

# TECHNOLOGY BEST PRACTICES FOR AN AGILE WORKSPACE

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# TECHNOLOGY BEST PRACTICES

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Agile design concepts are expanding well beyond their roots in software and influencing numerous aspects of corporate operations and culture. Workspace design is no exception. Agile workspaces incorporate many combinations of design choices but typically include open plan areas, breakout or collaboration areas, quiet zones, touchdown space, and resource areas. As these concepts influence development workflow, agile workspaces also encourage and support human workflow.

An agile workspace allows an individual to start the day at a seat in an open plan, move to a breakout area for collaboration with a team, shift to a quiet zone for focus time, and reunite with team members in a collaboration space at the end of the day.

Integrating technology into agile workspaces poses several challenges. The underlying infrastructure must be flexible enough and robust enough to support the motion of employees through the space and the dynamic nature of the space itself. Changeable office spaces supported by modular furniture and fixtures exacerbate the challenges for infrastructure.



## PROVIDE UBIQUITOUS CONNECTIVITY

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In most instances, this means building a robust and secure WiFi network with comprehensive coverage, high performance and automated resiliency. Agile environments require greater flexibility to support a user base that is continuously moving throughout the space and with that movement comes shifts in bandwidth and user density demands. WiFi and the underlying network infrastructure must be constantly monitored and actively managed to support these shifts without introducing bottlenecks.

*IT services must follow employees' daily journeys and unobtrusively support and enhance productivity.*



## DEVELOP A COMPREHENSIVE, INTEGRATED COMMUNICATIONS INFRASTRUCTURE

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User mobility not only mandates untethered wireless connectivity, but also provides a communications suite that supports voice, instant messaging, and advanced collaboration tools for screen sharing, audio and video conferencing and content sharing. Successful IT design for agile spaces requires careful integration of desktop software and collaboration tools with the physical assets throughout the space including desk monitors, conference phones, meeting room displays, video conferencing systems, and other AV systems.

## INTRODUCE ENHANCED RESOURCE RESERVATION SYSTEMS AND SMART KIOSKS

Resource reservation systems must move beyond basic meeting room reservations and expand to include open seating, technology resources, and even occupancy monitoring capabilities. The back-end software powering these systems must integrate with desktop productivity stack as well as various tablets and kiosks used for direct access by employees and guests. Wayfinding tablets and kiosks can direct users to workspace locations and provide real-time occupancy data to help users find available resources within the space. Data Visualization and analytics on space and resource utilization is required to ensure space and technology is available when required.

## BUILD STRATEGIC CABLING AND POWER INFRASTRUCTURE AND DELIVERY

Network connectivity and power delivery continue to push further into the wireless domain, but physical connectivity is still required. Fixed data cabling and power outlets must be deployed strategically throughout the space. Touchdown spaces should have excess power outlets while breakout areas and other flex spaces should have floor-based power and network ports leveraged as furniture and humans move throughout the space. Another consideration is how power is delivered. The definition of “power outlet” is expanding to include USB and wireless charging pads or mats for laptops and phones. Power over Ethernet devices is increasing in numbers and capability driving the need for network switches with large power capacities and the features necessary for delivering and monitoring power to the vast array of devices connected to the network.

## LEVERAGE DATA ANALYTICS AND IoT TO MAKE IT MORE AGILE

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Analytics on resource consumption can help optimize both the physical and IT design of the space. Traditional inputs from resource reservation systems can provide clues to usage. However, live data from card readers, WiFi systems, and IoT based sensors can inform not only space utilization but environmental control systems for heating/cooling and lighting. Dynamic adjustment of airflow and cooling not only makes users more comfortable and productive but help conserve energy. Careful IT infrastructure design ensures the sensors and back-end systems receive connectivity and power.

Moving above the physical layer, firms must develop comprehensive security and wireless spectrum management processes to support these systems. WiFi management includes providing secure connectivity to the systems and cloud-based data stores, isolating various systems from corporate resources, coordinating integration with non-IT infrastructure systems, ensuring the privacy of users within the space, and managing the wireless frequencies and protocols in use to ensure performance and reliability.

## EMBRACE THE CLOUD

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Many of the systems and services discussed above leverage cloud-based tools and data stores to deliver functionality or perform the back-end analytics supporting the services.



# SUMMARY



In summary, best practices for IT infrastructure include:

- Robust WiFi with strong controls and enhanced analytics
- Careful design for data cabling and selection of network switches
- Support for alternative power sources and delivery methods (PoE, USB, power mats, portable power packs)
- Software integration across desktop and physical assets
- Flexible communications software packages that support mobility
- Expand or extend security policies
- Develop data sharing models and controls to integrate with non-IT systems for lighting, physical security, and environmental controls
- Leverage analytics and reporting from a variety of systems including WiFi, reservation systems, physical security, and IoT-type sensors

IT infrastructure design must evolve across multiple dimensions to support an agile workplace. Align's holistic approach and broad technical resources help our clients navigate a sea of possibilities to develop comprehensive strategies of agile workspace IT infrastructure that suit their business and users. Our capabilities cover the full life-cycle of design, build, operation, and optimization IT infrastructure solutions that enable the user productivity and embrace the agile concepts.