Redefining Office Communication

Technology and Socio-Demographic Convergence Trends Driving Workplace Evolution

Commissioned by Ricoh

A Frost & Sullivan White Paper

RICOH

1.0

Brave New Workplace

Frost & Sullivan predicts that by 2025, the world will have at least 3.7 billion smartphones, 700 million tablets, and 60 million UCC platforms deployed.

Widespread connectivity, the increasing adoption of cloud computing, and rapid proliferation of smartphones are triggering far-reaching socio-economic changes globally and the ongoing evolution of workplace communication. New technological innovations underpinning the Fourth Industrial Revolution, e.g., Augmented Reality (AR) and Artificial Intelligence (AI), are having a transformative impact on the nature of work communication. Apart from the technological advancements, three megatrends notably globalization, demographic shifts, and increasing cyber risks also continue to redefine the world of work today.
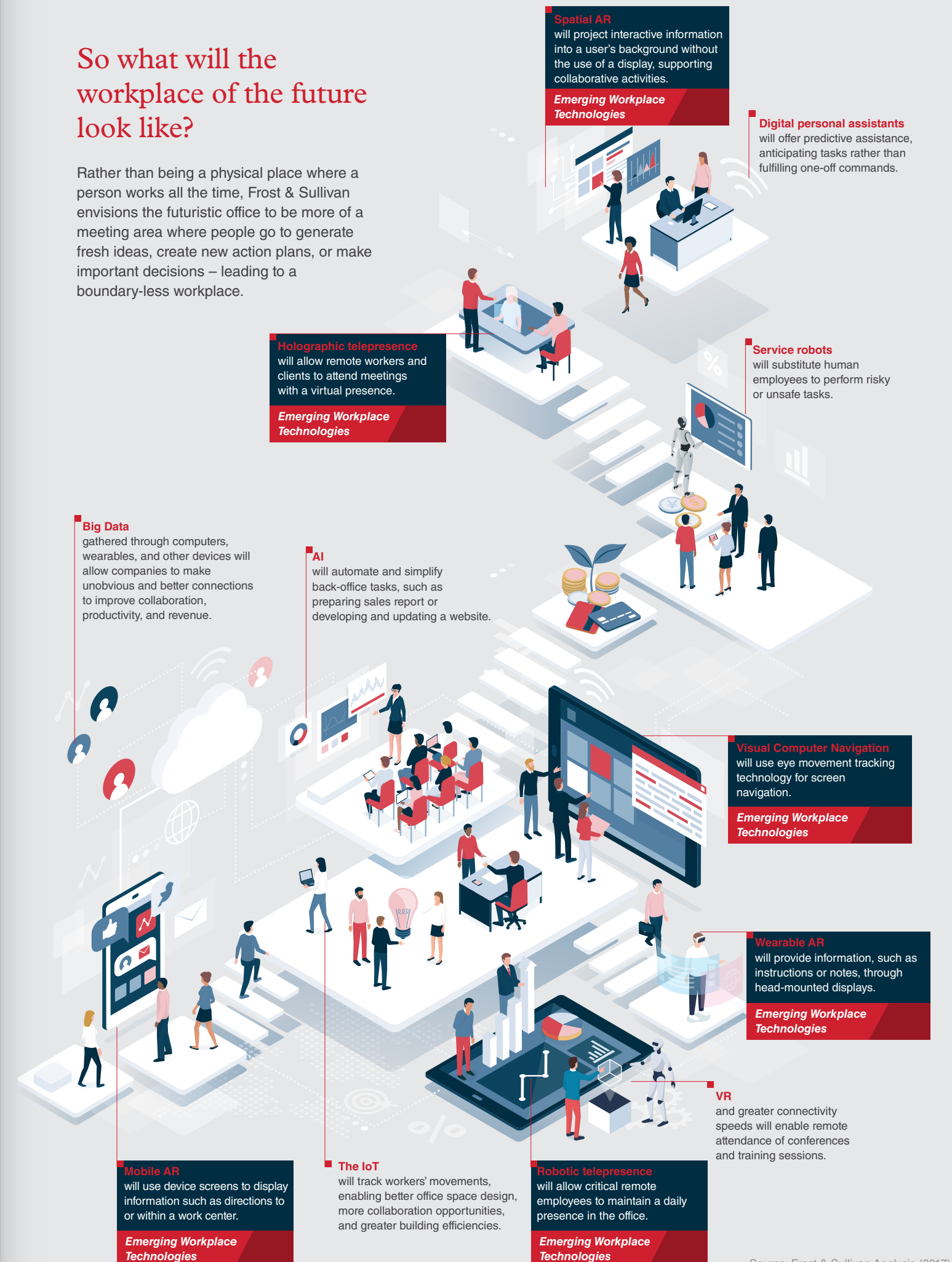
Looking ahead, freelancing and remote working are expected to establish themselves as the norm in major Western countries, while businesses dramatically overhaul the scale and appearance of their office footprint with a new focus on technology.

In catering to the modern workplace dynamics, future workplace design needs to place the Unified Communications and Collaboration (UCC) concept at the forefront and ensure robust security policies and systems to enable efficient document sharing without obstructing worker productivity. As such, the impact of technological disruption on the workplace communication landscape differs across emerging markets and developed economies depending on demographic trends, the prevalence of the sharing economy, and other conditions.

This white paper focuses on how the future of office communication is set to become a gateway to digitally empowering smart societies as seen through the lens of technological and socio-demographic megatrends in the years ahead.

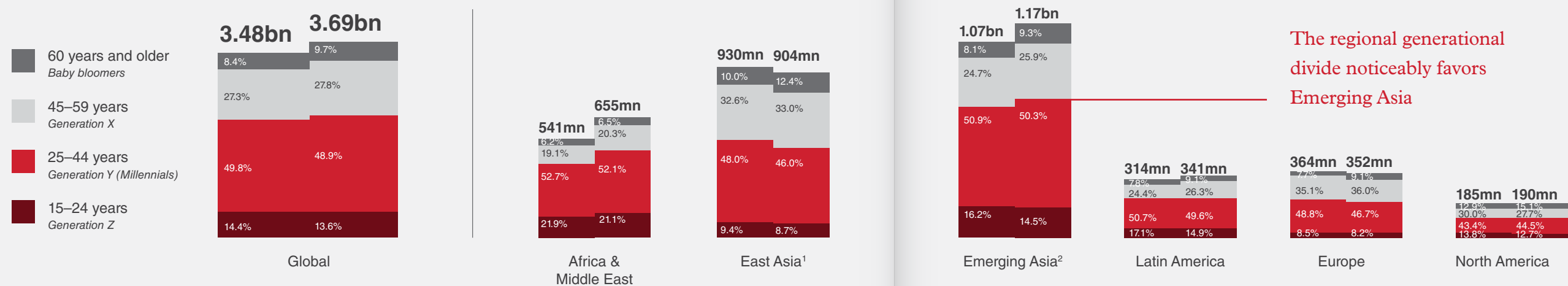## So what will the workplace of the future look like?

Rather than being a physical place where a person works all the time, Frost & Sullivan envisions the futuristic office to be more of a meeting area where people go to generate fresh ideas, create new action plans, or make important decisions – leading to a boundary-less workplace.

Spatial AR
will project interactive information into a user's background without the use of a display, supporting collaborative activities.
Emerging Workplace Technologies

Digital personal assistants
will offer predictive assistance, anticipating tasks rather than fulfilling one-off commands.

Holographic telepresence
will allow remote workers and clients to attend meetings with a virtual presence.
Emerging Workplace Technologies

Service robots
will substitute human employees to perform risky or unsafe tasks.

Big Data
gathered through computers, wearables, and other devices will allow companies to make unobvious and better connections to improve collaboration, productivity, and revenue.

AI
will automate and simplify back-office tasks, such as preparing sales report or developing and updating a website.

Visual Computer Navigation
will use eye movement tracking technology for screen navigation.
Emerging Workplace Technologies

Wearable AR
will provide information, such as instructions or notes, through head-mounted displays.
Emerging Workplace Technologies

Mobile AR
will use device screens to display information such as directions to or within a work center.
Emerging Workplace Technologies

The IoT
will track workers' movements, enabling better office space design, more collaboration opportunities, and greater building efficiencies.

Robotic telepresence
will allow critical remote employees to maintain a daily presence in the office.
Emerging Workplace Technologies

VR
and greater connectivity speeds will enable remote attendance of conferences and training sessions.

Source: Frost & Sullivan Analysis (2017)

Shifting Demographic Trends Transforming Office Communication

Figure I: Labor Force Projections by Region and Age, 2018 vs 2025F

Legend:
- 60 years and older — *Baby bloomers*
- 45–59 years — *Generation X*
- 25–44 years — *Generation Y (Millennials)*
- 15–24 years — *Generation Z*

Global
- 3.48bn: 8.4%, 27.3%, 49.8%, 14.4%
- 3.69bn: 9.7%, 27.8%, 48.9%, 13.6%

Africa & Middle East
- 541mn: 6.2%, 19.1%, 52.7%, 21.9%
- 655mn: 6.5%, 20.3%, 52.1%, 21.1%

East Asia[1]
- 930mn: 10.0%, 32.6%, 48.0%, 9.4%
- 904mn: 12.4%, 33.0%, 46.0%, 8.7%

Emerging Asia[2]
- 1.07bn: 8.1%, 24.7%, 50.9%, 16.2%
- 1.17bn: 9.3%, 25.9%, 50.3%, 14.5%

The regional generational divide noticeably favors Emerging Asia

Latin America
- 314mn: 7.8%, 24.4%, 50.7%, 17.1%
- 341mn: 9.1%, 26.3%, 49.6%, 14.9%

Europe
- 364mn: 7.7%, 35.1%, 48.8%, 8.5%
- 352mn: 9.1%, 36.0%, 46.7%, 8.2%

North America
- 185mn: 12.9%, 30.0%, 43.4%, 13.8%
- 190mn: 15.1%, 27.7%, 44.5%, 12.7%

[1]East Asia includes the Greater China region, Korean peninsula, Japan and Mongolia

[2]Emerging Asia includes the rest of the Asia-Pacific region (except Australia and New Zealand)

Source; ILO. Frost & Sullivan Analysis

By 2025, the global labor force is estimated to reach approx. 3.69 billion people, with Generation X accounting for over one-fourth and millennials making up almost half of the workforce (Figure I) – with both cohorts being technologically inclined, globally focused, and highly educated. Although the size of the labor force is forecast to expand as the population rises globally, workforce participation rate is expected to decline by 2025, mostly due to an increase in the population aged 60 and over.

Aging populations would greatly influence 2025's labor market, extending retirement ages, potentially creating labor shortages, and increasing the older-age population burden for prime-age workers. Many Western European countries – similar to Japan – will have hyper-aging societies by 2025, signaling the need for technological innovation to meet the needs of an aging populace.

Given that workplaces today are increasingly multi-generational, tech-enabled office communication tools and remote/virtual products and services (e.g., cloud web and video conferencing systems) are becoming essential to boosting engagement, collaboration, and productivity.

The Japanese government, for instance, is pushing ahead with a flagship work-style reform legislation that stipulates equal treatment for regular and non-regular workers in an effort to boost the nation's productivity and competitiveness amid the rapidly aging and declining population. By 2025, the ongoing trend of teleworking in Japan is projected to technologically evolve to make up for difficulties in communication among remote colleagues.

According to Frost & Sullivan analysis, more than half of the labor force will be located in Asia-Pacific by 2025, 15.1% of North America's labor force will be 60 and over, while Africa's labor force will largely consist of those 44 and younger. Japan's aging population, and likely decline in its potential labor force, is expected to be typically characteristic of many developed economies by 2025, while India, with its large youth population, will reflect the vast demographic dividends enjoyed by emerging markets.

Multiple studies have shown that in Emerging Asia, less than one-third of companies have their own websites while only about half use e-mail to communicate with clients and suppliers. This indicates that over the next decade, organizations in developing regions such as Latin America and Emerging Asia are likely to undergo radical changes in the way they approach office communication, primarily in the adoption of new technologies and work trends, as opposed to developed markets.

Enterprises in North America are likely to focus on cost reduction, productivity improvement, and customer experience enhancement as top investment drivers within office communication channels. Integrating UCC with office productivity and other business communication softwares in the next 10 years will be a priority across developed economies. In fact, recent surveys by Frost & Sullivan clearly show that the majority of IT decision makers perceive UCC as being critical to their organization's digital transformation initiatives.

The projected increase in the millennial population worldwide, making up the vast majority of the workforce, by 2025 also indicates the need to implement smart workplace communication tools (Figure II). As businesses deploy a multitude of audio/video solutions, utilizing UCC devices to fit varying user needs, they will also need to look at adopting various biometric technologies to ensure interoperability among multiple modalities and devices.

It is no coincidence that the impending generational divide positions millennials as 2025's global labor leaders, who value work-life integration, desiring time for personal pursuits through flexible working arrangements. These workers prioritize quality time with the family as well as learning and growing opportunities, suggesting that lifestyle and experience gained may be valued over pay when it comes to talent retention. The preference for work-life balance over the security of a steady fixed income is also giving rise to the sharing economy concept, and ultimately, freelance working.

While the model is not yet widespread, it is gaining momentum in pockets of the global workforce – with age proving to be the main differentiator of attitudes and behavior.

Employers adapting to millennials' communication preferences, such as engaging in social media applications, stand to gain improved employee outcomes and sustainable high performance in an ever-changing environment. A cross-cultural, multigenerational labor force and the need for continuous innovation could produce adaptive communication ecosystems in global enterprises.

Figure II: Generational Breakdown & Impact on Office Communication, Global, 2025F

Generation	Birth Year	Age in 2025	Demographic Characteristics	Impact on Office Communication Landscape
Baby Boomers	*1946–1964*	61–79	• Traditional media (TV, newspaper, radio) influences • Prefer suburban lifestyles • Associate work/career with life worth	• Attracted by roles that enable them to fully utilize their vast experience • Dependent on remote communication devices and robotic telepresence due to physical constraints
Generation X	*1965–1980*	45–60	• Tech-savvy • Live urban and suburban lifestyles • Embrace globalization	• Work flexibility gradually becomes vital due to family responsibilities • Utilize UCC tools to effectively communicate with global workforce
Generation Y (Millennials)	*1981–2000*	25–44	• Dependent on mobile technology • Desire urban lifestyles • Socially conscious • Value flexibility and collaboration	• Seek freelance, mobile work arrangements rather than traditional fixed roles • Focus on interactive cross-border meetings to increase productivity • Leverage technologies such as Wearable AR, Digital Personal Assistant, and Secure Biometrics.
Generation Z	*2001–2015*	10–24	• Grew up as digital natives • Embrace diversity • Environmentally concerned • Enjoy fast-paced lifestyle driven by instant recognition	• Keen on participating in sharing economy for stimulating work experience • Strong sense of privacy control over digital communication channels
Post-2015	*After 2015*	0–9	• Will enter labor force in 2030	• N/A

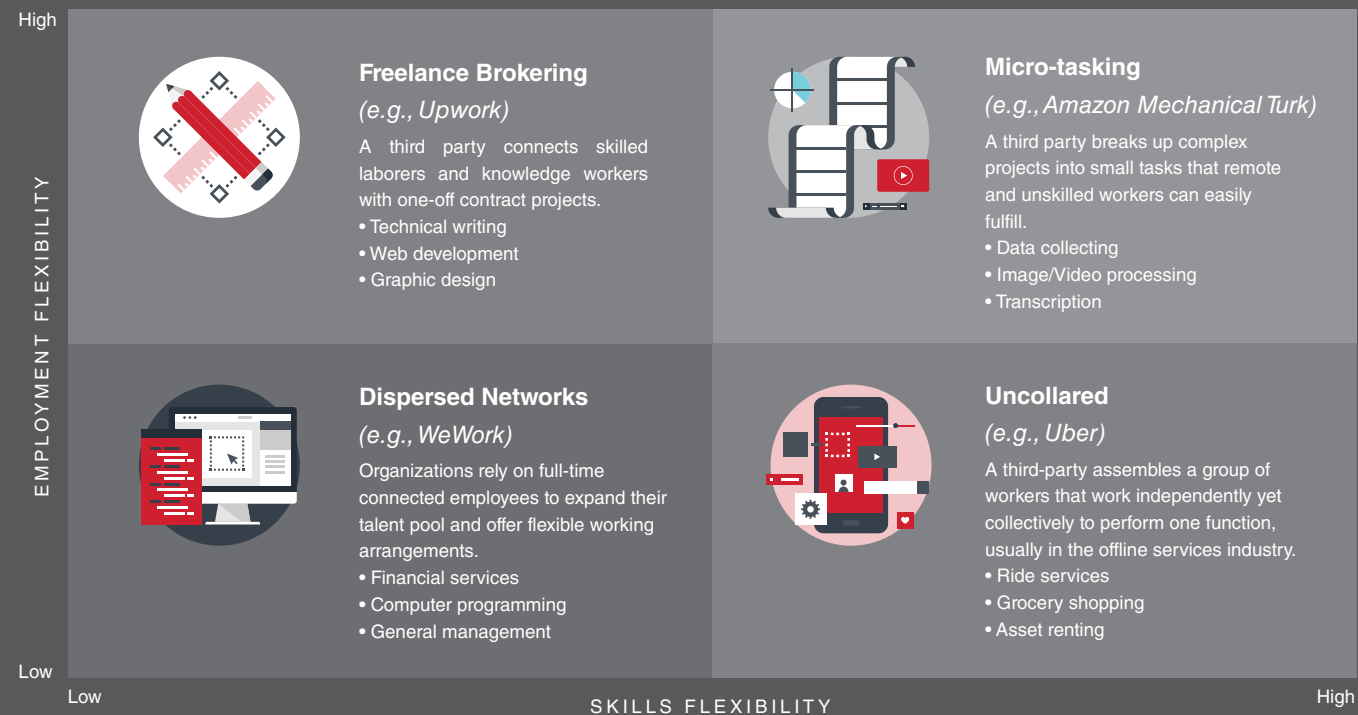Source: Frost & Sullivan Analysis (2018)

3.0

Flexible Remote Organizational Models for Greater Communication Options

Traditional notions of work are now being rethought, particularly with work being increasingly defined by what people do rather than where they do it. To benefit from new technologies and keep pace with innovation, organizations are increasingly loosening hierarchical structures, dispersing decision-making authority, and adopting startup-like qualities (Figure III). There is growing evidence that digital technologies are shifting labor markets toward more flexible and mobile working arrangements, with employment rising in categories grouped under "alternative work arrangements".
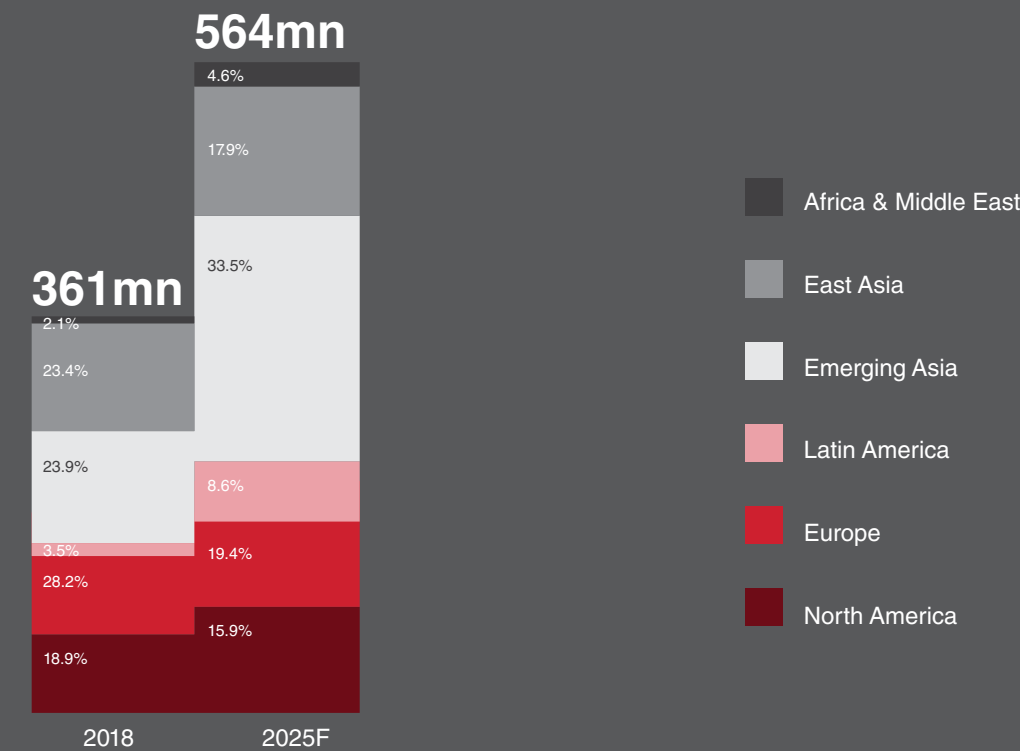
Freelancing, self-employment, and temporary work, among other non-standard work relations, are expected to thrive under the structure provided by service apps on smartphones and digital platforms. The trend is set to stimulate the growth of the remote labor force globally, enabling employees to adopt a variety of flexible work models and employers to tailor hybridized labor pools. While changing perceptions about work and increasing technology penetration will eventually lead to mobile and virtual work options, remote flexible arrangements (with some office presence) are likely to remain the most common.

Figure III: Remote Employment Models Matrix, Global, 2025F

EMPLOYMENT FLEXIBILITY — High / Low

Freelance Brokering
(e.g., Upwork)
A third party connects skilled laborers and knowledge workers with one-off contract projects.
• Technical writing
• Web development
• Graphic design

Micro-tasking
(e.g., Amazon Mechanical Turk)
A third party breaks up complex projects into small tasks that remote and unskilled workers can easily fulfill.
• Data collecting
• Image/Video processing
• Transcription

Dispersed Networks
(e.g., WeWork)
Organizations rely on full-time connected employees to expand their talent pool and offer flexible working arrangements.
• Financial services
• Computer programming
• General management

Uncollared
(e.g., Uber)
A third-party assembles a group of workers that work independently yet collectively to perform one function, usually in the offline services industry.
• Ride services
• Grocery shopping
• Asset renting

SKILLS FLEXIBILITY — Low / High

Source: Frost & Sullivan Analysis (2017)

Figure IV: Freelance Workforce Projections[4] by Region, 2018 vs 2025F

564mn
4.6%
17.9%
33.5%
8.6%
19.4%
15.9%

361mn
2.1%
23.4%
23.9%
3.5%
28.2%
18.9%

2018   2025F

Africa & Middle East
East Asia
Emerging Asia
Latin America
Europe
North America

Source: Frost & Sullivan Analysis (2017)

Digitalization of the workplace coupled with an increase in small and mid-sized enterprises (SMEs), demand for flexible workspaces, and inclination for innovative workplace cultures are spurring demand for space-as-a-service and revolutionizing the way people work today. Just as Japanese businesses famously modernized supply chains with the concept of just-in-time manufacturing, and the dot-com revolution transformed the global economy with e-commerce, the office communication landscape is evolving radically as businesses seek to rigorously manage costs and improve agility through more flexible work styles.

While such alternative working arrangements not only promote labor market participation, specifically for sectors traditionally excluded from job opportunities, their growing attractiveness also imply that an increasing number of highly educated professionals are opting to work as freelancers, which could shift the nature of informal employment in several emerging markets (e.g., Latin America, and Emerging Asia).

Frost & Sullivan estimates the total number of freelance workers to reach 564 million by 2025 – about 15.3% of the labor force – reflecting a compound annual growth rate (CAGR) of 6.6% from 2018 (Figure IV). More than half of these freelancers are expected to be based in Asia-Pacific, with Emerging Asia (India, Bangladesh, and Philippines in particular) contributing more than one-third of the total freelance workforce, whereas Africa and the Middle East are likely to have the smallest number of freelancers.

By 2025, developed economies (31% in Europe and 47% in North America) are forecast to have the highest proportion of their labor force engaged in flexible employment – many of whom are digital natives. These regions are likely to have in place network infrastructure, policies, and ecosystems to fully capitalize on future office communication patterns to cater to the flexible workforce.

Upwork and Freelancers Union recently revealed that 57.3 million people in the U.S. engaged in freelance work in 2017, contributing approximately US$1.4 trillion to the economy annually – an increase of nearly 30% from the year before[3]. Younger workers are driving the acceleration of the freelance workforce with almost half of working millennials freelancing, more than any other generation.

Technology is a key enabler to flexible work models, with organizations increasingly connecting and collaborating remotely with freelancers and independent professionals through digital communication platforms. This is evident from research stating that companies supporting remote work benefit from 25% lower employee turnover than companies that don't.

For employers, having a modern office communication environment is crucial to attracting and retaining talent, developing more engaged and productive employees, nurturing a culture of innovation, and staying ahead of the competition.

New tools and services transforming the traditional office space into a digital workplace could facilitate easier communication and more effective collaboration between employees, allowing businesses to stay agile, boost efficiency, and achieve higher productivity at a faster pace.

Technological Innovations Driving the Future of Office Communication

Instant Messaging

Email

Smartwatch

Smartphones

Tablets

Video/ Webcasting

Enterprise Applications

Anytime

Work

On-the-go

Home

Anywhere

Laptops/Desktops

Any Device

Document and Database Sharing

Any Application

IP Telephony

Head-mounted Displays

Podcasting

Telepresence

Enterprise Social Network

Source: Frost & Sullivan (2017)

Frost & Sullivan findings on UCC market activity suggest potential for integrated multi-vendor communications, cloud-based applications, and greater adaptability to BYOD (Bring Your Own Device) trends

Digitalization of the office environment is all about enabling each employee to do their job as efficiently as possible by promoting greater flexibility, providing them with convenient tools, facilitating seamless communication, and equipping them with adequate information. As a result, business uptake of AR technology, AI-driven instruments, wearables, and prescriptive analytics is forecast to rise by 2025 on the back of current UCC trends indicating an exponential growth of diverse in-house enterprise social networking and communication devices (Figure V).

UCC provides a simple platform to integrate temporary workers and contractors with the permanent team for more effective engagement and collaboration. These platforms allow traditionally siloed internal teams and external groups (such as suppliers, customers, and partners) to work together anytime, anywhere – helping to fuel new ideas, innovation, and co-creation. Frost & Sullivan findings on UCC market activity suggest potential for integrated multi-vendor communications, cloud-based applications, and greater adaptability to BYOD (Bring Your Own Device) trends as converged conferencing services (e.g., audio, video, web, screen share, chat) continue to take market share from standalone applications.
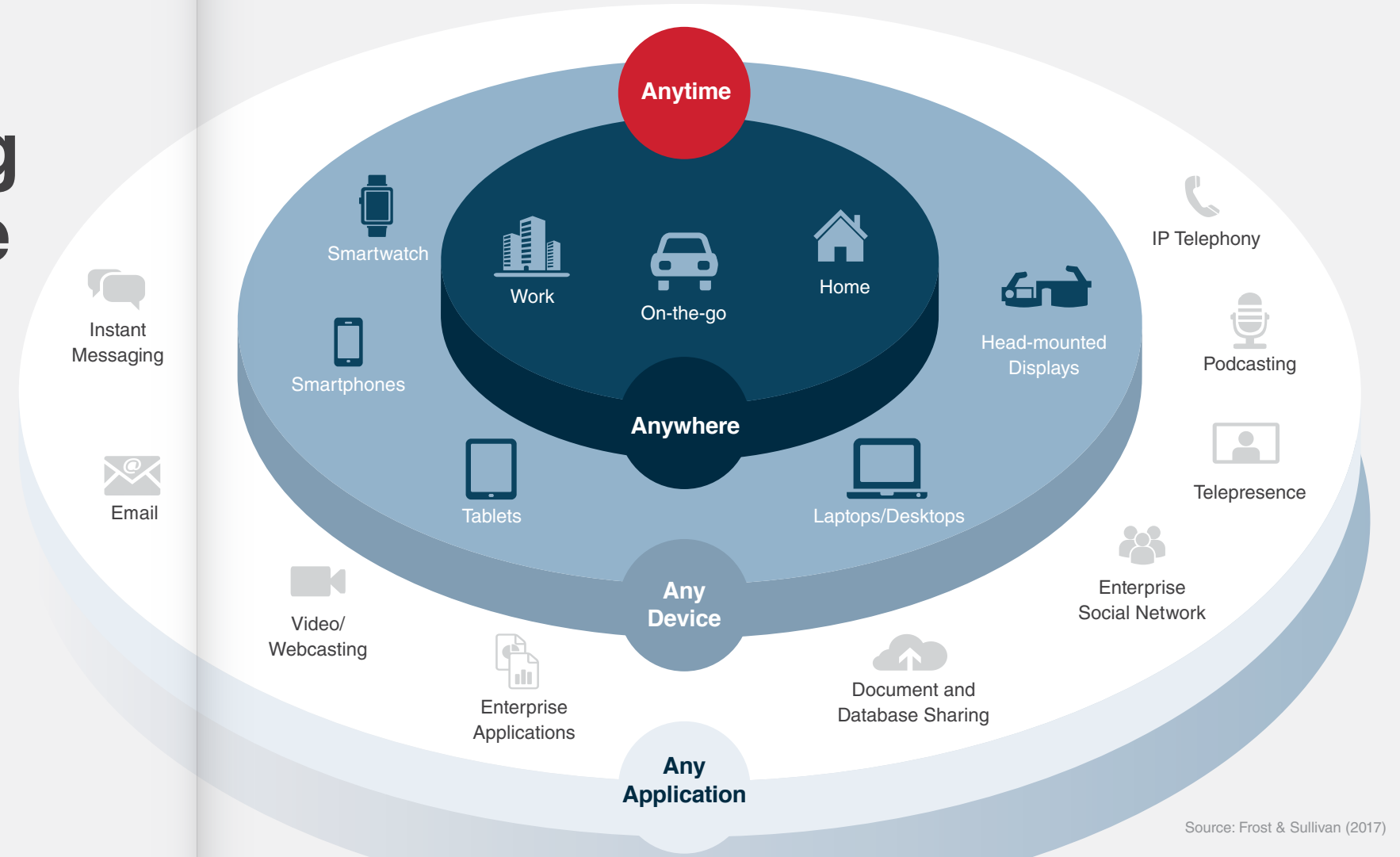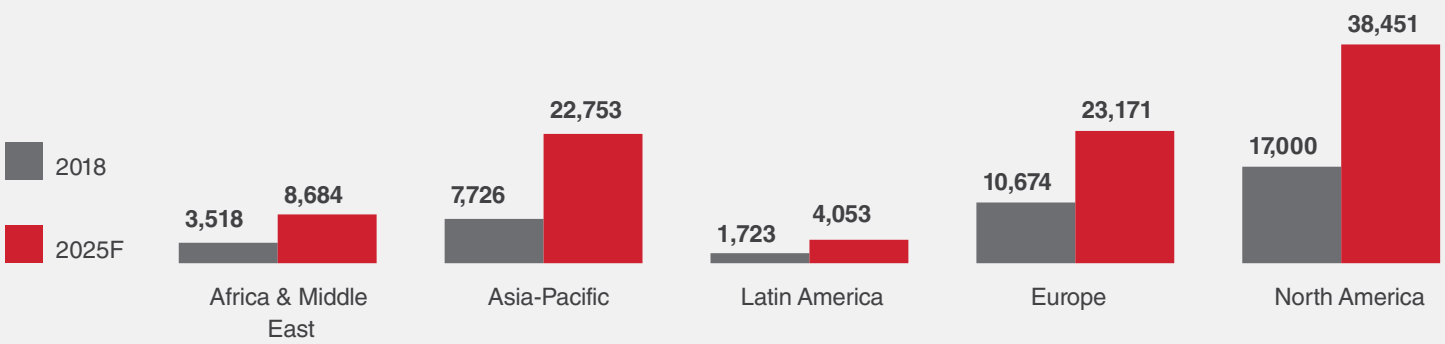
Enhanced telepresence and video conferencing solutions, for instance, could further support virtual co-location trends for flexible labor force as lower costs and rapid innovation stimulate the adoption of next-generation workplace communication features (Figure VI).

Of the connectivity trends, AR technology in smart devices holds the biggest potential for enterprise adoption, given its ability to boost performance while allowing for greater freedom of movement. AR can fit seamlessly into existing applications and platforms, including gamification for employee engagement, social media interaction, and company-wide collaboration through unified workplace communications (e.g., Microsoft HoloLens).

North America is projected to remain a robust market for AR-enabled opportunities in office communications while Europe and Asia-Pacific regions attempt to catch up with innovations in AR.

Growth in the wearables market, particularly when combined with AR capabilities, is also expected to surge within the enterprise segment. While smartwatches and smart wristbands continue to lead the total wearables market, the hands-free application and ability to display information in workers' line of sight make smart glasses a technology to watch in the future of workplace communication.

Figure VI: Global UCC Market Size by Region, $ Million, 2018 vs 2025F

- 2018
- 2025F

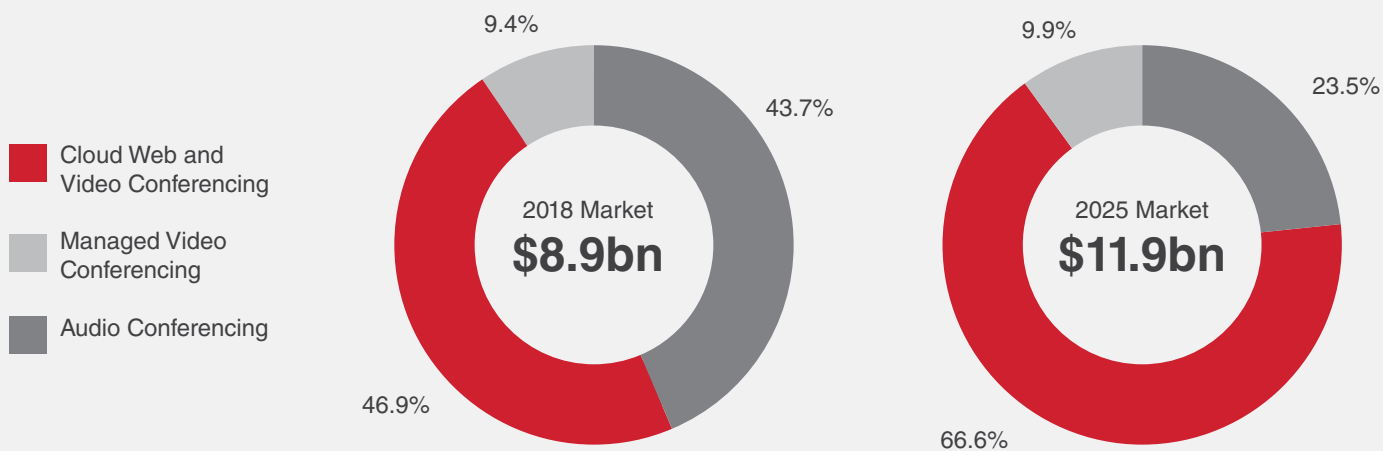| Region	2018	2025F
Africa & Middle East	3,518	8,684
Asia-Pacific	7,726	22,753
Latin America	1,723	4,053
Europe	10,674	23,171
North America	17,000	38,451

Source: Frost & Sullivan Analysis (2017)

By 2025, the global UCC market is estimated to more than double in size reaching $97.1 billion from $40.6 billion in 2018, registering a healthy CAGR of 13.3% over the forecast period. North America and Europe jointly account for about 68% market share in 2018, indicating a mature market where large organizations are already implementing UCC platforms for superior workplace communication.

In contrast, developing regions, such as Latin America, Africa, and the Middle East trail far behind in terms of embracing innovative communication channels. Asia-Pacific is expected to be the fastest growing regional segment by 2025 due to heightened demand for advanced communication platforms in the region paired with technological integration of cloud solutions.

Ample user demand is also anticipated to shift considerably from pure-play audio to intuitive audio and video conferencing, content sharing, and personalized collaboration experience (Figure VII). Interestingly, although major markets such as North America and Europe are beginning to experience a decline in audio revenue due to increased technology commoditization, all regions are forecast to record strong double-digit growth in cloud web and video conferencing revenue by 2025.

The trend broadly aligns with research findings stating that video conferencing tools perform up to 30% better than audio-only setups for remote office communication.

Figure VII: Conferencing Services Market by Segment, Global, 2018 vs 2025F

- Cloud Web and Video Conferencing
- Managed Video Conferencing
- Audio Conferencing

2018 Market
$8.9bn
- 9.4%
- 43.7%
- 46.9%

2025 Market
$11.9bn
- 9.9%
- 23.5%
- 66.6%

Source: Frost & Sullivan (2017)

Advancements in AI capabilities, including cognitive computing, deep learning, and natural language processing, are paving the way toward intelligent machines with the ability to train themselves and effective internal communication applications for better engagement. AI will significantly drive the adoption of audio and video conferencing services by enabling users to automate manual and repetitive tasks such as taking meeting minutes.

Video-enabling huddle rooms may also be a priority for companies looking to enhance work productivity.

An exciting area of AI development is the cross-over from consumer-oriented digital assistants to enterprise digital assistants for future workplaces. As AI and voice recognition improve, digital assistants could increasingly enter the workspace, helping knowledge workers to prioritize information while proactively suggesting courses of action.

Technology Spotlight: Key Features of Enterprise Digital Assistants

Smart Notification
Auto-interrupts workers when receiving high-importance calls or emails

Data Visualization
Provides data analysis, summary, and visualization, and suggests actions

Real-time Translation
Deciphers all incoming data and translates information to appropriate receivers

4.2

How Cyber Threats Might Affect Enterprise Communication

As the digital transformation agenda gathers momentum worldwide, cyber threats will continue to rise with a diverse range of attacks, actors, and motivations. Enterprise cybersecurity incidents and data breaches will increase and evolve with growing connectivity trends, creating the need for ongoing defensive efforts from all businesses. As companies gain cybersecurity awareness and implement remote work and BYOD security measures, new threats will continue to pose significant information security risks.

According to the latest Breach Level Index (BLI), the number of data records compromised in publicly-disclosed data breaches surpassed 2.6 billion in 2017, up by 88% from 2016. Industries with the highest number of incidents were healthcare (27%), financial services (12%), education (11%), and government (11%).

Region	Breach Incidents
North America	1,514
Asia-Pacific	113
Europe	112
Others	26
TOTAL	**1,765**

Source: Breach Level Index

> A recent Frost & Sullivan study revealed that the economic loss across Asia-Pacific due to cybersecurity breach incidents could hit a staggering $1.75 trillion – more than 7% of the region's total GDP.

Significant changes in the business environment owing to the rapid adoption of wireless communication and BYOD models have been identified as key catalysts behind the highest number of attacks taking place in North America in 2017. The number of records stolen in the region was almost double the record count from the previous year. The unprecedented level of security breaches is anticipated to trigger the need for advanced cybersecurity systems to support various data security requirements of internal office communication channels.

Part of the reason why Europe has suffered fewer data breaches can be attributed to the introduction of General Data Protection Regulation (GDPR) in 2016, which is currently in the execution phase across the European Union. A recent Frost & Sullivan study revealed that the economic loss across Asia-Pacific due to cybersecurity breach incidents could hit a staggering $1.75 trillion – more than 7% of the region's total GDP.
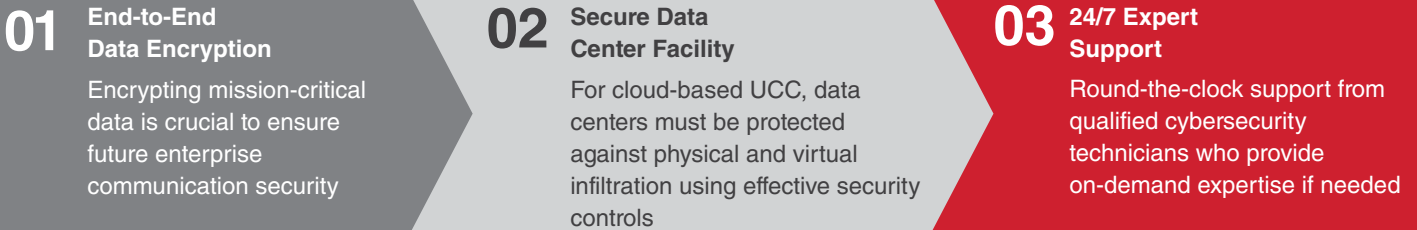
For these reasons, mitigating cyberattacks has become a top priority for enterprises given the dire financial consequences as well as the risk of business disruption and public scrutiny.

While most companies attempting to enhance communication security begin with email encryption features, many fail to consider securing voice, instant messaging, video and web conference calls – all of which can also be compromised by cybercriminals.

The need to secure communications with enterprise-grade end-to-end encryption for voice, instant messaging, and video conferencing is beginning to be recognized as a necessary step by senior executives in heavily-regulated industries as well as those that are potential targets for industrial espionage.

With the freelance workforce anticipated to rise by 2025, the ability to incorporate secure messaging into cloud-based UCC platforms used in businesses today is the next evolutionary step for industries worldwide (Figure IX). Exfiltration of sensitive data using sophisticated hacking techniques could shift from secure internal networks to cloud platforms as companies increasingly leverage cloud solutions, especially public could services, for improved work collaboration, file storage or delivery of anytime, anywhere unified communications. As such, organizations should strive to implement robust security standards to safeguard critical communication systems.

Figure IX: Best Practices for Securing Enterprise Communications, Global, 2025F

01 End-to-End Data Encryption
Encrypting mission-critical data is crucial to ensure future enterprise communication security

02 Secure Data Center Facility
For cloud-based UCC, data centers must be protected against physical and virtual infiltration using effective security controls

03 24/7 Expert Support
Round-the-clock support from qualified cybersecurity technicians who provide on-demand expertise if needed

Source: Frost & Sullivan Analysis (2018)

5.0

Ricoh Group – Empowering Digital Workplaces

The convergence of megatrends identified in this white paper provide a starting point for global businesses and government agencies to explore the wide range of options targeting the multiple facets of workplace communication. In recognizing the disruptive trends, Ricoh Group has embarked on the next level of workplace innovation to digitize tasks from conventional office spaces to wherever people work in the future. For more than 80 years, Ricoh has been driving innovation and is a leading provider of document management solutions, IT services, commercial and industrial printing, digital cameras, and industrial systems as well as office communication devices.

One of Ricoh's flagship concepts related to communication and collaboration area – Intelligent Workplace Services – is a digital platform offering integrated cognitive solutions that help companies collaborate across borders and prepare them for the future of work. Imagine creating a "space" where people can quickly gather to share information or make decisions, regardless of time zone or location, using a wide range of product line-up suitable for every type of meeting space.

For instance, a combination of Ricoh's interactive whiteboards (electronic whiteboards) for real-time, remote communication; teleconferencing/cloud-based web conferencing systems for simultaneous audio and video communication with multiple locations; and on-site projectors for better visibility.

Another upcoming innovation is Ricoh's Smooth Collaboration Service, a digital meeting assistant for enterprises that tracks action items and discussions happening during the meetings. The AI-driven virtual assistant can not only be controlled using voice commands, but also automatically draws up meeting minutes (incl. real-time translation for non-native speakers) and distributes them to attendees.

These initiatives clearly position Ricoh as a preferred partner in shaping the workplace of the future by deploying cutting-edge UCC solutions designed to support organizations as they embark upon their digital transformation journey.

> "Today, we are expanding our reach beyond the traditional office, as our customers are working in new digital workplaces. Ricoh is empowering digital workplaces by using innovative technologies and services that enable individuals to work smarter, thereby delivering true customer value."
>
> – Jake Yamashita
> President and CEO,
> Ricoh Group

We Accelerate Growth

Auckland	Colombo	London	Paris	Singapore
Bahrain	Detroit	Manhattan	Pune	Sophia Antipolis
Bangkok	Dubai	Mexico City	Rockville Centre	Sydney
Beijing	Frankfurt	Miami	San Antonio	Taipei
Bengaluru	Iskandar, Johor Bahru	Milan	Sao Paulo	Tel Aviv
Bogota	Istanbul	Mumbai	Seoul	Tokyo
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ABOUT RICOH

Ricoh is empowering digital workplaces using innovative technologies and services enabling individuals to work smarter. For more than 80 years, Ricoh has been driving innovation and is a leading provider of document management solutions, IT services, commercial and industrial printing, digital cameras, and industrial systems.

Headquartered in Tokyo, Ricoh Group operates in approximately 200 countries and regions. In the financial year ended March 2018, Ricoh Group had worldwide sales of 2,063 billion yen (approx. 19.4 billion USD).

For further information, please visit www.ricoh.com