SMART LONDON INNOVATION NETWORKS

Districts Network
Innovation event

17 September 2015
London's Living Room, City Hall

MAYOR OF LONDON

eit Digital

Institute for Sustainability

Contents

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Part one: Agenda

17 September 2015
3pm to 5.30pm
followed by drinks and canapés
London's Living Room, City Hall, London SE1 2AA

3.00pm	Arrival. Teas and coffees.	
3.15pm	Introductions and welcome	Matthew Pencharz, Deputy Mayor for Environment and Energy, Greater London Authority Fergie Miller, Business Developer, EIT Digital
3.25pm	Pitches: Smart wayfinding Chaired by Ian Short. Introduction	Ian Short, Chief Executive, Institute for Sustainability
3.30pm	Pitch 1: colocator. An insight platform offering districts real time visualisation and analysis of people movement.	Crowd Connected Ltd
3.45pm	Pitch 2: Smart Wayfinding. A combination of digital and physical wayfinding elements.	Maynard Design
4.00pm	Pitch 3: TriceKit. An SDK enabling location based and behavioural content delivery.	Area360
4.15pm	Break. Teas and coffees.	
4.25pm	Pitches: Connecting people and creating communities. Chaired by Ian Short. Introduction.	Ian Short
4.30pm	Pitch 1: Cityness. An app providing Augmented Reality digital 'overlay' for district users.	Umbrellium
4.45pm	Pitch 2: Strawberry Smart Bench. A smart solar social hub, offering a range of services to users.	Strawberry Energy
5.00pm	Pitch 3: Stickyworld. An online stakeholder engagement platform allowing district managers to capture and respond to comments.	Stickyworld Ltd
5.15pm	Pitch 4: Hello Lamp Post. A playful SMS platform, inviting people to strike up text conversations with street furniture.	Pan Studio
5.30pm	Closing remarks	Ian Short
5.35pm	Networking, drinks and canapés	
7.00pm	Close	

Part two: Introduction

This document provides the summary results of two innovation calls to support London's largest new developments. The calls are part of the activity of the Smart London Districts Network, a group of developers who have identified priority needs to enable the delivery of these new districts as smart city exemplars. The Network is run by the Institute for Sustainability, in partnership with the Mayor of London's Office and supported by EIT Digital.

You will find a short overview of the competition and the judging process, along with details of the innovations assessed to have provided the closest fit to the call criteria and which have been invited to pitch at this event.

Background

London's population is expected to grow to nearly ten million by 2030, placing pressures on resources, infrastructure and communities.

The Smart London Districts Network is one of two Smart London Innovation Networks (SLINs) created to support the development of the Mayor of London's vision for "smart city" innovation that addresses resource pressures whilst creating new economic and research opportunities.

The SLINs are a key commitment of the Smart London Plan, developed by the Smart London Board and launched by the Mayor of London in December 2013. They provide a forum for collaboration and sharing of best practice, as well as a mechanism for bringing new smart city innovation to market.

The Smart London Districts Network provides a platform for those public and private development organisations delivering London's largest and most ambitious development districts, to showcase these exemplar developments and enable collaboration, sharing of best practice and bringing new smart city innovation to market.

The Smart London Districts Network supports the GLA's economic development and wealth creation aims by helping to stimulate demand-led innovation and improve the environment through resource efficiency and social development.

The challenge calls

The Smart London Districts Network members have identified a number of key challenges for their districts where innovative data and digital solutions can have a big impact. These include navigation and transport and connecting people and creating communities. Two challenge calls have been run in 2015.

The first, for **Smart wayfinding**, sought smart innovations which would help residents, visitors, businesses and developers better connect with their surroundings. The second, **Connecting people and creating communities**, sought smart solutions which could be used to help connect people with others in their district as well as with the places they live, work and visit, creating a sense of place.

The Institute worked with Districts Network members to shape the challenges and to put the calls in the market place.

Full details of the calls are contained in Part three (Smart wayfinding) and Part five (Connecting people and creating communities) of this document.

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Assessment process

Applications to the competition were made through the iVeridis website, an online platform which matches buyers of smart and clean technology with innovative solutions. Following the closing date, the Institute implemented an assessment process designed to identify relevant and appropriate solutions for further investigation by Smart London Districts Network members.

Stage one

Carried out in house by the Institute for Sustainability, this initial sift was intended to remove entries which were not relevant to the competition challenge or basic criteria.

Entries which were deemed unsuitable for the Smart London Districts Network were removed at this stage, although entries of sufficient quality were shared, with permission, with organisations providing support to innovators, such as EIT Digital and Digital Catapult.

Stage two

A detailed review of shortlisted solutions was undertaken by a panel of expert judges. They provided feedback on technical aspects of the entries, as well as market applicability, including:

- Does the solution appear to offer a technically credible solution to the challenge?

- Is the solution technically viable?

- Is the solution sufficiently innovative compared to those currently widely available?

- Is the solution at a suitable stage in its lifecycle for demonstration?

- Does the solution address the challenges and competition criteria for London districts?

The judging panel included experts from:
- Bartlett Centre for Advanced Spatial Analysis (CASA) at University College London
- Digital Catapult
- EIT Digital
- Greater London Authority.

As a result of the assessment process, a number of innovative solutions were shortlisted and presented to Districts Network members. Following consultation with districts, four innovators from each competition were invited to present at this event. All winners selected were given the opportunity to attend a pre event briefing at which feedback from network members was given and advice on pitch content and presentation provided.

Part three: Smart wayfinding

The criteria

Network members identified navigation and wayfinding as a priority area in which they were seeking a range of solutions, which would address the needs of one or more of the following end user groups:

- District residents and visitors
- Developers during construction in an already occupied district
- Facilities and/or district management teams in an operational district
- Local businesses including retailers.

Solutions could be software, hardware or a combination of the two and should meet the following requirements:

- Solutions must be applicable at district scale
- Innovations should be close to market or market ready
- Solutions must use smart technology and/or data
- Solutions should have demonstrable potential to drive commercial value for the potential buyer
- Implementation of the solution should cause minimal disruption
- Solutions should be adaptable and compatible – this includes the ability to communicate/ work easily with standard software, platforms and existing systems e.g. phone apps
- End user experience, whether B2B or B2C, should be intuitive and encourage high levels of engagement/adoption
- Innovations should lead directly or indirectly to improved visitor/resident satisfaction levels
- Where possible, solutions should result in positive environmental impacts such as reduced air, noise or water pollution and increased visitor/user engagement with the environment.

Challenge response

Total number of entries: 45
Total number of organisations entering: 41

It was expected that the majority of the entries would provide apps or signage for district visitors or residents. Although some of these were submitted, the call attracted a broad range of innovations, including:

- solutions for district managers, such as planning tools, real time monitoring of people flow and crowd simulation
- solutions which provide information to residents/ visitors whilst harnessing data to feed back to district managers
- and solutions for both district visitors and residents, such as smart signage, tools to provide contextual information and apps focusing on quality of life.

Some of the responses, including several of the smart mobility solutions, were considered only appropriate at city scale and so were excluded from the judging process. A number of entries were identified as being more suitable for the 'Connecting people and creating communities' challenge and were resubmitted for that call.

Part four: Smart wayfinding winners

Overview

Through the judging process, four winning innovations have been selected as being the best match to the criteria developed by the Smart London Districts Network and have been invited to pitch.

The winners are:

colocator (Crowd Connected Ltd) an insight platform offering districts real time visualisation and analysis of people movement. colocator fuses observations from multiple smartphone sensors to generate location data, giving it increased location reach and avoiding problems of reduced smartphone battery life.

Flybits Smart City Solution (Flybits Inc) smart wayfinding apps for both district residents/ visitors and managers. Flybits supports Android and iOS. It combines contextual information for end users with actionable insights for district management, such as disruption of service notifications and consumer behaviour.

Smart Wayfinding (Maynard Design) a combination of digital and physical elements providing wayfinding to district users, including fixed milestones with digital displays and an app for residents/ visitors. The solution is designed to help reinforce a sense of permanence, whilst providing the flexibility to adapt to the changing requirements of the district and its events, spaces and activities. The Smart Wayfinding solution also allows managers to monitor pedestrian movement across the district.

TriceKit (Area360) a software development kit (SDK), with core features including indoor positioning, wayfinding, analytics and a prediction engine. The platform enables location based and behavioural content delivery which is accessible, contextual and enabled, to predict the needs of end users and individually tailor experiences. It also provides real-time analytics on district user movement.

Two further innovators are Highly Commended:

BriteLocate3D (Briteyellow Ltd) an interactive 3D indoor/outdoor positioning and navigation virtual reality app. Combines high resolution 3D visualisation with precise location accuracy to help visitors/ residents navigate around the district whilst allowing district managers to monitor use of public space and engage with users.

MappedIn Wayfinding (Industry Touch) a user-friendly wayfinding solution with a centralised web-based content management system. The CMS allows district managers to control and instantly edit every component of the wayfinding maps and deliver this to kiosks, mobile users and websites.

colocator (Crowd Connected Ltd)

Overview

colocator is an insight platform which fuses observations from multiple smartphone sensors to generate location data. It stores the data centrally, allowing real time location insight.

Benefits

colocator takes real-time data from cellular, wifi, Bluetooth and GPS and uses it to provide operators with a real-time visualisation and analysis of people movement. A web based console provides heat maps, region occupancies, event attendance figures, dwell time estimates and configurable alerting.

Data is harvested from apps and the required code can easily be dropped into an existing app.

colocator dynamically selects the most battery friendly sensors to use. The system can continue to track devices in real time when they are offline.

colocator analytics provide detailed insight into people movement and behavioural patterns across an area.

Cost and payback

Pricing is negotiated on a project by project basis, usually with a monthly licence fee and usage charge per active device.

Given the SaaS licensing model, there is no up front development or investment required in using the platform.

A payback time of under three years would be anticipated by Crowd Connected.

Installation and operation

The cooperative positioning technology is patent pending.

If required, the colocator SDK can be integrated into existing mobile apps, or a bespoke app can be created by Crowd Connected.

Comments and considerations

Nice – especially its ability to work anywhere This is a library (for iOS and Android) that improves location accuracy and reports users' footprints. Apps can be built using this solution for navigation and wayfinding utilising, for example, the push notification mechanism.

The use of standard APIs makes it easy to integrate.

colocator can be used as a basis from which to develop new smart app features, for example automatically directing users to underutilised facilities.

District users do not need to download a new app for their data to be used.

Although colocator is an SDK, Crowd Connected are able to provide an end-to-end solution.

The system was trialled at the Wireless Festival in London as a result of funding from Innovate UK, and has recently been used to monitor crowd movement in Baku ahead of the European Games.

Flybits Smart City Solution (Flybits, Inc.)

Overview

Flybits offers a smart wayfinding solution for district users and actionable insights for district managers using real-time data.

Benefits

The user side app utilises patented context-aware technology to power delivery of mobile apps and services that respond and adapt to a user's unique context, interests, environment and more.

Features include Augmented Reality wayfinding and navigation and information and services related to district venues and events.

Simultaneously, the Flybits Smart City Solution offers a dynamic rendition of services for district operations and management, including notification of disruption of service, or access to the security camera system.

Cost and payback

Pricing is based on a subscription model, following a SaaS licence structure.

Current city-wide customers pay a monthly fee based on a total number of 'Active users' and 'Points of interest'.

Installation and operation

Flybits can easily be integrated into existing platforms.

A simple content management system makes it easy for district management teams to select, deploy and scale content and services to locals and visitors.

Flybits can be automated or dynamically updated in real time.

Flybits supports Android and iOS devices.

Comments and considerations

A very good proposal offering context aware middleware for delivering information to locals and visitors in specific areas of the city.

Smartphone APIs are the delivery mechanism to the end user. Due to the modular nature of the solution, districts can grow organically allowing for effective integration and interoperability.

Solution causes minimal disruption by just making use of data, though external hardware or existing infrastructure can also be integrated.

Flybits is an end-to-end solution, although it can also be integrated into existing apps.

It provides contextual information for both district users and managers.

Flybits allows transition from outdoor to indoor navigation.

The return on investment for districts is unclear.

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Smart Wayfinding Solution (Maynard Design)

Overview

A wayfinding system combing digital and physical elements, designed to help reinforce a sense of permanence, whilst providing the flexibility to adapt to the changing requirements of the park and its events, spaces and activities.

Benefits

The physical and digital are addressed in a holistic manner. The installation of physical wayfinding milestones onsite, combined with the digital handheld element, ensures that the wayfinding system functions as one complete system, rather than disparate elements in isolation. The physical milestones are an important component to enable accessibility to all demographics and provide a non-discriminatory solution for all user groups including children and the elderly.

The solution is designed to improve navigation and wayfinding by providing a personal experience through the harnessing of live, user focused data feeds. The sharing of site wide data encourages visitors to engage more actively with their surrounding environment. A QR code connects the user with the digital app. The adaptability of this solution could complement existing wayfinding products.

Cost and payback

Maynard would anticipate accessing further funding sources, including grants, to develop the solution. An upfront investment would be required for development and purchase.

A payback period of one year is estimated on the basis that a minimum of 10 local companies and businesses are registered weekly users.

Revenue is raised via push notifications on the app and the live data feed on the digital display milestone signs.

Installation and operation

The physical elements are designed to be quick and inexpensive to implement, with minimal disruption. Initial set-up would require time to input information, but low maintenance levels would be required.

The digital solution could be integrated into existing platforms.

The products are self-powered through solar panels.

Comments and considerations

A complete solution involving both hardware and software elements offering real time 'livemap' capabilities in an application. Hardware components are self-powered through solar panels offering positive environmental impact. Further concept development is required for addressing the challenge.

Professional and well presented. QR codes are very 2012 and tracking is only GPS/wifi. If the plinths had beacons and worked with some of the other companies it has notable potential.

Maynard would actively engage with Movement Strategies who are experts in movement analytics and Coventry University for data analysis to develop this solution.

By combining digital and physical wayfinding, this solution encourages district users to interact with their surroundings.

This solution would require an upfront investment.

TriceKit (Area360)

Overview

A software development kit (SDK), with core features including indoor positioning, wayfinding, analytics and a prediction engine. The platform enables location based and behavioural content delivery which is accessible, contextual and enabled, to predict the needs of end users and individually tailor experiences. It also provides real-time analytics on district user movement.

Benefits

TriceKit is an SDK platform on which to build applications. A customised app could be developed if required.

User data is collected from mobile apps and from databases and includes demographic information, app engagement and user movement within an area. It can aggregate any touch point data, eg from mobile apps, geo-location, social media, on-site activity, weather.

TriceKit uses algorithms to provide customised information to its end users.

District managers can access real-time analytics on visitor/resident movement.

Cost and payback

Pricing is dependent on project requirements.

TriceKit can generate revenue through a number of channels including providing a platform for corporate sponsorship spaces.

Installation and operation

The solution can be delivered in as little as two weeks, depending on the customisation required, although installation and testing of iBeacons, if needed, would take longer.

The SDK platform is built to support development for both iOS and Android. The platform uses Content Delivery Network, which is backed by Akamai with over 170,000 servers around the globe, allowing the delivery of rich multimedia content.

The system is flexible and has no requirements or limitations for integration.

Comments and considerations

A good proposal … Auckland tourism events and economic development is an example of the use of their solution. Both indoor and outdoor wayfinding is supported as well as prediction capability.

Over 400 art, cultural and tourism organisations have used Area360's STQRY platform.

TriceKit has been used by Auckland Tourism, Events and Economic Development to provide a free (for users) wifi platform to leverage events and activities and generate revenue through corporate sponsorship spaces.

This is not in itself an end-to-end solution, although Area360 would be able to develop a customised app as required.

TriceKit works as a plug-in so can be fully integrated into other systems/ existing apps/ customer relationship management platforms.

Part five: Connecting people and creating communities

The criteria

The Smart London Districts Network members are interested in how smart technology and data can be used to help connect people with others in their district as well as with the places they live, work and visit, creating a sense of place. This can be particularly challenging in the large, phased developments being led by the Districts Network members.

Solutions could be suitable for use during build phase or in full operation, or might be used to provide a link between the build and operational phases.

Solutions could include:
- innovative data sharing platforms that help multiple stakeholders share information and communicate better with the local community
- creative apps and smart technology to engage people with the local area and with each other
- cutting edge 'concierge services' which help make life easier for residents and allow facilities management services to engage with local people
- innovative platforms that enable social network building, collaborative approaches and mutual exchanges between residents, businesses and other organisations
- technology that supports the gamification of community-wide challenges
- apps and data sharing devices that help businesses engage with and incentivise visitors.

These are examples, but any smart innovation which will help connect people and create communities at district scale would be considered.

Challenge response

Total number of entries: 38
Total number of organisations entering: 37

The call attracted a broad range of innovations. These included:
- smart technologies to enable districts to conduct dynamic consultation with stakeholders
- apps to encourage residents and visitors to engage with the locality and local services
- and uses of gamification to build community.

Some of the responses were considered only appropriate at city scale, whilst others addressed challenges outside the criteria. Several were applicable to the challenges of the other SLIN network – the Smart London Infrastructure Network – and will be presented to them separately.

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Part six: Connecting people and creating communities winners

Overview

Through the judging process, four winning innovations have been selected as being the best match to the criteria developed by the Smart London Districts Network and have been invited to pitch.

The winners are:

Cityness an app providing an Augmented Reality digital 'overlay' to public users of a district through which they can interact with each other and access information which helps them make sense of the area and its surrounding locations.

Strawberry Smart Bench a smart solar social hub, which offers a range of services to users, whilst encouraging them to congregate and socialise.

Stickyworld an online stakeholder engagement platform which allows district managers to capture and respond to comments and questions in a virtual environment.

Hello Lamp Post a playful SMS platform, inviting people to strike up conversations with familiar street furniture using the text message function of their mobile phone.

Two further innovators are Highly Commended:

Commonplace a collaborative insight tool for which allows districts to engage with residents, tenants and service users to improve decision making.

Placemeter an urban intelligence platform which takes the data collected from video feeds and translates it into predictive insights.

Cityness (Umbrellium)

Overview
App providing an Augmented Reality digital 'overlay' to public users of a district through which they can interact with each other and access information which helps them make sense of the area and its surrounding locations.

Benefits
Cityness is an augmented reality civic software platform for interactions in public spaces and buildings. It aims to provide interaction between past, current and future occupants of a district and provide a way of managing the identity of the area during a period of transition.

Cityness provides three levels of engagement within a district: information, messaging and interaction. It utilises an 'overlay' for exploring and interacting with a district, through the camera of their mobile phone or tablet. By holding the device up in the air as if to capture a video, users will see the real time image overlaid with 3D information.

Examples include: pointing at a venue could give access to information about the current event; pointing at the sky could give access to digital 'messages' left by other users; real time interaction with other users, such as playing with a virtual 'ball' in the augmented reality overlaid on a concourse.

Cost and payback
Costs (and payback) are dependent on individual project specifications.

Installation and operation
The Cityness API allows for third party developers to integrate it into district level platforms.

A 3D content management system would enable district managers to create interactive 3D virtual content that sits in the public realm.

Information could be automated, manually posted or acquired from devices/ sensors (eg building environmental data).

Day to day management is designed to be minimal once setup is complete. Uptake of Cityness by district residents/visitors can easily be monitored.

Interaction programming could be made open via an app to allow the public to change or program interaction possibilities.

Comments and considerations

An excellent company with an innovative track record.

Client side applications are responsible for ensuring privacy by verifying identity. The Cityness platform would ask for the user's permission before using geo-located personal data.

Cityness can be easily integrated into existing district platforms.

Cityness provides a platform for interaction and collaboration.

Payback is difficult to quantify.

Strawberry Smart Bench (Strawberry energy)

Overview

Strawberry Smart Bench is a smart solar social hub, which offers a range of services to users, whilst encouraging them to congregate and socialise.

Benefits

Strawberry Smart Bench provides users with a USB port for charging mobile devices, whilst sensors on the bench capture local environmental data. The bench is solar powered.

Users can also access an app to check information on the district, including local environmental data, events and businesses in the area and energy saved by using the bench. There is also a panic button, which allows users to contact emergency services.

The bench provides a charging point should the electricity grid be cut.

A simple web based dashboard allows easy tracking of collected data in real time from bench sensors.

The bench encourages people to stay and play in a district by giving them a meeting point and a place to charge their mobile devices, as well as giving access to information on local businesses and services.

Cost and payback

Cost would be dependent on the number of benches installed.

Payback has not been identified. However, with over 450,000 users on Strawberry Trees (a larger version of the Strawberry Smart Bench) Strawberry Energy identify a potential for monetisation of user engagement and data commercialisation, for example through reward programmes and advertising.

Installation and operation

The Strawberry Smart Bench requires a sunny location for optimum usage. It can be installed in four hours and requires minimum maintenance.

The Strawberry Smart Bench is guaranteed for two years.

The Bench can be integrated with other apps and is created to be an open and future proof platform.

Comments and considerations

Neat solar street furniture.

The battery life of mobile devices is likely to improve so this may be a solution to a temporary problem.

The bench works overnight and during adverse weather conditions and has battery power for 14 days usage.

13 Strawberry Trees have been installed in European locations.

Four Strawberry Smart Benches are being installed at Canary Wharf.

The benches have the potential to encourage people to extend their stay in a district.

Stickyworld (Stickyworld Ltd)

Overview

Stickyworld is an online stakeholder engagement platform which allows district managers to capture and respond to comments and questions in a virtual environment.

Benefits

The Stickyworld platform allows users to set up effective online consultation and engagement on planning and place making projects. Organisers can present design proposals and invite participants to stick comments and questions directly on PDFs, maps and inside virtual tours of the area, making it easy for everyone to understand proposals and any issues that need reviewing.

Stickyworld allows for comments to be exchanged between users, as well as between district managers and users.

Organisers can export PDF and CSV reports to evidence engagement.

Stickyworld helps communities understand design and planning proposals in a highly visual way and to engage in clearer conversations with each other and organisers. Stickyworld claims to be the only participation platform that enables detailed commenting on multiple formats, including 360˚ virtual tours, and its administration toolset supports the full lifecycle of projects from early planning consultation through to post occupancy.

Cost and payback

Stickyworld works on a subscription pricing model.

The payback time given is under one year. Stickyworld identifies that larger savings can be realised due to removal of risks in development, either in planning or detailed design.

Installation and operation

Organisers can use iPhones to capture street scenes. Stickyworld is working on Google Streetview integrations for area wide consultation and engagement.

Stickyworld can be integrated into existing websites and apps.

Comments and considerations

Nice and innovative – allowing messages to be left in a panoramic space.

Clearly addresses district/ community engagement issues.

Proven product and validated market.

Stickyworld can be supplied as a standalone product or with full support services included.

The costs are relatively low, but payback is difficult to quantify.

Clients include the Royal Borough of Greenwich, Canterbury City Council and the Design Museum.

Hello Lamp Post (PAN Studio)

Overview

Hello Lamp Post is a playful SMS platform, inviting people to strike up conversations with familiar street furniture using the text message function of their mobile phone.

Benefits

Hello Lamp Post is a scalable system that uses street objects as intervention points, providing a fine-grain location system with more tangibility than GPS. Rather than creating a mobile app, which would need to be downloaded and installed, through SMS as many people as possible can interact with Hello Lamp Post helping to shape the stories told about their city or district. The physicality of street objects, combined with the ubiquity and familiarity of SMS makes sure the play mechanic is as accessible as possible.

Hello Lamp Post utilises the unique codes assigned to individual pieces of street furniture. Users text the unique code and name to an advertised number which 'awakens' the object, prompting it to ask the person a series of questions which become more personal with every response.

The system stores user responses and repeats them to future players, acting as intermediary for conversation between local people, as well as visitors to a district. The system recalls past answers through identifying whether or not a user has already played. It also pulls in relevant data such as weather or time of day to ask particular questions or respond differently to people's answers.

Cost and payback

Cost is dependent on the size of installation.

It would be anticipated that payback would come from: increased footfall and longer dwell time; community building; partnership promotion; and network and partnership building.

Installation and operation

The solution uses secure Amazon S3 cloud computing technologies to host and maintain the web application that runs the core interaction. Postgres databases are used to maintain the dynamic list of each object and user. Twilio handles the SMS send and receive functionality.

Street level branding and visibility is required to promote the project and the number used to access the system.

The web story showcase can be integrated into an existing app or dashboard.

Comments and considerations

Very interesting concept.

Functional and time/context dependent questions would be vital if a district wants to give meaningful as well as playful interactions.

Excellent solution. Hello Lamp Post is one of the most cited IoT pieces of work.

When Hello Lamp Post was launched in Bristol, over 27,000 text messages were sent and 10,500 conversations took place over an eight week period.

Payback is difficult to quantify, although costs could be offset through advertising or partnership.

Hello Lamp Post won the Playable Cities Award in 2013 and was nominated for the Design of the Year Award at the Design Museum in 2014.

Part seven: networking

Following feedback from the judging panel and from Districts Network members, a number of innovators have been highlighted as being of particular interest and have been invited to attend a networking session following the pitch event. Delegates will therefore have the opportunity to meet and engage with these shortlisted innovators, as well as with the competition winners, and one-to-one meetings can be facilitated if required.

The purpose of this part of the event is twofold: to give delegates an opportunity to enter into more detailed dialogue with innovators about their products; and to give innovators themselves the chance to gain insight into the needs of the demand side, enabling them to tailor future product development, research and marketing to the needs of buyers.

Part eight: next steps

Following the event, the Institute would appreciate feedback from delegates on the innovators selected to pitch. If further information is required from individual innovators, we would be happy to request it on the delegates' behalf.

If delegates enter into discussion with any of the innovators, it would be helpful if you could let us know, either directly or through the GLA, in order to monitor the success of the competition, to help shape future work and to provide feedback to our funder. We would not ask you to share commercially sensitive details.

For more information, contact Jackie Sharp Jackie.sharp@instituteforsustainability.org.uk

The Smart London Innovation Networks (SLINs)

The SLINs are funded by the Greater London Authority (GLA). The GLA serves the Mayor of London.

The SLINs are a key commitment of the Smart London Plan, developed by the Smart London Board and launched by the Mayor of London in December 2013.

EIT Digital

EIT Digital is a leading European open innovation organisation. Its mission is to foster digital technology innovation and entrepreneurial talent for economic growth and quality of life in Europe. It brings together entrepreneurs from a partnership of over 130 top European corporations, SMEs, start-ups, universities and research institutes.

Institute for Sustainability

The Institute for Sustainability is an independent charity established in 2009 to support cross sector collaboration and innovation.

Its mission is to significantly accelerate the delivery of economically, environmentally and socially sustainable cities and communities. It does this by driving innovative demonstration projects and developing programmes to actively capture and share learning and best practice.