

# Artificial Intelligence: The Future of Coworking



## PART 1

# INTRODUCTION TO ARTIFICIAL INTELLIGENCE

The rise of the coworking industry has run parallel to an upturn in the impact of artificial intelligence and other new technologies in just about every aspect of our lives.

Smart home technology has already had a distinct role. Temperature control, lighting, audio and other routine aspects of life at home have been changed forever and will continue to evolve. But the reaches of AI go far beyond the mundane. We can now count on a sprinkler system stopping itself based off the saturation rate of the grass. Our phones and TVs predict what we'd like to see based off personal habits, and we are on the brink of having streets full of self-driving vehicles.

In this ebook, we'll explore the ways in which artificial intelligence (AI) and the internet of things (IoT) impact the shared workspace industry today and how they will shape coworking as a whole in the near future.

First, let's define AI and IoT.

### ARTIFICIAL INTELLIGENCE

What exactly are we referring to as AI? Artificial intelligence means your software gathers data, processes information and analyzes it to perform tasks or make predictions. Algorithms and metrics sense patterns or significant trends in order to take further action, with or without human inputs. For instance, when you get into your car at roughly the same time every morning and the map application on your phone suggests a route to get to the office, that's AI. Technology is inferring you're headed to work, analyzing all of its data on traffic in your city and helping you get where you need to go as efficiently as possible.

### THE INTERNET OF THINGS

The Internet of Things (IoT) is a plethora of devices which are internet enabled and connected to collect and share data. The products can then be controlled via smartphone, smart speakers, verbal commands or other linked devices. In short, IoT is about connectivity and performing tasks, while AI uses predictive analysis and draws conclusions from science that is often beyond what our brains can process.

Keep reading to see how AI and IoT are changing the coworking industry and how Yardi Kube is adapting its platform with these technologies.



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## PART 2

# AI APPLICATIONS FOR COWORKING

In the coworking space, AI simplifies operations, enhances the member experience and helps analyze and predict financial outcomes.

### **SIMPLIFYING OPERATIONS**

In the context of real estate, or a coworking space, one of the major functions of AI is collecting data to show utility consumption by season, by office or by individual member, as described by The Balance Sheet in "[AI for Real Estate](#)."

Operators and landlords looking to reduce energy consumption can now bank on AI to adjust IoT-enabled thermostats as quickly as every 30 seconds to optimize the comfort level inside the coworking space. Most importantly, this does so without using any extra energy.

### **ENHANCING THE MEMBER EXPERIENCE**

The simplest strategy to implementing AI into a workspace is to start small and gradually work up in both complexity and benefits added. In other words, first identify where AI can provide the quickest, most cost-efficient gains for you.

A great example of this lies in budgeting and forecasting. In a November 2019 webinar, the Inland Real Estate Group shared research that compared a machine-learning model to manually inputting data for a six-year period for a specific company. Beyond the time consumption, which was far greater manually, human error and lack of accuracy factored negatively into the equation. The end result showed that the AI model was 80% more accurate than traditional manual forecasts for the year 2018.

### **IMPROVING BUDGETING & FORECASTING**

For a coworking operator who sees high fluctuations in usage rate, bookings and retention, forecasting can be a challenge that leads to budget deficiencies. Inputting data into predictive AI software to solve these problems is one of the most basic yet influential uses of the technology for operators.





## PART 3

# AI IMPLEMENTATION BY THE NUMBERS

While the topic of AI and IoT may seem new to some, in 2016, [Gartner survey](#) showed that 29% of enterprises and organizations had adopted the Internet of Things with another 14% expecting to implement by the end of that year. A [2019 study](#) conducted by SAS, Deloitte and Intel with research and analysis from IDC shows that number has progressed significantly; 68% of companies are now using IoT to perform daily operational tasks.

**29%**

ADOPTED IOT  
IN 2016

**68%**

USING IOT ON DAILY  
BASIS IN 2019

implement AI, 43% said that saving money was their number one priority. However, those who had already implemented, stated the focus then became achieving ROI and improving data quality. This indicates they do more than just save money but are nowhere near the peak of how quickly they can provide results.

CBRE research, shared during a July 2020 Realcomm webinar, shows that 57% of commercial real estate companies were increasing spending on digital transformation prior to the COVID-19 pandemic. That number has grown. Now 70% of executives say digital transformation spending will accelerate<sup>1</sup>.

**70%**

EXECUTIVES SAY DIGITAL  
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During a Realcomm webinar focused on artificial intelligence, [Leverson](#) shared information from their study of 100 global organizations. Of those still looking to



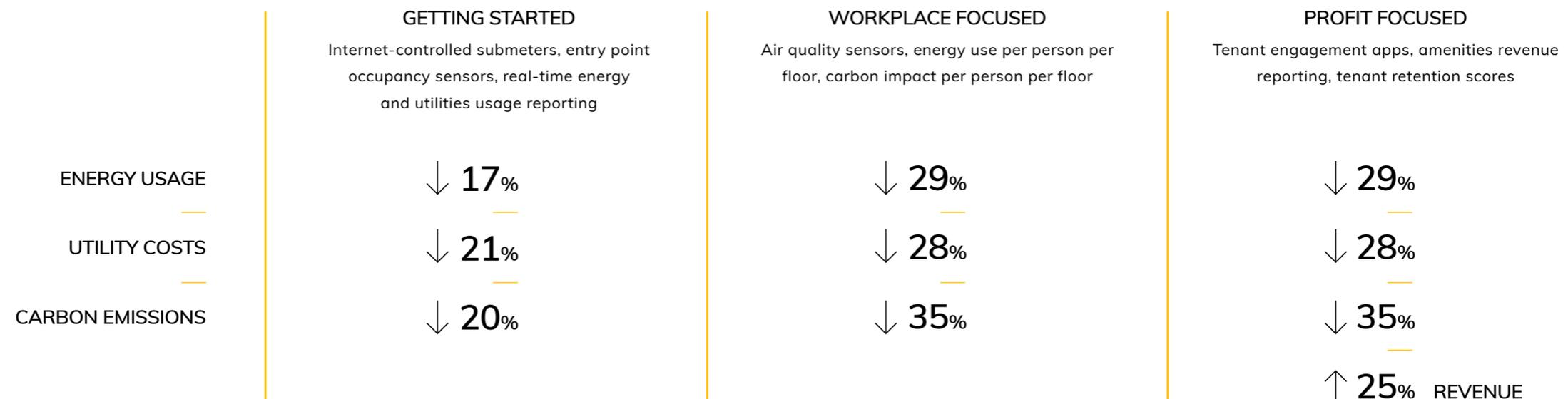


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## IMPLEMENTATION EXAMPLES & RESULTS

Optimizing commercial real estate space is a key application for AI. Yardi research showed that optimizing commercial real estate space is one of the largest impacts of AI. Commercial space is the fourth-leading cause of emissions in the U.S., and the average commercial building wastes 30% of its energy consumption<sup>1</sup>. A building optimized with AI could potentially increase its asset value by up to 5%.

Based on findings from prescriptive data, there are three levels or types of AI installations: Getting Started, Workplace Focused and Profit Focused.



<sup>1</sup> <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>  
[https://www.energystar.gov/ia/partners/publications/pubdocs/c+i\\_brochure.pdf](https://www.energystar.gov/ia/partners/publications/pubdocs/c+i_brochure.pdf)



## PART 4

# AI & YARDI KUBE

**Yardi Kube** has implemented AI advances into its platform and will continue to do so to simplify operations and transactions for operators. We spoke with Victor Vasev, senior director of coworking for Yardi, about how AI is factoring into the Kube platform.

### a. LEAD TRACKING

"First of all, we're leveraging AI on the prospect flow. As a lead comes into the system, through AI we'll determine if it's their first time visiting the site. If it is, there's a specific workflow for that visitor as opposed to someone who's been there before," Vasev explained.

CoworkingCafe, Yardi's search engine for coworking and shared workspace, is part of the Yardi Kube suite of products. Operators can list their space on the site and reap the benefits of its complete integration with Kube and Yardi Voyager. Once CoworkingCafe gathers the prospect's data, that person could see targeted advertising or recommendations for a coworking space based on location, browsing patterns and other recent searches.

### b. SECURE ACCESS

Automated door access control allows for immediate and secure admittance into offices, even after hours. "As you find a coworking space or meeting room, once you book it, you can literally show up and start working because, behind the scenes as you make that booking, the various systems are working together to make sure you get access to unlocked doors," Vasev said.



Beyond just the conference room, Yardi technology determines whether users need access to specific building doors as well. Admittance to both a locked front entrance and an elevator can be granted remotely, providing access to only those areas the member has reserved. Once in the space, members will also be given access to Wi-Fi. There are multiple systems that run all these steps and ensure member security and ease of access depending on the device the member uses.

In addition to improving member experience through seamless reservations and building access, operators get information about how many people entered and exited the room and when. This has increased value during the ongoing coronavirus pandemic as it allows operators to limit room capacity for optimum social distancing, as well as provide tracking data should a member fall ill.

### c. COMFORT & ENVIRONMENT

In the aforementioned example of thermostat control, AI considers countless factors, such as levels of occupancy (highly important in coworking since this number fluctuates so often), outside weather, time of day and many other influencers.

While these complex operational uses of AI often grab the most attention, working in a shared office environment can and should be fun as well. One of the aspects of advanced technologies that most excites operators and members alike is its smart music capabilities, with brands such as Sonos leading the way.

"Operators love the fact that they can link audio speakers to their phone and play via an app, whether it's a coworking space or a conference room or an event area, and also use that to share messages or page people," Vasev said.





## d. CHALLENGES & OPPORTUNITIES

Interestingly, coworking veterans aren't always up to date on the benefits of AI and IoT, despite their involvement in what is perceived as a tech-savvy industry.

"I think the veterans know how to make profit, but they're not all up to speed with the latest technology in coworking," Vasev added. "They have a working model, and they're sticking to it and they're trying [minor] changes like day passes and innovative memberships, but overall they're not changing their business model."

While this may be surprising, there is no shortage of opportunities for operators of all sizes to use AI to benefit their brand and reach new target audiences.

These are just a few ways AI and IoT can improve marketing for coworking operators and their spaces:

- Identify and focus marketing efforts on where the majority of leads are coming from.
- Recognize specific sections of a city's workforce that is unaware of the coworking location for targeted marketing campaigns.
- Quickly analyze what areas of a market are ideal for new space or expansion.
- Optimize the time and day in which emails are deployed to maximize open rate and interaction.





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## PART 5

# WHAT'S NEXT FOR AI?

One of the most important takeaways from the development of advanced technology is that while AI and IoT will enhance tasks and simplify operations, it is generally not expected to take jobs. It is sure to change jobs, but it will not replace them.

In the coming years, AI will only continue to refine and expand its capabilities, learning and better understanding the human language in order to improve predictions with less data. In addition, materials and software will continue to be greener in order to keep pace with the demand for overall energy efficiency.

One of the major developments in advanced technologies is 5G connectivity. Since it is not even close to the capacity it will have in coming years, it's hard to predict exactly how far the benefits of 5G will extend. However, in a market that has been permanently changed by the COVID-19 pandemic, we do know 5G will allow for a revolution in augmented and virtual reality (VR). Conference rooms and shared workspaces could use augmented reality to fill spaces when in-person meetings can't be held. Large conferences may be seen through VR in the sharpest of resolutions.

Meeting rooms may soon be equipped with 3D projectors and laptops could expand to fully virtual displays.

The pandemic may lead to an increase in sensors, contact tracing, Bluetooth tracking for social distancing requirements and even advancements such as airborne pathogen detectors. The incredible speed of 5G connectivity combined with its extremely low latency will be the driver behind many of these advances.

*While there are tests for self-driving, IoT-enabled vehicles, and operators can see a future full of robots taking the place of coworking community managers, the uses of AI for now are in the more pragmatic realm. As coworking continues to evolve, operators can expect to use AI to streamline daily tasks, create more comfortable work environments for members, become more energy efficient, better connect with members and prospects, and more accurately forecast occupancy and revenue.*





## CONCLUSION

Research points to trust as a major factor in the growth of AI. Users need to learn to trust machines with their data, to save money and accurately complete complex tasks.

Trusting AI and its security will remain of the utmost concern for operators. Meanwhile AI and IoT will continue to focus on door access, facial recognition, data protection and other aspects of safeguarding members and their valuable information. AI is going to expand its ability to detect cyber threats before they happen and better confirm authenticity of users when logging into networks.

As AI and IoT become more powerful and refined, operators will ultimately free up more time from manual tasks, gaining the ability to focus on the community-driven aspects of coworking.

**The Yardi Kube platform is continuously implementing AI into its scope of services to further broaden its capabilities to benefit all types of coworking spaces.**





# Thanks for downloading

For more information or any questions on Yardi Kube, contact us. We'd love to help!

Call us at (800) 866-1144 or email [sales@yardi.com](mailto:sales@yardi.com)



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