AXONIZE

The Axonize Smart Building, Smart Office, and Facility Management Survey

Survey Results and Executive Summary

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Summary

Introduction

94% of enterprises will use IoT by the end of 2021 according to a Microsoft report published in August[1]. IoT is becoming more critical than ever to the success of businesses to not only reduce costs, but stay competitive to tenants, occupants, and employees.

IoT spending is estimated to top $1.1 trillion in 2023 according to an IDC study[2], yet IoT adoption for individual businesses does not happen overnight.

With a strong focus on smart building technology and tools for success, Axonize surveyed senior-level executives across an array of industries to uncover current trends, mentalities, and education levels as they pertain to smart buildings, offices, and facility management.

Some of the key findings from this year's survey include:

- 63% of respondents have a plan in place to implement smart building projects, and the plans of 14% of these individuals will be launched by the end of the year.
- The most significant factor that is currently driving the implementation of smart technology is savings on costs and resources, yet the biggest impediment to implementation stated is also cost, which with the inexpensive services that exist today may indicate a lack of awareness for existing technologies available.
- 18% of those surveyed stated they are highly educated on all benefits of smart building technology.
- The companies of those surveyed are currently tracking HVAC, lighting, and security of doors and windows the most.
- 90% of those surveyed reported that they are currently tracking and monitoring one or more smart building capability.

Based on these findings, some of our key takeaways include:

- Individuals across industries still need more education, which is driving us to create and offer more materials to enhance smart building knowledge.
- Many individuals have implemented, but are not currently orchestrating their IoT projects. This reality may well be an impediment and the reason for not realizing cost savings.
- Individuals seem to be unaware of the fact that it is not enough to connect devices, but that the process itself needs to be optimized by using a single platform to orchestrate all buildings.
- Individuals have yet to realize ROI potential, based on their responses to our open-ended questions, even though they are actively connecting devices.

Methodology

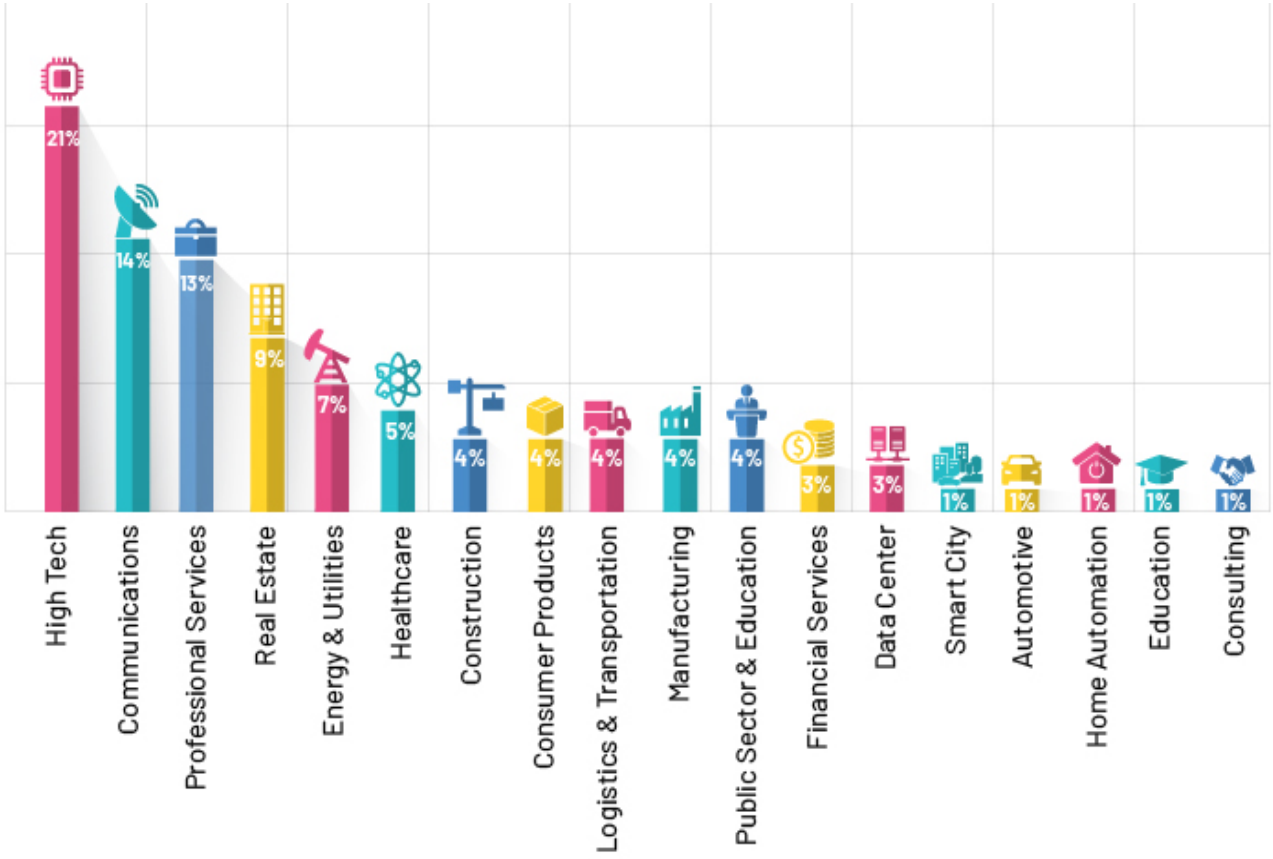
Survey results are based on 150+ responses collected from senior executives, consultants, facility managers, and building and business owners worldwide through a standardized online questionnaire conducted this year.

Axonize conducted this survey with an aim to uncover trends and challenges seen across industries to assess where business leaders stand currently in their mentalities and implementations of smart building technology. The survey also aimed to uncover if those currently using technology understand the benefits/challenges, or if further education is needed.

Company and Job Characteristic

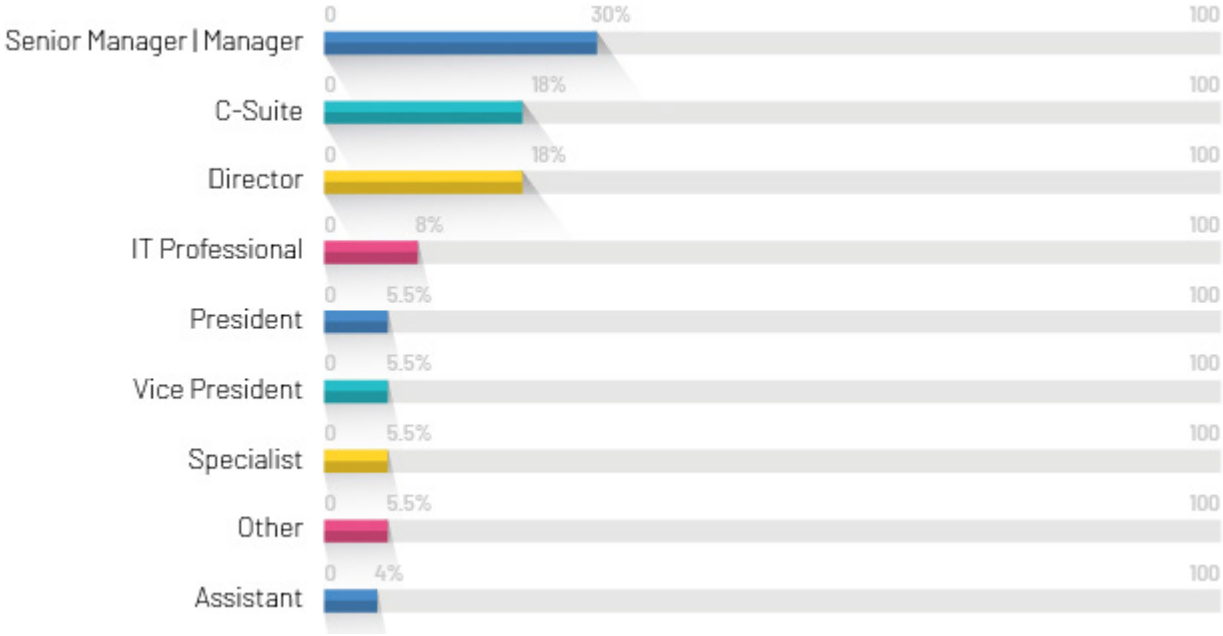
More than 150 individuals completed the survey. Respondents surveyed represent an array of industries, with the highest represented sectors including High Tech (21%), Communications (14%), Professional Services (13%), and Real Estate (9%).

Respondent industries represented



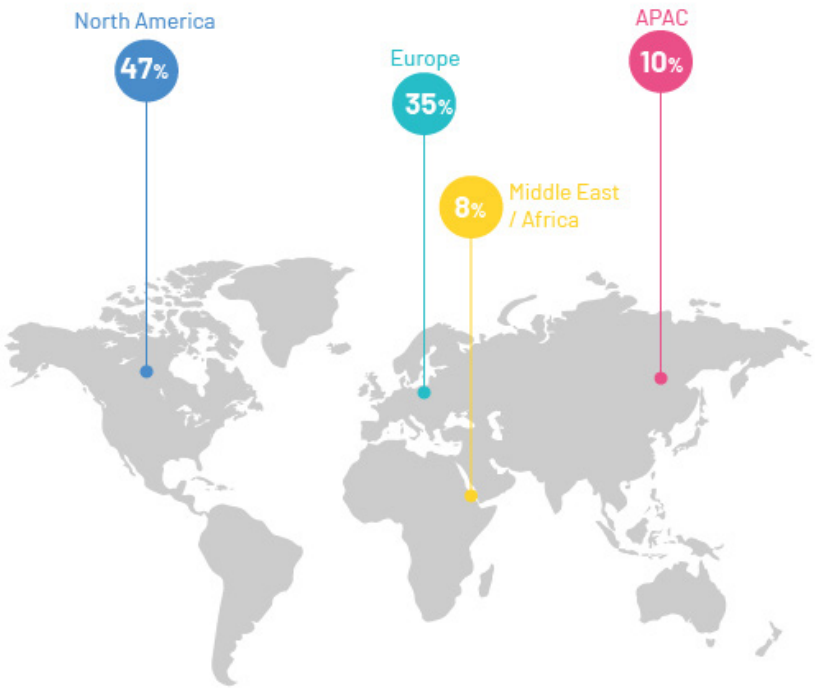
The majority of those surveyed hold titles of senior manager or manager (29%), followed by C-suite and director titles at 18% each, respectively.

Respondent levels of job seniority



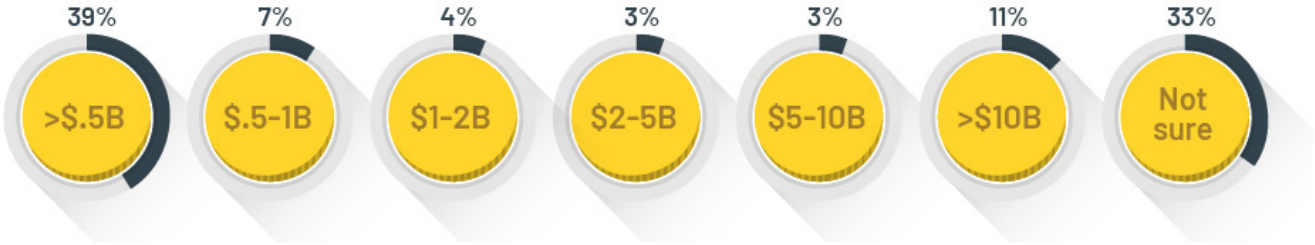
47% of survey respondents work for companies based in North America, while 35% work for companies in Europe. 18% of the respondents work for companies based in other parts of the world. Respondents' geographical locations showcase a balance in results across these regions.

Respondent job locations



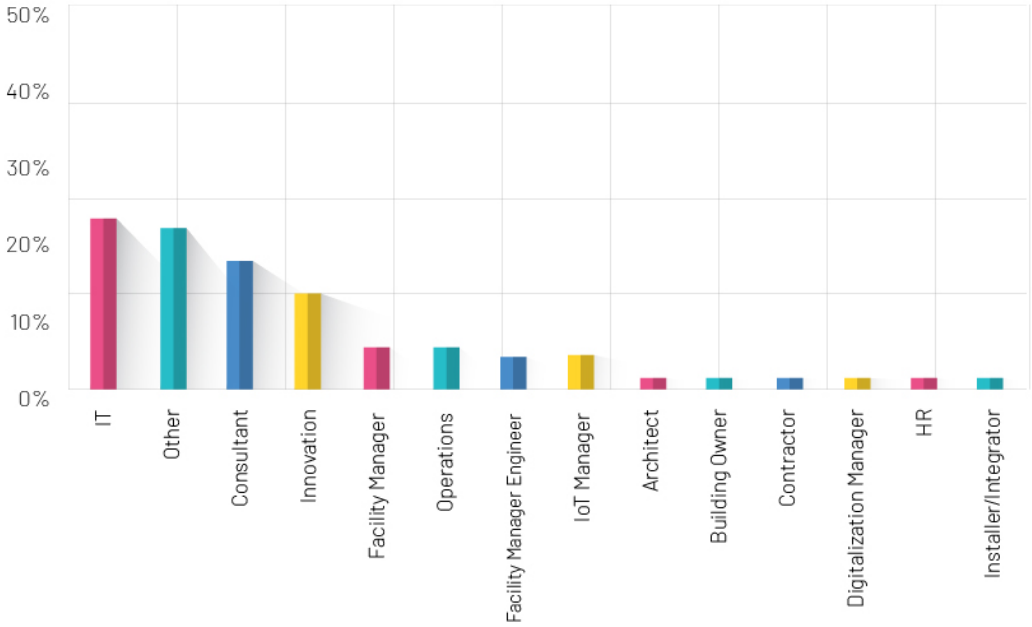
11% of those surveyed work for large companies with revenue greater than $10B USD. The majority of those surveyed work for companies with annual revenues of less than $0.5B USD. Analyzing this information shows that not only large enterprises are implementing smart building technology into their plans, but also small and medium sized businesses.

Respondent companies' annual revenue in USD



Within their respective industries, 22% serve in IT roles, followed by consultants at 17%. 13% of respondents are also responsible for leading innovation at their companies.

Respondent job functions

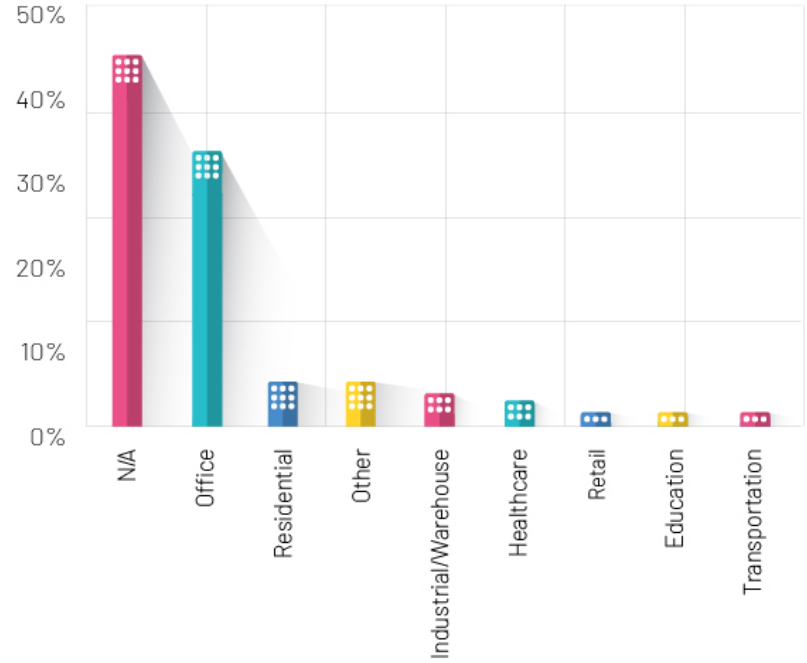


49% respondents have 1-6 years of experience in their current roles. 14% of those surveyed are seasoned in their current positions with 20+ years of experience.

Experience of respondents in current roles

33% of those surveyed are responsible for offices, while 44% are indirectly responsible for buildings. 6% are responsible for residential real estate, and 4% manage industrial and/or warehouse spaces.

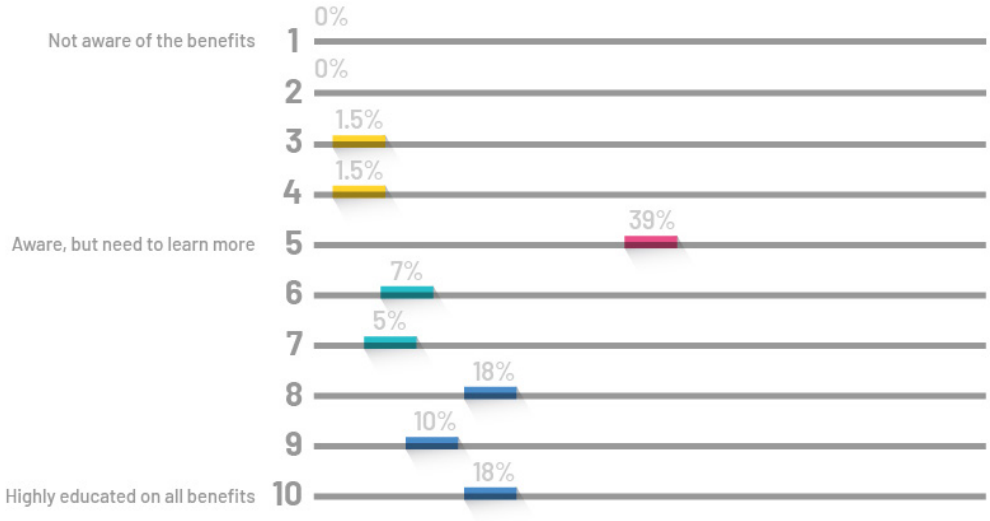
Type of buildings that respondents are responsible for



Smart Building Capability Tracking and Knowledge

The greatest number of respondents (39%) rated their knowledge of smart building technology as a "5" on a scale of 1-10, stating they are aware of some benefits, but need to learn more on the topic and general capabilities. 18% of respondents stated that they are highly educated on all benefits, while only 3% of respondents claimed they have little knowledge.

Education level of respondents and respective companies on smart building technology



When asked what comes to mind when considering smart building or office technology, and how these can be applied to individuals' businesses, respondents had an array of comments.

"The main intention of smart buildings and offices is to reduce energy consumption by adjusting lighting and HVAC temperature based on a number of people in the room and ambient light. Secondly, it should benefit

from the reduction of man-hours. Automating issues like a coffee machine can be done. [Smart building technology] would reduce the time spent by employees in finding the right things and searching time." – C-suite executive responsible for innovation in the consumer products industry

Survey respondents note the benefits of space utilization for both employers and employees:

"Better space utilization and making employees comfortable."
-Director responsible for innovation in the manufacturing industry

"Usage of different rooms, get information to optimize cost and better use the available space."
- Senior pricing manager for a data center

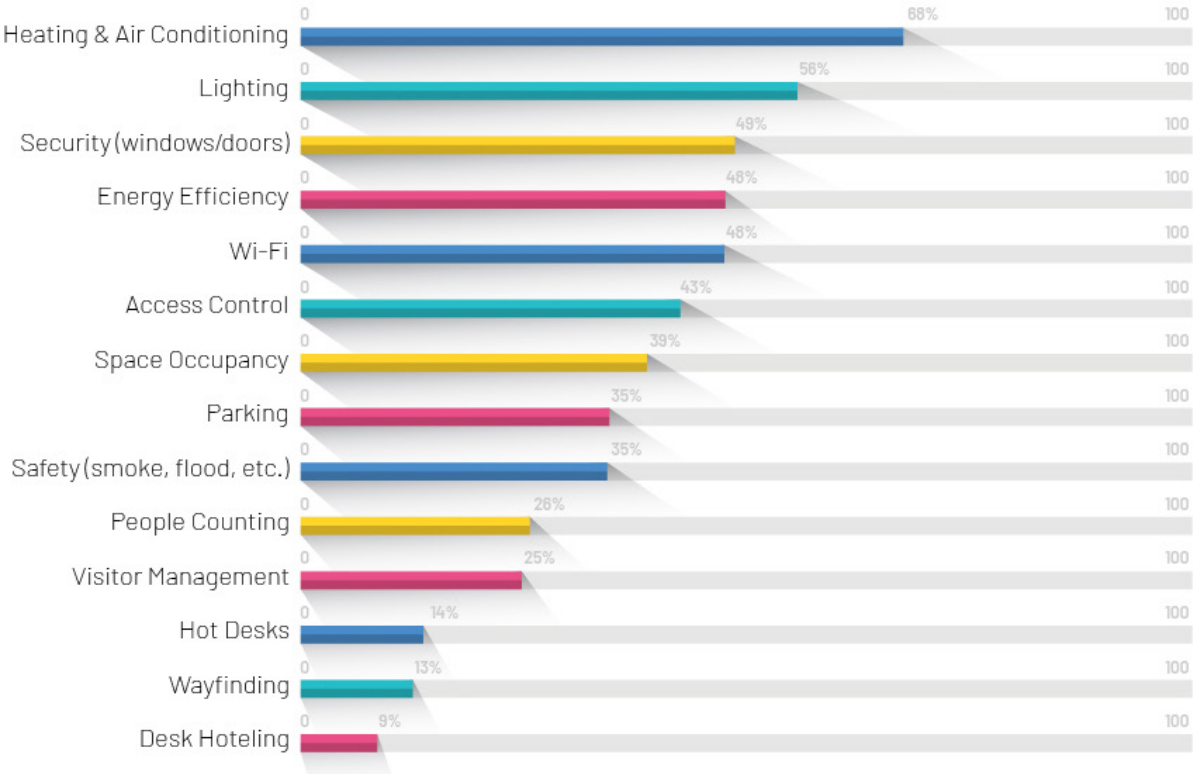
"Making a more 'green' workplace. Attracting younger workers who expect technology to make their lives better, enhancing worker productivity, reduce operating costs."
– Director serving as a consultant in the high-tech industry

"Lean solutions to make daily organizations easier for occupants and efficient for facility management team."
– Consultant, specialist in the public sector & education industries

Only 11% of those surveyed report that their companies are not currently tracking or monitoring any smart building capabilities. Heating and air conditioning were reported as the most frequently tracked capabilities, with 68% of respondents confirming they are monitoring their buildings' HVAC, followed by lighting (56%) and security of windows and doors (49%).

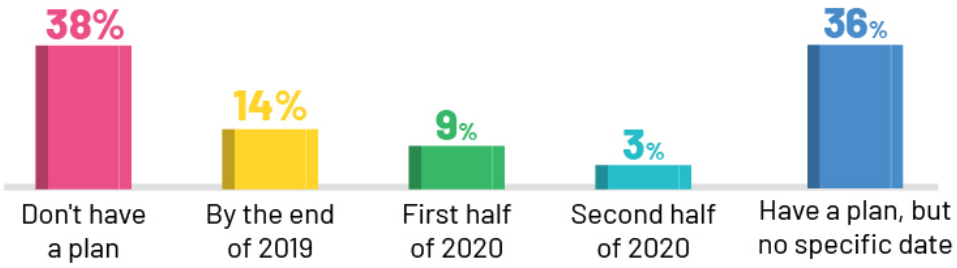
The smart building capabilities less likely to be tracked currently by respondents include desk hoteling (9%), and wayfinding (13%). Since security seems to be of high importance to individual respondents, the lack of visitor management monitoring seems to be a noteworthy gap.

Smart building capabilities currently being tracked or monitored by respondents



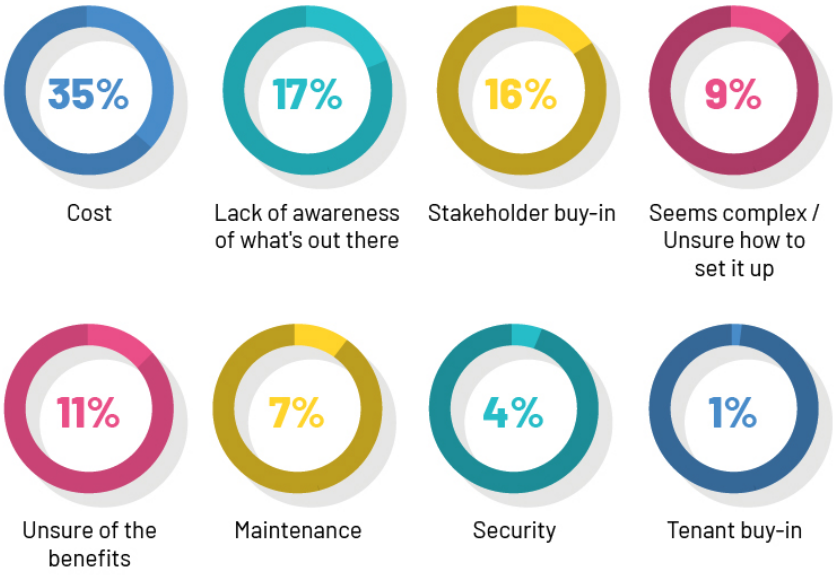
Respondents claim to be significantly aware of the benefits of smart building capabilities. Almost 15% of those surveyed state their company plans to act quickly to develop a smart building project by end of year. 38% of respondents do not have a plan in place and 36% state that their company has a plan, but no specific launch date has been set yet.

Company plans and/or timeline for developing a smart building project



The largest impediment to implementing smart technology to buildings, offices, and facilities was noted as "the cost associated" (35% of respondents). Another 17% noted that "lack of awareness" and a "greater need for education" is holding them back. Only 4% of respondents noted that they are concerned about security implications.

The biggest impediment to using technology to enhance buildings, offices, and facilities

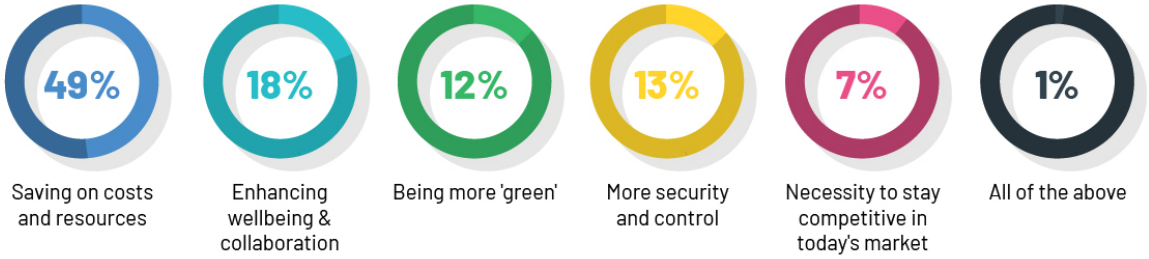


While cost seems to be the biggest barrier standing in the way of making companies and buildings smarter with new technologies and tracking opportunities, cost savings is also stated as the most significant factor driving respondents to implement it. Nearly 50% of respondents stated the opportunity to save on costs and resources is their primary driver for researching and implementing smart technology.

Survey respondents were highly focused on smart building and office technology for its opportunities to reduce costs. This was especially evident in the open ended questions, where the following phrases were commonly used: "cost savings," "cost reductions on energy usage, space needed, maintenance, and cleaning," "optimization of resources," "electric service savings, water service savings," and "sustainable zero net energy."

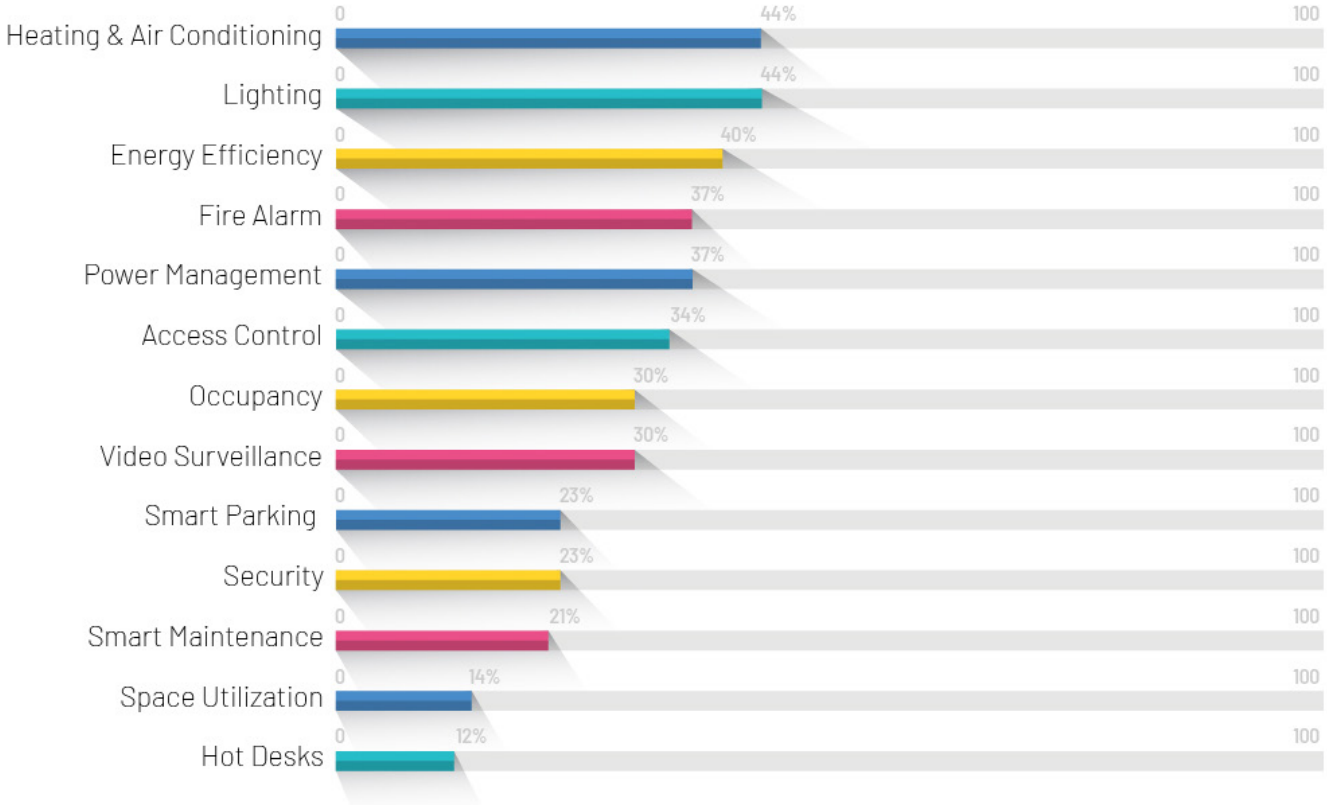
18% of those surveyed also stated the benefits of using smart technology to enhance their tenant and/or employees' wellbeing and the opportunity to drive further collaboration. 7% of respondents view smart building technology as a necessity to stay competitive in today's real estate and/or job markets.

The most significant factor driving respondents to implement smart technology



The use cases with the greatest implementation interest include HVAC, lighting, energy efficiency, and fire alarms. There is less need for education on the use case benefits of space utilization and hot desks.

Type of use case respondents would (or have already) implemented initially



Conclusion

It's no secret that "smart building projects based on IOT and AI will significantly improve efficiency and safety in buildings," as noted by one professional services industry respondent who focuses on digital transformation consulting for businesses.

With IoT comes the potential for buildings, building assets, and occupants to be connected like never before, leading to greater harmony, improved efficiencies, enhanced tenant wellbeing, and enhanced security measures.

While implementing all use cases is certainly not necessary, nor practical for all buildings and businesses, it's clear that more education must be conducted to inform executives on the array of potential use cases available.

Cost appears to be the biggest barrier standing in the way of smart building and IoT implementation, but it's also seen as the greatest driver for it. As more buildings implement smart technology and can witness the ROI directly, more cross-industry statistics will be shared to encourage businesses to take this important leap.

Retail locations, offices, hotels, manufacturing and logistics ecosystems can all benefit significantly from smart building technologies that provide them with predictive maintenance, easier access to important systems, and tools to effectively track usage and occupancy. With further stakeholder buy-in and more implementation of these technologies by competitors, more buildings and businesses will be well suited to do so as well, helping them to remain competitive in today's evolving, tech-forward landscape.

About Axonize

Based on 5 key technologies, Axonize is uniquely designed to transform buildings, offices, and retail locations into smart spaces. We provide customers with an end-to-end solution to manage the wide array of legacy and new software, devices, and sensors necessary to launch effective and secure IoT projects within days. With Axonize's IoT orchestration platform, businesses are operating more efficiently with improved utilization, comfort, and security. Axonize clients witness ROI and substantial cost savings within months.

Our current customers include:

Contact us for more information at **hello@axonize.com**.

Sources:

1 LiveMint: Microsoft Report

2 IDC Worldwide Semi-annual Internet of Things Spending Guide