

Employees need to be productive regardless of their location and because of their location.

There is no doubt that the turmoil of the last few years has changed the modern workplace. Arguably, this need for more flexibility has led to Microsoft's success as a market-leading vendor in the unified communications (UC) market. Indeed, Microsoft reports 270 million monthly active Microsoft Teams users globally and 12 million Teams Phone PSTN users as of July 2022.

Omdia, on behalf of Verizon, surveyed 522 US-based large enterprises with Microsoft Teams in July 2022 to understand their challenges and connectivity requirements for Microsoft Teams.

The top three findings from our survey are:

- Work has become more mobile, and organizations must prioritize this when selecting a Microsoft Teams partner. Around one-half of respondents (47%) need to support mobile workers, with 30% needing to support hybrid (time spent between multiple work locations), and 17% supporting a fully mobile workforce.
- Teams Phone Mobile (formerly Operator Connect Mobile) is a popular connectivity option for Microsoft Teams' customers. 57% of organizations prefer this connectivity option for satellite locations and 48% for remote employees, primarily to utilize a carrier's network for better call quality.
- Microsoft Teams customers need a variety of PSTN connectivity options and cannot implement the solution by themselves. Preferences for PSTN vary based on location, carrier availability and preference, and a need to simplify complex voice/calling infrastructure. Only 6% of enterprises plan to leverage their IT department for their Teams implementation primarily for design and initial configuration of the phone system and dial plan.



Recommendations

- Hybrid is here to stay, and organizations should choose a vendor with a heritage in mobile communications. Verizon helps ensure that Microsoft Teams users and their devices, regardless of location, are securely and reliably connected. Verizon provides organizations with enterprise-grade connectivity, security, resiliency, and network quality; private 5G network capabilities; and Advanced Secure Access Service Edge solutions.
- Global enterprises must select a flexible provider with broad connectivity options for Microsoft Teams. An enterprise's Microsoft Teams connectivity requirements are varied, and organizations need more than one PSTN calling option for Microsoft Teams. Verizon is the only US vendor to offer all three options (Teams Phone Mobile, Operator Connect, Direct Routing) and has a heritage in wired and wireline connectivity.
- Select a global partner with extensive Microsoft Teams experience. Few organizations (~6%) can leverage their IT department to design, configure, and implement a Microsoft Teams solution. Omdia recommends that enterprises select a vendor with extensive implementation experience and consulting services to help deploy Microsoft Teams.

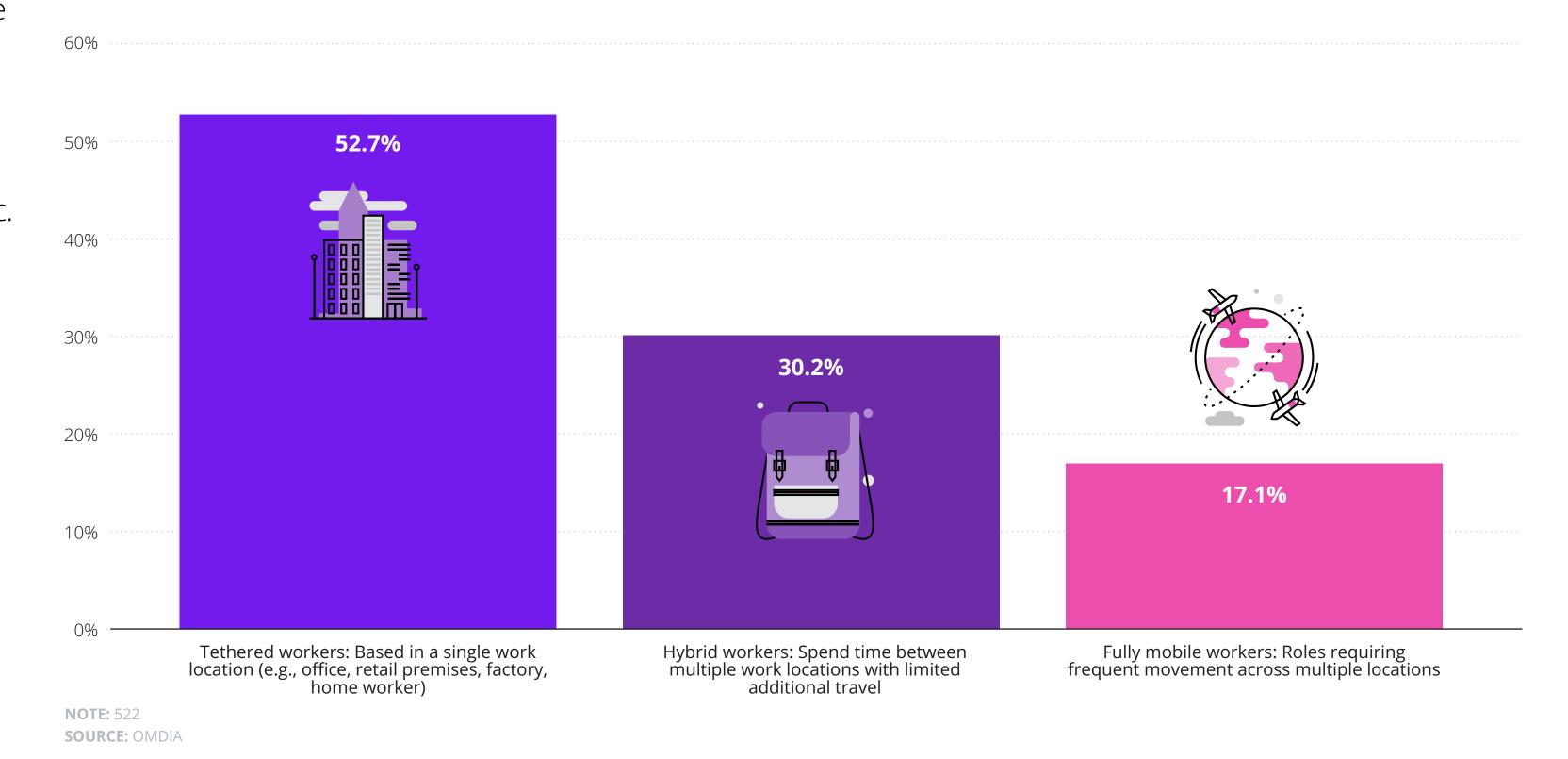


Where and how has changed

The modern workplace has changed. Technology allows us to work wherever there is an internet connection, and hybrid working is a viable and flexible option for many. Employee expectations are also changing. Staff are capitalizing on low unemployment rates and the availability of remote-working options, particularly as work-from-home arrangements became commonplace for many during the pandemic.

Enterprises also are quickly realizing they need to support a variety of work styles. Survey respondents reported that the majority of workers (53%) were tethered workers (based in a single work location), 30% were hybrid (i.e., a mix of remote and on-site), and 17% identified as fully mobile (see figure 1.)

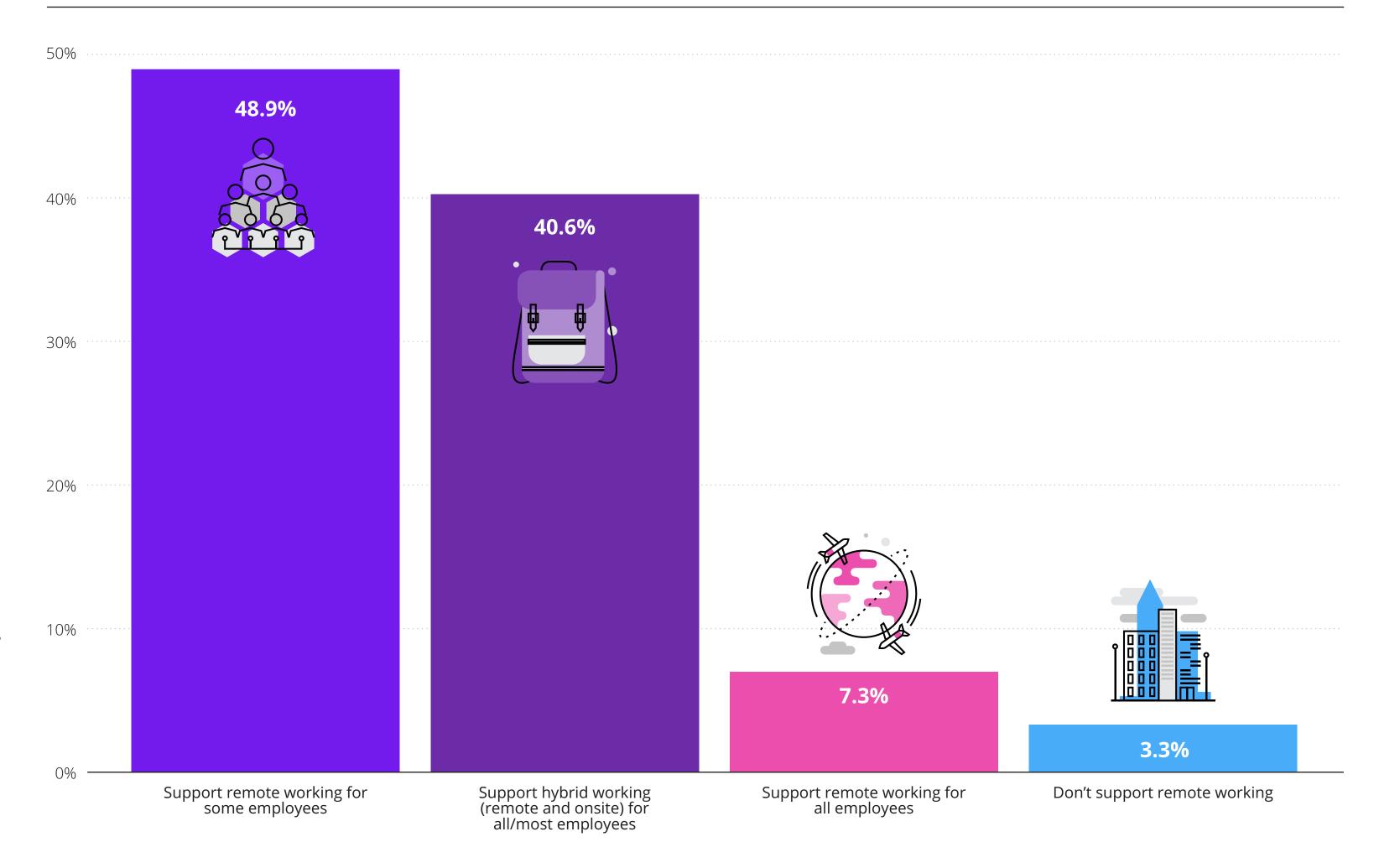
Figure 1: What percentage of your organization's total workforce will permanently align to the following work styles?



In the last year, Microsoft has emerged as a dominant player in the UCC ecosystem and continues to gain a foothold in the enterprise at an unprecedented pace. Despite Microsoft Teams users leveraging the internet to communicate and meet with colleagues and customers, the ability to make and receive calls dialed through the public telephone network (PSTN) is still needed.

The ability to support mobile workers is also a vital consideration for enterprises. Mobile frontline workers (employees who interact face-to-face with clients, customers, and patients) traditionally have been underserved by technology; however, a positive outcome of the pandemic is that this segment is now a key focus area for many businesses. Our survey shows that most organizations will need to support remote employees in some capacity (see Figure 2). Consequently, Omdia believes selecting a partner with a broad range of Microsoft Teams connectivity options should be a key consideration.

Figure 2: How does your company approach how/where employees work?



NOTE: 522 **SOURCE: OMDIA**

Enterprise telephony requirements are varied

Microsoft Teams, plus another

vendor's cloud-based calling offering

NOTE: 521

SOURCE: OMDIA

Microsoft Teams provides a flexible communication and collaboration platform to meet changing operational requirements, but various use cases exist. For example, when speaking with colleagues, the internet is commonly used to call and attend meetings. However, connectivity to the PSTN is required (plus a Microsoft Phone System license), to dial external phone numbers and for customers to dial into the company.

Despite the terms being used interchangeably, there is a distinction between "calling" (using the internet to communicate peer-to-peer), and "dialing" (using the PSTN). One-half (51.4%) of respondents are leveraging Teams for calling (over the internet communications) corporate-wide.

For dialing over the public phone network (PSTN), 34.5% indicate they use one or more on-premises phone systems plus Microsoft Teams, and 14% use a cloud-based calling solution plus Microsoft Teams (see Figure 3.)

Figure 3: Which best describes your telephony environment

50%

51%

40%

20%

14%

14%

Mixed on-premises phone system

(different vendor solutions and

Microsoft Teams)

On-premises phone system

(single vendor solution plus

Microsoft Teams)

Microsoft Teams for calling

(corporate-wide deployment)

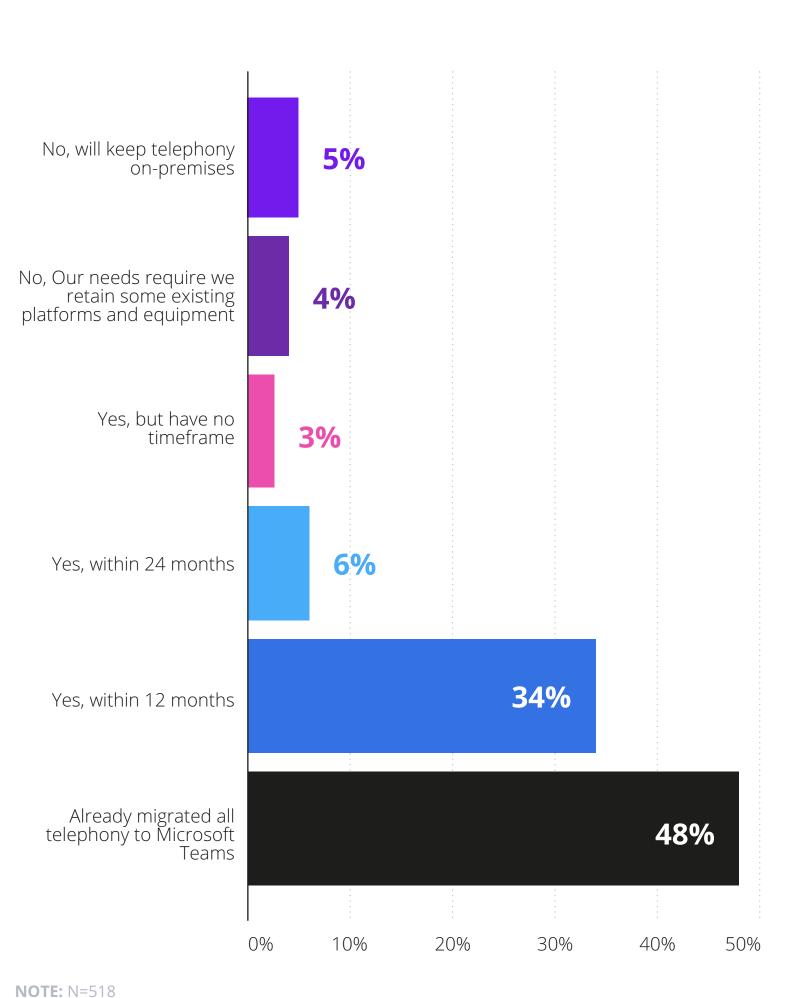
We also asked respondents about their plans to migrate some or all of their telephony to Microsoft Teams. Although 47.5% of respondents indicated they had migrated all their telephony to Teams, a significant portion (40%) plan to migrate some or all of their telephony to Teams within the next two years, and an additional 3.3% said they plan to use Teams for telephony in the future.

Interestingly, nearly 10% of respondents have no plans to migrate calling to Teams because they prefer to keep their telephony on-premises (4.6%) or their unique requirements mean they need to retain their existing platforms and equipment (4.2%) (see Figure 4.)

Figure 5 shows that nearly 3 out of 4 survey respondents (73%) plan to migrate to Microsoft Teams because it offers the best feature set and aligns with their communication and collaboration needs. Given that Microsoft's Productivity and Business Processes segment generated \$16.6B in revenue in fiscal year 2022, it is not surprising that 67% of respondents cited productivity as a key reason for migrating as Teams integrates with their Office productivity suite.

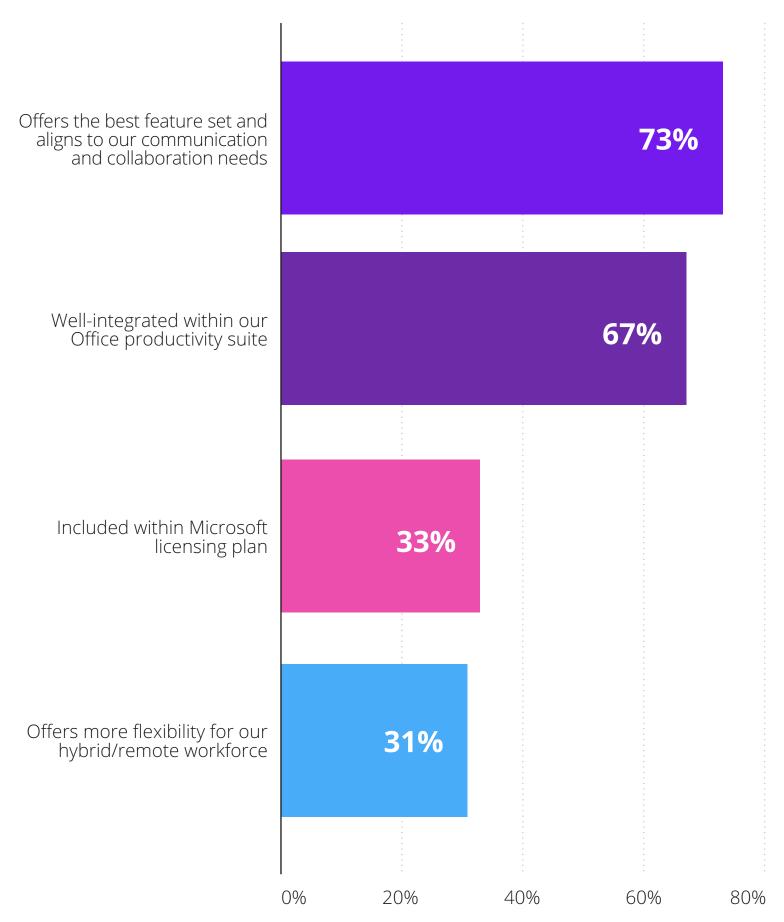
One-third (31%) of respondents said they chose Teams because it offers more flexibility for hybrid/ remote workforces, an important factor contributing to Microsoft's acceleration in the unified communication and collaboration market.

Figure 4: Do you have plans to migrate all or part of your telephony to Microsoft Teams?



SOURCE: OMDIA

Figure 5: What is driving your decision to migrate to Microsoft Teams?



NOTE: 266 **SOURCE: OMDIA**

Supporting hybrid experiences in Microsoft Teams

SOURCE: OMDIA

Our survey suggests organizations are exploring new ways of working facilitated through Microsoft

Teams. Enterprises are looking to change the purpose of office space, with the top-ranked investment priorities for physical locations being the introduction or provision of additional hot-desks, the intent to invest in smaller satellite spaces, and to provide extra fixed desk space. (see figure 6.)

Optimizing conference room spaces for Teams Room and interoperability with existing video conferencing investments were strong third choices for respondents. Organizations should note that Verizon provides cloudbased video interoperability for H.323 and SIP-based video conferencing room systems through a BlueJeans Gateway for Microsoft Teams Rooms.

The diversity of investment priorities also re-reinforces the need to support hybrid employee experiences and a partner that provides various options for PSTN connectivity (figure 7.)

Figure 6: What are your organization's investment priorities for your physical locations?

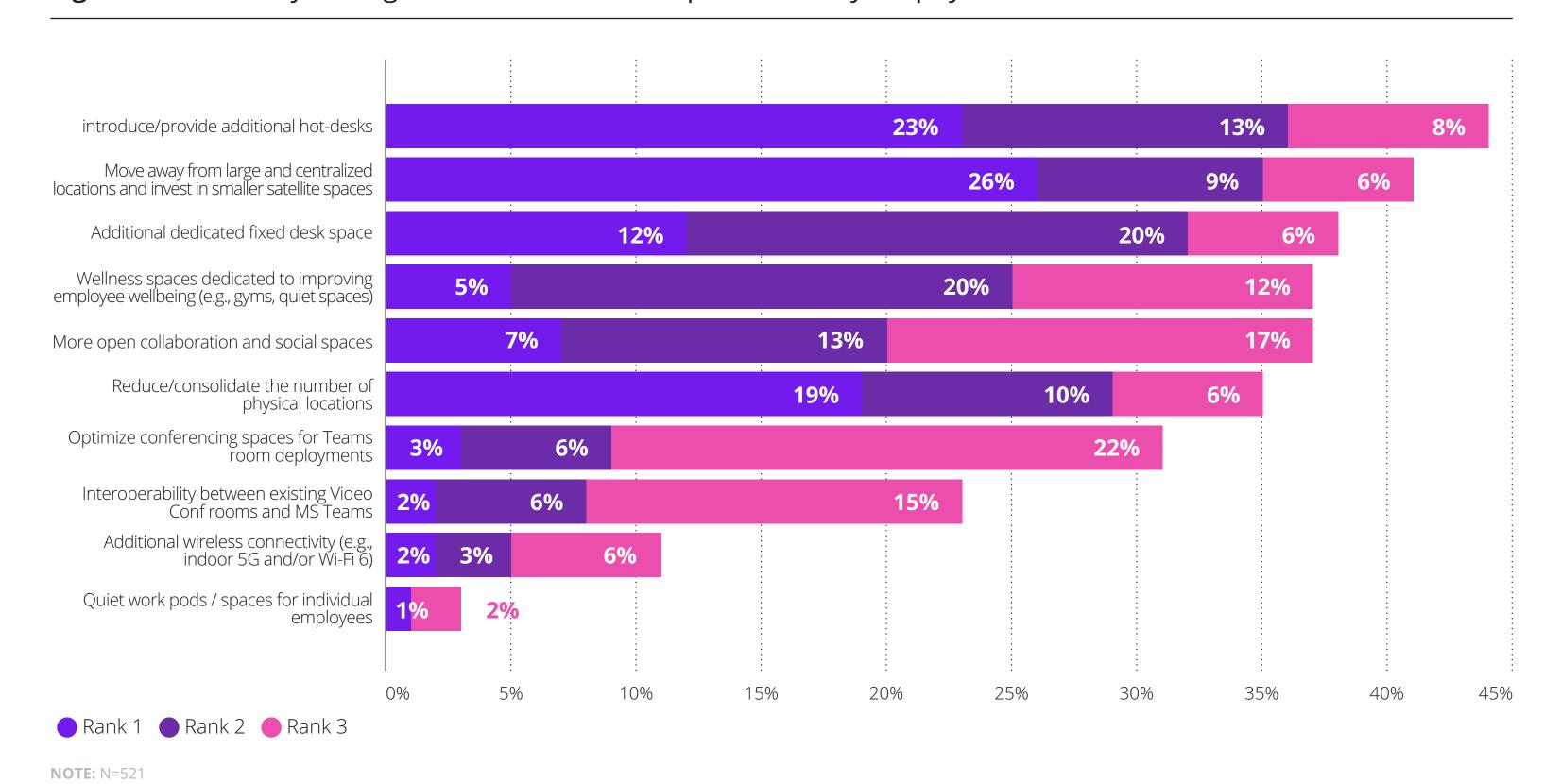
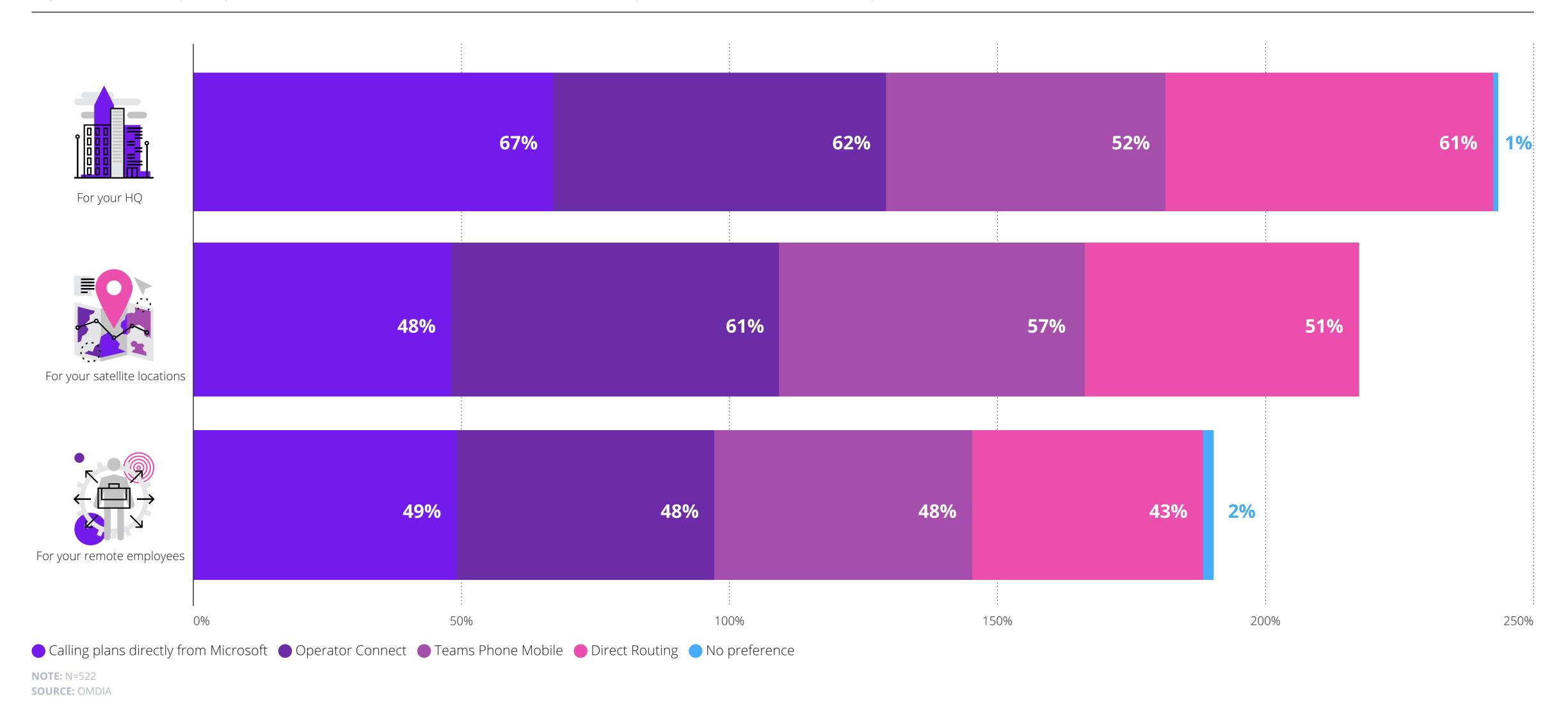


Figure 7: What is your preferred method of PSTN (Public Switched Telephone Network) connectivity for Microsoft Teams?



Organizations need a variety of connectivity options

As previously mentioned, to dial the PSTN, organizations need a Microsoft Teams Phone System license plus either of the following four options:

- Teams Phone Mobile (previously Operator Connect Mobile) a corporate-managed, mobile-first solution enabling wireless numbers to receive inbound calls and make outbound calls through Microsoft Teams.
- Operator Connect which couples Microsoft Teams Phone System to a service provider's network making it easier to connect Teams voice calls outside a company's network.
- Direct Routing a cloud-based solution that extends secure SIP connectivity for Microsoft Teams outside of an enterprise network.
- Microsoft Calling Plan a domestic and international call plan service available directly from Microsoft.

Our survey revealed that organizations need multiple ways to connect to the PSTN (Figure 7), and in this section, we explore why and suggest additional benefits.



Teams Phone Mobile

With roughly half (47%) of respondents' workforces comprised of hybrid and fully mobile work styles, Teams Phone Mobile allows enterprises to offer hybrid and mobile users a single phone number for business-provided (corporate liable) mobile and desk devices.

Respondents primarily selected Teams Phone Mobile to leverage the mobile cellular network for better voice quality (see Figure 8). Teams Phone Mobile allows users to make calls using the mobile phone native dialer via a service provider's voice network and seamlessly uplift the same call to a data network. For example, calls can be made while moving between locations (the commute into the office, for example) and then seamlessly switched to a corporate network and PC-based Teams client when the user arrives at the office.

Other key reasons respondents favored Teams Phone Mobile were to reduce the volume of calls placed on phone systems, consolidate onto Teams Phone Mobile, and reduce administration and management overheads (all 61%.) Indeed, Teams Phone Mobile helps streamline management by provisioning users via the Office 365 portal. Furthermore, the portal can be used to enforce business policies, including security, compliance, and data governance (for example, the recording and retention of voice calls on mobile devices.)

Besides utilizing the phone's native dialer for Teams calls and the benefit of a single phone number across their devices, Teams Phone Mobile also provides easy transfer between Teams endpoints, unified voice mail, unified call history, and other native features. Indeed the extensive benefits of Team Phone Mobile are such that 61% of respondents would switch carriers to enable Teams calling.

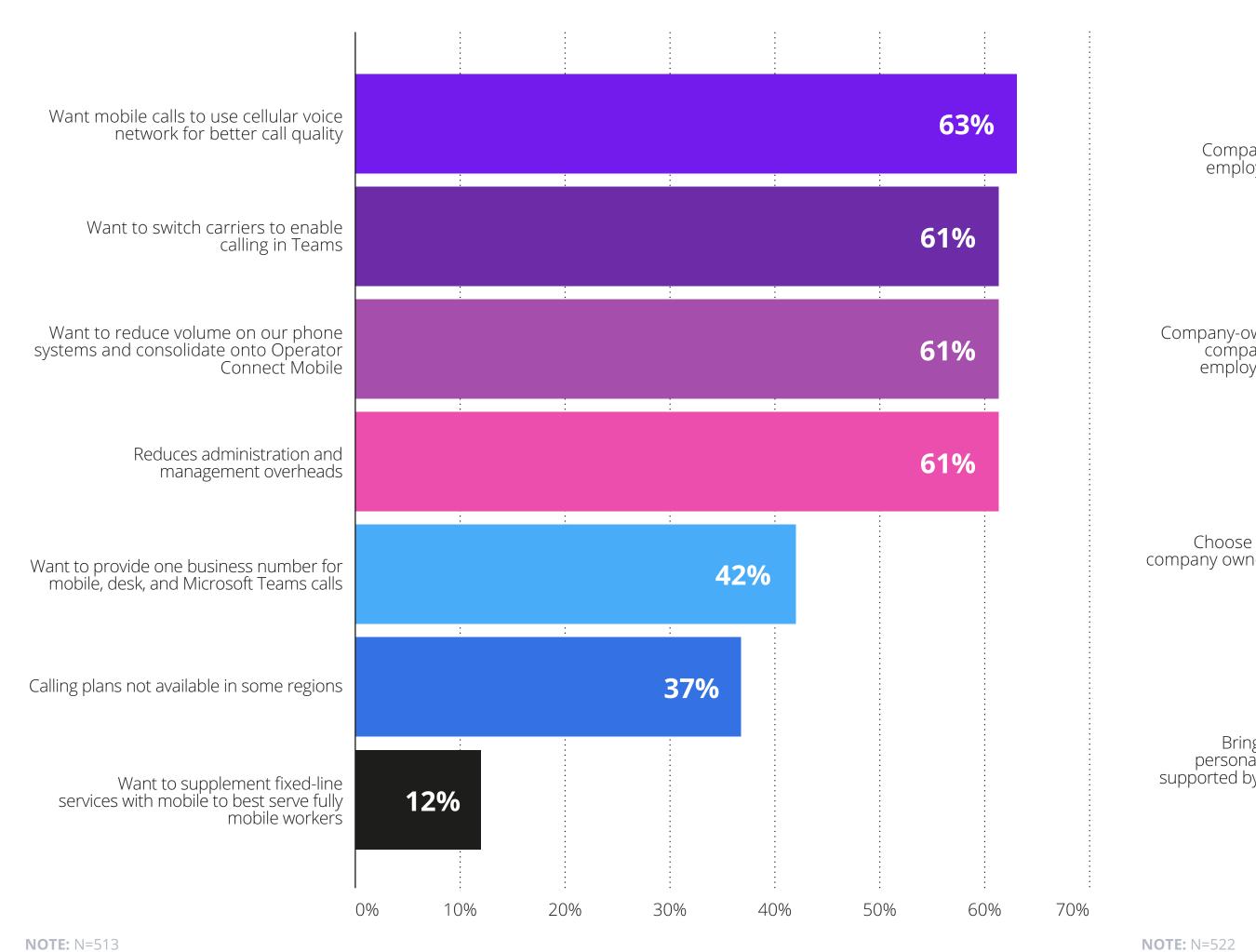
Approximately two-thirds (63%) of organizations support corporate-owned devices and can leverage Teams Phone Mobile today (see figure 9). Future Teams Phone Mobile developments will allow organizations to integrate SMS messaging with Teams Chat and enable employees to utilize their own mobile devices for work (i.e., BYOD), which addresses the remaining 37% of organizations that support BYOD policies.

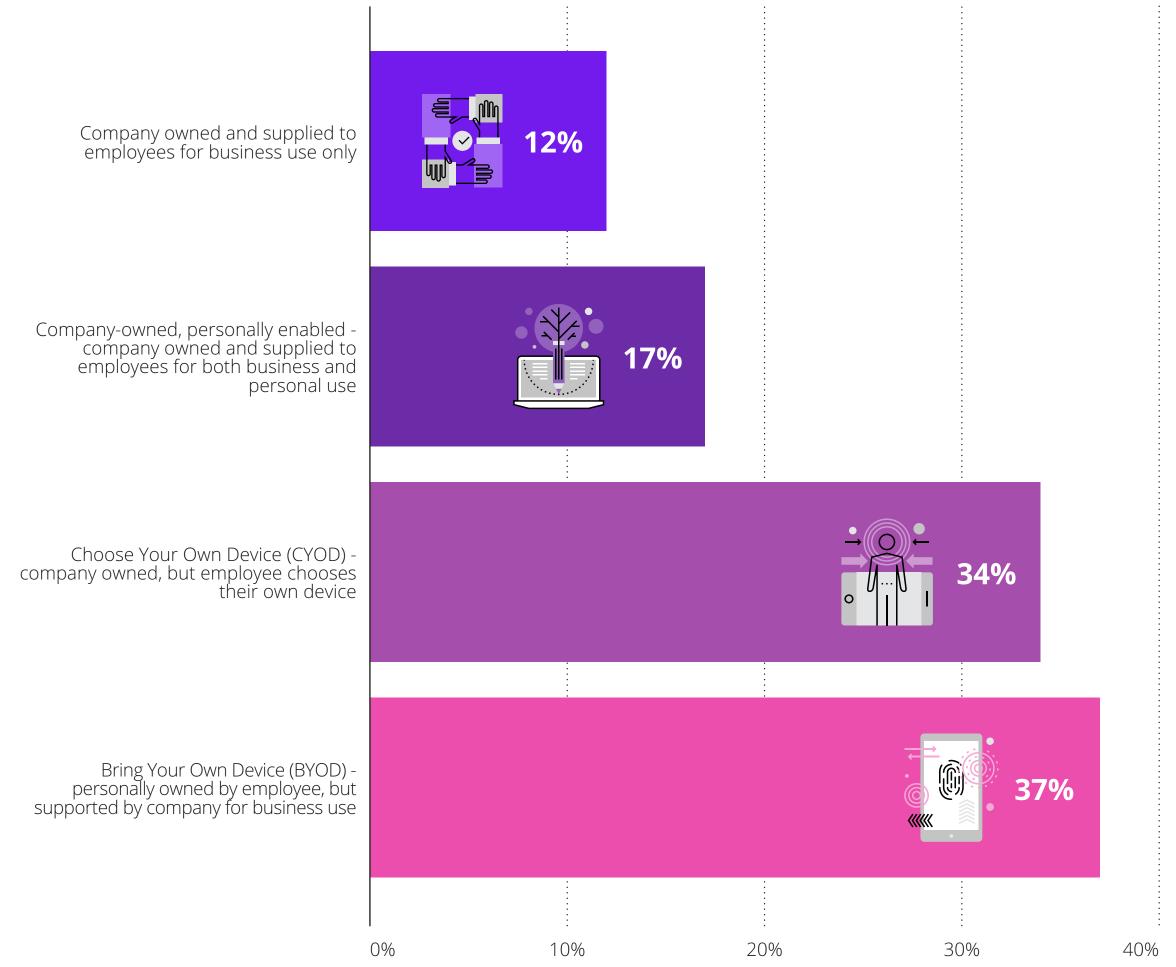


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Figure 8: Why do you prefer Teams Phone Mobile for PSTN connectivity?

Figure 9: Which best describes how your organization supports mobile devices for work?





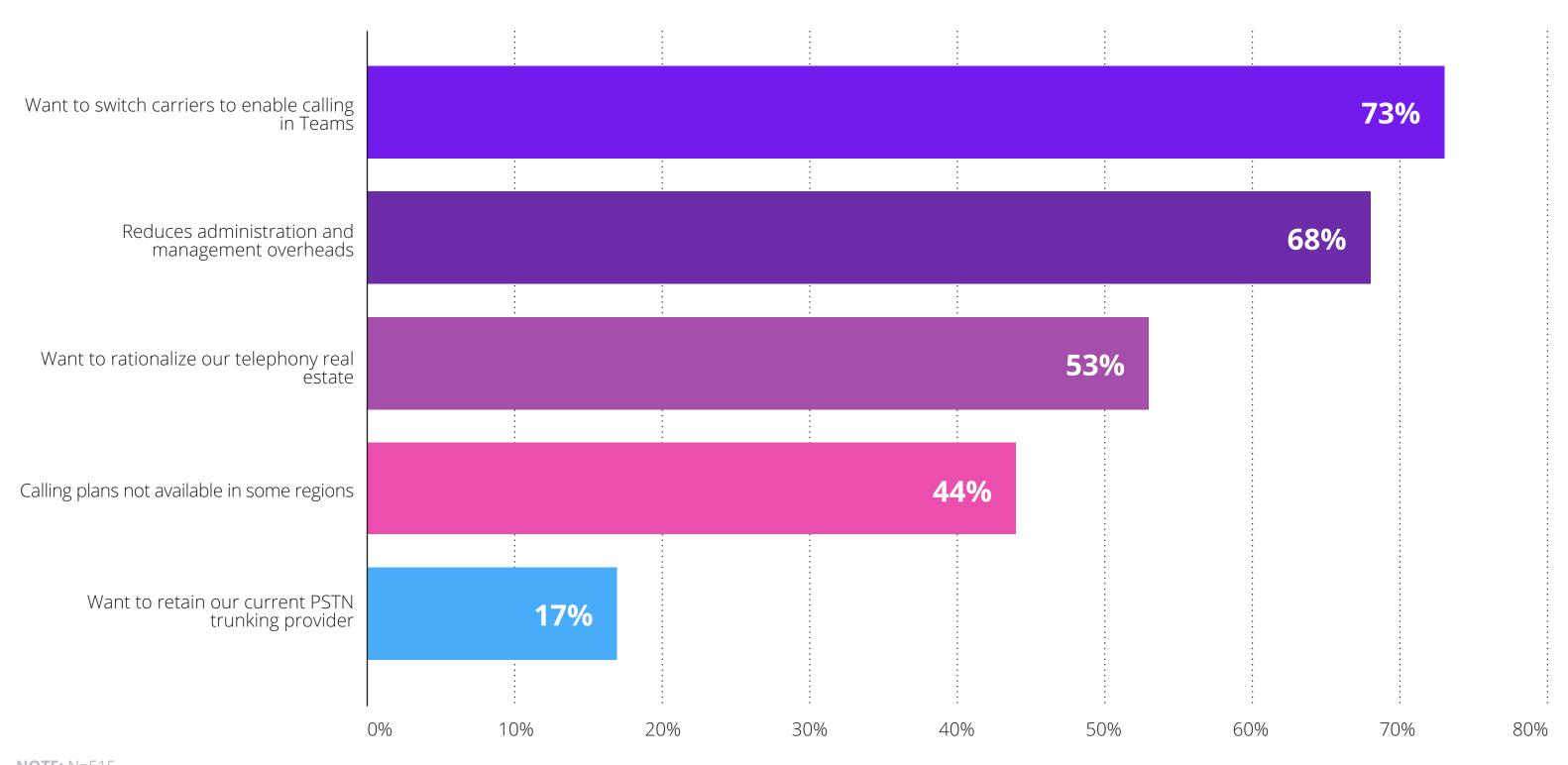
NOTE: N=513 SOURCE: OMDIA NOTE: N=522 SOURCE: OMDIA

Operator Connect

Operator Connect allows enterprises to either maintain their existing relationship with their carrier (if available through Microsoft's Operator Connect Program) or select a new one. A direct peering arrangement with Microsoft data centers creates a one-to-one network connection for enhanced reliability. Operator Connect is also an easy way to add carrier redundancy into an organization's overall design.

Respondents stated Operator Connect was the preferred option for satellite offices, primarily because they want to switch carriers for Teams calling, reduce administration and management overheads, and rationalize telephony real estate (Figure 10.)

Figure 10: Why do you prefer using Operator Connect for PSTN (Public Switched Telephone Network) connectivity?



NOTE: N=515 SOURCE: OMDIA

Direct Routing

Direct Routing allows an enterprise to connect a Session Border Controller (SBC) to MicrosoftTeams Phone System to dial PSTN calls, with the added benefit of a platform for interoperability with other vendor PBXes, call center systems or 3rd party telephony trunks. This PSTN connectivity option is essential as 34% of organizations still use an existing on-premises phone system. Direct Routing allows these organizations to better interoperate with Teams while offering an easy and full migration option to Microsoft Teams in the future.

Direct Routing also offers a voice resiliency option, through survivable branch appliances (SBAs). SBAs allow an organization to maintain basic telephony services if the connectivity between an SBC and Microsoft 365 Phone System fails.

Figure 11 shows that enterprises may wish to leverage Direct Routing because it allows organizations to choose their own carriers (63%) or retain an existing arrangement with their service provider (60%). The

ability for organizations to retain greater control of their phone numbers was also a key preference (61%.)

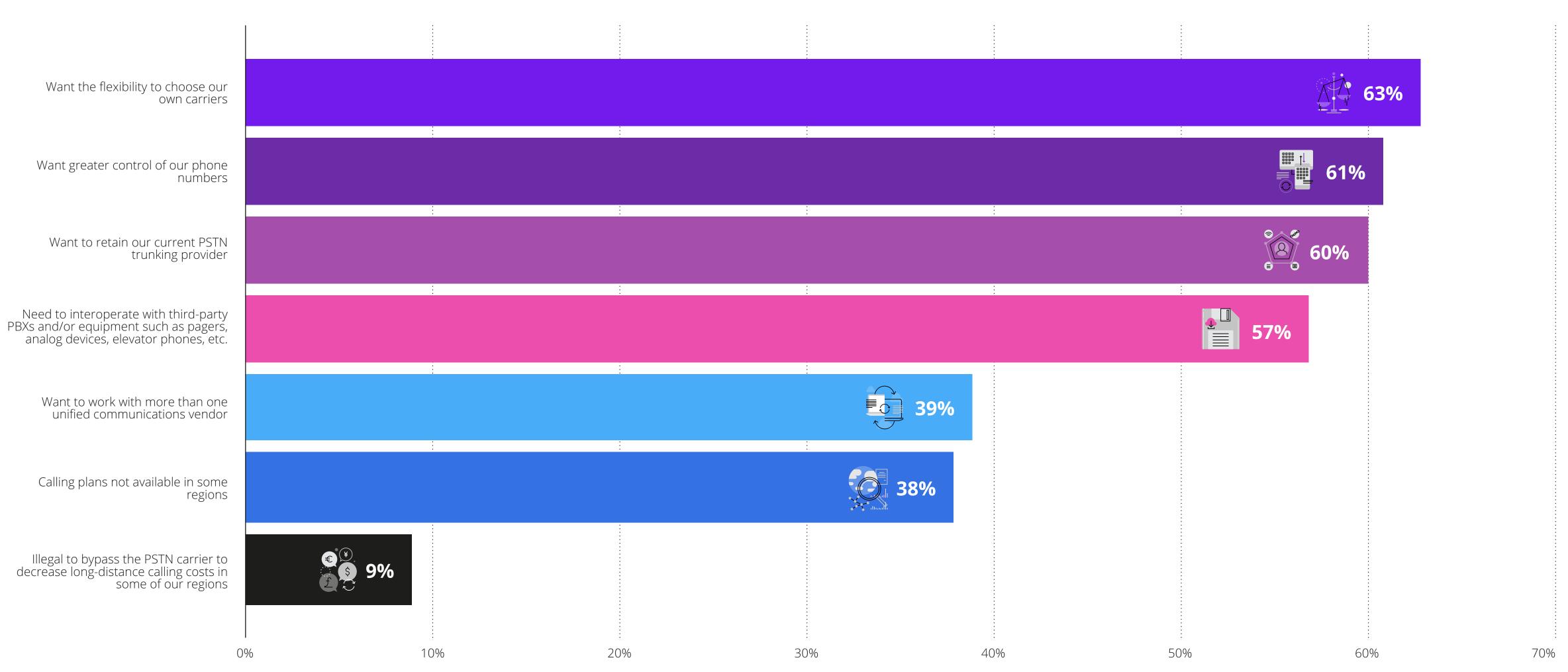
Regardless of the underlying third-party phone system (on-premises or cloud-based), Direct Routing allows organizations to integrate their existing telephony investments with Microsoft Teams.

Consequently, Direct Routing addresses roughly half of those businesses that have not yet migrated to Microsoft Teams for telephony. (See Figure 4 - Do you have plans to migrate all or part of your telephony to Microsoft Teams?)

Finally, Direct Routing offers businesses the flexibility of a migration path to Teams when it makes sense to do so. For example, when telephony contracts expire, when it is no longer economically viable to retain PBXes, or when additional telephony features are added to Teams.



Figure 11: Why do you prefer Direct Routing for PSTN (Public Switched Telephone Network) connectivity?



NOTE: N=492 SOURCE: OMDIA

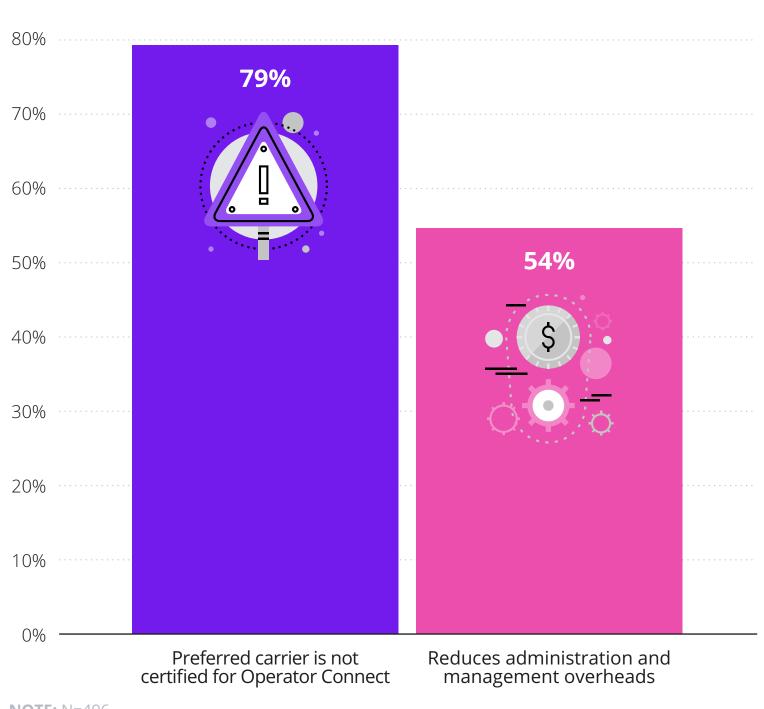
Microsoft Teams Calling Plans

Microsoft suggests their Teams Calling Plans may be a suitable alternative for organizations that do not have a service provider that provides PSTN connectivity for users. Indeed, Microsoft Teams Calling Plans was the number one option for respondents' HQ connectivity because their preferred carrier was not certified for Operator Connect (79%.) As respondents to this survey were either domestic (with multiple offices in the US) or multinational companies with headquarters in the US, this suggests that Microsoft Teams customers prefer Service Providers that support Operator Connect for their headquarters.

For multinational companies, carriers that support Operator Connect and Direct Routing (such as Verizon), allow organizations to deploy full phone replacement in a larger global footprint than Microsoft Teams Calling Plans. Carriers like Verizon also have beneficial pricing plans that help lower total costs, such as treating calls to wireless phones or other VoIP customers as On-net calls.

Finally, while 54% of those surveyed would prefer Microsoft Teams Calling Plans for PSTN connectivity to reduce management and overheads, different countries have different rules and regulations for acquiring phone numbers. Customers may be unable to get new phone numbers via the Microsoft Teams admin center and need a Letter of Authorization or LOA. LOAs are also required to transfer or port existing phone numbers from another service provider to Teams, giving Microsoft permission to request and transfer numbers on a customer's behalf. While this may not be an issue for domestic enterprises, this may be an inconvenience and additional consideration for multinationals.

Figure 12: Why do you prefer Microsoft Teams Calling Plans for PSTN (Public Switched Telephone Network) connectivity?



NOTE: N=496 SOURCE: OMDIA



Summary

Global enterprises need to select a flexible provider with broad connectivity options for Microsoft Teams.

Our survey shows that an enterprise's Microsoft Teams connectivity requirements are varied and complex. Most organizations require more than one Microsoft Teams calling solution for their unified communication and collaboration needs. Verizon is the only US vendor to offer all three options: Teams Phone Mobile, Operator Connect, and Direct Routing.

Hybrid is here to stay, and organizations need to consider a vendor with a heritage in mobile communications

Our survey showed that 97% of respondents need to support remote employees in some capacity. Verizon Mobile for Microsoft Teams helps to provide organizations with enterprise-grade connectivity, security, resiliency, and network quality;

a comprehensive and integrated user experience via Teams Connect Mobile; private 5G network capabilities; and Advanced Secure Access Service Edge solutions.

Select a global partner experienced with all aspects of a Microsoft Teams deployment.

Few organizations (~6%, according to our survey) will leverage their own IT department for their Microsoft Teams implementation. Consequently, Omdia recommends that enterprises select a vendor with extensive experience in the global roll-out of Microsoft Teams.

As a Tier 1 carrier, Verizon's Global SIP network (powered by Microsoft's Azure for Operators' Managed Service for Teams Calling) provides customers with a solution that blends connectivity, calling, and administration under one easy-to-use customer interface and calling plan.



Appendix



About

Verizon

Verizon Communications Inc. (NYSE, Nasdaq: VZ) was formed on June 30, 2000 and is one of the world's leading providers of technology and communications services. Headquartered in New York City and with a presence around the world, Verizon generated revenues of \$133.6 billion in 2021. The company offers data, video and voice services and solutions on its award-winning networks and platforms, delivering on customers' demand for mobility, reliable network connectivity, security and control.

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Omdia

Omdia is a global technology research powerhouse, established following the merger of the research division of Informa Tech (Ovum, Heavy Reading, and Tractica) and the acquired IHS Markit technology research portfolio*.

We combine the expertise of more than 400 analysts across the entire technology spectrum, covering 150 markets. We publish over 3,000 research reports annually, reaching more than 14,000 subscribers, and cover thousands of technology, media, and telecommunications companies.

Our exhaustive intelligence and deep technology expertise enable us to uncover actionable insights that help our customers connect the dots in today's constantly evolving technology environment and empower them to improve their businesses – today and tomorrow.

*The majority of IHS Markit technology research products and solutions were acquired by Informa in August 2019 and are now part of Omdia.





Methodology

Omdia, on behalf of Verizon, surveyed 522 US-based Microsoft Teams organizations to understand their approach to

- Where and how they work
- Their telephony challenges
- Their connectivity requirements for Microsoft Teams Calling

Respondents were either domestic (with multiple offices in the US) or multinational companies with headquarters in the US. Their organizational structure was complex, with a mix of remote working, hybrid, and office-based requirements.

Further reading

Verizon UC and CX study finds major disconnect between management and employees

(https://www.verizon.com/about/news/verizon-uc-and-cx-study)

Microsoft Country and region availability for Audio Conferencing and Calling Plans

(https://learn.microsoft.com/en-us/microsoftteams/country-and-region-availability-for-audio-conferencing-and-calling-plans/country-and-region-availability-for-audio-conferencing-and-calling-plans)

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