

Orbital Witness

New technology spots key legal issues in real estate transactions.

Anyone who has ever bought a house will know the time and expense involved with legal checks. It's a system that is complicated for individual homeowners and further amplified when it comes to complex commercial real estate transactions.

Now a team at London-based, legal-tech firm [Orbital Witness](#) has developed AI-powered software to make the process more efficient and transparent, with a long-term aim of creating a 'one-click' legal risk rating similar to those used to instantly assess credit ratings.

"The process of recording and registering property rights hasn't really changed in over 100 years. Property lawyers still have to collect and read through information on numerous issues, such as rights of way, planning constraints and boundary walls. It's laborious and unprofitable for legal teams, and costly and frustrating for clients," said Will Pearce, who co-founded Orbital Witness in September 2018 with Ed Boule.

Using £384,080 in Innovate UK funding via the Industrial Challenge Strategy Fund's [Next Generation Services challenge](#), Orbital Witness began working with [Stuart Middleton](#) of University of Southampton, an expert in [Natural Language Processing](#), a sub-field of AI. Their aim was to "bring due diligence into the 21st Century" and develop algorithms that could extract and analyse legal rights and obligations from [HM Land Registry](#) documents (a project sponsor).

"The technology trawls through the information and is able to flag potential risks, which the lawyer can then investigate without having to follow the breadcrumbs themselves through multiple documents. It takes away time-consuming due diligence and means legal teams can focus on advisory work," said Pearce. "It also decreases the risk of tired eyes missing key pieces of information."

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Will Pearce, co-founder of Orbital Witness

The project was supported by leading London law firm [Mishcon de Reya](#) and insurance broker [Lockton Companies](#) who helped provide input on commercialisation within the legal and insurance industries. The technology is currently being used on around 2000 properties a day with a focus on commercial real estate investment and development. The company has raised £3.3 million in seed funding and is now working with all five of the prestigious 'magic circle' law firms.

Future plans include analysis of a broader range of data – including non-legal and geographic information, such as flood risk – to provide a comprehensive risk-rating tool for the real estate and insurance sectors. "Real estate is the world's largest asset class but there is very little transparency," said Pearce. "Our aim is to make it possible to transact real estate far more quickly, and for anyone to understand the potential legal constraints surrounding a property with a click of the button."

