



WHAT IS PROPTech AND HOW IS IT CHANGING REAL ESTATE INVESTMENT?

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Real estate market is constantly evolving, and the emergence of new technology tools has brought radical transformation to the sector. As we entered a super-cycle of innovation, industry players experienced rapid technological developments. At the forefront of technological developments, blockchain and artificial intelligence are most likely to leave a significant imprint on the market in the coming years (commonly referred to as proptech).

In order to determine the potential impact of proptech, the industry first needs to have a clear overview of what proptech means, namely, *"what is proptech and how is it changing real estate investment?"*, *"why is proptech a hot topic in 2019?"*, and *"what is the future of proptech?"*. The answers are not obvious, but one thing is certain, we are facing one of the main technological changes in generations. Proptech (real estate technology or property technology) has emerged through a combination of real estate transactions, market behaviours and digital processes and it is often defined as real property technology or technology that offers technologically innovative products or new business models for real estate market, which leads to new and innovative business approaches to the real estate market.

Everything from efficiencies in property and real estate management, sales processes to blockchain is now on the table. To illustrate this super-cycle of innovation, we have listed below some of the most common applications based in proptech innovations:

- **Artificial Intelligence ("AI"):** systems that are able to automatically read, evaluate and analyse data (e.g., relevant information from contracts

and documents can be extracted/scanned and imported into a CRM – customer relationship management – system), which improves the efficiency of operational tasks. In asset management, the possible use of artificial intelligence ranges from identifying suitable investment targets according to the portfolio matrix to checking virtual data rooms, using algorithms. Possible applications in property and facility management include simplified collaboration, peer-to-peer transactions, supply chain management and data management.

- **Blockchain:** blockchain technology introduces new ways to trade real estate assets and can enable trading platforms and online marketplaces to support real estate transactions more comprehensively. How does it work? In a nutshell, once a transaction occurs and it is verified by the network, it is added as a new block to the blockchain. This information will be available to all third parties who have access to the blockchain. Some companies are already using blockchain technology to facilitate real estate transactions, in particular, real estate owners can create part-ownership interests in real estate assets through issuance of tokens, which can then be sold to third parties.

- **Big data:** the use of a large volume of structured, semi-structured and unstructured data that has the potential to be mined for information and used in machine learning projects and other advanced analytics applications. Possible applications, for real estate agencies, encompass the possibility to use the information collected by them, from being in the market, to their platforms, and use it to understand and improve how to target potential buyers.

- **Geolocation:** this technology provides real time location services allowing users to better explore places and the services there located and other points of interest. From a real estate perspective, geolocation is already being used in housing search apps, where users can be notified of available properties when passing by a certain street and also enabling geo-advertising opportunities specifically targeted to consumers. This allows agents and property owners to better market their assets, improving user experience at the same time.

- **Drones and virtual reality:** with the capability of mapping buildings and to conduct inspections at a fraction of the cost, the ability of drones to perform scans to the façades, record the temperature of a building or check for cracks to a building's structure, has made them an everyday tool for developers, planners and constructors. The use of virtual reality by real estate developers allows its clients to take a look *"inside"* their new home, even before being built.

Proptech in the legal practice

In Portugal, Proptech has already shifted the way transactions are conducted, namely in what concerns the country's land registry. Since its introduction in 2009, Portugal's land registry website (Predial Online) has been allowing market players to promote land registration acts online, make electronic deposit of documents, payments, request and consult the land registry or even notify public entities prior to the sale of properties, for the exercise of applicable legal pre-emption rights.

Machine learning projects that can scan documents and conduct due diligence analysis, software to manage in real time conditions precedent in large real estate transactions, or mapping tools that can assist management companies to track their portfolios, among others, are also starting to be implemented in Portugal, enabling real estate lawyers to be more efficient and have greater know-how on the transactions they are advising. Typically, real estate deals have a closing period no shorter than one month, nevertheless, with increased access of such tools, we will be able to significantly reduce the negotiation and signing period.

Smart contracting, powered by blockchain, is also becoming a more tangible reality. Real estate leases executed through a website or an app which will unlock the door for users upon payment or financing agreements that can automatically release liens when fully repaid are two of the many examples to the potential of this technology.

Despite such innovations being a breath of fresh air, the Portuguese legal reality is not entirely prepared to embrace them, since some Portuguese legal procedures in real estate transactions are still cumbersome and strict.

Conclusion

There is no denying that the real estate industry is rather conservative when compared to other fields of business. However, the use of Proptech in real estate is becoming a reality between key players in the market and real estate lawyers should be paying close attention to these new technologies. For law firms, the rise in Proptech can mean new challenges but also the opportunity to rethink legal perspectives and their way to advise clients.

Property technologies are here to stay. Nevertheless, despite its increase, one can consider that real changes in the legal market will take some time before gaining acceptance from clients and parties involved and by law firms themselves, which are usually and generally conservative and averse to legal uncertainty and to the lack of regulatory frameworks or concerned as to the security risks this kind of technologies can represent. Additionally, the complexity of real estate transactions and the specificity that each asset embodies, allied with the conservativeness of investors mean that they will be unenthusiastic in wanting to automate transactions completely.

This should not deviate us from the fact that Proptech offers a wide range of opportunities for innovation and efficiency which, combined with the lawyers know-how, translates, in the end, to great value proposition from law firms to their clients in their advising on real estate transactions. ■