



**An Ghníomhaireacht
Tithíochta**
The Housing Agency

Annual Conference **AI & Innovation In Housing**

7th November 2024

Summary report

Prepared by Johanna Wiedermann, Policy & Practice

Programme

On Thursday the 7th of November 2024, The Housing Agency hosted its annual conference in the Gibson Hotel, North Point, Dublin. Michael Carey, Chairman of The Housing Agency welcomed attendees and spoke about the importance of exploring innovative ideas in housing. He commented on the current political landscape confirming that the date for the general election had been confirmed as the 29th of November. He finished his introduction by launching The Housing Agency's new Strategy of Statement for 2025 – 2029. He emphasised how the role of the Agency has expanded in recent years but that the overall vision of 'delivering homes for people in need' remains unchanged.



Michael Carey (The Housing Agency)

Following on from Michael Carey's introduction, David Silke, interim CEO of The Housing Agency, gave the welcoming address. He spoke about the importance of looking forwards and learning about the transformative impact that AI will have on the sector. He highlighted that there are opportunities which have to be balanced against the risks and challenges of new technology. He outlined his hopes for the conference to bring greater awareness of the benefits and drawbacks of AI, to explore data collection and sharing as well as how the sector needs to upskill to make the most of this new technology.



David Silke (The Housing Agency)

He asked the attendees to engage in a Slido poll asking "Over the next five to ten years, from the following list, which three areas do you think AI will make the greatest impact to in the housing sector?"

53 people answered the poll, with the following results:

- Customer experience – 29
- Asset management and maintenance – 27
- Housing design – 26
- Sectoral trend analysis – 25
- Property searches and sales – 20
- Construction of new homes – 17

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- None of the above – 0

The conference was a half-day in-person event and involved discussions from expert speakers under the theme of **Artificial Intelligence and Innovation in Housing**. Two sessions were held as part of the conference under the topics of 'AI & Innovation in Housing Design' and 'AI & Innovation in Housing Delivery'.

The conference agenda can be found [here](#) and the conference video can be viewed here - [Video](#)

There were 85 in-person attendees including representatives from local authorities, approved housing bodies, state agencies, government departments and the private sector.



David Silke (Interim CEO of The Housing Agency, Alison O'Connor (Journalist, broadcaster and author) and Michael Carey (Chairman of The Housing Agency)

Session 1

AI & Innovation in Housing Design

THEO LYNN – ASSOCIATE DEAN FOR RESEARCH, DCU BUSINESS SCHOOL

Theo spoke about the role that AI can play in improving energy efficiency in buildings through aiding in the process of retrofitting buildings. He introduced a project called RINNO, a Horizon 2020 project. The objective of the project is to use AI to accelerate the rate of deep renovation in the EU by reducing the time, effort and cost of deep renovation work. He gave an example of a building where this had been used to improve energy efficiency in Lille. Through using machine learning a team of project engineers were able to assess a large amount of data and come up with the best solution for a specific building, saving them time. While work is being undertaken, sensors and drones are used to maintain a constantly updated - record of the project. He emphasised the importance of recognising that AI is a tool which can help humans make decisions, but that it is crucial that people are trained to use it.



Theo Lynn (DCU Business School)

WILL SYNNOTT – CHIEF CUSTOMER OFFICER, DISPERSE

Will spoke about the importance of bringing innovation to the construction sector which has lagged behind manufacturing in terms of innovation. He introduced the work of Disperse, a company which provides deep insights into large construction projects with the aim of improving transparency and decision making through the use of real time data. Will explained that through taking 360-degree photos weekly across construction projects they are able to provide up-to-date information on the project. This enables the different people involved to make decisions and monitor progress. Accountability is improved through their technology and by increasing the efficiency of the project there are significant cost savings. He highlighted that while collecting data is very important, of equal importance is how that data and information is communicated.



Will Synnott (Disperse)

BREFFNI GREENE – ASSOCIATE ARCHITECT, HENRY J. LYONS

Breffni spoke about the role of AI and augmented reality in architecture. He underlined the role it can play in streamlining processes as well as being a tool to facilitate creativity. He explained that the Royal Institute of British Architects (RIBA) had found that while 41% of architects use AI, 69% of architectural practices have not yet invested in AI. Breffni introduced a project called [VUCity](#) which has created a digital twin of Dublin and therefore allows prospective developments in the city to be analysed using augmented reality. He also showed how AI can aid in design even showing how it could help to go from a sheet of music to embedding that music into the design of a building façade. He ended his presentation by asking attendees to be aware of the challenges that AI can pose, especially around bias and the need to have a strong vision when using it as a tool.



Breffni Greene (Henry J. Lyons)

ADELE KEANE – CHIEF OPERATING OFFICE & CREATIVE DIRECTOR, IMVIZAR

Adele talked about the work that [Imvizar](#) does, which is using augmented reality to help people connect with places through storytelling. She showed examples of how their app can be used to bring cultural heritage to life by having statues explain their stories to visitors, or by transporting the user to a street's history. She explained how powerful these visuals are to get people to connect with places. She highlighted the importance of this for the built environment by showing how their software could be used to show the future planned cycle infrastructure. She highlighted that augmented reality is an effective way to get people to engage with spaces and ideas and that it is something which can also work for different groups including children.



Adele Keane (Imvizar)

Session 2

AI & Innovation in Housing Delivery

SABAHAT KHAN – CHIEF INFORMATION OFFICER, LOCAL GOVERNMENT MANAGEMENT AGENCY

Sab spoke about the LGMA's vision to deliver government systems in a digital world and how technology can be an enabler to get people to engage with public services. He spoke about how transformational events show us how things can be done differently, Covid 19 being the most recent of such events. He emphasised the importance of digital services maintaining the same quality as in-person services. He set out key themes for technological change such as 90% of the services that local authorities provide being available digitally by 2030. He also highlighted the importance of training and the need to upskill people who use and run the services. Additionally, he highlighted the importance of the public sector attracting and retaining staff with an interest and expertise in IT and AI.



Sabahat Khan (LGMA)

DECLAN GRIMES – SENIOR ENGINEER, LOUTH COUNTY COUNCIL

Declan spoke about a current project in Louth County Council where they have built three terraced homes using concrete printing technology. He showed drone video footage of how quickly the building was built using this method. The technology, which is considered a modern method of construction, results in homes which have an A2 rating. Declan emphasised the importance this technology has for accelerated delivery of housing. He said there were opportunities to upscale this method of construction and that due to the shorter building timescales that disruption was minimised for neighbouring homes.



Declan Grimes (Louth County Council)

JO SEDLEY – BURKE – CONSULTANT, CAMPBELL TICKELL

Jo highlighted how AI is causing huge cultural and behavioural shifts as it becomes more embedded into daily life. She explained that it offers endless opportunities for housing management and maintenance as well as building. She highlighted that while many people use AI in their work, their workplaces often do not have a policy on how to engage with AI. Jo said ~~that~~ it is crucial that organisations think more consciously about how they want their staff to engage with this. She reminded the group that while there are many opportunities with AI, that proper consideration must be given to fully understanding it and the ethical implications of using it. She finished by highlighting that people adopt technology at different paces and ~~that~~ we need to ensure that people are not left behind in the process.



Jo Sedley- Burke (Campbell Tickell)

Closing Remarks

Barry Lowry – Chief Government Information Officer

Barry spoke about how AI can be seen as both a threat and as an opportunity. He explained that this can depend on the level of exposure and complementarity that AI offers in relation to a sector. In relation to the public sector, Barry explained that many people engage with public services online and that there is great potential there to improve services. He highlighted the importance of not rushing into technological change and spoke about the Government's [National Strategy on AI](#). He underlined the crucial importance of humans checking the work that AI does and, like other speakers, said it needs to be seen as a tool. He described three pilot projects that his team are currently running using AI. They are using an AI customer service chat bot function, using AI as a policy research assistant and an AI driven knowledge database. He finished his presentation by discussing the opportunity that AI represents for government to better meet the needs of its citizens while also making better use of taxpayers' money.



Barry Lowry (Chief Government Information Officer)

Acknowledgements

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