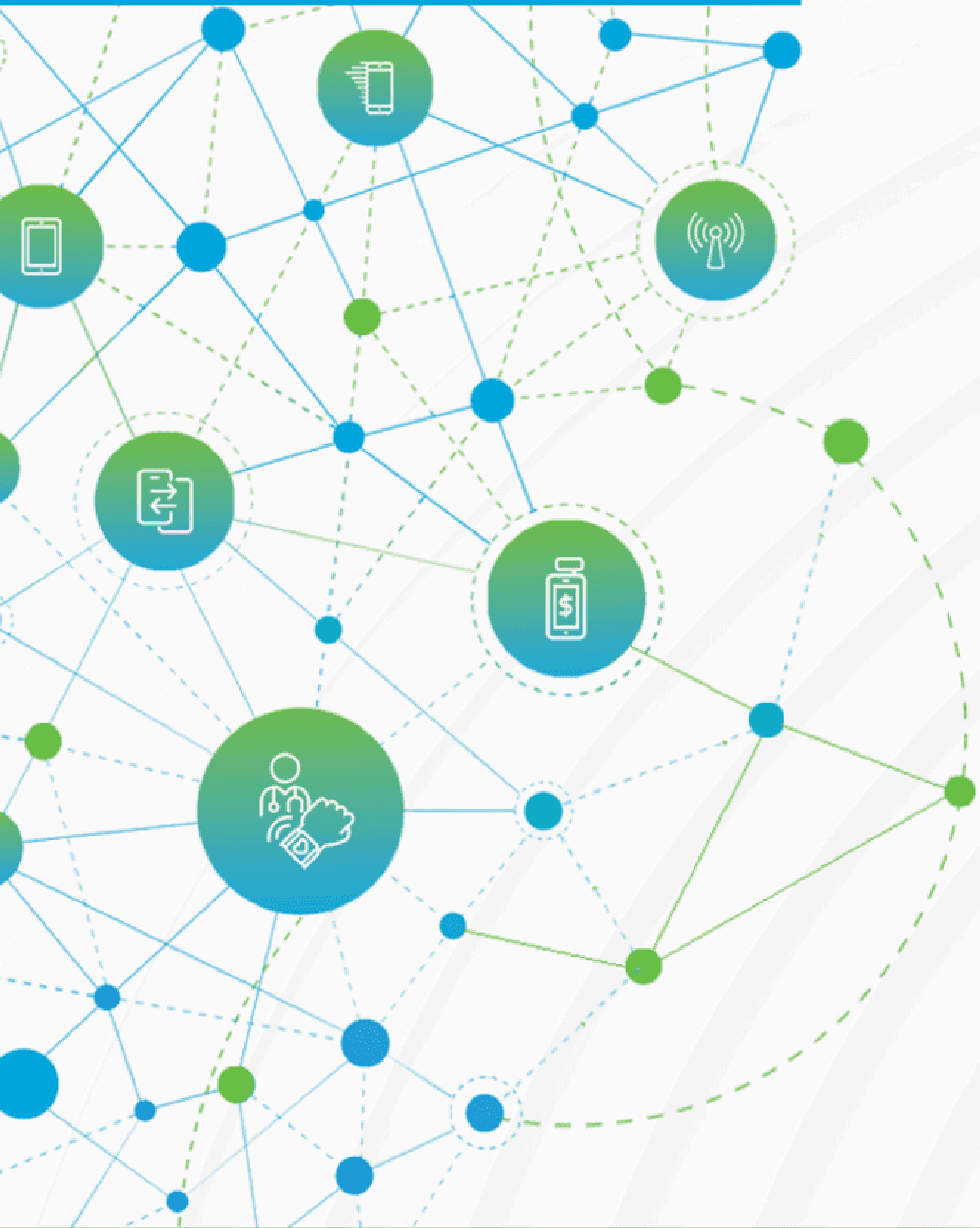


2022 Enterprise Mobility Outlook

Research shows most organizations are behind on mobile-driven digital transformation

Data and Analysis Provided by Hanover Research

Executive Summary

Where Are Organizations in Their Mobile-First Journey?

The pandemic hyper-accelerated digital transformation initiatives in every kind of industry. Solutions were needed—practically overnight—for remote work, contactless transactions, logistics, at-home learning, telemedicine, automation to lessen the impact of labor market shortages, and much more. The speed at which transformation happened shook up a lot of past assumptions about how quickly technology can be implemented and adopted. It also put a spotlight on the many advantages of mobile tech, like higher productivity, increased efficiency, nimbleness, and improved user experiences.

The benefits are so evident that organizations are adopting mobile-first—or mobile-only—principles that put mobility at the heart of strategy, operations, and the user experience. With 5G now widely available, new use cases like augmented reality, enhanced communications, and more sensor-based systems mean that mobile-driven digital transformation will speed up over the next few years.

As an enterprise mobility leader with a history of innovation, Stratix conducts research every year on emerging trends. In this year's Enterprise Mobility Outlook, we wanted to see where organizations are in their mobile-first journey and what might be holding them back. We partnered with Hanover Research, surveyed a broad sample of company leaders and IT decision-makers across a wide range of industries to get a comprehensive picture.

The Self-Perception is Quite Different from the Reality

With this year's research, we wanted to get a sense of where organizations think they are on mobile-driven digital transformation vs. how they scored on a battery of questions designed to reveal their true status. The results were quite interesting—with a wide gap between self-perception and reality.

It's significant because it shows many organizations have yet to fully understand what it is to be mobile-first and the benefits. Many consider themselves mobile-first because they use mobile devices in some workflows but have yet to wrap their arms around a holistic mobile strategy that drives far greater benefits.

Other Findings Show How Devices are Used and the Challenges Organizations Face

The 2022 Stratix Mobility Outlook report also examines practices around mobile solutions in organizations to see what's working and what isn't—including how they're distributed and maintained. We found many common challenges.

- The overwhelming majority of enterprises provide corporate-owned mobile devices to employees when they're required for their jobs. Only 14 percent have Bring Your Own Device (BYOD) policies—despite all the buzz around BYOD in recent years. Using personal devices in the workplace does bring security concerns, and employees often don't want to give employers the control necessary to improve security, citing privacy uneasiness.
- Many industries—especially retail—use shared device strategies but are re-thinking how they do it because of significant management issues—such as getting the devices back to the charging cradle and hiccups with check-in/check-out processes, etc.
- Off-the-shelf technology is rarely an option for enterprises, with two-thirds saying they need very or extremely customized devices. Because it allows more customization and a wider range of device types—including rugged—the Android operating system is the leading choice for enterprises. Still, iOS is only 12 percentage points behind and popular with end users who have Apple devices in their private lives and are familiar and comfortable with how they work.

2022 Enterprise Mobility Outlook Analysis

Stratix Senior Vice President of Marketing Elizabeth Klingseisen shares some of the most interesting findings from this year's research.

Listen to Podcast >

- Very few enterprises have internal repair capabilities, so maintenance usually involves a Mobile Managed Services Provider (MMSP) or an OEM relationship.
- While most organizations have in-house teams for mobile technology, they face challenges managing it like repair, endpoint management, and device tracking. The majority have some degree of difficulty staffing their IT teams with qualified people.

Enterprises Have a Long Way to Go

While the pandemic dramatically sped up the pace of digital transformation at enterprises across the entire range of industries, the 2022 Enterprise Mobility Outlook shows just how much remains to be done. With constant disruption now the "new normal" in business and exciting opportunities for organizations to get a leg up on competitors with 5G, this year's report card on enterprise mobility offers notable data and conclusions. Read on as we dig into the details.

How We Did the Research

The Methodology

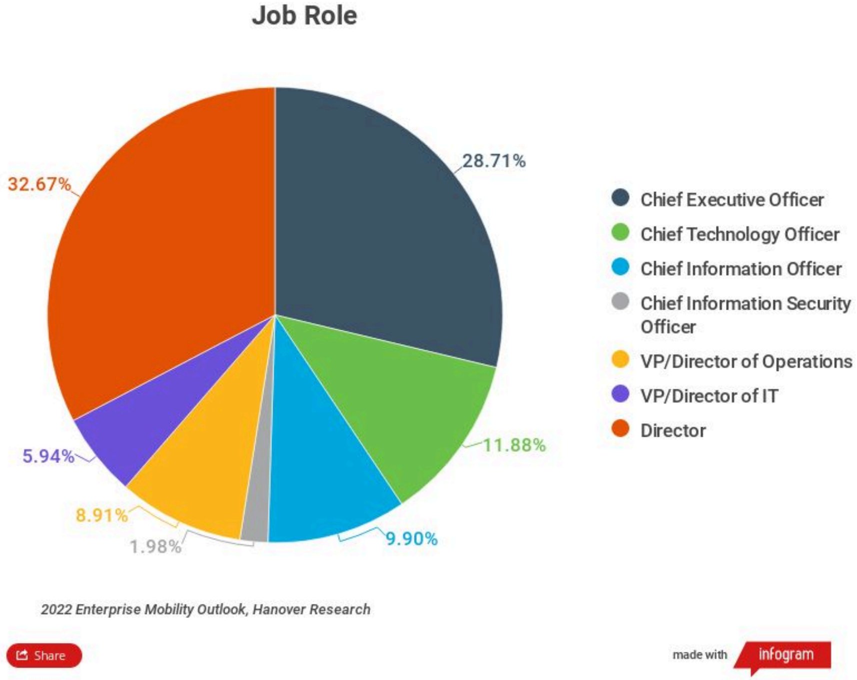
To accomplish our research objectives, Hanover used an online quantitative survey to gather information from 291 qualified participants. Responses to the survey questions are calculated at a 95 percent confidence level.

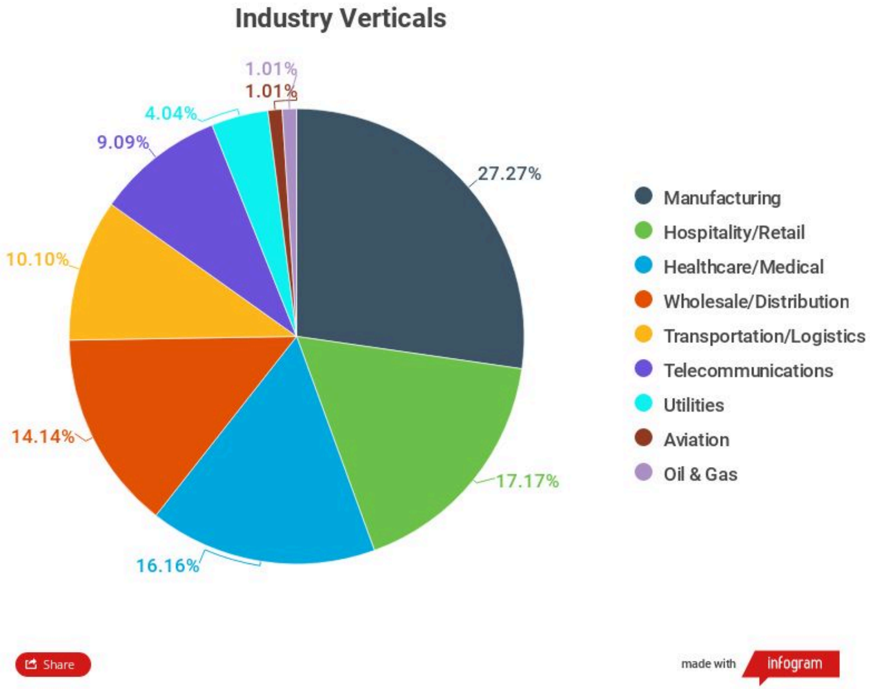
Respondent Profile

Acceptable survey respondents were from enterprise organizations with over 3,000 employees that currently utilize mobile technology in their organization.

To ensure our respondents were knowledgeable about the implementation and management of their mobile solutions, they also had to be involved in the decision-making process for the purchase of technology and IT solutions/products at the organization. Their job roles spanned IT and operations, with all respondents at director level and above (see figure 1.1).

Figure 1.1





To further focus our research on organizations that leverage mobile at the point of transaction, we ensured respondents fell into one of these industry verticals:

- Aviation
- Manufacturing and supply chain
- Grocery
- Hospitality
- Healthcare (in-home care)
- Retail
- Restaurant
- Telecommunications
- Transportation and logistics
- Oil and gas
- Utilities (gas/water/sewage/garbage)

Survey respondents that did not fit the qualification criteria were eliminated from the survey.

Key Segmentations

In previous studies, we've found it valuable to make comparisons across industries to identify trends and differences that inform our overall understanding.

We grouped our respondents into four "vertical" categories for this comparative approach (see figure 1.2):

Figure 1.2

Vertical Categories	
Field services (healthcare, telecoms, and utilities)	**26%**
Manufacturing and supply chain	**27%**
Retail (grocery, hospitality, restaurant, retail)	**22%**
Transportation (aviation and transportation)	**25%**

Key Questions We Set Out to Answer

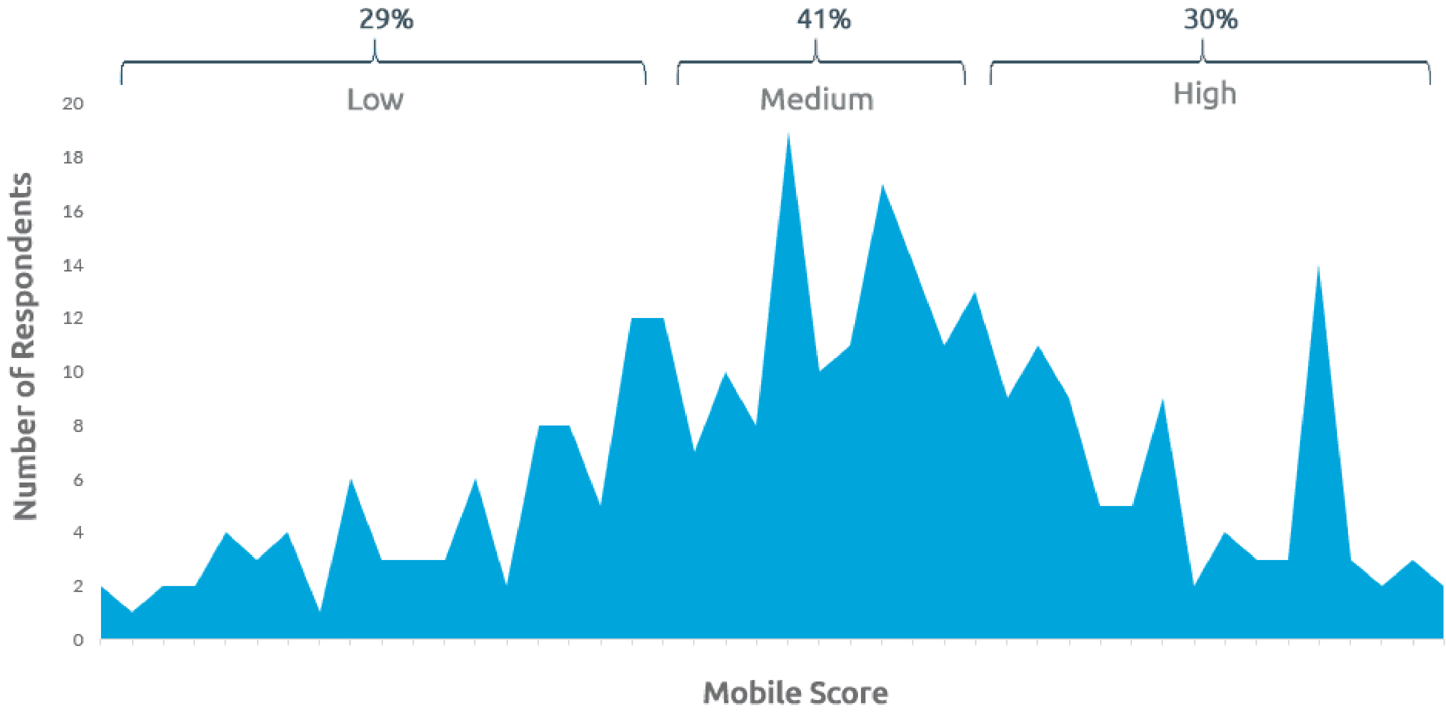
With the research, we wanted to get a complete picture of where organizations are in their mobile-first journey, so we set out to answer these key questions:

- How pervasive is mobile in organizations currently, and what are the use cases?
- What are the predominant device ownership and usage classifications?
- How are shared devices used and supported?
- In our 2021 survey, there were indications that organizations were moving away from shared device strategies, so we looked to see if that trend is continuing and—if so—what's the new plan?
- How comfortable are organizations managing mobile technology and all the challenges and nuances inherent with large-scale solutions?
- How are organizations structuring their overall mobile strategy? Is it unified or fragmented?
- What are the primary barriers to adopting a mobile-first strategy (i.e., expertise, resources, prioritization, etc.)?
- Who holds the decision-making authority?
- Where do organizations self-identify on the mobile-first strategy spectrum, and where do they actually fall?

The Stratix Mobile-First Score

There's a Significant Gap Between How Organizations See Themselves and the Reality

Figure 2.1: Mobile-first Score



New for this year in the Stratix Enterprise Mobility Outlook is our Mobile-First Score, which looks at how organizations rank on a series of questions designed to dig into their mobile-driven digital transformation progress. We assessed an enterprise's total "score" and then normalized the distribution across low, medium, and high (see figure 2.1).

While more than half describe themselves as mobile-first, and another 41 percent as somewhat mobile-first, only 29 percent have a high Mobile-First Score, and 41 percent come in at medium.

What Does Mobile-First Look Like?

The gap between the self-perception and the Mobile-First Score shows that a majority of organizations aren't fully leveraging mobile-first principles that put mobility at the heart of strategy, operations, and user experiences. The benefits include higher productivity, increased efficiency, nimbleness, happy end users, and delighted customers. Organizations that have embraced the philosophy stand out in three key areas:

1. Mobile is Central to Strategic Decision-Making

Thinking about how IT solutions fit into the mobile environment should be a key consideration in decision-making. That decision-making should be centralized so that leaders can leverage a holistic view of the entire organization to see where there are opportunities for scale, potential savings, and increased efficiency. The percentage of total IT spend on mobile helps show the level of commitment to mobile-first solutions.

2. The Organization Has a Comprehensive Understanding of its Mobile Environment

Another key component of being mobile-first is how well organizations comprehend their mobile environment at a holistic level so they can proactively manage it, track device inventories/status, and forecast future needs. Without that big-picture strategy, there can be security breakdowns, inefficient change management, poor ROI because of a lack of visibility/accountability, and incorrect forecasting of future needs.

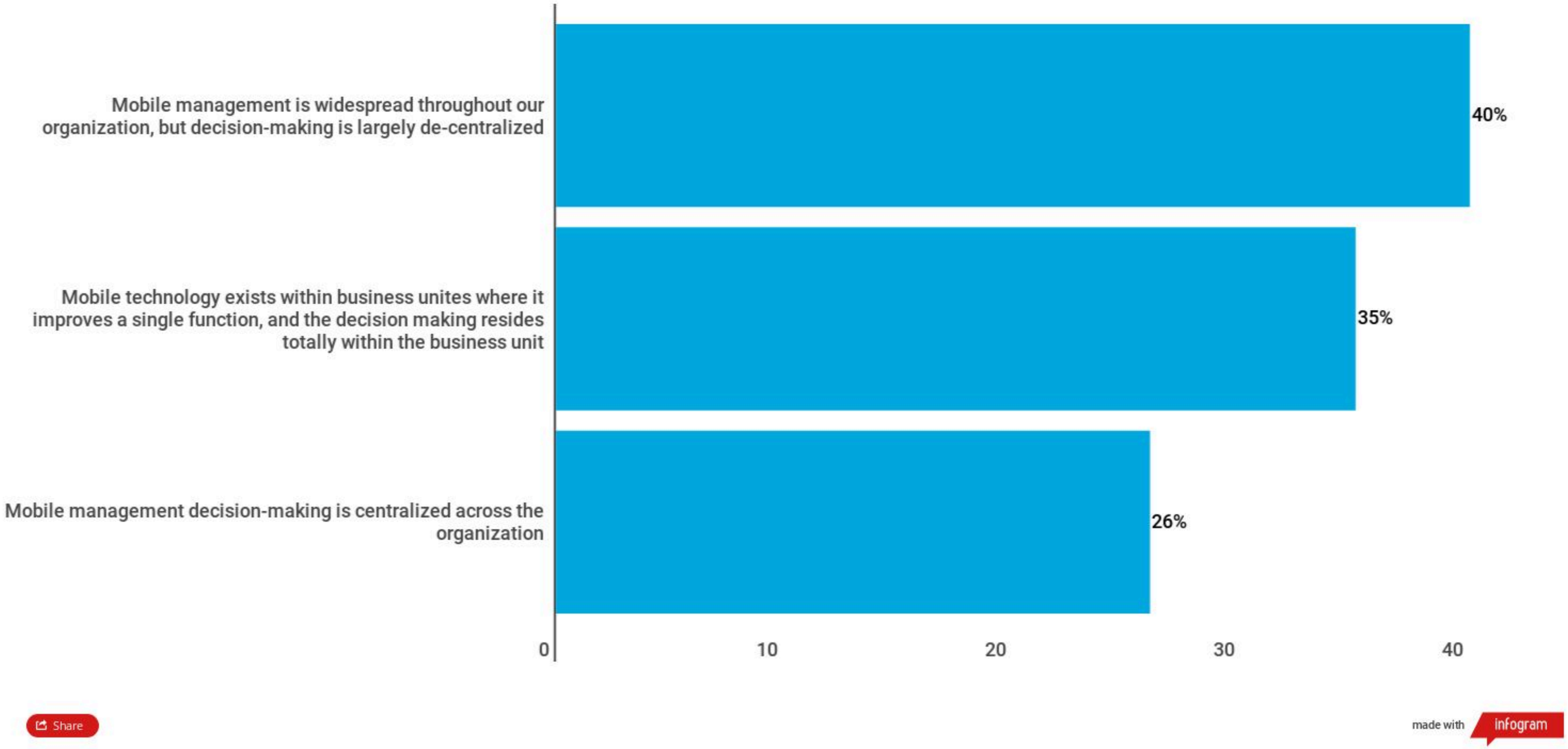
3. Proactive Digital Transformation

Mobile-first organizations proactively and thoughtfully examine workflows and existing technology for opportunities to improve. That can be migrating workflows to mobile, making legacy data and applications available from anywhere and any device, or increasing the number of employees using mobile when it can improve their productivity and user experiences.

How Mobile-First are Organizations?

To rank participants on our Mobile-First Scale, we looked at the progress organizations have made towards adopting its fundamental tenets.

Figure 2.2: How Embedded Mobile Management is in Strategy and Decision-Making



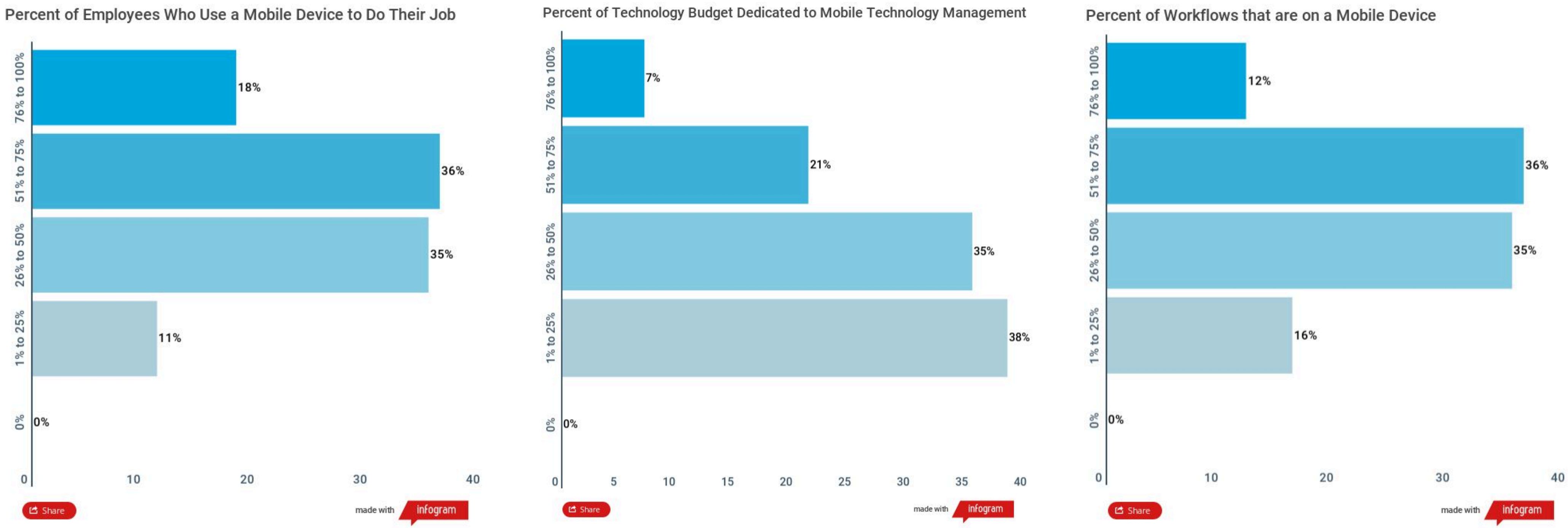
1. Centralized Decision Making on Mobile Management

The data shows that while organizations reported mobile management is widespread, it's almost all decentralized or done within business units instead of centralized across the organization (see figure 2.2).

Without a centralized strategy for mobile, organizations are missing strategic opportunities around scale, such as cost savings when similar devices can be used for multiple workflows—or volume discounts when buying for multiple business units simultaneously. There are additional advantages of being able to save in soft cost areas as well—such as employee training time, smaller spare pools, simplified management, security, and pushing out updates.

The amount spent on mobile is also a leading indicator of the importance and focus of the overall mobile-first strategy. Ideally, it should be a reflection of the percentage of employees that rely on mobile to do their job and the number of workflows that are embedded on mobile—but here's where we see some misalignment in our survey responses (see figure 2.3).

Figure 2.3

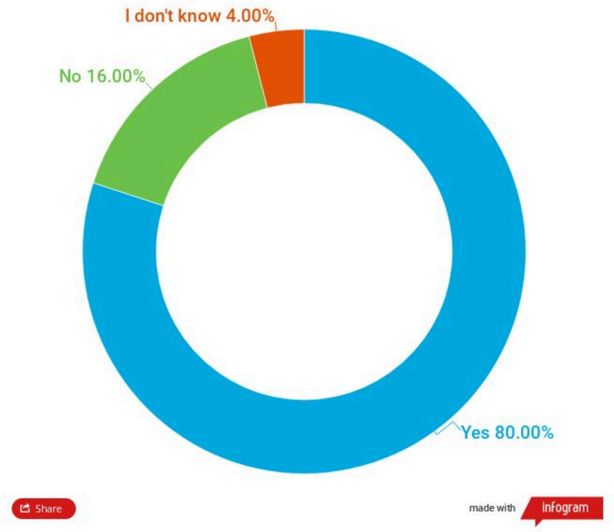


2. Comprehensive Understanding of the Mobile Environment

Organizations use a patchwork of platforms to manage their mobile environments, which can hamper their ability to get the holistic view they need to craft the best strategies.

The report found most organizations are leveraging automation to enroll, manage, and protect devices (see figure 2.4).

Figure 2.4: Use a Comprehensive Management Platform



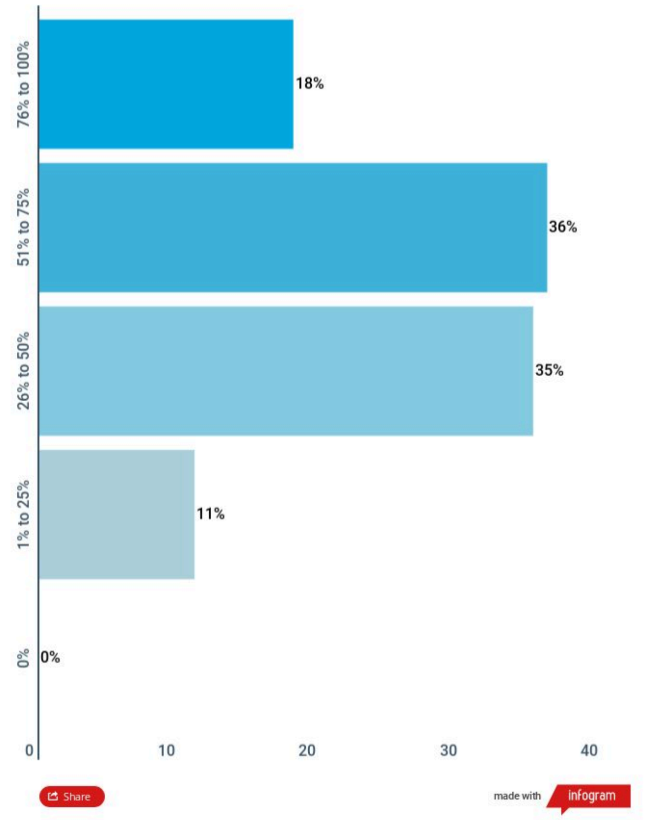
But while the vast majority of organizations are using endpoint management solutions, over 30 percent still struggle with multiple platforms and other inefficiencies. As most Enterprise Mobility Management platforms give you the ability to administer any endpoint from one solution, doing it on multiple platforms is a lost opportunity for security gains along with increased efficiency and improved change management.

Eighty-eight percent of organizations report that they can track and monitor their mobile device inventory, but their tools, automation, and analytics capabilities are much less clear. You can see that in the data when they report an inability to forecast their needs for new devices and device repairs for the coming year. If organizations truly could look at their device performance and analyze and track in real-time with automated asset management tools, these numbers should all align. It's an opportunity for organizations to get significantly better at managing their mobile environments.

3. Proactive Digital Transformation

The survey also looks at how organizations are evolving and pivoting to mobile solutions to improve productivity and user experiences. Very few give the majority (75% or more) of their employees a mobile device to do their job (see figure 2.5).

Figure 2.5: Percent of Employees Who Use a Mobile Device to Do Their Job



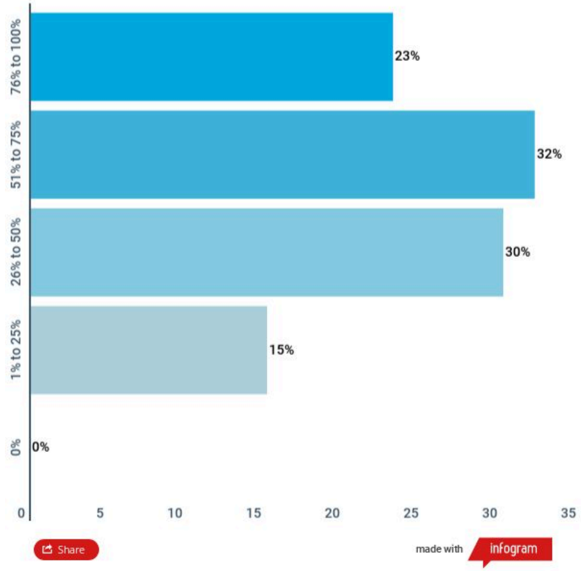


Figure 2.6: Percent of Employees Who Can Access Data From Anywhere on Any Device

Only a quarter of organizations have enabled their workers to access all the things they need to do their jobs from anywhere and any device (see figure 2.6).

That number is even worse if you look at legacy data, which has long been a challenge in digital transformation. Only 12 percent of employees can access what they need on mobile devices. If a worker has good mobile tools in some areas but routinely has to go back to a desktop to use a siloed legacy application for other workflows, that's a significant problem (see figure 2.7).

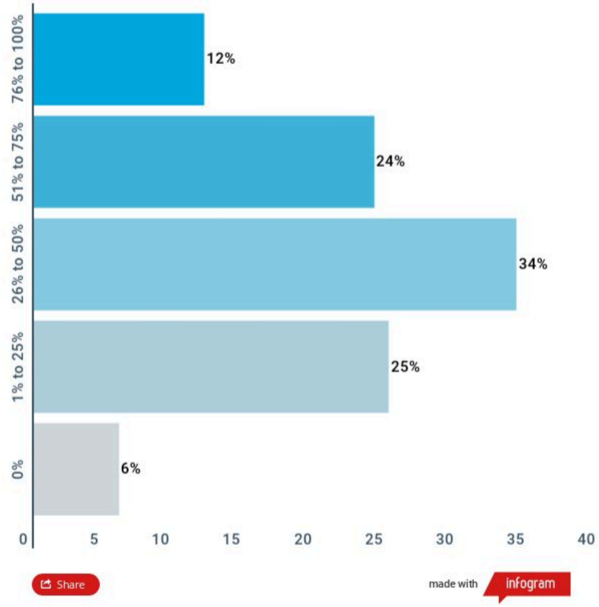


Figure 2.7: Percent of Employees Who Can Access Legacy Data

Perhaps more significant in terms of the mobile-first evolution is how actual business process enhancements are lagging—and that could be the key to why more of the workforce is not 100 percent mobile. Very few organizations have migrated their workflows to mobile in the last three years. When you consider that in the context of the pandemic and the significant shift to remote operations, it's a surprising statistic (see figure 2.8).

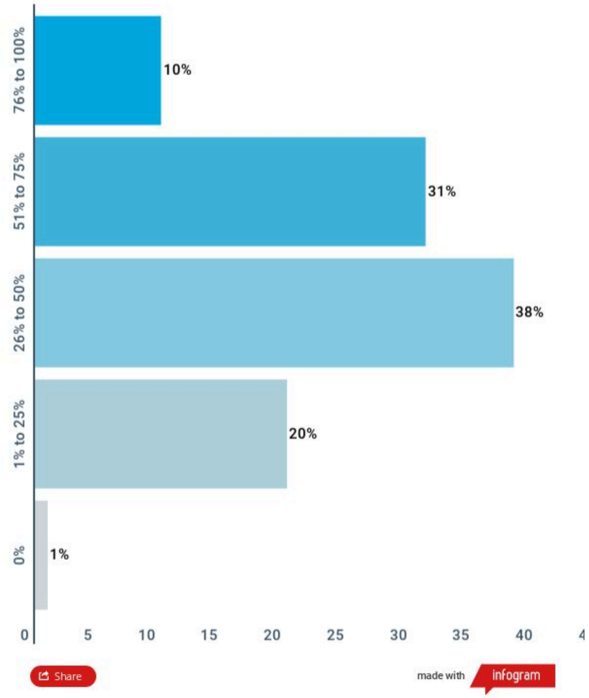


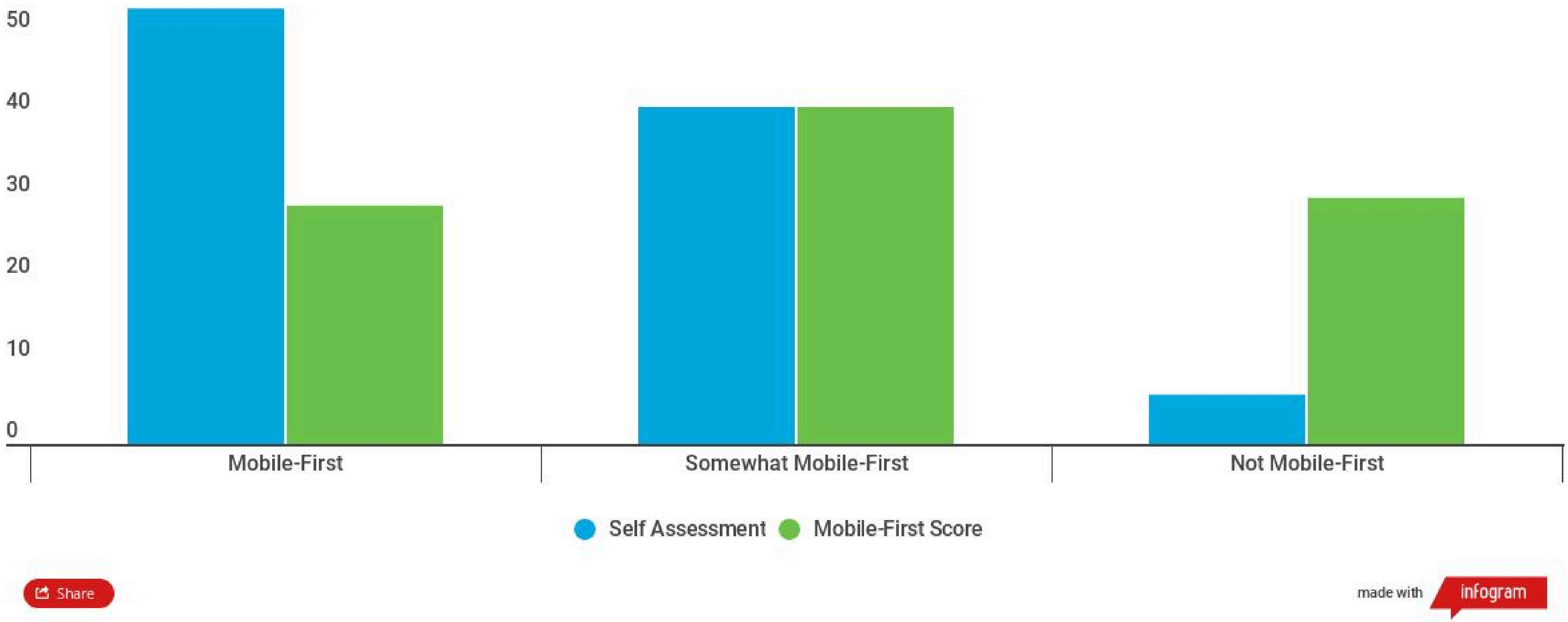
Figure 2.8: Percent of Workflow that Has Moved to Mobile Device in the Last 3 Years

It's expected that field services would rank high on mobile-first because you have to be mobile

Mobile-First Self Perception is Exaggerated

Clearly, our respondents—on the whole—are more likely to describe themselves as mobile-first than they truly are, and that's likely a self-serving bias. Rather than an equally distributed curve, 53 percent say they consider themselves Mobile-First when, in actuality, only 29 percent are (see figure 2.9).

Figure 2.9: Mobile-First Self Perception



When we compare the self-assessment with the actual score on an individual level, it's apparent that organizations who are low on the self-assessment are much more likely to be accurate than those who are medium. The least likely to be right are the high scores (see figure 2.10).

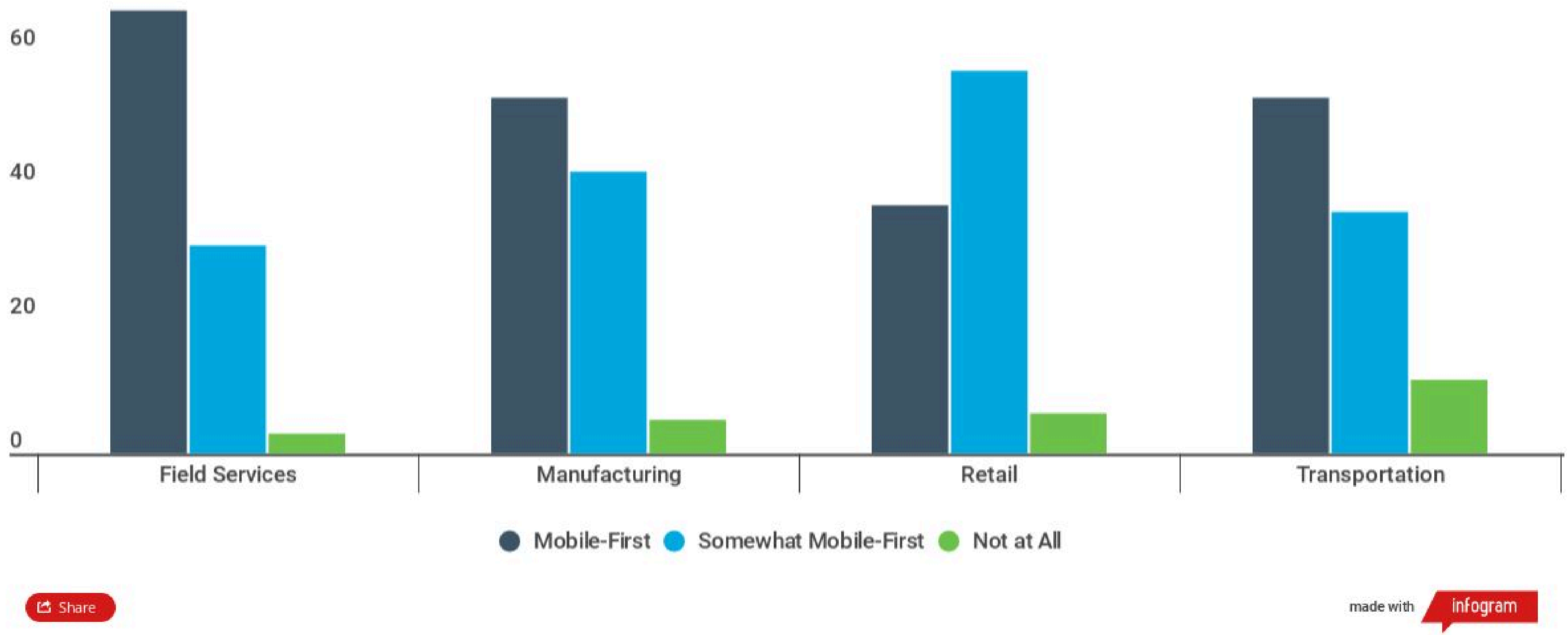
Figure 2.10: Mobile Score Vs. "Mobile-First"

	Total	Not Mobile-First	Somewhat Mobile-First	Mobile-First
Low (0 - 39)	30%	61%	34%	23%
Medium (40 - 49)	41%	33%	50%	35%
High (50 - 64)	29%	6%	15%	42%

Self-Assessment Breakdown by Industry

Retail organizations are significantly less likely to describe themselves as mobile-first than field services, manufacturing, or transportation (see figure (2.11).

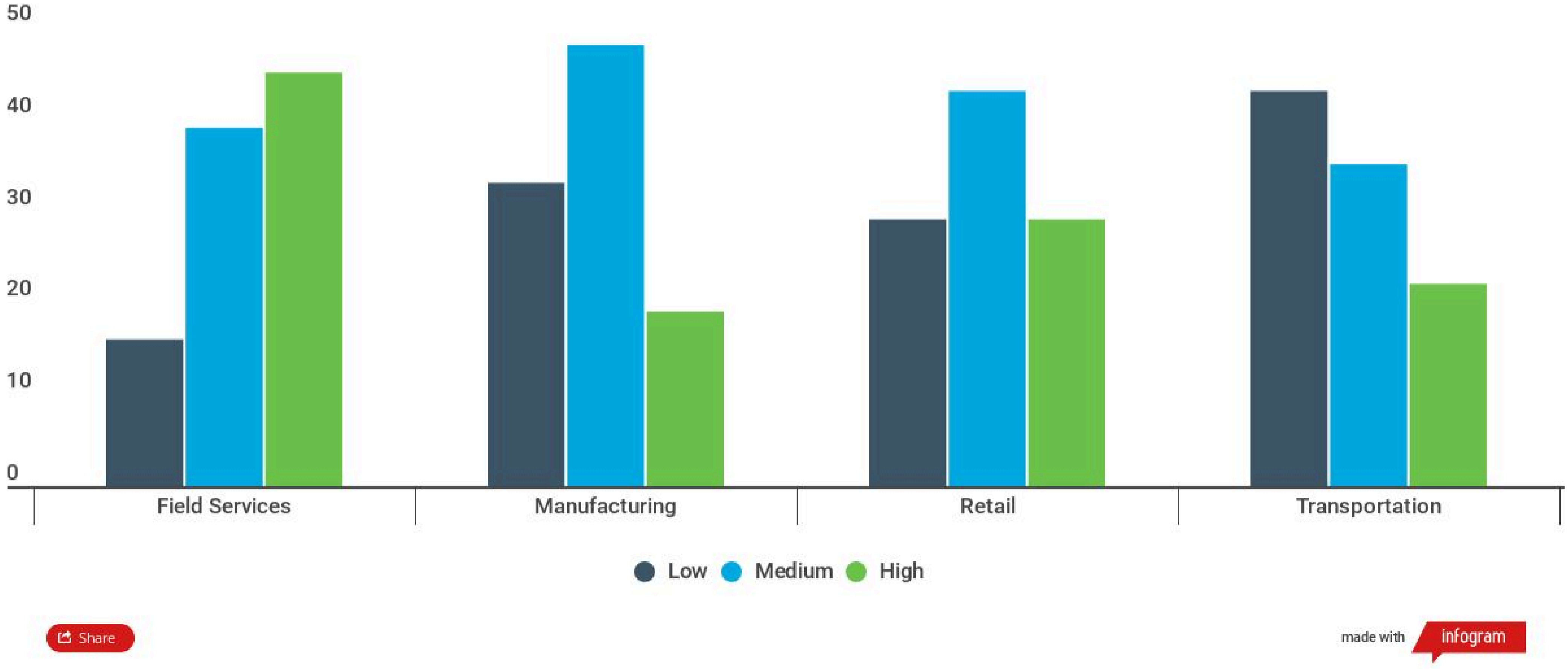
Figure 2.11: Self-Assessment Breakdown by Industry



Mobile-First Score by Industry

Of the four groups, field services has significantly higher Mobile-First Scores than manufacturing, retail, and transportation (see figure 2.12).

Figure 2.12 Mobile-First Score Industry

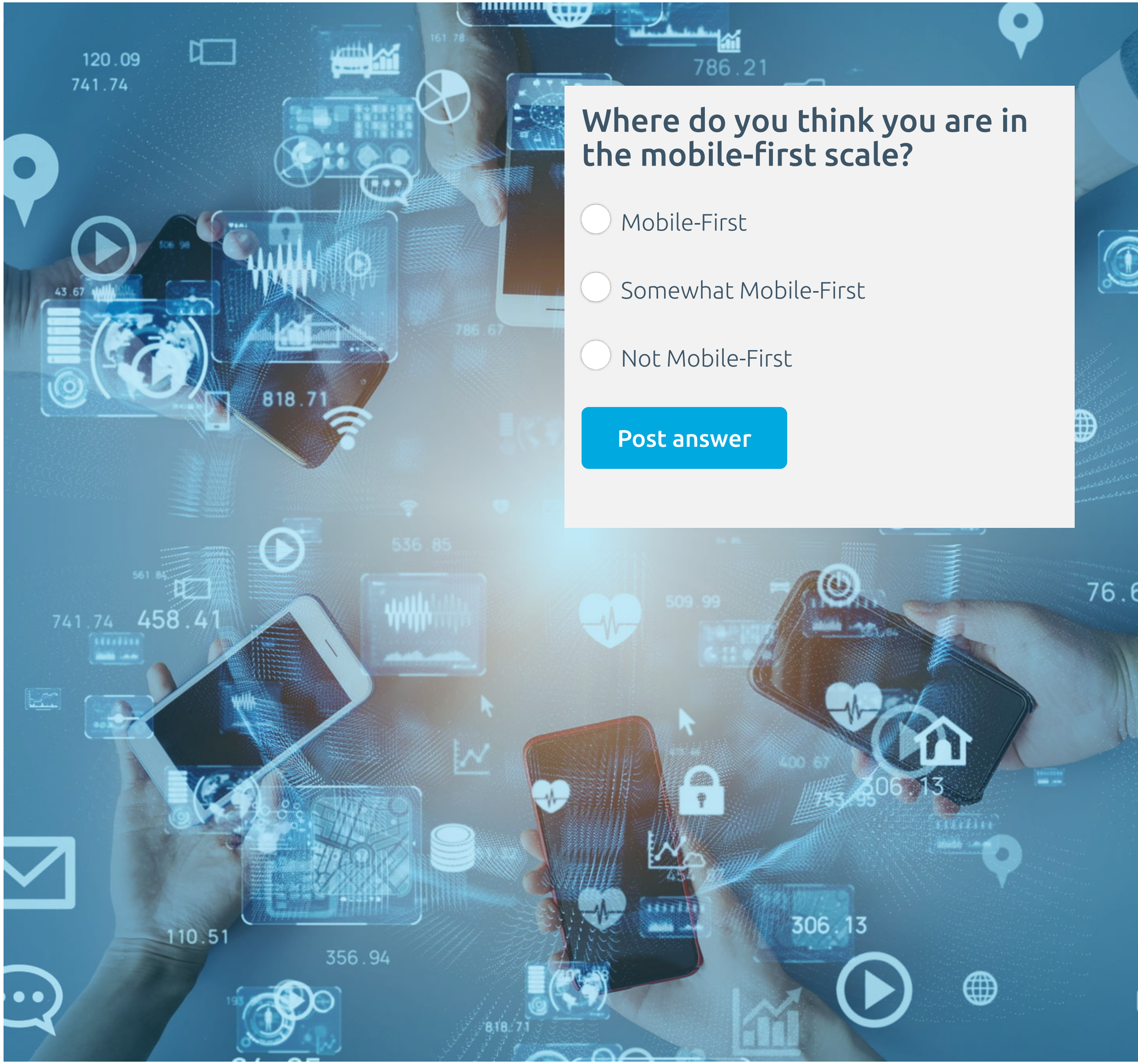


to be in the field. While retail has rolled out mobile solutions for inventory control, buy-online pickup-in-store, and some point of sale, it still relies on many legacy applications, and their strategies haven't quite reached the organizational level.

Mobile-First Scores Show How Organizations Must Up Their Games

As digital transformation accelerates across industries and mobile devices become more diverse and essential to operations, organizations need holistic strategies and centralized decision-making to ensure mobility solutions work well and deliver on the expected ROI. With the exponentially higher number of use cases coming with 5G, it's more important than ever.

The Stratix Mobile-First Score vs. the self-evaluation in the survey reveals that organizations might think they're moving in the right direction, but they're not moving fast enough.



Mobile's Impact on the Organization

Responses Reveal Needs and Challenges

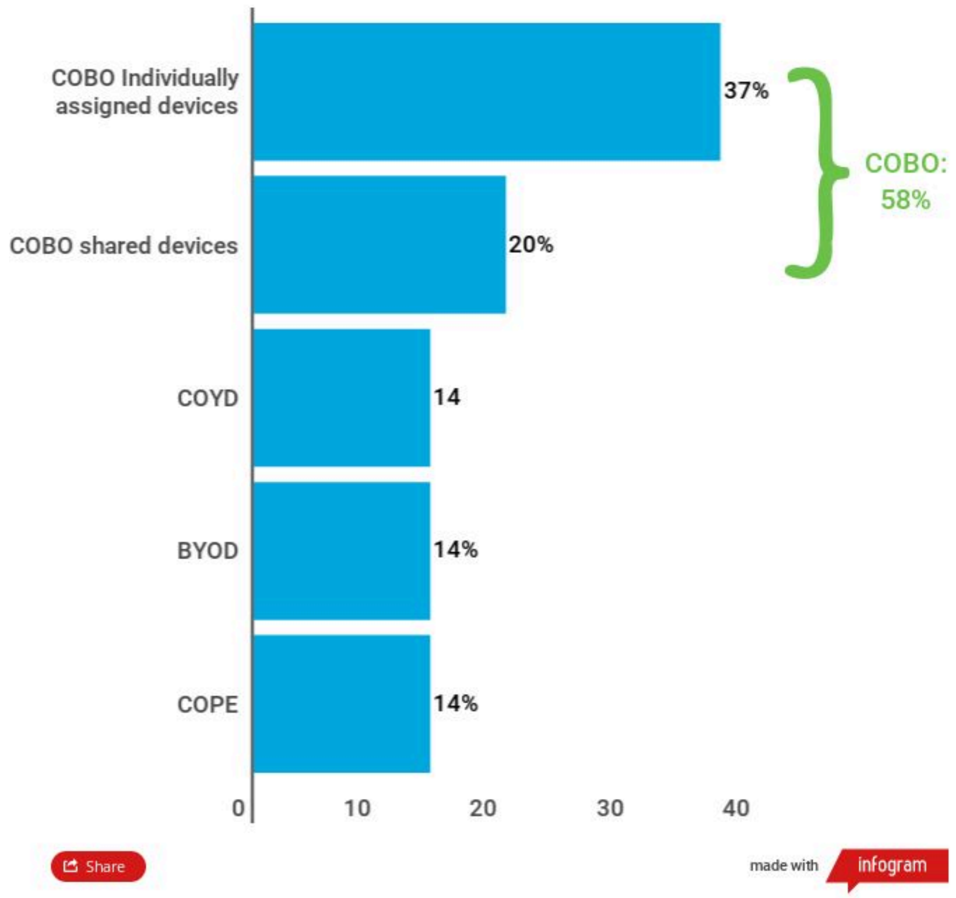
This year's research also examined how mobile is used within organizations and how strategies may change. We looked at special needs at the enterprise level and how that's driving device choice. The report shows many of the challenges and how that's affecting relationships with support partners.

Mobile Technology Usage

Organizations Usually Own Devices

Overall, 86 percent of organizations provide corporate-owned mobile devices to employees—whether individually assigned, shared, corporate-owned/personally enabled, or choose your own device. Fifty-eight percent of the total are corporate-owned/business-only (see figure 3.1).

Figure 3.1: Percentage of Total Mobile Devices Owned by the Organization



When you break it down by industry, manufacturing organizations are significantly more likely to provide individually assigned devices vs. shared—followed by transportation and then retail. Overall, Bring Your Own Device (BYOD) policies account for just 14 percent of device ownership. Field services organizations are the most likely to rely on BYOD—coming in at 36 percent.

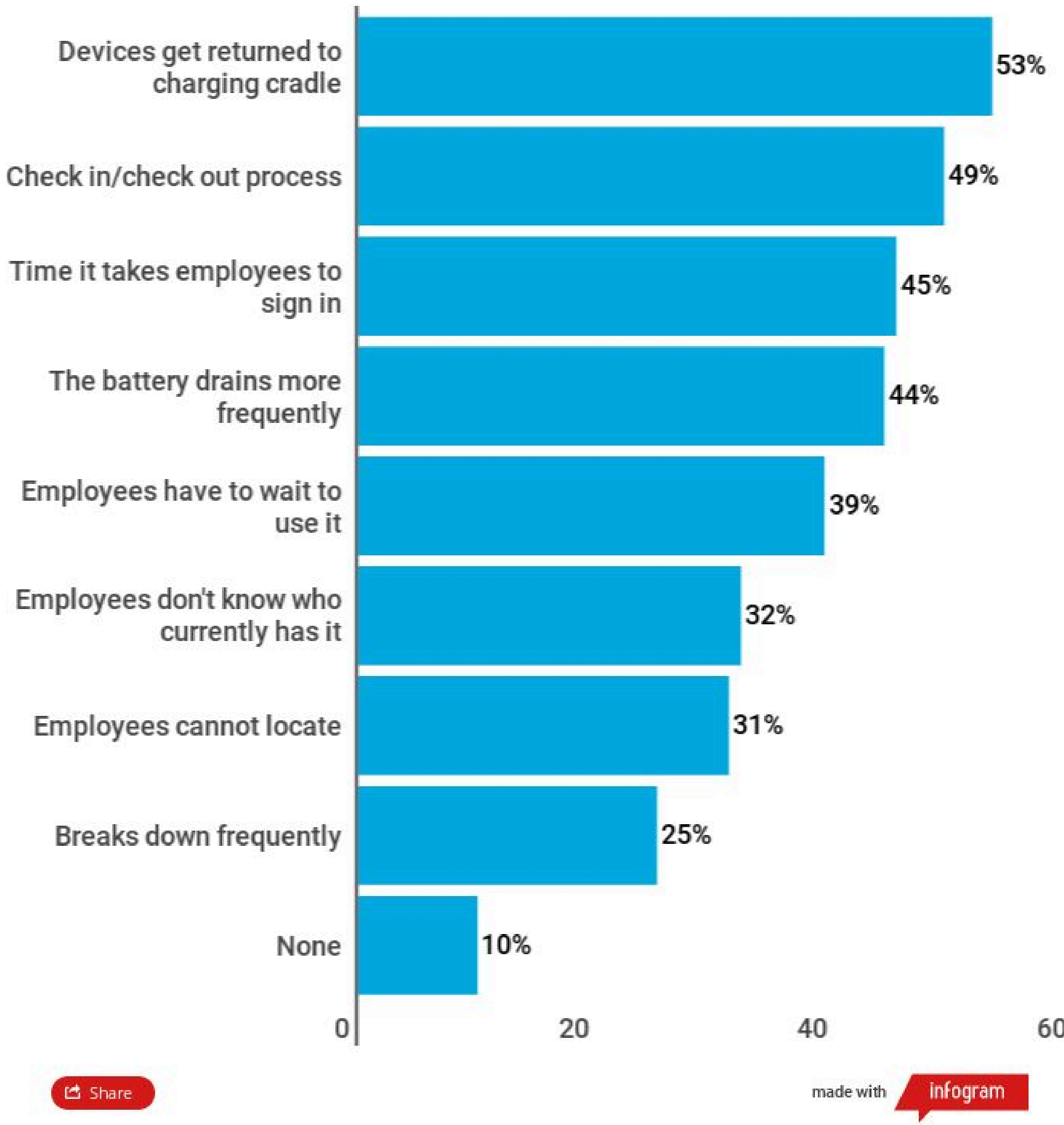
BYOD drove a lot of buzz in the IT world for a while as pundits proclaimed that users demand technology that they're most comfortable with and that personal tech had—in many cases—surpassed that given out by employers.

That's flipped in recent years because of security concerns, support challenges, and privacy fears when employers demand full control of personal devices to ensure they're protected, and data is secure. The equipment provided by employers has improved too—and now rivals what end users have in their personal lives.

Shared Devices Bring Hurdles

While shared devices make up just 20 percent of the total—and 89 percent stay with one employee for their entire shift—there are significant issues with management such as getting the devices back to the charging cradle, check-in/check-out processes, battery life, and more (see figure 3.2).

Figure 3.2: Challenges When Sharing Mobile Devices



When you break it down by industry, two-thirds of retail organizations struggle with getting devices back to recharging stations. They also see issues with battery life and employees waiting to use equipment (see figure 3.3).

Additional Resources

What is Mobile-First?

Most now accept that mobile-first leveraging mobile technology is a key component of digital transformation. Stratix Chief Strategy Officer, Alex Kalish, provides a quick explainer and more on why it's important when you consider new technology solutions and purchases.

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"Mobile solutions increase automation, improve workflows, and create better user and customer experiences."

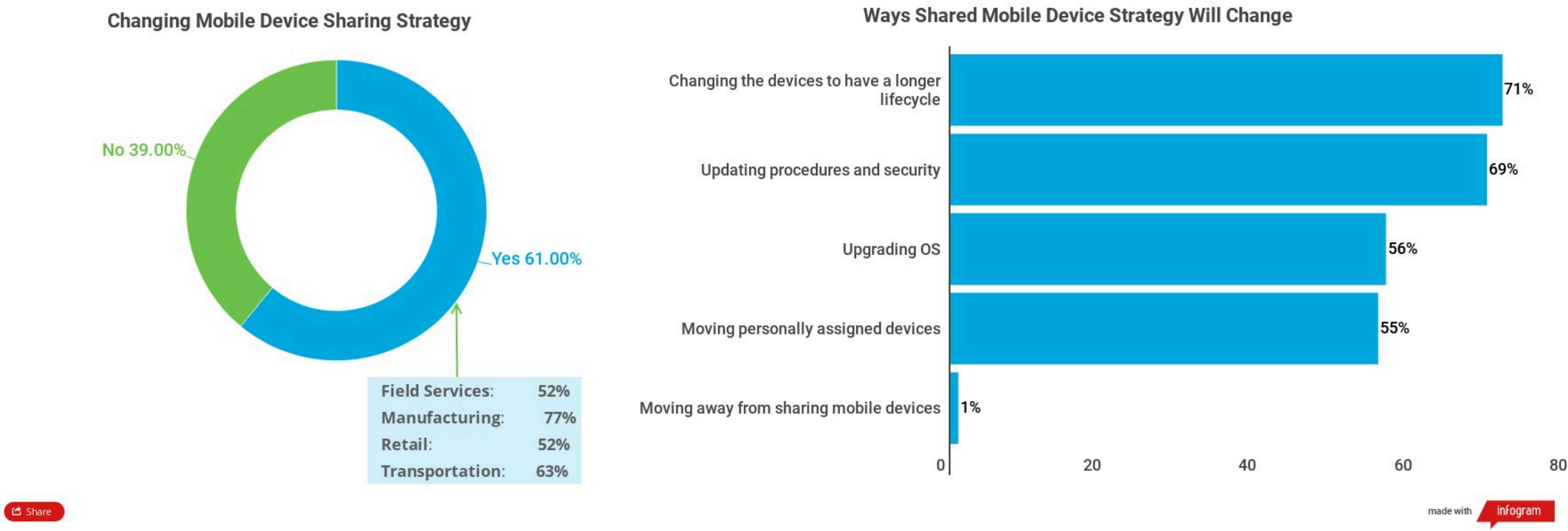
Figure 3.3: Challenges When Sharing Mobile Devices

	Total	Field Services	Manufacturing & Supply Chain	Retail	Transportation
Devices get returned to charging cradle	53%	52%	42%	64%	56%
Check in / check out process	49%	45%	45%	50%	58%
Time it takes employees to sign in	45%	46%	49%	48%	37%
The battery drains more frequently	44%	34%	49%	59%	38%
Employees have to wait to use it	39%	25%	45%	59%	35%
Employees don't know who currently has it	32%	25%	42%	32%	33%
Employees cannot locate it	31%	22%	40%	39%	27%
Breaks down frequently	25%	17%	36%	25%	25%

The disproportionately high shared device problems in retail add up in lost productivity. Transportation organizations say their challenges revolve more around storing devices and checking them in and out.

The shared device problems mean two-thirds of organizations are looking to evolve their strategies—including moving to devices with a longer lifecycle, updating procedures and security, upgrading the operating system, and shifting to personally assigned devices (see figure 3.4).

Figure 3.4

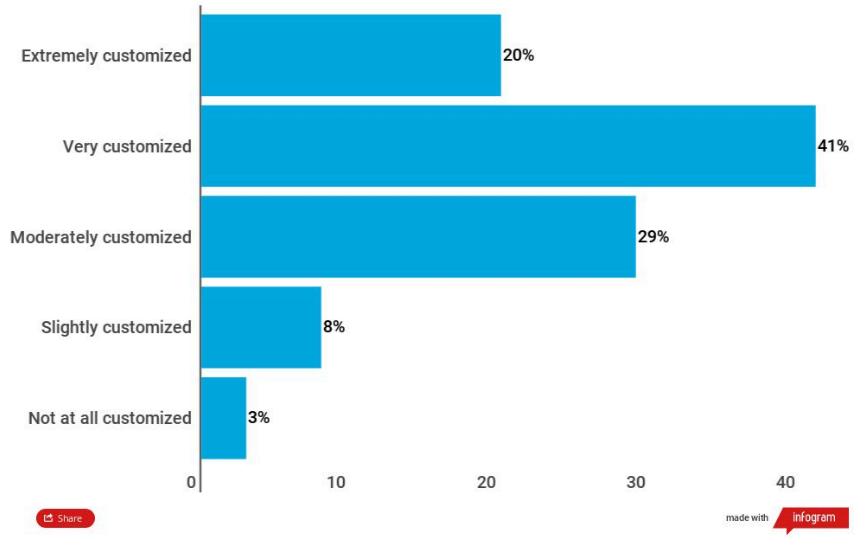


Mobile Technology Considerations

Enterprises Rely on High Levels of Customization

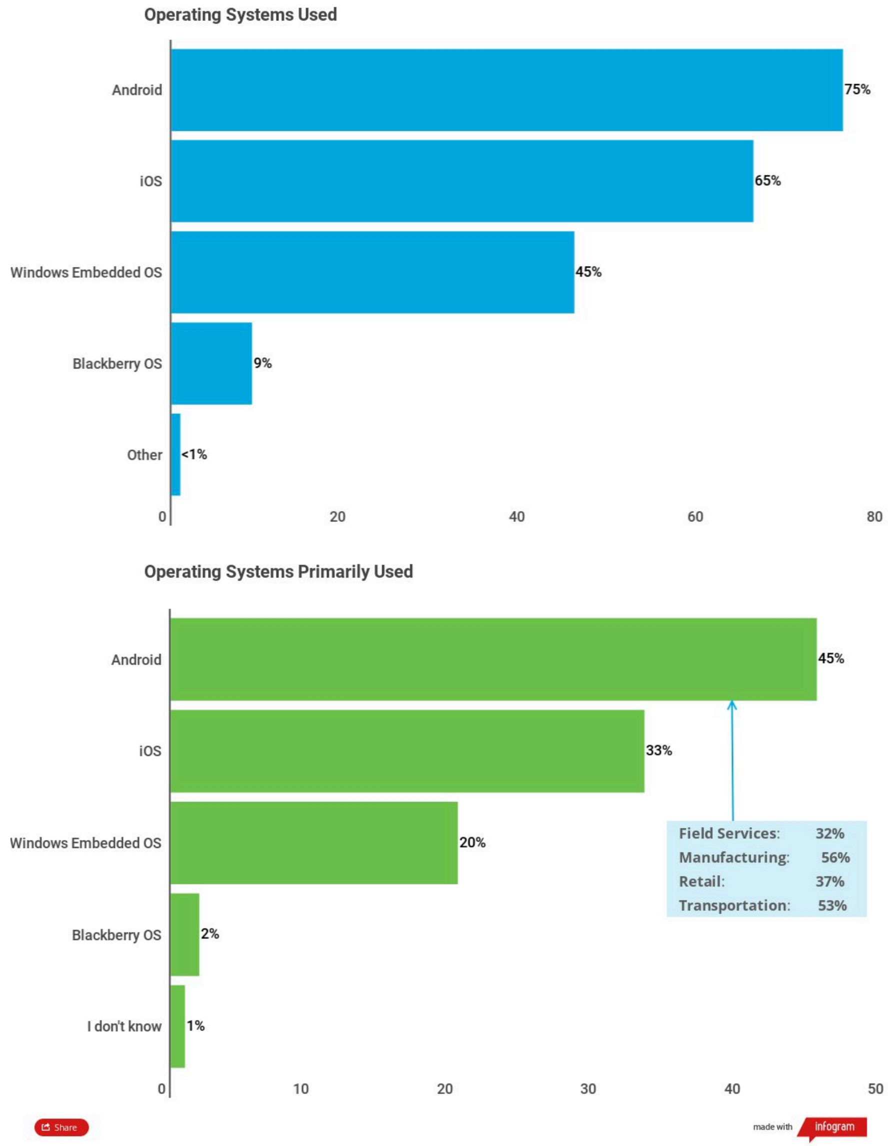
The 2022 Enterprise Mobility Outlook shows that buying off-the-shelf mobile solutions is not an option for most organizations. Two-thirds say they need customized devices, with 20 percent characterizing that as "extremely customized." (see figure 3.5).

Figure 3.5: Customization Needed from Mobile Devices



The research shows how that's driving operating system selection (see figure 3.6).

Figure 3.6



Nearly half rely on the Android operating system, and that number increases to more than 50 percent in the manufacturing and transportation sectors. There are multiple Android device types available for those segments—especially rugged devices—and the operating system has more flexibility for customization. Retail and field services are more likely to choose iOS for employees who have Apple devices in their private lives and are often more comfortable with them. In overall primary use, iOS trails Android by only 12 percentage points.

Customization can extend beyond operating systems and applications. Many enterprises require custom peripherals and accessories. For example, Stratix has a whole department devoted to solving the unique challenges customers bring us.

Few Have Internal Repair Capabilities

When corporate-owned devices break down, organizations primarily have relationships with Mobile Managed Service Providers (MMSPs) for repair or replacement (see figure 3.7).

Some rely on external repair services, but very few do it in-house. If organizations use multiple OEMs to repair different technology solutions, juggling all of them creates unnecessary and frustrating complexity. That goes back to the value of centralized decision-making in mobile-first organizations that are always considering the bigger picture.

Figure 3.7: How Broken Corporate Owned Devices are Repaired

	COBO Individual	COBO Shared	COPE	COYD
We get a replacement from our MMSP	42%	39%	42%	40%
Send to our MSP for repair and return	36%	37%	29%	30%
External repair services	13%	17%	20%	20%
In-house repair	9%	7%	9%	10%
Other	<1%	0%	0%	0%

Mobile Program Management

IT Department Challenges

Three-quarters of organizations say the IT department is primarily responsible for managing mobile technology. Of our industry segments, field services are more likely to rely on their customer service operations than the others (see figure 3.8).

We quizzed our respondents on the amount of time IT teams devote to managing mobile technology. The breakout is significant in that one-third of in-house IT departments spend all week on mobile technology security, and a further 20 percent spend all week on end-user support. That's over 50 percent of IT time dedicated to supporting mobile—time that is NOT spent on transformation initiatives.

As with all IT functions, finding qualified resources to manage mobile isn't easy. And, by all reports, it's getting harder to recruit and retain every day (see figure 3.9).

Figure 3.8: Department Primarily Responsible for Mobile Technology

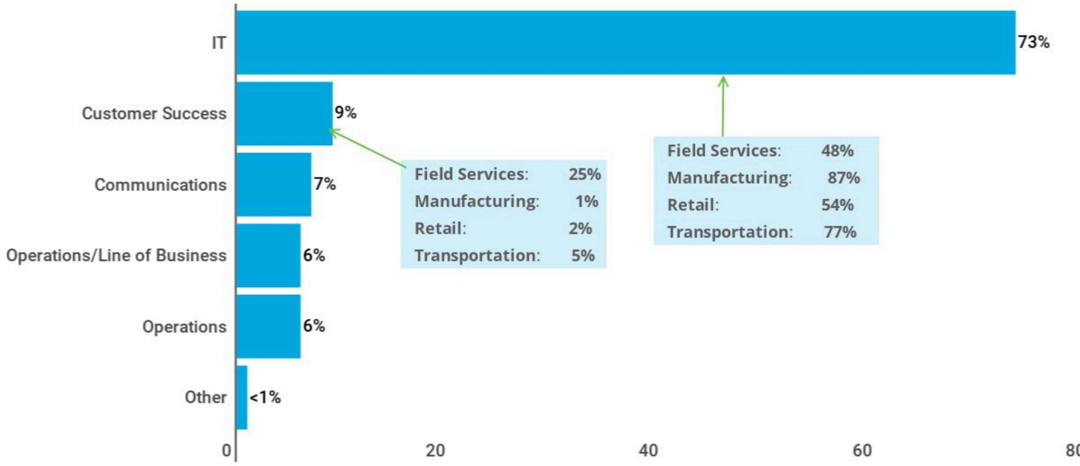
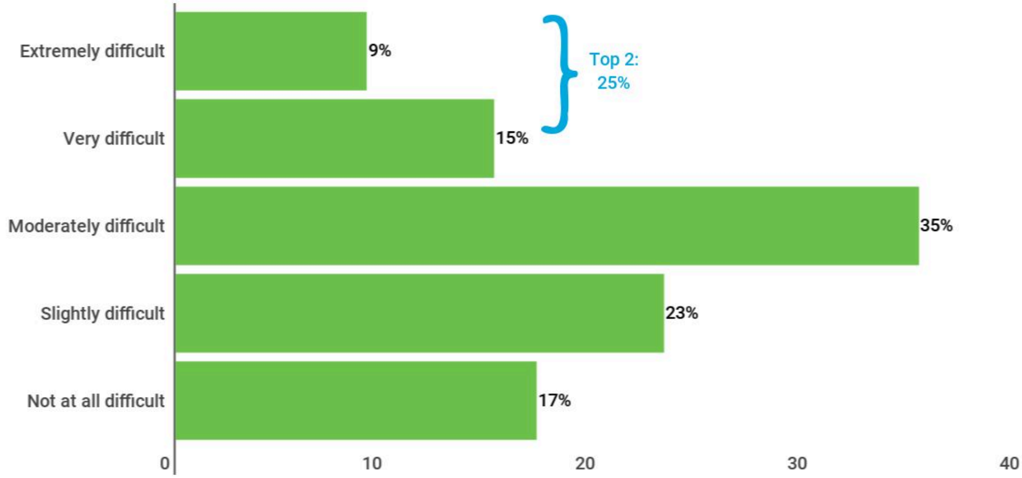


Figure 3.9: Difficulty in Finding the Right People to Manage In-House Mobile Technology



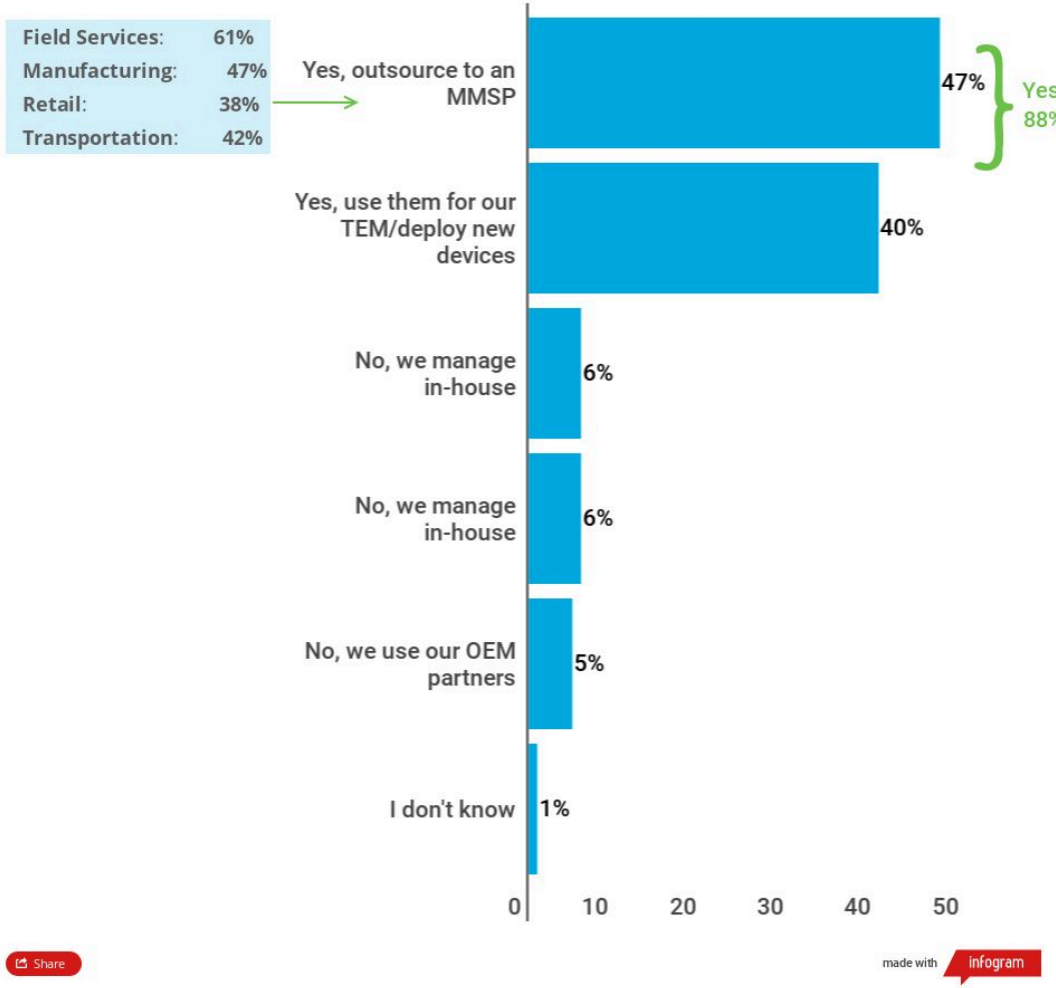
Organizations Frequently Rely on Mobile Managed Services Providers

Almost all organizations currently have some kind of partnership with an MMSP. Nearly half outsource support, while 40 percent use MMSPs for deployments and telecom expense management. Far fewer manage in-house or rely on OEMs (see figure 3.10).

Very few organizations do not currently use an MMSP to support their mobile devices. Over half of these organizations use an in-house department **(56%)** and nearly half say it's faster to train their own employees **(41%)**.

2022 Enterprise Mobility Outlook, Hanover Research

Figure 3.10: Current Use of MMSP to Support Mobile Devices



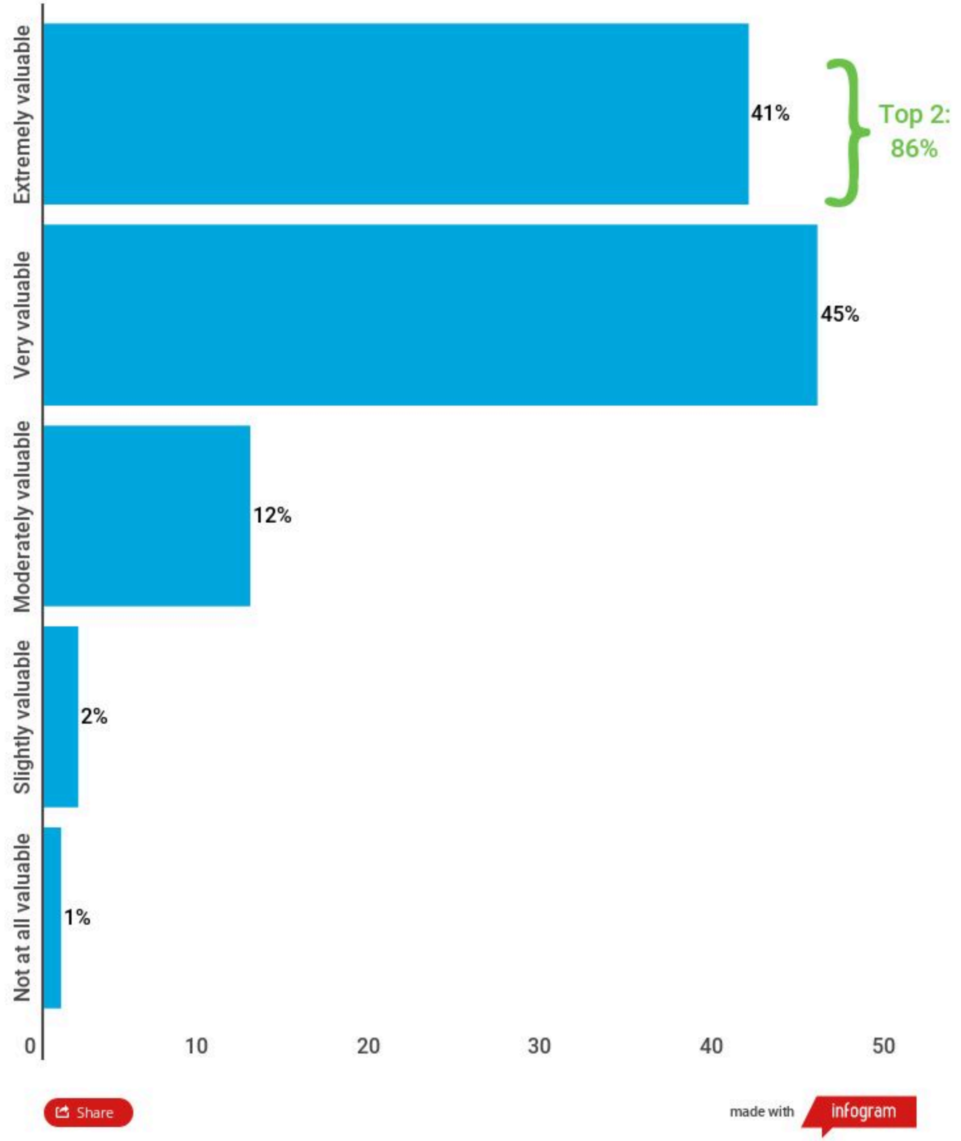
Field services organizations are far more likely than retail or transportation to rely on an MMSP for device support. The high overall MMSP reliance levels aren't surprising. Few organizations have the expertise and scale to manage mobile solutions effectively. Partnering with organizations that work with mobile every day, know all about the latest technology, and can help customers avoid many of the common pitfalls gives organizations the confidence they need to launch projects, and rest assured they'll deliver the expected experiences and ROI.

Because of that, the research shows enterprises value MMSPs that "can do it all" with solutions that manage all aspects of mobile technology (see figure 3.11).

Organizations Need Help Taming the Complexity

Although enterprises see value in a total solution—for various reasons—they tend to approach mobile management piecemeal. As their internal IT teams are spending 50 percent of their time on end-user support and security—while often outsourcing logistics and repair—more holistic solutions from outside partners would enable IT teams to focus better on transformation initiatives, and there's clearly an IT appetite to do so.

Figure 3.11: Value in an MMSP that Offers Complete Solution



Conclusions

2022 Enterprise Mobility Outlook Shows What's Working and What Isn't

Conclusions: 2022 Enterprise Mobility Outlook Shows What's Working and What Isn't

There's Plenty to Be Done

This year's research paints a comprehensive picture of the current state of enterprise mobility. Organizations are leaning into mobile-first, but few are there yet.

The gap between self-perception and more quantifiable indicators on our Mobile-First Scale is troubling because that shows organizations have yet to fully understand what being truly mobile-first is, let alone how to get there.

Those that lag behind on mobile-first will miss out on opportunities for increased productivity, nimbleness, and better user experiences. That leaves them vulnerable to competitors that do it better or if new disruption happens.

With the availability of 5G soaring in 2022, organizations that can take advantage of new use cases also stand to get a leg up on competitors. Those who are mobile-first now already know how to launch new technology effectively, so they'll be able to leverage 5G innovations faster.

Looking at mobile's impact on the organization, it's clear that companies are re-thinking shared device strategies because of the challenges. Ownership of devices appears to be staying within organizations, and BYOD hasn't expanded at the rate many predicted it would a few years ago.

The need for high levels of customization isn't going away, but enterprise solutions typically involve such large numbers of devices that it's economical to tailor solutions to specific needs. While Android is the leader in the customization space, Apple is aggressively going after the business market, so the gap between the use of the two leading operating systems may get smaller.

> **Those that lag behind on mobile-first will miss out on opportunities for increased productivity, nimbleness, and better user experiences.**
>
> *2022 Enterprise Mobility Outlook, Hanover Research*

Enterprise Mobility Reports

Third Year for the Enterprise Mobility Report Brings Important New Insights

With our 2022 Outlook and Mobile-First Score, we can see who's leveraging mobile for digital transformation, how they're doing it, the challenges, and what they need to do to improve.

Our first Enterprise Mobility Outlook—done just before the pandemic outbreak—showed how early technology adopters were leading the way on overall revenue.

Our second study in 2021 gave us a report card on how organizations were responding to the pandemic and who was best equipped.

About Stratix

Wherever your organization is in its mobile-first journey, you don't have to go it alone. Stratix has led from the front on mobility for nearly four decades. We can help you design and deliver end-to-end mobile technology solutions that make your organization's mobility convenient, easy, and cost-effective. We execute deployments at scale and with precision, so they work in the hands of your end users out-of-the-box. Once devices are in service, we provide ongoing world-class managed services and visibility tools that ensure nonstop mobility throughout their lifecycle. For additional information, visit www.stratixcorp.com

About Hanover Research

Founded in 2003, Hanover Research is a global research and analytics firm that delivers market intelligence through a unique, fixed-fee model to more than 1,000 clients. Headquartered in Arlington, Virginia, Hanover employs high-caliber market researchers, analysts, and account executives to provide a service that is revolutionary in its combination of flexibility and affordability. Hanover has been named a Top 50 Market Research Firm by the American Marketing Association and Insights Association since 2015. To learn more about Hanover Research, visit: www.hanoverresearch.com

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2022 Enterprise Mobility Outlook