A PEOPLE-SHAPED\(^{\text{TM}}\) APPROACH TO SMART SOCIETIES

Matt Marsh - Firsthand Experience

KEY WORDS
Regeneration Innovation Collaborative People-Shaped

DESCRIPTION OF THIS PAPER
This case study shares innovation processes, models & techniques for Smart City development. It will help municipalities replicate the people-shaped\(^{\text{TM}}\) approach adopted, supporting stakeholder engagement & development of a shared vision for a smart city in a risk mitigated & human centered fashion.

BACKGROUND
In the UK (and elsewhere) a lot of the responsibility for creating a fertile social and economic landscape has shifted from central and regional governments to the local level, specifically to mayors, urban planners, and local councilors.

In response, the Royal Borough of Greenwich has an ambitious regeneration strategy. It is taking a comprehensive or 'whole-city' approach to support the attainment of its economic and social objectives. As part of this "whole city" approach, it wishes to lay down a framework to enable the creation of a "smart society", and make sure Greenwich is technologically fit for purpose in the 21st Century.

Strengthening the local economy and increasing prosperity are major drivers for the Council. There is a strong commitment to build on the area's 400 year reputation as a creative skills base, and to transform this area into a forward thinking "digitally enabled" district. As such, the Council has recognized the role technology can play in achieving these objectives for regeneration and growth.

Consequently, Greenwich is creating an environment that can stimulate the adoption of 'smart city' technologies and applications, as well as enable wide adoption of new technology enabled approaches to the delivery of services.

To achieve this, it is working closely with technology partners, such as Cisco, Dimension Data Advanced Infrastructure, and Living PlanIT, property developers and landowners, Higher Education and SME's to create a "whole city" technology platform that will drive innovative end-user applications and commercial activity.

THE SMART SOCIETY CHALLENGE
Like most people, the citizens and municipal representatives of Greenwich have high expectations of what technology can deliver. Their personal experience of their smart phones, high speed broadband and ever cheaper digital technology has revolutionised their individual social, business and entertainment lives.

It's citizens have an expectation that new technologies will be able to provide improved access to better public services; such as housing, health, education, transport utilities, and waste management, among others.

And additionally, there is a desire that individuals benefit from some of the economic prosperity that a "digital society", "a future city" or "a smart and connected city" will provide (i.e., people expect it will create new opportunities to get a decent job and lifestyle).

Consequently, people want to be confident that the digital technology that they will be investing in will be good for future employment, education, health, family, leisure and environmental prospects. They want to feel confident that what is going to be done, will be in the best interest for his or her long-term future.

So, expectations created by embarking on a digital society initiative can be huge. However, with these expectations in place, pragmatic implementation oriented challenges, associated with the development of a smart society quickly emerge.
What if a municipality backs the wrong technological horse? What if the technology that is put in place becomes redundant or obsolete in a few years? What if changes to digital services provision goes faster than some of the residents want to go - and that the elected municipality alienates the very people they are trying to help?

And to complicate things further, the “Future City” sector is saturated with jargon, is couched in technologically oriented language (rather than human needs focused), and critically, potential benefits to be delivered may be framed in ways that citizens or their representatives don't fully understand.

So, to successfully create a digitally enabled society, it is critical to be able to lay out the vision for why the municipality is choosing to invest their taxpayer’s money in a specific scheme, technology company, development organisation or in set of services. These imperatives must then be articulated to voters, rates payers, politicians, and business leaders in a simple, yet effective way.

And, to achieve this goal, those tasked with creating a technologically enabled future have to engage in a conversation about the future with a multiplicity of corporate, governmental and societal representatives - and all the while continuing to perform their day jobs efficiently and effectively.

And this is exactly what the People-Shaped(TM) approach seeks to deliver.

THE PEOPLE-SHAPED(TM) APPROACH

One of the fundamental realities associated with bringing new forms of digitally enabled service and municipal experience to life is that not everyone, “at the local level”, is always exactly clear about what digital can do, let alone should do, for his or her communities.

This is not unique to municipal service innovation. As with most product and service innovation programmes, users tend not to know what it is that they want next - because it doesn’t yet exist in their consciousness. So it is impossible to simply go and ask them using some kind of focus group sessions. So, a different approach is needed. To mitigate the risk of investing in the wrong digital society “solution” requires a process for future-thinking that carefully arbitrates the technological, business and user realities.

The people-shaped(TM) approach discussed in this paper ensures that any future solution is not only technically feasible, but economically viable and, of course, desirable to the populous too.

The output from adopting this people-shaped(TM) approach enables organisations to move forward with consensus and common understanding, before expensive implementation activities are performed. Without this vital step, the danger is that technology is purchased, infrastructure is built, services are coded and people are trained to meet a goal that no one actually needs or wants. And then once the money is spent, a reset is required, resulting in late stage fixes that cost 100 or 1000 times what it would have cost to have done it correctly in the first place.

The people-shaped(TM) methodology begins with understanding users needs, perceptions, motivations and behaviours - and placing them at the centre of the service innovation process. And in this instance, “users” includes citizens, those elected or employed to deliver it, as well as all the necessary partners who will be contracted to implement it.

The people-shaped(TM) approach ensures that digital priorities are successfully negotiated and arbitrated early on in a collaborative, constructive and creative fashion. And it also ensures that “analysis paralysis” is avoided - endless competing agendas operating in an information vacuum. This prevents the possibility that nothing ever actually gets started, that the positive political and business intent is eventually lost in endless executive meetings - and tragically that the opportunity to actually improve citizen’s lives and give them a chance to succeed in an increasingly global marketplace is lost.

A people-shaped(TM) approach creates a shared terminology and sense of purpose that genuinely addresses the needs of the population at the local level. It provides the necessary conceptual models about creating
the future and how to get there. And it equips different departments or partners with the tools that foster collaboration, investment, and transformation of business practices in a supportive and effective fashion.

In summary, a people-shaped approach provides the missing human perspective that prevents investment in the wrong thing, at the wrong time, for the wrong people. A people-shaped approach is a risk-mitigated process for creating future digital societies, and one that saves money, saves reputations, saves resources - and delivers maximum fundamental opportunity for all.

THE CASE STUDY
In 2012, the Royal Borough of Greenwich took the bold step of creating an expert panel to help them engage with moving forward with their digitally enabled social and economic regeneration agenda.

This panel, called the Digital Advisory Board (DAB) consisted of professionals from the worlds of digital advertising, product and service development, academia, Government, local business, and technology providers.

However, it became apparent, that whilst the DAB could provide clear guidance about how to manage implementation activities, without a clear articulation of ambition, vision, priorities and change management, it was impossible for them to operate in a strategic and evidence based environment.

Without this strategic and evidence based perspective, there was a danger that any advice given, would have been provided without appropriate context that would mitigate the risk of "ploughing ahead" and implementing solutions that the citizens and elected representatives of Greenwich neither needed or wanted.

To address this, the Council agreed that a small piece of work needed to be performed to help them articulate what their goals were, and what tactics they would deploy to achieve them.

In response, Greenwich engaged a business innovation agency called Firsthand Experience to help them take a human-centered approach that would enable them to clearly define their vision, their priorities, their stakeholder engagement approach, and identify the tactics they would adopt to successfully move forward with their digital society agenda.

The Council agreed with Firsthand Experience that they should adopt two key principles; first that they should adopt primarily a "first follower" approach; and second, that a rigorous and robust people-shaped innovation programme should be adopted to provide the missing end user perspective that, to date, had been missing.

A sixteen week people-shaped(TM) service innovation programme was devised, divided into seven distinct steps. First, the Council's business and political imperatives were identified. This ensured that scale, scope and ambition of the programme had been clearly understood.

Next, secondary research was performed to "surface" best practice and exemplars where digital society initiatives had been successfully deployed and proven. This ensured that Greenwich did not spend scant resources "reinventing the wheel."

Third, in-depth interviews were performed with experts from the technology, digital society, change management, education and business sectors to "sense check" assumptions, as well as the capability, viability and feasibility of the solutions being proposed.

Fourth, materials and findings generated during steps one to three were synthesized into a range of visual models and frameworks that supported effective exchange of perspective, development of shared language, articulation of ambition, definition of vision, and selection of priorities and tactics.

Fifth, an array room was prepared that collated all the evidence from global best practice. New visual models and frameworks that described alternative approaches to creating a digital society were presented for easy
review. This was all rapidly and visually prototyped in order to facilitate decision making. A voting and discussion mechanism was developed that ensured all team members were able to provide their voice and opinions in a collaborative and supportive environment.

Sixth, a series of creative workshops were performed with the Council’s executive, the Digital Advisory Board, Council department leaders, regeneration partners and others to reveal where shared strategies and approaches existed. This was then used as a mechanism for identifying ways for moving forward that could be easily communicated and acted upon.

And finally, seventh, the work was documented, findings synthesised and a summary of the strategic recommendations provided. A framework for articulating the next steps that needed to be taken was created, broken down into immediate, short term, medium term and long term actions and investment.

OUTCOMES / CONCLUSIONS
Seven models that described alternate approaches to “change and growth” in Greenwich were developed.

These models were then used to develop a strategy that was devised into a “four pillars of digitally enabled social and economic regeneration” action plan. This plan was then translated into specific actions that drove:
- Enabling economic activity
- Enabling a digital infrastructure
- Enabling better delivery of service, and
- Enabling latent human capital.

Collectively, they provide a bed-rock from which future collaboration, decision making and planning can be made.

In conclusion, by adopting a people-shaped approach, the Council has been able to harness not only its internal stakeholders and their external development partners, but to take an evidence based and risk mitigated approach to creating a digital society.

Last, it has also left a legacy whereby the Council is able to effectively communicate the priorities and decisions it had made at a local, national and international level.

PRACTICAL APPLICATION
The approach has enabled the Royal Borough of Greenwich to set out clear objectives and actions, and to get buy-in from key stakeholders. By working closely with developers, Greenwich is seeking to embed smart city technology infrastructure in all new developments and to create an environment that stimulates the development and take-up of new ‘smart city’ applications and services.

It has opened a Digital Innovation Centre that is the focal point for collaboration in developing Smart City applications and services. The Council will also be working through the Centre to identify new solutions to service issues.

Its approach is Borough wide but there is a particular focus on Greenwich Peninsula at North Greenwich. Encompassing TheO2 arena, this 160 Ha development site has consent for over 10,000 new homes and 61/2 M. Sq ft of commercial floor space, including offices, hotels, retail, and Higher and tertiary education.

On completion the development will accommodate 25,000 residents and over 20,000 workers, in addition to almost 10 million visitors that currently visit TheO2. It is already home to Ravensbourne, a University Sector College specialising in digital media, design and broadcasting, 150 creative technology and media companies; 1700 technology and design students; and has over 4,000 technology, media and design businesses attending events each year. There is a strong commitment to build on the areas’ reputation as London’s ‘Digital Peninsula’.
As part of its commitment to creating a Smart and Connected Community, Greenwich has incorporated a requirement for developers to provide technology infrastructure in future developments, within its draft Core Planning Framework. The people-shaped(TM) service innovation programme has led to a clearer dialogue with developers on the Council’s expectations and objectives.

The Royal Borough’s core objectives are to create:

- A world-leading Smart and Connected Community that uses technology to achieve a stronger economy and a better place to live, work, study and visit;
- A technology platform and creative environment that facilitates the development and take-up of ‘smart’ services and solutions;
- A ‘living-laboratory’ for smart City Technologies at Greenwich Peninsula

The three key elements to Greenwich’s approach are to:

1. Create at Greenwich Peninsula a Digital Business District that focuses on design led-innovation, creative media and content; smart city technologies and applications.
2. Create a Digital neighbourhood and community at Greenwich Peninsula and to apply the approach and learning across the entire Royal Borough.
3. Use of digital technologies in the design and delivery of Council services.

The Royal Borough of Greenwich has now:

- Set up ‘Digital Enterprise Greenwich’ to drive forward its work on Smart Cities, and to encourage collaboration with the private sector and the take-up of new approaches within the Council and elsewhere in the public sector.
- Collaborated with Ravensbourne, a University Sector College specialising in digital media, design and broadcasting to open a business incubator to support the growth in business start-ups.
- Opened an Innovation Hub at Greenwich Peninsula that supports collaboration and the development of smart city applications and technologies – working alongside Cisco, Living PlanIT and the University of Greenwich’s Faculty of Computing and Mathematical Sciences. This has also benefited from funding from the TSB to support SME’s develop new applications in retail, transport and the urban environment; and ERDF funding to create a digital accelerator focused on smart city applications.
- A new cross-council group looking at the adoption of new technologies to improve services with a particular emphasis on education, skills, health and support activities for SME’s. This strand aims to secure greater efficiencies.
- Addressing digital exclusion, through the creation of a Digital Skills Centre to enable greater access to the expertise and resources at Ravensbourne, and a proposal for an initiative with BT to encourage greater use of IT among specific groups within the community.
- Secured an agreement with the developer of the Greenwich Peninsula, working with Cisco and Dimension Data, to create an advanced technology infrastructure across the peninsula in all building and apartments which will provide a platform for integrated building and estate management systems and to support end-user applications and smart city applications.

**Conclusion**

The approach by the Royal Borough of Greenwich represents a comprehensive or ‘whole-city’ approach within an individual London Borough. It is just one example of the good work that is taking place within Cities. Greenwich aim is to use smart city technologies to support its economic and social objectives and to create an environment that can stimulate ‘smart city’ technologies and applications and new approaches to the delivery of services.