

practices, with the aim that greater well-being will result for the residents. Without over simplifying what is in fact a very complicated area, the report recognises that the function of local government and public institutions becomes even more critical when influences on our well-being are out of control. In order to address this, the Local Government Act of 2000 provides local authorities with the discretionary power to do anything they consider likely to promote the economic, social and environmental well-being of their area. The purpose of the act, according to Hothi et al (2008), 'was to encourage innovation and closer joint working between local authorities and their partners to improve the communities quality of life.

Government attention now focuses on how public services can be improved by the people that use them in their design and delivery. The emphasis has shifted from the service providers to service users, with a re-evaluation of the issues that have previously driven public service provisions, such as choice and target to ones that now focus on the needs of the people that use the public services (Strategy Unit, Building on Progress: Public Service 2007). Furthermore, in order for these changes to occur, the House of Commons Public Administration Select Committees report on 'User Involvement in public services' (2007-08) recognises that for public service transformation to occur the use of information technology will play a key role.

In the NESTA report 'Transformers: How local areas innovate to address changing social needs' (2008), social innovation refers to new ideas (products, services and models) created to satisfy un-met social needs. What shape the social innovation takes is not fixed and may result in a new service, initiative organisation or, an original approach to service delivery. In the case of 'Love Lewisham', the social innovation occurs not just in terms of providing a new service initiative but also fulfils Goss' expectation of behaviour change, through public engagement and energy, to improve the local area. This paper will provide an analysis of the innovation behind the 'Love Lewisham' service and its success in engaging and empowering the local community.

The following information has been compiled from a proposal document from Lewisham Council entitled 'Love Clean Streets', IT documentation, government reports and also interviews and discussions with Lewisham's Environment Officer, Nigel Tyrell. The case study will describe the nature of the service and discuss its uniqueness in terms of public service innovation.

Love Lewisham: Public Sector Service Design Innovation

In 2004 the 'Love Lewisham' site was launched through a need to address specific community problems such as environmental crimes and to introduce the use of new technology to address this. The council recognised that the reporting process and communication channels for residents and stakeholders needed to be simplified. Prior to 'Love Lewisham' the process was one directional, whereby residents would make a call to the council's environment call centre where it would be logged. This method had a number of shortcomings, firstly it could not quantify the size of the reported incident, it was limited in not providing any feedback to the resident who had taken the time to report the incident, and there was time delay between reporting a job and the street cleaning teams remedying it.

Front Stage (what customers experience)

The 'Love Lewisham' Campaign and website are front stage of the service as they raise awareness and communicate the service process to residents. Initially, they were set up to deal with graffiti but were extended to include other environmental issues such as fly-tipping and fly-posting. The uniqueness of the technology is it offers a 'simple one-click solution, no email, no attachments' (Delivery Transformation Group 2006) for reporting environmental crimes whereby local residents can photograph incidents in the community and send it immediately to Lewisham environment staff via a mobile phone. This touch point proves the co-production of the service, as it requires the co-operation and participation of the residents. The software used is unique to 'Love Lewisham' as it provides the user with the ability to up-load 'before' and 'after' images to the web site and not just report it. To make the communication process two-way, the resident may also request feedback on their particular report. In order for this to be achievable, specialist software has been developed in parallel with the website which enables the user to record the exact location of the incident via GPS mapping services and to receive progress reports automatically. This use of technology moves what used to be a back stage process for dealing with environmental crimes to the front stage line of interaction via the website, whereby the physical evidence of the reporting and feedback creates active citizenship.

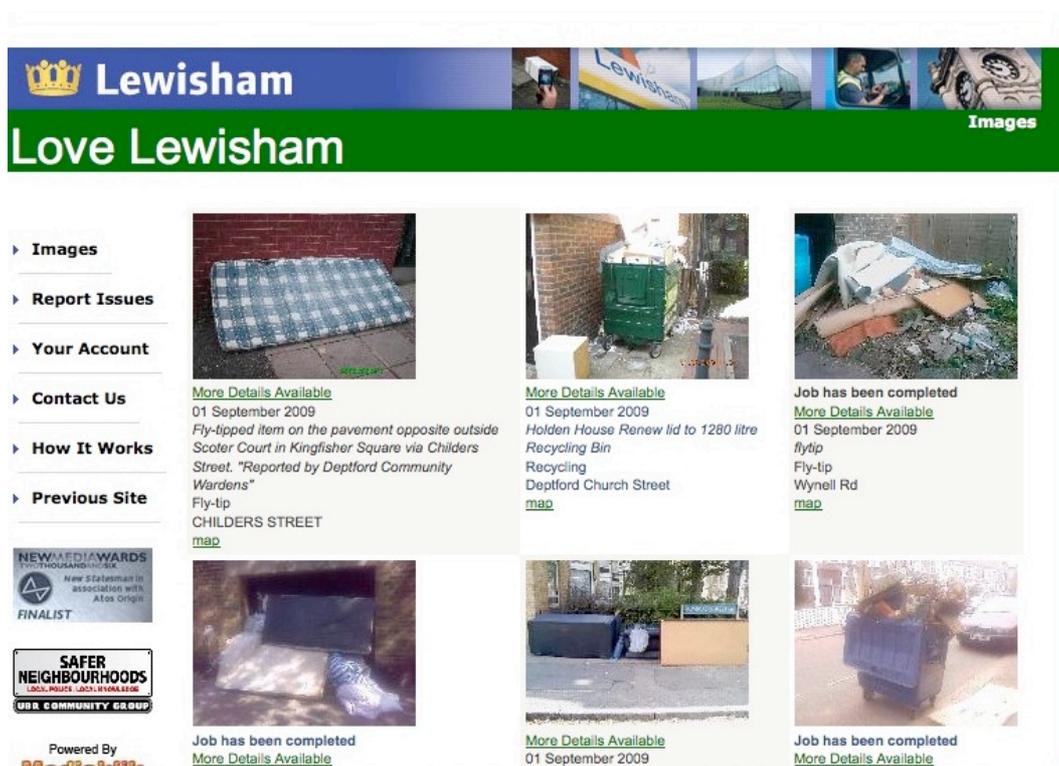


Figure 1.0 Image of the 'Love Lewisham' website and reported environmental crimes.

The 'Love Lewisham' website is also used as a blog which is in online 'word of mouth' (Lovelock, Wirtz, Chew 2009) that forms a place of social interaction for residents to leave comments and engage in discussion on issues relating to Lewisham, the environment and keeping the borough clean. This web site is about engendering civic pride, despite the early concerns that people would abuse the system, these have proved unfounded. Branding is used strategically in the service design of 'Love Lewisham'. The 'Love Lewisham' Mediaklik application for the public's use was launched on Valentines Day in 2004. Lovelock et al

(2009) states that a successfully managed company has a recognisable brand that also has meaning for its customers. Vincent Harris (2008) write on the use of the emotional epithet 'love' on the Lewisham web site and how it galvanizes citizens to report problems and makes them aware of how they are affected by the actions of others.

Backstage (support processes and technology)

'Love Lewisham' is a scheme that uses mobile devices, smart phones and pocket PC's to send images and comment straight to a live web front-end, for rapid action by Lewisham's environment staff. A Cam2web application, created by Lewisham's Head of Environment Nigel Tyrell, was originally intended for use by staff and local politicians. According to the Transformational Government Report (2006) the system was developed on Microsoft's Not NET Environment. Cam2web captures images and other information on a mobile device and sends them to a database for viewing and up-dating on standard web enabled PC's or other wired devices. The report explains how 'Love Lewisham' was later extended for use to members of the public using MediaKlik- a software professionally developed by 'bbits' Mobility, and although similar to Cam2Web, provides access for a broad range of devices without the need for residents to download software; instead they can use MMS to send 'Love Lewisham' an image from any camera-enabled phone.

'Love Lewisham's' innovation has improved efficiencies and workflow within the council's environment office. Before the website was in place, the time delay to log a graffiti complaint and to pass it on to the cleaning team for it to be cleared, took on average three days. In addition resources were often wasted, as the size of the problem could not be accurately gauged from a telephone report. Frequently, graffiti clean-up teams would be presented with only a small offence on a lamppost. With the introduction of 'Love Lewisham', the interactive map allows members of the cleaning team to pinpoint the exact location of the graffiti and the size of the problem resulting in a single member of the team or one of the managers to remove the item, or to send a team for larger incidents. Once the job is finished the member enters a job number and sends it in to the system, which automatically up-dates the web site. Any positive feedback from the public when they have been informed of the clean-up is also up-loaded on to the website. Council workers have greater job satisfaction when they get positive feedback from the public.

The refuse and cleaning teams are now clearly engaged in the environment department's management processes with the introduction of the 'Love Lewisham' service. The mapping and categorization plus the visual reference, enables the graffiti team to judge the size of the offence more accurately, resulting in greater efficiency within the department and service delivery. Furthermore, the refuse collection teams have also been issued with digital cameras to photograph random fly-tipping and graffiti which they can instantaneously report back, empowering them to be pro-active in their jobs; they can also visually record any actions that may impact on the service delivery for example, skips or cars blocking entrances to flats or streets. Now, when there is a break-down of service delivery, the public can be visually and accurately informed of the reasons behind any disruptions, resulting in great transparency and trust between the residents and the council.

The software used for the 'Love Lewisham' web site allows all the data that comes onto the site from the public and the employees to be recorded and stored. This visual record of incidents together with the satellite mapping allows monitoring for any trends. This has proved in-valuable when addressing vandalism in neighbourhoods.

Impact of 'Love Lewisham' on the Downham Neighbourhood

The impact of success of the Love Lewisham website can be seen within the Downham neighbourhood. Within this area, the Downham Safer Neighbourhood Team (SNT), saw graffiti as a major contributor to anti-social behaviour for residents, business owners and faith group leaders. Within the neighbourhood 27% of residents rated graffiti as the second most important issues to tackle, as it degraded their environment and created a climate of fear. The aim of the plan was to rapidly remove graffiti 'tags' within 24 hours, ideally as soon as they were noted. The use of the 'Love Lewisham' technology was seen as critical to the success of reporting, speed and accuracy of locating and removing the graffiti within the neighbourhood. Using the 'Love Lewisham' web site and the mapping technology, the cleaning process very quickly outstripped the graffiti's appearance; this discouraged taggers as well as assisting the police to re-schedule their patrols to those areas that were frequently vandalised and targeted.

The following quotes are from Lewisham street-cleaning staff and taken from council documentation on the success of the Love Lewisham site:

"Only three areas that were cleaned have been vandalised again". Downham Police Community Support Officer (PCSO).

"Sometimes a job I report is done before I get back to the yard". Refuse driver

"I am still using the excellent 'Love Lewisham' site, a wonderful interactive resource for generally improving the neighbourhood". Resident blog.

Council reports also show that local residents in Downham are more proud of their surroundings with the advantage that there is a decrease in the fear of crime that the vandalised environment created.

Service efficiencies resulting from Love Lewisham

Since the introduction of the web site a number of efficiency benefits for the council can be attributed to its introduction. The following figures have been taken from council documentation on 'Love Lewisham'.

- In the first quarter of 2003 a total of 1,140 jobs were reported to Lewisham Council, which took an average of 2.87 days to complete.
- In the first quarter of 2005 there were 2,209 jobs reported to the Council (more or less double), which took an average of 0.89 days to complete.
- In the first quarter of 2007 a total of 6,500 jobs were reported. These were dealt with in under a day and within the same budget.

According to a recent report on 'Mobile Technology and the development of public services', published by the government Delivery and Transformation Group (<http://development.cabinetoffice.gov.uk/uploads/assests/www/cabinet.gov.uk/mobilemater061130.doc>) Lewisham is held as an example:

The public get a quicker response, leading to cleaner streets. Employees have improved workflow and reduced paperwork. Council operatives have increased job satisfaction in responding to environmental issues rapidly and capturing evidence before and after use. Lewisham resident satisfaction levels for street cleaning rose from 49% in 2002, 53% in 2003 and 56% in 2004 to 60% in 2005. This 8% is above the London average.

A DEFRA report 'Achieving improvement in street cleansing and related services' (2005) highlights the importance of the quality of the local environment and in particular the need for high levels of street cleansing; the public use this evidence as a means to gauge how well an area is being managed and its attractiveness as a place to live, work, visit or bring up a family. The report further explores the need for efficiencies with improved service delivery and quotes the elected mayor of Lewisham in 2005 Steve Bullock.

It is not just how much is spent on local environments management, but how well it is spent. The public have every right to expect that we spent their money efficiently and we make sure that services are excellent civic leaders.

Love Lewisham: A Service Design Analysis

Prior to the arrival of the 'Love Lewisham' service the presence of tangible clues of the local environmental services and their delivery were minimal; the customer interactions limited and the communication channels weak; its intangibility, both physically and mentally, resulted in a lack of ownership over the service for the local residents.

In the last eighteen years, key authors on service marketing such as Lovelock, Vandermerwe, Booms and Bitner have all addressed the unique nature of services and the need to recognise and co-ordinate different element of the service experience. Services frequently depend on customer involvement in the co-production of the service, which requires the design of touchpoints and interactions to be considered from a user participatory perspective. In the case of 'Love Lewisham', the website and technology create a holistic public sector service experience by bringing the act of supplying the service, its physical evidence and its interactions and processes visibly close to the community.

Local Residents as Co-producers

The local residents' participation in 'Love Lewisham' is central to the creation and production of the service. Bitner et al (1997) identify how the degree of participation of users in a services' delivery may vary and be categorized into three broad levels: Low level participation, moderate participation and high-level participation. With a high participation level, customers work with the provider to co-produce the service (Lovelock, Wirtz 2007). 'Love Lewisham' would be categorized as high-level participation as the service cannot be created and delivered without the residents' active participation. According to the authors Lovelock and Wirtz, if the customers fail to assume their role effectively and don't engage in the key production tasks they will undermine and lower the quality of the service outcome. Love Lewisham is reliant on local people to report environmental crime visually using their own technology, be it a mobile phone or pda together with other stakeholders such as the council staff. The use of self-service technologies to achieve this level of stakeholder involvement is paramount to the success of the service delivery for Lewisham. Lovelock and Wirtz state:

"The ultimate form of involvement in service production is for customers to undertake a specific activity themselves, using facilities, or systems provided by the service supplier. In effect, the customers' time and effort replaces that of a service employee".

Schneider and Bowen (1995) suggests that customers be viewed and treated as partial employees and this change in mindset alters the service encounter. They suggest that customers who are offered an opportunity to participate at an active level are more likely to

be satisfied; according to the authors, customers like to be offered a choice even if they choose not to participate in the service.

In order to motivate customers to become co-producers, participants need to be reassured that they will be rewarded for performing (Lovelock and Wirtz 2007). 'Love Lewisham' provides essential feedback for the reporting efforts of the local residents through notification, acknowledgement and providing information on the clean-up. The improved response time for dealing with environmental crime and the knock-on effect this has on the local communities perceptions of safety and quality of environment all contribute to local residents sense of ownership and motivation in the service delivery.

Figure 2.0 diagrammatically shows how 'Love Lewisham' has shaped service design from an anonymous, partially invisible service experience to one that actively engaged the residents and results in greater levels of community satisfaction. The use of technology ties and creates a tangible touchpoint for the community, creating a coherent public sector service.

Mental intangibility defined by Lovelock, Wirtz and Chew (2009) is described as a customer's difficulty in visualizing the experience in advance of purchase and to understand what will be delivered. Although referring to private sector consumer services, mental intangibility also exists with public sector services. To reduce the perceived risk for customer the authors recommend that the service provider documents performance, provides information on what to expect, and what was done and why.

Mental intangibility is reduced with 'Love Lewisham' through its very public presence and the collective responsibility of the community and their involvement in reporting graffiti and fly-tipping. The frustration with lack of know-how over process and the common feeling that can often arise with public sector services of disengagement 'that no-one will listen' or 'no-one will act on my report' are overcome in the up-loading, acknowledgement and the rapid notification processes that inform the reporter of the clean-up. For the cleaning teams the positive feedback from individuals acknowledges their efforts and makes the process more rewarding and transparent.

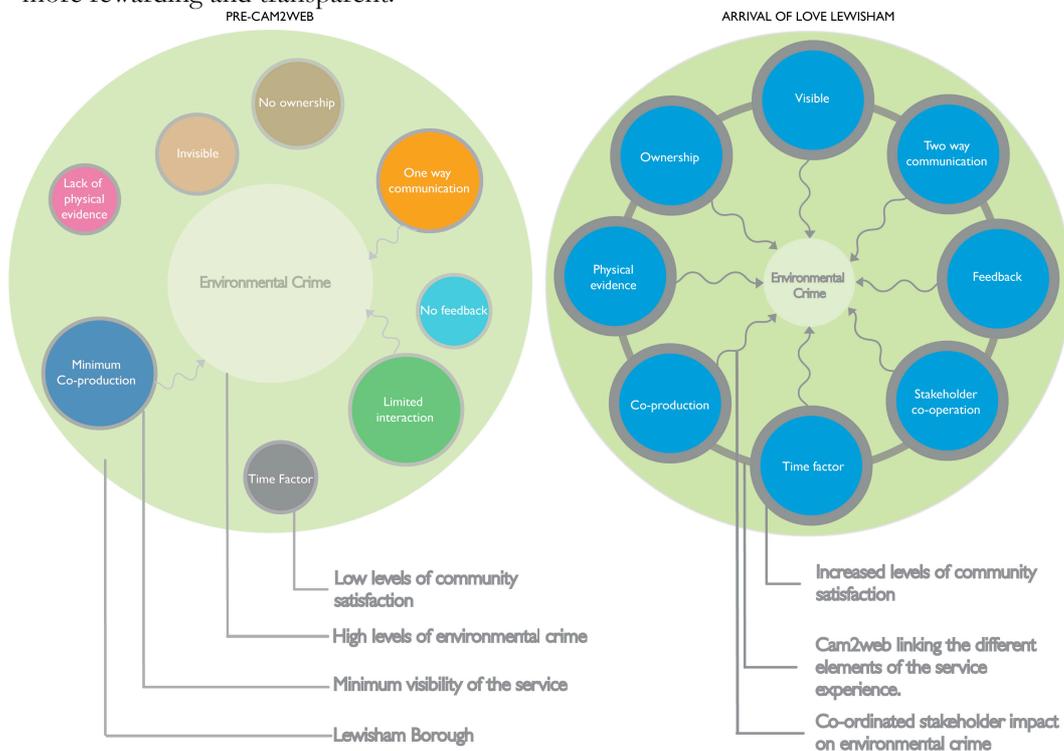


Figure 2: Shows how 'Love Lewisham' has shaped the service design

According to Thaler (2008) the best way to help humans to improve their performance is to provide feedback, 'well-designed systems tell people when they are doing well and when they are making mistakes'. In the case of 'Love Lewisham' the web site provides feedback not just on the progress of the street-cleaning teams' work but also through the efforts of the community in reporting environmental crimes.

Social Capital and 'Love Lewisham'.

According to Harvard Professor Robert Putnam (2000) social capital is:

".....networks, norms and trust that enable participants to act more effectively to pursue shared objectives."

These shared objectives and activities may be broad in purpose for example, a sports club or community centre, however, they have in common an ability to create social networks. In the report Neighbourliness+ Empowerment=Wellbeing, Hothi et al (2008) refer to our sense of belonging relating 'to how much we feel as though we are part of a group or community.' 'Love Lewisham' empowers local residents to take a collective responsibility for their local community. The website, providing a catalogue of all environmental incidents and their status, allows people to view the efforts of all the stakeholders in working towards a cleaner and safer community and results in a stronger local identity that is essential for increasing social capital.

Conclusion

The innovative use of technology for reporting fly-tipping and graffiti, once treated as an invisible complaints process to the council's Environment Office, is now an community effort which has empowered the local citizens to take ownership of their environment with the result of higher levels of satisfaction amongst residents for their local public sector environmental services. The use of Cam2web technology in 'Love Lewisham' has allowed the frequently disparate and often invisible elements of a public sector service to become a visible touchpoint for Lewisham, where all stakeholders' contributions are recorded and acknowledged in dealing with environmental crimes.

The 'Love Lewisham' site and process provides a key co-produced touch point whereby the local resident take responsibility for their own community via the use of mobile technology. The website provides a tangible communication touch point for residents who are able to see galleried, their efforts for reporting fly-tipping. Furthermore, the acknowledgement and quick response time in dealing with the offence by the council clean-up teams creates a much appreciated but frequently overlooked communication feedback mechanism for the residents; internally this has also resulted in more effective management of resources for Lewisham.

'Love Lewisham' provides a case study on social innovation from a number of perspectives; it was started locally, encourages all stakeholders to co-produce the service, it provides a touchpoint that creates a coherent service experience with feedback and it has driven efficiencies internally within the department and reduced the levels of vandalism within the borough.

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