



PROPMODO RESEARCH E-BOOK

# Boosting Smart Office Building Performance with Data Driven Solutions

IN COLLABORATION WITH **cohesion**

START

# About the underwriter

Cohesion is smart building software that reimagines the connection between people and places. By unifying every system, data and human in buildings, the most significant operational, functional, climate, and economic challenges in the built environment, can be overcome seamlessly.

The Cohesion unified smart building software platform is built on three products: Smart Access, Smart Experience, and Smart Maintenance. These solutions work together to enhance building and workplace experiences by enabling a frictionless, digital environment, without the need for expensive capital projects. Through an extensive library of integrations that cover everything from security access control, through workplace applications, Cohesion simplifies the management of real estate portfolios, whether owned or leased.

The platform empowers companies with improved productivity, insightful data, and streamlined operations, placing control in the hands of employees and management. With an unyielding focus on technological advancement, Cohesion's customers and partners benefit from powerful, cutting-edge solutions to support their assets' financial, sustainability and growth goals.

cohesion



[www.cohesionib.com/contact-us/](http://www.cohesionib.com/contact-us/)



833-796-5500



**Introduction**



**Increasing Revenue**



Tenant Retention



Leasing



Value-Add Services



**Decreasing Costs**



Labor



Equipment



Energy



**Building Improvements**



Experience



Modernization



Activation



**Conclusion**



# Introduction

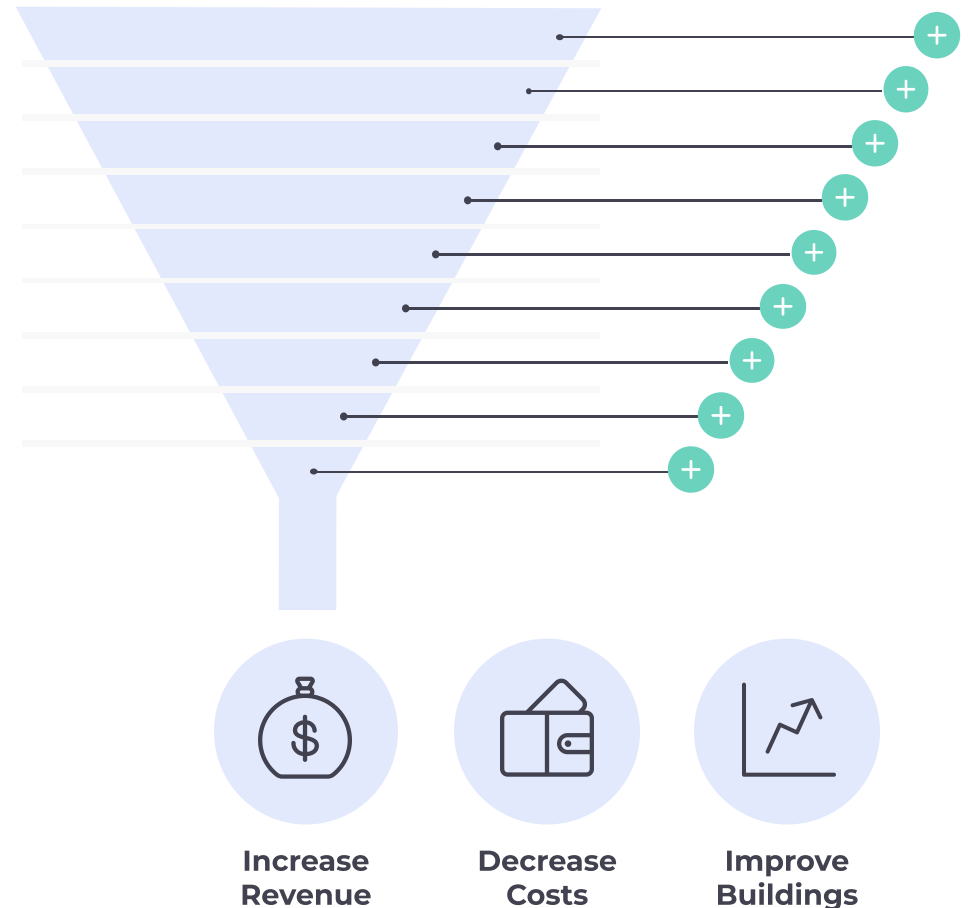
After a few turbulent years, office attendance is finally beginning to stabilize. While the general occupancy is still lower than pre-pandemic levels, this doesn't fully capture the current situation.

**Businesses are reevaluating their use of physical workspaces, leading to a shift in their requirements from office buildings.**

Rather than serving merely as a place for focused individual work, offices are increasingly becoming hubs for collaboration.

This shift in office use has also changed what occupiers seek in a workspace. The preference has moved towards intelligent, amenity-rich offices. These modern spaces are designed to enhance productivity, creativity, and company culture. To meet the expectations of today's companies, office buildings must evolve. **A key part of this evolution is the effective use of data.** Fortunately, buildings are generating more data than ever before. However, this data must be utilized and communicated effectively to improve office performance and market appeal.

In this Propmodo Research E-Book, we investigate how **the collection, analysis, and application of data can transform building operations.** We will explore various strategies that can help in increasing revenue, reducing expenses, and pinpointing the most advantageous upgrades for any building.





# 01 Increasing Revenue

Adaptability and diversification are key to profitable office buildings



# 01 Increasing Revenue

It is impossible for an vacant office building to be profitable. While it's true that the office sector is experiencing a slowdown, this impact isn't uniform across all types of assets. Premium properties, such as Class A, A+, and Trophy assets, have shown remarkable resilience during this downturn. That is because expectations have changed with the rise of the hybrid workforce and buildings have had to evolve their floor plans, amenities, and services to remain competitive.

For buildings that are lagging behind, the path to increased revenue lies in a proactive approach. To enhance profitability in today's office market, buildings must adapt by upgrading to flexible, tech-enabled workspaces and offering value-added amenities like wellness centers. Regular tenant feedback is crucial for targeted improvements, along with a keen understanding of local market trends. Diversifying revenue streams through alternative uses like event spaces or pop-up stores, and incorporating smart building technologies, can also significantly boost the building's appeal and operational efficiency. These strategies are key for buildings to stay competitive and attract modern tenants.

***"Office landlords are giving away more concessions than ever but are not budging on asking rent, so to find the right comparable data you have to be sophisticated in the way that you benchmark prices."***

---

*Phil Mobley, National Director of Office Analytics at CoStar*

# 01 Increasing Revenue

## Tenant Retention



### Gauging Satisfaction

To predict tenants' lease renewal likelihood, evaluate their satisfaction using both quantitative data (like occupancy rates, maintenance requests, and amenity usage) and qualitative feedback from regular interactions with them. Analyzing these insights alongside survey responses offers a detailed view of the risks associated with non-renewal.



### Transparency

While it may seem counterintuitive, openly discussing low occupancy levels with tenants is essential for building trust through transparency. Tenants typically favor landlords who actively help in optimizing their office space usage. They are generally willing to accept occasional emptiness on certain days if it benefits their workforce's overall success.

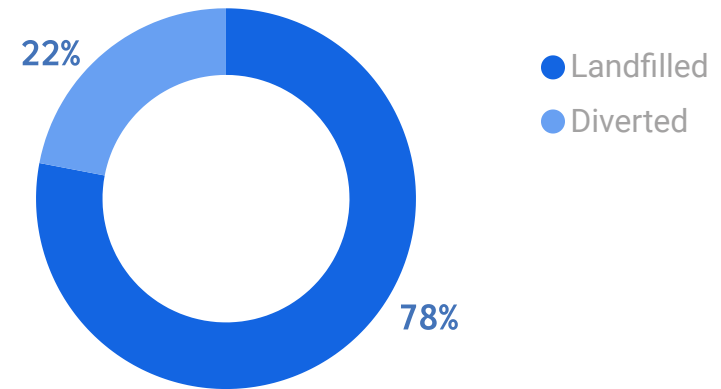
# 01 Increasing Revenue

## Tenant Retention

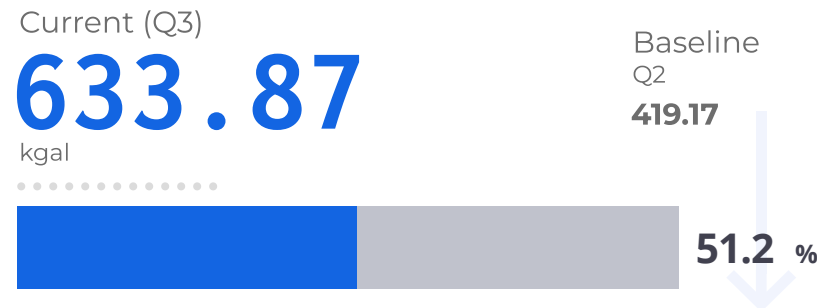
### ESG

Companies are increasingly recognizing the importance of aligning their operations with environmentally friendly practices, and this extends to the buildings they occupy. Occupiers are seeking detailed insights into a building's energy efficiency, carbon footprint, waste management practices, and overall sustainability measures. A lack of transparency in these areas can render an office space unattractive, as more businesses aim to meet their own ESG goals and cater to the expectations of their environmentally conscious stakeholders. Consequently, buildings that proactively provide comprehensive ESG data and demonstrate a commitment to sustainability are more likely to attract and retain discerning corporate tenants.

### WASTE MANAGEMENT



### WATER



The data is hypothetical and provided for illustrative purposes only.



# 01 Increasing Revenue

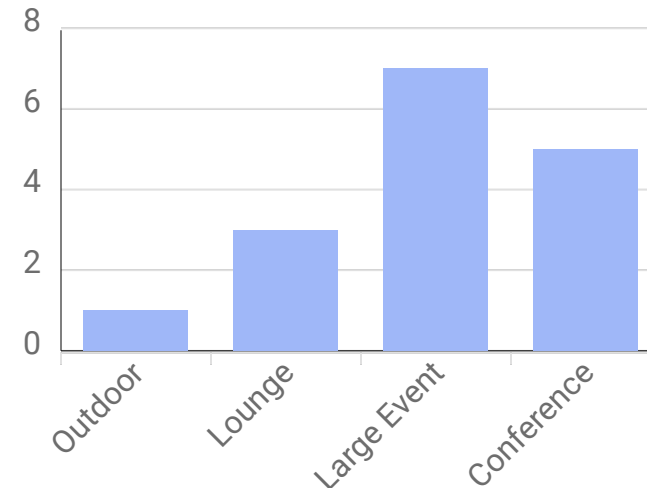
## Tenant Retention


### Amenity Activation

Tenants often overlook the importance of a building's amenities to their workforce. Providing data about their amenity usage can help them understand the full benefits of the physical office. These can be valuable pieces of information that they might not be privy to from their own data.

Many offices are equipped with digital amenities, including engagement apps, which increase in value as employees utilize them more frequently. Demonstrating to tenants how their staff engage with a building's digital services can be beneficial. Providing data on the frequency of employee interactions with programs, content, and their communication through engagement apps can highlight the office's value.

 AMENITY UTILIZATION BY TYPE



 **21%** Of all tenants utilize reserved physical amenities

*The data is hypothetical and provided for illustrative purposes only.*

# 01 Increasing Revenue

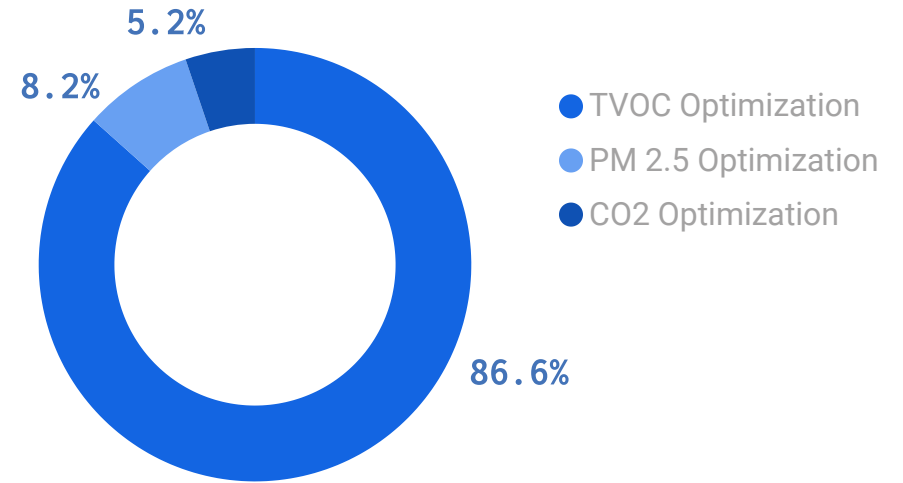
## Tenant Retention

### Wellness

The corporate emphasis on employee wellness is increasingly influencing the demand for data-driven insights into the health and quality of office environments. Companies are not just looking for efforts in promoting wellness but are seeking concrete evidence of a healthy workspace. This includes real-time air quality data, seamlessly integrated and gathered from Building Management Systems (BMS).

Additionally, transparency about the maintenance and effectiveness of wellness programs and facilities within the building is crucial. Providing clear and ongoing data demonstrates a building's commitment to high standards of health and wellness. This is crucial for companies dedicated to their employees' well-being.

 AVERAGE MINUTES OF ADDITIONAL FRESH AIR



**59%**

Daily reduction in TVOC pollutants when present

.....  
IAQ optimization began in November '23

**39 mins**

Average duration of an optimization event

.....  
IAQ optimization began in November '23

*The data is hypothetical and provided for illustrative purposes only.*

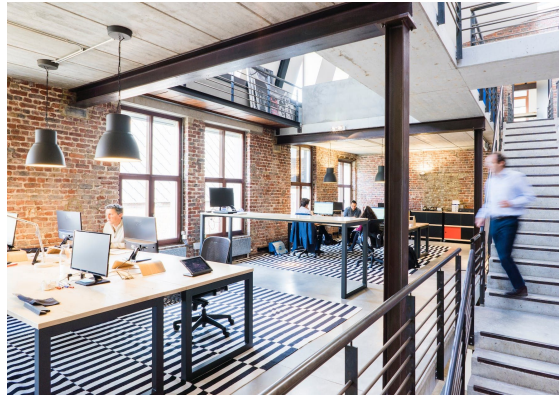
# 01 Increasing Revenue

## Leasing



### Benchmarking Pricing

It is important to not only understand current comparables but also the change in rents. Sublease data should also be taken into consideration. Lease details of similar properties should be used to model what prices you can expect for space that might become vacant in the future.



### Calculating TIs and Concessions

Having precise data on tenant reliability boosts confidence in granting tenant improvement allowances and concessions. If there's a high probability that companies will be long-term tenants, offering substantial concessions can often be financially beneficial.



### Pipeline and Prospecting

Information about the growth of companies and industries in your area can be utilized to identify potential clients. Although brokers typically generate client pipelines, building managers should also compile their own lists to gauge the market size for a particular space.

# 01 Increasing Revenue

## Leasing



### Market Segmentation

By studying occupancy and amenity usage patterns, office owners can discern preferences across industries and company sizes. This insight allows for the customization of office spaces to suit the specific needs of likely tenants, making the spaces more appealing to these targeted groups.



### Marketing

Leveraging detailed data on each lead enables customized marketing campaigns tailored to the specific needs of prospective tenants. This approach enhances the effectiveness of marketing efforts, leading to more efficient tenant acquisition and higher conversion rates.



### Lead Nurturing

Rather than solely relying on brokers to track sales, landlords can create their own data sets. With an account-based marketing program, office owners can acquire new leads and enhance relationships. CRMs track interactions with prospects, automating much of this process.

# 01 Increasing Revenue

## Value-Add Services

### Co-Working & Flex Space

There are a lot of ways that buildings can generate revenue by monetizing underutilized spaces. Doing so requires innovative thinking and a way to incorporate the management of these spaces into one integrated technology platform.



Co-working and flexible office spaces can increase revenue and provide tenants with more options, but they demand more intensive management due to increased administrative needs like IT, billing, and on-site staff.



Data on the local co-working market will show what kind of prices can be charged for this kind of space and what the demand might be.



Co-working space can be a valuable amenity for current tenants, so it's important to consider how adding this service could affect retention and rental rates.



# 01 Increasing Revenue

## Value-Add Services

### Affiliated Services



#### Internet

Some states allow buildings to bundle internet service and sell packages to their tenants. Knowing the current corporate rates of your local ISPs can inform pricing/profitability.



#### Concierge

Buildings can also sell concierge services as an add on to office space. These can come in the form of an in-building coordinator or as a digital concierge services provided by a tenant experience app.



#### Local Retail

Discounts to local vendors can also be leveraged if you have data on which companies are in your area. Digital portals can help landlords easily monetize local retail connections.



#### EV Charging

Installing EV chargers not only adds to a property's appeal but also creates additional revenue as certain providers provide a revenue split for energy sold.



#### Events

Events can also provide ancillary revenue and normally only adds traffic to a building on off days and times. But opening a building up to events requires more from the property team.





# 02 Decreasing Costs

Using data to balance cost-cutting and  
tenant satisfaction

# 02 Decreasing Costs

In the current economic climate, where inflation has significantly increased expenses ranging from janitorial services to utilities, building owners are urgently seeking ways to manage escalating costs effectively. However, simply cutting budgets across the board can be detrimental, particularly as many occupants are now looking for more, not fewer, services. In this delicate balance, it's essential that cost reduction doesn't compromise the tenant experience.

A crucial aspect of this strategy involves a thorough evaluation of labor costs, particularly when leveraging third-party services. Data plays a pivotal role in this analysis. By examining metrics such as the number of outstanding work orders, hot/cold service requests, and the frequency and effectiveness of mass communications and tenant engagement activities, building owners can gain a comprehensive understanding of the value and impact of these roles.

This data-driven approach allows for informed decision-making, ensuring that any reductions in labor or services are targeted and do not adversely affect the overall quality of tenant services. Thus, through smart use of data, building managers can achieve a harmonious balance between cost efficiency and maintaining high standards of tenant satisfaction.

***"Data can reveal the most effective ways to allocate your time and resources. However, this requires first gathering data from various sources into a single, centralized location for analysis."***

---

*Chad Flores, VP of Product at Cohesion*

# 02 Decreasing Costs

## Labor

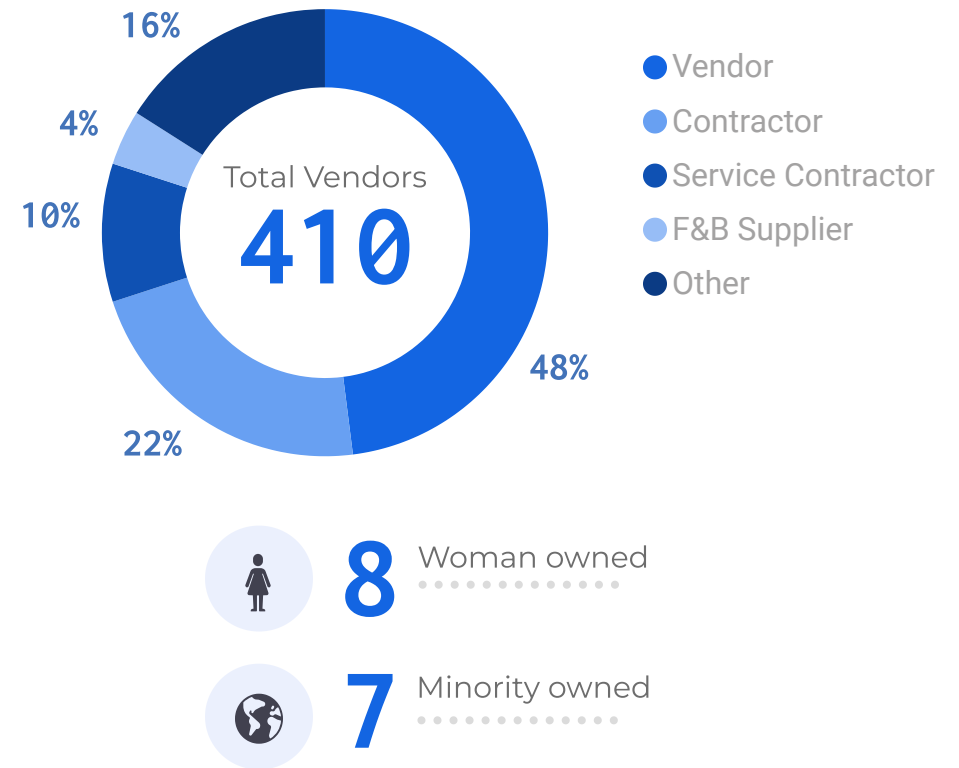


### Maintenance

Data from groups such as Building Owners and Managers Association (BOMA) is valuable in benchmarking specific costs on a per square foot basis, offering larger organizations a clear perspective on their spending. This is particularly useful when comparing different properties in their portfolio, enabling a more efficient allocation of resources.

Analyzing maintenance crew work orders offers valuable insights. Categorizing these orders highlights where efforts are most concentrated, often revealing routine but time-consuming tasks. Automating such tasks allows organizations to enhance workforce productivity, shifting focus to more complex activities. This strategic approach improves operational efficiency, resource management, and cost reduction.

### VENDORS



*The data is hypothetical and provided for illustrative purposes only.*

# 02 Decreasing Costs

## Labor

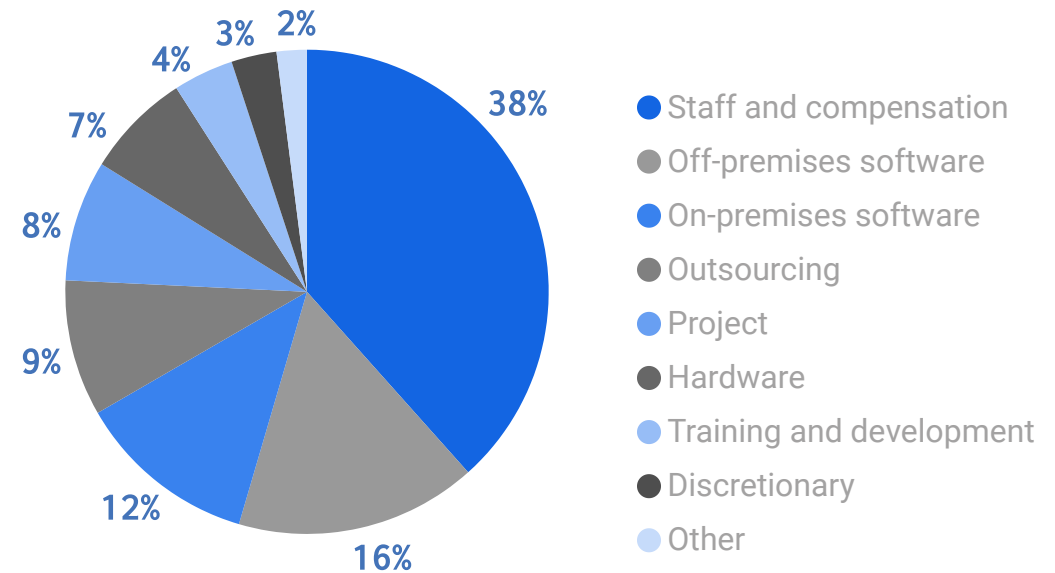


### Automating Security

Security investment, while expensive, is essential, as an unsecured building often incurs greater costs. Detailed data analysis of past security incidents and frequent scenarios within a building is key to identifying vulnerabilities. This data-driven approach aids in formulating effective prevention strategies for future incidents.

Integrating computer vision technology significantly enhances security measures. Trained with property data and past security footage, these systems extend the capabilities of security personnel. They efficiently monitor numerous cameras, swiftly detecting potential threats or unusual activities. This integration bolsters the security team's real-time response and contributes to a more proactive security approach, effectively minimizing the risk and impact of future breaches.

More than a third of the security budget goes to staff and compensation



Source: <https://www.iansresearch.com/resources/all-blogs/post/security-blog/2022/06/21/how-security-budgets-break-down>

# 02 Decreasing Costs

## Equipment

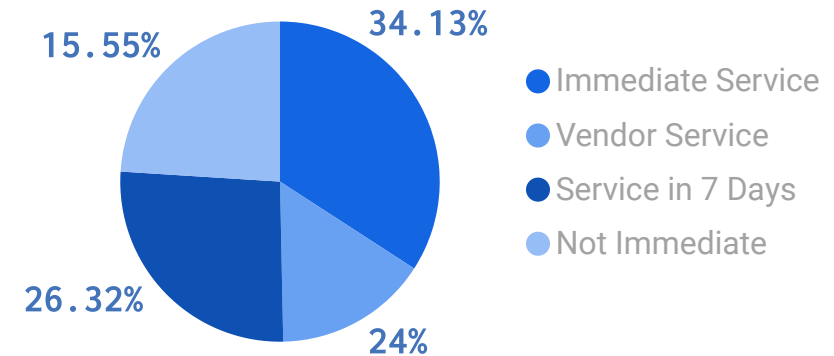


### Predictive Maintenance

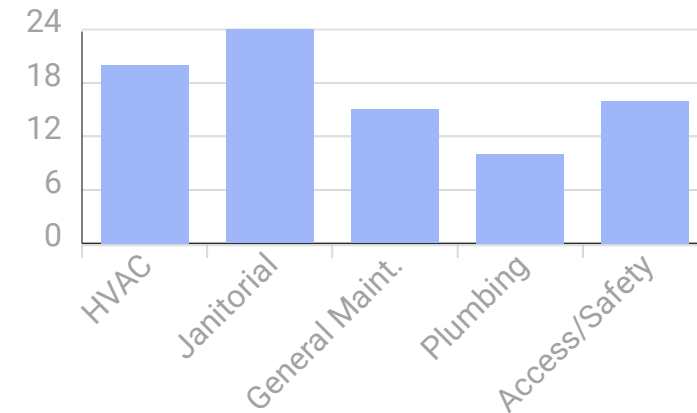
Effective tracking of equipment performance and usage is vital for identifying the most beneficial upgrades or replacements. Proactive maintenance, addressing issues before failure, reduces labor costs and customer complaints. This method also enhances the strategic planning of capital expenditures, ensuring smoother and more efficient operations.

Utilizing data on run time, power usage, and equipment effectiveness aids in making informed replacement decisions. Additionally, sensors that track vibration and heat provide real-time insights, enabling early problem detection. This approach not only prolongs equipment life but also optimizes asset management, leading to more cost-effective operations.

WORK ORDERS BY PRIORITY LEVEL



WORK ORDERS BY TYPE



2.5

Average workorder tickets per weekday per building

The data is hypothetical and provided for illustrative purposes only.



# 02 Decreasing Costs

## Energy



Utilities are a significant cost factor in office management, but they can be effectively managed through the integration of intelligent systems. These systems, employing technologies like IoT and AI, monitor and automate energy usage, leading to more efficient resource use and reduced peak energy demands. Consequently, landlords and office managers can achieve notable savings on energy costs. This approach not only optimizes energy consumption based on varying conditions such as occupancy and weather but also contributes to environmentally sustainable office operations.



# 02 Decreasing Costs

## Energy



### Heating and Cooling Efficiency

Advanced, granular temperature data enables a more balanced operation of heating and cooling systems. The use of occupancy sensors allows the Building Management Systems (BMS) to dynamically adjust according to the fluctuating occupancy levels throughout the day, enhancing efficiency and reducing unnecessary energy expenditure.

### Lighting Optimization

Beyond mere illumination, lighting systems equipped with sensors can serve a dual purpose. They can adjust lighting levels based on occupancy and time of day, and also act as a valuable data collection tool for the BMS, thanks to their existing power and data connections.



# 02 Decreasing Costs

## Energy

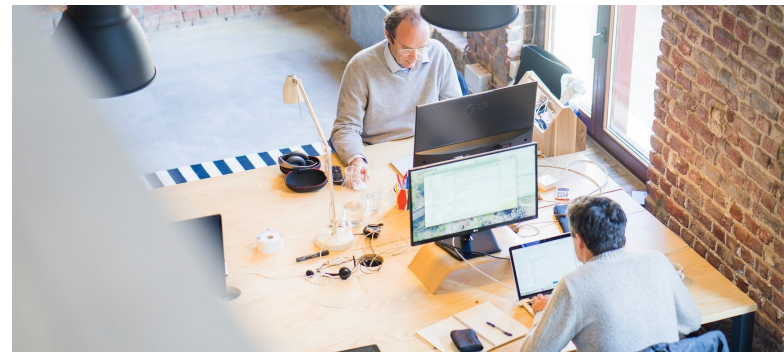


### Tenant-Controlled Spaces and Amenities

A significant portion of an office building is under tenant control, posing a challenge in uniformly reducing energy costs. Here, landlords can partner with tenants, offering them comparative data on their energy consumption. This collaborative approach encourages tenants to engage in energy-saving practices.

### Demand-Controlled Energy Usage

Demand-controlled energy usage, using energy only when needed, is crucial for amenities reserved via booking software. By adjusting temperature control and lighting to match booking schedules, energy is consumed only during occupancy. This strategy reduces energy costs while ensuring functionality and comfort.





# 03 Building Improvements

Strategic upgrades, informed by data,  
for a competitive advantage



# 03 Building Improvements

In today's competitive office market, simply reducing costs and enhancing leasing isn't always sufficient. For many office buildings, staying competitive requires investing in strategic upgrades. This is particularly evident as Class A/A+ buildings, with modern amenities, fare better in vacancy rates compared to less updated Class B/C buildings. However, these upgrades are costly and can be ineffective if not well-planned.

Data analytics plays a crucial role in guiding these investments. By analyzing market trends, tenant preferences, and the performance of comparable properties, building managers can make informed decisions about which upgrades will most effectively attract tenants and reduce vacancies. This data-driven approach ensures that investments are targeted and impactful, helping buildings to remain attractive and competitive in a dynamic market.

***"Training machine learning models with your own building's data can be incredibly valuable, but this only works if the data is thoroughly cleaned first."***

---

*Sarah Shank, former Head of Innovation at PGIM*

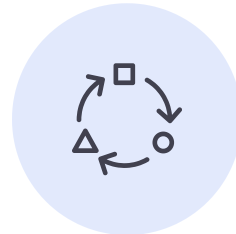
# 03 Building Improvements

Improving Experience



## Creating Value

Offices need to understand the experience they provide by examining the occupant's journey, from entry to workspace and amenities. Evaluating these aspects reveals how to improve worker interactions, pinpointing enhancements to make the building more responsive to occupant needs.



## Adapting to Changes

As preferences evolve, building management and tenants must use data to adapt their spaces dynamically. If areas, amenities, or programs lose popularity, consider making changes. Testing new ideas on a small scale is an effective strategy to prepare for larger, necessary changes.



## Empowering Tenants

A dedicated team is key for property decisions, yet integrating tenant feedback and data for real-time insights is also essential. Empowering tenants, from suggestion boxes to advanced platforms, allows contributions to programming and software customization, speeding up decisions and adjustments.

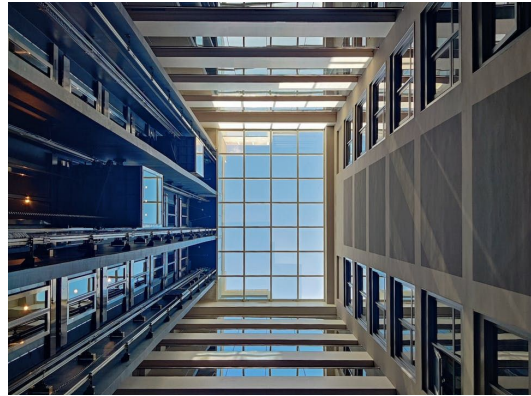
# 03 Building Improvements

## Modernization



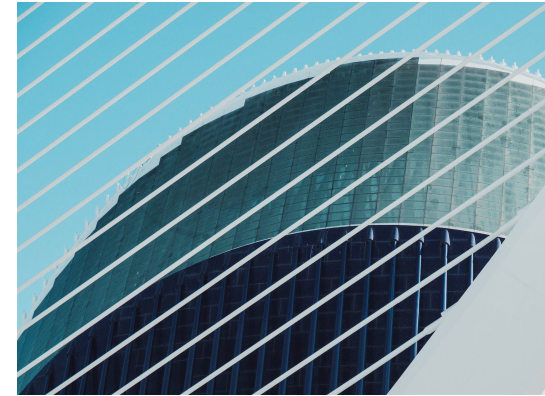
### Replacement schedules

Rather than just using run time as a gauge for life expectancy, other metrics like performance, electrical draw, or even temperature can help buildings see which pieces of equipment really need to be changed.



### Software upgrades

Intelligent software can help future-proof building systems by recommending changes or upgrades to mechanical systems that will enhance energy efficiency. It's also important to consider capital expenditure budgets to establish a realistic timeline for these upgrades.



### Electrification

Driven by local laws and sustainability goals, buildings are moving towards costly electrification. Yet, by balancing potential fines, market demand for sustainability, and financing options, these investments can remain profitable.



# 03 Building Improvements

## Activation

### Not All Amenities Are Created Equal

Amenities must be desired and used, or they're simply a costly waste. To make sure that amenity will get used or will improve marketability data of what amenities are the most popular for each tenant and tenant category must be collected and analyzed.



### Health and Fitness



Office buildings can enhance the workplace experience by offering health and wellness amenities and using communication platforms to facilitate community-driven sports and wellness activities among tenants.

### Events and Entertainment



To draw in hybrid workers, particularly on low-attendance days, office buildings are adopting innovative programming, using surveys and experimentation to find the right mix of activities that appeal to the workforce.

### Enhanced In-Office Services



Providing services like dog walking, dry cleaning, and meal delivery, supported by digital platforms, enhances office space appeal and aids in data collection. This allows for a better understanding of tenant needs.



The office market is evolving, and to stay competitive, office buildings must embrace change. This evolution can manifest through redesigned spaces and new amenities or even through simpler measures like updating management processes and expanding services. Taking proactive and data-driven steps is key to navigating these adaptations strategically and profitably. Much of the necessary data is already generated by the buildings themselves, while additional insights may need to be gathered from external sources.

Although management teams may initially hesitate to undertake the detailed work required to leverage data for critical decisions, the positive outcomes of such efforts cannot be overstated. Ensuring the crucial buy-in for these changes involves educating and collaborating with those tasked with their implementation.

While the future of the office market may appear uncertain, utilizing data shines a light on the path forward. By adopting a more sophisticated approach to data usage, buildings can become more efficient, attractive, and ultimately more profitable, ensuring a bright future in an ever-changing landscape.



In collaboration with

cohesion

To speak to a smart building expert, go to  
[www.cohesionib.com/contact-us/](http://www.cohesionib.com/contact-us/)