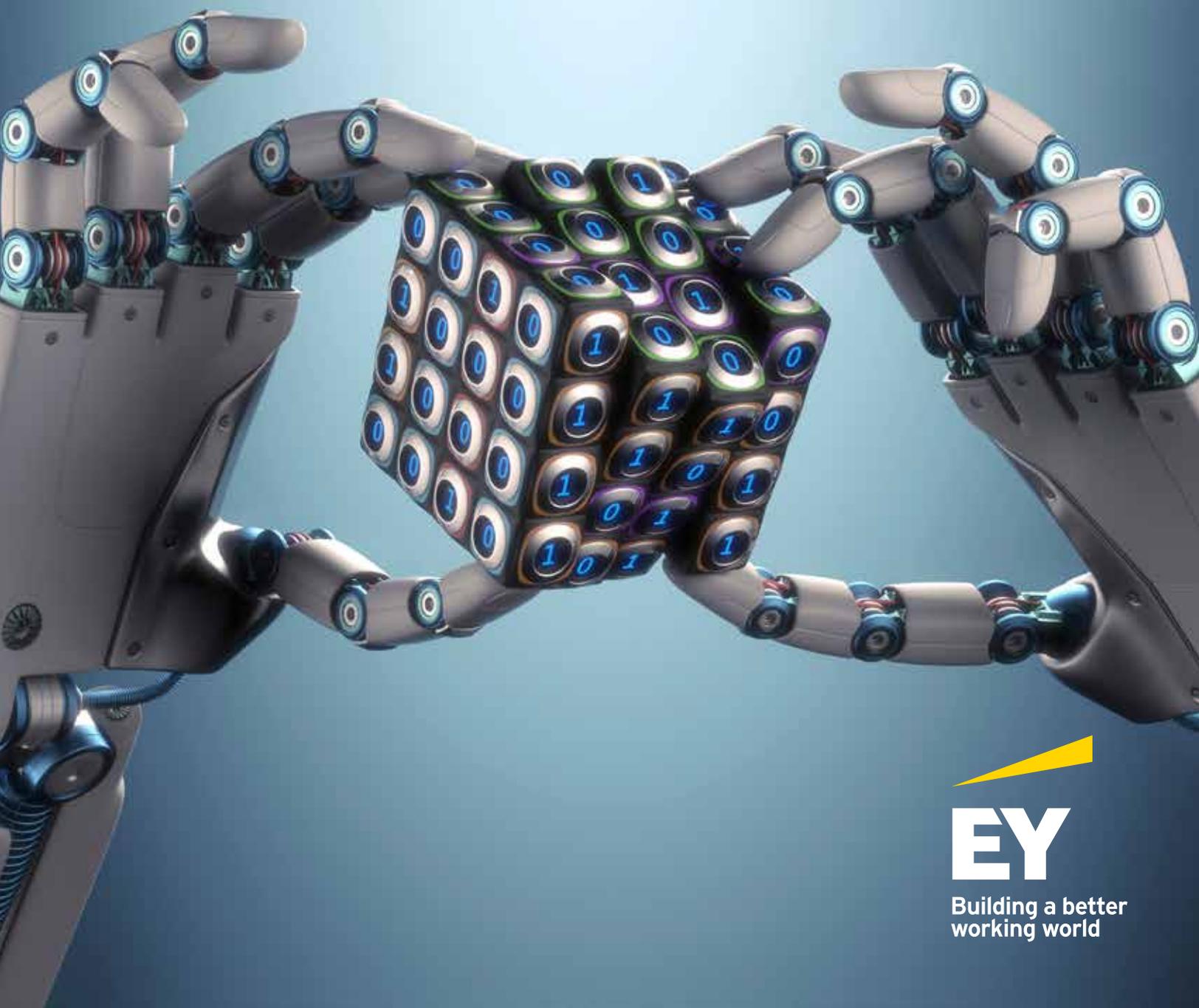


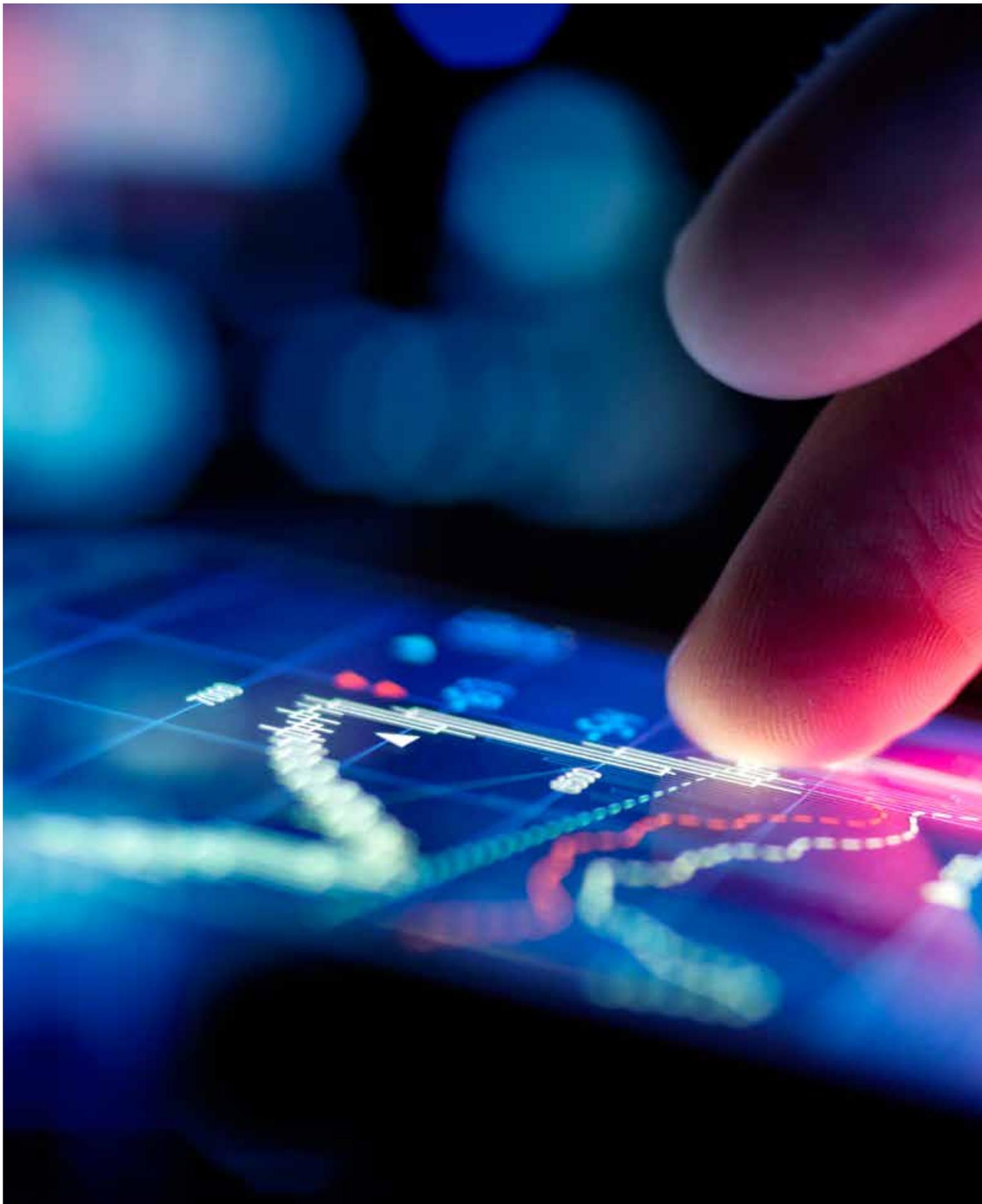
# Digital trends in real estate, hospitality and construction

Building blocks for future growth



**EY**

Building a better  
working world





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## How will your business survive and grow in the digital era?

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The digital future is here. Whether real estate is center or secondary to your business, the choices you make now will position you as a cutting-edge industry leader or a dinosaur in the age of technology.

All industries have a real estate component, whether they are owners, operators, investors or occupiers of real estate. The importance of considering factors such as customer preferences and expectations, building and information security, cost efficiency and environmental impact in relation to real estate is critical in today's increasingly digital environment. This represents opportunities and challenges.

Having a strategy in place to identify and address current and emerging issues is key in today's fast-paced environment – but developing one can overwhelm companies, even those with well-established teams.

# Digital trends in real estate

## In the short-term

Disruptive forces can pave the way for explosive growth or take down reputable giants. Having a strategy in place to identify and address emerging disruptive trends, analyze and prioritize their importance, understand their long-term implications, highlight risks and plan for action is imperative for thriving in this business environment.



### The sharing economy

The sharing economy provides enhanced leisure experiences, business opportunities and conveniences that were previously out of reach for many.

The real estate, hospitality and construction (RHC) sector has felt the effects of this new economy. UberRUSH has changed the logistics and warehousing business, Airbnb has changed the way people travel, and construction machinery is now shared to generate profits.



### Internet of Things/big data

It is estimated that more than 1b "things," excluding smartphones, tablets and PCs, will be connected in commercial buildings alone by 2018. This is up 35% from 2015, according to Gartner.

In the RHC spaces, the Internet of Things (IoT)/big data can help enhance customer experience, identify operational efficiencies, analyze building information management for owner/operators and manage project risks.



### The last mile

Distribution real estate is rapidly changing, given the rise in e-commerce and explosive growth in urbanization. Advanced algorithms, drones, delivery robots and autonomous vehicles are poised to shape the distribution landscape.

In the short-term, mega warehouses in rural areas and smaller warehouses in urban centers are being built to distribute goods on demand, while brick-and-mortar shops are disappearing or being reconfigured or repurposed due to changes in shopping behavior.



## Robotic process automation

Robots can perform rule-based tasks based on pre-defined instructions. They can also understand unstructured data and human communication, and draw conclusions enhancing process automation. Robots can also learn from experience in order to perform complex tasks.

In the near-term, there will be less need for back-office functions, leading to reconfigured and ultimately fewer offices. Rapid data processing in the hospitality space will lead to efficiencies and free up time to focus on customer service. Current construction technology has the ability to connect machinery and workers to the cloud, increasing precision and safety.



## Compromised cybersecurity

The average time to detect a cyber attacker's presence in a company's system is 140 days, compromising not only its proprietary business information, but also sensitive customer data.

Building, vendors and tenants are interconnected, and business systems are shared across building networks. Building IT systems have some level of security, but often have deficiencies, exposing companies' networks to cyber attacks.



## Autonomous vehicles

The auto industry, as well as technology and logistic companies, are investing millions to create vehicles that can run safely without human intervention, meaning that autonomous vehicles may soon be a common sight.

There is a potential for disruption in real estate's industrial, office, residential and retail segments as a result of different parking requirements as well as warehousing and manufacturing logistical changes.

## On the horizon



## Virtual brokerage and leasing

Real estate companies are moving rapidly toward a more self-service model. Property owners can enhance their marketing strategies by offering virtual reality tours of pre-construction projects, and also owning more of the customer experience via web technology. Fewer points of contact for leasing or selling space reduces contract turnaround time, allowing for greater capital retention and quicker deployment of capital to other projects.



## 3-D printing

3-D printing, also known as additive manufacturing, creates objects of any shape from a digital 3D model.

3-D printing could have an impact in warehousing and production facilities. In construction, concrete printing, when combined with a mobile prefabrication center, has the potential to reduce the time needed to create complex building elements.



## Blockchain

Blockchain technology allows companies to streamline and accelerate business processes, increase cybersecurity, and reduce or eliminate the roles of trusted intermediaries or centralized authorities.

Execution of contracts in a safe and trustworthy environment remains a challenge. For example, blockchain technology is being piloted for land title registry in Sweden, Ghana, the Republic of Georgia and other countries. It is also being used for financing cross-border projects, real estate sharing applications and varying types of "smart contracts."

# EY's core digital offerings

No matter what stage of technology adoption your business is currently in, we can help take your business to the next level with our strategic insights and experience in the following five core areas:



## Digital enterprise and execution

Rethinking the business strategy and operation model in the digital age:

- ▶ Development of an enterprise-wide digital strategy, including analytics, cybersecurity, operations, technology, finance and tax
- ▶ Analysis and optimization of marketing channels, including websites and loyalty programs
- ▶ Design of smart building strategy
- ▶ Development of mobile strategy



## Experience transformation

Embracing the world of the customer, then design and implement new experiences:

- ▶ Develop data analytics to obtain insight into the customer's experience
- ▶ Develop advanced predictive analytics to develop targeted marketing
- ▶ Use of analytics to identify cross-selling opportunities, customer loyalty and behavior patterns
- ▶ Develop mobile services analytics to improve mobile customer strategy and optimize the customer experience



## Digital trust

Scanning the digital risk horizon and building agility to respond to digital risks:

- ▶ Understand cyber risk exposure and develop an advanced threat management process
- ▶ Assess enterprise-wide identity and access management
- ▶ Recommend options for data protection and privacy



## Incubation and innovation

Establishing an end-to-end innovation capability to incubate new ideas and business models:

- ▶ Our EYnovation™ program offers start-ups and fast-growing companies EY services, our global network, the opportunity to share relevant knowledge and a dedicated EY mentor.
- ▶ Advisory services are also provided around legal structure, obtaining approvals and protecting intellectual property rights.



## Digital operations

Optimizing and automating operations to execute on the promise of digital:

- ▶ Construction of data analytics suite: contracts, revenue, margin, cost, project anomalies analysis
- ▶ Smart operational efficiencies through smart building strategy development
- ▶ Robotics process automation to unlock operational efficiencies
- ▶ Smart cost-reduction opportunities and operational efficiencies through customized analytics

**EY is helping companies around the world define their future-state digital strategy and transformation road map.**



### Global real estate developer

One of the largest developers in Asia, with a primary focus on residential, commercial, retail malls and hotels, was looking to better understand how descriptive, predictive and prescriptive analytics can help drive customer engagement. EY was engaged to identify and help implement a scalable platform to capture data concerning different property types, customers and external sources. Benefits to the client:

- ▶ Built centralized data analytics platform
- ▶ Defined data governance and policies
- ▶ Enhanced analytic capabilities for the following areas: single customer view, family-oriented marketing, top customer analysis and customer journey



### Global cruise line company

One of the largest global cruise vacation company's primary goal was to become a more digitally enabled organization, as well as to improve the guest experience. EY helped the company create a future-state digital and customer experience strategy and transformation road map. Benefits to the client:

- ▶ Identified digital gaps and opportunities
- ▶ Defined a future-state digital experience and road map
- ▶ Constructed a digital organization design and operation model

# Contact us

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## EY | Assurance | Tax | Transactions | Advisory

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### About EY's Global Real Estate, Hospitality & Construction Sector

Today's real estate sector must adopt new approaches to address regulatory requirements and financial risks while meeting the challenges of expanding globally and achieving sustainable growth. EY's Global Real Estate, Hospitality & Construction Sector brings together a worldwide team of professionals to help you succeed – a team with deep technical experience in providing assurance, tax, transaction and advisory services. The Sector team works to anticipate market trends, identify their implications and develop points of view on relevant sector issues. Ultimately, this team enables us to help you meet your goals and compete more effectively.

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