.

Digital transformation will also be a necessity as companies move forward beyond just investments into e-commerce as an increasingly important sales channel; but also into methods to adapt cost structures and to make each step of the value chain better, faster, and cheaper.



As such, the trend of retail companies turning to omnichannel fulfillment capabilities as well as personalized customer journeys would likely to radically accelerated.





The Next Norma

The Next Distributed Workforce

The Next Field Serv

The Next Supply Chain and Last-Mile Delive

The Next Retail

The Next Healthc

The Next Educati

Safe Distancing

Alerts (ie. vibration, visuals or beeps) when staffs are in close proximity (breach of social distancing guidelines) especially in an enclosed area such as a storeroom.

RECOVER

Modernizing Retail Scanning

The enterprise-grade scanning solution allows retail associates to efficiently capture barcode and text throughout the store for inventory and price accuracy check or even facilitating instant checkout to get customers on their way.



THRIVE

Prepare for the Next Normal

Contactless Delivery

SMS/text notification with a contactless signature link to be triggered automatically when the driver indicates he is already at the recipient's location - allowing the recipient to sign on their device

Workers' Health and Safety

employers can monitor the health vitals of workers, track check-in/check-out of the workplace and perform contract tracing more effectively.

Sales Associate With the use of wearables.

Equipping the sales associate with a mobile device equates to providing them full access to inventory information, customers' data, and purchase history. In-store mobility helps to enhance customer experience through more personalized service to boost revenue and customer loyalty.

Empowering the

RESPOND

Prepare/Manage Continuity

Contact-Free Checkout

Introduce self-checkout counters so that customers can scan their purchases and make payment all through a mobile payment kiosk with built-in MPOS solution - zero-contact with the cashiers.



Allow shoppers to make purchases online and collect them in-store/curbside. SMS/text notification with a contactless signature link to be triggered when the customer has arrived for collection.

Futurescaping the Next Healthcare

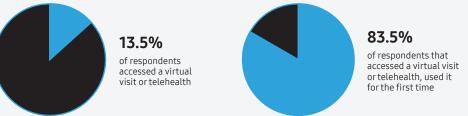
The COVID-19 pandemic had revealed vulnerabilities in the healthcare system in almost every country. Long-held paradigms were shattered as to what is sustainable and raise deeper considerations towards safeguarding the health of patients from cross-infection and the viruses that patients are exposed to when they visit hospitals.

The fear of virus transmission had driven people to stay away from the hospital as many governments postpone and cancel elective surgeries. In response, doctors are turning to telehealth to offer medical advice to their patients and provide chronic medication prescriptions.

Even the most change-resistant medical health professionals are now embracing and using all these new technologies in this turbocharged healthcare evolution, this is perhaps the best time ever to reimagine healthcare for the 21st century.

The pandemic is a pivotal moment for telehealth and virtual visits as healthcare organizations, payers, and even employers are promoting these services to consumers who are worried that they have been exposed or have COVID-19 and not the flu. Using these services minimizes exposure to other patients and healthcare providers. Lynne Dunbrack Vice President. IDC Health Insights Research

Increased Use Of Telehealth Due To COVID-19



COVID-19 Industry Impact: Health and Life Science. IDC Health Insights, 2020

he Next Normal The N

The Next Distributed Workforce

The Next Field Servi

The Next Supply Chain and Last-Mile Delive

The Next Reta

The Next Healthcare

reported by respondents that used telehealth

80.5%

satisfaction rate

Virtual Visit and Screening

With the use of mobile devices and virtual screening tools, hospitals can carry out virtual screening for those who are of low risk and monitor those with mild symptoms to reduce the strain on the healthcare system.

RESPOND

Prepare/Manage Continuity

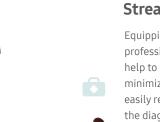
Virtual Rounding

Virtual rounding allows providers to remotely communicate with patients safely and efficiently, increasing their ability to reach more patients, and limiting face-to-face time with patients to help better protect provider's health and safety.



Tele-Ultrasound Solution

Enables remote collaboration, virtual guidance, and second opinion. The solution helps the doctors to make faster-informed decisions.



Streamline Processes

Equipping healthcare professionals with mobile devices help to reduce paperwork and minimize human error. They can easily register patients and input the diagnosis using the device and continue with the reporting in a desktop environment with Samsung DeX.



Prepare for the Next Normal

Long-term Patient Care

Monitor patient's health vitals using wearables and maintain constant communication with patients to ensure mental and physical wellbeing throughout treatment.





Patient-Centered Care

Bring comfort to patients through bedside infotainment solution that provides access to the personal health records, entertainment, educational information and video conferencing features to stay connected with family.



RECOVER

The Next Healthcare

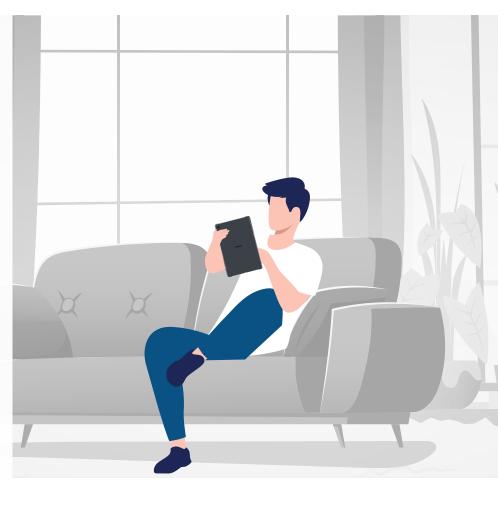
Futurescaping the Next Education

As of mid-April 2020, 195 countries had ordered for countrywide closures of schools and universities during the peak of the pandemic.

Educators around the world were suddenly shoved into the development of remote learning materials and teaching through the internet. However, this shift to remote learning has been uneven. While some systems were able to train and equip educators, rolling out remote learning with appropriate student support services in a very short time frame, others are struggling, constrained by the lack of access to devices, technology, or expertise.

For those with access to the right technology, a joint study by Russian and American universities demonstrated that high-quality online courses advance students' skills and knowledge the same way as in-person classes.¹

Perhaps it is time for the pedagogy of 20th century organized education, where it had not changed much for over a hundred years since its advent during the industrial revolution, to finally catch up with the times.



¹ Source: "Online Education Platforms Scale College STEM Instruction With Equivalent Learning Outcomes At Lower Cost" Igor Chirikov, Tatiana Semenova, Natalia Maloshonok, Eric Bettinger, René F. Kizilcec Science Advances LOS ADP 2020 - EADVS242

he Next Normal The Next Distributed Workfo

Remote Learning

With the digitization of learning materials and use of communication and collaboration tools on mobile devices such as tablets, both students and teachers can continue to learn and teach in a safe environment at the comfort of their home.



Prepare/Manage Continuity



Redefining Attendance

Absenteeism is a huge concern for most educators. Beyond daily attendance, through digital tools, teachers can monitor engagements such as submission of online assignments and attendance of virtual classes. Gamification can also help children to learn more creatively.

Immersive Learning Experience

Innovative technologies such as AR/VR on mobile devices have the potential of transforming students learning in a classroom. They can help educators provide a hands-on approach to learning, accommodate students' diverse needs, and promote a sense of curiosity and wonder.

Transition to Blended Learning

Unlike remote learning - a stop-gap measure, learning institutions should continue moving some elements of instruction online as it enables flexible teaching and learning, Furthermore, online offers a better environment to explore simulation and resources.



Modern Classroom

Classrooms of today are still widely associated with traditional teaching methods - tied to the chalkboard in the front of the classroom. However, modern classrooms are open and flexible and have writable surfaces, one-to-one devices, hands-on learning with makerspace activities. An environment where technologies are incorporated into every aspect of learning.



Personalized Learning

As learning has progressively shifted to the digital platform, educators can utilize digital resources such as cloud computing, mobile learning, advanced analytics, open content to personalize instruction, while also expanding learning capabilities beyond the classroom walls.





RECOVER

The Next Education

Samsung Portfolio



SAMSUNG OFFICES FOR SOUTHEAST ASIA AND OCEANIA

AUSTRALIA

3 Murray Rose Ave, Homebush Bay NSW 2127 Australia https://www.samsung.com/au/business/

CAMBODIA

No. 445 Monivong Blvd Corner Street 232 Sangkat Boeung Pralit Khan 7 Makara Phnom Penh, Cambodia https://www.samsung.com/th/business/

INDONESIA

TCC Batavia, Tower One, 22nd Floor. Jl. KH. Mas Mansyur Kav 126 Jakarta 10220 - Indonesia https://www.samsunq.com/id/business/

LAOS

3rd Floor, Kalao Tower II, 23 Singha Road, Vientiane, Laos PDR, 8156 https://www.samsung.com/th/business/

MALAYSIA

Level 13, Mercu 2 No. 3 Jalan Bangsar, KL Eco City 59200 Kuala Lumpur, Malaysia https://www.samsung.com/my/business/

MYANMAR

Building 14, 1st Floor, Myanmar ICT Park, Universities' Hlaing Campus, Hlaing Township, Yangon, Myanmar https://www.samsung.com/mm/business/

NEW ZEALAND

24 The Warehouse Way, Northcote, Auckland 0627, New Zealand https://www.samsung.com/nz/business/

PHILIPPINES

8/F Science Hub Tower 4, McKinley Hill Cyberpark, Fort Bonifacio, Taguig City 1634, Philippines https://www.samsung.com/ph/business/

SINGAPORE

30 Pasir Panjang Road #17-31/32 Mapletree Business City Singapore 117440 https://www.samsung.com/sq/business/

THAILAND

33rd-35th Floor, Empire Tower 1 South Sathorn Road, Yannawa, Sathorn, Bangkok 10120, Thailand https://www.samsunq.com/th/business/

VIETNAM

Level 23-25, Bitexco Financial Tower - 02 Hai Trieu, Ben Nghe Ward, Dist 1, HCM City, Vietnam Floor 18 - PVI Building, 1 Pham Van Bach, Dist. Cau Giay, Hanoi, Vietnam https://www.samsunq.com/vn/business/

SAMSUNG

LEGAL AND ADDITIONAL INFORMATION

ABOUT SAMSUNG ELECTRONICS CO., LTD

Samsung Electronics Co., Ltd inspires the world and shapes the future with transformative ideas and technologies, redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, medical equipment, network systems and semiconductors and LED solutions. We are also leading in the Internet of Things space through, among others, our Digital Health and Smart Home initiatives. We employ 307,000 people across 84 countries. To discover more, please visit our official website at www.samsung.com and our official blog at global.samsungtomorrow.com