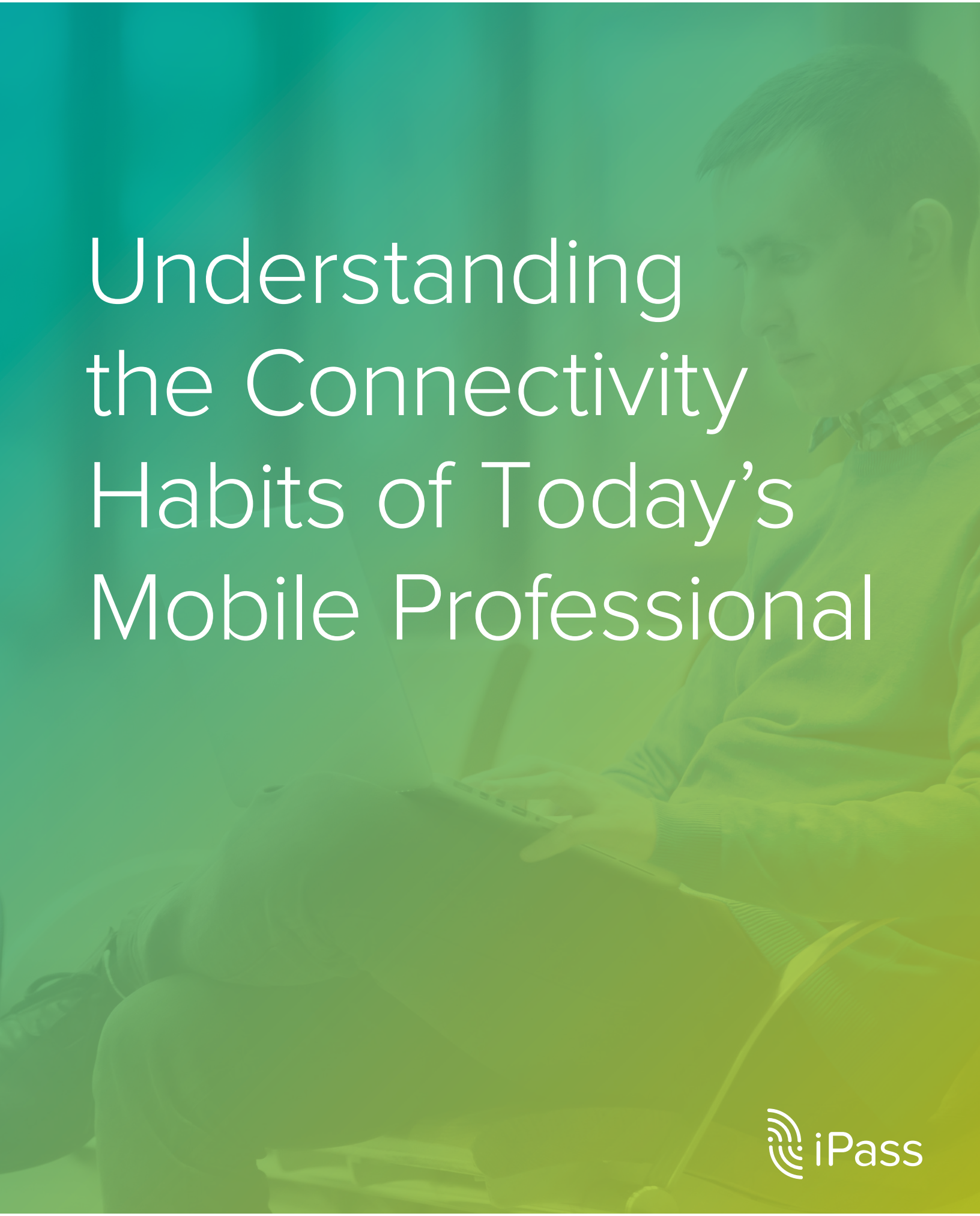


Understanding the Connectivity Habits of Today's Mobile Professional

iPass

To take their mobility strategies to the next level, enterprise decision-makers need to start thinking like demographers not just technicians.

"Who is my employee?"

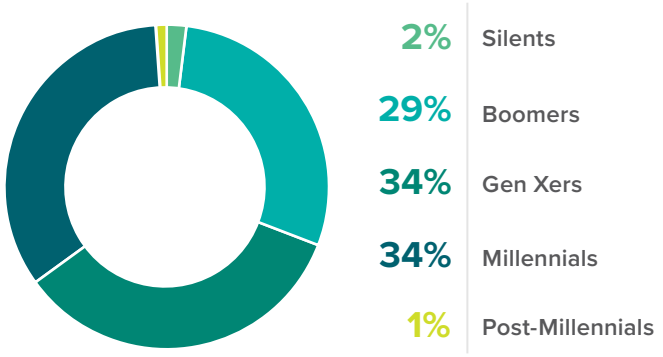
The modern workforce is mobile, multi-generational, and multiplying in kind. Forecasts suggest a near ten percent jump in the global mobile workforce between 2016 and 2022.[1] Within the same forecast period, five distinct generational cohorts will be simultaneously participating in the global workforce. But very shortly thereafter, one generation will come to dominate all.

Millennials are estimated to represent three quarters of the workforce by the year 2025. This trend has been long in the making. In the U.S., for instance, Millennials became the largest working cohort in 2015.[2] Why is this important? Very soon, the archetypal worker will have grown up nearly exclusively in the smartphone age.

Not only are Millennials dominating the workforce, but older generational cohorts, by in large, are proving just as attached to their mobile devices as Millennials. The psychological term, nomophobia, was coined recently to describe the irrational fear of being without one's mobile device. Although irrational fear is atypical, the coining of the term in and of itself suggests widespread attachment to mobile technology.

So why does that matter to the enterprise? When asked, over 80 percent of mobile workers say that the concept of not having an access technology like Wi-Fi makes them anxious.[3] Stated otherwise, mobile users aren't giving up the attachment they feel to mobile technology when they enter the workplace, especially as digital content becomes more pervasive and accessing that information over mobile channels becomes even easier.

Labor Force Composition in the U.S. by Generation, 2015



Courtesy: Pew Research

The data shows that when mobile users walk through the office door, they clamor for the same level of convenience that they experience in their consumer lives. Moreover, they expect their employers (current or prospective) to guarantee it. Indeed, some CIOs have begun prioritizing the personalized experiences of their employees when developing and deploying their mobile strategies. But too often, IT teams are running blind when it comes to actually understanding the mobile connectivity habits of their employee base. What follows then is an exploration and analysis of the connectivity patterns of today's mobile worker.

Connectivity patterns among mobile workers

People love Wi-Fi, and they'll pay, court security risks, and even endure inconveniences for access

In a given week, mobile workers access free Wi-Fi or pay for on-demand Wi-Fi pretty often. These workers access ad-hoc Wi-Fi in the face of some pretty strong, negative incentives:

- Free, public Wi-Fi is inherently unsecure, and enterprises are wary of, if not altogether hostile to, letting their employees use free Wi-Fi. Indeed, 68 percent of organizations currently ban their use, with an additional 14 percent planning to introduce a ban in the future.[4]
- The widespread (consumer) perception that Wi-Fi should be free of charge.
- Both free, public and on-demand Wi-Fi often introduce inconveniences, such as pop-ups, spam, session time-outs, and slow speed.

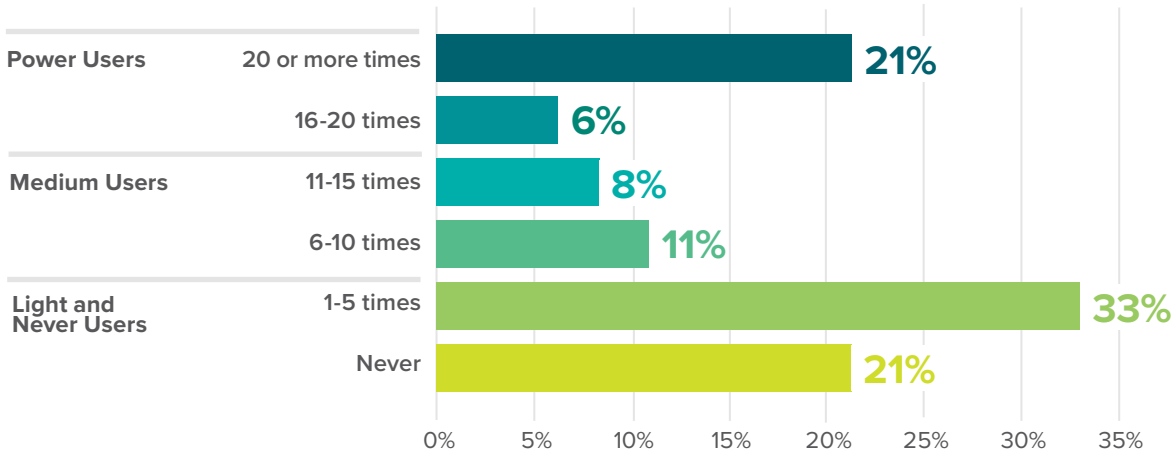
Despite the risks, inconveniences, and negative perceptions, nearly 80 percent of mobile workers use free Wi-Fi or on-demand Wi-Fi at least once a week. Taken in isolation though, that 80 percent tells an incomplete story, as it collapses together a sliding scale of usage behavior. We'll examine the two most distinctive user-types.

The light and never user

At one end of the usage spectrum lies the *light or never user*, the majority of enterprise users who either never or very rarely access free or on-demand Wi-Fi. They constitute a majority of the mobile workforce, and in their out-of-office connectivity behavior, they abide by prevailing enterprise security strictures. They either abstain from connecting outside of the office or look for other connectivity sources besides Wi-Fi, often settling for poorer-quality connectivity as a result.

SURVEY QUESTION:

In a given week, how often do you access free Wi-Fi or pay for Wi-Fi on demand (not including at home or at work)?



Mobile data traffic is booming. The period between Q3 2016 and Q3 2017 alone saw total data traffic growth of 65 percent.

The power user

On the other end of the spectrum is the *power user*, a significant minority in the enterprise, who accesses free or on-demand Wi-Fi 16 or more times per week. By definition, this user is impervious to negative perceptions surrounding free, public Wi-Fi, bucks business restrictions on external Wi-Fi use, and/or is more than willing to shell out for on-demand Wi-Fi.

The power user-type should come as no surprise to IT, even if the sheer volume of power users might. There is nothing particularly novel about risk-taking behavior – even on Wi-Fi. When asked in previous years, sixty-six percent of workers averred that they worried about Wi-Fi security. Nonetheless, forty-two percent still admitted to accessing corporate data on unsecured networks.[5]

So although the risk-taking should be expected, the intensity of desire to get connected which compels it requires comment. To understand that intensity, we have to look at how power users are, in fact, impacting larger, mobile market trends. Those trends directly affect how enterprise decision-makers provision mobility solutions to their employee base.

Larger mobile market trends

In the enterprise context, the connectivity habits of power users may stand out (if only for censure). But in the wider mobility market, never and light users exhibit connectivity patterns outside of the norm.

Mobile data traffic is booming. The period between Q3 2016 and Q3 2017 alone saw total data traffic growth of 65 percent.[6] And those growth numbers are forecasted to continue into the near future across all major device types, especially smartphones.

Mobile data traffic per device (GB/month)

	2016	2017	2023 forecast	CAGR 2017-2023
Smartphone	2.1	2.9	17	34%
Mobile PC	7.7	9.8	27	18%
Tablet	3.6	4.6	12	18%

Courtesy: Ericsson Mobility Report November 2017

In the last decade alone, content consumption patterns have changed dramatically, contributing to the surge in mobile data traffic. Now, video is at the forefront, especially video content consumption over mobile, i.e. on lighter-weight consumer portables. These lighter-weight consumer portables are increasingly becoming the primary work devices in the enterprise. In fact, they are forecasted to become the primary work devices by 2020.[7]

Not just a consumer trend, the consumption of cloud-based video content has transformed the way enterprises interact with their employees, customers, and partners. In "3 statistics that prove enterprise video is on the rise," IBM Product Vice President, Alden Fertig argues that those changing consumer media habits have forced enterprises to accelerate their production of streaming video to achieve key business objectives.[8] Taking data culled from IBM Cloud Video subscribers, Fertig came away with the following findings, relevant to the provisioning of mobility solutions in the enterprise:

- The percentage of enterprise video streaming (on mobile devices) increased five-fold from 2015 to 2016.
- Over the same period, video length in the enterprise might have decreased slightly but file size ballooned by nearly 30 percent, suggesting that digital creators in the enterprise began prioritizing quality over quantity.
- U.S. businesses aren't the only ones integrating video streaming into their business strategies. Globally, enterprise video viewership grew by more than 25 percent in the same period.

Connectivity enables business and consumer tasks

The mobile connectivity reliance of power users (specifically) and mobile workers (more generally) is perfectly consonant with prevailing mobile market trends. More importantly for the enterprise, those same mobile users refuse to modify their dearly-held consumption patterns when they enter the workplace, as well as change their preference for access technologies that allow them to more efficiently and inexpensively consume the kind of content they prefer. And by a factor of nearly two to one, that technology has tended to be Wi-Fi.[9]

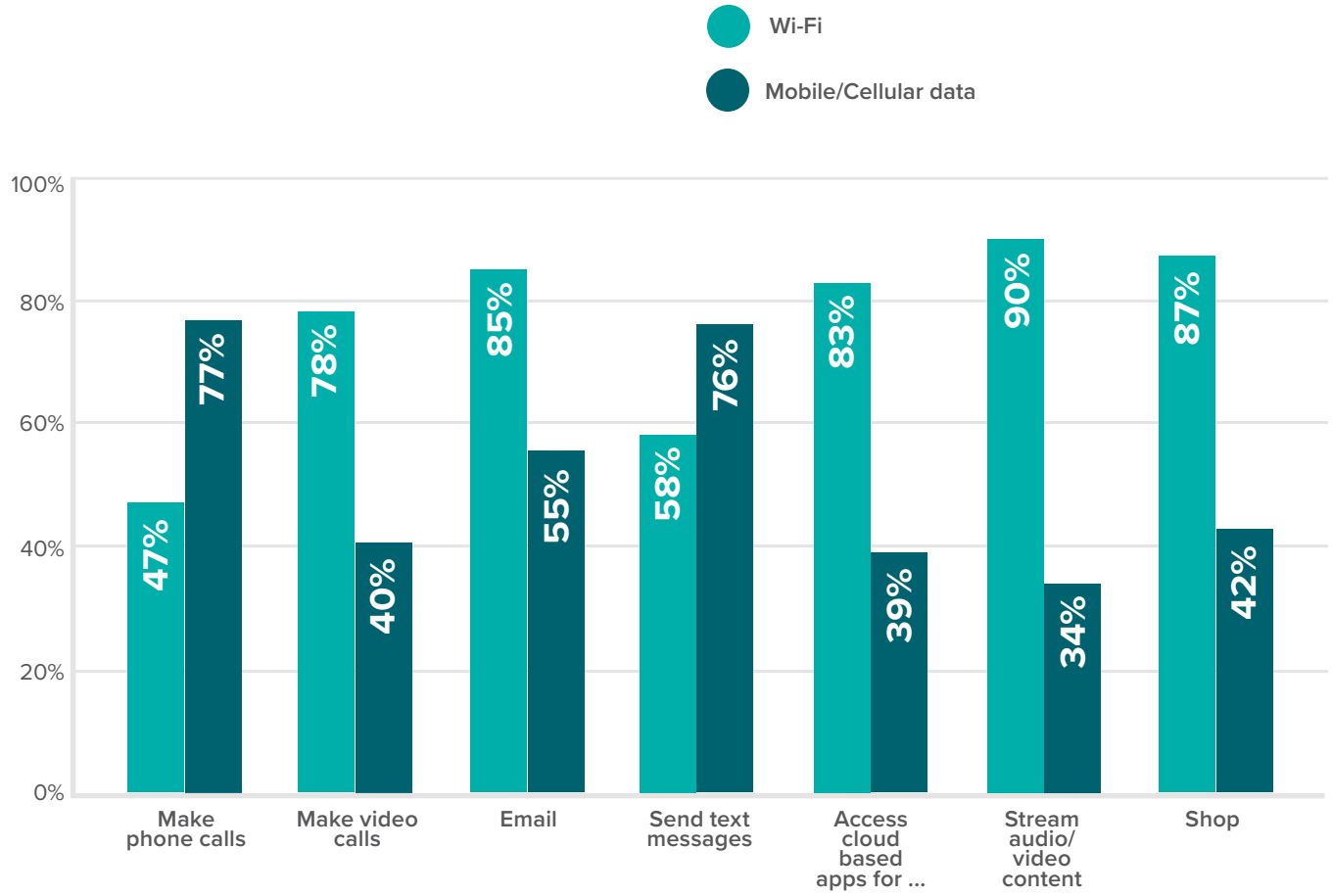
SURVEY QUESTION:

If given the option to connect to a Wi-Fi hotspot or use mobile data services, which would you use first?

Cellular/mobile data plan restrictions, greater reliability, and better performance are all reasons why mobile users prefer Wi-Fi over cellular. Specifically, Wi-Fi provides a better user experience for high-bandwidth activities, i.e. streaming video, accessing cloud services, and making video calls. And it is therefore no surprise that mobile workers are more likely to perform those activities over Wi-Fi than cellular/mobile data. For instance, when streaming audio and video content, workers are more than two and a half times more likely to use Wi-Fi than cellular.

SURVEY QUESTION:

Which of the following tasks do you regularly do while connected? (Tick all that apply)



Conclusion

All of these factors contribute to the widely shared view among mobile workers that without Wi-Fi they are lost. Nearly 60 percent of mobile workers find that they are unable to do some aspect of their job without remote access to Wi-Fi. Moreover, over one third of mobile workers lose somewhere between one and five productive hours per week when they are not able to get online. A smaller, but no less significant, number admit to losing more than five productive work hours per week.[10]

To be productive and happy, mobile workers need constant, high-quality connectivity. And to be globally competitive, enterprises cannot afford to ignore the connectivity requirements of their workers, as the impact of unproductive, disengaged employees can be the difference between business success and failure. Improving access can not only help enterprises recoup lost productive hours, it can also have the additional benefit of transforming disengaged employees into engaged, creative, satisfied, and ultimately more loyal employees.

1. Richard Esposito, RCR Wireless: 2017 Predictions: Mobile workforce to drive further enterprise change in 2017. Available at https://www.rcrwireless.com/20170104/opinion/2017-predictions-mobile-workforce-to-drive-further-enterprise-change-in-2017-tag10.
2. Richard Fry, Pew Research Center: Millennials surpass Gen Xers as the largest generation in U.S. labor force. Available at http://www.pewresearch.org/fact-tank/2015/05/11/millennials-surpass-gen-xers-as-the-largest-generation-in-u-s-labor-force/.
3. iPass: Mobile Security Report 2017. Available at https://www.ipass.com/research/ipass-mobile-security-report-2017/.
4. Ibid.
5. iPass: Mobile Professional Report 2017. Available at https://www.ipass.com/mobile-professional-report/.
6. Ericsson: Ericsson Mobility Report November 201. Available at https://www.ericsson.com/en/mobility-report/reports/november-2017.
7. Richard Esposito, RCR Wireless: 2017 Predictions: Mobile workforce to drive further enterprise change in 2017. Available at https://www.rcrwireless.com/20170104/opinion/2017-predictions-mobile-workforce-to-drive-further-enterprise-change-in-2017-tag10.
8. Alden Fertig, Ustream: 3 statistics that prove enterprise video is on the rise. Available at https://www.ibm.com/blogs/cloud-computing/2017/03/3-statistics-prove-enterprise-video-rise/.
9. iPass: Mobile Professional Report 2016. Available at https://www.ipass.com/research/ipass-mobile-professional-report-2016/.
10. iPass: Mobile Professional Report 2017. Available at https://www.ipass.com/mobile-professional-report/.

About iPass

iPass (NASDAQ: IPAS) is a leading provider of global mobile connectivity, offering simple, secure, always-on Wi-Fi access on any mobile device. Built on a software-as-a-service (SaaS) platform, the iPass cloud-based service keeps its customers connected by providing unlimited Wi-Fi connectivity on unlimited devices. iPass is the world's largest Wi-Fi network, with more than 62 million hotspots in more than 160 countries and territories where iPass customers have connected successfully at airports, hotels, train stations, convention centers, outdoor venues, inflight, and more. Using patented technology, the iPass SmartConnect™ platform takes the guesswork out of Wi-Fi, automatically connecting customers to the best hotspot for their needs. Customers simply download the iPass SmartConnect app to experience unlimited, everywhere, and invisible Wi-Fi.

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