Wipro leverages Intel vPro® technologies for workplace support in pandemic times

Mrinal Rai, Principal Analyst, ISG

February 2021

ISG Provider Lens™

wipro

ISG Provider Lens™

ISG Provider Lens™ delivers leading-edge and actionable research studies, reports and consulting services focused on technology and service providers' strengths and weaknesses and how they are positioned relative to their peers in the market. These reports provide influential insights accessed by our large pool of advisors who are actively advising outsourcing deals as well as large numbers of ISG enterprise clients who are potential outsourcers.

For more information about ISG Provider Lens™ studies, please email ISGLens@isg-one.com, call +1.203.454.3900, or visit ISG Provider Lens™.
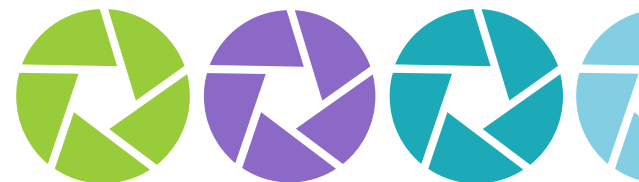
ISG Research™

ISG Research™ provides subscription research, advisory consulting and executive event services focused on market trends and disruptive technologies driving change in business computing. ISG Research™ delivers guidance that helps businesses accelerate growth and create more value.

For more information about ISG Provider Lens™ studies, please email ISGLens@isg-one.com, call +1.203.454.3900, or visit ISG Provider Lens™.

ISG Provider Lens™

Contents

Summary

With COVID-19 and the resulting increase in remote workers, enterprises are being challenged with providing best workplace technology experience to their employees and having the ability to measure the tech performance and user experience. Since end user devices are at the core of workplace technology, their features play a critical role in making or breaking user experience. User expectations for device performance are changing as their roles and responsibilities change. Remote workers expect an uninterrupted experience and do not want unexpected device failure or breakage. Enterprise IT organizations are suddenly faced with challenges associated with ensuring users will get immediate, secure help from their workplace support teams in the event of an unexpected failure, even while working from any location, and without the need for an in-person field technician visit. IT organizations have the ongoing need to provide devices that are best suited to user personas, which has become harder as the pandemic has changed work styles. Wipro understands these challenges and has created service offerings that leverage the latest technologies from Intel to provide consulting around persona-centric device suggestion and measuring the resulting user experience. It also helps enterprise IT support teams leverage Intel vPro® technology for assisting in remote field support with out-of-band (OOB) management.

Intel's Project Athena and Wipro's XLA approach

Intel's innovation program code-named Project Athena is aimed at developing standards for laptops to provide the best performance and user experience. This project was inspired by understanding device usage and helped Intel to innovate across many areas associated with PC and laptop platforms to address user experience challenges. These areas are:

- Keeping the device ready for users
- Performance and responsiveness
- Quick charging and high battery life
- Faster connectivity
- Form factor, innovative interaction, and adaptive intelligence

The Project Athena innovation program focuses on key experience indicators (KEIs) for measuring real-time usage and performance. The different domains covered in project Athena are highlighted below in Figure 1.
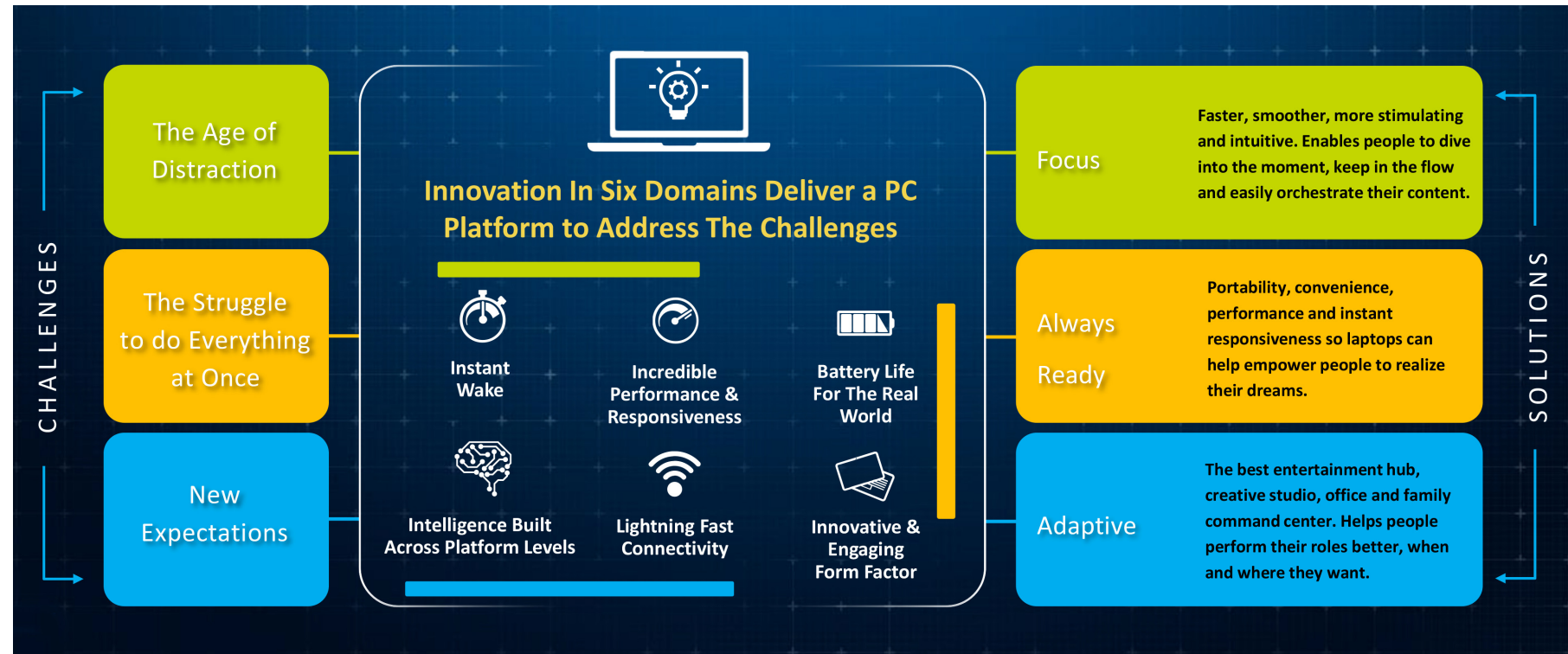
Project Athena and its relevance in COVID-19

These parameters become extremely important in high-volume remote working scenarios such as the one we are experiencing in the COVID-19 world. Users with multiple work habits, preferences and requirements would need a laptop with the latest build that provides all the required and desired features they need to do their particular work from anywhere on any network.

In September 2020, Intel introduced the Intel® Evo™ platform - a whole new class of laptops that are co-engineered and verified to meet the requirements of the 2nd edition Project Athena specification. In January 2021, Intel introduced the Intel® Evo™ vPro® platform to deliver the integrated business-class technologies IT needs from the Intel vPro platform with the computing experience of the Intel Evo platform that users want. Powered by 11th Gen Intel® Core™ i5 vPro® and Core™ i7 vPro® mobile processors, these laptops offer adaptive intelligence built across platform levels, which will become critical in the post-COVID world. These intelligent features make the laptop adaptable for the intended use. The laptops leverage machine learning and artificial intelligence technologies to identify users' needs and adjust the performances accordingly. For example, when a user initiates an application the system can quickly understand that user needs more CPU power and can quickly increase the processor performance for quick launch. When the user continues to use the application, the processor power can return to normal to improve battery life. Original equipment manufacturers (OEMs) now make laptops conforming to Intel Evo Platform and Intel Evo vPro platform standards.

In the post-COVID and new future ways of working, remote working at scale will require enterprises to select the best-performing devices that can conform to the latest standards developed after in-depth studies of user types. This will become even more important as the future ways of working will involve managing diverse working styles for users who may never come to office ever.

Figure 1: Project Athena components

CHALLENGES

The Age of Distraction

The Struggle to do Everything at Once

New Expectations

Innovation In Six Domains Deliver a PC Platform to Address The Challenges

Instant Wake

Incredible Performance & Responsiveness

Battery Life For The Real World

Intelligence Built Across Platform Levels

Lightning Fast Connectivity

Innovative & Engaging Form Factor

SOLUTIONS

Focus — Faster, smoother, more stimulating and intuitive. Enables people to dive into the moment, keep in the flow and easily orchestrate their content.

Always Ready — Portability, convenience, performance and instant responsiveness so laptops can help empower people to realize their dreams.

Adaptive — The best entertainment hub, creative studio, office and family command center. Helps people perform their roles better, when and where they want.
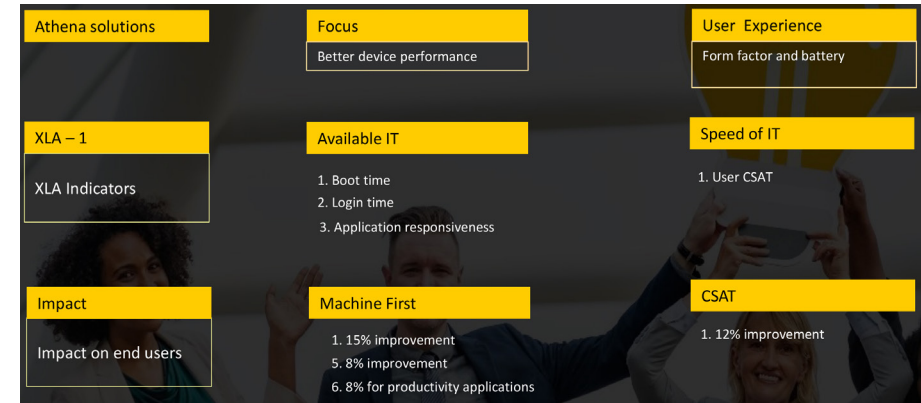
Source: Intel

Wipro's addition on Intel's Project Athena and Intel Evo Platform

Wipro has enhanced its digital workplace consulting services by leveraging Project Athena. Intel developed the Project Athena standards after intensive efforts where social scientists and ethnographers studied users' behavior with their devices at their homes, offices and other locations. Wipro's digital workplace consulting services include segmenting end users based on their personas according to their computing needs, which may depend on their role, responsibilities, location and usage pattern. Since Project Athena already considered these parameters for developing its standards, Wipro can advise its clients on the device types best suited for their workforce personas. For example, for tech-savvy users Wipro can suggest high performing, compact form factor, self-optimizing and intelligent platform devices.

Wipro also follows a robust methodology for measuring its workplace services effectiveness in enabling user experience. A significant set of key performance indicators (KPIs) or experience-level parameters for measuring experience level agreement (XLA) indicators can be applied to these devices, as shown in Figure-2. Through the Project Athena KEIs, Wipro has developed its own XLA indicators such as "Available IT" that measures the time it takes to access workplace technologies. Indicators such as device boot time, login time and application responsiveness can be measured based on the Athena KEIs.

Wipro has been approaching enterprise clients about mapping required user experience with devices that are approved and compliant with Project Athena.

Figure 2: Wipro's XLA indicators

Source: Wipro

Intel's KEI-based parameters play a key role in Wipro's XLA approach and help CIOs ascertain if the devices assigned are performing at the desired level and generating measurable user experience.

Remote support through Intel vPro platform addresses field service challenges

At this writing it has been nine months into the pandemic and the way enterprise IT teams are working to manage their workplace technology ecosystem has already transformed. There has been a flurry of new challenges and opportunities to use latest technologies to manage remote working effectively.

While enterprise IT organizations were already equipped with technology that enables their employees to work from any location, the pandemic forced them to apply these at scale never tried before. Remote working at scale has its own huge set of challenges in terms of user enablement, experience management and meeting users frequently changing expectations. It translates into challenges in managing workplace services operational activities, such as ensuring remote service desk support, remote field service and device support. The remote work or work-from-home model also allows users to connect to their workplace environment by relying on unknown personal or public networks and with managed or unmanaged devices. Security has become a paramount factor to address while enabling remote working technology. Enterprise IT has to ensure that each user's connection is secured, and all device and application access is managed according to company policies.

Managed field support services have their own set of related obstacles. Field support services generally include IMAC (installs, moves, adds, changes), operational monitoring, incident or problem determination and resolution, technical support, break-fix, software reimaging, network connectivity within the site and disaster-recovery support activities at supported sites. Because employees are not working from office premises and may not always be connected to a secured office network, their workplace experience heavily relies on the devices they use. Devices are the first point of contact for end users and their key means to access the workplace environment. These devices in most cases are issued or managed by employee's own organization, however, in the pandemic times, there have been cases where employees need to use their own devices to access their workplace. A user's experience and productivity thus ties more strongly to the device performance. It is important that all device break/fix and IMAC services are carried out smoothly and according to responsible COVID practices to ensure a safe, uninterrupted employee experience. The use of IT vending machines for no-touch interaction to provide devices is an example of how some enterprises are meeting this need.

According to ISG's UserX™ user experience monitoring, users report highest satisfaction levels when they interact with a support agent in person (Figure-3). Using automation-enabled predictive analytics and proactive monitoring have helped enterprises reduce spending on costly support channels. However, the highest reported user satisfaction remains on those channels where users personally interact with the service agent. These channels are mostly used for most complex issues such as device break or corrupt operating system (OS) configurations.

During the pandemic times, however, enterprise IT organizations are unable or reluctant to send their field support engineers to user locations, and users are unable or unwilling to visit tech bars. While most problems related to applications and other software can be resolved remotely by workplace support teams, issues like devices crashing or not booting up may still require field engineer assistance.

The issues are even more complex to handle when users are using their own personal devices to access workplace apps. As remote work is scaling up in the current environment, there is a strong need for enabling better remote field support. This can be done by leveraging the latest technology to assist users with issues that result in a sudden productivity halt. At the same time, IT organizations need to keep it simple and integrate any such additional offering with their existing IT service management capability.

Figure 3: User Satisfaction Measurement
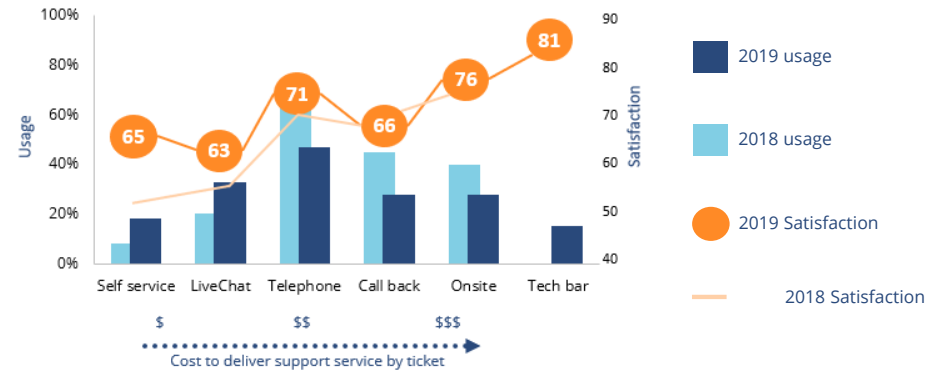
Source: ISG UserX™

Wipro's LiVE Workspace Connect

Wipro has recently realigned and reimagined its LiVE Workspace offering in response to the pandemic and need for remote working at scale. The new offering called Wipro LiVE Workspace Connect covers many remote working aspects such as remote workspaces, enabling desktop virtualization, support from cognitive artificial intelligence (AI) assistants, user experience measurement and monitoring and remote field support.

Wipro leverages the Intel vPro platform to enhance its remote field support in these unusual times. Intel vPro platform includes Intel® Active Management Technology (Intel® AMT) and Intel® Endpoint Management Assistant (Intel® EMA). The platform is a system-on-a-chip solution available with all devices that support Intel Core i5 vPro, Intel Core i7 vPro and Intel® Xeon® processors. Intel AMT enables Wipro to manage and repair devices including personal computers (PC), laptops, and connected IoT devices based on the Intel vPro platform. It is used in combination with Intel® processors and network controllers and is a key component in the "hardware-enhanced" manageability and security strategy.

With Intel AMT technology, Wipro provides remote diagnostics, image management for computing devices and energy cost reduction. It can also help enterprise IT organizations to perform remote repair and maintenance activities, such as powering devices down when not in use to conserve energy. Key remote support activities Wipro can support with Intel AMT technology include:

- **Remote power control:** It allows powering-on single or multiple systems remotely when the user is unable to boot them and they are not connected to the network. It can perform remote remediation and patch management.

- **Hardware alarm clock:** It allows for wake-up and power-off schedules. It can help users by ensuring their device only powers on during business hours only, which helps with compliance and maintaining user work schedules even while users work from home.

- **Hardware KVM:** It provides remote keyboard-video-mouse (KVM) control and visibility that can support cases such as device OS failure.

- **Boot redirection:** It allows devices to boot into temporary environment. This can help users that are facing serious device failure.

- **Beyond firewall support:** It allows for managing and supporting devices under the purview of enterprise IT or inside the corporate firewall and those that fall beyond it, including BYOD devices.

- **Cloud-based manageability:** Intel EMA is a cloud-based management solution that allows enterprise IT organizations to integrate Intel AMT access to third-party consoles.

- **Unattended system control:** It allows for remote management of systems when users are not in front of them.

- **Upgrade management:** It provides OS update assistance and monitors boot steps for upgrades of operating systems such as Windows 10.

The key differentiation that Wipro brings with Intel vPro technology is providing out-of-band management support. In technical terminology, with in-band management device management software or agent sits at the applications layer on the device and communicates with the management server. This management happens above the OS level and requires the device to be powered on and the OS to boot up. In contrast, out-of-band management requires a management service agent at the hardware level (Figure-4). Out-of-band (OOB) management is provided below the OS layer, runs on the hardware level and does not require the device to be powered on.

Wipro uses Intel vPro technology for OOB remote management to support end users working from any location and facing device boot up failure. If workers use their Intel® Core™ vPro® based- devices to access their workplace applications and data, Wipro can support them remotely. Leveraging Intel vPro platform, Wipro can provide secured remote management making workforce productive with lower costs.

Figure 4: In band and out-of-band management
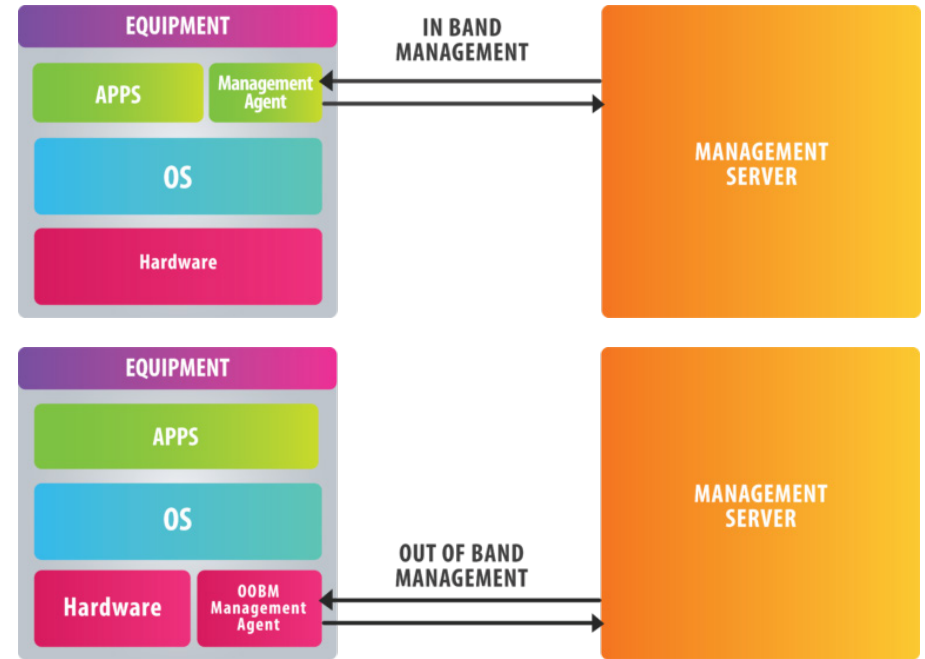
Source: 42Gears Mobility Systems Inc

imagine your future®

Wipro's value addition over Intel vPro technology

While Intel vPro technology is not new, its application to support end users with remote management was not fully explored. The pandemic has highlighted the use cases where users need immediate support when they see the blue screen of death or are unable to boot the device because of OS failure. Wipro identified this need and has created customization and integration for Intel technologies through software components to allow remote support. Wipro leverages REST APIs to integrate Intel EMA with its clients' ITSM tools. This allows enterprise IT organizations to leverage Intel EMA technology with their existing service management tools such as ServiceNow. With this enablement, an IT help desk agent can launch a remote support session through its regular ITSM console. (See Figure 5 as an example).

Wipro provides pre-built integration with ServiceNow™ and other ITSM toolsets and also provides end-to-end auditing of such remote support calls. It conducts a complete discovery and implementation plan spanning approximately three months to enable remote management using Intel technology.

Implementing Intel vPro technology for remote field support requires training for remote workers. Wipro accompanies its LiVE Workspace offering with a coordinated organizational change management component. The OCM program includes communications and required trainings to ensure the new technology is adopted, and helps ensure effectiveness, user satisfaction achievement and efficiency improvements go as planned.

Figure 5: Example of ServiceNow console view for integration of Intel vPro platform remote support for service desk agent

Source: Wipro

As shown in Figure – 6, Wipro conducts a detailed assessment of existing endpoint devices and ascertains their fitment for remote field support. It then helps clients register endpoints for cloud-based support and integrates the clients' existing ITSM ecosystem. It pilots the rollout in the second week of the engagement for selected user groups. In about three months, Wipro can conduct a complete scaled rollout of remote field support for different user groups.

Figure – 6: Wipro's three week assesment for remote field support

Day 1	Day 3	Day 5	Week 2	Week 3
Evaluate current endpoint estate for fitment for remote field support	Enable cloud based components for registering endpoints for support	Provide integration with current ITSM systems	Pilot rollout of remote field support for user groups	Scaled rollout of remote field support for user groups
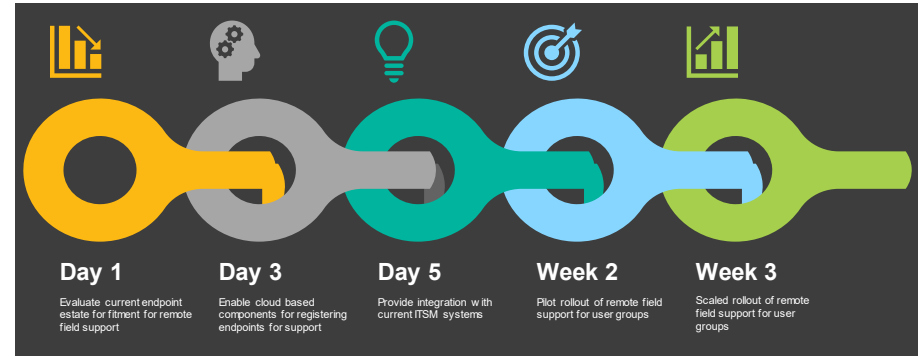
Source: Wipro

Case Example

One of Wipro's large legal industry clients wanted to roll out Microsoft Teams and required help on remote management for it. The company needed to enable BIOS changes on devices to enable cameras and needed to optimize network for video quality. Wipro provided a rapid MS Teams rollout along with required adoption support and change management. It leveraged Intel vPro platform for out-of-band changing of BIOS settings.

Another of Wipro's technology industry clients had a legacy field support structure with little visibility into remote field support services. The client was also experiencing high downtime because of social distancing and lockdown norms. Wipro assisted with a one-week assessment and provided a scaled out of-band solution rollout to 70 percent of the device estate in another two weeks. The project resulted in increased OOB remote hardware support by 40 percent and decreased user downtime by 50 percent.

The right implementation of cutting-edge technology solutions needs better service partners

Intel, being a world leader in semiconductor and chip manufacturing, has developed key industry standards and features that enhance end users' experience and facilitate workplace support teams' operations. Its Project Athena-based specifications help enterprises choose the right devices for end users, and the Intel vPro platform allows support teams resolve critical device issues remotely. As the pandemic has changed the way of working and we are likely to witness significant remote working than before, even after the pandemic subsides. These technologies will outlive COVID-19 and will be extremely relevant for the "next normal" way of working.

Wipro is a leader in managed workplace services globally and has been recognized multiple times by ISG. ISG has particularly highlighted its offering in workplace-related consulting services. Wipro analyzes users' personas and maps their work journey based on roles and responsibilities, and identifies their workplace technology needs. The analysis then further drills down to the requirements for devices and specifications. In its XLA approach, Wipro focuses on parameters such as available IT, automation-enabled machine first resolution, speed to serve end users and customer satisfaction. Leveraging Intel's Project Athena specifications helps Wipro to best consult on required workplace technology and enables it to provide threshold values for measuring the experience level KPIs. Using Intel vPro technologies, Wipro can help its clients provide remote work support for their employees by enabling their support

teams. With its ability to integrate this technology with existing client setup, it brings a valuable proposition that is relevant for these pandemic times.

ISG has observed that enterprises are considering XLAs and/or modifying or complementing their existing technology-centric service level agreements to make them more user experience centric. In the post COVID-19 world, remote working will remain on the rise and enterprises will still face the challenge of equipping their workers with the best possible platforms and devices. The latest devices from multiple OEMs with the most sought-after features are based on Intel i5 or i7 processors. To fully realize the potential of these devices and leverage them to enhance experience of their users, enterprise IT leaders must be aware of their potential. They should also engage with a reliable service partner that can quantify these experiences to provide empirical evidence of best usage of these technologies. Wipro is doing just that for its clients. While an increasing number of clients are restructuring their managed workplace services contracts to include XLAs or experience indicators, parameters related to device availability, reliability, connectivity and performance will remain as key indicators of experience.

Author

Mrinal Rai, Author
Principal Analyst

Mrinal Rai is the principal analyst for Digital Workplace and Conversational AI. His area of expertise is digital workplace services, enterprise social collaboration and conversational AI both from a technology and business point of view. He covers key areas around the Workplace, End User computing domain and conversational AI viz., modernizing workplace, Enterprise mobility, BYOD, VDI, managed workplace services, service desk, enterprise social software, content/ team collaboration, chatbots and intelligent virtual agent platforms. He has been with ISG for last 8+ years and has more than 13 years of industry experience. Mrinal works with ISG advisors and clients in engagements related to chatbots, virtual assistants, workplace modernization, social intranet, collaborative workplace, cloud-based VDI, end user computing and service desk.

iSG Provider Lens™

imagine your future®

ISG Provider Lens™ | February 2021

Intel® technologies may require enabled hardware, software, or service activation.
Intel, the Intel logo, and other Intel marks are trademarks of Intel Corporation or its subsidiaries.

ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 700 clients, including more than 75 of world's top 100 enterprises, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis. Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,300 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data. For more information, visit www.isg-one.com.