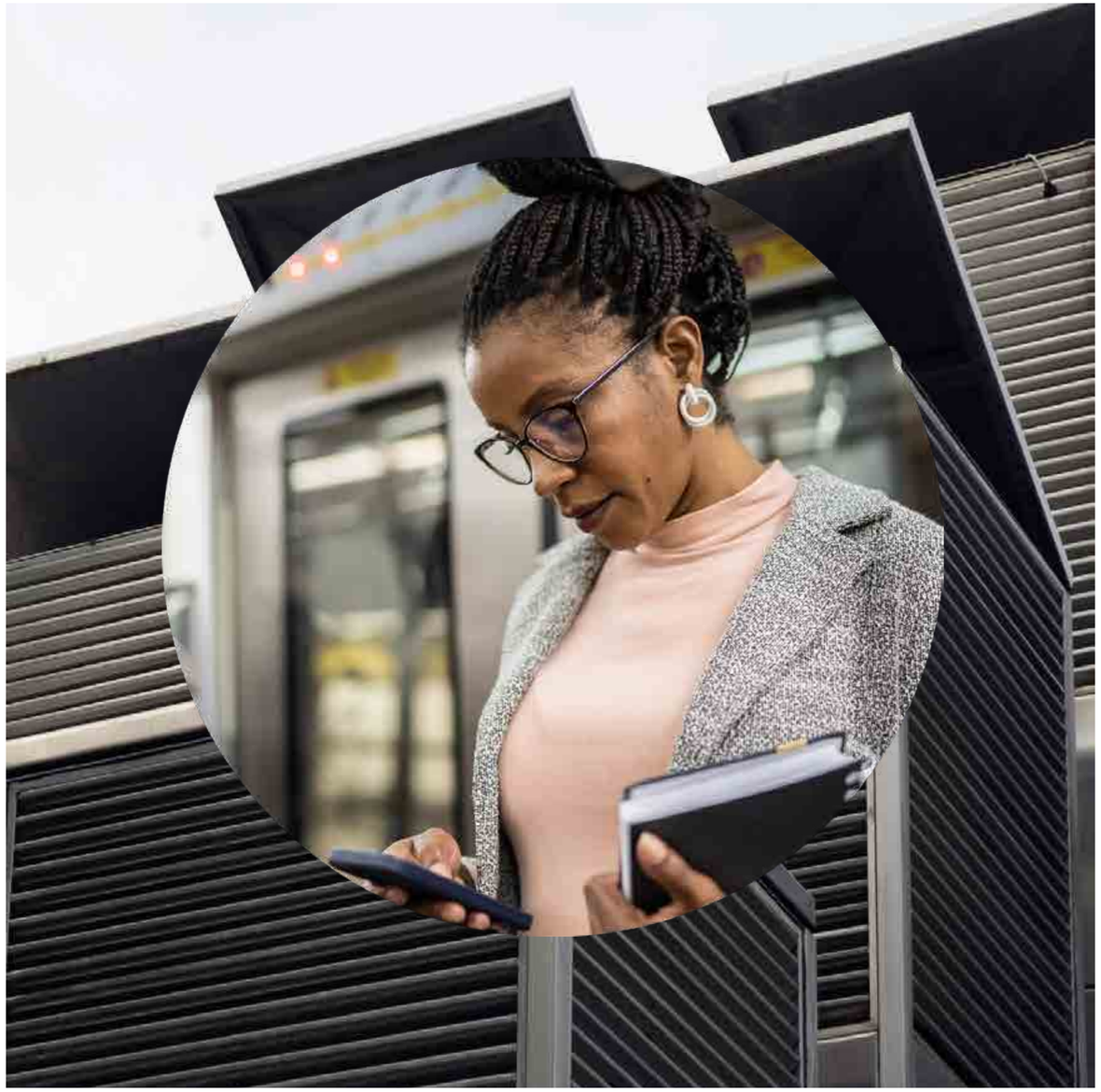
Elevate facilities operations through capital planning

Bring confidence and transparency to decision-making



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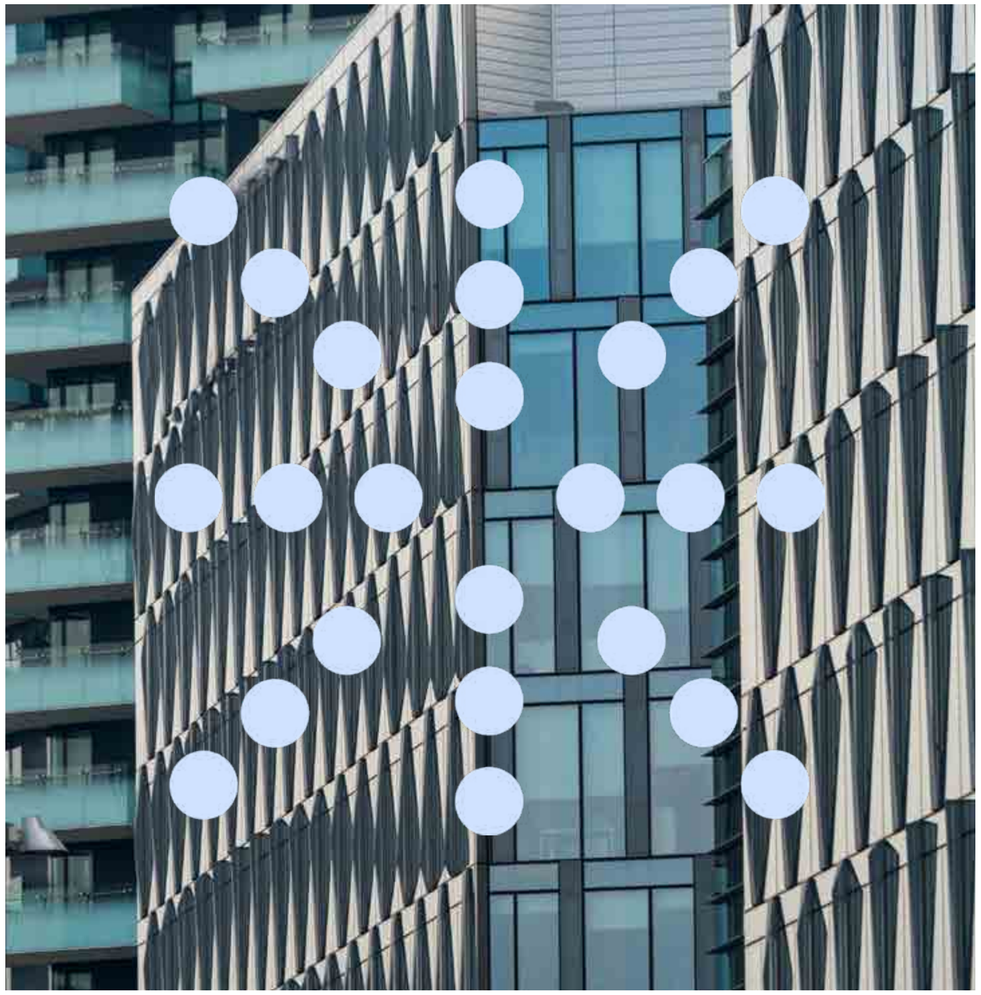


Introduction

Imagine finding out your portfolio has incurred **USD 6.7 billion in deferred maintenance.**[1] The University of California (UC) calculated this number by reviewing 2,300 buildings and campus infrastructure assets through a holistic facilities management system, which enabled them to inventory over 125,000 assets, assess their condition, and assign risk ratings and costs.

Managing capital planning is a complex task, especially in an ever-changing economic, technical and operating environment. This task includes maintaining aging infrastructure, managing data from multiple projects in different places, optimizing energy usage, sustainability upgrades, following local regulatory and compliance regulations, and creating engaging environments.

Using comprehensive facilities data and integrated processes for capital planning is becoming more critical with rising interest rates, increasing oversight, concerns about sustainability, and more demanding customers and employees. They reinforce how critical the collection and use of comprehensive facilities data is to feed integrated capital planning processes. As the maxim goes, it’s difficult to manage what you can’t measure. Developing credible and justifiable budget requests is not only expected but represents responsible financial stewardship. Having the right information in the right place empowers teams to make better decisions to anticipate and address issues proactively.

Identify the challenges

Whether it’s a large university system, a large manufacturer with extensive production and distribution facilities with various locations, or a business downsizing its office space, capital planning brings a unique set of challenges that demand financial expertise, strategic thinking and adaptability.

Maximize the value of return on invested capital

Leveraging the value of return on capital investment is critical to efficient financial management and business strategy—it requires careful consideration when it comes to capital planning for facilities. When you don’t engage in capital planning you risk the failure of mission-critical assets, risk business reputation and embark on reactive maintenance, which all affect your bottom line.

- **Capital planning and facility decisions:** Determining whether to acquire facilities, build something new or refurbish existing buildings can be a tricky process. Each option has its unique set of advantages and challenges. For instance, acquiring new facilities might offer immediate benefits but could involve higher upfront costs, while refurbishing existing ones may be more cost-effective but require careful planning and execution.

- **Data-driven decision-making:** Trying to predict the optimal return on capital is tricky, especially if there’s a lack of data. Where you manage building leases and facility assessments , and track deferred maintenance and other information across real estate lifecycles is paramount to making informed capital planning decisions. Having a trusted source of consolidated operational information for every asset in your real estate and facility portfolio can make capital planning much easier.

- **Value assessment of the enterprise** It’s essential to assess how each investment aligns with the overallgoals and strategies of your organization. Considerations extend beyond immediate financial returns and include long-term benefits and strategic alignment. Investments that contribute to core business objectives and growth prospects often yield more significant returns in the long run.

- **Facility constraints:** Evaluate what might affect capital allocation decisions. It could be related to space limitations, infrastructure deficiencies, regulatory requirements or environmental considerations. Identifying and addressing these limitations can help ensure that capital investments deliver their intended value.

When trying to maximize returns on capital investment, you must ask yourself, what will be a substantial value to my enterprise? Are there constraints within your facilities? Do you need more space? Rather than relying on a crystal ball, it’s necessary to make assumptions based on trusted data. By strategically addressing these factors, you can optimize capital investments and achieve better returns over time.

The lack of a single source of truth

When data is dispersed across various locations, teams and software tools, it can be difficult for organizations to have a single source of truth at different moments in time. As a result, the decision-making process and capital planning become immensely complex.

- **Data consistency:** When different teams have data silos, inconsistencies between software tools can make apples to apples comparisons difficult, paralyzing decision-making, and errors can easily creep in, leading to flawed decision-making. With a centralized source of accurate data, it's possible to trust the information used to make critical decisions.

- **Decision-making:** When all relevant information is easily accessible, decision-makers can easily evaluate the condition of existing facilities and potential investments, as well as prioritize projects based on their impact and alignment with organizational goals.

- **Resource allocation:** Capital planning often involves allocating limited resources. By understanding the condition and value of existing assets, organizations can allocate funds more effectively, helping to ensure that investments generate the best possible returns and contribute to long-term sustainability.

- **Collaboration:** When everyone has access to the same information, it fosters a common understanding and facilitates cross-functional communication.

A single source of truth is essential for conducting facility condition assessments (FCAs) efficiently. The lack of centralized data can hinder the analyses that are vital for determining the true condition and value of facilities and their components. Without this critical information, effective capital planning becomes an even more daunting task.

Minimize the side effects

Overcoming the challenges associated with capital planning requires key actions in three distinct phases.

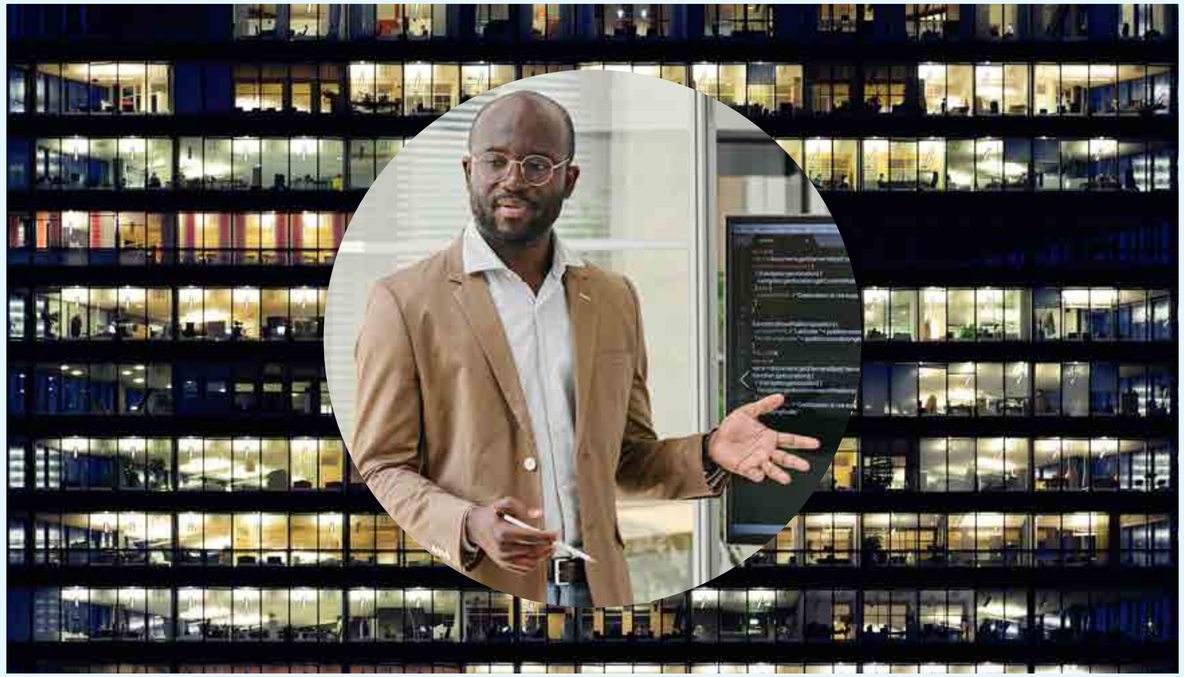
- Portfolio management
- Assessment
- Execution

Phase 1.
Portfolio management

Portfolio lifecycle assessment: This analysis provides a place to capture building system details so facility professionals know what they have in their buildings, when they were installed, when they're expected to reach their end of life and the estimated replacement cost.

Asset management system: This system tracks the performance and condition of building systems and equipment, as well as schedules and tracks maintenance activities. This process helps prioritize investments based on asset condition, optimizes maintenance schedules and avoids unexpected breakdowns.

Phase 2.
Assessment



Risk assessment: Identifying and assessing risks associated with each facility is crucial. This process includes evaluating factors, such as safety hazards, compliance with regulations and potential vulnerabilities. A thorough risk assessment helps in prioritizing maintenance and renovation efforts based on the risk level associated with each facility.

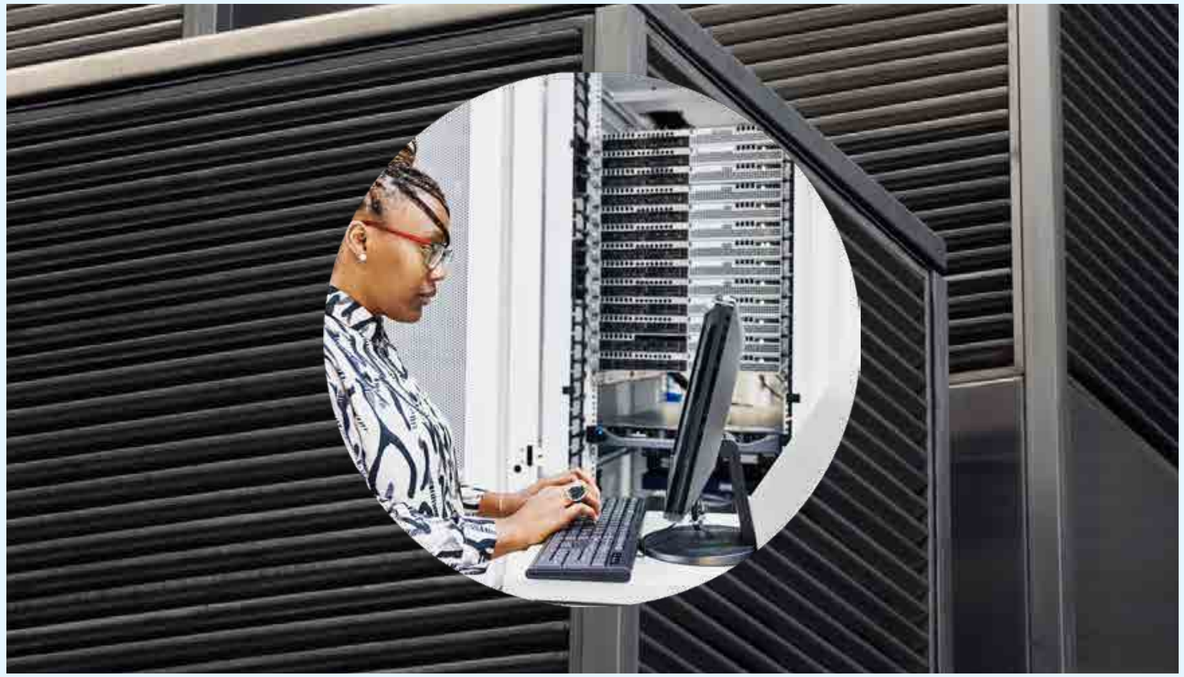
Energy audits: Energy efficiency is a growing concern for organizations due to environmental considerations and cost savings. Conducting energy audits as part of the analysis helps identify opportunities to reduce energy consumption and greenhouse gas (GHG) emissions. It can also reveal potential areas for upgrading equipment or systems to improve efficiency.

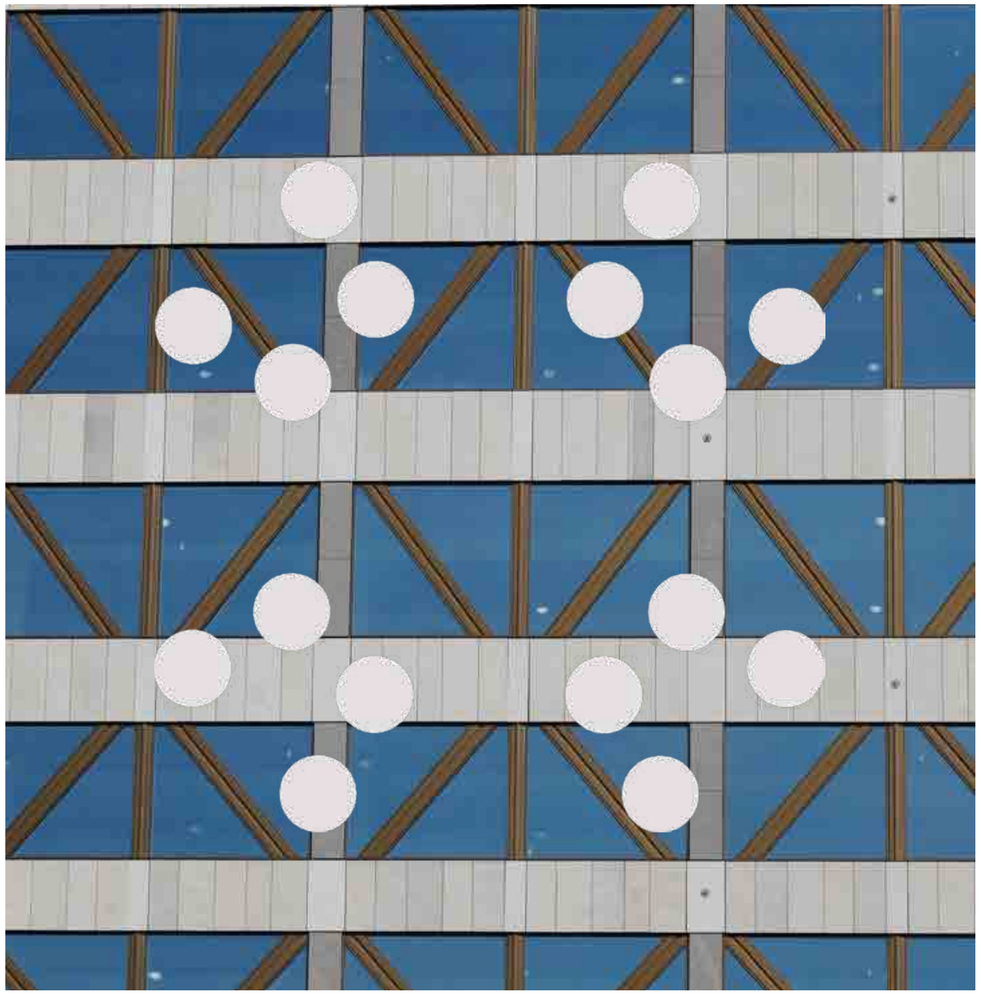
Facility condition assessment (FCA): An FCA provides a comprehensive evaluation of a facility's physical condition, covering aspects such as structural integrity, mechanical systems, electrical systems and overall functionality. This assessment helps determine what's broken or in need of repair, what's working efficiently and what requires immediate attention.

Financial analysis: Understanding the available funding for capital projects is essential for effective facilities management. This process includes budgeting for routine maintenance, renovations and major repairs. Conducting a financial analysis helps in aligning financial resources with the identified needs.

Documentation: The purpose of this initial phase is to identify what their maintenance requirements are, as well as determining how much funding you have for your capital projects. Documenting all this information and having it readily available and well-organized is essential for informed decision-making and ongoing facilities management.

Phase 3.
Execution





Program and funding management: This system can manage a large-scale planning program to coordinate business objectives across multiple related projects.
It also aligns various funding sources, helping ensure they're applied to the proper project.

Project management: Manage the execution of specific projects, including scheduling, budgeting and tracking progress with this system. It helps ensure that projects are completed on time and within budget and that resources are allocated efficiently. Local facilities can also complete upgrades during routine maintenance cycles and manage local projects that improve facilities.

Without a centralized repository of information, managing assets can become inefficient. An asset management system serves as the linchpin in streamlining this process by consolidating data, records, and documentation into one cohesive platform.

Implementing an asset management system brings order to data chaos by integrating FCAs into the database and enabling organizations to seamlessly conduct these assessments and gain valuable insights into their facilities' health. This process not only aids in prioritizing maintenance and repairs but also contributes to better decision-making regarding capital investments.

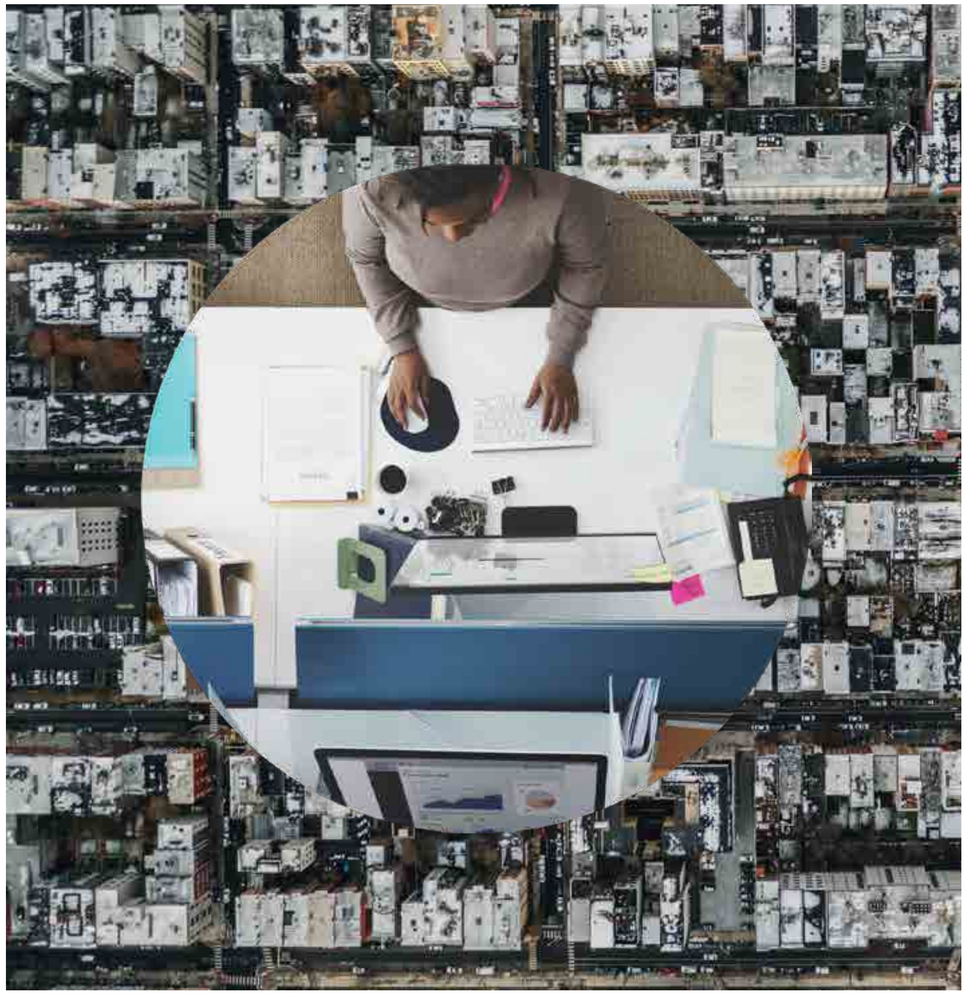
At UC, a comprehensive facility condition assessment program is turning data into actionable insights and creating a firm foundation for data-driven portfolio management. UC has implemented one of the largest and most extensive FCAs across its facilities, using a long-term integrated system to maintain the university's extensive real estate.

The system not only records the details of the backlog but also categorizes them based on overall risk scores and urgency ratings, providing insights into the necessary funding for addressing high-priority deferred maintenance within the next one to five years.

Additionally, the system facilitates communication between FCA inspectors, facility managers and maintenance support teams to share information that may otherwise only be known by individuals or recorded in logbooks. With more teams recognizing the value of the FCA data in relation to initiatives like net zero or sustainability, data-driven decision-making is improved.

“In just the last two years, we have received 30% more funding than the previous six years combined.[1]”

Ron Kalich
Director of Facilities Asset Management
and ICAMP at the University of California



Using an integrated facilities lifecycle management solution that includes capital planning delivers substantial benefits. It means sharing real-time information to help ensure transparency and collaboration; timely progress and risk management; quality control; and, eventually, better and more reliable outcomes.

The IBM® TRIRIGA® Application Suite is a complete and integrated real estate and facilities management solution with full capital planning capabilities. This solution has been specifically developed to deliver an intuitive and streamlined experience through a variety of tools and techniques to meet the latest facility management requirements throughout the entire management cycle.

To become industry leaders, enterprises are investing in the latest technologies for managing such projects. A study by McKinsey & Company[2] has demonstrated that companies that embrace the transformation of their capital planning have seen cost savings and positive outcomes in multiple areas:

- 10%–20% strategy and planning
- 5%–20% field execution
- 5%–20% contract management
- 5%–15% team interaction
- 5%–15% engineering, procurement and contracting
- Cumulatively reducing overall project costs by up to 45%

Portfolio management

Portfolio lifecycle analysis: Facility professionals have the possibility to easily track building system details, including installation dates, expected lifetimes and replacement cost estimates.

Asset management systems: These systems monitor building systems and equipment conditions, schedule maintenance activities and prioritize investments. This process optimizes maintenance and avoids unexpected breakdowns.

Assessment

Facility condition inspection: This systematic evaluation of a building's systems is used to identify significant deferred maintenance issues and potential improvements.

Risk assessment: Facility risks and hazards are identified and evaluated to prioritize capital investments for occupant safety.

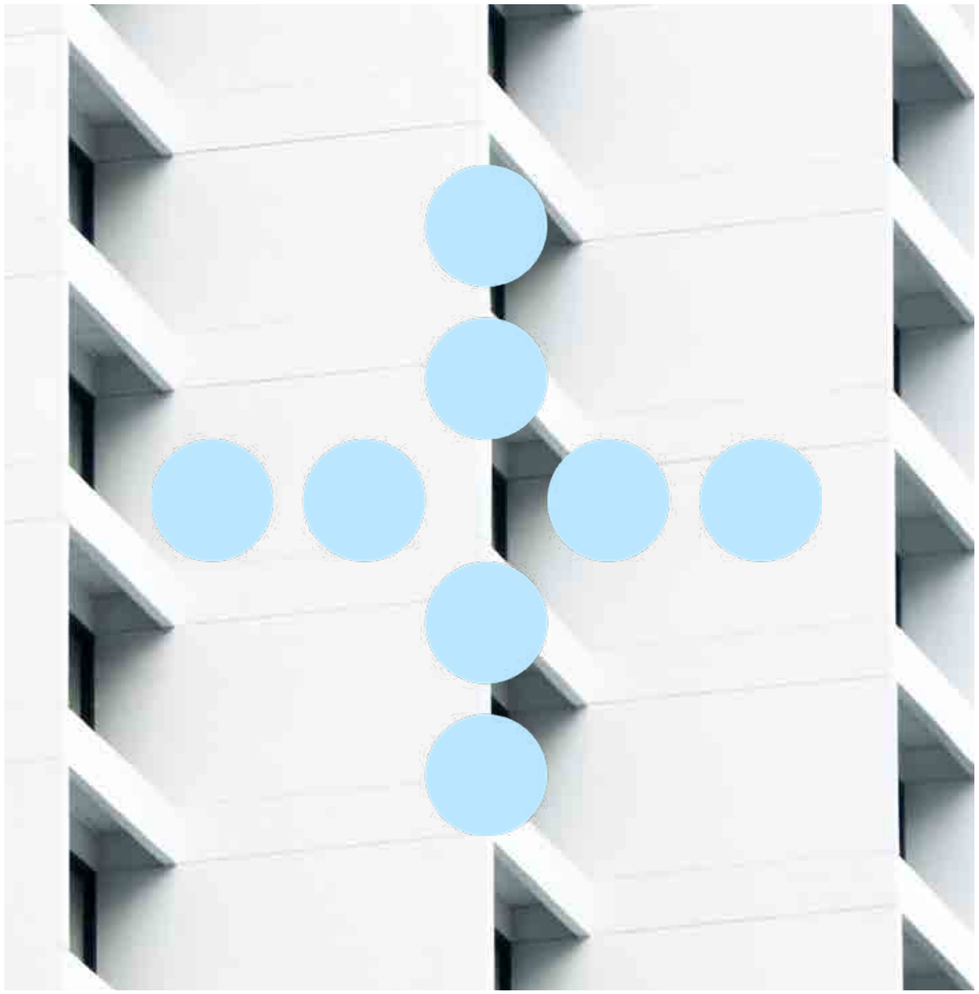
Energy audits: These audits provide expertise that lies in identifying energy-saving opportunities through equipment and system optimization, resulting in reduced costs and improved sustainability.

Execution

Program and funding management: This system coordinates business objectives across multiple related projects and aligns funding sources.

Project management: This solution executes capital projects by scheduling, budgeting and tracking progress to help ensure timely completion within budget and efficient resource allocation.

Through AI-supported dynamic space planning, the IBM TRIRIGA Application Suite provides real-time insights and enables you to compare hundreds of performance drivers to determine the impact on project or business outcomes. The outcome is better project planning and faster schedules, resulting in increased project returns that meet sustainability goals and future needs.



Unlock long-term success

Capital planning instills confidence in budgeting processes to help ensure timely, transparent and accurate decision-making. For organizations aspiring to make well-informed decisions about the allocation of financial resources, the IBM TRIRIGA Application Suite provides an integrated solution that goes beyond siloed tools or manual processes.

By harnessing the power of this platform, organizations can drive growth, maintain competitiveness and help secure long-term success, all while efficiently managing resources and mitigating risks. Effective capital planning isn't just an option, it's a strategic imperative for any organization that aspires to maximize returns and achieve enduring success. How about moving to the next level?

Talk to an expert →
University of California case study →

1. Shifting the paradigm for managing deferred maintenance, IBM, December 2022.

2. How capital expenditure management can drive performance, McKinsey & Company, 29 June 2022.

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