Microsoft

Enabling a modern support experience at Microsoft

The Modern Support investment at Microsoft is transforming how we deliver support capabilities to our employees across physical and digital interactions. Our support experience focuses on identifying and remediating issues automatically—before employees are even aware that they exist, which enables employees to be more creative, innovative, and productive. We're also enabling more seamless interaction for employees by giving them broad and inclusive access to support with in-context tools that combine to create an efficient and effective support environment.

The Modern Support investment is part of a broader vision for delivering the most productive employee experience possible as we continue our digital transformation. To learn more about how Microsoft is achieving this vision, refer to "Reinventing the employee experience at Microsoft."

The vision for modern support

Our vision for a modern support experience involves providing our employees with easy-to-use, transparent, and integrated services by transforming how we deliver support capabilities across physical and digital interactions at Microsoft. This investment enables automated, data-driven, and user-centric support services that help solve issues quickly. The objective is to ensure that our employees and partners can work efficiently and effectively.

The Microsoft Global Support team is the first entry point for user-support issues. We want to enable this team to focus on enhancing stakeholder relationships, improving workplace productivity, and ensuring a positive user experience. This support experience, as envisioned, will reduce the time it takes to resolve user issues and will eliminate inefficiency in the support process through automation and integrated AI and machine learning. Regardless of the method used to request support—phone, chat, self-help, auto-route, email, real-time video, walk-up, or other interaction channels—both users and Global Support teams need a seamless, efficient, and engaging support experience.

The Global Support team at Core Services Engineering and Operations (CSEO) acts as a scalable group of trusted, specialized advisors who work to identify and discover solutions to business issues while providing feedback to our product groups to help them create better experiences for consumers. The team uses their expertise and skills in working with a wide range of complex processes, devices, infrastructure deployments, and technologies. Global Support agents also work with other teams at Microsoft as part of a seamless unit, squarely focused on the user experience. We want this multilayered team to plan, learn, and adapt to changing conditions to enable people and businesses throughout Microsoft to realize their full potential.

Examining support at Microsoft

Traditionally, the Microsoft support culture has been based heavily on service levels. In the past, specific service-level metrics have driven support efforts and investments. Although service-level metrics are important in overall support health, we wanted to put greater emphasis on the user experience—from the perspective of the employee requesting assistance and the agent providing it. We realized that we needed to understand not only if our services and tools are functioning but also whether they meet employees' needs.

We're also shifting from a support model where work tasks are costly, complex, and require significant support intervention, to a model that creates experiences that are easily discoverable, simple, accessible, personalized, and automated. We need to connect the experiences that exist today—and the ones in the future—in an end-to-end way that reflects how people want to work in context. We want to provide support in a way that best suits people's needs. Several factors prevent our users and agents from experiencing and delivering optimal support:

- Users' frustrations:
    - o My support experiences are too complicated and involved.
    - o It's too hard to find solutions myself, and when I do, I can't follow some of the support articles because they're too long and complex.
    - o It takes too long for support to fix my issues.
- Agents' frustrations:
    - o I want a single place to access all my tools.
    - o I need to ask the user multiple questions before I start troubleshooting.
    - o The knowledge articles that I deliver are too long and complex.
    - o Users often first recognize equipment issues before the issues are proactively identified through monitoring.

Identifying the catalyst for change

Between 2016 and 2019, Microsoft expenditures for real-time analytics grew three times faster than our spending on non-real-time analytics. By 2021, we'll use information to reinvent, digitalize, or eliminate 80 percent of business processes and products that existed a decade earlier. By 2022, every interaction between users and applications or devices will be adaptive and personalized to the user.

The next generation of consumers—people born between 1995 and 2010, who account for 27 percent of the world's population—is entering the workforce. This generation is less inclined to trust companies and brands, and they're quick to switch preferences. They expect to be heard and involved in decisions, and they seek out employers and brands that offer authentic, transparent experiences. Enterprises that adapt faster to the changing demands of the modern consumer will outperform their peers.

The competition for talent and customers is also changing. Hiring the right talent or acquiring the correct prospects isn't enough—delivering experiences that earn customer loyalty is key. At Microsoft, we recognize the opportunity—and the need—to transform our support experiences to better meet user expectations in a continually changing business and technology landscape.

Transforming to embrace modern support

CSEO's efforts and investments in modern support focus on the two key employee roles that participate in support activities: users who experience and report issues and support agents and technicians who track and resolve those issues. We're pursuing several goals to improve both the user and support experience within our support environment.

- User-experience efforts

    - o User issues are transparently identified and remediated, whether they're encountered at the application or device level.
    - o Users receive a consistent, effortless experience across all support interactions.
    - o Support is provided quickly and reliably and is available in whatever context suits the user.

- Support-experience efforts

    - o Knowledge services enable support agents and technicians to resolve user issues quickly.
    - o Connected tools and correlated platforms create a seamless support experience for the agent.
    - o Automated alerting and monitoring with remote connectivity drive proactive resolution of common issues.

Measurements
We're using the following measurements to track our progress across the modern support investment.

- User satisfaction. We use a four-point scale to measure user satisfaction for all aspects of the support experience. We measure this at the transactional level and on each user ticket. We also send out a relational survey every six months to capture holistic user-satisfaction data.

- Time to resolve. We measure time to resolve as the absolute time it takes for a ticket to be closed, beginning at the moment it's created.

- Ticket per headcount. This measurement reflects the number of tickets in relation to the total number of employees and contingent staff.

- Ticket reactivations. This metric represents the percentage of tickets that are reactivated after they've been closed.
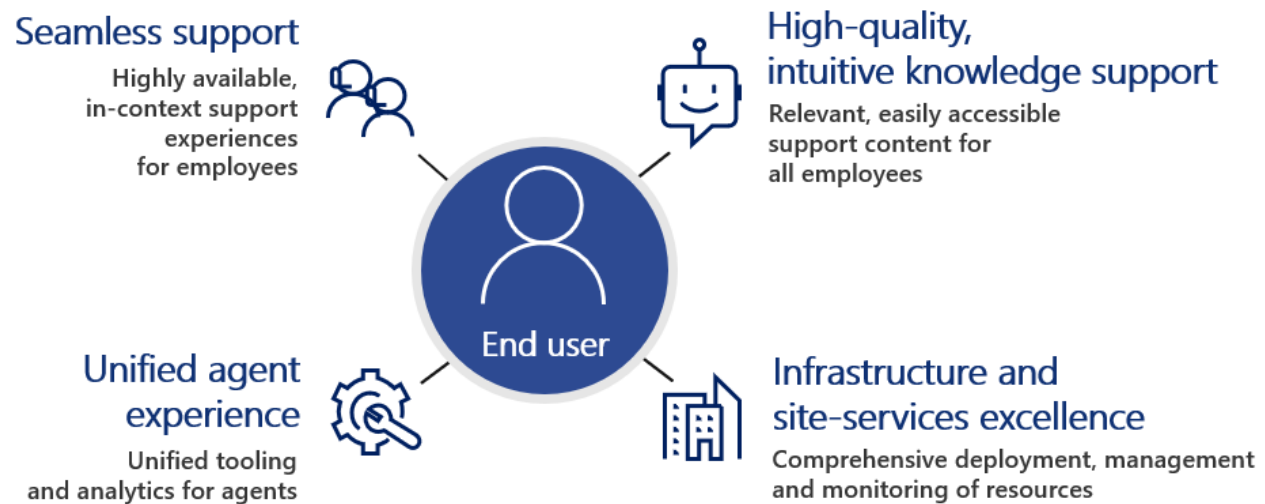
Seamless support
Highly available, in-context support experiences for employees

High-quality, intuitive knowledge support
Relevant, easily accessible support content for all employees

End user

Unified agent experience
Unified tooling and analytics for agents

Infrastructure and site-services excellence
Comprehensive deployment, management and monitoring of resources

Figure 1: The modern support experience at Microsoft

Seamless support

We want our employees to have the most simplified and transparent support experience possible. Employees can expect that their day-to-day issues will be automatically found and rectified without disrupting their productivity. When employees need to engage with support, they can do so in-context by using a method that best suits them: within an application or by using virtual agents, or by using social media, phone, email, or in-person interactions. Support is accessible to all Microsoft employees through inclusive design and assistive technology to our support solutions. We're investing in technology that enables self-healing and remediation capabilities that are unobtrusive to employee workflow.

For example, if an employee reports an issue with an app they're using, we want to gather relevant data proactively and—if possible—use automated tasks to resolve the problem immediately. By using data from the employees' device, information about the current application context, and other relevant data, the system supplies automated remediation tasks to resolve the issue without agent intervention. If automated remediation isn't possible, the ticketing system uses the same data to populate metadata, so that the user request is directed to the most appropriate agent with the information needed to resolve the issue quickly.

Business systems that incorporate continuous intelligence using real-time data in context, to improve decisions are becoming more common. We're implementing a system for predictive and proactive software analytics on all our managed devices. This system will enable us to use real-time, contextual client data to improve both decision making and the end-user experience. Within this system, data is collected to monitor activity, performance, and software

usage. The system's engine then processes and interprets the data in real time, providing a base for proactive, automated remediation.

By championing a unified model for all interactions with support tools, we create an environment in which users have consistent and coherent experiences across all support channels. In-context support experiences that allow an employee to engage support from within their current app or environment. In-context support enables non disruptive interaction with support tools. The data that we collect through the in-context method better enables automated remediation. It also provides better information for support agents, if the user pursues agent contact through chat, phone, or other methods. For example, implementing a universal virtual agent interface across all our support tools provides a consistent interface and experience, regardless of the tool used. This model extends to all facets of the support experience, from user interfaces to processes and workflows.

CSEO is rethinking the support toolset to improve the experience and increase efficiency for users and support agents. By improving our knowledge-based content, documentation becomes more relevant and searchable. This decreases agent time to resolution and increases customer satisfaction. Migrating to an integrated cloud platform provides not only issue-tracking capability but also automated support processes and predictive recommendations. To better manage internet of things (IoT) devices and conference-room assets, we created a strong partnership with our infrastructure deployment teams. This structure ensures that new devices support remote connectivity and get onboarded to our alert-monitoring solutions.

It's also critical to provide face-to-face interactions with support for our users, especially when they require help with devices. To do this, we now have walk-in support centers around the world that enable users to get this type of support. These centers use technology for online check-ins and collect wait-time information to help keep users as productive as possible. In regions where Microsoft operates small offices, virtual technologies allow users to bring their device to a dedicated area to obtain get help online from agents.

The goals of these initiatives are to decrease the effort agents require to resolve issues and ensure that users are completely satisfied with their experience. We also provide 24-hour exclusive executive support services designed to quickly resolve technology-related issues for company executives and their executive assistants. Executive support services also identify automation opportunities that can be applied throughout the Global Support organization.

Key results
These investments have produced three key results:

- Users have more time to focus on their job because issues are automatically identified and remediated transparently on their devices. This means less interaction and time interfacing with support.
- Employees get support anytime, anywhere, and the efficient ticketing process doesn't require a repetitive description of issues or tedious tasks.
- Alert monitoring is enabled on all our IoT devices and conference-room assets to enable more proactive issue detection.

High-quality, intuitive knowledge support

At Microsoft, we understand from experience that well-informed users experience fewer issues and are more empowered to seek self-remediation methods. Accordingly, improvements to our knowledge systems' quality make the systems easier to use, for both employees and support agents. Multiple self-help and virtual-agent modalities will automatically present to employees accurate, meaningful, and simple-to-follow content that helps them mitigate issues quickly.

Even the best content doesn't help users if they can't find it. We're focusing on creating straightforward knowledge-based content. Using the Flesh Kincaid readability standards with a target level between 60 and 70, helps us ensure a better reading experience for users and agents. We're implementing a common platform for search and creating a single entry point into our knowledge content from our primary company portal. In addition, we established more stringent content guidelines for new knowledge-based articles, and are examining and improving the way that we record and use metadata for predictive, accurate search results.

Short, easily consumable guidance videos for users, better support individual content-consumption preferences. Our support resources include a broader range of media types to provide a more optimal support experience. In addition to online content, we now provide in-person and online sessions that focus on adopting new Microsoft products, technologies, devices, and services. This service helps supply the contextual information and resources that employees need to be productive, creative, and innovative.

We're reinventing how we approach employee readiness through content delivery and consumption. The new-employee onboarding process is being improved to ensure that employees are prepared for new products and services we introduce into their workflow. Our future state will include a complete toolset and readiness content for all employees that enable them to be productive right from their first day of employment. Our teams are unifying our onboarding approaches, creating a consolidated content platform, and learning paths based on user roles and business functions.

Key results
Our efforts have produced these key benefits:

- Simple, knowledge-based content. Our support content is accessible, simple, and easy to follow, and targets a broad reading level and regional context.
- Day-one readiness for all employees. New employees can more easily find and use knowledge content from their first day on the job.
- Effective training programs for all employees. Employees can easily find and subscribe to high-quality training content that's relative to the tools and services that they use.

Unified agent experience

Our support teams need the proper toolset to fix issues quickly and support the productive enterprise for Microsoft employees. To meet this goal, we're developing and using connected tools and correlated platforms that increase information reuse and employ data pertaining to the support environment. The result will be a seamless experience for both agents and users.

We're moving toward giving our agents a single support-experience interface by consolidating multiple agent-entry points into a single agent workspace. By reducing the number of tools that agents use, we give them a complete toolset, a simpler view into the support environment, and a more streamlined method for executing support tasks.

To improve agents' toolsets, we're making our tools more intelligent. Machine learning and predictive analytics enable our agents to access all the information they need to resolve an issue—including information that they might not know they need. Existing ticket data provides insights into the resolution process so that our agents can supply the quickest resolution possible. We have also implemented intelligent workflows that automatically present themselves to the agent. These workflows, based on issue classification, help guide the agent through the troubleshooting process with the user and ensure a consistent, thorough process.

Our ticket-resolution toolset enables us to gather robust user sentiment from chat experiences, call-quality data, and our Yammer communities. This information helps our agents understand the issue's complete context and respond more appropriately to the initial user contact. Our agents need to enter the issue-resolution process with the greatest possible chance of success. User sentiment also helps Microsoft's leadership and key stakeholders better understand the issue-resolution process and where intervention might be warranted. The data also helps our product groups and partners continually improve their products.

Key results
Our efforts have produced these key benefits:

- A single lens for our agents. Our agents manage and interact with tickets from a single interface.
- Proactive and predictive support insights. Our agents can find and potentially resolve issues before they're reported by users.

- Single repository for support data. We now have a single location for user and agent data that's accurate and relevant to their respective roles.
- Enhanced automated-support capabilities. Automation-assisted mitigation actions expedite resolution of technical issues.
- Innovation framework. A universal, technology-assisted process now exists for sharing ideas and suggestions for resolving support issues.

Infrastructure and site-services excellence

Our Global Support organization continually invests in our core sites across the 110 countries and regions in which Microsoft operates, creating efficiency and value for both our users and our support teams. Our site services teams, led by site support managers, have a broad portfolio. They're responsible for infrastructure deployment, end-user and site infrastructure support, stakeholder management, readiness delivery, and crisis-management engagement.

Our site-support teams, with their global reach, play a key role in supporting business continuity. In many instances, our team is the only onsite IT presence. We now provide the core site, service owners, and business units with a local partner. That partner helps them better understand outage impact, minimize service disruption, and develop local business-continuity plans.

Microsoft supports technology in more than 500 physical buildings and more than 12,000 conference rooms worldwide where change and modernization are ongoing activities. Our infrastructure deployment service team provides professional project management services for the IT infrastructure component and real estate-related projects. This team proactively collaborates closely with our Global Support organization personnel and with site-support managers who execute the onsite activities. The team's mandate is to align infrastructure changes, generate end-to-end oversight, and support greater business agility.

The franchise model concept empowers our site support managers to be accountable for the delivery of our remote and onsite support services portfolio. Site-support managers have access to a real-time service-metric portal that provides service health and user satisfaction insights by geography, site, and service. The portal helps them drive service improvement and user readiness content, creating a globally consistent support experience across all service lines.

We're also working toward identifying shadow IT resources across our global portfolio. By engaging with the business units associated with the shadow IT resources, we can evaluate gaps between the current corporate enterprise service offering and the local business needs. The goal is to ensure that our global enterprise support service portfolio meets all local business units' needs.

Key results
Our efforts have produced these key benefits:

- Customer satisfaction metrics for Global Support services are met or exceeded at the geographic and site level.
- All shadow IT and non-sanctioned resources are removed, replacing them with corporate enterprise services where required.
- All infrastructure projects are delivered on time and on budget.

Conclusion

The Modern Support experience at Microsoft is transforming the way our users and agents experience and provide support across the company. Our environment enables our employees to be creative, innovative, and productive by providing a support experience that focuses on identifying and remediating issues automatically—before employees are even aware that issues exist. By creating a seamless support experience, creating high-quality knowledge content, supplying a unified agent experience, and maintaining infrastructure and site-services excellence, we're improving employees' support interactions. The Modern Support experience gives everyone at Microsoft broad, inclusive access to support that makes our users, our agents, and our company more successful.