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INTEL KEEPS WATCH OVER CAPITAL CITY

Intel Labs is playing an instrumental role in Dublin City Council's digital innovation drive, notably through the CityWatch project, which was recently piloted in Dublin. Martin Curley, vice-president of Intel Labs and director of Intel Labs Europe, explains to Dermot Crowe just how the scheme works.

Dublin City Council (DCC) is embracing innovative technologies which will boost job creation and enhance living conditions, according to the vice-president of Intel Labs and director of Intel Labs Europe.

Martin Curley has acknowledged Dublin City Council's role in various collaborations with Intel Labs, academic researchers and the public as part of the city's Digital Masterplan, designed to secure future sustainability.

Intel Labs is playing an instrumental role in that digital innovation drive, notably through the CityWatch scheme which was recently piloted in Dublin. CityWatch works, Curley explains, in "parallel with an ambient intelligence system" where people using smart phones or i-Pads can pick up signals and information from existing ambient sensors.

This information can then be relayed to the city manager, offering important and useful feeds on environmental conditions, traffic issues, flooding and even crime. Dublin is very much to the forefront of this technological movement. "There is a big opportunity to make Dublin a test centre for future technologies and create jobs," Curley states.

'QUADRUPLE HELIX'
It is hoped that when these designs are fully developed and tested that they can be transferred and exported to other cities around the world. The collaboration between DCC, Intel Labs, Trinity College and the citizens of the city is a model referred to as the 'quadruple helix' by Curley. However, he's quick to point out that it's not a stuffy concept but a very simple ideal.

"This is a collective and collaborative

intelligence gathering of all the citizens of the city, both to respond to scenarios where we might have an emergency, or it can actually be used just to collect information to make Dublin a better place to live in.

"For example, if someone notices and wants to tag a nice environmental resource

that somebody else may be interested in, it gives real-time intelligence to people in Dublin City Council. This is getting quite a bit of interest internationally.

"At a recent conference in San Francisco the Intel President Renee James spoke about

"There is a big opportunity to make Dublin a test centre for future technologies and create jobs," according to Martin Curley.

Martin Curley, vice-president of Intel Labs and director of Intel Labs Europe, thinks the mindset in Dublin is very advanced.

Dublin City Council
Comhairle Cathrach Bhaile Átha Cliath

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CityWatch and many of them are going on in other cities around the world. But Dublin is one of the cities getting a global profile as a leader."

At a demonstration in the Mansion House, it was shown how water poured into a drain fitted with a float sensor would, when the threshold was reached, set off an alarm on the city manager's computer or mobile device and indicate the flood location. Blinking traffic signals would then be activated, advising motorists to avoid the hazard. From their phones, citizens will be able to report similar concerns, like traffic delays or high air pollution or noise levels.

ADVANCED MINDSET
While Intel has already developed ambient sensors around the city, which records everything from temperature to air quality to humidity all through the week, there is a strong reliance on public involvement. The early indications are positive, Curley says.

"I think the mindset in Dublin is very advanced and that is most important. The technology will come when ready but the mindset has to be there too to make it work. The citizens are showing they want to adopt the technology and it is all about adoption.

"Dublin is in a nice position to move ahead and it's poised to become a global leader. Because it is smaller, we can do things faster. I think this idea of quadruple helix works very well."

There are 100 pilot users of the CityWatch scheme and there will be an in-built incentive for regular users. "We have a bonus points system so that the more you use it, the more points you get," says Curley. He adds that they are trying to develop it as a "win-win" solution.

The early evidence is that people are embracing it; results from their initial tests show a usage rate of more than 50 per cent on a frequent basis. "This quite surprising as very often with tests like this, you can get as low as ten per cent. One of the apps we are considering would be to monitor crime patterns, where users would warn other citizens: here is a crime spot. Gardaí and the DCC can get involved. I would certainly value that."

INNOVATIVE IDEAS
Curley says people are aware of the importance of looking at innovative ideas to make cities work better and cope with future challenges. "People are more conscious that we need to do things more sustainably. We presented solutions that are better and more resource-efficient. And people feel they want to share and have a say in that future. By working together we can create and drive structural improvements far beyond what we can do on our own.

"It is about establishing a shared vision and creating a shared value, which is a concept that is starting to have wider appreciation, that business can be profitable and do some good at the same time. We helped run a conference in the Mansion House to showcase how Dublin might look in the future and how technology could change our lives.

"One thing that came out of it was that we had a couple of thousand Dubliners come through and we asked them 'do you think Dublin should be a test bed for future technologies' and 'would you be willing to participate in that' and the response was very interesting; 96.2 per cent of Dubliners said yes, typically you might expect 10-12 per cent."

TV WHITE SPACE LINK
Curley said Intel Labs has also worked closely with DCC and Trinity College researchers to connect up the fastest TV white space communication link. "One of the big problems in adopting digital technology is the cost of communications. If you use cellular, it is not cost-efficient. We use free TV white space and that could be a game-changer and would put Dublin on the map."

TV white space that has been freed up by the switching off of analogue will enable an environmental measurement system using remote sensors in Dublin city. The system can measure temperature, humidity and dust levels, and noise, all of which aims to enhance the lives of city dwellers. The information gathered is sent to Intel's Ambient Intelligence Platform via an 18-km TV white space link.

The development of a Digital Maturity Scorecard (DMS) has been another interesting development. "We hope that the digital maturity framework will become a global tool," says Curley, "and part of that is an assessment instrument which assesses the maturity rating of Dublin.

"Maturity is now about 2.2 on a scale of one to five. The scorecard was developed by Intel, Innovation Value Institute and DCU. It is hoped to improve Dublin's rating, with the scorecard acting as an invaluable benchmarking tool."