REPORT REPRINT

IBM leverages Watson AI, industry apps to aid back-to-office efforts

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Watson Works combines artificial intelligence models and capabilities from TRIRIGA, Maximo and other IBM applications to deliver 'smart spaces' and workplace tech for employees returning to work following COVID-19 lockdowns.

Introduction

IBM is delivering a packaged set of capabilities under the Watson Works banner to help customers more intelligently manage workplaces and employee safety as businesses start to return to their offices, warehouses and factories following COVID-19 lockdowns. While key aspects of the products can be deployed by any enterprise, they likely deliver the most value to companies that already use IBM applications, including IBM TRIRIGA for facilities and real estate management, IBM Maximo for industrial asset management, and IBM Watson Care Manager for healthcare case management. Watson Works adds enhanced workplace re-entry capabilities to those platforms, as well as new adviser and assistant applications, to enable a range of post-COVID-19 return-to-work use cases, including workplace access control and re-entry, space allocation and social distancing, and employee health management.

451 TAKE

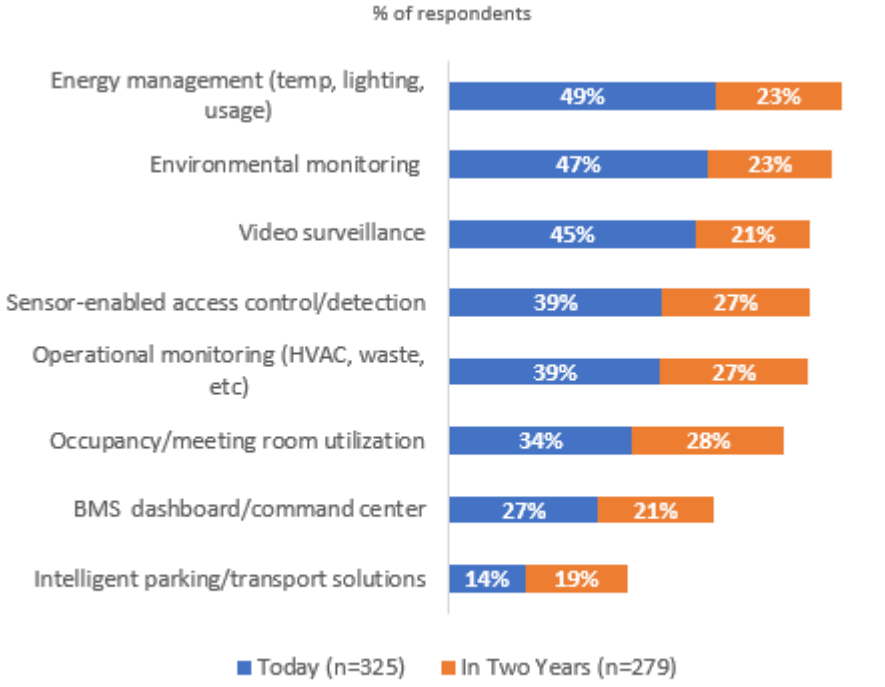
While far from alone in offering solutions to support enterprise back-to-work needs, IBM is well-positioned to serve customers on this front, especially those already using its core industry applications. IBM TRIRIGA, in particular, was already helping customers to manage not only their physical facilities, but also the employee experience within them – with employee health and safety being perhaps the most critical 'experience' of all. In many ways, post-COVID-19 return-to-work requirements are a perfect testing ground for IBM to show the role that IBM Watson AI technology can play in helping customers – and IBM itself – stitch together traditional application functionality and new IoT data sources and AI models to create something new. While every returning business faces some common challenges – monitoring health, managing social distancing, and tracking resources such as PPE and other supplies – every enterprise faces one-of-a-kind challenges as well, be they unique business processes, rapidly changing work rules, or in-flux local health and infection realities. In such an environment, flexible, constantly learning AI models are a requirement versus yesterday's relatively static, slow-adapting enterprise applications. Watson Works represents a good example of IBM playing by these new rules.

Context

Smart-building and smart-office capabilities were already a top IoT use case area before the COVID-19 outbreak, including building energy management (deployed today by 49% of enterprises), sensor-enabled access control (39% deployed) and occupancy/meeting room utilization (34% deployed), according to 451 Research's Voice of the Enterprise: IoT, Workloads and Key Projects 2020 survey.

Smart Building Use Cases

Source: 451 Research's Voice of the Enterprise: Workloads and Key Projects 2020



Q: You indicated that you work in the manufacturing industry sector. Within your vertical, which of the following IoT use cases have you implemented today? In two years?

The challenge of safely bringing employees back into work environments has made such IoT-enabled applications even more critical. IoT data collection and analysis can help solve an array of problems, including enforcing social distancing guidelines; helping workers to self-test and companies to manage health symptoms and outcomes; and assisting enterprises to better plan for, manage, and utilize space and resources within their facilities. Building and office endpoints that can help generate useful insight include beacons, cameras and Wi-Fi access points for tracking worker location, movement and actions (such as mask-wearing); building systems and sensors for tracking critical environmental information; and health-screening data from temperature readers and other on-site medical devices.

Managing the return to work

IBM Watson Works brings together a range of such functions with the common goal of helping businesses manage return-to-work challenges. IBM and customers can leverage new IBM apps and functionalities specifically focused on managing the return to work, or build off existing deployments of IBM facility management, industrial asset management or healthcare case management applications. IBM's deep legacy application roots in verticals like real estate, industry and healthcare give it a jumping-off point to help customers in those sectors manage the return to work, while Watson Works mobile and SaaS applications offer solutions for customers in other industries, as well. IBM's Watson AI platform and models serve as the stitching between it all, orchestrating application functionality, enhancing data-sharing and delivering critical insight.

Central to Watson Works is the IBM Return-to-Workplace Advisor, which includes two elements: an employee support application that provides a central hub for health and safety information, including the self-reporting and collection of employee symptoms and test results, and an enterprise command center analytics application for monitoring employee health and workplace safety trends, leveraging both internal and third-party/government data. In a use case that ties those front- and back-end capabilities together, companies could use the Advisor to evaluate whether an employee is safe to return to work and then issue a token to their mobile device allowing entry to the office. Among the AI models that can be leveraged with the Advisor are community risk models, for assessing health and safety status and trends of workplace locations; severity risk models, for identifying and protecting individuals most at risk for health complications; and transmission risk models, for predicting and managing hotspots based on real-time reporting data.

IBM has also enhanced its IBM Watson Assistant customer and employee self-service application with new return-to-work capabilities and pricing. The AI-enabled assistant can be trained to answer the bulk of employee questions about COVID-19 and workplace re-entry, streamlining information delivery and guidance. As part of Watson Works, IBM is offering IBM Watson Assistant for 60 days at no charge for use cases supporting returning to work.

In addition to those return-to-work-specific apps, customers of IBM's existing real estate, industrial and healthcare applications gain new return-to-work capabilities, as well.

IBM TRIRIGA is central to Watson Works' return-to-office capabilities, helping companies manage their corporate facilities and office utilization. IBM has added a host of return-to-work capabilities to the application, including the ability to create social distancing plans, enhance office and meeting-room booking and utilization, schedule and manage facility cleaning efforts, and make it easier for employees to find and book workplace services. IBM already spent much of this year enhancing TRIRIGA's capabilities to help enterprises manage not only their facilities, but also the employee experience within them, leveraging IoT data and insight. AI-driven enhancements to TRIRIGA Building Insights and a new TRIRIGA Assistant, launched in January, provide enterprises with new insight into in-building experiences and employees with a better way to interact with corporate spaces and resources. In April IBM followed that up by adding support within TRIRIGA for Cisco DNA Spaces, which leverages location data from Cisco Wi-Fi networks and access points to provide new insight into what's happening inside offices – from the movement of employees to meeting room utilization – without the need to deploy new IoT sensors. Those capabilities and the expanded return-to-work focus via Watson Works continue to move TRIRIGA down the path of delivering enhanced smart-building experiences.

As part of Watson Works, IBM also added similar return-to-work and worker health and safety capabilities to its IBM Maximo and Watson Care Manager platforms. IBM Maximo Worker Insights, for instance, gained the ability to monitor factory and warehouse workers for temperature, social distancing and mask-wearing. IBM Watson Care Manager, meanwhile, gains new capabilities to help companies deploy and manage COVID-19 contact tracing and care management – processes that healthcare providers know well but now must also be overseen by businesses in other sectors.

Competition

A return to work is top of mind for every enterprise, and IT vendors and providers have responded with solutions to address the challenges. In May Salesforce announced Work.com, a command center and tools for helping businesses manage work re-entry, including contact tracing, employee wellness and employee/shift management with a focus on safety and social distancing. Siemens has partnered with Salesforce in this effort, contributing technology from its 'smart infrastructure' portfolio, including IoT lighting and workplace experience applications. HPE, meanwhile, announced five new return-to-work applications in June managed through its HPE Pointnext services arm, including social distance tracing, fever detection and touchless entry. Systems integrator Infosys announced a similar slate of services in the same time frame, including contact tracing, temperature screening, mask compliance, and occupancy and workspace analytics.

SWOT Analysis

STRENGTHS

IBM's Watson AI platform and industry applications like TRIRIGA and Maximo are best-of-breed within their realms, giving Watson Works a strong point from which to launch its return-to-work efforts.

WEAKNESSES

There are a lot of moving parts – technically, culturally, product management-wise – in making a cross-business unit offer like Watson Works more than just slide-ware. Steering a giant ship like IBM down a coordinated new path is always a challenge. The vendor's move to modularize capabilities to ease deployment could mitigate such concerns.

OPPORTUNITIES

The biggest opportunity for Watson Works looks to be helping existing application customers accelerate their digitization and AI-enablement, leveraging COVID-19 as a digital tipping point and change driver. Enticing net-new AI/application customers with return-to-work use cases could be a tougher, albeit potentially rewarding, path for the vendor.

THREATS

Small specialist vendors can deliver certain post-COVID-19 capabilities like contact tracing in a more focused, aggressive way, while the complexity of large-scale post-COVID-19 change will turn many big enterprises to SI/management consultant partners first. IBM has its foot firmly in both businesses, forcing it to compete on multiple fronts.