Digital facilities management: Leveraging the power of people, data and technology

Switch Automation

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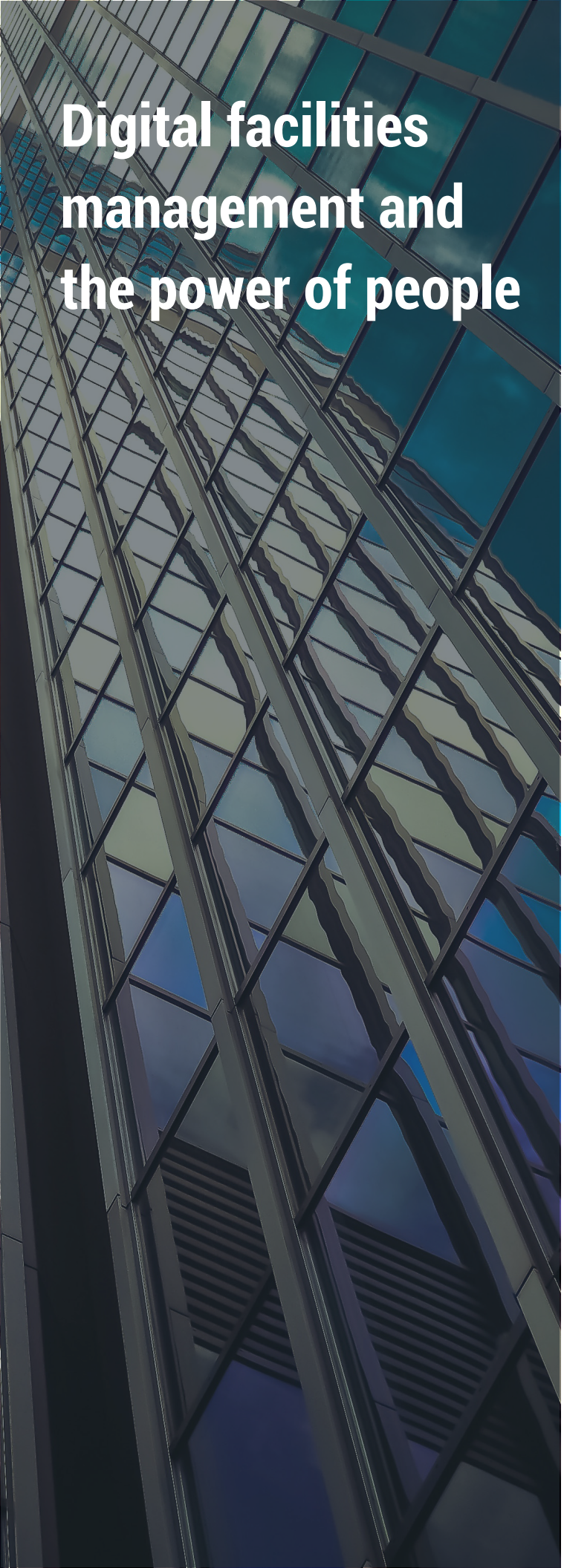
As a building manager you're constantly juggling competing priorities like rising energy costs, pressure to save money, facility management staff cuts, tenant demands, investor and board expectations and more. With data scattered among multiple systems and vendors, creating useful actionable insights to achieve your goals seems nearly impossible.

In this e-book you'll learn ways to determine your portfolio's unique needs, and how to choose the right vendors to help you achieve your smart building goals. Discover how to leverage the power of your building data to lower OPEX costs while maintaining occupant satisfaction across your entire portfolio.



Digital facilities management and the power of people

Ever heard the saying it takes a village to raise a child? Well, it takes one to manage a building too. Each one is unique, from its use to its occupants and its systems to its operators. In this section we examine digital facilities management and the power of people who own and operate buildings.

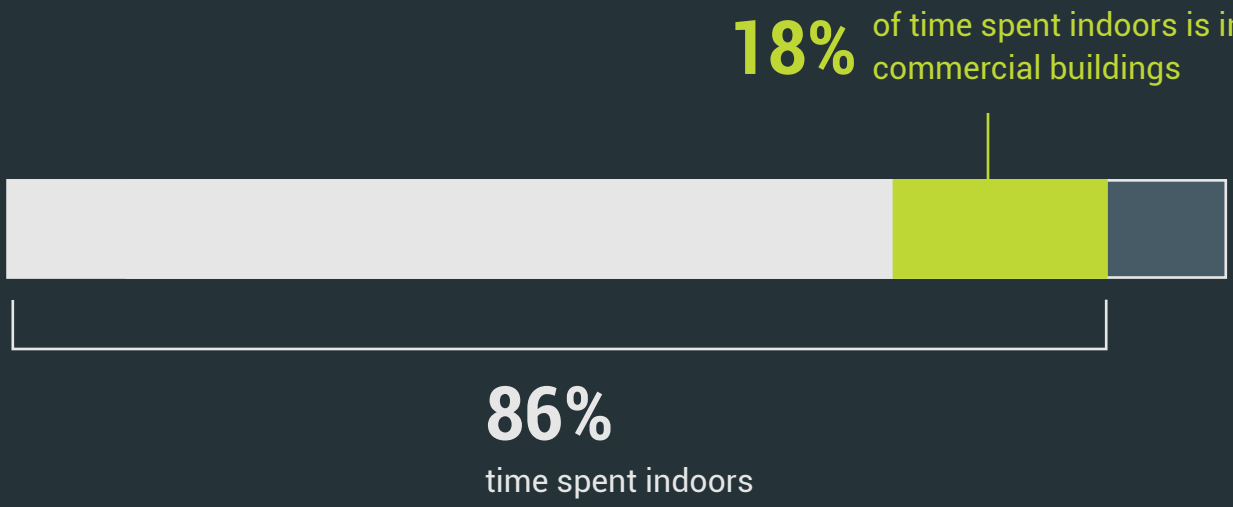
Those tasked with managing facilities are often unsung heroes who spend their days preventing catastrophes, saving money, fulfilling tenant requests and ensuring that large portfolios operate smoothly. Whether you're the onsite facilities technician, regional energy manager, director of sustainability or CEO, chances are you juggle a plethora of building challenges. Perhaps it's fielding space temperature complaints. Or maybe you're managing excessive utility bills. You might be planning the next big CapEx project. Whatever your role, you have your hands full.

Here's the good news

You have the power to make a significant impact. Consider these statistics:

$30 trillion
worth of the world's commercial real estate

40%
global energy consumption by buildings



The Impacts

Buildings significantly impact our lives in a multitude of ways, and that's exactly why it's important for them to be well-run. A successfully operating building contributes to:

- Lower operational costs
- Reduced capital expenditures
- Occupant health & wellness
- Tenant retention
- Increased revenue and commerce
- Energy efficiency
- Environmental stewardship

The Challenges

When it comes to digital facilities management and the power of people, your access to data and systems varies based on your relationship to buildings. And your role comes with its own unique set of challenges. For example:

Commercial Landlords

You care about your tenants' satisfaction, but the many disconnected, on-site, legacy building automation systems (BAS) make it difficult to proactively manage service issues. You need a **single, easy-to-use solution** that highlights potential problems BEFORE your tenants notice.

Commercial & Corporate Tenants

You're paying for operational expenses, but since you don't have access to the building management system (BMS), you have no way to control your environment, costs or performance. You need a **hardware-agnostic solution** that connects all your data and systems to help achieve your unique corporate objectives.

Vendors and other building professionals

You manage remote assets but have no access to the data. You need a **solution that extracts real-time data** from hardware in remote locations and delivers it right to your desktop.

Operations & facility managers

You are responsible for managing HVAC, security, lighting and other key systems. You're expected to drive operating costs down while adopting innovative technologies and approaches. Whether you're the Facility, Building or Portfolio Manager, you need an **enterprise-grade centralized command and control center**.

Senior leaders

You're tasked with driving costs down across the enterprise, including those from real estate. You're expected to drive technological transformations that will better the business for customers, employees and shareholders. You need **visibility into performance data** so you can make strategic, data-driven decisions on investments, performance and people.

Energy & sustainability professionals

You're challenged with reducing energy costs and improving sustainability performance. With Energy Star, LEED, Carbon Disclosure Project, NGERS, NABERS, GRESB and the WELL Building Standard requirements, you handle everything from complex reporting to creating energy efficiency programs. You need an **enterprise operations platform** to effectively and efficiently manage this landscape.

The Industries

Every industry utilizes its buildings differently. Specific use cases dictate how resources are managed and applied when it comes to digital facilities management and the power of people. Consider these examples:

CRE

There's a wealth of data in commercial buildings, and most of it is siloed and underutilized.

In an industry driven by tenant preferences, Commercial Real Estate (CRE) companies are searching for new ways to build brand equity and boost net operating income (NOI).

Retail

The retail industry is undergoing a massive shakeup. With the rise of e-commerce and omnichannel shopping, retailers must find new ways to cut costs and drive value through their brick-and-mortar stores.

You need an Internet of Things (IoT) integration and analytics to create connected, smart stores that improve retail performance, streamline vendor management and identify cost and time-saving opportunities.

Financial Services

The status quo of decentralized bank facilities management causes hidden inefficiencies and inconsistent operations.

Whether you manage a network of bank branches, a portfolio of office buildings or both, you want remote insight, analytics and automated control systems to drive bank facility optimization with a single user interface.

Grocery

With razor-thin margins, the growth of e-commerce, and shifting consumer trends, brick-and-mortar grocery companies must find innovative ways to cut operating costs and boost sales.

A single grocery store spends about $4 per square foot on energy, adding up to 15% of overall operating costs, so energy efficiency measures are a key piece of the puzzle. Typical energy management systems (EMS) and siloed smart devices can only get you so far. You need a comprehensive solution that helps you manage all your stores remotely and resolve time-sensitive issues before they dent your bottom line.

Digital facilities management and the power of people

When it comes to the power of people, data and technology in digital facilities management, IT and OT teams hold the keys to success. It's important to empower your organization to succeed with best-fit tools and technology for your unique business needs.

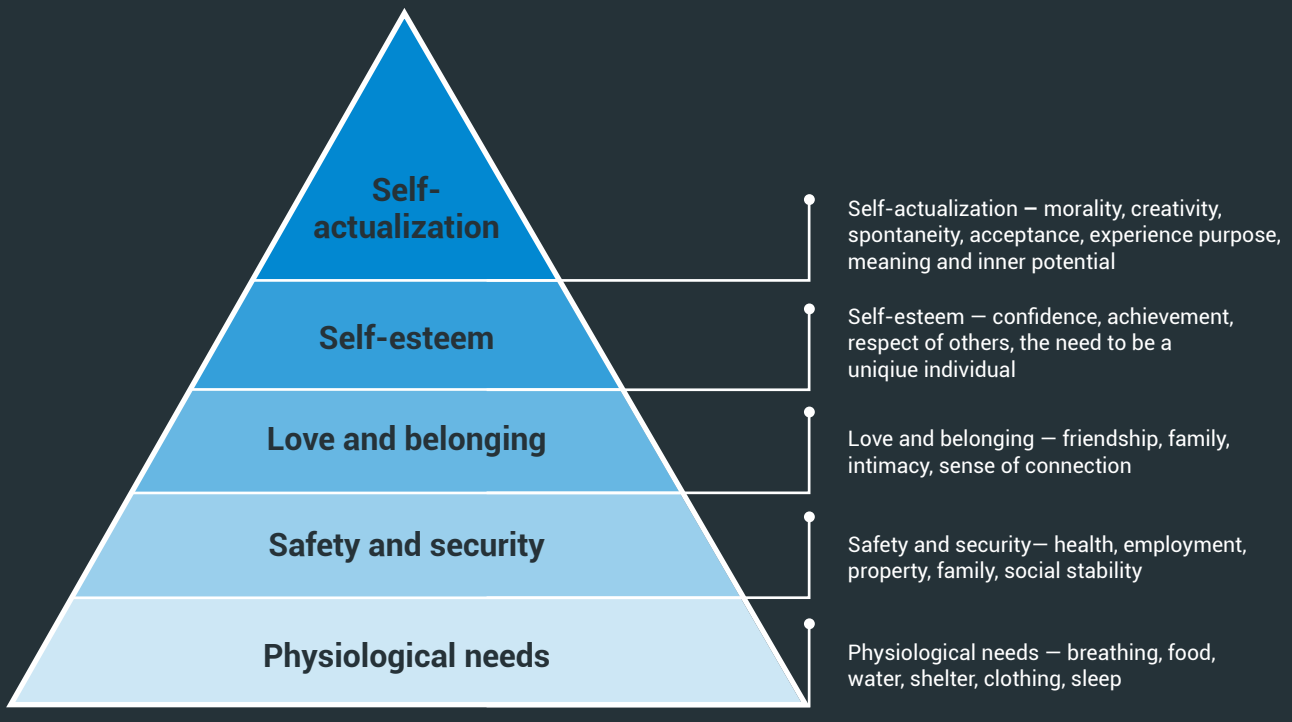
Digital facilities management and the hierarchy of needs

Stranded assets. Data living in a myriad of spreadsheets across an organization. No enterprise-wide insight for senior leaders. Lack of real-time decision support. Increasing expectations to manage complex operations with a shrinking budget and fewer staff. In this section, we examine digital facilities management and the hierarchy of needs that building operators face when managing them.

The first section of this e-book highlighted the industries and roles most affected by today's traditionally managed buildings. In the past, real estate and facility management professionals were forced to rely on siloed solutions to manage the rapidly evolving ecosystem of buildings and technology. Now, traditional building management reaches a pivotal moment. Isolated point solutions, spreadsheets and stand-alone BMSs are no longer enough to manage and interpret the tidal wave of data pouring in from our assets. So, how can we effectively manage our buildings?

Maslow's Hierarchy

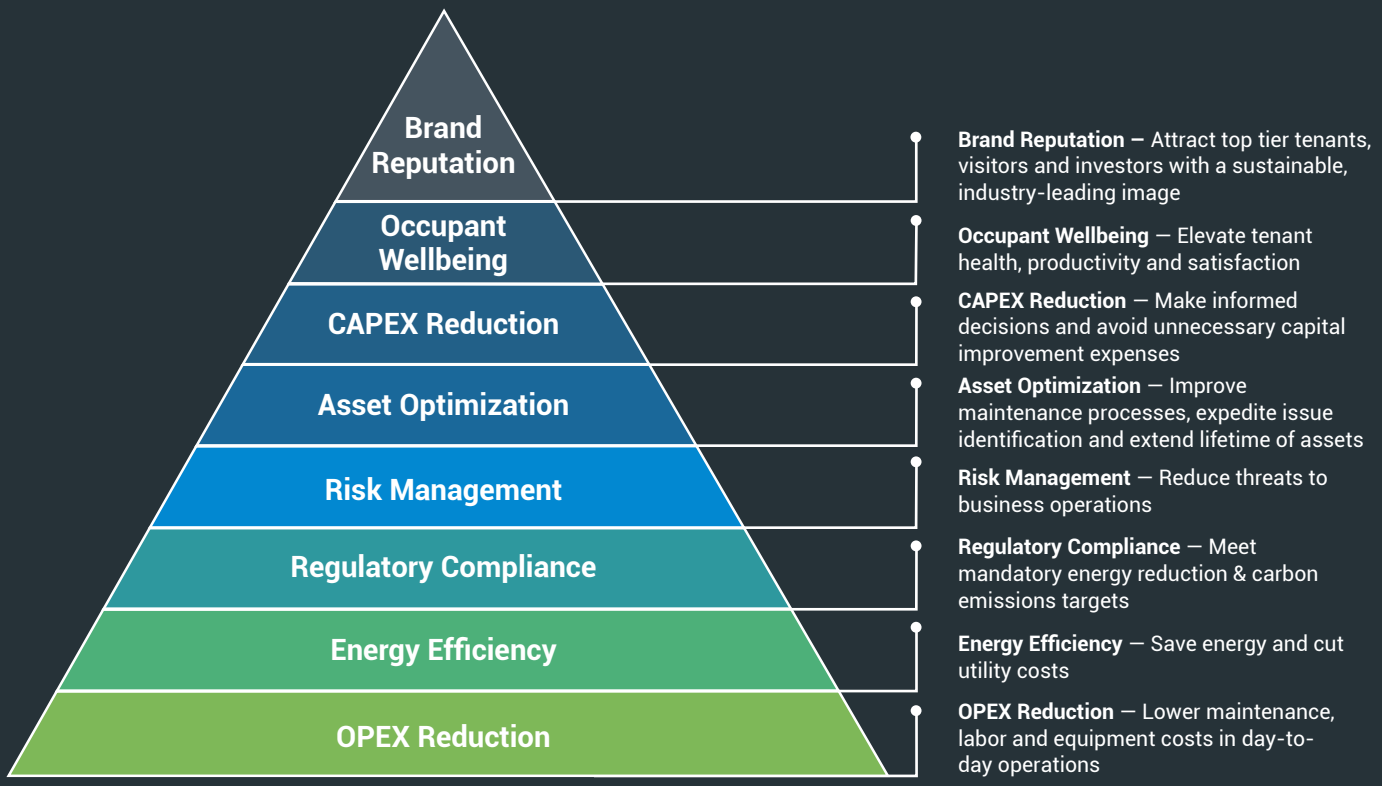
In 1943, Abraham Maslow, a well-known psychologist developed his famous hierarchy of needs. His theory posited that humans are motivated to achieve certain needs and that some of those needs take priority over others. Basic needs are physiological and must be met in order for a person to advance to the psychological, followed by the fully actualized tiers.



Digital facilities management and the hierarchy of needs

Facilities management is no different. Often, the tyranny of the urgent reigns supreme and base-level tasks bog down busy building managers due to inefficient processes, disconnected assets and lack of end-to-end solutions.

We used data from a recent report by independent research firm Verdantix that incorporated interviews with over 300 real estate executives to create our own **Building Management Hierarchy of Needs:**



Obstacles to smart building success

It's tough for an on-site facilities team to focus on occupant wellbeing when they're busy running hot/cold calls each day. Similarly, how can a CEO focus on curating an industry-leading brand image, while distracted by hazardous building conditions that threaten daily operations? These are just a some of the reasons we get stuck:

Scattered Data

Vast amounts of building data are stored in spreadsheets, on-site systems, outsourced to vendors or recorded on paper– if it's even collected at all. Because it's segregated within multiple departments, regions and users, the data is like an unmined diamond; valueless until discovered and shaped by a master craftsman. This scattered data combined with the elements of human error and ongoing hardware and software procurements means there is no single, accurate source of information to base operational decisions on.

Varied Systems and Hardware

A multitude of different data-producing building systems, such as HVAC, lighting control, security and energy monitoring systems, as well as different hardware manufacturers, models, protocols and network architectures make standardizing data to gain actionable insights nearly impossible.

Specialized Skill Sets

Traditionally, building technologies were only available as hardware solutions, featuring proprietary, confusing operating software. At the enterprise scale, these technologies require significant operating budgets and skilled engineering professionals. As a result, building management systems (BMS) or building automation systems (BAS) are poorly commissioned, underutilized and do not fulfill the current or future needs of real estate professionals.

Technological Chaos

Enterprises often chase the next 'bright shiny thing' in tech but finding the right solution to accomplish organizational goals requires a collaborative, strategic approach across all departments. Technological advancements and emerging software solutions are driving massive changes in real estate operations and management. All of these changes can be confusing at best, overwhelming at worst, and make it difficult for real estate and facility management professionals to make the right procurement decisions.

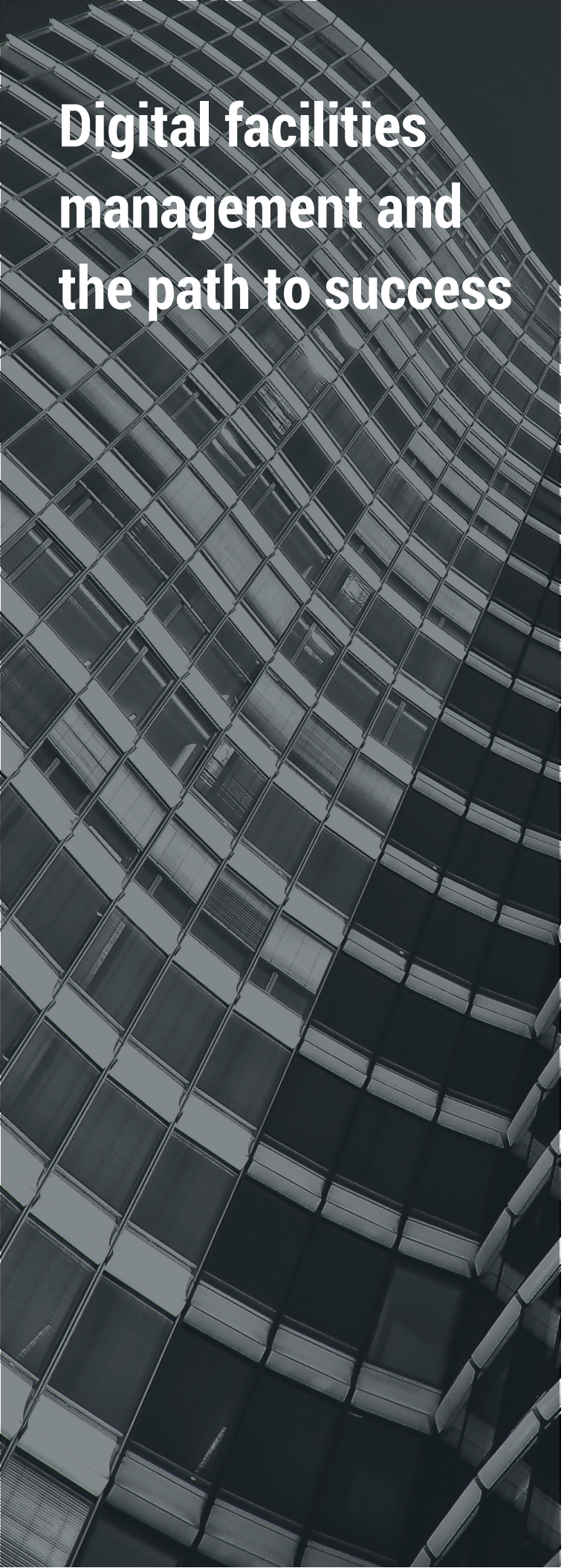
Pressure to go "Green"

Companies are under pressure to reduce environmental impact, but they don't have data-driven benchmarks to help them create results-oriented sustainability programs. Even though more than 50% of the 2050 building stock is already built, less than 2% of the world's building inventory has a green building rating (UNEP).

There is a solution

The Building Management Hierarchy of Needs outlines the operational stages we must ascend to move from reactive to proactive to predictive maintenance. Regardless of where your portfolio is on the journey to smart building success, there are a plethora of solutions available to help you navigate digital facilities management and the hierarchy of needs to reach your goals.

Now that you understand the critical people and milestones to reach as you implement an effective smart building program, we'll explain how to overcome the obstacles in each tier of the building management hierarchy.



Digital facilities management and the path to success

"There are so many technologies that say they will make my buildings smarter and more efficient. Software platforms, dashboards, Internet of Things (IoT) sensors, controls, BMS and BAS…With all these options, how do I know which ones actually work so I can choose the right solution for my business?"

– Global Facilities Manager, Fortune 100 Financial Institution

In the previous section we summarized the levels of operation building managers must ascend to achieve a fully actualized smart building program. We'd suggest it's nearly impossible to focus on the top tier, Brand Reputation, without first ensuring fundamental needs like OPEX reduction are met. So, how can you select the right tools to empower your team today and set them up for success in the future? Here, we show you how to jumpstart your digital facilities management program and find the best solution for your organization's unique set of needs.

Ask the right questions

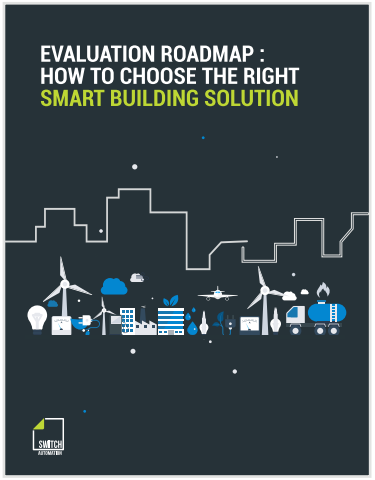
Before you dive in to vetting vendors, it's important to identify your short- and long-term program goals. Additionally, you'll need a clear understanding of your portfolio's strengths and limitations to help inform your strategy and prevent unnecessary roadblocks. In our e-book, Evaluation roadmap: How to choose the right smart building solution, we share an in-depth plan to guide you through strategy, design and implementation. Here's a summary of the three elements to consider when mapping your journey through digital facilities management and the path to success.

Strategy

- What are your benchmarks and measures of program success?
- Who are the key stakeholders and how will they be impacted?
- How will you incorporate real-time business intelligence?
- What should reporting look like?
- How do tenant satisfaction and occupant comfort factor into your program?
- What IT guidelines and restrictions are there?
- How should your solution align with third-party vendors?

Design

- How do metering, fault detection, controls, security and communications factor into your strategy?
- What systems and equipment are in your buildings today?
- What are your budgetary constraints?
- Who will manage current and future integrations?
- What is the project timing?
- How will end-users be trained?



Implementation

- What are the integration roles and responsibilities of your team and external contractors?
- What are the integration points?
- How will data be tagged and filtered?
- What standardized naming conventions will you use?

For the full guide, download the free Evaluation Roadmap e-book.

Avoid buyer's remorse

After you've considered your building needs, resources and goals, follow these tips to avoid buyer's remorse down the road:

Configurable is better than custom

While a custom product may sound ideal, when it comes to software it's particularly costly because the upfront implementation takes longer and you'll have to spend again to pay for future feature updates. Opt for a configurable solution with standardized functionality that can scale to meet evolving business needs.

Phased integrations are more effective than multiple pilots

Using multiple pilots to compare solutions wastes valuable time and swamps teams with siloed projects that lack interoperability. Vendors typically have different value propositions and it's tough to prove scalable ROI without a significant data set. Narrow down your vendors first, then select one to integrate a subset of representative buildings. You'll gain an accurate representation of a portfolio-wide program that can be quickly replicated.

Consider tomorrow as well as today

Many companies are driven to pursue a smart building solution by a specific pain point. However, they also tend to have a long-term vision for a holistic smart building program with flexibility to evolve as basic operational needs are met. An ideal platform gives you the option to start simply with features like utility benchmarking to understand baseline energy consumption. Later, you can add more advanced elements like fault detection and diagnostics to identify valuable savings opportunities and/or command and control to manage building performance in real-time.

Digital facilities management and the path to success

When it comes to digital facilities management and the path to success, it's critical to make a wise investment in the right technology to power your program. Follow these guidelines to get an apples-to-apples comparison of your options and know exactly what you're getting. Ultimately, the only constant in real estate is change. While a good solution demonstrates immediate operational savings and ROI, a great solution continues to do so well into the future.

About Switch

Switch Automation is a global real estate software company that helps property owners and facility managers reduce operating costs, improve energy efficiency and deliver exceptional occupant satisfaction. Our comprehensive smart building platform integrates with traditional building systems as well as Internet of Things (IoT) technologies to analyze, automate and control assets in real-time. We serve enterprise customers and partners in a variety of industries including financial services, retail, grocery, commercial real estate and more. Learn how Switch Automation creates technology to bring people and planet to the center of building operations at www.switchautomation.com.