Al in the office: a smarter space for us to work

While everyone's talking about the impact of artificial intelligence (AI) in the workplace, we're looking at its potentially transformational effects in the workspace – the office buildings where we work, which shape how we work...and our motivation to commute there in the first place.

Enticing people back to their desks: the old, the new and the hybrid

For many companies, the office space has languished for decades beyond its shelf life, failing to attract the talented people who want more than a token plant on their pre-Covid desk.

The fact is the next generation of workers *expect* AI in the workplace. They've never known life without high-speed wi-fi and the comforts of instant tech. What's more, the universities from which they've graduated set the facilities bar very high, with mini 'city' destinations all part of the campus package. For these younger workers, the idea of having to schlepp to an office to use the photocopy machine is a thing of period dramas.

Older workers also want more bang for their commuter buck. After all, this is a world that's seen stay-at-home mandates and the perks and possibilities of working from the kitchen table.

The office has never had to work so hard to draw people in

Al is a compelling differentiator that will only become more so as people's homes get more and more high tech. With virtual assistants at the behest of every whim (Siri, read out my texts; Toda, make it 20 degrees; Alexa, play Radio 2; Google, turn on the washing machine and see who's at the door), our houses are already fitted with more Al than your average skyrise can dream to match. When it does, there'll be competition between employers to out-Al our homes — and to out-Al each other.

Al has been poking around the workplace for a while – whether we're aware of it or not – and is on the cusp of taking off. Here we look at the many ways we can harness Al to enhance the office experience for employees and their clients, while offering flexible, sustainable and cost-efficient options for those making the decisions.

Selecting a building – AI can help make highly informed decisions

First on the decision makers' to-do list: choosing an office building. This has traditionally meant perusing visuals – photos, floor plans, energy performance charts – and a rudimentary background check.

Al opens up a whole new galaxy of information to help tenants, landlords, agents and even sectors make the best selection for their base. Al can do an instant scan of everything in a building's vicinity – from amenities and demographics to air quality, travel times, crime statistics and more. It can also examine

both historical and real-time market data to identify trends in property values, rental rates and demand for specific types of building.

It can then use algorithms to create predictive models showing a building's future value or performance. How much will it cost to run in five years' time? What will the area look like ten years from now?

Planning space - AI can demonstrate countless scenarios and help us evolve with our buildings

Inside the building, AI can help architects and interior designers to visualise and map out space. Taking a floor plan, these teams can use AI to suggest optimal layouts according to people flow, sun position and workspace requirements on any given day, as well as scenarios for every permutation of work model.

What if the business grows three-fold in a year? What if our clients want us on site every Tuesday? What if we hold a monthly group hug?

Al can then generate test fits and virtual reality simulations of the office layout – and umpteen future adaptations – before construction begins.

It can also help us optimise energy usage, lower costs and reduce our carbon footprint – from deciding which walls, design features and furniture items are absolutely necessary (and/or fit for multi-purpose) to choosing the most eco-friendly materials and sustainable building practices.

In short, AI can show and recommend how to build, use, grow into, reconfigure and repurpose a building for the years to come – and how to hand it over with the least possible waste.

AI is a cosy and clever addition to the office team

Once the contractors have gone and the occupants are in, AI can make a building so inviting it may lure even the most office-shy worker out of the house.

Firstly, there's comfort. Smart office tech can customise a workspace according to personal preference and productivity. We're talking height-memory desks and automatic controls for temperature, lighting and music. Virtual meeting assistants can set up collaborative whiteboards for teams of remote and inoffice workers, then take notes, make suggestions and order coffee along the way.

These digital aids are likely to grow for individuals too, as they're able to access all our files, trawl heavy data and do the mundane and monotonous without effort or complaint. Tasks like data entry and timesheet submission.

Al offers foresight, flexibility and financial savvy

Aside from adding ambience and convenience, AI tools deliver significant cost savings. Smart sensors can optimise the lighting and heating based on natural light, climate and desk traffic from one day to the next. Why illuminate the whole building on an almost-empty Friday? While we're at it, should we pause the milk order, trim down security or cancel the cleaners?

Intelligent tech can provide a constant cost analysis of office usage – staff movement, weekly activity, seasonal trends – and look at these in relation to energy consumption, market forecasts and supplier

quotes to identify both cost-saving opportunities and ways to adapt the space for now and projected growth.

Al can also predict when office facilities need an update or maintenance check and schedule these tasks. It may not be long before Al-powered robots actually carry out such jobs, along with cleaning or moving furniture to adapt to changing needs.

In terms of security, AI can use biometrics to control both physical and data access. It could even use voice and face recognition to monitor the emotional health and wellbeing of staff, and potentially adjust environmental factors to boost mood and productivity.

Al is not without its challenges, but nor is it optional

On the flip side, AI brings security risks too, with exposure to hacking as well as ethical concerns about surveillance, monitoring and data collection. Companies will need a raft of new policies to address privacy and compliance – and to be proactive with AI training.

But this is all part of running a business. And, like the internet before it, Al is not a nice-to-have. For employers wanting to stay competitive, it's a must-do-soon whose absence will drive a bigger wedge in the case of home versus office – and company versus company.

The future is a happy and exciting blend

While offices will still be designed and fitted out by people, we see many benefits to using AI at different stages of the process – from selection and design to sustainable build, occupant experience and eventual hand over – thanks to its deeper and faster insights and analytics. Indeed, the next generation of designand-builders will use it at conception.

Al can streamline the fitout process, making it more eco friendly and cost efficient, more customisable and collaborative, and altogether more conducive to employee wellbeing and productivity. Companies can scale without adding headcount and effortlessly adapt their workspace for changing business needs.

Beyond the workspace, we might even share our office data with the wider community for the benefit of all. For example, if we and other office buildings deduce that Wednesdays are a high people-traffic day, we could liaise with local companies, such as transport providers and sandwich shops, who may decide to scale up their services in line with our footfall.

But first things first. We need building infrastructure to catch up with all this tech – and for companies to invest in the notion of office life. For some, it may seem unrealistic to return to the big commute. But, with the right culture and AI capability, we believe the office could be entering a whole new level of water cooler love.