

# Market Insight: The Transformation Of IWMS To Connected Portfolio Intelligence Platforms (CPIP)

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SMART BUILDINGS

# Market Insight: The Transformation Of IWMS To Connected Portfolio Intelligence Platforms (CPIP)

The integrated workplace management systems (IWMS) market has changed so profoundly that IWMS solutions are now moving into the next phase of their evolution, transforming into more connected and intelligent offerings. In this report, Verdantix establishes connected portfolio intelligence platforms (CPIP) as the next era of IWMS systems, delivering enhanced customer value through insights derived from the Internet of Things (IoT) and advanced analytics. This report provides facilities, workplace and real estate directors with an introduction to CPIP – a new IoT-enabled software category for real estate and building optimization. Legacy IWMS suppliers that do not make the leap to CPIP risk failing to address the needs of the market, such as the desire for demand-led workflows and interoperable solutions. Executives should use this report to inform their real estate software strategies and future buying decisions.

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## ORGANIZATIONS MENTIONED

Accenture, Accruent, AMS Workplace Technology, AREMIS, Deloitte, eCIFM, EY, Facilio, FM:Systems, Granlund, Gravicon, Horizant, IBM, InnoCal Venture Capital, iOFFICE + SpacelQ, JLL, Microsoft, MRI Software, Nuvolo, Planon, Rapal, Schneider Electric, Scudo, Slack, Spacewell, TA Associates, Tango, VLogic Systems, Waud Capital, zLink.

# The Integrated Workplace Management System Market Is Ready For A New Category Definition

Since the 2000s, firms have used integrated workplace management systems (IWMSs) as a central point of integration across assets, space, maintenance, energy and workplace management processes. Today, IWMS solutions are evolving into a new era, shaped by analytics, the Internet of Things (IoT) and employee-facing functionality, to offer new value to customers. This report provides facilities, workplace and real estate directors with an overview of connected portfolio intelligence platforms (CPIP) – the new software category superseding IWMS. Later in this report, we introduce and define this new category. This first section of the report examines the key trends driving the evolution of IWMS solutions from the early 2000s to the present day.

## IWMS Solutions Emerged In The 2000s In Response To Buyer Demand For A Single Real Estate Platform

Before the advent of IWMS, software products that targeted facilities management were limited to point solutions and computer-aided facility management (CAFM) solutions. The scope of these solutions was constrained to helping facilities teams manage asset information and maintenance plans, often at a single site or across a small portfolio. From the early 2000s to mid-2010, software providers invested heavily to:

- **Expand the scope of modules to include lease, space and energy management.**  
IWMS solutions evolved from CAFM and point solutions for facilities operations data management and reporting. From 2005 to 2010, suppliers such as FM:Systems and Planon invested in developing new modules across lease and space management, as well as energy reporting functionality. Vendors aimed to integrate all real estate and facilities data and processes, to drive enhanced decision-making.
- **Transition from tactical solutions to enterprise-class software.**  
The transition from CAFM to IWMS was also marked by software platforms becoming enterprise-class, serving the needs of many business users, rather than a single function. The ‘management systems’ descriptor in the IWMS abbreviation sought to capture the enterprise nature of the applications. Many vendors today continue to position their IWMSs as the enterprise resource planning (ERP) application of real estate.
- **Integrate solutions with BIM and business software systems.**  
The earlier generations of CAFM and point solutions relied mostly on manual data input, which was inefficient and time-consuming for users. Software providers such as Archibus (part of iOFFICE + SpacIQ) and IBM’s TRIRIGA therefore developed integrations with building information modelling (BIM) solutions to automatically input asset information – such as asset type, parts and warranty – and digital floorplans into solutions. Furthermore, suppliers developed integrations with existing business software systems, such as ERP solutions, allowing customers to use this information in new modules, such as lease management modules coupled with financial data.
- **Extend the scope of users leveraging solutions.**  
Once software suppliers added modules for lease management, the scope of users leveraging the solutions expanded from facilities management (FM) teams to include real estate (RE) teams. With the addition of lease management capabilities and integrations with business software systems, RE teams could leverage IWMS solutions to manage and report on leases, such as running a report to identify upcoming lease expiry dates.

- **Offer business intelligence and data visualization tools.**

Firms implemented legacy IWMS solutions to centralize data and report on operations across real estate portfolios. As firms began to manage broader, more diverse data sets in IWMS solutions, software suppliers added business intelligence (BI) and data visualization tools to help users combine and analyse data sets. These tools also enabled users to create visually appealing dashboards customized to their areas of interest.

## **IWMS Solutions Have Evolved Incrementally In Response To Customer And Technology Trends**

The term IWMS was coined in 2004 and the market was effectively launched in the early 2000s. IWMS solutions underwent their first major transformation in the 2010s, shaped by the transition to cloud and mobile, driving the emergence of a second generation of products. During the IWMS 2.0 era, vendors also enhanced their products in response to customer feedback that their solutions were expensive to implement and maintain. As a result, the extent and nature of the solutions demanded are now well beyond the traditional scope and market understanding of an IWMS (see **Figure 1**). Specifically, this transition has been driven by the:

- **Rise of cloud-hosted software solutions.**

In the mid to late 2000s, cloud-based solutions gained popularity across B2B software markets, as they provided suppliers with greater scalability across capabilities and geographies, as well as the ability to quickly deploy and update solutions. The introduction of cloud slowly spread into the IWMS sector, allowing providers to modularize their solutions, and thus enabling customers to deploy modules as needed rather than implementing an entire suite of solutions (see [Verdantix Archibus Propels Its Modernization Strategy With New IWMS Cloud Apps](#)). Software providers that entered the IWMS market during this time, such as Nuvolo and Tango, built their solutions cloud-first from day one.

- **Supplier strategies to decrease time to value.**

In the early days of IWMS installations, it was not uncommon for customers to wait multiple years for their IWMS investment to start delivering the value they expected. This partly reflects the solution's history; IWMSs were implemented by large organizations that opted for significant customization and ambitious 'big bang' rollouts. From the 2010s, vendors made a series of enhancements to offer quicker and more flexible implementations. One of the main changes was the inclusion by vendors of more out-of-the-box workflows to reduce the configuration burden for buyers (see [Verdantix IWMS Implementations: The Time-To-Value Imperative](#)).

- **Rollout of mobile applications for technicians and employees.**

The introduction of smart mobile phones transformed how the entire world communicates and interacts with people, services and places. Software firms quickly adapted to this trend and developed mobile apps for technicians and building occupants to simplify day-to-day processes. IWMS providers started off with technician mobile apps to help FM teams track and manage maintenance schedules, on-demand service requests and asset registers. In the following two years, IWMS suppliers launched mobile apps for employees centred around submitting maintenance tickets and reserving rooms/desks.

- **IoT devices for real-time data analysis.**

Prior to the widespread use of IoT sensors and meters, IWMS solutions leveraged static data from construction models, manual data inputs and some live data from business systems. IoT devices introduced the ability to bring in near-real-time data to enable smarter workflows, asset performance monitoring, advanced maintenance plans and space planning based on concrete data (see [Verdantix](#)

FIGURE 1

## Key Trends Pushing The Boundaries Of The Traditional Scope Of IWMS

Technology Trends		Customer Trends	
	<b>Cloud-First Architecture</b> Suppliers developed existing solutions in the cloud and modularized offerings		<b>Hybrid Office Strategies</b> Firms shifted to hybrid workplace strategies to meet employee demand, leading to demand for agile working tools in IWMS solutions
	<b>IoT &amp; Operational Technology Integrations</b> Providers gradually built IoT devices and OT systems integrations to leverage real-time data		<b>COVID-19 &amp; Occupant Wellbeing</b> Occupant wellbeing became the focal point for firms, requiring tools to help manage employee health and safety in the workplace
	<b>New Analytical Tools</b> Suppliers invested in implementing more advanced analytics, such as AI, to enable enhanced workflows and deeper insights		<b>New User Groups</b> The scope of users leveraging IWMS solutions expanded to include end-users and real estate executives
	<b>Low-Code Approaches</b> Low-code platforms that enabled end-users to customize and configure solutions themselves became increasingly popular		<b>New User Interfaces</b> As new user groups leveraged IWMS solutions, customer demand for new user interfaces and customized dashboards grew
	<b>Mobile Applications</b> Providers launched mobile apps for technicians and building occupants to simplify day-to-day processes		<b>Terminology Confusion &amp; Perception</b> The emphasis on the workplace confused customers and, as IWMS solutions evolved, customers perceived solutions as legacy offerings
	<b>Integrated Platform Architecture</b> Suppliers invested in revamping architecture to be more open, bringing in data from building systems, smart devices and third-party solutions		<b>Faster Implementation &amp; Time To Value</b> Customers wanted to reduce the amount of configuration needed for installation in order to immediately leverage solutions

Source: Verdantix analysis

[Green Quadrant: IoT Platforms For Smart Buildings 2022](#)). IWMS suppliers progressively developed integrations for IoT devices such as occupancy sensors, and formed partnerships with hardware providers. In some cases, IWMS providers – such as FM:Systems – developed their own IoT sensors. Software suppliers that entered the market at this time ensured that IWMS solutions could leverage IoT data. For instance, Spacewell has enabled customers to leverage its IoT platform alongside its IWMS solution since 2018.

- **Advanced analytics and data visualization tools.**

From 2005 to 2010, IWMS solutions provided simple analytical tools and dashboards for users to visualize combined data sets, such as data on leases, space usage and maintenance. As more advanced analytics emerged, such as AI and machine learning (ML), software suppliers built these into solutions to enable enhanced workflows and deeper insights. This allowed users such as facilities managers to run predictive and preventative maintenance plans to improve operations. Some IWMS providers that entered the

market during this period embedded advanced analytics into solutions from day one.

- **Flood of private equity investment and vendor acquisition strategies.**

As IWMS solutions grew in popularity, private equity (PE) firms such as Waud Capital, and venture capital (VC) firms such as InnoCal Venture Capital, started investing in software suppliers. IWMS suppliers used the funds to acquire firms, expand to new geographies and modernize their platforms for the cloud era (see [Verdantix IWMS Vendors Are On A Collision Course As Geographic Expansion Ramps Up](#)). Witness Accruent acquiring Four Rivers Software Systems and VFA in 2014 following its investment from PE firm TA Associates in November 2013. From 2010 to 2021, Verdantix tracked over \$145 million in announced investments from funding rounds, debt-financing and PE investments raised by various IWMS suppliers. For many vendors, the wave of PE investments marked the end of a founder-CEO leadership era.

- **Market shift towards hybrid workplace strategies.**

Over the last five years, firms have been implementing hybrid working environments to meet employee demand and help reduce real estate portfolios. This change in workplace strategy has forced IWMS suppliers to develop agile working solutions not native to IWMS platforms, such as room booking capabilities. Furthermore, suppliers have had to invest in new space management functionality to help users manage the hybrid era, such as dynamic space planning and move management tools.

- **Customer demand for tools to manage COVID-19 and occupant wellbeing.**

Over the past five years, firms have been increasingly interested in occupant wellbeing. COVID-19 further accelerated this trend, triggering firms to make new investments in wellbeing programmes (see [Verdantix Beyond COVID-19: Emerging Best Practices For Occupant Health And Wellbeing](#)). In response to customer demand, IWMS suppliers launched a set of solutions to help firms manage occupant wellbeing and safety, such as health screening apps. For instance, in 2020 FM:Systems launched a new solution, Safe Space, to help firms manage workplace re-entry and monitor the workplace to ensure a safe environment (see [Verdantix FM:Systems Expands Its Workplace Monitoring Tools To Support Safer Buildings](#)).

## Introducing CPIP: The Next Era Of Real Estate Platforms

The market for the ‘top of the stack’ real estate platforms – traditionally IWMS – has been revolutionized by a slew of investments, new customer demands and technology advances. Vendors have also been under pressure to modernize their maturing platforms to address market demand for solutions that are quick to install and easy to maintain. The changes have been so profound that the IWMS terminology triggers incorrect assumptions about scope and functionality in customers’ minds. Why? Because it misses out on the next phase of the evolution of these solutions and their transformation into more connected and intelligent offerings (see **Figure 2**).

To capture this evolution, there is a need for a new category definition that better expresses the broadening functionality, new value delivered to customers and impact of the IoT. Verdantix introduces the term ‘connected portfolio intelligence platform’ (CPIP) to capture this new market reality. We define CPIP solutions as:

*“Cloud-connected platforms that help firms enhance the performance of buildings across portfolio management, operations and employee experience. These platforms intelligently combine data from building systems, smart building devices and IoT sensors with advanced analytics, workflow management engines and mobile solutions.”*

To gain an in-depth understanding of the future evolution of the market, Verdantix ran over 30 interviews with IWMS, IoT and systems integration professionals. We also leveraged insights gained from previous product benchmarks on IWMS and adjacent software segments from the past 10 years.

FIGURE 2-1

## History Of The IWMS Category From 1980 To The Present

	1980-2005 (CAFM, point solutions)	2005-2010 (IWMS 1.0)	2010-2022 (IWMS 2.0)	2022+ (CPIP)
<b>Core Value Proposition</b>	Tactical data management and targeted reporting; single-building focused	Centralization of portfolio-level data and targeted reporting	Workflow management, integrated reporting and employee experience	Employee engagement and workflow optimization across the hybrid workplace, enabled by real-time data analysis
<b>Key Modules</b>	Facility-operation-focused: <ul style="list-style-type: none"> <li>• Maintenance management</li> <li>• Facilities management</li> <li>• Furniture tracking</li> <li>• Facility drawing management</li> </ul>	Expanded to cover: <ul style="list-style-type: none"> <li>• Lease management</li> <li>• Space management</li> <li>• Energy reporting</li> </ul>	Expanded to cover: <ul style="list-style-type: none"> <li>• Workplace experience</li> <li>• Real-time space monitoring</li> <li>• Dynamic restacking</li> </ul>	Expanded to cover: <ul style="list-style-type: none"> <li>• Hybrid workplace management</li> <li>• FDD/asset monitoring</li> <li>• Field services</li> <li>• ESG</li> </ul>
<b>Product Architecture</b>	Single platform  On-premise, customized	Single platform  On-premise, customized	Transition to cloud  Single-platform vision, with bolt-on M&A to deepen functionality, often in silos	Cloud-enabled suite of complementary solutions with targeted integrations  Emergence of low-code and IoT data-capture abilities
<b>Analytics</b>	Data warehousing and business reporting	Data mining, BI and data visualization	Emerging application of AI and ML	Further application of AI, ML and robotic process automation (RPA)
<b>Data Input/ Scope Of Integration</b>	Manual entry	Manual entry and data from BIM and other business software systems	Increasing integration of IoT data from workplace sensors	Increasing integration into the full smart building ecosystem, including BMSs, digital twins and smart devices
<b>User Interface</b>	Desktop dashboard	Desktop dashboard	Desktop, mobile and digital signage	Further broadening: Slack, Teams (omnichannel)
<b>Scope Of Assets Managed</b>	Building assets	Building assets	Buildings and non-building assets (e.g. linear assets)	Buildings, non-building assets and home

Sources: Verdantix analysis, vendor interviews



FIGURE 2-2

### History Of The IWMS Category From 1980 To The Present

	1980-2005 (CAFM, point solutions)	2005-2010 (IWMS 1.0)	2010-2022 (IWMS 2.0)	2022+ (CPIP)
<b>Scope Of Users</b>	FM	RE and FM	RE, FM and building users	RE, FM, human resources (HR), finance director (FD), sustainability, and building users
<b>Platform Expansion</b>	None	Limited	Bolt-on acquisitions and strategic mergers	Vendors are highly acquisitive, seeking to expand functionality and enter new markets

Sources: Verdantix analysis, vendor interviews

## Key Components Of CPIPs

From the early 2000s to the present day, software providers have incrementally built up legacy IWMS solutions through bolt-on acquisitions and integrations. CPIP offerings transform this gradual development into native functionality underpinned by a more open platform architecture. CPIP solutions are characterized by:

- **Broad suite of modules, from lease to energy management.**

Since the early 2000s, IWMS suppliers have invested in expanding the scope of their modules to provide customers with a single solution for different users. A key feature of CPIPs is an even broader suite of modules to manage processes across facilities, maintenance, lease, property, capital projects, space, energy, workplace, assets and ESG (see **Figure 3**). IBM's IWMS solution, TRIRIGA, captures this full range of capabilities, offering a set of unique workflows for each module, and integrated workflows across the modules (see [Verdantix Green Quadrant: Integrated Workplace Management Systems 2022](#)).



FIGURE 3

### Fundamental Features Of CPIP Offerings

Feature	Requirements
<b>Core Value Proposition</b>	Employee engagement and workflow optimization across the hybrid workplace. Asset performance improvements enabled by real-time data and advanced analytics
<b>Modules</b>	Facilities, maintenance, lease, property, capital projects, space, workplace, employee experience, asset and energy/ESG management
<b>Product Architecture</b>	Cloud-first architecture with targeted integrations; IoT data-capture capabilities and low-code offering
<b>Analytics</b>	Advanced analytics: AI, ML, RPA
<b>Data Input</b>	Manual, smart devices (e.g. IoT sensors and meters, and connected equipment), building systems (e.g. HVAC and BMS), and third-party software and existing business solutions (e.g. ERP)
<b>User Experience</b>	Integrated omnichannel user experience: single dashboard for reporting, and consistent UI across modules and devices
<b>Assets Managed</b>	Buildings and non-building assets (e.g. linear assets), and employees' homes
<b>User Types</b>	FM, HR, RE, FD, sustainability and building users

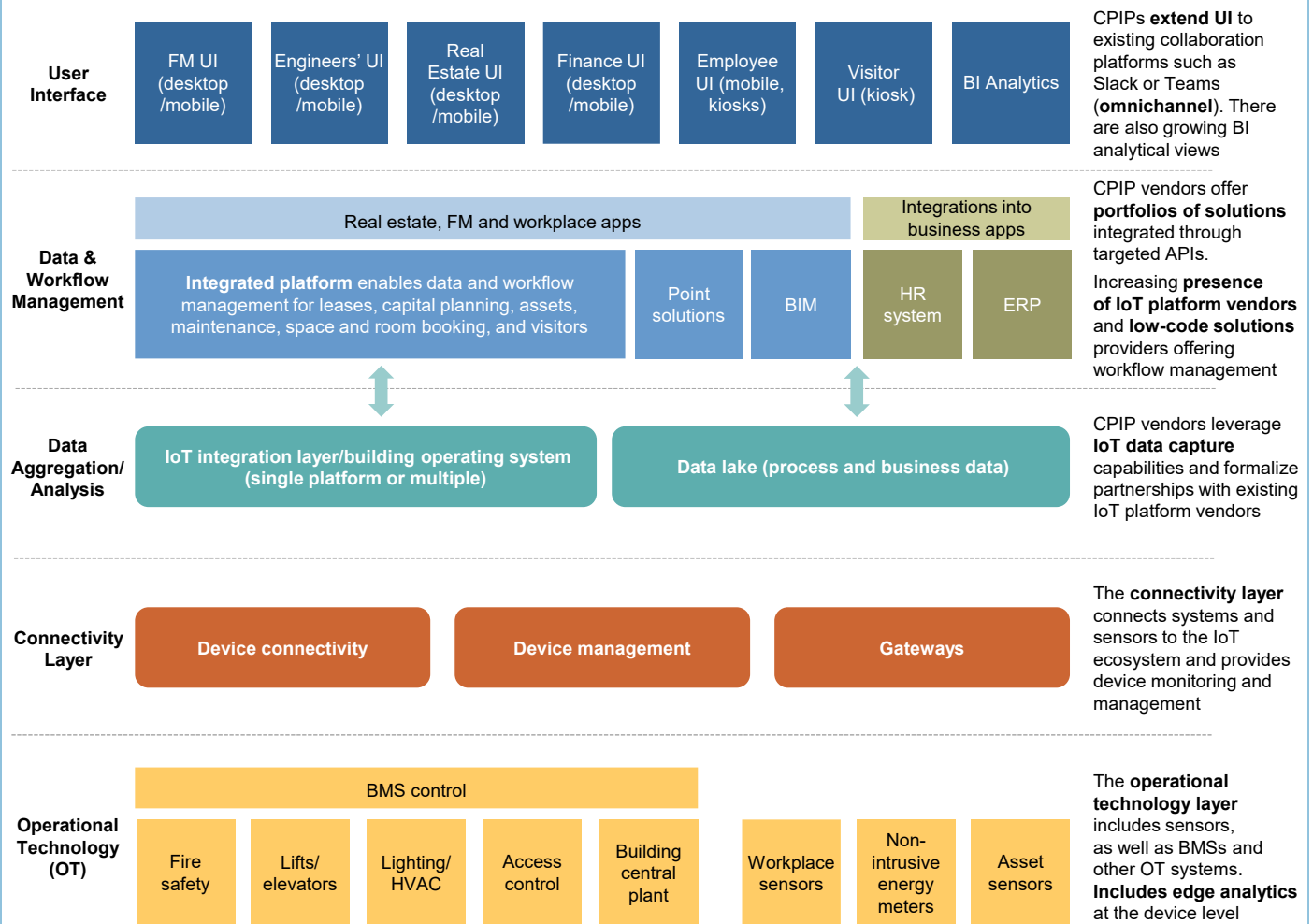
Source: Verdantix analysis

- **Real-time data input from sensors, building equipment and existing systems.**

As firms increasingly deploy smart devices, such as IoT sensors, buyers are expecting their real estate software platforms to leverage real-time building-level data. In the 2021 Verdantix survey of 285 real estate and facilities executives, 60% of respondents reported having passive infrared (PIR) occupancy sensors implemented at multiple sites and 53% of firms noted the deployment of energy meters (see [Verdantix Global Corporate Survey 2021: Smart Building Technology Budgets, Priorities & Preferences](#)). CPIPs integrate with the full smart building ecosystem to pull in real-time data from smart devices, building systems, third-party software applications and existing business solutions. For example, Rapal's IWMS360° platform leverages its integration with Granlund to gather data from BMSs and asset sensors to provide an overall building performance score.

FIGURE 4

### Technology Stack For New CPIP Category



Source: Verdantix analysis

- **Integrations across third-party and best-of-breed solutions.**

The early vision for IWMS was based on a customer selecting one vendor to support all of its RE and FM processes. However, in reality, no single IWMS vendor can fully meet all the functionality needs of a large firm or stay at the forefront of innovation in all areas. For CPIPs, the emphasis is on 'connection', rather than a single integrated platform. Suppliers have invested in updating the architecture of solutions to enable easier integrations with building systems and third-party solutions (see **Figure 4**). Customers can choose to connect a suite of best-of-breed software applications to their CPIP using application programming interfaces (APIs), helping them to benefit from specialist products and reducing the costs of configuring applications. This opens up the possibility of firms using a CPIP for 80% of their functional needs, while also leveraging innovative software products from start-ups. Firms pursuing this strategy will need to engage a workplace systems integrator such as Accenture, AMS Workplace Technology, AREMIS, Deloitte, eCIFM, EY, Horizant or JLL (see [Verdantix Green Quadrant: Workplace Systems Integrators 2021](#)).

- **Consistent user interfaces across modules and devices.**

According to the Verdantix corporate survey, the quality of the user interface (UI) is the most significant factor influencing software vendor selection; 40% of respondents rated it as 'very important' and a further 52% as 'important'. From 2017 to 2022, IWMS providers made significant investments in updating and modernizing the UIs of desktop, mobile and kiosk deployments. An essential characteristic of CPIPs is not only an appealing – but also a consistent – UI across the various modules and dashboards for different users. For instance, Planon's UI is visually appealing and consistent across modules, making its solution intuitive and easy to use. In the future, CPIPs will provide out-of-the-box integrations with common collaboration platforms such as Microsoft Teams and Slack.

- **Advanced analytics across multiple modules.**

Buyers are looking to leverage data analytics to make data-driven insights, with 42% of firms in the 2021 Verdantix global survey rating improving the analysis of building data to maximize insights as a high priority. Software suppliers across the market have invested in improving analytics to enhance decision-making and operations. CPIP offerings need to provide advanced analytics across modules such as asset and space management, allowing customers to run analytics on combined data sets. For example, Tango's floorplan scenario modelling tool uses ML and AI analytics to run multiple floorplan permutations, displaying the top two suggestions based on multiple inputs, such as real estate objectives (for example, minimizing square footage or reducing cost), headcount forecasts and collaboration requirements from different teams.

## Suppliers That Do Not Evolve Into CPIP Risk Losing Out On New Revenue Streams

Software providers are looking to transform legacy IWMSs into CPIP offerings by partnering with third-party software firms, acquiring suppliers or building the capabilities in-house. Suppliers that do not evolve existing solutions risk:

- **Being perceived as an aging IWMS software supplier.**

For the past 10 years, various market commentators and buyers have proclaimed that IWMS is dead. Even though the solutions have evolved significantly since their inception, some firms still conceptualize IWMS as an on-premise, heavily customized solution that is expensive to implement. By making the transition to CPIP, vendors can more easily articulate how they have evolved and enhanced their solutions by making the most of IoT and advanced analytics. Some IWMS suppliers have started marketing their own terms to showcase their evolved solutions, such as MRI Software offering an Extensible Workplace Management System (XWMS) or Nuvolo providing a Connected Workplace platform.

- **Losing out on new revenue streams.**

The addition of new modules, integrations and advanced functionality as part of the evolution to CPIP offerings enables suppliers to charge new fees or upsell to customers. For instance, CPIP suppliers can offer a basic version of a solution, with add-ons for more advanced functionality, such as fault detection and diagnostics (FDD). The growing popularity of third-party integrations enables software suppliers to gain more revenue by charging a fee for each integration required (see [Verdantix Strategic Focus: Making Sense Of Smart Buildings Software Pricing Models](#)). CPIP providers will also be able to leverage partnerships to target new markets and gain new customers.

- Failing to meet customer demand for higher levels of building performance.**  
 CPIP offerings enrich legacy IWMS solutions with real-time data from building equipment and advanced analytics, enabling smarter workflows and greater automation. Examples include restricting space booking once an occupancy sensor reaches a set limit or cleaning a desk when a sensor identifies that it has been recently vacated. This allows CPIP suppliers to meet customer desire for demand-led and IoT-informed workflows that improve day-to-day operations. This will support customers moving towards more advanced building management regimes such as condition-based maintenance or smart cleaning.
- Being unable to target customers looking to invest in a single module to start with.**  
 Rather than a single platform with multiple modules, CPIP is a cloud-first suite of complementary solutions that can connect to third-party apps as well. The modularized architecture allows software buyers to invest in and deploy modules as needed through the cloud. This enables CPIP providers to target a larger customer base, such as mid-market firms and customers looking for a single solution (see [Verdantix Strategic Focus: IWMS Solutions For The Mid-Market](#)). Additionally, a modularized solution allows CPIP suppliers to adopt a land-and-expand go-to-market strategy with clear upselling capabilities.
- Losing market share to IoT platform vendors building workplace functionality.**  
 The move to CPIP expands the original scope of legacy IWMS solutions from workflow management to encompass the broader smart building ecosystem. The scope of CPIP then includes a workflow management layer on top of an IoT data platform layer. This advancement enables CPIP suppliers to target customers looking for IoT solutions embedded with integrated workflow capabilities.

## Software Providers Are Pursuing Four Core Strategies To Make The Leap To CPIP

CPIP extends the value proposition of legacy IWMS solutions, enriching modules with real-time data and advanced analytics to enable smarter workflows and greater automation. Software providers are in the process of evolving IWMS solutions into CPIPs by broadening the modules they offer, integrating with more devices and leveraging advanced analytics. In the future, vendors from an IoT monitoring background will likely invest in this vision by expanding their real estate analytics and workflow capabilities. How are providers making the jump to offering a CPIP? Verdantix analysis finds that suppliers are:

- Partnering with third-party providers to expand modules and capabilities.**  
 With the growing use of open standards, a key strategy for IWMS providers is to form long-term partnerships to gain new revenue streams and offer advanced functionality. Take Planon establishing a strategic partnership with Schneider Electric, so that it can incorporate the latter's asset monitoring and BMS analytics in its workflow platform. In some instances, IWMS suppliers rely on partners to offer entire modules that are not included in their solutions. For instance, Rapal partners with point solutions providers Granlund, Gravicon and Scudo for asset and maintenance management, capital projects, real estate management and property management.

- **Acquiring software suppliers to gain new or enriched functionality.**

The high volume of mergers and acquisitions (M&A) in the IWMS market shows that suppliers are methodically acquiring solutions to enhance existing functionality. This has been a key strategy for some IWMS providers – such as MRI Software, which acquired 20 firms from July 2019 to January 2022. IWMS suppliers commonly acquire point solutions to fill capability gaps, but are gradually taking on full-platform solutions to offer completely new functionality. Witness Planon acquiring Axonize, an IoT platform provider, to deliver enhanced IoT connectivity for buildings (see [Verdantix Planon Accelerates Its Smart Building IoT Strategy By Acquiring Axonize](#)). Buyers need to be alert to the extent to which CIP vendors offer out-of-the-box APIs to the solutions they have recently added to their portfolios by M&A.

- **Investing in building up capabilities in-house.**

Some IWMS suppliers, such as IBM, Nuvolo, VLogic Systems and zLink, are transitioning to CIP solutions by building up new capabilities in-house. Nuvolo started off in 2014 by providing enterprise asset management (EAM) solutions and extended its platform to create its Connected Workplace solution in January 2021 – an IWMS solution that expands functionality to cover maintenance, space, workplace and sustainability management. Similarly, in June 2021 VLogic introduced hybrid work scheduling and built an integration with advanced infrared IoT occupancy sensors to enable real-time space occupancy tracking over a cellular network. IoT platform providers are also investing in developing workflows to evolve solutions into CIPs. Witness Spacewell merging its workflow-based software, Axxerion, with its IoT platform, Cobundu, to offer an advanced workplace management solution in March 2022.

- **Entering the market with modern platform architectures.**

Non-legacy IWMS providers are also establishing CIP propositions with modern platform architectures that are natively compatible with building systems, smart building devices and third-party software solutions. These platforms are built to aggregate and centralize data from various sources overlaid with workflows to enable automation. For example, Facilio's platform captures building data from traditional building systems and modern devices via its IoT-based edge software. The Facilio platform offers a workflow engine, custom modules, advanced analytics and a suite of connected apps for firms to leverage (see [Verdantix Buyer's Guide: Smart Building IoT Platforms \(2020\)](#)).



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