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PREFACE

Across Indian real estate, digitalization is increasingly being looked at as a practical way to resolve persistent pain points, including delays, rework, cost overruns, and gaps in transparency. Owners, developers, investors, and occupiers now expect *predictability, accountability, and measurable performance* at scale. Therefore, the way forward is to integrate technology across the building lifecycle, built on shared data, live tracking, and results-based models. This thought-leadership paper sets out that approach and shows how we can move from pilots to portfolios with AI, spotlighting PropTech companies as indispensable stakeholders and execution partners and what this means for you as an owner, developer, investor, or occupier.



Anshul Jain Chief Executive- India, SEA, MEA & APAC Office and Retail, Cushman & Wakefield

INTRODUCTION

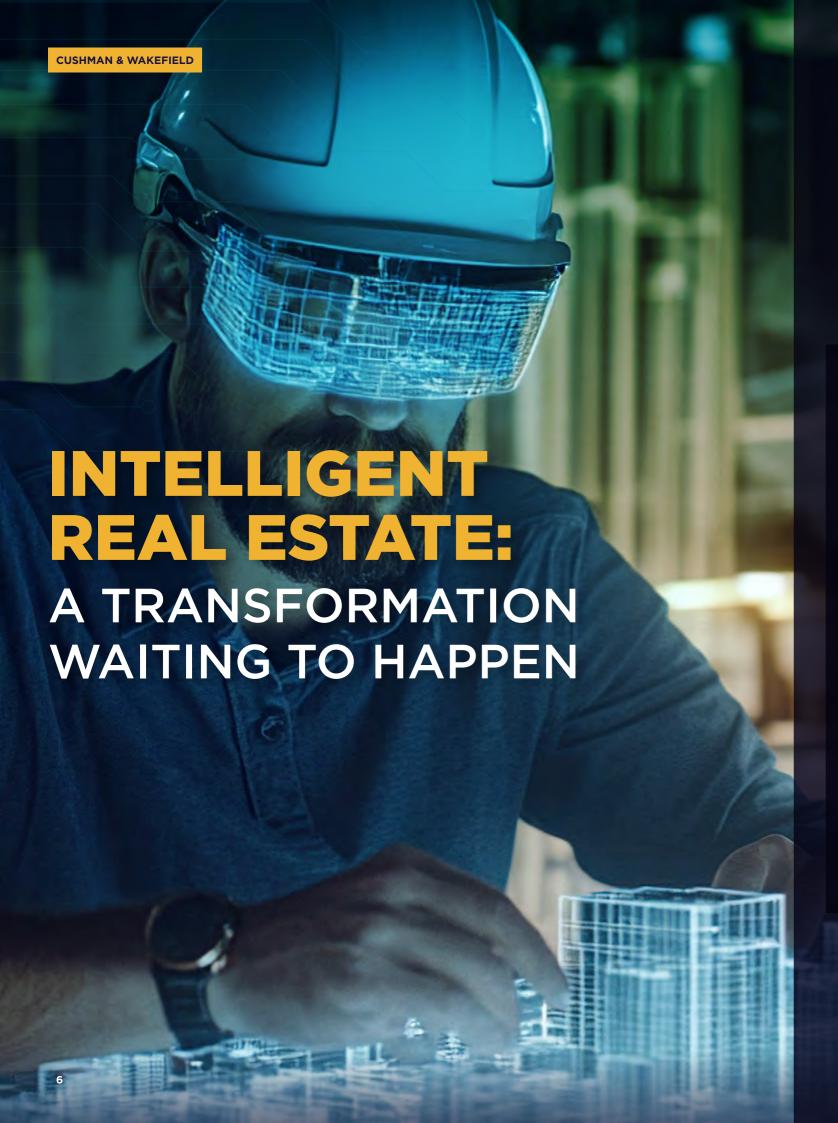
India's commercial real estate is entering a decisive phase of digital transformation. Certifications and digital-first workplaces are now mainstream, yet inefficiencies—delays, rework, cost overruns, and weak transparency continue to weigh on project deliveries and margins, making technology adoption urgent.

PropTech, defined here as an umbrella of solutions spanning traditional applications (leasing, operations, occupier experience) and ConTech tools (planning, design, execution), is gradually emerging as the real estate sector's backbone. More than 2,200 active firms now operate across the building lifecycle, signalling an increase in depth and readiness. These PropTech firms are working on enhanced use of Artificial Intelligence (AI) to offer integrated digital solutions, thereby helping the larger cause of enhancing AI adoption within the real estate sphere.

A <u>C&W Research survey</u> of senior leaders—including developers, flex operators, facility managers, asset managers, and PropTech firms reinforced this picture: solutions exist, but most remain confined to pilots. The challenge is not availability, but scale. Here, AI becomes critical,

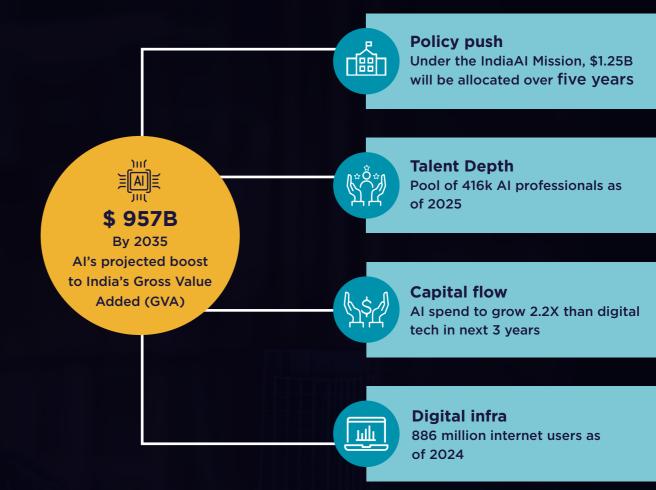
integrating siloed systems, proving ROI in real time, and enabling enterprise-grade adoption.

Market dynamics are already shifting. Institutional landlords are embedding certifications across portfolios, Global Capability Centers' (GCC) are raising digital benchmarks, and occupiers are pushing for hyper-personalized performance-led workplaces. Together, these forces are driving four strategic shifts i.e. planning & design phase maturity, performance-linked business models, potential institutionalization of Built-to-Suit (BTS) campuses of occupiers, and hyper-personalization.



India's digital transformation is accelerating, with AI at the centre of the shift. By 2035, AI could contribute nearly USD 1 trillion to economy, raising the country's annual growth rate by about 1.3%¹. The foundations of this momentum are underpinned in Figure 1.

Figure 1: Foundations of India's Accelerating Al Momentum



Source: C&W India research; MeitY IndiaAl's report; Business standard research; IAMAI; and IDC.

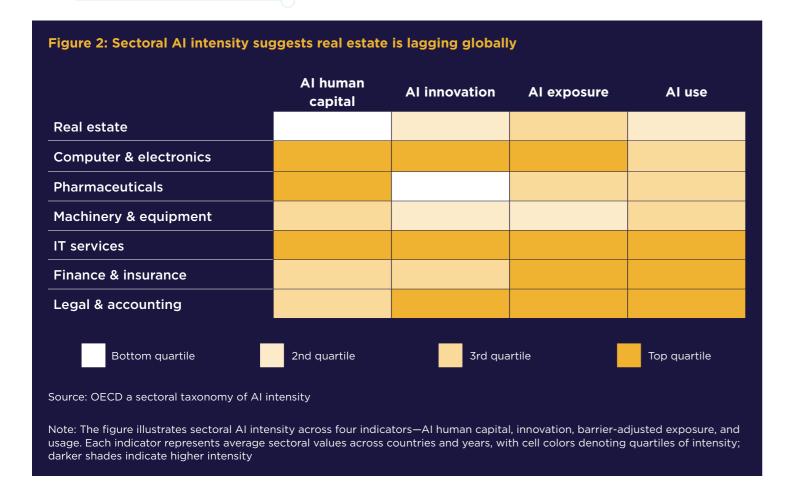
Data reveals despite India's rapid Al progress, real

estate remains in the early stages of digital maturity -

lagging sectors like BFSI and technology, where

adoption already exceeds 50%iii

Yet, beneath this strong macro tailwind lies a striking imbalance: real estate remains among the slowest adopters of AI and technology. The OECD's 2024 taxonomy places the sector among bottom quartile across all AI readiness indicatorsⁱⁱ i.e. human capital, innovation, and practical deployment (See endnotes for definitions), refer to figure 2.

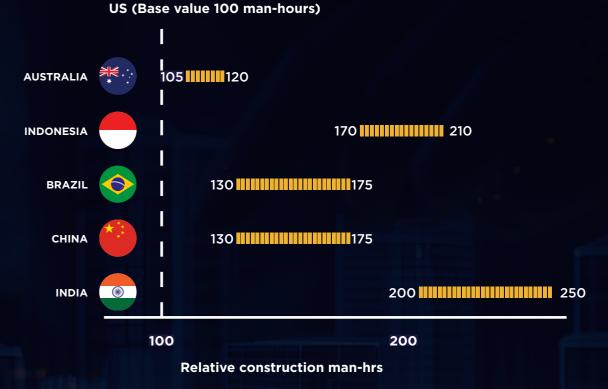


In India, TeamLease Digital data reflects a similar trend: BFSI leads with 68% adoption, technology and pharma sectors exceed 50%, while infrastructure and transport are at just 20–22% —signalling an early-stage maturity for the real estate industryⁱⁱⁱ.

RISING COSTS AND WEAK PRODUCTIVITY ARE PUSHING REAL ESTATE TOWARDS TECHNOLOGY ADOPTION

Among the many challenges faced by India's commercial real estate sector, productivity and cost pressures stand out as the most immediate bottlenecks. Construction activity that requires 100 *manhours in the US often takes more than double the effort in India* (Refer figure 3), reflecting fragmented execution and limited integration of tech tools.

Figure 3: Construction productivity benchmarking



Source: C&W analysis of Compass International data

Note: Construction Productivity (U.S. baseline = 100 man-hours): This measures the number of labor hours required to complete the same unit of construction work. Compass International, benchmarked construction labor productivity across 20 economies.



With raw materials up ~10% and labour ~8% annually, developer margins are tightening, propelling wider adoption of PropTech to drive efficiency and predictability

At the same time, input prices are rising sharply. Raw materials account for nearly 60% of construction $cost^{\underline{w}}$ and have grown at an annualized ~10% on average since FY21, while adds labour another 20-30% of the construction cost, has seen average wages increase ~8% annually \underline{w} .

Figure 4: Construction inputs witness sustained cost inflation (2021-2024)

Raw Material

(Cement, Steel , Aluminum, Copper)

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Grew 10% CAGR

60%OF THE CONSTRUCTION COST

Labour

(Skilled, unskilled, semi-skilled)

Grew

8% CAGR

20-30%

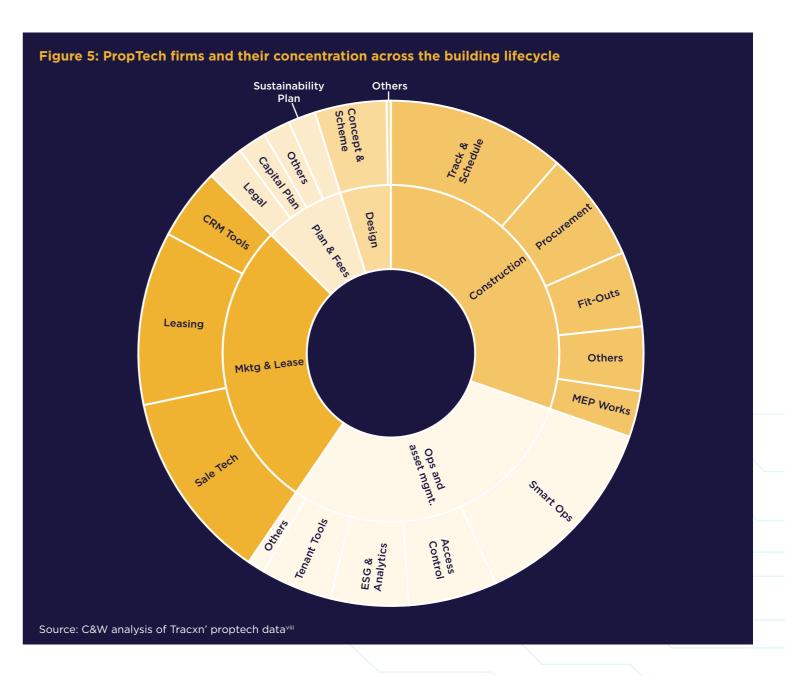
F THE CONSTRUCTION COST

Note: Pricing is based on prevailing rates in the Mumbai market except copper and aluminium prices, which reflects global market levels.

The combined effect is steadily intensifying pressure on developer margins and creating greater uncertainty in project delivery. These pressures are fast becoming triggers for wider technology adoption, a momentum that could be unlocked through PropTech.

A GROWING ECOSYSTEM IS LAYING THE GROUNDWORK FOR INTELLIGENT REAL ESTATE

While the sector has been slower to adopt digital technologies, the stage is already set for rapid change. Enabling this is a vibrant ecosystem of more than 2,200 PropTech firms operating in India^{vii} catering to commercial real estate—spanning the full building lifecycle from planning and design platforms to construction technologies, leasing tools, and operations management systems, refer Figure 5.



These firms are tackling some of commercial real estate' most entrenched inefficiencies: improving scheduling and procurement, streamlining execution, optimizing energy and facility costs, and enhancing occupier experience. Their diversity underscores that PropTech is no longer a niche but is steadily evolving into the digital backbone of commercial real estate.



A new era is unfolding in India's commercial office market, where technology and performance are no longer optional, they are central to how value is defined. Occupiers, landlords, and investors are converging on a common expectation: workplaces must be digitally enabled and aligned with global sustainability standards. This shift is reshaping what qualifies as Grade-A space and demanding a new level of technological intervention.

CERTIFICATIONS ARE THE NEW STANDARD: SHAPED BY OCCUPIERS, ENABLED BY PROPTECH

The shift in India's office market is most clearly reflected in the mainstreaming of building certifications. Green, WELL, and WiredScore credentials once seen as premium add-ons are now baseline requirements for Grade-A space. As of H1 2025, 52% of India's office stock is green-certified, and certified buildings are delivering up to 5% higher occupancies and ~11% rent premiums compared to uncertified stocks^{ix}.

This transition has been driven by occupiers, who increasingly shortlist only those assets that can demonstrate measurable performance on sustainability, wellness, and digital readiness. In effect, certifications have become a proxy for quality and transparency, signaling that a workplace is future-ready and aligned with global benchmarks.

PropTech is what makes these standards viable in practice. From BIM that reduces design conflicts^x to Internet of Things (IoT) systems that track energy use and air quality, digital tools provide the quantification, transparency and ongoing data streams needed for certification and compliance.

Figure 6: Impact of building certifications on performance



52% of India's Office Stock is Green-Certified



~11% Rent Premiums



5% Higher Occupancy

CERTIFIED PORTFOLIOS ARE NOW CORE TO INSTITUTIONAL STRATEGY

The occupier-driven demand has been reinforced by institutional landlords and REITs, who have rapidly scaled their certified portfolios. In India, nearly 90% of REIT-owned office space is green-certified, with 24% WiredScore and 31% WELL certifications^{xi}, underscoring how deeply performance standards are now embedded into their portfolio (Fig. 7).

Figure 7: Share of REIT office portfolios with key certifications

100

80

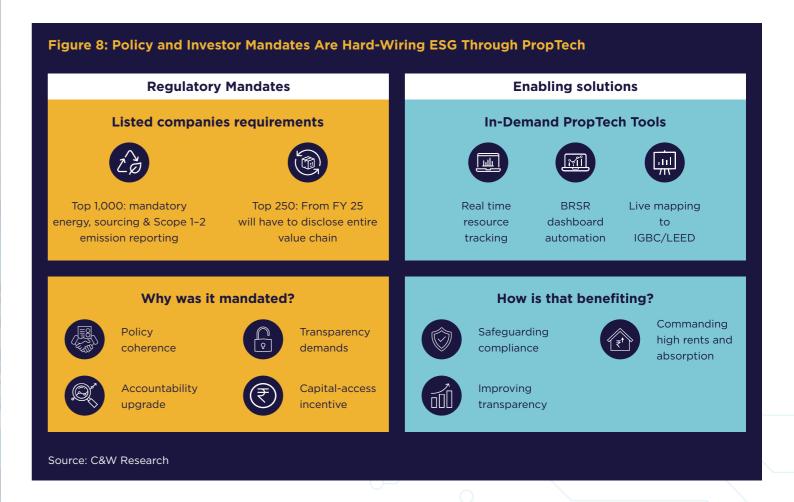
100

20

Green WIRED WELL

Note: Green, WIRED, and WELL certifications can overlap, so the percentages represent each type individually and do not

This portfolio shift reflects not just tenant preference but also regulatory and investor pressure. India's stock market regulator - SEBI - has a BRSR (Business Responsibility & Sustainability Reporting) mandate that requires the top 1,000 listed companies to report on energy and emissions, with the top 250 disclosing full value chains by FY25. These mandates are driving demand for real-time tracking, ESG dashboards, and IGBC/LEED mapping—solutions enabled by PropTech (Fig. 8).



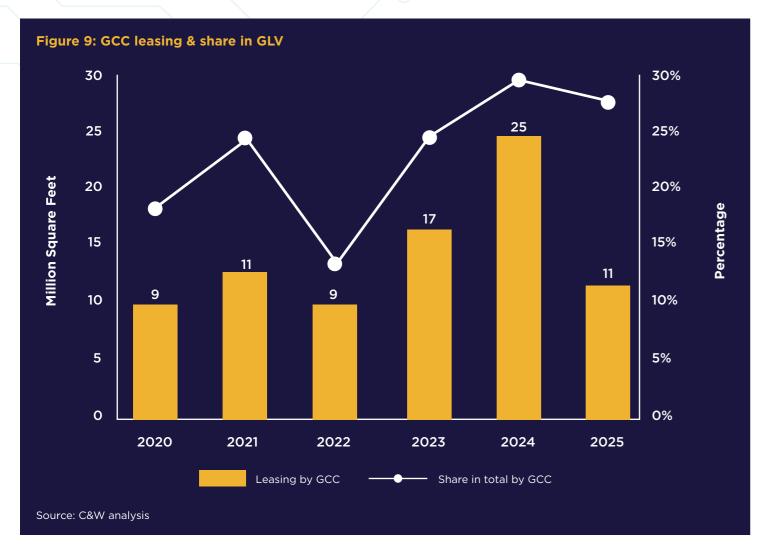
For landlords and investors, certifications and disclosures have become more than compliance exercises. They are about future-proofing assets, safeguarding liquidity, and attracting capital flows that increasingly demand transparent, data-backed performance. Certified portfolios, powered by PropTech tools, deliver this assurance by embedding sustainability, wellness, and digital readiness into daily operations. By embedding digital solutions into day-to-day operations, institutions are establishing a new benchmark of certified, tech-enabled Grade-A offices in India.

Source: C&W Analysis

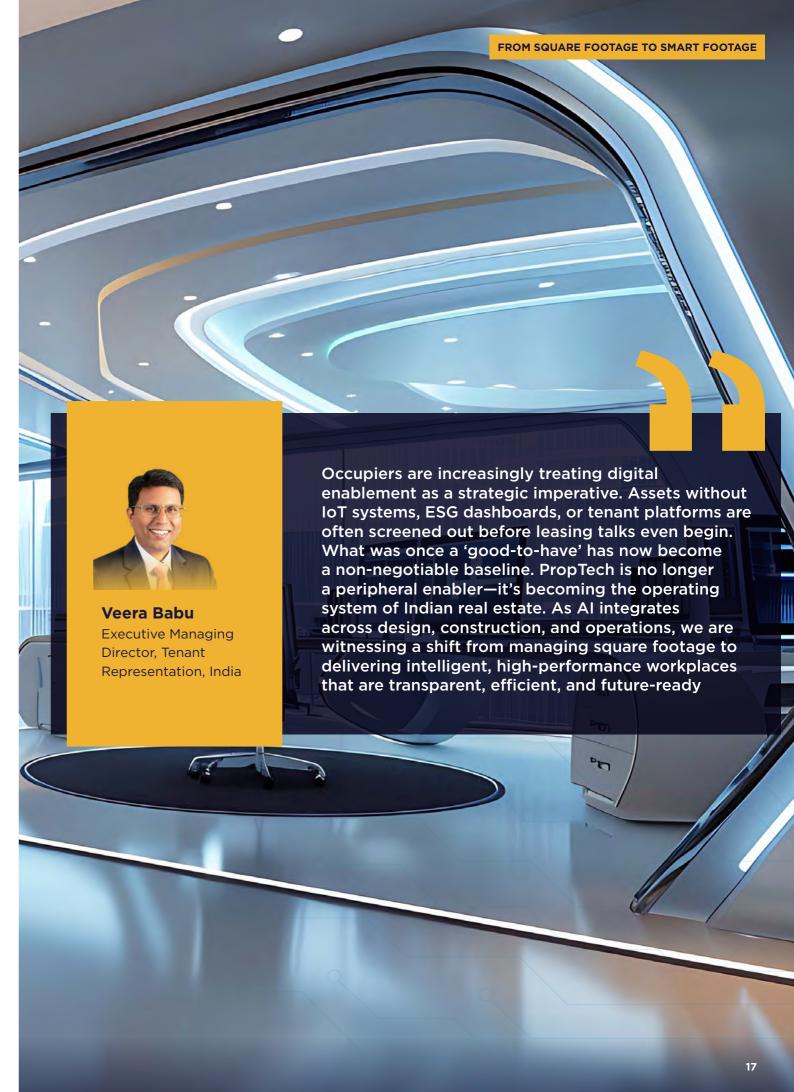
sum to 100%.

RISING GCC ONSLAUGHT IS ELEVATING DIGITAL-FIRST WORKPLACES

The rise of GCCs is accelerating the shift toward digital-first workplaces. They are increasingly seeking flexible, speed-to-occupy workplaces with compliance-ready digital infrastructure and minimal upfront costs. Today, functions such as AI, data science, cloud computing, and blockchain account for 20–25% of GCC activities in India, and this share is projected to rise to 40–50% by 2030^{xii}. This shift toward innovation demands resilient networks, secure IT environments, and advanced digital integration far beyond standard fit-outs.



Meeting these expectations is possible only through PropTech-enabled solutions. Smart BMS, IoT sensors, digital twins, and ESG dashboards are increasingly embedded from day one, supporting enterprise-grade standards such as SOC-2, ISO 27001, and zero-trust frameworks. As the innovation footprint of GCC's expand, PropTech's role will become even more evident, gradually taking digital workplace integration higher and setting new benchmarks for certified, performance-led offices across India.



Certifications and digital standards are now central to Grade-A supply, yet recurring inefficiencies continue across the lifecycle. These come into sharper focus when viewed through stakeholder priorities, with cushman and wakefield's industry stakeholder survey respondents highlighting the most common pain points and the PropTech solutions currently in use.



Shashi Bhushan

Executive Managing
Director, Project &
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PropTech and AI are no longer experimental they're reshaping real estate with smarter design, performance-driven models, and hyper-personalized workplaces, setting the foundation for a decade defined by intelligent, scalable, and resilient assets.

CUSHMAN & WAKEFIELD

PROPTECHIN

SOLVING BOTTLENECKS,

PREPARING FOR SCALE

ACTION:

Figure 10: What stakeholders told us: Pain points and proptech fixes across the building lifecycle











O1 Planning & Feasibility

O2 Design & Planning

O3 Construction & Execution

O4 Marketing & Lease

Operations

& Asset
Management

Sub-Phase

- Demand & market Assessment
- Site Selection
- · Legal Assessments
- Capital Planning & Pre- Design
- Concept & Schematic & Detail Design
- Premitting & Compliance

- Project Tracking & Scheduling
- Procurement & Vendor Execution Structural Work
- Electrical, Plumbing & MEP
- Flooring, Painting interiors
- · Quality Inspection
- Post Completion Approvals
- Leasing Strategy
- Sales Enablement
- CRM & Campaign Management

- Smart Buildings Ops
- Maintenance & Reliability
- Energy, ESG & Compliance
- Tenant Experience & Services
- Post-Occupancy Analytics & Feedback
- Asset/Portfolio & Lease Analytics

Primary Pain Points

- Site Access & Base-Mapping Inefficiency
- Land Title & Acquisition Ambiguity
- Tech ROI & Integration Barriers
- Clash-Prone Design
- Design reworks & Weak Site Specific Simulation
- Version mix-ups & Coordination overload

- Scheduling & Tracking Gaps (Slab-Cycle Slips)
- Procurement & Materials Drag
- Workforce & HSE Gaps
- Weather & Dust Disruptions

- Opaque Inventory & Pricing (No-Real Time Updates)
- Manual Sales Ops & Slow Approvals
- ROI Blind Spot From Siloed Data
- Siloed Ops Stack
- Inefficient Buildings & Weak KPIs
- Reactive Maintenance, Not Predictive
- ESG, Waste & Policy Gaps

PropTech Fixes

- Drone-Based Surveying & Excavation Maps
- Geospatial Intelligence for Site Selection
- Model-Based Design Coordination & Simulations
- Iterative Design, Change in Tracking Tools

- Predictive Schedulers, Labor & Asset Trackers
- Automated Vendor Management, Shared Dashboards
- VR Walkthroughs & Fit-Out Previews
- Platformized Brokerage, Online Booking Portals
- All-In-One FM & Tenant Apps
- Fault Detection & Prediction, Root Cause Analysis (RCA)

Sources: Cushman & Wakefield interviews/surveys with industry executives.

Note: This analysis synthesizes all inputs received from the C&W research interview and survey of industry participants across the building lifecycle—including developers, PropTech firms, flex/managed workspace operators, and integrated FM firms. For each phase, we have reported the top 3-4 pain points based on repeated mentions; PropTech fixes highlighted are the most frequently cited and are not exhaustive. Company concentration is derived from Tracxn's PropTech database by mapping firms to lifecycle phases and sub-phases based on stated offerings and counting unique companies per sub-segment (duplicates removed). The scope covers commercial and mixed-use segments.

concentration

EXAMPLES OF ON-GROUND INSIGHTS FROM C&W RESEARCH'S SURVEY



Planning and feasibility

A prominent Mumbai-based developer has used drone surveillance combined with geospatial intelligence to create excavation maps, translating into over 90%-time savings



Operation and Asset management:

A leading managed space operator has adopted 'as-a-service' models for cooling, filtration, STPs, and other operational functions, shifting to pay-per-use and performance-linked contracts leading to improved accountability and support better cost recovery



Construction and execution:

A prominent developer has deployed an automated quality checklist tool, reporting over 90% fewer errors. In parallel, live progress tracking has delivered around 20% savings in project monitoring efforts



Design and planning:

On a highly engineered project, the use of BIM with digital twin-enabled clash detection led to over 50% time savings by identifying and resolving design conflicts before execution

Source: C&W interviews with industry executives.

The mapping shows that PropTech solutions are steadily evolving to address the sector's inherent complexities and inefficiencies. From design platforms that minimise clashes to procurement and scheduling tools that streamline execution, leasing solutions that enhance transparency, and operations technologies that reduce reliance on reactive maintenance—digital interventions are already reshaping outcomes across the lifecycle.

As these solutions gain traction, they are poised to ease long-standing inefficiencies such as *delays, rework, rising costs, and fragmented data,* laying the foundation for a more predictable, efficient, and transparent delivery model. Building on this momentum, AI emerges as the catalyst to connect these advances, amplify their impact, and deliver the kind of integrated, enterprise-wide ecosystem that the industry increasingly demands for scale, resilience, and future readiness.

PROPTECH MATURITY REFLECTS OCCUPIER PRIORITIES

While PropTech solutions today span the entire building lifecycle, an analysis of company maturity by funding stage^{xiii} highlights how adoption is unfolding, refer figure 10.

Figure 11: PropTech maturity by funding stage

Building Lifecycle Phase



Source: C&W analysis of Tracxn's PropTech database.

Note: Each cell reflects the count of companies operating in each phase at a specific funding stage. The lifecycle-maturity matrix was developed by mapping companies from Tracxn's PropTech database across five lifecycle phases: Planning & Feasibility, Design & Approvals, Construction & Execution, Marketing & Leasing, and Operations & Asset Management. To avoid double-counting, each company was tagged only once per lifecycle phase, even if it operated in multiple sub-phases within that phase. Funding information was consolidated into four maturity categories—Budding (Unfunded), Developing (Seed/Funding Raised/Early stage), Growing (Series A-D), and Mature (Series E-Public)—with an additional "Uncategorized/Other" bucket for companies outside these definitions. The scope was limited to firms active in commercial and mixed-use real estate, excluding acquired and acqui-hired and deadpooled entities.

concentration

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The analysis reveals, PropTech is advancing first in areas with clear occupier pull and quantifiable ROI, while innovation in upstream sets the stage for the sector's next horizon of growth.



Marketing & Leasing:

Adoption is concentrated around sales enablement, tracking, and CRM tools, reflecting occupier priorities for transparency and faster decision-making.



Construction & Execution:

Solutions focus on project scheduling, procurement, and quality monitoring, where efficiency gains can be clearly demonstrated.



Operations & Facility Management:

A wide mix of tools address occupier needs around energy efficiency, ESG compliance, and tenant engagement, helping this phase advance more quickly toward maturity.



Planning & Feasibility and Design & Approvals

Innovation here is still **emerging**, as ROI is harder to quantify and occupier influence less direct. However, tools such as generative design, digital twins, and regulatory automation are expected to drive wider adoption over time.

Turning this momentum into portfolio-wide scale requires overcoming hurdles that are less about the technology itself and more about consistent adoption. Industry leaders highlighted three recurring frictions:

Figure 12: Survey Insights: Barriers to scaling Proptech in CRE

Industry leaders highlighted three recurring frictions:



ROI proof

Many solutions struggle to demonstrate measurable returns upfront, with returns often realised only over the long term



Integration Gaps

Gaps persist, as new tools struggle to link with entrenched legacy systems



Fragmented Vendor Landscape

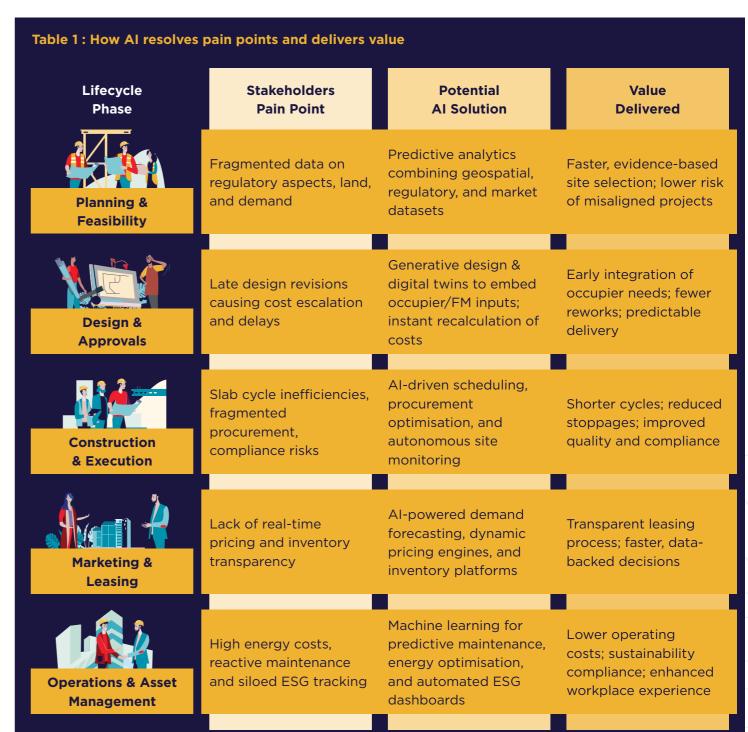
A crowded field of niche providers limits interoperability and creates hesitation for portfolio-wide adoption.

Source: C&W survey/interview

Addressing these barriers will be critical to move PropTech from isolated pilots to enterprise-wide transformation an evolution where AI can play a pivotal role.

HOW AI UNLOCKS PROPTECH MATURITY

As industry leaders stressed, the issue is not the availability of technology but scaling it. Al directly addresses this gap by linking systems, proving ROI in real time, and automating decisions across the lifecycle. In doing so, it can turn pilots into scalable business cases and accelerate adoption across the lifecycle.



In short, PropTech addresses the pain points; Al unlocks maturity. Together, they move real estate beyond scattered pilots into an intelligent ecosystem where outcomes are transparent, predictable, and scalable across portfolios thereby setting the stage for intelligent real estate.

24 25

Industry leaders we engaged with stressed that getting projects completed on time and within budget remains a major challenge. Despite progress in downstream adoption, globally, nearly 30% of commercial projects still miss their scheduled deadlines^{xiv}, creating cost pressures, contractual complexity, and delayed absorption of new supply. Much of this is linked to how the design phase is managed.

Manoj Sharan Managing Director, IFM & Asset Services

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While FM and OM systems are increasingly integrated, their effectiveness is sometimes limited by structural design constraints. Likewise, retrofitting solutions such as sensor-based lighting and HVAC systems, in existing buildings, have sometimes struggled to deliver full value.

Project heads whom we surveyed highlighted that late-stage design revisions account for over *half of delays and account for over 2/3rd of the cost rise.* Industry leaders also recognized that many of these challenges stem from their needs not being embedded early enough. Recognizing this, pro-active developers are contemplating beginning to involve facility management and operational teams earlier in the design process to anticipate downstream requirements and reduce the risk of disruption.

CUSHMAN & WAKEFIELD

FRONTIERS PROPTECH

LOOKING AHEAD, FOUR SHIFTS WILL BE CENTRAL TO HOW PROPTECH CREATES VALUE:



Advancing design maturity

- Embedding occupier requirements, FM inputs, and cost implications from the outset is becoming critical.
- PropTech tools such as generative design, digital twins, and simulation platforms make this possible by hardwiring operational and sustainability needs into the earliest stages.
- This lead to minimising rework, compresses timelines, and ensures delivery outcomes are predictable, occupier-ready, and digitally aligned.



Evolving business models

- The industry is moving away from capexheavy structures toward performancelinked "as-a-service" models for functions such as cooling, filtration, and wastewater treatment.
- IoT sensors, ESG dashboards, and predictive analytics enable this shift by tying costs to outcomes, improving accountability, and aligning value across stakeholders.
- PropTech ensures performance can be tracked, verified, and monetised in real time, making these models viable at scale.



Hyper-Personalization: A forward-looking trend

- With certifications now mainstream and digital-first workplaces becoming the leasing norm, occupiers are shifting expectations toward hyper-personalisation^{xvi} i.e. workplaces designed around their identity, wellness priorities, and productivity needs.
- The shift is already visible in pockets:
 - In marketing and leasing, data-driven platforms are enabling curated proposals and occupier-specific content. In global markets, such tailoring has boosted engagement by 50%+ and lifted conversion rates by ~10%xvii.
 - At the asset level, managed office providers and facility operators are piloting bespoke interiors, flexible FM models, and prefabricated modules that incorporate occupier requirements earlier, thereby reducing rework and delays.
- For occupiers, hyper-personalisation delivers culture- and sustainability-aligned workplaces, predictive space and resource optimisation, and offices that act as strategic enablers of talent, wellness, and efficiency.
- Today, these remain early pilots, but as PropTech and AI mature, data-driven platforms will become the integrator—linking design, operations, and tenant experience into a seamless, scalable system.



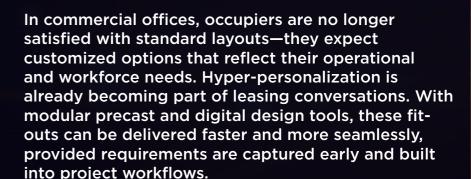
Unlocking built-to-suit (BTS) potential

- Large occupiers are commissioning customised campuses that sit outside the conventional leasing pool. PropTech can help standardise, digitise, and operationalise these spaces so they can enter institutional-grade inventory more seamlessly.
- Our analysis indicates that India's top 10 office occupiers alone account for
 ~73 mn sq ft of BTS campuses, representing ~USD 11 bn in asset value. This concentration
 outside the mainstream leasing pool underscores the scale of opportunity that PropTech can
 unlock by standardising and institutionalising such spaces.



Shikha Shah

Executive Director, Commercial, Residential and Social Infrastructure



CONCLUSION

The journey of Indian office spaces is moving decisively toward intelligent, PropTech-enabled workplaces. What began as pilots to fix inefficiencies is now reshaping strategy, with AI emerging as the force that will scale adoption and institutionalize change.

Based on C&W Research's survey with developers, flex operators, integrated FM providers, and PropTech firms, the following outlines the strategic priorities for key stakeholders in commercial office projects as PropTech and AI adoption moves forward.

Table 2: Strategic Implications for Stakeholders



Occupiers

- · Demand sustainable, certified, and digitally enabled workplaces as the new baseline.
- Adopt platforms that provide real-time transparency on leasing and performance.
- raise the bar expecting compliance-ready digital infrastructure, speed-to-occupy fit-outs, and scalable campuses.
- Push for hyperand productivity.



- Embed FM and occupier inputs upfront through digital twins and generative design.
- margins, reduce rework, and ensure predictable delivery.
- GCCs in particular will efficiency.
- personalisation that aligns space with culture, wellness,



Developers & Operators

- Use Al-driven tools to protect
- Shift toward performancelinked "as-a-service" models for accountability and
- Leverage PropTech to standardise and institutionalise BTS campuses (~73 mn sq ft, USD 11 bn) into Grade-A supply.



Investors

- Treat certifications and ESG integration as baseline for asset performance.
- Channel capital toward digitally enabled portfolios with demonstrable operating efficiencies and resilience.
- Prioritise assets with PropTech-driven transparency (IoT, ESG dashboards, predictive maintenance) to de-risk investments.
- View BTS campuses as a growing institutional asset class, backing PropTechenabled standardisation and compliance to integrate them into Grade-A inventory.

PropTech addresses today's bottlenecks; Al unlocks tomorrow's maturity. To translate innovation into market-wide impact, collaboration across occupiers, developers, operators, and investors is essential. The winners will be those who act now-turning pilots into portfolios, and real estate into a truly intelligent ecosystem.

GLOSSARY:



BIM (Building Information Modeling):

A digital representation of a building's design and physical/functional attributes, improving collaboration, clash detection, and lifecycle management.



BMS (Building Management System)

A computer-based system that monitors and controls building services—HVAC, lighting, power, fire safety, and security. Increasingly integrated with PropTech and IoT platforms for smarter operations.



BTS (Built-to-Suit)

Customised real estate assets developed to occupier specifications—such as corporate campuses—outside conventional leasing pools. PropTech enables standardisation and institutionalisation of BTS supply.



Digital Twin

A dynamic virtual replica of a physical asset that integrates real-time data from IoT sensors to simulate performance, optimise operations, and support predictive maintenance.



Generative Design

An Al-driven process that uses defined parameters (e.g., cost, sustainability, efficiency) to generate and evaluate multiple design options automatically.



Hyper-Personalisation

Customising workplaces to occupierspecific culture, wellness, and productivity needs, enabled by IoT, predictive space planning, and modular fit-outs.



Predictive Analytics

Al-driven analysis of large datasets to forecast outcomes such as leasing demand, pricing trends, or maintenance requirements.



Predictive Maintenance

AI- and IoT-enabled systems that forecast equipment failures or service needs before they occur, reducing downtime, costs, and disruption.

METHODOLOGY

PropTech company mapping: Over 2,200 active firms were identified and classified according to their primary offerings. Companies focused exclusively on residential or industrial real estate, as well as those that are deadpooled, acquired, or acqui-hired, were excluded. PropTech has been treated as an umbrella category encompassing both traditional solutions (leasing platforms, asset operations, occupier experience tools) and ConTech solutions (planning, design, and on-site execution technologies).

ABOUT THE SURVEY

This report is underpinned by insights from a targeted survey of 20 senior leaders across India's office real estate ecosystem. Respondents included senior representatives from leading developers, asset management firms, flex and workspace operators, facility management providers, and PropTech companies operating across geographies.

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SOURCES:

- i. Accenture, "Rewiring for success," 2017.
- ii. Al Human Capital: Proxied by Al skill demand in online job vacancies (Lightcast data). It reflects the extent to which sectors require Al-related expertise, indicating their ability to build and sustain Al capacity. Al Exposure: Measures the degree to which sectors are technologically and taskwise exposed to Al, i.e, how much of their activities could potentially be affected by Al. This is adjusted for barriers to adoption, such as regulation or feasibility. Al Innovation: Based on Al-related patenting activity, this dimension captures the innovation intensity of each sector in developing new Al applications and technologies. Al Use: Derived from firm-level survey data on actual Al deployment, it measures the real-world uptake of Al tools and systems within sectors.
- iii. TeamLease Digital, "Al Adoption in Key Indian Sectors Touches 48% in FY24," Times Group.
- iv. Gleed, 'India Biannual Construction Market Report,' October 2024; Bridgit, 'Labor vs material cost in construction,' March 2025; Civil practical knowledge, 'Construction Cost Per Square Feet in India,' August 2025.
- v. The analysis includes average CAGR of steel, cement, copper, and aluminum whic making up more than half of raw materials cost.
- vi. C&W analysis of Gleed India Biannual Construction Market Report.
- vii. C&W Research of Tracxn database as of November 2024.
 - For Methodology and scope refer to endnotesviii. Only the top 3-4 subsegments by company concentration have been highlighted in the infographic. Remaining smaller subsegments have been grouped under "Others" as follows:
 - Construction Post-Completion Approvals, Quality Inspection, Structural Work.
 - Planning & Feasibility Credit / Risk Due-Diligence, Demand & Market Assessment, Investment / Fund-Raising Platforms, Site Selection.
 - Operations & Asset Management Asset Monetization, Lease Risk & Capital Planning, Optimization Loops, Post-Occupancy Analytics, Predictive Maintenance.
- viii. Figure 4 Methodology & Scope:

This study maps the startup ecosystem across the building lifecycle, categorizing companies by the phase they primarily cater to. Classification was based on company descriptions, offerings, and database tags, with duplicates removed to ensure unique counts. The scope covers firms active in commercial and mixed-use real estate, while those focused exclusively on residential or industrial segments, as well as deadpooled, acquired, or acqui-hired firms, were excluded.

For this analysis, PropTech is used as an umbrella term. It includes both traditional PropTech solutions (leasing, operations, occupier experience) and ConTech tools (planning, design, on-site execution), as both are integral to understanding technology adoption across the building lifecycle. The companies mapped are primarily digital or software-enabled platforms, reflecting the shift toward data-driven, integrated real estate workflows.

- ix. The analysis was carried out by examining the total office space across the top eight cities, along with average quoted rentals, and calculating vacancy rate shares for green-certified versus non-certified buildings.
- x. BluEnt, 'How Al BIM Modeling Shaping the Future,' February 2025.
- xi. C&W Analysis.
- xii. Vestians 'Why Global Capability Centers Are Expanding in India And What It Means for Real Estate Strategy,' November 2024.
- xiii. The maturity analysis (Fig 11) reflects companies mapped at the broader lifecycle phase level. Since firms may operate across multiple sub-phases, they can appear in more than one phase in this view. As a result, the concentrations shown here should not be read as summing to total PropTech company counts, but rather as an indicative view of maturity distribution across lifecycle phases
- xiv. Maxx Builders, 'Why 30% of Commercial Construction Projects Fail to Meet Deadlines,' October 2024.
- xv. The estimate, is based on Cushman & Wakefield's analysis of the self-occupied portfolios of India's top 10 corporates Infosys, TCS, HCL, Tech Mahindra, Cognizant, Capgemini, Oracle, Microsoft, Amazon, and Wipro. The valuation was derived using weighted average capital values across major office markets (Bengaluru, NCR, Hyderabad, Pune, Chennai, Kolkata, and Mumbai), where prevailing benchmarks on an average ranged from ₹10,500 to ₹22,500 per sq ft. The figures are intended as research-based estimates of market value and not transactional valuations.
- xvi. IDC, 'Hyper-Personalization: Intelligent Customer Engagement for Business Growth,' May 2025.
- xvii. Netguru, 'Unlocking Hyper-personalization in the Real Estate Industry With Generative AI,'
 November 2024.

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About Cushman & Wakefield

Cushman & Wakefield (NYSE: CWK) is a leading global commercial real estate services firm for property owners and occupiers with approximately 52,000 employees in nearly 400 offices and 60 countries. In 2024, the firm reported revenue of \$9.4 billion across its core service lines of Services, Leasing, Capital markets, and Valuation and other. Built around the belief that **Better never settles**, the firm receives numerous industry and business accolades for its award-winning culture.