Embracing the world of data for Real Estate
Fit for the future

To thrive in a complex and changing business environment, leaders have to make quick and informed decisions. If data availability was yesterday's challenge, today we are confronted with a flood of data from different sources that needs to be considered in real-time.

49%
agreed

Enhanced data collection, analytics and digitisation improves Real Estate investment decision-making

36%
agreed strongly*

47%
agreed

Technology, big data and the rise of "space as a service" will disrupt the traditional property valuation model

20%
agreed strongly*

* Source: Emerging Trends in Real Estate®: Europe 2018 (based on personal interviews and surveys from more than 800 of the most influential leaders in the Real Estate industry

The value drivers for Real Estate investment have become more complex due to social, cultural and technological change. Real Estate is being redefined from a financial asset to a service. Today, making strategic investment decisions and optimising portfolio performance requires business intelligence through the use of operational, economic and behavioural data sources. A third of the industry still manages data on spreadsheets and mostly in silos, while under-investing in technology. A data and digital strategy, aligned with business' objectives, can help you move from challenges to opportunities.

Getting fit for the future

To get "fit for the future", **Real Estate players should focus today on:** Data and reporting.

Leading Real Estate players are embracing innovation for strategic advantage. CEOs acknowledge that technologies will be a game changer in this industry. While technology is an enabler, data is at the core of the digital transformation and the way to handle these will be a differentiator for the future.

Data at the core of your operations

Many people talk about data, but what does it really mean and how does it apply to the Real Estate industry?

Data sources

Data is generally generated by three sources:

- **from business processes:** for instance, commercial transactions including relevant parameters
- **from individuals:** like social media posts which may be very relevant for investments, as well as, comments from individuals as tenants
- **from machines and sensors:** this can be satellite image data or various pieces of information via 'the Internet of things' in connection with building operations and maintenance; items that can be relevant for both tenants and investors

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Data challenges

Will you get the data challenge right by capturing, leveraging and creating value from it?

Some of today's challenges are:

- Mastering the sheer volume of data
- Building the right data management competencies
- Exploiting the full potential from data: better value for decision-making and investor transparency
- Making strategic use of data; and
- Adapting systems to continuously changing requirements

Simply collecting data is not enough. Companies will be successful when they first put some thought into how they will gain value from their raw data.

01 Collecting data

In a typical Real Estate portfolio, you might find a pan-European structure including certain types of assets from all over the world. Various stakeholders will be involved:

- The **property manager** deals with the rental agreements, the service charges and Opex/Capex.
- The **asset manager** has to arrange cash projections and make decisions regarding assets, while defining portfolio strategy and handling the risk management function.
- On top of that, the **fund manager** collects the data from the other parties and prepares the reporting for the investors, focuses on fees and expense metrics, and performs financial modelling.

The various pieces of data collected are therefore produced by different people and many different systems building it bottom-up. The challenge is how to integrate and connect those data sources. The objective is to have a seamlessly integrated data management framework with integrated supporting technologies. That objective is not new, but with today's available techniques, there is a need to better achieve this to create a competitive advantage.

02 Managing data

Real Estate players are increasingly required to meet the information demands of several stakeholders and build better data management capabilities. Surveys indicate that nearly 65% in the industry think the way their firm manages data will be a differentiating factor in the future. Managing Real Estate data can be approached from three areas:

- **Data ownership**: do you have the right governance and procedures in place? Although the owner/investor of a building should be entitled to all info regarding their property, it may often not have access to it, while the property manager would be sitting on it
- **Data architecture**: how to standardise and ensure quality of data, and how to integrate and combine the "silos"
- **Data delivery**: how to deliver the reporting on your data to your stakeholders on time

03 Extracting value

The next step is extracting value from data. How do you structure and refine data into something useful? The focus points are:

- The application landscape and the level of integration of the applications
- Data format: how much data is exchanged where paper and spreadsheets are still being used?
- System controls: what are the operational risks in handling data and reporting?

The main objectives to use and create value from data are:

- The key is to use more, better and quicker data for **investment purposes**. We see the need to develop artificial intelligence applications and use machine learning to analyse big data. These techniques are already widely used in other investment categories, but for Real Estate we're really only at the beginning.
- Data to achieve **cost efficiency and operational effectiveness**; for instance, the use of information on smart buildings and the use in robotics process automation. By combining data with RPA, quality will improve and manual intervention will no longer be necessary.
- **Occupier interaction**: to better understand occupier behaviour and preferences and respond quicker to them
- And last but not least, to enhance **investor reporting**. By analysing internal data and combining this in a systematic way with external and public data to benchmark e.g. performance.

Integrated data solutions

The key is to have an integrated data solution whereby the manual sharing of data is reduced to a minimum. Current software solutions increasingly try to combine the various functions for Real Estate management, such as leasing functions, the accounting function, managing work orders for maintenance, and other asset monitoring functions. Well known software solutions all come with their advantages and limitations. It's about tailoring them to your needs. What makes one solution better than another: whether it's the capacity to fulfil your specific needs, the potential to interact with other parties such as your property managers, the flexibility and agility of the system, or simply the price and implementation costs.

*Some data tools are already available or can be tailored to your needs.*

Examples

Digital Intelligence platform

The platform, developed by PwC, trawls more than 150 million sites including all major social media channels, media sites, blogs, etc. covering 187 languages. It gives users instant access to billions of conversations from every corner of the public web, as they happen, anywhere on the globe.
Are you wondering about the potential success of putting a development project on affordable housing in the market? Feedback from targeted tenants can easily be obtained, and patterns, in otherwise unstructured data, can be combined with economic data to become more meaningful. By further combining with artificial intelligence, the tool can be very useful in supporting investment decisions.
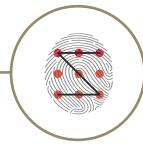
Smart mobility scan

The objective is to optimise a company's Real Estate strategy and its employee's commuting solutions. A corporate user with a number of offices in one country can decide how many offices it should effectively have and use, as well as what makes its employees happy. The big data aspect is about analysing closed/internal data about employees' time spent using offices and their travel data, combined with open/public data about traffic information. This scan will give you a valuable insight and may be used in an app for your employees to help them in their commuting behaviour.

What would happen if a competitor or investment analyst actually had more insight about some of your portfolio assets than you as the manager or owner? And what about a technology provider or peer being able to undermine your fee structure if you don't tackle the data issue well yourself?

Harnessing the power of data and business insights is imperative for Real Estate companies. It will play an essential role in helping companies improve deals and investments, mitigate risk, better understand tenants and their needs, make better and faster decisions and open up new profitable possibilities.

To achieve this, Real Estate companies will need to invest in modernising their IT and data infrastructure, from new data management tools and information portals to artificial intelligence, machine learning and automation systems. They should also make sure they hire people with the right skills, knowledge and expertise to make sense of the data and support their business in tackling this data (r)evolution.

Data is at the core of the digital transformation and we can assist with managing change as you transition to the digital age.

Find out how to be fit for the future, visit
www.pwc.lu/en/real-estate/re-digital.htm

> *"Leading Real Estate players are embracing innovation and digitisation for their strategic advantage. CEOs acknowledge that digital is a game changer. While technology is an enabler, data is at the core of the digital transformation. We know that data and costs are challenging for this industry, but those who will manage them well will also be winners in the future.*
>
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