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Report of the Deputy Chief Executive

Report to the Executive Board

Date: 17th December 2014

Subject: Smart Cities: Delivering a sustainable City in the Digital Age

Are specific electoral Wards affected? If relevant, name(s) of Ward(s):	☐ Yes	X No
Are there implications for equality and diversity and cohesion and integration?	X Yes	☐ No
Is the decision eligible for Call-In?	X Yes	☐ No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: Appendix number:	Yes	☒ No

1. Summary of main issues

1.1. The world's most successful cities have Smart programmes where citizens, voluntary, public and private sectors co-operate to achieve sustainable city outcomes and increase economic competitiveness. The ability to share and exchange information across a whole city system will both contribute to better lives and outcomes for Leeds.

1.2. A Smart City is somewhere that maximises the potential of all of its assets: people (skills, endeavour), information (from all parts of the City), businesses and things (devices, technology) that when **combined** are more than the sum of its parts.

1.3. The Leeds Smart City approach operates within a 3 layer model of delivery comprising:

- The **Foundation Layer** that provides the operational foundation which is the means by which all digital assets across the City interoperate with each other and provide combined information from which we can gain new value and insight. We will build this incrementally by considering and incorporating "Digital by Design" in all new projects that we carry out across the City.

- The **Differentiation Layer** defines the City's unique priorities, strengths and areas of distinctive opportunity based on the skills and knowledge of people. In Leeds these areas are Health and Wellbeing, Data and Co-Production.

- The **Innovation Layer** in the Smart City is the development of global leading projects that exploits the City's differentiators through a unique combination of Information, Human Capabilities and Digital technology to deliver city outcomes in a uniquely innovative way that can then be applied in other cities.

1.4. This paper describes the need for a coordinated and supported approach to Smart Cities and recommends actions to move this forward including the formalisation of the temporary arrangements around the Smart Cities team.

2. Recommendations

- Endorse the Smart Cities approach and direction detailed in the report
- Support the formalising of the Smart City Team from existing resources under the leadership of the Chief Information Officer.
- Support the creation of a Capital Innovation Fund of £150K that can be used to support "Civic Enterprise" type prototypes as a basis for informing wider business cases. Spend against this to be recommended by the Smart Cities lead with sign off from Chief Information Officer and Executive Member for Digital & Creative Technologies, Culture & Skills.
- Support the direction to all managers and services to commit to make all non-person sensitive data open and published on the Leeds Data Mill.

1. Purpose of this report

1.1. To explain to Executive Board the drivers for a Smart Cities approach for Leeds and to recommend a particular strategic approach to its delivery.

1.2. To explain what has been delivered so far through temporary and loose arrangements in what has been a “prototype” year.

1.3. To articulate where we want to be and the main issues to be resolved.

1.4. To provide practical recommendations in terms of progressing from this point on including the formalising of a Smart Cities Team.

2. Background Information

2.1. The urban population in 2014 accounted for 54% of the total global population, up from 34% in 1960, and continues to grow. In the future a high proportion of the population of the UK will be living in urban areas and a significant proportion of these people will be over the age of 65.

2.2. As people migrate to live in urban areas, city resources will come under increasing pressure; examples include the demand for all services continuing to increase putting severe strain on the ability of the city to keep on delivering; and the demand for health services are predicted to overtake supply within 10 years. This is a worldwide problem with no clear solutions.

2.3. Pressures on public finances have seen local authority budgets reduce in Leeds City Council by 40% since 2012, with further significant cuts to come.

2.4. The work of the Commission for the Future of Local Government advocates a move to a new civic enterprise model of delivery where the Council is smaller in size and bigger in influence. A new leadership style where Councils become more enterprising, businesses and other partners become more civic and citizens become more engaged with the focus on delivering outcomes not services. Part of this is about a new social contract whereby we are doing things with people as opposed to for them. The Smart City approach will follow these principles.

2.5. Smart City services have the potential value to the UK economy of $40bn by 2025 according to a recent Arup study. Leeds is already a major hub for technology and data jobs and by embracing this agenda, as well as delivering public outcomes; we will have the opportunity to help create new business growth, export and inward investment opportunities.

2.6. The Deputy Prime Minister recently announced the creation of TechNorth – a major new Northern Futures project bringing the pockets of excellence in tech industries from across the North together to form an internationally renowned virtual hub. TechNorth will be set up to co-ordinate the existing

digital technology expertise of Manchester, Leeds, Sheffield, Liverpool and the North East tech cluster (Newcastle, Sunderland and the Tees Valley). The Smart Cities work may provide some key differentiators for Leeds that could provide an opportunity as part of the Tech North programme of work.

2.7. The strategic approach in Leeds is that the application of Information, Technology and Smart in Leeds is as a means to an end and not an end in itself. Therefore, our strategy is to proactively focus on our **differentiators** in an attempt to develop innovative solutions to the problems and opportunities noted in this section with the view that they can be applied globally.

3. Where Are We Now

3.1. Leeds City Council put in place a small Smart Cities team (1.5 FTE), with the support of the Chief Information Officer, which has been operational since January 2014. To date this has been a low cost approach utilising limited internal secondments and resources on an ad-hoc basis.

3.2. The work so far has focussed on the development of prototypes and proof of concept initiatives across three broad areas:

- Data (With a focus on Open Data[1] so far)
- Health and Wellbeing
- Co-production of solutions with communities and localities

3.3. These include:

3.3.1. The creation and development of a prototype award winning Open Data Platform – Leeds Data Mill (Launched in March 2014) - which provides an environment to store and access Open Data from across the City. Leeds is widely acknowledged and cited, by the Cabinet Office, leading industry analysts Gartner Group and others as leaders in the field of open data.

3.3.2. The delivery of prototype applications by local digital companies e.g. Leeds Art Crawl allowing public discovery and cataloguing of City Art works and a prototype framework service offering visualisations of open data – the Leeds City Dashboard.

3.3.3. The development and implementation of engagement events including the popular ‘In Numbers’ series of events building private sector engagement, and the new education programme the ‘Leeds School of Data’.

3.3.4. Leeds differentiates and leads nationally on the development of smart methods and approaches to enable the delivery of Health and Wellbeing outcomes. This includes the development of the Pioneers informatics blueprint to underpin whole system approaches, the advanced development and application of tele-health solutions and hub, prototypes developing

[1] **Open data** is **data** that can be freely used, reused and redistributed by anyone - subject only, at most, to the requirement to attribute and share alike.

solutions for citizen driven health that will reduce social isolation and elderly admissions to hospital.

3.3.5. Leeds represents Local Public Services (represented by various professional organisations, the LGA and other national groups), in their contribution to the HM Government's Personalised Health and Care 2020 Framework, which lays out plans for how the use of data and technology can transform outcomes for patients and citizens. Local Public Service representatives assert that this cannot be centrally driven or delivered and must be delivered within the local context. The application of digital technologies in new ways through a mix of reusable standard and shared capabilities and those developed to meet the specific needs of communities and localities is necessary. Therefore, Leeds will lead a group of key stakeholders who will develop the methods by which the 2020 Framework will be implemented within communities across the Country.

3.3.6. These approaches provide the digital perspective to work of the Commission on the future of Local Government in terms of focusing more on delivering outcomes not services through the application of civic enterprise and co-production. These approaches are being taken and replicated by others who are investing in them and accelerating the delivery of solutions. E.g. Norfolk's Information Hub, Bournemouth and Edinburgh's Open Data Platforms.

3.3.7. Leeds leads on the development of a report to government, sponsored by the Department of Business, Innovation and Skills, on how to accelerate the delivery of Health and Wellbeing innovation in the digital age. This is governed by a ministerial forum chaired by Sir Alan Langlands, Vice Chancellor of the University of Leeds.

3.3.8. The development of approaches to Smart City services including Smart Housing and Smart Parking.

3.3.9. The delivery of large scale Wi-Fi solutions including Free Public Wi-Fi rolling out to 103 Public Buildings and contributing to closing the Digital Divide by providing Free Wi-Fi to tower block residents. A further innovative concession contract for deployment of free Wi-Fi to other communities and localities across the City is also being progressed. DCMS cite Leeds as the City that best deploys and exploits Wi-Fi as part of the Superconnected Cities programme.

3.3.10. Have supported the creation of the Leeds Open Data Institute, one of two in the UK and one of only twenty in the world. It is now active in its own right and hosts the "In Numbers" events. Members now include Leeds, Bradford and Calderdale Councils and lead private sector organisations.

3.3.11. Have secured funding from the Technology Strategy Board for a Civic Enterprise Partnership to exploit the Data Mill amongst other Local Authorities. Led by local media company HeBe Works the consortium consists of Leeds City Council, York City Council and University of Central

Lancashire this 18 month programme will develop a local approach to Open Data and enable other local authorities to move forward on their Open Data journey.

3.3.12. Through doing this Leeds has established a national profile in the Smart City space and excellent relationships both with Whitehall and amongst key funding agencies as we aim to be the Smartest City in the UK **in the areas where we seek to differentiate**.

3.4. The work thus far has been done with limited resources on an adhoc basis. The ability to meaningfully engage with communities, localities and businesses to develop co-produced solutions to an increased number challenges requires more time and capacity to be put in.

3.5. These developments have proved that Leeds City Council has the ability to encourage and facilitate innovation across the City and the capability to move forward with the Smart Cities agenda as articulated.

4. Where We Want To Be

4.1. **Leeds is the Best City for delivering better Health and Wellbeing outcomes, enabled through information and technology, where more people will live fulfilling lives and making Leeds the best place to grow old.**

4.1.1. The effective combination of data and application of new digital capabilities, across the whole health and social care system, at a local level can enable behavioural changes, allow earlier interventions and increased resilience at a community level.

4.1.2. As well as integrating Health and Care services and providers across the Whole System which is a key facet of the Leeds Informatics Programme the focus of the Smart work will be on the co-creation of new citizen, community and locality developed solutions, bottom up, to enable better resilience and lives. The groups involved in this are citizens, entrepreneurs, voluntary sector, enterprises from numerous sectors (academic, industry, health service, third sector and government). This will change the ways in which we do things and also what it is we do.

4.1.3. Leeds has one of the country's highest concentration of health informatics experts (over 2000), that have the potential to provide unrivalled expertise, so they can spot new opportunities for innovation in health and social care, as well as in other sectors too. The mapping, identification and connecting of these assets with those of the digital community of Leeds and their alignment to outcomes will be part of the Smart Cities role.

4.1.4. As noted above, Leeds is acknowledged as a national leader in this area and has strength in terms of the partnership across Health and Social Care.

4.2. **Leeds is the Best City for deriving the value from data (The aspiration is to be 'The Data City').**

4.2.1. Being the Best City for deriving value from data requires the development of new digital skills as an important differentiator. The role and number of **Data Scientist** (highly skilled people who can analyse and derive value and new insights from large and complex data sets through new techniques and approaches) needs to be a differentiator in the future. It is proposed that Leeds be the City where Data Scientists are developed and want to come. Globally this is quickly becoming one of the most sought after roles for which there is now the greatest shortage.

4.2.2. Further the combination of data from across the City and beyond, building on the Leeds Data Mill work, with the best Data Scientist has the opportunity to create new insight, action and policy in helping to resolve some of the most significant challenges facing the City and the public sector today. One idea, to be explored in this area, is that of bringing together the different Information Analytics Teams across the City into an Information Hub for the City as part of the Leeds Institute of Data Analytics in the University of Leeds. The institute has been grant funded to the tune of £12M thus far with more opportunities to come and will contain some of the greatest and best developing minds in this area. Co-location alone could significantly help with the development, cross skilling of our Data Scientists and Data Analytics staff as well as bring some new insight into the delivery of City outcomes.

4.2.3. The successful "in Numbers" engagement events and approach, pulling together interested parties across the communities and localities of the City, to identify and co-produce solutions to specific problems and opportunities using data will also form a key part of this work.

4.2.4. Developing and delivering these capabilities could help cement the delivery of the aspiration of Leeds becoming the Data City.

5. Main Issues

5.1. Whilst the temporary arrangements have successfully delivered a series of prototypes, raised the profile of Leeds within the Smart City Community and National Government; and secured additional funding, the capacity to take the Smart City agenda forward and deliver the above is limited.

5.2. The world's smartest cities are recognised for innovation and attract inward investment from national and international organisations. This is done in other Cities through dedicated bid teams which we do not have. We need to be bidding as appropriate for funding sources to accelerate our work in Leeds. This capability is required to attract funds to contribute to the progression of Smart Cities that may be going to other Cities.

5.3. In the Digital Age it is necessary for all managers and business leads, across all sectors, to obtain a base level of understanding and knowledge of how

business models need to change to succeed. The ‘digital maturity’ of Local Authority service heads is generally very low and this paper is a call for action for all to proactively take personal responsibility to gain the necessary business skills to effectively operate in this new age. NB. digital maturity is not skills in technology, it is understanding different business, service and values models in the digital and data age.

5.4. Working with local employers, the Employment and Skills service are engaging schools to support teachers and their students to acquire coding skills; and young people to gain work experience and apprenticeship opportunities; working with adults to acquire basic digital skills to access services, further learning and employment. Local FE and HE learning institutions offer a wide variety of learning and qualifications at all levels, however, there is an opportunity for greater interaction between employers and education providers to support the pipeline of specific digital skills as well as up-skilling the wider workforce and promoting a culture of continuing development to support employees to acquire new skills and knowledge that better meets the demands of a rapidly changing commercial landscape and to support the growth of the ‘information and digital economy’.

6. What Do We Need To Do

6.1. The Smart City Team will focus and proactively engage with stakeholders to assist them in progressing on the differentiating areas only. They will help facilitate connections, bring in good innovative practice, ideas etc. They will research and ensure alignment to standards which will be the glue enabling all of the different parts of the system to work together thus creating the Smart City.

6.2. This will be only at the prompt, proposal and possibly prototype end of the innovation cycle. There must be "business" sponsorship and clear business cases in terms of taking things further forward from there in terms of sustaining or scaling solutions.

6.3. The Smart City team will provide advice to ensure that anything which is developed is done with due consideration of the City outcomes and considers the needs of Leeds’ communities and localities.

6.4. The Heads of Information Management & Technology (IM&T), located in Directorates, will provide support for all other areas.

6.5. All managers across the Council need to become aware and educated about the digital and data principles, and why they are important and applied to new work they do.

6.6. The Smart City approach in Leeds will be to take a whole system approach to solving some of the challenges and exploiting the opportunities. This will involve coproducing solutions with a mix of partners that are hoped to result in the incubation of some start-up companies. **By its nature this involves new and different approaches to commissioning, procurement and engagement**. Members of Procurement Unit have been involved in some of

this thinking.

6.7. Smart Cities thinking through the Digital Principles must be a key consideration, **for business leads**, in the delivery of all City Outcomes, Breakthrough Projects etc. Business leads, internal and external to the Council, can be supported by the appropriate Heads of IM&T.

6.8. Skills are important. It is not just about Digital it is about an understanding the new business models within the digital age and how we can inform and support change in business in Leeds and reform the Council in this new context; developing an approach to Smart Procurement is an example. Maintaining a map of city wide digital assets and exploiting them will help to ensure the necessary digital capabilities required in the City are developed.

7. Linking to Other Agendas

7.1. **Health and Wellbeing** – This work will report directly under the existing governance under the Health and Wellbeing, Transformation Board and support the work of various groups across the City. Therefore, close links and involvement from Health and Wellbeing leads must continue and are important. In this instance the Smart Cities team will work with and inform the Partnership Team, the Universities, Health organisations and nationally, NHS England and the Department of Health.

7.2. **Economic Development** – This work will be delivered through innovation by mix of inward investors, entrepreneurs and people across the City and therefore economic development is a key component in all of these programmes of work. Close links and involvement from Economic Development, and agencies such as Leeds and Partners and the LEP will continue to be important. This paper is not about a strategy for the digital and information economy as a whole, although linked, and a separate paper on this will be brought forward in due course by the Economic Development Team.

7.3. **Super Connected Cities Programme** – The Smart Cities team will continue to be directly involved in the work of City Development on Super Connected Cities and the introduction of voucher scheme to allow businesses to gain access to faster/ultra fast fixed broadband (minimum download speed of 80Mbps), providing public wireless connectivity and other related schemes.

7.4. The Smart Cities team will pull people together as one to work on particular opportunities or problems. This will consist of a small core team and ‘secondees’ to be included, as required, for specific projects.

7.5. Smart City outcomes are ‘business or sector led’. The Smart City team will provide support, advice and facilitation. (“Small in size, big in influence”)

8. Corporate Considerations

None

9. Consultation and Engagement

9.1. The approach to Smart Cities has been considered, reviewed and approved by the appropriate council officer boards and Lead Member.

10. Equality and Diversity / Cohesion and Integration

10.1. Equality, diversity, cohesion and integration requirements are embedded in all planning processes for Smart Cities.

11. Council policies and City Priorities

11.1. The Smart City Programme supports the ambition to be "The Best City and Best Council" and the Council's values. It will assist in the achievement of outcomes contained in the Council Business Plan 2011-2015 and help to deliver the wider city priorities. Smart Cities thinking will cut across the Breakthrough projects 2014/15.

12. Resources and value for money

12.1. Internal staff resources, working on Smart Cities, have been provided through favours and funded through current directorate budgets. We are looking to establish a dedicated team within existing resources.

12.2. External funding for the Smart City initiatives has to date been through successful bids to the TSB, BIS and the Cabinet Office. However this approach has been ad-hoc and resulted in an uncertain funding position with some restrictions on spending depending on the funding source.

12.3. Funding secured and spent to date has been circa **£150k** (Including Grants from Cabinet Office and contributions from LCC).

12.4. The current grant funding position is as follows:

Technology Strategy Board Consortium Agreement	
Research Partner Staff Support	£88k (To Mar 2016**)**
Local Government Association	
Data Mill and Dashboard Development	£165k (To Mar 2015**)**
Department of Business Innovation and Skills	
Health and Wellbeing report	£50k (To Jan 2015)

12.5. Whilst this resource is welcome the external funding is for specific developments / programmes and is time bound which limits the additional areas which could be taken forward e.g. application prototypes.

12.6. Whilst a certain level of support can be obtained from Grant funding, this is not guaranteed and comes with limitations both in terms of time and outcomes required. An allocation of £150K is requested into the Capital

Programme to be used as seed corn funding for prototype projects and as possible match funding for external bids for funds. This will allow Leeds to develop priorities for Leeds rather than simply reflect only those of external funders.

12.7. Once prototypes are proved to be successful they can be taken forward as full services either via a business case providing funding or as a commercial application via an existing developer or a start-up.

12.8. This approach can enable faster, cheaper and more focussed solutions to city problems and will include the local digital / creative community in a key development role.

12.9. Other routes include the Leeds City Region LEP, Combined Authority and the Health and Social Care Capital.

13. Legal Implications, Access to Information and Call In

13.1. The decision will be subject to call-in arrangements but there are no specific legal implications or issues relating to access to information.

14. Risk Management

14.1. A high level analysis has been undertaken and a number of risks have been identified. Principally, the potential to invest in prototypes that fail – of which there will be some, and the sustainability of services provided by these different approaches. However, not supporting this approach also carries risks as outlined above.

15. Recommendations

15.1. Endorse the Smart Cities approach and direction detailed in the report

15.2. Support the formalising of the Smart City Team from existing resources under the leadership of the Chief Information Officer.

15.3. Support the creation of a Capital Innovation Fund of £150K that can be used to support “Civic Enterprise” type prototypes as a basis for informing wider business cases. Spend against this to be recommended by the Smart Cities lead with sign off from Chief Information Officer and Executive Member for Digital & Creative Technologies, Culture & Skills.

15.4. Support the direction to all managers and services to commit to make all non-person sensitive data open and published on the Leeds Data Mill.

Background Documents[1]

None

The background documents listed in this section are available to download from the Council’s website, unless they contain confidential or exempt information. The list of background documents does not include published works.

Appendix 1 : An Example of Smart Cities Working in Leeds:

The Leeds Citizen Driven Health 2020 Scenarios.

Bill is a retired 81-year-old former engineer who has lived in Leeds all his life. He has had diabetes for the past 15 years and was diagnosed with Alzheimer's Disease 4 years ago. Bill was widowed 5 years ago and his 2 daughters and son live with their families in various parts of the UK. The family used to make a real effort to see Bill whenever they could, but weeks could go by when he saw nobody. Often Bill's main contact would be the part time carer who would visit whenever possible or in a crisis, or the trip to see his GP, Dr. Simons. He also started to call emergency services because he didn't want to be a burden on the family.

The Leeds Network Neighbourhood Scheme local to Bill, had introduced Yecco in 2015/16. Yecco is an entrepreneurial digital health company. They wish to develop a Digital Application that combines the use of social media, apps and freely available electronic monitoring equipment to manage long-term conditions and improve communication between citizens, their families, and professionals. The technology gives reassurance in terms of both medical monitoring and home safety technology. It allows his family to know whether Bill is warm, if he is up and about or if he has left any appliances on overnight. Smoke detection, floods in the bathroom and whether he has fallen from bed are all visible for Bill's family through Yecco.

Bill has been using his iPad without fear for the past 4 years and now has daily contact with his daughters, his son, and his 6 grandchildren, who regularly send him video messages, pictures of what is going on in their lives, and remind him of things he needs to remember to do. Between the extended family and the connected professionals Bill's care is taken care of, but actually it is Bill who is largely self managing his conditions.

Bill is now able to manage his diabetes entirely by himself and visits his GP once every 3 months as opposed to twice a month as was previously happening. Previously Bill would end up at A&E at Leeds City Hospital at least twice a year for various reasons, and was normally there for a week at a time. In the past 4 years he has been in hospital only twice, both for un-preventable reasons.

His failing memory and withdrawn character have been transformed through stimulation and rediscovered purpose and he now is caring for 2 other neighbours with similar conditions.

The Network Neighbourhood has now become another family to Bill (with 250 local members) and he is involved in it's Yecco Club, which meets twice a month. At the club they also have Virtual Quiz sessions with over 1000 other Network Neighbourhoods, both in the UK but also internationally. The Yecco Club is now involved in pushing Yecco to develop new and useful solutions for the future beyond 2020. Bill, someone who never went out or saw anyone from week to week, now has daily contact via his iPad with family and carers and has a social event each week thanks to technology.

From a Leeds City perspective it is easy to quantify that Bill's care was costing over £25,000 a year and he still was isolated, lonely and had a poor quality of life. By investing in technology, every £1 spent the City now saves £2.30 on Bill's care. However, Bill is also supporting others, which further enhances the economics enabled by use of technology. His family worries much less about him and as unpaid carers are more effective in managing their own lives, family relationships are much less strained with his son, who as the main carer now feels significantly better supported.

A recent quote from Bill:

"I used sit in my room watching the TV day-in-day-out. If I had realised what type of life I could be living all those years ago I would have started using technology immediately. What technology has done for me is to help me reduce my reliance on Healthcare and Social Care, but on the flip side has brought me together with my family and also a whole new community, not just in Leeds but all over the world ! It's amazing!."

John is 82 years old and lives alone in his own home that for the past 50 years has been in Cross Gates, Leeds. He has started to struggle with his mobility and has COPD caused by working in a factory with asbestos as a young man. As a result he needs regular oxygen and needs to take his blood pressure readings regularly. He suffers from high blood pressure and has a family history of cardiac disease.

John separated from his wife with whom he no longer has contact and many of his friends are in a similar position to him, have moved out of Leeds or have passed away. John has 2 daughters and 3 grandchildren, but they either work or are at college. One of his daughters also has health problems and recently started treatment for cancer. John does not want to worry them and is keen for his grandchildren to do well in their education since not having that opportunity himself. He also does not want to put any more stress on his daughters. As a proud man, he manages as best he can and has a homecare assistant visit each morning to help with some basic tasks.

John's children put money together to buy him an iPad for his birthday but he does not use it and is not motivated to use new technology. John has problems with his memory and he used to love football and go to matches with his friend but this stopped a few years ago when his friend became too frail.

The use of technology introduced in Leeds has transformed life for people like John, reduced the pressure on Council services, and brought families closer together.

How Yecco can help:

- Volunteers trained on Yecco worked with grandchildren to teach John how to use his iPad. He is now messaging and what he would have called his daily diary is now his "Timeline" entry on his iPad which the family can all see and send him messages and comments.
- John's eyesight isn't what it was, but fortunately Yecco have introduced a way that John can magnify any messages, pictures or information he receives. He can also have it read to him automatically.
- Family, volunteers and social care staff now schedule video calls in the calendar so everyone in the family knows when to call. The family feels supported and an online support plan they have created together with John (with his consent) means everyone knows exactly what is happening.
- John's homecare assistants use the iPad as an interactive tool to keep the family and John in the loop about all aspects of his care. John's medical details are now available for all the right people to be able to access immediately.
- Grandchildren can schedule directly with John when they are back home from studying and arrange times to visit, they can send him messages or remind him of their birthdays! They love Yecco as it's like Facebook and so much more, all in one place!
- John's condition means he has to use a Pulse Oximeter (to measure his oxygen levels), a Blood Pressure Monitor and a Thermometer; all which are designed to be easy to use (press 1 button and that's it!). His information is automatically transmitted to the family, carers and also the GP practice, hospital, or the out of hour's facility. The out of hours call centre can contact John and his family when intervention is required, or routinely advise him that he is managing very well. In fact other neighbours are now starting to support each other.
- Should any family members or volunteers accompany John to a medical appointment the information on home monitoring will be instantly available and recorded accurately, there is no need for manual updating by anyone in the network.
- John can be supported by a network of family members, volunteers and professionals that John has given consent to see his readings, increasing communication and monitoring of his respiratory difficulties and blood pressure.
- The Network Neighbourhood Scheme now arranges for a volunteer to take John to a football social club where his daughters and grandchildren go for lunch when they visit and all these events are visible in the Yecco system and to John on his iPad. One click and he's booked in!
- Yecco enables education for volunteers and carers to ensure their quality of care and knowledge gets better and better, reducing the burden on Council services.

A recent quote from John:

"The introduction of technology has improved the quality of people's lives in Leeds dramatically; by managing medical conditions more effectively, spotting problems earlier and intervening sooner. Yecco's technology has helped to create 2 communities, one online and one that has been facilitated through the introduction of technology that connects people and brings them together regularly. For Leeds City Council it means better care for its citizens, less stress on Council Services, less stress on families and less days off work (good for companies). The Leeds Pound (£) now goes further which withholds Leeds's great reputation for looking after its lifeblood…The Leeds's Citizen."

The Role of the Smart Cities Team

The role of the Smart Cities Team has been to gain a good understanding of the problem and opportunities through engagement with various stakeholders across the City including citizens, different communities and localities. From this we identify through research and networks potential innovators and innovation that could be developed or applied through co-production with the community. This includes researching potential sources of external funds and grants to fund the ventures. The Team provides the facilitation and criteria by which prototypes are funded and judged.