

FACILITIES MANAGEMENT TRENDS FOR 2024

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FACILITIES MANAGEMENT is undergoing rapid evolutions across businesses, schools, campuses and others organizations. Aramark is at the forefront of these transformative innovations and has identified 15 leading trends influencing how organizations develop and maintain facilities, as well as how they surpass occupant expectations.

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TECHNOLOGY

TREND 1 Predictive Maintenance Technology and Data Are Refocusing Maintenance Efforts

With sensor technology growing, the ability to monitor virtually any component of a facility is changing the game. Such information allows organizations to migrate away from conventional, time-based preventive maintenance measures toward real-time, data-driven actions that predict when maintenance is needed. With sensors becoming ubiquitous, managers and owners always know assets' status. Daily management will become less about knowing which assets are on a cycle for attention and more about which are nearing failure. Preventive efforts, generally applied throughout the entire asset pool, will now be proactively targeted to where the greater need is likely to occur. Preventive maintenance will still be important, but less critical as technologies take the reactive nature of operations and maintenance out of the equation.

DID YOU KNOW:

Facilities management experts estimate there are approximately **seven sensors for every one person**.

DID YOU KNOW

Facilities can save **3-10x** more money with predictive technologies

>6 MINUTES:

Time it takes vibration analysis to identify mechanical problems

<u>5 Innovations in Facilities</u> <u>Management</u>





DID YOU KNOW

30 percent of energy consumed in commercial and industrial buildings is wasted.

Office of Energy Efficiency & Renewable Energy



TREND 2 Remote Monitoring Provides Continuous Insight and Cost Reduction

Just as homeowners can remotely monitor and schedule their heating, air conditioning, lighting, security and more, remote monitoring with connected devices is increasingly being used to manage facilities operations, significantly reducing energy costs. With up to 30 percent of energy consumed in commercial and industrial buildings wasted, identifying opportunities for improved efficiency remains an important area of focus.

Remote monitoring is impacting four key areas:



Improved User Experience

Remotely controlling heat and air, reducing energy consumption and monitoring equipment for failures



Site Maintenance

Assessing performance and quality control centrally at remote sites



Telemetry

Monitoring equipment usage and productivity, and receiving proactive service notifications



Data and Business Intelligence

Receive real-time data and insights collected from remote monitoring to make decisions and improve operational performance

TREND 3 Robotics and Automation Enhance Productivity

No one likes jobs that are dirty, repetitive or dangerous — which makes them perfect for robotic technology. Autonomous vehicles can perform certain repetitive tasks faster and safer, allowing humans to perform more interesting and engaging activities. But robotics applications go beyond just automation.

Improved sensor technology, lasers and 3D cameras will generate continuous data intelligence on repetitive tasks. Analyzing this data in real-time allows machines to identify actions that deliver the best results. This learned behavior integrates continuous improvement into its daily operation. For example, autonomous cleaning devices achieve greater results by getting machines closer to walls, improving their ability to operate in tighter spaces and handling dynamic environments more effectively. Likewise, drone technology makes cleaning buildings safer, faster and more effective, accessing hard-to-reach areas like high windows and roofs so people don't have to. Tasks that used to take days can be done within hours.



DID YOU KNOW

The **robotic cleaning market** is expected to grow at a compound annual growth rate of 21.5% through 2027.

Markets and Markets



TREND 4 Digital Twin Technology for FM Takes Off

Digital twinning is emerging as one of the most exciting, leadingedge technologies for facilities management in 2024. Imagine the possibilities of having every space and asset at your fingertips in a dynamic digital environment. Digital twinning is a planning, design, construction and operations tool consisting of an accurate 3D virtual models of spaces and assets, providing a holistic remote view of every inch within a facility.

It's an exceptional way to maximize building efficiency and identify maintenance needs.

Having accurate virtual models that can be accessed remotely brings a host of benefits, including:

- Remote monitoring with real-time data
- Enhanced decision making
- Improved staff training
- Comprehensive asset information
- Precise measurements taken remotely
- Improved pre-service insights
- Outdoor assessments
- Strategic predictive maintenance

As buildings become more equipped with the latest remote monitoring and sensor technology, digital twinning will offer these and other advantages. For instance, it can integrate with IoT sensors that measure real-time occupancy and energy usage.



DID YOU KNOW

Digital twinning results in an 80% decrease in the cost of site surveying and as-built modeling.

<u>Matterport</u>



DID YOU KNOW

78% of facility decision-makers

have deployed smart building features, but 38% say they lack the data analytics skills to take full advantage.

<u>Toggled</u>



TREND 5 Bridging the Data Analytics Skill Gap

Facilities management has reached a pivotal moment, with previously unavailable data and insights now becoming ubiquitous through emerging technology.

However, the challenge lies in readily transforming this wealth of data into actionable solutions and uncovering previously unnoticed issues. The need for advanced facilities and data analytics is now essential. Those who can harness and integrate data for broad-based decisions will thrive.

Facilities in all industries are seeing big data impact in four areas:



Integrated Work Management Systems (IWMS)

A single cloud database connects multiple business processes, optimizing all resources and assets within one integrated platform.



Building Information Modeling (BIM)

Software creates digital models and visualizations of any space, building or equipment, allowing for faster diagnostics and easier decision-making.



Geographic Information Systems (GIS)

Spatial information systems capture acreage, square footage and asset locations, enabling faster response to service needs, improved staffing levels and accurate scheduling.



Remote Monitoring Systems

IoT sensors continuously monitor spaces, equipment and building systems, expanding the reach of an organization's existing staff and resources.

FACILITIES





Digital Transformations for Data-Driven Decision Making

Facilities management, the bedrock of an organization's physical environment, is undergoing a profound transformation through digitization, wireless communication and sensor technologies. These advancements empower continuous monitoring of nearly every component within a facility, generating a wealth of data that holds unprecedented potential for decision-making. Data is changing the way organizations manage their spaces, assets, operations and people. Yet, this volume of information requires deep analytics to truly be advantageous and impactful. To do so most effectively requires the worlds of FM and IT to integrate and collaborate more closely than ever.

Managing facilities is rapidly becoming less physical and more digital. Historically, FM departments have been staffed by older, less tech-savvy generations and IT departments staffed by younger generations less interested in physical building operations. As the skilled labor shortage continues, the need for cross-departmental collaboration will be essential to truly leverage the possibilities of smart buildings and digital innovations.



TREND 7 Space Utilization Data Drives Demand-Based Operations

Across industries, there is a shift toward more strategic use of physical space to minimize costs. This is especially true in higher education, where declining enrollment, budget deficits, labor shortages and deferred maintenance backlogs have exposed a liability in excess space.

The move toward remote work and learning spaces also impacts space utilization. Although <u>90% of workers</u> are expected to return to the office in 2024, many will still be working a hybrid schedule.

As a result, flexible spaces will be in high demand, and the ability to balance building retrofits to improve utilization will require careful consideration.

Additionally, real-time space utilization monitoring is changing how spaces are serviced with actionable data and insight into how those spaces are used on a daily basis. Traditionally, cleaning, maintenance and other support services are scheduled as though all spaces and equipment are regularly used.

In reality, large amounts of space in buildings, particularly at universities, are underutilized every day. Much like the guest bedroom in your home, why remake the bed if no one slept in it? Cleaning and maintenance of spaces and equipment based on actual user demand, rather than assumption, drive greater productivity and improve the user experience.

DID YOU KNOW

A 5% error on a 2 million GSF campus could create excess spending of **\$450,000 to \$500,000**

<u>Understanding Space Date: Know</u> <u>Which Measure to Use</u>



DID YOU KNOW

Only about **60%** of space in buildings and on campuses is used daily.

Flex Space Is Here To Stay

Past Present Future < 5% 30% Flexible Flexible 80% Occupancy 80% 60% Traditional Traditional Occupancy Occupancy 20% Vacant 15% 10% Vacant Vacant <150 sqft 200+ sqft 300+ saft per person per person per person

~30% of CRE Space Will Be Flex by the End of 2030

TREND 8 Optimizing Day-to-Day Operations To Protect Investments

Deferred maintenance remains the bane of every facilities manager and owner. It's a challenge faced across the nation, from public entities and school districts, to universities and hospitals. Whether a facility is brand new or historically significant, an underfunded operating budget remains the primary driver for eventual capital exposure. At higher education institutions, for example, there is an estimated 36% shortfall in funding capital renewal and maintenance backlogs. As a result, capital renewal needs have spiked to \$133/gross square foot.

More recently, organizations have targeted new sources of capital funding to catch up on their backlogs. Energy performance contracts, P3 partnerships and the emergence of energy infrastructure and asset monetization structures are popular ways to secure needed capital. However, a critical realization has emerged: without corresponding investments in the day-to-day management and operation of facilities, capital investments are left vulnerable. In response, a renewed emphasis on connecting the "keep-up" and "catch-up" approaches to maintenance is needed. Organizations are recognizing the necessity of directing funding strategies to "keep up" and protect limited investment capital, ensuring that the benefits of capital "catch-up" investments are sustained. This shift signals a more proactive stance against deferred maintenance, aligning financial investments with comprehensive and sustainable facility management practices.



TREND 9 Moving From In-House Management to Strategic FM Partnerships

Few organizations are prepared for the demands posed by the continuous changes in facilities management — including R&D, skilled staffing, training programs, leading-edge technologies and more. Delivering a high-quality physical environment in a cost-effective manner is not only increasingly technical in nature, but also beyond the core mission of most organizations. The ability to staff such a function, remain abreast of exponential changes, and continuously innovate for competitive advantage together represent an expensive and unrealistic proposition for most organizations. The pace of technological change remains too great. Integrated facilities management (IFM) providers, whose sole existence is to meet these demands, will fill the void in most organizations' operations. They must remain on the leading edge of innovation for their own survival. Partnering with such providers will be essential for organizations to remain competitive.



DID YOU KNOW

Integrated facility management (IFM) services are close to **20 percent** of all outsourced facilities management and growing every day.

McKinsey & Company



Benefits include:

- Improved user experience
- Higher employee engagement
- Greater recruitment and retention
- Higher productivity levels
- Elevated staff skills
- Better-informed decisions
- Access to continuous innovation and best practices
- Reduced operating and capital costs

For these reasons, partnering with strategic providers is becoming increasingly common. The global market for in-house and outsourced facilities management is estimated to reach <u>\$1.9 trillion</u> in 2024, with the outsourced segment accounting for more than half the total and quickly outpacing in-house. IFM services are close to 20 percent of all outsourced facilities management and growing every day.

ENERGY



DID YOU KNOW

74% of prospective students say a college's commitment to the environment affects their decision on whether to attend.

The Princeton Review



TREND 10 FM As Stewards for Sustainability

Technology has made it possible to monitor and manage energy usage like never before. IoT sensors allow for real-time tracking, while intelligent building systems allow facilities managers to proactively adjust consumption. Thanks to artificial intelligence, the most advanced building systems can even predict usage based on historical data and make adjustments accordingly. But with great power comes great responsibility. Simultaneously, facilities leaders are facing increased pressure from board members, investors and the public to reduce their carbon footprint.

More than <u>90% of the largest companies</u> now file sustainability reports, and a recent study from Oxford University found that more than 80% of mainstream investors consider environmental, social and governance (ESG) data when making investment decisions. Facilities leaders recognize they need to be better stewards of the environment by reducing energy consumption and using alternative energy sources whenever possible. Many also have published commitments to reduce carbon emissions and reach specific targets.

A growing number of businesses are looking for ways to become more energy- and carbon-efficient, including by revamping their infrastructure, operations and budgets. Sustainability challenges will continue to impact supply and value chains, building design, management and maintenance.

The same is true for colleges and schools. The Princeton Review's 2024 Guide to Green Colleges lists hundreds of institutions that are deemed environmentally-responsible. Hundreds of campuses have signed a climate pledge from Second Nature, an organization committed to accelerating climate action.

DID YOU KNOW \$100K Typical annual energy use of a 50K square foot classroom building <30% Savings from cost-effective energy measures

U.S. Energy Information Association



PEOPLE

TREND 11

Flexible Spaces To Increase Occupant Engagement and Satisfaction

The way in which spaces are designed has a huge impact on occupant interactions and engagement. For example, experiential learning and peer teaching leads to higher levels of information retention for students compared to traditional lectures. The right settings encourage collaboration and increased productivity, such as facilitating interactions between workers, managers, students and instructors. In addition, the increase in hybrid work and study schedules means organizations are looking more closely at how to efficiently use available space and extend its use with flexible options.

- Dining When it comes to dining, flexible options like 24/7 self-serve kiosks better meet a variety of schedules and preferences
- Socializing Allowing people options on where and how to socialize is imperative to ensure success, from clubs and events, to lounges and coffee shops
- Studying Students are increasingly comparing university experiences to the real world, and flexible study spaces are among the first areas they will look to make that comparison
- Working Versatile environments, such as co-working spaces with adaptable layouts, foster collaboration and accommodates diverse work styles, preferences and schedules

Acknowledging how the physical environment and workplace experience impact productivity, engagement, learning and wellness, facilities leaders will focus on creating multi-use spaces where occupants can enjoy a meal, study, socialize and work. They are paying more attention to how these spaces engage the senses and rely on technology to further elevate them.

WORK, LIFE AND THE WORKPLACE:

- TYPICAL WORK WEEK
 Office workers on average
 come into the workplace 48%
 of the week.
- IDEAL WORKWEEK
 Workers say they need to spend 63% of their time in the office to be productive.
- FOUR KEY
 CATEGORIES OF SPACE

Spaces for creative group work, individual quiet work, to connect and recharge, and to reflect and restore all contribute to how employees perceive the office.

► ACCESS TO KEY SPACES

90% of office-based employees have access to one of these space types within their office; just 47% have access to all four.

Source: Gensler 2023 U.S. Workplace Survey

"

As the boundaries between work and life continue to blur, the design and purpose of the workplace becomes complex and multi-dimensional ... It is time to rethink universal and homogeneous office design and create more tailored spaces to accommodate the unique needs of employees as they navigate through different work and life situations."



40% of the 12 million people in the skilled trades workforce are over the age of 45. Nearly half of those workers are over the age of 55.



Less than 9% of workers aged 19-24 are entering the trades.

PeopleReady Skilled Trades

TREND 12 Addressing the Growing Skilled Labor Shortage

The skilled labor shortage continues to intensify, presenting a formidable challenge across all industries, including facilities management. Vacancies for custodial staff, maintenance personnel and other skilled workers are increasingly harder to fill. With an aging workforce, physically demanding work often leads to an earlier exit, creating a surge of staffing vacancies. The law of supply and demand is working against facilities management, as workers with critical skill sets are commanding starting salaries higher than their predecessors. This is one area where partnering with a facilities service provider can bring additional resources to attract, train and help retain quality talent.

A shortage of critical facilities professionals is prompting managers to explore new solutions. Organizations must adopt a multifaceted approach that combines upskilling, technology integration, strategic recruitment, collaborative partnerships with integrated facilities management, flexibility, knowledge transfer and a commitment to diversity and inclusion. Learn more about how the facilities management sector is evolving and what campuses are doing to attract and retain top talent in this resource, <u>Top Trends To Attract</u>. <u>and Retain Talent</u>.



DID YOU KNOW

In 2024, the construction industry will need to attract more than 500k additional workers on top of the normal pace of hiring that happened in 2023 to meet the demand for labor.

Associated Builders and Contractors

TREND 13 Knowledge Transfer and Succession Planning To Ensure Uninterrupted Operations

The FM industry faces an aging workforce, with more workers leaving the market than entering it. Impending retirements or shifts in employment among leadership can lead to the loss of valuable expertise, potentially disrupting operations. Organizations must proactively implement knowledge transfer, training and succession plans to mitigate the impact of this workforce transition.

Planning for the future of FM includes multiple goals:

- Being able to attract and retain talent
- Forming partnerships with key talent providers
- Providing continuous career development programs for skilled labor
- Creating a formal skilled labor development curriculum
- Providing career management paths, including hands-on training, certifications and professional designations
- Leveraging technology and data capture for continuous monitoring and historical reference

Organizations can proactively address the dual challenges of insufficient staffing and talent gaps by working with an IFM partner with comprehensive talent acquisition resources. Access to such resources assists in attracting and retaining top-tier talent, while facilities management development programs nurture the growth of the next generation of facilities management professionals through training, certifications and credentialing.



DID YOU KNOW

- The built environment (buildings, schools, hospitals, etc.) are responsible for approximately 35% of total U.S. emissions.
- To meet 2050 net-zero emissions targets, 2.5% of the existing building stock will need to be retrofitted each year.
- Fully deploying energy efficiency in buildings can drive nearly half of emissions reduction targets and lead to savings of \$57 billion to \$107 billion by 2050.
- Fluorescent lighting now violates federal law in five states as of January 1, 2024, with seven more states to follow shortly thereafter.

<u>Alliance To Save Energy</u>



TREND 14 Building Sustainability Into Operations

The dual mission of profitability and sustainability is steering organizations towards substantial efforts to combat climate change, building sustainability into all areas of operations. As facilities leaders consider the impact their buildings have on occupants as well as the environment, they are routinely incorporating sustainable elements to drive triple bottom line outcomes, that is, the financial, social and environmental performance of a company over time. This includes reducing energy and water consumption through IoT sensors, relying more on alternative energy and using responsible sourcing and recycling.

Optimizing building systems can improve operations, reduce energy consumption and lower energy costs. A few examples include:

- Using outside air for cooling when outside temperatures are favorable
- Implementing building system controls to align heating and electric supply with demand
- Implementing a preventive maintenance program for building equipment, including using sensors to ensure systems are operating efficiently

Investing in new energy-saving systems, such as high-efficiency HVAC units, demand-controlled ventilation systems and LED lighting can further amplify savings. More organizations are also turning to renewable sources of energy to minimize their carbon footprint. Many colleges and universities have committed to becoming climate neutral within the foreseeable future. Likewise, leading manufacturing organizations and other businesses are taking steps to tackle carbon emissions across operations and supply chains.



TREND 15 Strategic, Data-Backed Risk Mitigation

Every building varies in size, location, function and need and has its own unique challenges and risk profile.

For instance, a building with aging infrastructure has inherent environmental risks and potential occupant hazards. It requires a tailored plan for handling preventive and deferred maintenance, with remote and real-time monitoring to guarantee seamless operation.

Conversely, a more modern facility with a complex building automation system or state-of-the-art equipment would benefit from continuous commissioning and predictive maintenance approaches.

An integrated facilities management model addresses these variations among building personas while providing consistent service delivery. Yet, a flexible approach that recognizes these variations will ultimately mitigate risk by optimizing staff productivity, spending limited resources wisely, and assuring environments maintain the desired occupant experience.







< 100,000 GSF

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	-	-
		-

< 100,000 GSF Remote



< 100,000 GSF Favorable geo density



As a leader in IFM solutions for commercial, manufacturing, healthcare, K-12 education and higher education organizations, Aramark brings decades of experience and deep technical expertise.

Our facilities management experts have their fingers on the pulse of the industry in multiple ways, including our own studies, our clients' on-premises studies, working with leaders in the field and staying on the forefront of innovation—from IoT sensor networks for unprecedented business intelligence to sustainability-infused solutions that are good for the planet and your people. With every organizational partner, we go beyond traditional facilities maintenance, custodial, landscaping and engineering services by combining science and art to maintain cleaner, more efficient spaces. We deliver environments that support your organization's goals — including recruitment and retention, addressing deferred maintenance, saving energy and much more.



Learn more about our trend-setting services, and contact us to discuss how we can help your organization achieve your goals.

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