

Cellular in the Workplace Survey, 2017

Connectivity issues are widespread

Data shows impact on stress levels,
productivity and company reputation

Our smartphones and tablets are more than just conveniences. They are vital tethers, keeping us connected to those people and things most important to us. They are key work tools for productivity and communication. They allow us to make phone calls, check emails, send messages, and video chat. The problem is, that for many of us, because we spend most of our time working at jobs that keep us indoors, the connectivity that we rely on for essential everyday tasks, such as client communication, accessing internal applications, isn't very reliable.

The modern office building, hospital, retail establishment, or hotel is too often where cellular signals go to die. The nature of cellular signals, combined with modern building techniques, leaves many of us leaning against a window hoping to grab enough signal to make a quick call home or connect with a client.

It's all too common a problem, but we were curious who employees blamed when it occurs, because the source of the issue is likely not whom most think it is. The landscape in the mobile world is shifting. Until just a few years ago, carriers made the investment in distributed antenna systems that boosted indoor cellular signal for their customers in certain venues, like sports arenas, large office complexes and airports. But, with the proliferation of mobile devices, it's all the carriers can do to keep up with the demand on their outdoor networks. They don't have the

time or the money to invest in indoor signal amplification. That responsibility has now fallen to the building's owner or manager or the enterprise, especially if the business owns its own facility.

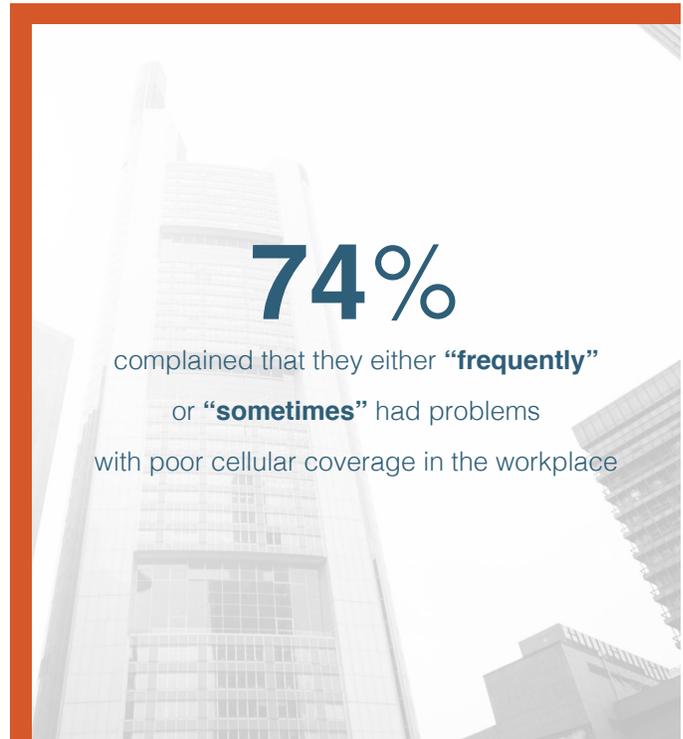
The problem is, not many businesses know where the responsibility lies. And if they don't know that indoor signal amplification is up to them, then it's a good bet the employees who work in those buildings probably don't know it either. That was our thought, at least. And it was one we wanted to test - so we asked.

We surveyed 1,000 office workers in the United States to determine how often they have trouble with indoor cellular coverage at work, and, when it does happen, who they blame.

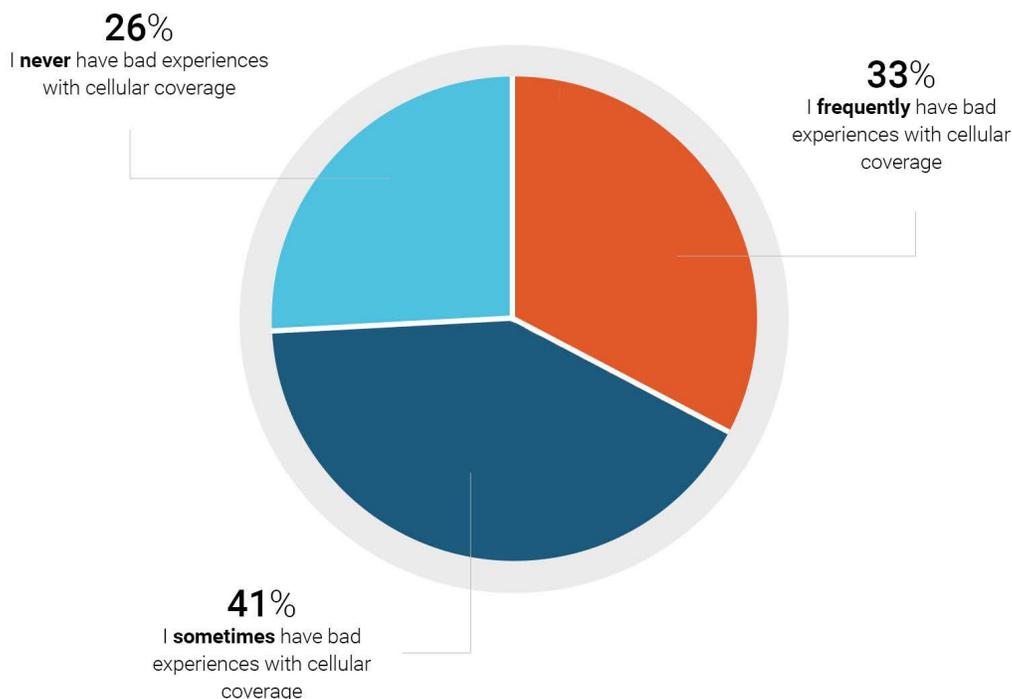
Here's what we found.

Most employees have trouble with in-building cellular coverage

Overall, we learned that the problem of poor cellular coverage is widespread. Of the 1,000 U.S. office workers surveyed, 74 percent complained that they either “frequently” or “sometimes” had problems with poor cellular coverage in the workplace. The survey panel included office employees of a variety of ages who work in a variety of commercial buildings, ranging from urban office buildings to retail shopping centers, industrial facilities and medical buildings.



In-Building Wireless Employee Experiences



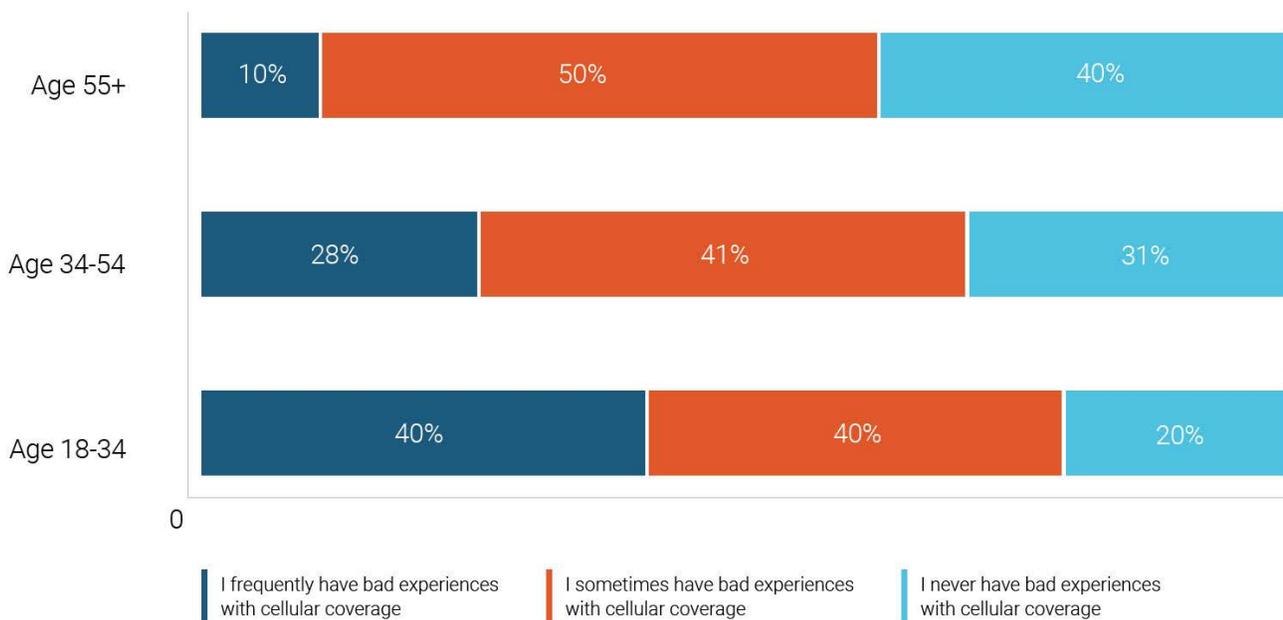
Millennial employees are more likely to complain about poor coverage

While the problem of unreliable coverage was fairly widespread, not every employee is inclined to say something when the coverage becomes spotty. Actually, millennial office workers, those between the ages of 18 and 34, are 68 percent more likely to complain of “frequent” problems with cellular coverage in the workplace than their coworkers.

There are a couple of factors that likely contribute to that number. Many younger workers haven’t lived through a time when cellular coverage, even outdoors, wasn’t nearly 100 percent reliable. For workers even just a few years older than the millennials, they can recall a time when the cellular network wasn’t as ubiquitous as it is now. Therefore, dealing with a weak or nonexistent signal, while far from ideal, isn’t an unfamiliar idea.

The second factor is that these younger workers live a much more online life. Data access and the capabilities that come with it are woven into their everyday. That makes them much more reliant on access to mobile data and much more likely to notice when it’s not there.

Millennial Employees Coverage Complaints



Healthcare and hospitality workers were among the most frequently frustrated

While we asked employees in a variety of industries whether or not they had frustrations with indoor cellular coverage, it was the workers in healthcare and hospitality who overwhelmingly said “yes.”

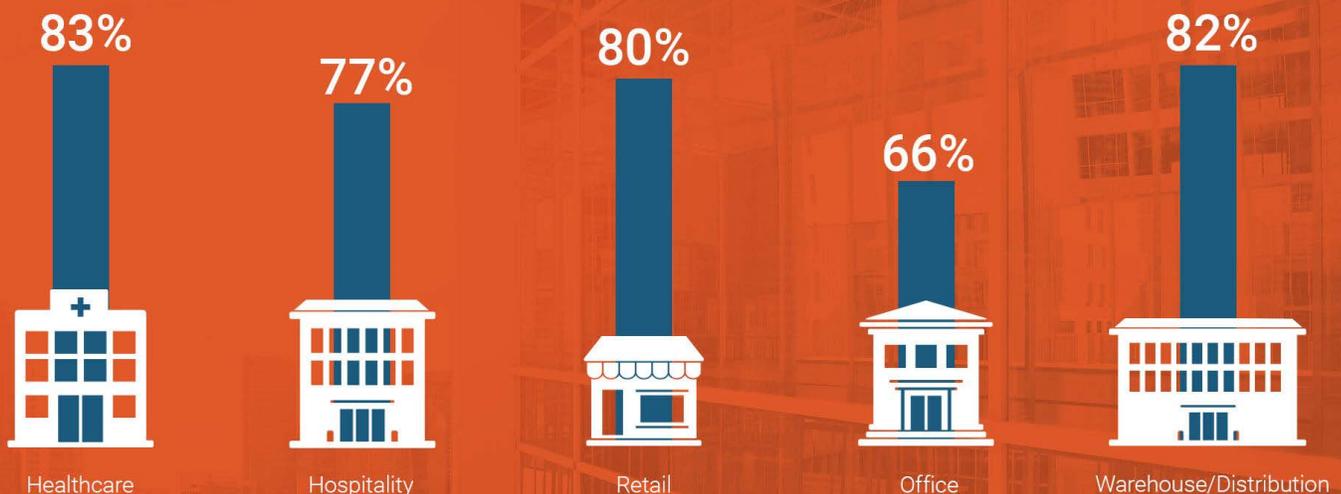
Healthcare workers led the pack with 83 percent of them saying they deal with poor cellular coverage at least some of the time. For the hospital or regional care center, inconsistent coverage should be troubling.

Because doctors and other specialists are able to be more particular about where they practice, not being able to receive a consistent cellular signal can be a real disincentive to choose a work location. Fewer doctors choosing to practice at a given hospital could lead to fewer patients.

Hospitality workers dealt with poor indoor coverage at a similar rate as those in healthcare: 77 percent. And that should be a concern for hospitality businesses because poor cellular coverage isn't selective. If your employees are noticing trouble connecting, then your guests are definitely experiencing it too.

Frequently or sometimes have bad experiences with cellular coverage

Healthcare and hospitality workers were among the most frequently frustrated



Warehouse/distribution workers lose productivity due to poor cellular coverage

Workers within warehousing and distribution jobs also reported difficulty with in-building connectivity. This group reported the highest level of frustration. More than 45 percent of respondents reported “frequent” problems connecting.

Overall, 82 percent of warehouse/distribution workers reported some level of difficulty connecting. Where these employees differed with counterparts in other industries is many of them still seemed to consider it a carrier problem. Nearly 40 percent said that they blame the carrier when they had trouble completing a call.

Where warehouse/distribution seemed to differ slightly from other employees was how they handled the difficulty in making calls. Many, 32 percent, said they were forced to go outside to make calls, and 41 percent said that the connectivity issues increased their stress levels. Those two numbers together could point to productivity issues. Obviously, an employee away from his or her desk or work station is one that’s not producing for the company. But stressed employees aren’t efficient employees either. Left unaddressed, indoor-cellular connectivity issues could be costing warehouse and distribution companies money in employee time.

How Poor Cellular Coverage Affects Warehouse Workers



41%
feel more stressed



26%
feel their productivity
decreases



32%
are forced to make
work calls outside of
the building

People are beginning to look beyond the carrier when laying blame for poor indoor coverage

In the past, a building or business owner could shrug shoulders and point to the carriers when employees complained about spotty indoor cellular coverage. As was pointed out earlier, that's changing. Carriers are passing the responsibility of better indoor coverage off to the building owner. And, according to our survey, so are the people who are complaining.

Maybe the most revealing result came, again, from millennials. They are 58 percent more likely to blame their employer when there's a connectivity issue.

That's a number that all employers should make a note of because it will only grow. The coming generations are going to be more

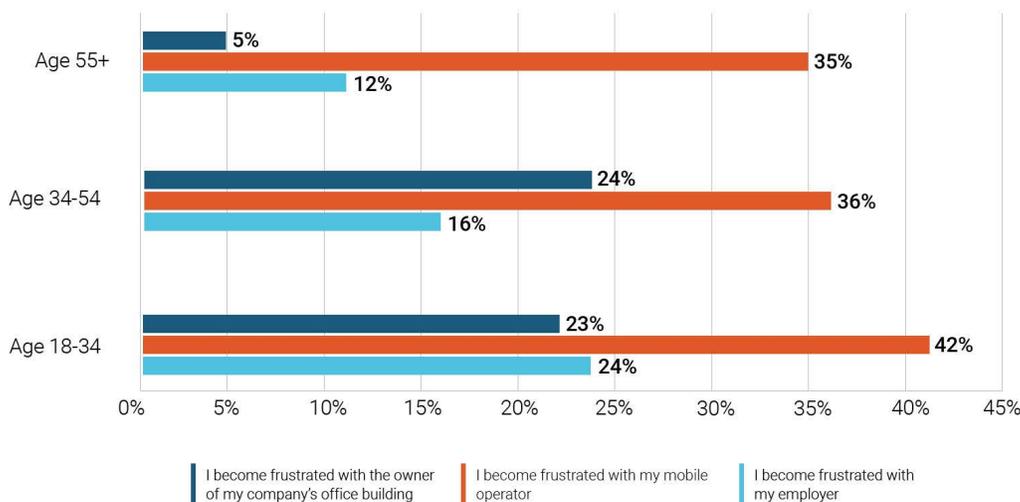
connected, and those generations are getting ready to enter the workforce.

Uninterrupted indoor cellular signal is going to be the expectation, and those younger generations aren't going to work in buildings, or for employers, who can't provide connectivity.

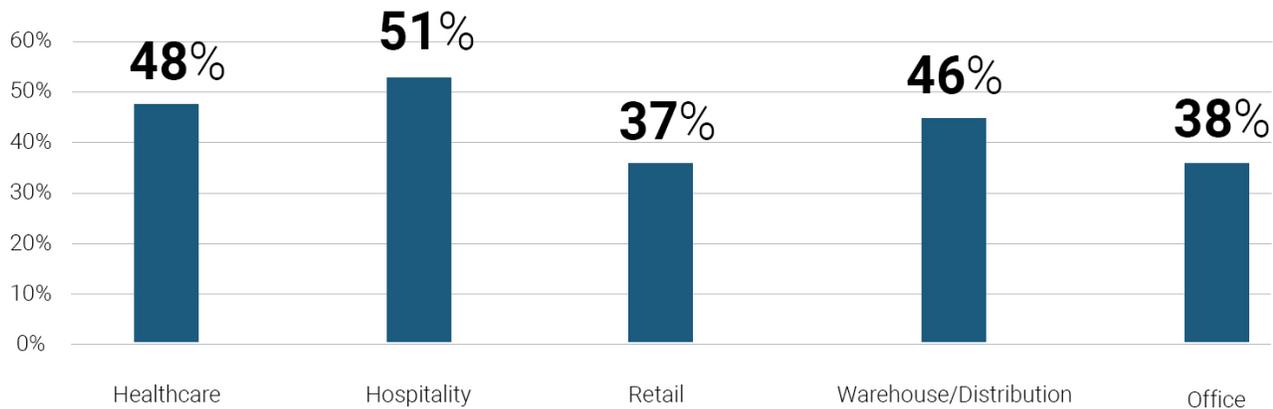
Healthcare and hospitality employees are also starting to look toward employers and building owners to fix the problem of poor indoor coverage. Forty-eight percent of healthcare workers blame someone other than the carrier for poor coverage. And more than half of hospitality workers, 51 percent, blame someone other than the carrier.

We expect that year-after-year those numbers will grow. Increasingly, employees and customers will realize the burden on indoor coverage is no longer on the carriers and they will start making life decisions—like where to work, where to shop, and where to play—based on where they can get the most reliable coverage.

Where Blame Falls for Cellular Issues, by Age



Percent of Workers that Blame Someone Other than their Carrier for Poor Cellular Coverage, by Industry



Solving for indoor connectivity

Connectivity and boosted radio signals are only going to become more critical as we move forward. It's not just about being able to make phone calls, but allowing employees to work in the manners they choose. It's about allowing them to find the technologies they need to work most productively and making those technologies usable in the workplace.

It's also about more than just employee productivity. By boosting indoor cellular signals, businesses are well positioning themselves for the technologies that are quickly coming.

For example, location services that will allow shopping malls to track where specific shoppers are in their buildings and push appropriate advertising content to them, and technologies that allow for machine-to-machine communications in manufacturing centers are at the heart of boosted productivity and the Internet of Things.

The right in-building connectivity solution, as long as it's spectrum and technology agnostic, can not only ensure employees have the connectivity they expect today, but also provide businesses the infrastructure they need to support the technologies of tomorrow—a necessary component in ensuring ubiquitous coverage.

About Zinwave

Zinwave's UNItivity platform is the only truly future-proof, universal wireless access solution on the market. UNItivity's unique wideband architecture breaks the cycle of endless DAS upgrades because it supports any frequency from 150 MHz to 2700 MHz, accommodating current and future wireless services without hardware upgrades. In addition, UNItivity's streamlined, all-fiber architecture makes it more reliable and much easier to install than traditional DAS solutions. Zinwave has a global customer base. For more information about Zinwave, please visit www.zinwave.com.