

Virtual reality and smartphone apps are the future of housing, says academic report

December 21 2015

The future of housing could see virtual reality 'walkthroughs' of new builds and smartphone notifications when repairs are needed, ground-breaking new research has found.

Academics at Birmingham City University and members of the Building Alliance CIC have published a report outlining how [new technology](#) such as Building Information Modelling (BIM) and beyond could revolutionise the housing industry.

Among the findings are the creation of digital 'dashboards' and mobile apps which monitor a house's ageing and repair needs, life span predictions for parts and recommendations for regular 'house servicing' to increase a property's value.

New technology could also allow prospective buyers to virtually place their own furniture or belongings into a yet-to-be-built house and use augmented reality headsets to travel through each room to see how it would look.

The findings could see the process of buying and [building](#) a house connected for the first time and homes given annual, certified maintenance – similar to a car's MOT.

Professor David Boyd, Director of Environment and Society at Birmingham City University, led the research project.

He said: "We've seen a push for more digital construction techniques to be used on commercial projects but no one has really looked at what this could mean for the future of the housing industry.

"From a buyers' perspective this could be a real game changer, giving them an increased amount of choice and flexibility as well as the long term maintenance support from housing developers.

"This would give us the chance to connect the operational side of building homes with the process of buying homes which would have far reaching benefits for both builders and buyers.

"We regularly maintain our cars so there's no reason why we shouldn't be doing the same with our homes and this would add to the value of homes in much the same way as a full service history does."

The study was carried out alongside dozens of construction organisations and industry experts.

The report showed that sensors fitted in homes could constantly monitor energy use, decay and building stability and deliver regular reports to smartphones which could help slash emissions and avoid damage to houses.

Researchers also found that virtual walkthroughs and digital construction would drastically reduce the time and money needed to make alterations to buildings and plans such as removing a wall or adding extensions.

Professor Boyd added: "A lot of this may seem futuristic but the amazing thing is that all this technology is here and ready to be used right now."

Provided by Birmingham City University

Citation: Virtual reality and smartphone apps are the future of housing, says academic report (2015, December 21) retrieved 28 April 2024 from <https://phys.org/news/2015-12-virtual-reality-smartphone-apps-future.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.