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Colliers INTERNATIONAL

FICCI

EMERGING TRENDS IN REAL ESTATE

TECHNOLOGY & NEW ASSET CLASSES





FOREWORD

Technology is going to rule the way we work, live and make decisions about our lives in the times to come. In this report by Colliers International on How technology and new asset classes will advance over the next decade on the prospects of Anytech, Amentisation and the rise of Shared Economy, which are the three major alterations and are believed to impact the real estate sector in the coming decade, have been explained in a comprehensive manner.

AnyTech is the broad technology-based force that is reshaping work processes, workforces and workplaces across industries in a consistent manner. In general, it is believed to create a workplace environment where fixed costs and sunk assets are minimized, employees and teams are more mobile and regularly in flux and everything from software to desk space is delivered on an agile, as-needed basis, rather than 'owned.' In the light of this information, it appears that in the coming times to come, features like automation, technology, decentralization and collaboration along with artificial intelligence and the internet of workplace will be the drivers of Anytech.

The importance of Amentisation gains ground in light of the rise of a new generation of young people, which will need the conceptualisation of Gen Z spaces to meet their varied needs. This generation will comprise one-fifth of the Indian workforce by the end of 2021, and their needs will drive the move towards wellness solutions in the form



Sanjay Dutt
Joint Chairman, FICCI Real Estate Committee &
MD & CEO, Tata Realty & Infrastructure Ltd



FOREWORD

Technology is transforming the landscape of Indian Real Estate Sector like never before. The rapid technological advancement and innovations are redefining the future of this sector. Tech ecosystem is not just bringing in efficiencies in space management but literally is the game changer.

While the Indian real estate sector has relatively been a late entrant to adapting newer technologies in construction, its rapid ramp-up in simplifying the property sale/purchase/lease process has had significant positive impact in the buyers/seller market and the game has just begun. To give boost to technology adoption, Government of India too has rolled out several tech-led initiatives under “Global Housing Technology”.

FICCI and Colliers International have brought out this report at the opportune time. The release of the Report at the 13th Edition of FICCI Annual Real Estate Summit on 24th January 2020 would set the context and enrich the discussions at the conference. This report focuses on vital parameters like Anytech (Workplace + Tech), Amenitisation, Shared Economy & new asset classes. These parameters will further be complimented by Artificial intelligence, Internet of workplace, Decentralisation and collaboration, Automation and Cloud and on-demand.

I am confident, that the findings of the Report would be most useful not only for realtors, but also for consumers, government, research & academic institutes and the industry. The ideas and deliberations arising out of this Report would go a long way in addressing the challenges and reflecting on the way forward.



Raj Menda
Joint Chairman, FICCI Real Estate Committee &
Corporate Chairman, RMZ Corp



FOREWORD

Technology is at the forefront of change and has immensely disrupted our daily lives positively in the last decade. We believe that the next decade will usher in new formats of workplaces, amalgamate workplaces and technology to increase productivity. As technology upgrades, it will dictate how workplaces will evolve over the upcoming decade. The amalgamation of technology such as robotics process automation, 5G, Internet of Things, will make our workplaces more connected and smarter.

In this connected world, the concept of "shared economy" has found many takers. In India, for instance, the shared economy in terms of transport, travel, CRE and residential sector, have become widely popular in the last five years. Among other countries, India has among the fastest-growing flexible workspace sector, with the coliving sector too catching the eye of the millennials. Over the next decade, it is pertinent to note that the shared economy is likely to gain further traction as we all utilize resources in a sustainable manner.

In this report, Colliers International showcases how technology and newer asset classes will advance over the next decade. The report peaks into the future to explore how the shared economy in terms of coworking and coliving will share the real estate sector and how such stakeholders can seize opportunities.



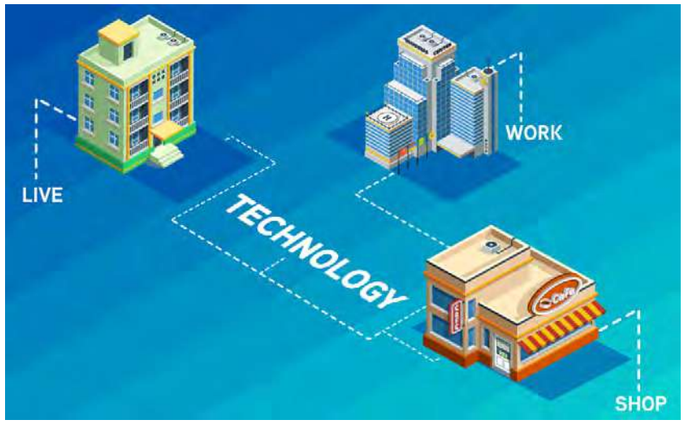
Sankey Prasad
Managing Director & Chairman
Colliers International India

EMERGING TRENDS IN REAL ESTATE -
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The real estate sector has evolved over the last decade with constant change in the business environment bringing new disruptions. These changes have altered the way we work, shop and live, and it is technology that is enabling this change.

Over the next decade, we expect to see technology mould the decisions of the major stakeholders. In this report, we discuss the three major changes impacting the real estate sector and how developers, occupiers and investors can enhance their decision.

Figure 1: Nature of disruption



1. ANYTECH[1]

AnyTech, as defined in Colliers' report The Rise of AnyTech, 27 November 2019, is the broad technology-based force reshaping work processes, workforces and the workplace across industries in consistent ways. In general, we believe it creates a workplace environment where fixed costs and sunk assets are minimized; employees and teams are more mobile and regularly in flux; and everything from software to desk space is delivered on an agile, as-needed basis, rather than 'owned.'

We believe that over the next decade, the industry is likely to see even more transformation in the workplace as the pace of technology-driven change accelerates. We note that technology is moving on from becoming the domain of certain industries to becoming more embedded across sectors in processes, customer interactions and business models. With enterprises incorporating technology in various aspects every enterprise is in effect becoming a technology company.

There is no doubt the AnyTech convergence will present challenges and disrupt some standard practices, as it rewrites the human: server balance – the ratio of human talent to technology within a workplace or organisation. While human numbers may remain the same, AnyTech will grow bigger in proportion in the human, server base workforce.

Source: Colliers International

Figure 2: AnyTech decoded





What changes will AnyTech bring to CRE strategies?

- We expect occupiers to prefer for smaller, lighter workstations that can be easily moved or reconfigured, depending on work requirements. We recommend that occupiers repurpose the workplace for wellness and leisure to boost staff morale, which should have a positive impact on employee productivity.

- We believe that as technology advances, 5G can enhance capabilities of Internet of Things (IoT) and make buildings better connected, leading to a more robust digital infrastructure. We believe that landlords need to recognise that 5G can benefit their buildings by enabling faster and smarter connectivity, which has the potential to boost the valuation of their buildings.

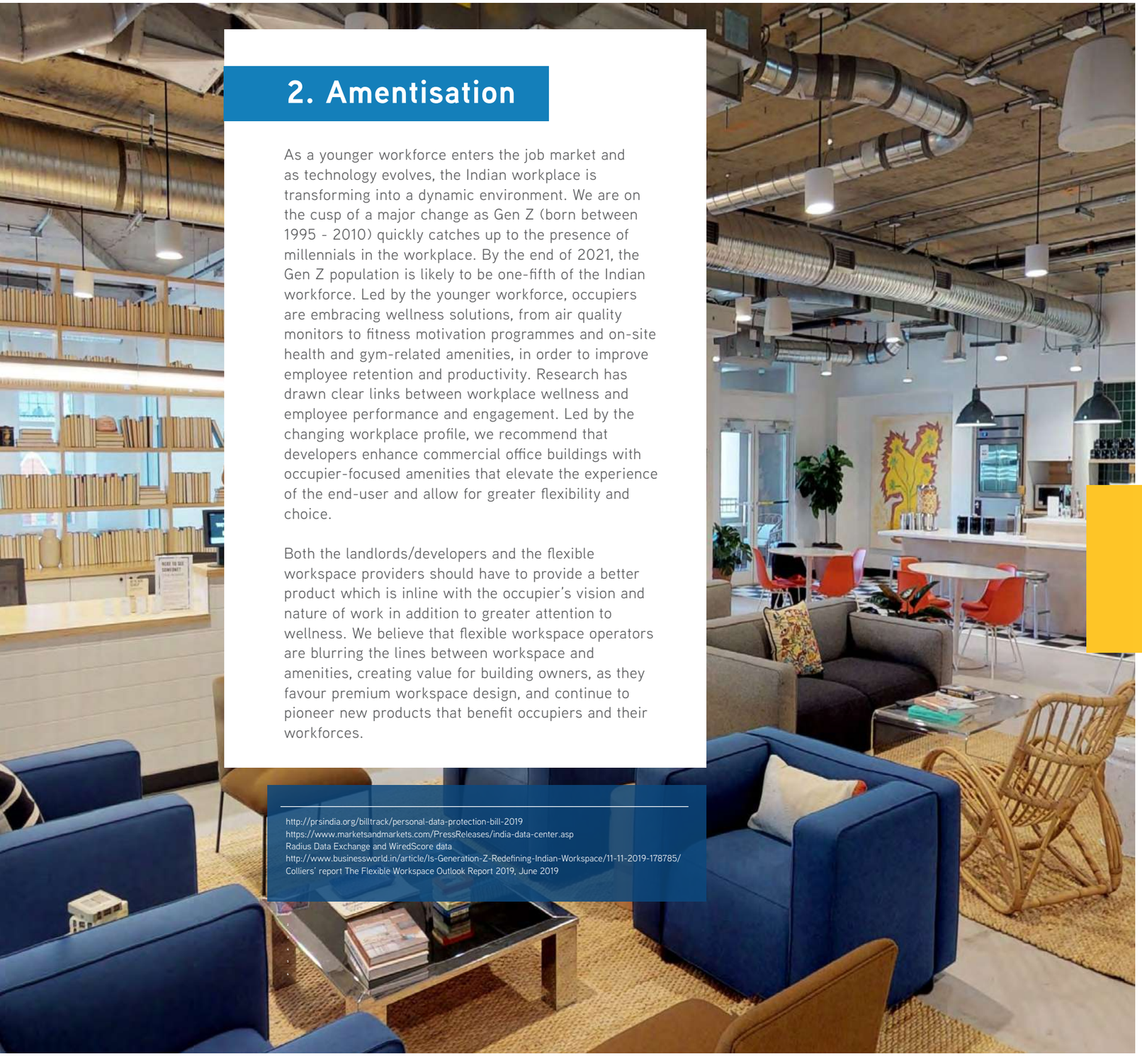
- Despite the growth of cloud and outsourced infrastructure, we believe that many firms can secure more real estate to house their burgeoning data resources, for regulatory and security reasons. The government has tabled the India's Personal Data Protection Bill, 2019 that mandates data localization, which should lead to increased requirement for data centers. According to Markets and Markets , the India data center market size is projected to reach USD 1.5 billion by 2022 from USD 1.0 billion in 2018, growing at a CAGR of 11.4%.

- With 5G scheduled to roll out in India by 2021, we believe that occupiers are likely to increasingly favour connectivity over location, once the new technology is firmly entrenched. In fact, occupiers in London have ranked connectivity higher in the priority than location, as they are ready to pay an additional 5.0% for property with strong connectivity.

- We also see companies in the industrial and manufacturing segment embracing technology as the fourth version of industrial revolution gains momentum. The exchange of real time information building efficiencies should enable decision-makers to put technology in the center of their CRE strategy. Recently, HCL Technologies has partnered with Portuguese firm Critical Manufacturing to provide industry 4.0 services, consulting and support to manufacturing customers.

[1] https://anytech.colliers.com/*Internet of workplace create environments in which resources can be allocated and conditions changed on a continuous basis to support demand fluctuations, boost efficiency and enhance the employee experience

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2. Amentisation

As a younger workforce enters the job market and as technology evolves, the Indian workplace is transforming into a dynamic environment. We are on the cusp of a major change as Gen Z (born between 1995 - 2010) quickly catches up to the presence of millennials in the workplace. By the end of 2021, the Gen Z population is likely to be one-fifth of the Indian workforce. Led by the younger workforce, occupiers are embracing wellness solutions, from air quality monitors to fitness motivation programmes and on-site health and gym-related amenities, in order to improve employee retention and productivity. Research has drawn clear links between workplace wellness and employee performance and engagement. Led by the changing workplace profile, we recommend that developers enhance commercial office buildings with occupier-focused amenities that elevate the experience of the end-user and allow for greater flexibility and choice.

Both the landlords/developers and the flexible workspace providers should have to provide a better product which is inline with the occupier's vision and nature of work in addition to greater attention to wellness. We believe that flexible workspace operators are blurring the lines between workspace and amenities, creating value for building owners, as they favour premium workspace design, and continue to pioneer new products that benefit occupiers and their workforces.

http://prsindia.org/billtrack/personal-data-protection-bill-2019
https://www.marketsandmarkets.com/PressReleases/india-data-center.asp
Radius Data Exchange and WiredScore data
http://www.businessworld.in/article/Is-Generation-Z-Redefining-Indian-Workspace/11-11-2019-178785/
Colliers' report The Flexible Workspace Outlook Report 2019, June 2019

Figure 3:

Landlords as Experience Management Experts

- Fostering community and collaborative events
- Incorporate green or natural spaces
- Advanced air quality monitoring and ventilation systems.
- Low Volatile Organic Compounds (VOC) and sustainable materials into building design and construction
- Clean transportation (e.g. electric vehicle charging stations, bike parking spaces). Last mile connectivity for employees: Rapid Metro, Feeder metro busses
- Use IOT technology to track, adapt, and optimize resource usage. Useage of mobile applications that provide several services such as ordering food at discount, hailing cabs etc

Source: Colliers International

What does Amentisation mean for occupiers and landlords?[6]

- We believe that the amentisation of office buildings can elevate tenant experience and become a key real estate driver. Over the next decade, amalgamating hospitality elements into the office environment and creating a technology-enabled, amenity-rich outsourcing platform for occupiers should feature heavily in the strategies of building owners.
- Building owners should leverage the flexible workspace sector to create a range of amenities to better serve their occupiers and their workforce. For instance, developers such as RMZ Corp, Brigade Enterprises. and Ascendas have their own flexible workspace brands.
- In a survey conducted by job portal Shine.com, 60% of millennials in India seek jobs that allow flexibility, and about over 52% feel that their organisation might not have the adequate culture to provide flexible working options. As a younger workforce enters the job market and as technology evolves, we foresee a higher number of occupiers adopting new approaches to workspace design, offering options such as a) experiential workplace, and b) flexible workspaces options to retain talent. Over the next decade, we foresee occupiers focusing on effectively utilizing and shrink in some instances due to lower demand for large, dedicated meeting facilities or fixed desks as more employees choose where to work.
- We believe that office buildings with better amenities tend to have a better tenant profile, which should increase the value of a building for investments purposes. We note this especially as institutional investors in India are preferring to invest in office buildings in cities such as Bengaluru, Hyderabad, and Pune.

3. Rise of shared economy – Understanding the drivers and impact on real estate

Flexible workspace

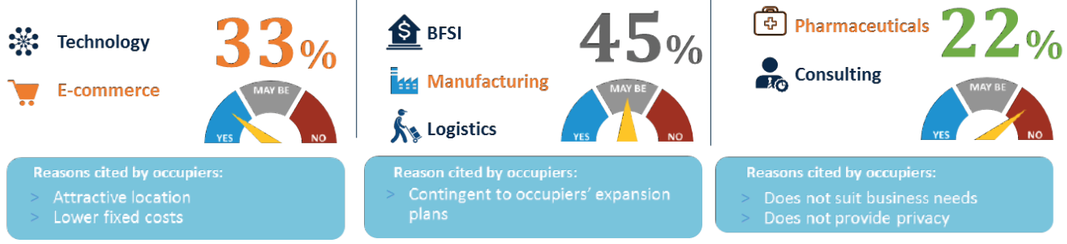
Flexible workspaces have grown rapidly in India since 2017, with the sector garnering a 19% share in total leasing in 2019. According to Colliers International, the flexible workspace sector in India has leased about 11.2 million square feet (1.0 million square meters) of space in 2019, which is the highest annual total ever observed.

Going forward, we expect consolidation among flexible workspace operators to pick up in pace from 2020 onwards, as larger operators with financial discipline acquire smaller companies for inorganic growth, to enter new locations, and to acquire scale. As a result, we expect average annual leasing volume by flexible workspace operators to be in the range of 9-10 million square feet (0.84 – 0.93 million square meters) during 2020-2021.

Colliers International conducted a survey and detailed interviews to understand occupiers' flexible workspace strategies over the next two years. The survey was conducted from June to August 2019, and solicited responses from over 50 occupiers, across diverse sectors including technology, banking, financial services & insurance (BFSI), e-commerce and manufacturing, among others. Our detailed interviews with flexible workspace operators revealed that current demand in flexible workspace centers is being driven by enterprises which typically have more than 500 full-time employees. It has been recently reported that in India, WeWork garners 52.0% of its demand from enterprises1, compared to 30.0% globally. Other operators, such as Smartworks, Awfis, Regus and IndiQube, are also increasingly deriving demand from enterprises.

About 33.0% of the occupiers surveyed by Colliers International said they are likely to take up space in a flexible workspace over the next 24 months, primarily for the host of benefits provided. About 45.0% of occupiers surveyed are uncertain about leasing in flexible workspaces, with the decision hinging on their expansion plans over the next two

Figure 4: Occupier outlook for flexible workspace



How is flexible workspace impacting work?

- We believe that the rising viability of remote work and virtual collaboration should enable firms to distribute various functions across a number of smaller sites. We note that this should enhance flexibility, control costs and offer employees more choice – and even, in some cases, to forgo taking up space altogether.
- Efforts to accommodate a more mobile workforce and ad-hoc teams especially in technology companies should support the continued development of the flexible workspace sector, which continues to gain traction in India.
- In 2020, operators focusing on polishing niche amenities in terms of adaptation of technology should prove to be game-changers, differentiating operators in this highly competitive segment. Smartworks is the first flexible workspace operator in India to introduce an AI-enabled robot that helps in overall office management through services such as facial recognition and send real-time updates to facilities managers based on requests received.



Co-living & Student housing (Rental Housing)

The concept of ***shared economy*** has garnered much attention over the last five years. As technology shapes our everyday life, be it the way we live, or the way we travel, millennials have steered demand for the shared economy. Coliving is attempting to reshape the way the residential sector functions. With millennials driving housing demand, there is a marked change in demand patterns.

As a general trend, it is noted that landlords and developers are signing joint development agreements with coliving operators in educational hubs and tier 2 cities where migrant student population is high. Consensus estimates suggest that these properties can offer yields up to 2X higher than pure residential yields of 2-3%.

How is coliving reshaping the residential sector?

- We recommend that developers experiencing large unsold inventory should strategise to repurpose the inventory for rental housing for coliving or student housing.
- We recommend developers either buying land parcels or partnering with coliving operators for properties, which are near to prime business districts. We believe that coliving facilities in such locations in cities such Bengaluru, Hyderabad, Delhi-NCR, Pune can ensure steady demand from migrant professionals.
- In the next decade, we expect the rental housing market to drive residential real estate, led by upcoming robust regulatory initiative by the government. The ministry of housing and urban affairs recently unveiled the draft Model Tenancy Act 2019 that proposes to create a legal framework to bring harmony to the landlord-tenant relationships. While the tenant has a cap on their security deposit and protection from arbitrary increases, the landlord is entitled to stiff penalties for failure to vacate and use a transparent repossession mechanism. We note that the tenancy act has the potential unleash 'built to rent' properties in India, wherein properties are built for the sole to reason of renting, and not for selling.
- We foresee greater activity in educational hubs in tier II cities such as Jaipur, Kota, Dehradun and Indore.

NOTES

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Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialisation, and its emergence as one of the most rapidly growing global economies. A not-for-profit organisation, FICCI is the voice of India's business and industry.

From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 250,000 companies. FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

Contact Us

Neerja Singh
Director
Infrastructure
Telephone: +91 11 2348 7326
neerja.singh@ficci.com

Sachin Sharma
Senior Assistant Director
Real Estate, Urban Infrastructure & Smart Cities
Mobile: +91 96431 58335
sachin.sharma@ficci.com

Shaily Agarwal
Senior Assistant Director
Real Estate, Urban Infrastructure & Smart Cities
Mobile: +91 9911477779
shaily.agarwal@ficci.com

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Colliers International was the first International Property Consulting firm to be established in India. In India, we are present in 9 locations: Bengaluru, Mumbai, Gurgaon, New Delhi, NOIDA, Pune, Chennai, Hyderabad and Kolkata, with over 1700 professionals. Our offerings include services for Occupiers, Developers and Investors.

For more information about Colliers International India, contact:

Sankey Prasad
Managing Director & Chairman
sankey.prasad@Colliers.com

Marketing and PR
Sukanya Dasgupta
Senior General Manager
sukanya.dasgupta@colliers.com

Authors:
Megha Maan
Senior Associate Director | Research
megha.maan@colliers.com

Vaishnavi Bala
Assistant General Manager | Research
vaishnavi.bala@colliers.com



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