Technology is set to change real estate forever, writes Nigel Walton, an Associate Lecturer with the Open University and a contributor to Oxford Analytica as part of a Cording Real Estate Group inspired discussion.

When you travel on the train or the tube, you don't bat an eyelid when you notice someone reading a newspaper on an ipad. You might, however, if you saw someone reading the print version.

The ipad is as established as an iphone and a laptop, yet it is worth remembering that when we celebrated new year in 2010 we had never heard of it. It has only been in existence for six years.

Major developments in the technological environment can become commonplace very quickly. They are now impacting upon a broad range of information-based service sectors, as high growth Internet-based firms, such as Google, Amazon, Facebook and Airbnb, and financial technology (Fintech) start-ups expand their product portfolios into new markets.

Real estate is one of the information-based service sectors that is currently being impacted by this new type of competitor and the broad range of disruptive digital technologies that have emerged. Due to the vast troves of data that these Internet firms have at their disposal and their asset-light (cloud-based) structures, they are able to offer highly-targeted products at much lower costs than conventional brick-and-mortar companies.

New technologies are driving changes in consumer behaviour as high smart phone usage and apps transform how people communicate and transact business. Artificial intelligence and robotics (robo-advisors) are also changing the economics of how asset allocation and business advice will be delivered in the future. High levels of Internet connectivity (within the car, home and office) and the diffusion of the Internet-of-Things (IOT) will lead to unprecedented levels of automation, utilising high-speed 5G networks and GPS.

This has significant implications – and opportunities - for real estate managers. In terms of asset, wealth and investment management, there are already a number of trends emerging. The automation of advice and research through artificial intelligence algorithms and software robots and the use of free unstructured data from websites (social media) known as Big Data, will not only remove the need for human input but it will also have a commoditising effect on the industry. As technology costs decline and labour costs increase, advice and research will no longer command a premium price. As cost pressures increase, robo-advisors will become increasingly deployed to handle mainstream asset allocation and routine advice.

There is also the prospect of disintermediation (removal of intermediaries) occurring, if a large Internet firm such as Google were to offer free advice just to access important financial data and increase its marketing power and artificial intelligence capabilities. Alibaba in China is already offering wealth management services and Amazon is now moving into Fintech. There are also new start-ups such as REscour that identify real-estate investment opportunities.

Future real estate trends are towards on-demand 24/7 information relating to property availability, streamlined and more efficient leasing processes and fast availability of funding via the Internet. New `platform` start-up companies have already moved into this space including LiquidSpace, The SquareFoot, PivotDesk, Hightower and VTS and Fundrise.

As buildings become more intelligent and connected, the management and maintenance functions will require less human input and there will be increased remote monitoring. This will enhance productivity and reduce running costs and potential new revenue streams could emerge as intelligent buildings and furniture generate valuable data that can be monetised. Due to the high cost of residential properties in cities, demand for office

space may be affected as more millennials adopt remote working as a preference. Since these 'digital natives' will be highly leveraged, rental rather than ownership will be the norm as the sharing economy expands.

In retail, less shopping floorspace will be required but there will a shift towards more call centres and logistics depots as more goods are sold online. Many brick-and-mortar retail stores will adopt a show room model where goods are merely viewed and tested with orders being placed online. They will also act as click-and-collect hubs based on high levels of automation. The trend towards pop-up shops is also likely to increase and flexible shorter-term leases will become more commonplace.

This new environment will require innovative strategic responses from real estate firms, which will need to enhance digital capabilities and develop both online and offline modes of service delivery. These can be achieved through building the capabilities in-house, buying the capabilities through M&A and/or partnering with other technology platform providers.

As the lower segments of the market become commoditised a repositioning and refocusing on the premium high-end customers is the most logical step to take. High net worth individuals and corporations are still going to want to deal on a one-to-one basis but they may want the firm they are dealing with to have a strong digital presence.

The ipad is now six years old. It will be fascinating to see which new technologies will be so established in 2022 that we forget how we ever lived without them.

Nigel Walton is an Associate Lecturer with the Open University, where he teaches strategy and entrepreneurship, and a regular contributor to the Oxford Analytica Daily Brief on technology and innovation.

He was speaking at the first in a series of insightful discussions organised by Cording Real Estate Group, called How technology is set to change real estate forever