Connected CMMS is an application that ties people, processes, and systems together to automate property maintenance and service operations.

Connected CMMS for Increasingly Complex Property Operations

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Introduction

Property operations are about to get even more complicated. Hybrid work models mean fluctuations in the use, occupancy rates, and services delivered within buildings. Organizations across all industries are exploring dynamic corporate real estate tactics such as repurposing unused space, subleasing, short-term rental arrangements, on-demand space, and hub-and-spoke real estate models.

While commercial office space has undoubtedly seen major changes in the past two years, it is far from the only property segment impacted. The pandemic will lead to lasting changes across all property types as they face similar challenges moving forward. Property owners and operators are strategizing around many facets, such as ways to safely bring students back to schools and universities, improve compliance procedures in hospitals, and increase footfall in retail, all while optimizing costs and operational efficiencies. The coming digital world means constant changes and adjustments to all types of properties and facilities, such as campuses, warehouses, healthcare providers, commercial stores, and offices.

AT A GLANCE

KEY STATS

» Half of companies experienced a 50–74% improvement in operational efficiency in 2021 from investments in digital transformation.

» 9 out of 10 organizations are making changes to the physical work environment, with 58% retrofitting existing properties and 34% investing in new facilities.

» 35% of organizations believe increasing instrumentation, interconnection, and intelligence of physical workplaces will be one of the most enduring technology changes.

The way people work has evolved rapidly over the past several years, which is a stark contrast to the lack of digital innovation in real estate and property management operations to date. IDC's March 2022 *Future Enterprise Resiliency and Spending Survey* reveals that half of companies experienced a 50–74% improvement in operational efficiency in 2021 from investments in digital transformation. Yet most teams still use their computerized maintenance management system (CMMS) purely as a work order system for technicians and craftspeople. Property operations teams are missing out on portfolio-level opportunities to streamline operating expenses, enhance productivity, and optimize system performance through technology advancements.

Rethinking the Boundaries of CMMS

Think of all the tasks, workflows, and communications involved in the daily job of property operations and corporate real estate managers to oversee a company's entire property portfolio. When an organization removes the boundaries of CMMS, imagine how much of the work can be accomplished, tracked, and analyzed in one application. This paper explores the possibilities of a connected CMMS, defined here as an application that ties people, processes, and systems together to automate property maintenance and service operations.

People

Every organization using a CMMS collaborates across multiple stakeholders, which receive and deliver information or are otherwise involved in property operations:

» **Property owners:** Tenants are the customers, and some services may be outsourced to contractors and vendors.

» **Property management services:** Businesses are the customers, and some specialty areas may be subcontracted.

» **Occupiers:** Property and facility managers serve employee and occupant needs while coordinating maintenance technicians and outsourcing vendors.

Currently, engagement and communication are often afterthoughts in the maintenance software world. Interactions happen separately from the system of record because that system is a standalone product. Instead, people communicate with mobile applications, kiosks, collaboration software, and calendar tools that connect back to the maintenance application.

Processes

Property operations can be death by a thousand paper cuts if workflows are not fully and intelligently automated. Organizations conduct many key processes outside of a traditional CMMS application. These processes, which often relate closely to managing the numerous vendors critical to running a facility, include:

» Proposal management and contract negotiation

» Invoicing, approvals, and signatures

» Payment tracking and dispute resolution

Payment processing, accounting, and financial reporting might occur in an integrated ERP or financial application. However, the activities surrounding these financial transactions, such as communicating reasons why an invoice is higher than expected before it is paid, are critically important to achieving an organization's outcomes. Property operations teams should track vendor and financial information as rigorously as they track maintenance and service tickets.

Systems

From a systems perspective, siloed fault detection and diagnostics (FDD), energy management, and building management system (BMS) solutions mean engineers look up diagnostic information in one application, search for asset records in another application, and log their work in yet another application. With IoT, organizations have an enormous opportunity to leverage existing systems for predictive maintenance to anticipate potential system failures before they occur. Key property systems that can be better integrated with a connected CMMS include the following:

» BMS alarms to trigger condition-based work orders

» Bidirectional integration with the building automation system (BAS) controlled by CMMS workflows

» Fault reports analyzed with maintenance and asset records to diagnose and prevent future problems

» Energy information systems to comply with emission standards mandated by government regulations

For example, imagine a building manager sitting at home on a Friday night receives a notification that a small team of coworkers will be spending time in the facility over the weekend. The manager can adjust the HVAC schedule for the occupied zone for one day or configure the workflow where the employee space request pushes out the new HVAC schedule to the BMS automatically.

Benefits

We all know that property market conditions will change six months, three years, and 10 years from today, but how those conditions will vary depends greatly on the organization, region, and industry. Because each organization and property within the real estate portfolio is unique, flexibility is key to handling whatever may come next. IDC research shows that 35% of organizations globally believe increasing instrumentation, interconnection, and intelligence of physical workplaces across all vertical sectors will be one of the most enduring technology changes coming out of the past two years. The connected CMMS applications used by real estate operations and maintenance management will be the linchpin in creating the physical work environment of the future.

Boost Workforce Productivity

Repeated data entry from manually logging progress, communications, and activities in multiple places should be avoided. For example, a hospital facility manager can issue a request in the CMMS to pay the vendor that fixed the broken automatic entry door. The payment processing is handed over to the organization's integrated financial application, and the CMMS receives notification when payment is received. Over hundreds or even thousands of transactions a year, property operations managers can save significant time, avoid frustration, and reduce the back-and-forth emails with external vendors and internal finance and accounting colleagues.

Improve Stakeholder Engagement

Transparency builds trust, but many organizations struggle to provide enough visibility into activity progress in part because they lack clarity themselves. A connected CMMS application allows service requesters to access self-serve tools and updates on issues to improve stakeholder engagement. For example, a property manager leasing multiple buildings to a university client can implement a tenant portal where students, faculty, and administrative staff can request a service and view its progress. To deliver this level of insight to service recipients, the property operations team must first have a better understanding of its own workflows.

Make Better Decisions

A connected CMMS provides access to real-time information and insights to optimize decision making across all aspects of property operations. In general, a CMMS can be too narrow in scope if it is used only for storing basic asset information and work orders. As organizations look for new ways to use technology in a future steady state of operating, a CMMS provides far-reaching value when it integrates with multiple enterprise applications and building systems. Interconnected applications can generate insights linking more data sets and applying intelligence to impact tactical and strategic actions. For example, a facility management service provider to a large retailer can track information about inventory and labor costs to more efficiently plan and budget operational activity.

Key Trends

The larger trend of rethinking the purpose and requirements of buildings directly impacts maintenance, property, facility, and real estate management teams. IDC research shows that 9 out of 10 organizations are making changes to the physical work environment, often spurred by hybrid and flexible work models, including programs such as virtual learning, telehealth, and digital commerce. Over the next few years, 58% of organizations will primarily retrofit existing spaces and 34% will mainly invest in new facilities.

This changing use of facility functions and new building technology systems will have widespread ramifications for the property operations professionals responsible for portfoliowide maintenance and service. They will need to adjust for fluctuating occupancy levels, new asset classes, and a greater variety of vendors needed to keep digitally sophisticated properties running smoothly. Today's CMMS may not be well equipped to handle the increasing complexity.

Organizations may need to quickly reconfigure properties and execute operational pivots to comply with the latest laws, mandates, and regulations. As seen over the past two years, adjusting properties for occupant health, such as new visitor protocols for entering a building, can be a moving target. Rapid changes can greatly strain existing modes of communicating. Property agility and resiliency require coordinating across business ecosystems comprising customers, occupants, employees, patients, students, vendors, suppliers, and partners, regardless of location.

With the demands on property owners, service providers, and occupiers, effective property operations can't be achieved on paper or with a hodgepodge of disconnected, unrelated, and untraceable tools. Organizations should take the time now to put in a unified, enterprisewide system that is designed for all the stakeholders involved in property operations moving forward.

Considering Facilio

The Facilio Connected CMMS is intended to improve efficiencies and change the way customer experiences are delivered by connecting people, processes, and systems in the following ways:

» **Connecting people:** Facilio applications are designed for management of multiple stakeholders from the start, not as an afterthought. The Facilio Connected CMMS enhances value with layered people-centric workflows to action processes dynamically. Facilio has user interfaces for all roles integral to property operations, including adaptable tenant portals. Further, executive leadership and management can focus their attention on the areas with the greatest potential for improvement with both internal and external vendors, using resource and performance metrics and reporting. Role-based access is critical to Facilio's approach to improve the experience for all stakeholders in the value chain, such as building owners, property operators, facility operations teams, maintenance contractors, service vendors, tenants, and occupiers.

» **Connecting processes:** The Facilio Connected CMMS brings together processes to holistically enable the many facets of property, real estate, and maintenance operations from a single place. Through Facilio's property operations platform, the technology vendor aims to redefine best practices and create new paradigms that fit today's evolving building realities. Facilio supports efficiency upgrades, and its platform complements many current technology stacks. Facilio strives to accelerate time to value from day 1 by providing many pathways for managers and users to configure and automate workflows, dashboards, and reports.

» **Connecting systems:** The key to future proofing property operations for greater scale lies in the structure of the Connected CMMS application and its ability to integrate with multiple systems. Facilio goes beyond the scope of traditional CMMS applications, which primarily serve as a system of record for asset and work order information. Facilio has an API-first architecture that is vendor agnostic. It is IoT and data driven to work with the live environment and building systems to deliver intelligent insights for property operations teams. Facilio property service is omni-channel, offering mobile, onsite kiosk, web, and email access points.

Challenges

One of the greatest hurdles property operations and maintenance management will face as they navigate the next several years of increasing complexity is helping teams overcome their comfort level in using existing maintenance systems of record. Organizations may find the applications and processes in use now are too rigidly structured and are limited in scope because they were intended for the traditional property operations of the pre-pandemic era. Facilio will be challenged to help users through the changes necessary to better adapt to dynamic conditions. This can include assisting property teams with pre-implementation data management, workflow redesign, and user training.

For Facilio's value proposition to resonate, property operations teams will need to create the business case for automating more workflows on one application. This may be particularly difficult for organizations doing most day-to-day work outside of a CMMS. Many groups are still challenged by using manual processes stitched together with a jumble of productivity solutions, paper-based workflows, and unintegrated applications. Communication is scattered, resulting in wasteful and frustrating back-and-forth exchanges between stakeholders. Facilio can provide value calculators to support teams in quantifying the potential benefits of a connected CMMS.

As property, real estate, and maintenance each try to manage work separately, they suffer from application proliferation and technology fatigue. Too many departmental point solutions function in silos. It becomes difficult to make initial technology decisions, implement solutions, and subsequently modify technology choices to better accomplish the desired objectives. Facilio will also face the challenge of serving as a bridge between IT and property operations functions to ensure its applications are well integrated into the changing technology stack.

Conclusion

IDC believes property management will become increasingly complex as approaches to hybrid work models and dynamic, portfoliowide operations evolve with the digital world. This will push the boundaries of real estate and maintenance operation applications outside of traditional CMMS for property owners, service providers, and owners/occupiers.

As a result, the market will grow for connected CMMS applications that link people, processes, and systems together to automate property maintenance and service operations. To the extent that Facilio addresses the challenges of overcoming familiarity with rigid and limited systems, demonstrating the value of automating workflows together, and supporting successive technology decisions, the company has an opportunity to create a new vision for connected CMMS.

> The connected CMMS applications used by real estate operations and maintenance management will be the linchpin in creating the physical work environment of the future.

About the Analyst

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Juliana Beauvais is a Research Manager with IDC's Enterprise Applications team, providing insights and analysis of enterprise asset management with emphasis on facility and real estate management. Juliana focuses on the standard overall IDC EAM software documents of Market Shares, Forecasts, Market Glances, Market Analysis Perspectives, and MarketScapes, among many IDC reports.

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More About Facilio

Facilio is a data-driven, vendor-agnostic property operations platform that connects to diverse building systems, IoT sensors, and business software applications. Facilio enables property owners and operators to optimize asset and building performance and control portfolio operations at scale, all from one place. Powered by artificial intelligence (AI) and deep industry expertise, Facilio is ushering the real-estate industry towards a connected, automated built environment and is solving operational gaps for over 10K properties across 100+ million sq. ft spanning 12 countries.

We are happy to help you over a free consult call: Get in touch with marketing@facilio.com

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