

The Digital Workplace of the Future



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Introduction

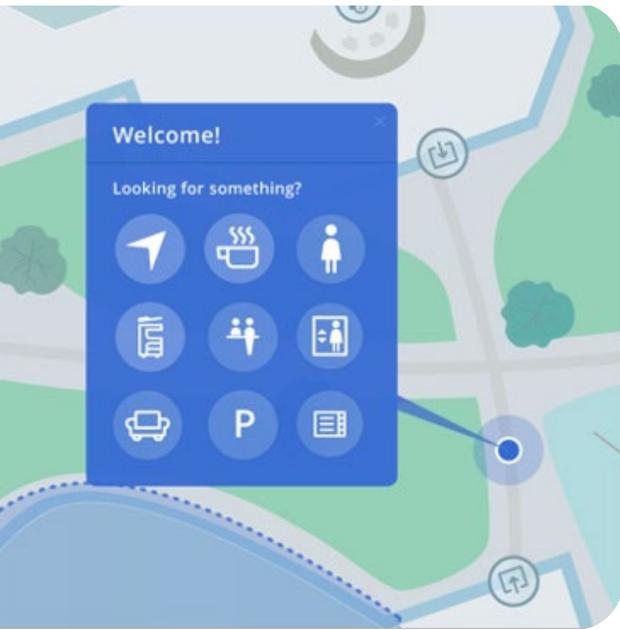
Our offices are changing. Over the last twenty years, office walls have tumbled down, cubicles have been dismantled and reassembled, and the entire workplace dynamic has been reconceptualized several times. Open office plans have been adopted and reconsidered in the span of two decades as informal collaborative workspaces, open individual work areas, quiet zones and shared multipurpose resources have taken hold.

As the business world continues to evolve and becomes more mobile and digitized, employees need to be able to quickly and easily share knowledge through efficient collaboration and immediate access to the resources they require. It is also thanks to this evolution that securing corporate spaces has become imperative to business success.

With the digital office of the future being driven by a new generation of tech-savvy employees, there is growing interest in how companies can embrace trends such as Bring Your Own Device (BYOD) combined with the Internet of Things (IoT), Indoor Intelligence, and existing business applications to improve workforce engagement and enhance the employee experience.

This white paper will provide insight into how indoor intelligence technology plays a crucial role in the digital workplace of the future by connecting disparate systems into a single interface across multiple devices, creating a more connected, agile workplace, geared for productivity and collaboration. Because ultimately, for many enterprises, the digital workplace of the future is already here.

The Digital Workplace of the Future Puts the Employee Experience First



As competition for top talent becomes more fierce, leading organizations know that in order to secure the best people in their industry, they must offer more than a steady paycheck. Leading employers know that employee engagement and positive employee experiences are imperative to winning the war for talent. This means that they must meet employee expectations for technology and environment.

The generation currently advancing in the workforce has been fueled by advances in technology. Compared to their parents and grandparents, they have fundamentally different values when it comes to how they should live and work. This is one of the main challenges organizations are struggling with - offering employees the resources and support needed to engage with the purpose of the business and drive success.

This new digital workforce requires agile collaboration and decision-making tools. Emerging technologies, such as indoor mapping and location sensor technology, are being adopted to facilitate business innovation to make spaces smarter and more intuitive.

It merges business data and systems with indoor maps to cultivate indoor intelligence and location-awareness, which enable real-time interactions with colleagues, mobile access to resources, and digital indoor navigation. It can also easily be used as a tool to enhance business processes, workflows, and employee training by delivering context-specific information. This empowers employees to feel productive and engaged in their work, leading to better performance and higher retention rates.

In a survey by Gallup, employees cite the “availability of resources to perform well,” and, “I have the materials and equipment I need to do my work right,” as key factors that drive engagement.

The Digital Workplace of the Future Operates at Max Efficiency

Indoor intelligence has the power to support organizational initiatives beyond employee retention. When workplaces embrace location technologies, they usher in improvements to operational efficiencies and cost reductions. The benefits of technological advancement can be better understood in the context of several challenges facing companies today.

Office Hoteling

Over the past twenty years, office hoteling - the technique whereby employees reserve workstations, private offices, conference rooms, or other office resources on an hourly or daily basis utilizing an office reservation system - has increased in popularity as it offers:

- Significant savings on office real estate
- The ability to scale company infrastructure in support of employee growth without adding fixed office space
- Workplace flexibility

“Over the past three years, we have saved 11% annually in facilities cost for hoteling locations and 82% in annual capital expenditure for planned growth facilities. Importantly, we also so far have seen a 43% reduction in our carbon footprint.”

- Sam Strickland, Chief Financial and Administrative Officer at Booz Allen Hamilton (source: The Wall Street Journal)

The challenge is that if not implemented correctly, it can result in employee dissatisfaction and become a costly exercise.

To succeed in implementing office hoteling initiatives, organizations will need to start by integrating location-based services, indoor mapping and existing business applications, which when combined, deliver an airline style application that gives employees the ability to reserve meeting rooms, request a specific room setup, reserve a workspace, in a specific location, for a specific period of time.

Using indoor intelligence technologies, employees have the ability to schedule these resources via a web browser, an interactive kiosk, or a mobile device. Then, using their employee app with mobile wayfinding, they can navigate to the most appropriate parking lot, from their parking space to their reserved workspace, and from their workspace to conference rooms or any other point of interest.

Location-Based Scheduling

Gartner describes a business moment as *“a transient customer moment that organizations can exploit dynamically based on the interconnection of many things”* (Gartner, *the Rise of the Business Moment*, Andrew Spender). This business moment has the potential to trigger a series of events involving people, applications, and in this case, meetings. In the digital workplace of the future, location and proximity-based scheduling are a reality that result in significant improvements to workplace productivity and agility.

These short but essential moments are interconnected with an enterprise’s business model in such a way that they provide added value to business processes and streamline decision making.

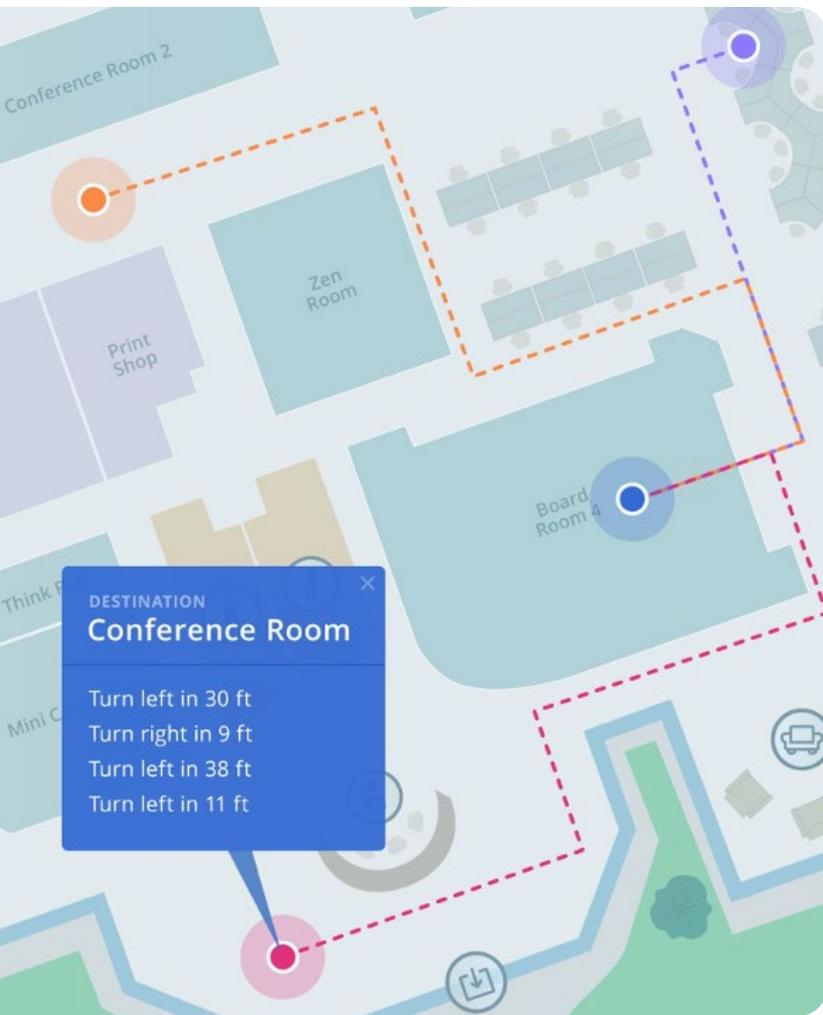
The trend toward BYOD and wearable technology has led to a more connected workplace, where workers use mobile devices and location technologies to locate one another and schedule meetings based on location and proximity rather than date and time.

On large campuses, where departments are spread across multiple floors and buildings, the ability to hold ad hoc meetings based on the proximity to team members and resources significantly improves employee efficiency and productivity. Using location-aware technologies, companies can deliver notifications to employees’ mobile devices providing travel time to a meeting based on a person’s location relative to the meeting room on a corporate campus.

Ad hoc meetings are a manifestation of an agile and more collaborative workspace, and are highly beneficial to businesses when they are easily facilitated. With indoor mapping and positioning, employees can use opt-in ‘colleague finder’ features to be notified of a coworker’s location during a predetermined window of time. Using these features, employees can find key decision makers or gather teammates in a timely manner and request impromptu meetings in convenient locations. By accessing real-time data on employee location and movement, the company app can suggest time slots and meeting rooms conveniently located for all attendees.

Through integration with Integrated Work Management Systems (IWMS), cost allocations for meeting rooms can automatically be assigned to relevant departments based on employee identification numbers and workspace usage patterns can be monitored, giving facilities managers insights into resource usage patterns, thereby helping optimize workspace usage.

As indoor mapping and location-based technologies rapidly evolve, they continue to bring situational awareness to the workplace, creating an environment where employees are more connected. This provides more opportunities for collaboration, as the workplace becomes more efficient.



Navigating To The Meeting

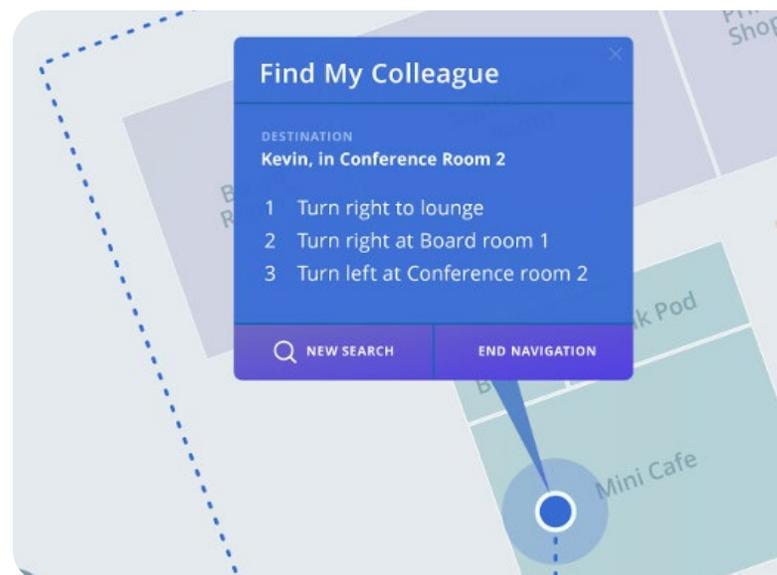
Whether navigating the inside of a building or moving from one corporate campus to another, with indoor intelligence software, a user's travel preferences and location are taken into account in the digital workplace of the future.

Meeting notifications are based on estimated travel time instead of fixed time slots. This means that a user is alerted based on the time it takes to get to a given meeting, rather than the time until the meeting begins. On route to the meeting, their device provides turn-by-turn directions to the meeting room.

As internet-enabled objects - collectively known as the IoT - become more pervasive and integrated with location based services, companies are able to provide employees with the kind of location-aware solutions that increase operational efficiency and productivity.

Value is created for both employees and the overall company management. Using the IoT, devices are able to communicate amongst themselves and optimize processes so that the employees engaged in a certain workflow can have the best context to make the right decisions.

It saves them time and energy, avoids confusion and delays, furthers communication and collaboration. Essentially, it connects everything.



The Mobile Workforce

Today's workforce is self-organized, collaborative, and leverages technology to improve productivity, regardless of their physical location. To attract and retain talent, employers need to welcome and embrace these changes by providing flexible workspace allocation and supporting trends like BYOD.

"Consumerization is the specific impact that consumer-originated technologies can have on enterprises. It reflects how enterprises will be affected by, and can take advantage of, new technologies and models that originate and develop in the consumer space, rather than in the enterprise IT sector. Consumerization is not a strategy or something to be "adopted." Consumerization can be embraced and it must be dealt with, but it cannot be stopped."

- Source: Gartner, IT Glossary, Consumerization

Office hoteling initiatives give employees the ability to reserve a workspace at a variety of locations, spread across multiple buildings or floors. However, hoteling presents certain challenges for facilities managers, such as accurate cost allocation, workspace usage optimization, and optimal utilities usage.

With energy supply being a hot topic, companies are actively trying to reduce energy consumption, ultimately working toward 'green-building' status. And while office hoteling offers opportunities to reduce costs, it also has the potential to increase energy wastage associated with space underutilization.

Location data can help facilities managers gain valuable intelligence into workspace usage patterns which in turn enrich business decisions, help optimize space utilization, and cost allocation.

With the trend toward BYOD, mobile devices and wearables are becoming more pervasive in the workplace, and have the potential to provide better insight into workspace usage patterns.

These devices act as beacons, sending accurate location information - the data required to identify usage patterns - which can then be visualized on an indoor map. This kind of data provides facilities managers with better insight into workspace usage patterns, helping them to improve workplace efficiency, enhance employee engagement, and manage costs.

The Digital Workplace of The Future Embraces Indoor Intelligence & Innovation

The Intelligent Office

The digital workplace of the future is an environment where employees can quickly and easily share knowledge through efficient collaboration and immediate access to the necessary resources.

Employees have reached a level of digital savviness where they expect the same capabilities at work as they do when using an airline application or planning a trip to the local shopping mall. They are bringing their own device to the workplace, not only to keep in touch with family and friends, but to make their work day more productive.

The ability to provide employees with a consistent experience, regardless of device or location fosters better employee engagement and a more agile way of working. Companies can achieve this by leveraging both physical and virtual technologies that increase performance and streamline processes.

The physical technologies of the digital workplace include mobile devices, wearables, kiosks, and indoor positioning technologies. These virtual technologies are delivered via the applications that run on these devices. Traditionally, many of these applications have existed in isolation, meaning employees needed to jump between applications to schedule a meeting, reserve a conference room, locate a colleague, or even look up the daily special in the cafeteria.

Within this digital environment, work is social, accessible and data-driven; business conditions are in line with the consumer-like environment we have become accustomed to outside of work. Indoor mapping and location solutions provide a mechanism for integrating disparate technologies delivering a truly unified experience for employees across a range of interactive platforms.

"I think that the biggest change that is yet to come lies in how companies address the cultural and organizational challenges. These must be overcome in order for the incredible opportunities that are offered by transformational technologies to be able to take effect."

Dave Choplin, Chief Envisioning Officer (Microsoft UK) Source BBC



Indoor Location Intelligence

Indoor mapping and location platforms go far beyond showing users how to navigate from point A to B. In fact, they play an integral role in creating indoor location intelligence. They create an environment where location-sensing technologies, the Internet of Things (IoT), and other third-party data and systems are all connected through a single platform to deliver a consumer-like experience in the workplace.

Integrating location with core systems such as facilities management applications, scheduling systems, active directories, and people management tools is not just a nice to have, it's becoming commonplace and is essential in creating a more connected and agile workplace.

A major factor to consider when investigating indoor mapping platforms is the ability to integrate with third-party applications such as Integrated Work Management Systems (IWMS). Interoperability through connected technologies help users realize workflow efficiencies. For example, when an employee reserves a workspace using a wayfinding app, through integration with the IWMS, the workspace can be charged to their cost center based on their employee number. If the employee leaves the workspace to collaborate with co-workers in the coffee shop, they are prompted to release the workspace.

Spatial context also helps uncover patterns and trends that empower businesses to make informed and actionable decisions. An organization may use data gathered on employee work patterns to trigger a business rule, such as closing off a hoteling area to reduce the consumption of utilities in underutilized office space.

With location-aware technologies, an individual's location can be established by their proximity to a beacon or device. This increased visibility increases the opportunity for ad-hoc collaboration, helping to make the workspace more efficient and productive.

Indoor mapping and location platforms bring location awareness to an organization. Designed to scale in pace with evolving technologies, collect data from disparate sources, and deliver contextual, interactive experiences across multiple devices, they assist in improving employee engagement, increasing productivity, reducing costs and creating better experiences for employees.

The Digital Workplace of the Future is Safe and Secure By Design

As workplaces become smarter, securing them becomes both more difficult and more important. Modern offices are home to ever more private data and proprietary information and organizational success depends on keeping that corporate intelligence secure.

Exposure to new types of security threats can be alarming for organizations as their buildings become smarter. Since these security threats are not as familiar, they can be more stressful for organizational leaders considering IoT technology. Organizations must now work to develop comprehensive, 360-degree, wireless situational awareness of their buildings.

It is key that both people and platforms communicate with other security technologies to mitigate the risks they now face as it becomes increasingly apparent that security silos at any level can lead to gaps and vulnerabilities down the road.

The digital workplace of the future leverages the same indoor intelligence infrastructure that makes it dynamic to keep it secure. The same technology that is used for detecting physical intruders should also be able to provide visibility into the devices transmitting within a facility, and which frequencies they are operating on.

An indoor intelligence platform will not only empower security teams to visualize people moving through a space, but also provide the tools to automate device lockdowns in no-phone zones, or automatically disable features such as smartphone cameras in sensitive parts of an office.

A company's progress relies on its ability to harness the potential of transformational technology to maximize employee effectiveness in a way that is safe and efficient. However there can be concerns that privacy will be sacrificed in the name of progress; that organizations will use this data to monitor and track employees. It therefore falls on a company to correctly implement and communicate the true purpose of these advancements which are to augment workplace performance and secure the facilities.



Learn how to see the unseen. Read "Securing Smart Workspaces" next.



Conclusion

The emergence of the digital workplace is challenging businesses to not only adapt, but to think ahead of the curve.

In order to succeed, business processes must be streamlined and optimized through the integration of social and operational technologies in the workplace, making way for the employee-centric digital workplace. In this environment, agile collaboration is key and cognitive computing becomes an enabler.

The digital workplace of the future is one where top talent wants to remain, operations are constantly optimized, innovation is embraced, and data is secure. It stretches further than facilitation and actively contributes to the overall success of an organization.

Learn how to unleash the power of indoor intelligence in your workplaces today.

Let's talk about your goals.

800-563-8065 | info@inpixon.com | inpixon.com

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