

# Office PropTech Innovation Final Presentation Deck

PropTech Strategies for Design, Efficiency, and Growth

Group 1, Office – Summer 2025 Innovation Report

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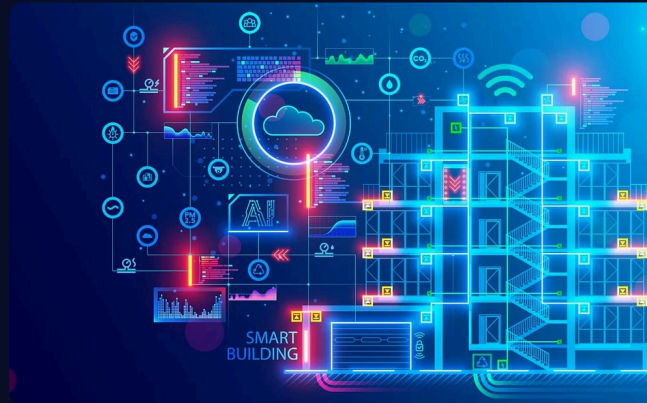
# What Does Innovation Look Like in the Office Sector?

PropTech is transforming office real estate through cutting-edge technologies that enhance every stage of the property lifecycle. The objective is to retain tenants, improve performance (buildings and persons), and reduce footprint.



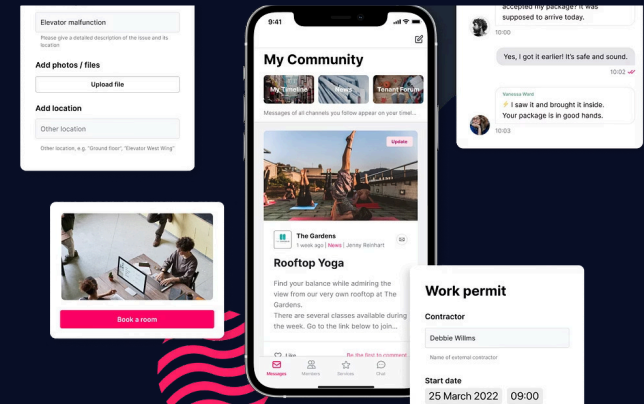
## Generative Design & Ai

Accelerate feasibility and compliance to deliver a more comfortable and productive space.



## BIM, Digital Twins, & Sensors

Optimize operations and energy consumption. Increase ROI and provide better service.



## Integrated Platforms & Dashboards

Merge ESG compliance with tenant experience and underwriting.

# Major Trends Reshaping Office Real Estate

The office sector is undergoing significant shifts, driven by evolving work models, regulatory demands, and technological advancements.

## Return to Office vs. Flex Work

61% of companies plan to reduce physical footprints (JLL, 2024), shifting towards more flexible and efficient spaces.

## Net Zero + Local Law 97

Over 50,000 NYC buildings must cut emissions by 2026, pushing for sustainable building practices and retrofits.

## AI-Powered Analytics

Predictive systems cut HVAC energy by 15-30% (BrainBox AI), reducing OpEx and environmental impact.

## Employee Experience & Retention

Incentivized by tenant experience and workplace efficiency targets. Intelligent building systems improve tenant wellness and employee performance while reducing carbon footprint.

## Rise of Office to Residential

PropTech tools are helping developers and operators identify underutilized office sites, model building feasibility and performance opportunities, especially in cities with high housing shortages.

## EXECUTIVE SUMMARY

# Unlocking Innovation in the Office Sector

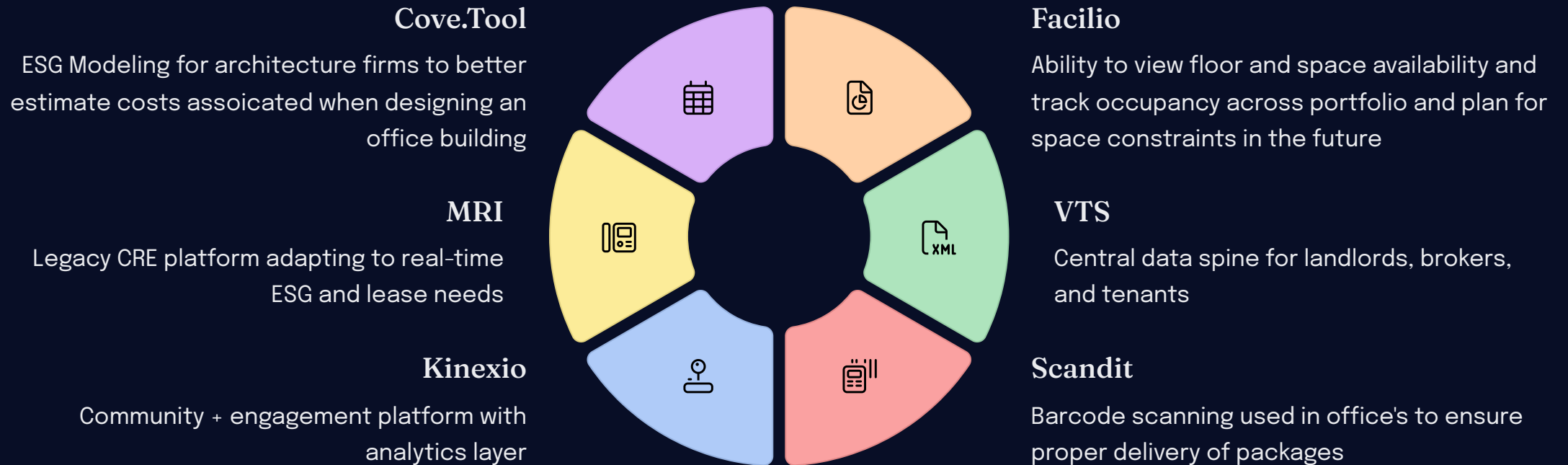
- Office real estate is at an inflection point due to hybrid work, ESG mandates, investor demands, and rising operational costs.
- Innovation is not optional. It is the key differentiator across tenant experience, development, and investment outcomes.



# PropTech Leaders

Discover the standout PropTech platforms driving innovation in the office sector. Buildings using integrated ops-leasing tech saw 11% higher NOI (RET Ventures, 2023)

## Strategic Overlap:



# Key Investors



## JLL Spark

Launched in 2017, JLL Spark is the venture arm of JLL Technologies; by June 2018 it established a \$100 million global venture fund targeting early-stage PropTech companies—primarily seed and Series A, with selective later-stage rounds, complemented by JLL’s deep commercial real estate expertise and global client reach

Example: VergeSense



## Fifth Wall

Fifth Wall has deployed large-scale capital into category-leading PropTech leveraging its network of over 110 strategic real estate LPs—including CBRE.

Leader in Climate Tech Investments

Example: RoadRunner Recycling

# ROI Drivers





# Acquisition & Capital Markets

## Key Innovations:



### Fractional Investment / CRE

- Enables fractional ownership, improves liquidity



### AI Underwriting & Risk Modeling

- Real-time market & lease data, tenant health scores



### Tokenization of Asset

- Streamline property transactions using blockchain technology for more transparency and fractional ownership

## ROI Sources:

- 1 Faster & more accurate investment decisions
- 2 Reduced vacancy and risk exposure



# Strategies for Tenant-Centric Experience

1

## Tenant Analytics

Tracks usage and occupancy. Enable data driven decisions.

2

## Dynamic Pricing

Rent adjustment based on tenant behavior

3

## Comfort Monitoring

Smart HVACs & adaptive environments for satisfaction

4

## Amenities

Beverage stations, nap pods, flexible workspace

5

## Modern Design

Modular layouts for various team needs and work styles

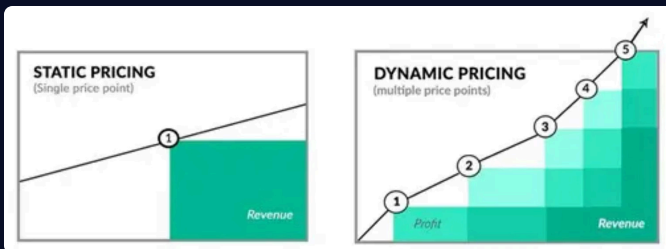
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## Seamless Onboarding

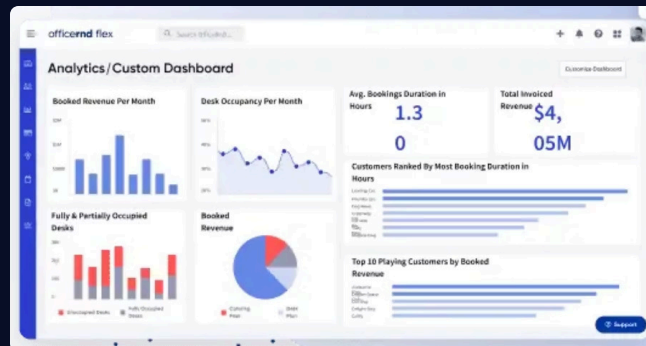
Digital platform and automated onboarding to ensure seamless experience

## ROI Sources:

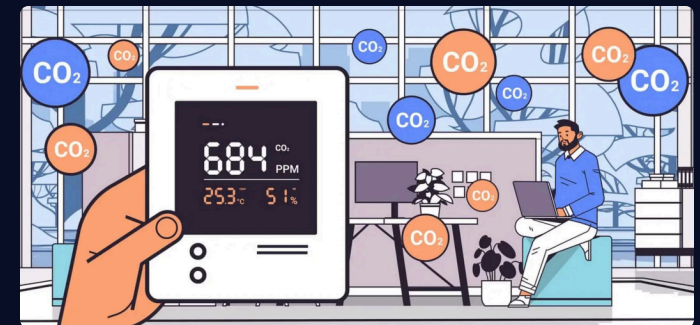
### 1 Operational Efficiency



### 2 Rental Optimization



### 3 Increased Tenant Retention



# Innovations Highlights

## Tenant Analytics



### HqO

*Connecting Real Estate to People*

Tenant experience platform used in office buildings to track tenant engagement, feedback, and amenity usage.

**Clients:** Jamestown, Vornado, Columbia Property Trust

**Innovation:** Data helps landlords personalize tenant experience, improve retention, and justify premium rents.

## Tokenization of Assets



### RedSwan

*Simplifying Digital Real Estate Investing*

Uses blockchain to tokenize commercial real estate (primarily office and mixed-use), allowing global investors to purchase tokens backed by real-world properties.

**Highlight:** Redswan secures FINRA membership

**Innovation:** Enhances liquidity, transparency, and global access to CRE investing.



# Market Analysis & Site Selection

PropTech tools are revolutionizing how we identify and evaluate optimal sites, leveraging data for strategic decision-making. Office spaces are becoming more aligned with experiences and using retail sector metrics.

- **Placer.ai, SiteZeus, MapZot, & Lucernex:** Foot traffic & demographic overlays for precise market understanding. Predictive AI site scoring to identify high-potential locations
- **T3 Development Strategy:** Integrated approach focusing on Timber, Transit, and Technology.



# Market Analysis: Uncovering Opportunities

Significant opportunities remain in leveraging advanced data for site selection.

## Underserved Areas

- Deep equity-based site modeling (e.g., access to transit, low-income tenant capture) to ensure inclusive development.
- Environmental risk modeling during land acquisition to mitigate future liabilities and promote resilience.
- Neighborhood characteristics to acquire and maintain talent.
- Site development and massing capabilities with infrastructure comprehension.



## Crowded Areas

- Pure-play GIS or BIM products without tenant overlay are rapidly aging, necessitating more integrated analytical approaches.
- Esri GIS: Static data heavy, manual mapping softwares for numerous types of modeling and mapping needs.

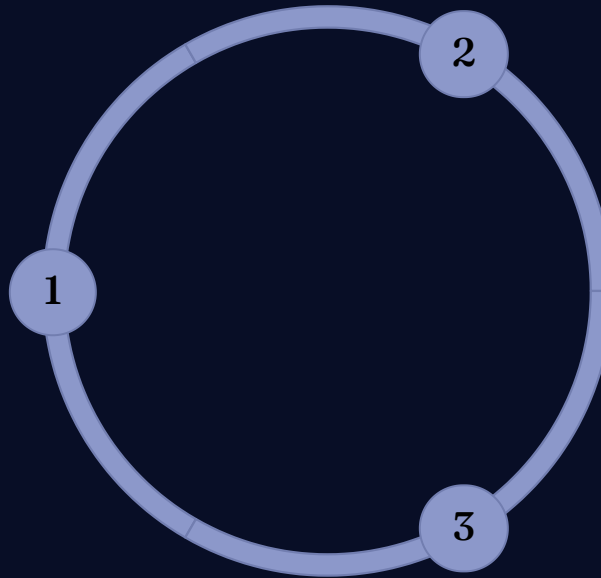


# Operations & Property Management

PropTech platforms are optimizing building performance, reducing operating expenses, and enhancing occupant experience. 39% of office OPEX is energy-related; AI HVAC platforms can reduce this by 20% (JLL Research, 2024), significantly improving profitability.

## Foundational Platforms

Building Engines, Kaiterra, Runwise:  
Integrated BMS + ESG Dashboards for  
holistic property oversight.



## Plug-and-Play Sensors

ZiggyTec, InfoGrid, VergeSense:  
Deployable sensors for real-time  
occupancy, air quality, and asset  
monitoring.

## Predictive Maintenance

Honeywell Forge + Siemens DT: AI-driven  
systems for anticipating equipment  
failures and automating building controls.



# Design, Development & Construction

PropTech is streamlining the entire design-to-construction process, improving efficiency and sustainability. The building and construction sectors account for 40% of US GHG emissions. AI site selection tools reduce feasibility analysis time by 50% (Swapp, 2023), accelerating development cycles.



## TestFit

Generative zoning and yield modeling for rapid project feasibility. Projects using TestFit report 2x faster feasibility cycles (Propmodo, 2024).



## Cove.Tool

ESG and embodied carbon optimization for sustainable building practices and instant massing solutions. (Users: Blackstone, RXR, Cushman)



## Swapp

AI-driven architectural concept-to-documentation workflows, automating complex design tasks.

# Example of Prop Tech with T3 - West Midtown in ATL



01

First mass-timber office project in Atlanta; ~205,000 SF built of DLT over glulam with steel bracing

02

Delivered in 16 months with 10–15% cost premium but faster time to-market and higher preleasing than conventional build



03

Tech-enabled ops, digital twin, IAQ sensors, energy dashboards, tenant apps support UX and retention

04

Site selection optimized using GIS, foot-traffic, and transit scoring



05

Wired Platinum & LEED Silver certified, ntegrated IAQ and tenant comfort systems from day one

06

Preleased 70% before completion to tech/creative tenants

“Smart glazing can cut HVAC loads by 20%, while improving daylight access.” – DOE, 2023

# The Future of Office Innovations

## Over Saturated and Fragmented

### Sensory & Static Dashboard Overload

IAQ, HVAC and foot traffic monitoring systems,

### Traditional Mapping Tools

Offer little in comparison to AI supported platforms with environmental risk, foot traffic, and transit analysis

### Legacy BMS & BIM Platforms

Autodesk, Tridium **must** adapt rapidly to meet new systems and tenant needs

## Watchlist

### Adoption vs Innovation Gap

Office is lagging behind MF and Industrial. Will post-Covid era push uptake?

### Policy Landscape

Local → Federal and International rules and energy standards will heavily sway investor behaviors

### Integration

Consolidation of various platforms and data point into real time, usable, capital strategy tools

## Opportunities

### Cybersecurity

Deeply under-addressed with such important assets and operations moving to the cloud. Huge disruption potential. → **Blockchain capabilities**

### Live NOI Dashboards

Tenant usage, ops data, live revenue to forecast performance → **Dynamic Pricing (VTS, MRI, HqO)**

### Resilience Underwriting

Score climate risk, grid resilience, infrastructure reliability into site selection and ops. (OneConcern, ZestyAi)

