International conference: "CONT_ACT RIGA 2013: E-Government CONTent and ACTions – Effective Public Services"

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ICT-enabled public services and service innovation: trends and prospects

Jeremy Millard

Danish Technological Institute

jrm@teknologisk.dk

TEKNOLOGISK
INSTITUT

Context: crisis-ridden Europe

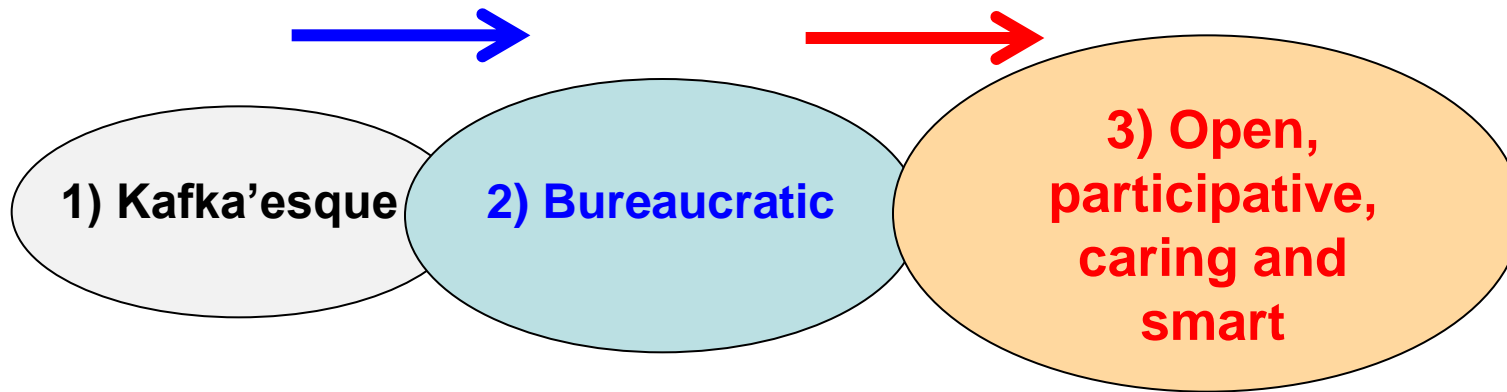The current state of public administration and public services in a crisis-ridden Europe

- Dramatically increasing poverty, unemployment, worsening working conditions and strained social services

- Many other 'wicked' problems, like ageing society, climate change, resource scarcity, energy crunch, and governance deficits at all levels
- How can we continue to keep 'social need' and the European social model centre stage in order to find the best response despite these distractions?

Context: the three ages of government

1) Kafka'esque → **2) Bureaucratic** → **3) Open, participative, caring and smart**

• Arbitrary	• Rules-based	• Open & transparent
• Random	• Administrative	• Collaborative
• Disconnected	• Professional	• Responsive & participatory
• Fragmented	• Top-down	• Accountable and trust-worthy
• Coercive	• Gov-centric	• Outcome-based
	• One-size-fits-all	• Both innovative & stable
		• Both bottom-up & top-down
		• User-centric & user-driven
		• Both evidence- & values-based
		• *CARING: GETTING PERSONAL*
		• *SMART: INNOVATIVE & INTELLIGENT*
		• All is enabled / driven by ICT

Caring government: Getting personal

UK "best in class" one-stop-shop, sophisticated navigation portal

Cost c. £60 million p.a., 2007 – 2012: www.direct.gov.uk

But not everybody thinks so……

Challenged by a small group of hackers (from 2009)

Directionlessgov — Search more than 6 million pages of UK government info, instantly! Using direct.gov.uk and Google search.

Directionlessgov.com is the result of a small effort by members of the Democracy.org.uk Collective.

We got so fed up with the general uselessness of the multi-million pound shambles otherwise known as the Direct.gov.uk portal, that we decided to build something better in under an hour. Sadly, we ran catastrophically behind schedule, but we still finished before lunch.

For free. Think of it as a gift. When it comes to searching for relevant UK Government resources, we think it beats Direct.gov.uk hands down. Don't believe us? Just compare the two.

Enter a search term and optional postcode

[   ] Search

e.g. Recycling Manchester or Health SW2 1RW

3 random searches
- brown (direct.gov.uk)
- cavity wall insulation (direct.gov.uk)
- scotland travel (direct.gov.uk)

http://www.directionlessgov.com

The government accepts the challenge….

"Only a small minority of Directgov users come in through the home page (12%)….

…..the majority of visitors arrive from search (52%) or via an external link (43%) straight to one of the big transactions such as car tax, student loans or job search" (2010)

Source: http://www.cabinetoffice.gov.uk/news/digital-default-proposed-government-services
(accessed December 2010)

The government accepts the challenge ….the alpha version

….but the hackers remain sceptical…

Directionlessgov

Search more than 6 million pages of UK government info, instantly! Using direct.gov.uk and Google search.

An early prototype of the official website to replace DirectionlessGov.com went live on May 10th, 2011.

Hopefully Government wont screw it up.

Enter a search term and optional postcode

[   ] **Search**

e.g. *Recycling Manchester* or *Health SW2 1RW*

3 random searches

- brown (direct.gov.uk)
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http://www.directionlessgov.com

So, the government employs some of the hackers….the beta version

Today, after full launch

and winning the UK's top design award originally set up for industrial product and service design (summer 2013)

Changes in user behaviour

From "pull" to "push"

- many stops

  ⬇

- no wrong door

  ⬇

- one stop – portal: **WHERE MOST ARE TODAY**

  ⬇

- personalised push services in and from the cloud: *e.g. UK's Service Design Principles for 2014:*
  - delivered direct to individual user
  - ***who ever, where ever, whenever*** they are
  - use of "**design-thinking**" holistic principles where the "government does the hard work to make it simple for users":
    - matching personal needs
    - with service journeys

UK: "push" model

Oct 10 to Mar 11	Apr 11 to Mar 12	Apr 12 to Mar 13	
Technology	• **Confirm** commitment to shared web services via G-Digital with CIO as driver; Directgov adopts user/stakeholder role	• **Renegotiate** current IT terms to deliver improved functionality in budget	• **Accelerate** move to new web services	**Future state:** Government services wherever you are
		• **Commence** new governance and advisory board arrangements	• **Review** effectiveness	• **Increase pace** of channel shift & 3rd party delivery
Governance/powers	• **Mandate** provision of APIs • **Announce** Directgov as driver of channel shift/digital transactions • **Create** new powers to enforce quality with clear ministerial back-up • **Dissolve** current governance & realign with Cab Office	• Formal **launch** of new team/service remit at start of fin year	• **Launch** flagship transactions • **Create** partner model: 50% of transactions served by third parties by Mar 2012 • **Enforce** quality
	As is: Public services all in one place	• **Appoint** Transformation Director to lead change • **Review** team capabilities/skills review, design new structure & consult • **Revise** budget to create in-year savings • **Create** SWAT teams to work on flagship channel shift services	• **Announce** kill/cure programme for poor content & transactions • **Publish** detailed data on satisfaction • **Test** wholesale/retail model with market
		Organisation/Structure	**Consumer proposition**

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Source: United Kingdom, Directgov Strategic Review – Executive Summary, 29 September 2010:
http://www.cabinetoffice.gov.uk/sites/default/files/Directgov%20Executive%20Sum%20FINAL.pdf

For example: personal service profiles (UK)

Personal "push" dashboard: UK beta version mock-up

Public Services (beta) – helping you, your family, your community

Search…

Main menu ? ↑ x

Your favourite pages

About Public Services

Contact Your MP, Councillor etc

Leave good or bad feedback on public services

My family ? ↑ x

Johnny has a new school report

Sinead's needs a regular vaccination (book)

Breakfast club next week – sign up here

Choose a school – click here for your preferences

My impact on environment ? ↑ x

Your car is due for a service

Bob click here for an easier, greener commute we have found for you

Amazing thermal image of your house Bob – see how much heat gets out!

Welcome Bob ? ↑ x

Happy Birthday Bob

New family history records published at National Archives

My community ? ↑ x

Dogs in Moseley Park – should they be on a lead? Is dog poo a problem? click to have your say

Your recycling collection day changed to Thursday

Register to vote

New planning application on

Quick Links ? ↑ x

Most popular today

Directgov

Weather – met office

War Graves Commission

Travel advice

GOVHOO!

My money ? ↑ x

DWP owes you £397 ! – click here to collect

Parking ticket outstanding

Sorry there were problems with your electronic tax return - £5 rebate

My Doctor ? ↑ x

Hey Bob, how's the diet going? – you promised to be down to 100kg by Easter……

Please click to make an appointment for a diabetes check

Cheating low fat pie recipe from Delia

Free British Army Fitness for Bob in Moseley Park

RSS feed, click use Licence – please feel free to reuse

Public Service Ad COI Adserver

Want to help improve local schools?

School governors needed in Moseley

Why worry about crime?

Click here to talk live to a local

For example: personal proactive services (Taiwan)

From "pull" to "push": "e-housekeeper" select from list of 203 services

From "pull" to "push" and back again to "pull"

For some services, for some people in some situations, "pull" is still best:

- **Users are 'expert' in their own problems as only they possess the fine grained knowledge which professionals can easily miss**

Now in pilot testing:

- Exploits public service components in the cloud: e.g. simple drag-and drop

- Users compose services from components provided by many actors as well as governments using automatic web-service discovery (e.g. electronic agents)

- Users can manage own interaction with the public sector through personal online dashboards (e.g. 'MyPage')

- Need secure authentication, 'single-sign-on' & 'once-only' using interoperable and mutually recognised authentication schemes

Everyday, location-driven service personalisation

'Everyday' and location-based services (both "pull" and "push")

- Based largely on mobile smart phones using GPS, although web-based services are also relevant.

- Offered or created depending on where users are, as well as who they are and what they are doing

- Are also data-driven but largely in a local context where users are given a lot more choice & control

- E.g. local services related to health, education, care, transport, infrastructures, utilities, parking, accidents, clean and safe environments, congestion and pollution watch, culture, amenities, leisure, sports, security, crime watch, weather, participation, engagement, conflict resolution, etc.

- Is much easier for users themselves or their intermediaries to participate in constructing and designing their own services at local level where knowledge and resources are often more relevant, closer to hand and more amenable.

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Location-driven service personalisation in Taiwan

Service Excellence

Towards Digital "Life Dashboard" with "Life Map"

CITIZEN DASHBOARD — iTaiwan

My Records | My Health | e-Invoices | My Benefits

LOCAL — Nearby: Art exhibition, Free flu shots, Metro (3 min)

NEW Traffic ticket ($200) | Pension Notice | License approved | 1999 | Personal ID

Real-time Traffic | Community Stats

Food Tracker | Job Search | e-Learning | myGov App Store

Safety | Culture

Carry government in your pocket; alerts you when it can be of service

"Just in time" and "last mile" public services; also "delivered to your door" (e.g. by the postman!)

Source: Dennis Linders + Ken Wang | CEGOV 2013

"Mass customisation" in e-government

Joe Pine (1995)

Mass customisation: "fundamentally customers don't want choice …..

– they just want exactly what they want"
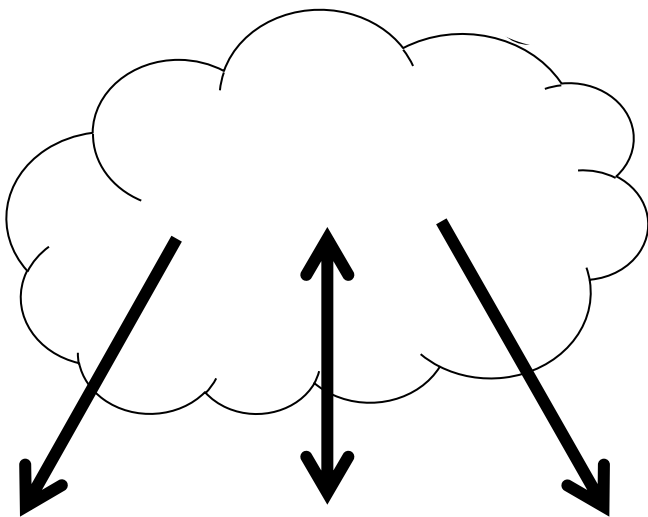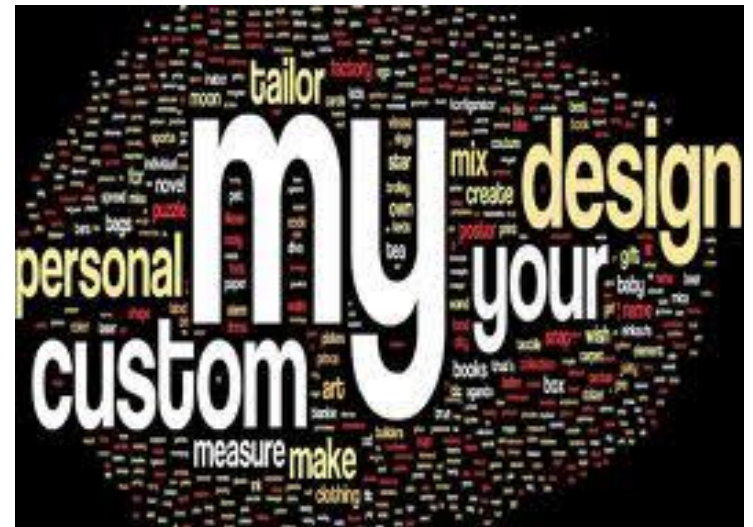
Both "pull" and "push"

- Government as a personal assistant (and intelligent agent)

- Switching between "pushing" services it "**knows**" individuals want or need

- …and "empowering users to "pull" what they "**want**"

Smart government: innovative and intelligent

Using data analytics for evidence-based intelligent government

Using data analytics for decision simulation and policy modelling

- Huge unexploited data reservoirs ('BIG DATA')

- Distributed data, seamless 'cloud computing'

- Data mining, pattern recognition, visualisation, gaming

- Information, consultation, polling, voting, etc.

- Greater precision on policy choices and trade-offs

Public policy evaluation and experimentation for innovative government (1)

- Social policy experimentation tests innovative solutions at small scale with a view to disseminating them widely

- Collects evidence about their real impact and aims to bring innovative answers to social needs

- Are small-scale probing interventions to test impact, made in conditions where their impact can be measured

- Typically uses randomised control groups to evaluate the specific value added of the measures and considers what would have been the situation if the measure had not been implemented?

Public policy evaluation and experimentation for innovative government (2)

A powerful tool: Randomised Controlled Trials

- Randomised controlled trials (RCTs) are the best way of determining which policy option works best (and which don't work!)

- Are used extensively in international development, medicine, and business to identify which policy, drug or sales method is most effective.
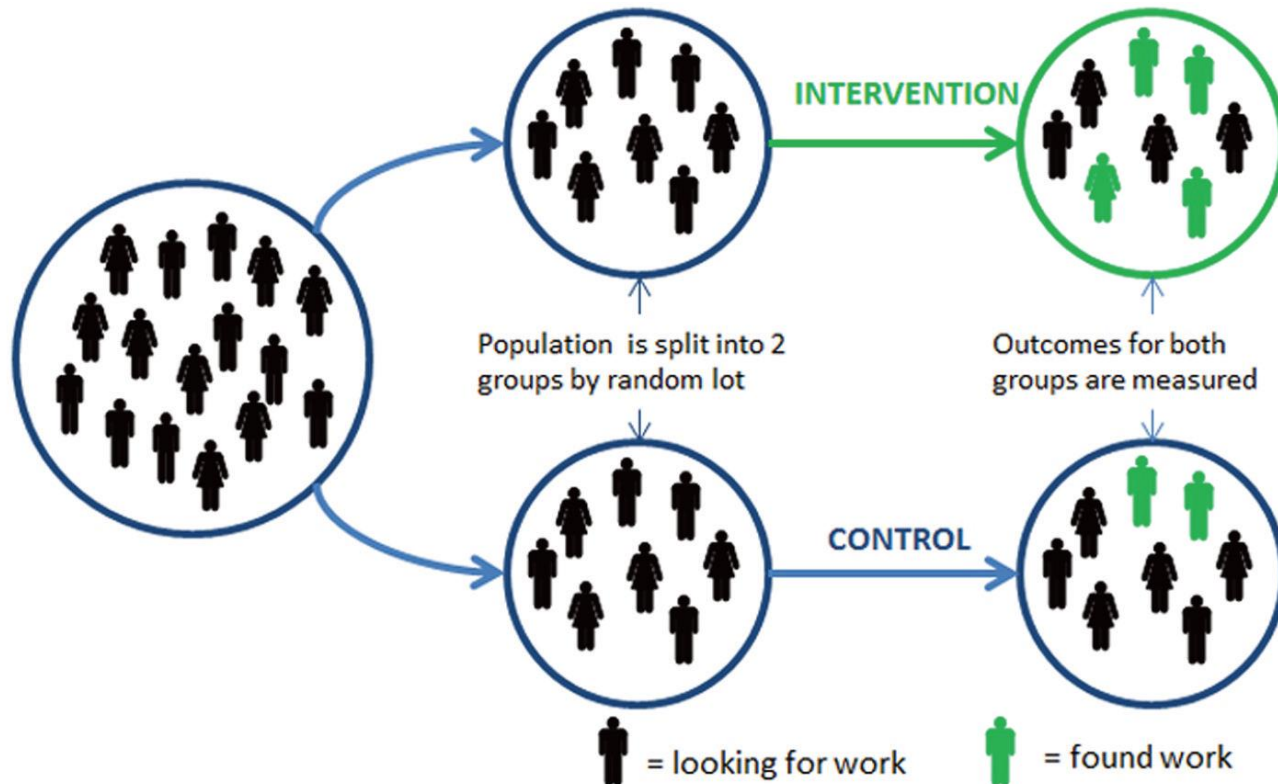
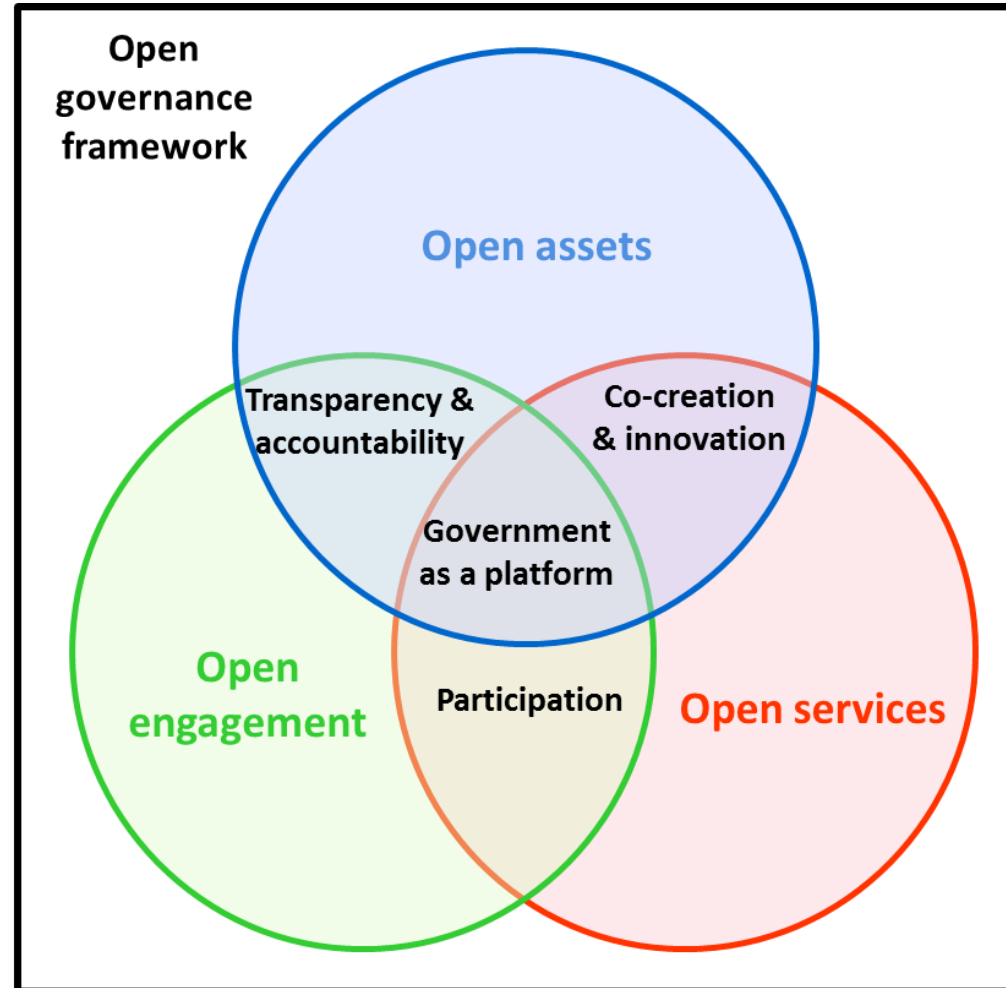# Government as an innovator / agent of innovation

USA: San Francisco

The San Francisco Mayor's Office Of Civic Innovation

A START-UP CALLED GOVERNMENT

- Ed Lee's Office of Civic Innovation "walks in the steps of the worlds' hottest startups by going lean".

- In January 2012, Mayor of San Francisco Edwin Lee appointed the city's – and the world's - first Chief Innovation Officer, to foster a culture of innovation across City Hall, and build stronger relationships with the local tech industry." "I am a firm believer that the spirit of innovation drives economic growth, solves our toughest civic challenges, and creates a better San Francisco for all of our residents."

Public sector innovation

Open Government and the '**open governance framework**' are predicated on the recognition that:

- government does not have a monopoly on wisdom or assets

- …..government can produce a lot of 'public value' on its own

- …..but can do more in partnership with others and even facilitate others to do it on their own

- Government can become much more efficient and effective if it shares assets, resources and data internally and, even more, if it also does this EXTERNALLY

- …. the potential for innovation increases dramatically

Open governance framework

Open assets

Transparency & accountability

Co-creation & innovation

Government as a platform

Open engagement

Participation

Open services

Source, J. Millard, 2013, partially based on David Tallon's blog

Government as a platform

Supporting innovation across society:

- …..a strategy which places the government as a platform for others to build upon

- …..an open environment and ecosystem which sees everyone, every community and every organisation potentially as a resource with assets to create public value

- …..unused assets equals WASTE

For example, converting 'waste' into 'resources' through sharing

- …..strong focus on identifying and deploying unused assets in communities and in society as a whole.

- …..these can include finance, people's time and expertise, data, things, places, buildings, spaces, etc., where the goal is to use the matching, orchestrating and coordinating power of ICT to turn what would otherwise go to waste into public value resources.

The **Rise** of the
Sharing Economy

Community   Local Economies   Environment

SHAReaBLe   TriplePundit

Learn more >>

Three pillars of government as a platform

1. **Provide tools for collaboration and co-creation**:

- Mitigate the 'burden' on users to (co) create

- Need guidelines, incentives, supports, advice, networks

2. **Manage assets:**

   Identify legitimate and available assets across society, and help to orchestrate and deploy them (often in collaboration with asset owners) to create public value

3. **Ensure sustainability and balanced public value**

- 'Good governance': government should not become an actor like any other as it still needs to fulfill roles which others cannot, including taking responsibility for overall regulation, quality, accountability for services and performance, responsibility if things go wrong, and for data protection and security – government is the only actor with democratic accountability across whole of society.

- Thus, the general sustainability, continuity and stability of the public governance system is important.

The changing role of government

In building open collaborative platforms

- Government's **role changes** to one of orchestrator, coordinator, integrator, enabler, facilitator, arbiter, broker and regulator for the activities of others in delivering public value.

- Government as a platform facilitates public value creation in the most efficient and effective way possible by supporting an ecosystem of actors with changing roles and relationships. This would supplement the challenge of government having to do '**more for less**' to being able to orchestrate doing '**more with more**' as it pools and leverages the assets of others together with its own to solve the 'wicked' problems

SIPRESS

"Stop! Wait! Government's no longer the problem, it's the solution!"

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Paldies !!

Jeremy Millard

Danish Technological Institute

jrm@teknologisk.dk

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SOME OTHER EXAMPLES

…..but only if time

Crowdsourcing (1)

👑 Lewisham

Go straight to ... [Go]   Search term   [Search]   ▶ Council services A-Z   ▶ Contact us

▲ Home
▲ News and events
▲ News

▶ News from other websites
▶ News archive

Love Clean Streets cleans up!

Lewisham Council has won a prestigious Government Business Award for its Love Lewisham / Love Clean Streets project.

Lewisham Council's website Love Lewisham, which has been running now for five years, and the recently launched London-wide Love Clean Streets, both help people to share information about their area to improve the environment.

The 'environmental innovation award' was handed out at a ceremony held at the Emirates stadium, home of Arsenal FC, last week.

Collecting the award Councillor Susan Wise, Cabinet Member for Customer Services, said: "This really is a fantastic accolade, a just reward for all the hard work that's been invested in setting up the project.

"Encouraging local people to get involved and to report the problems they see not only helps improve the areas in which they live by reducing the amount of nuisance crime but at the same time helps build public support for the work done by councils generally. Using state of the art technology in this way is a cost effective way of helping to create cleaner, greener places."

Useful websites
▶ Love Lewisham
▶ Love Clean Streets

Crowdsourcing (2)

Love clean streets (UK): 2

Love clean streets (UK): 3

Total cost 2010-2012: £176,362

Benefits recorded late 2011:

- 87% reduction in staff time per case
- Staff overtime from £300k pa to zero
- 70% reduction in report handling costs (comparing telephone, website and mobile)

- 21% reduction in environmental case work
- £18k p.a. decrease in inspection costs
- 73% less graffiti
- Graffiti removal from 2.78 to 0.5 days

- Fly-tip removal time from 2.5 to <1.0 days
- Increased trad-waste income of £20,000
- Fourfold decrease in land at unacceptable standard
- 30% increase resident satisfaction

Purpose: Improve environmental quality through a social-networking hub, save money and improve citizen benefits

www.lovecleanstreets.org

Citizen creation

Map Kabira

Kibera in Nairobi, Kenya, is one of the largest slums in Africa and was a blank spot on the map until November 2009, when young Kiberans created the first free and open digital map of their own community using simple GPS devices and uploading data to OSM.
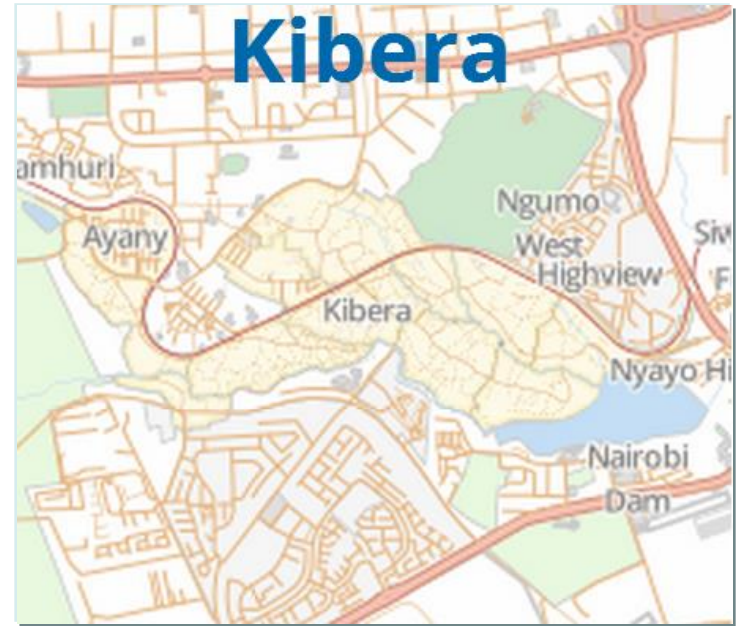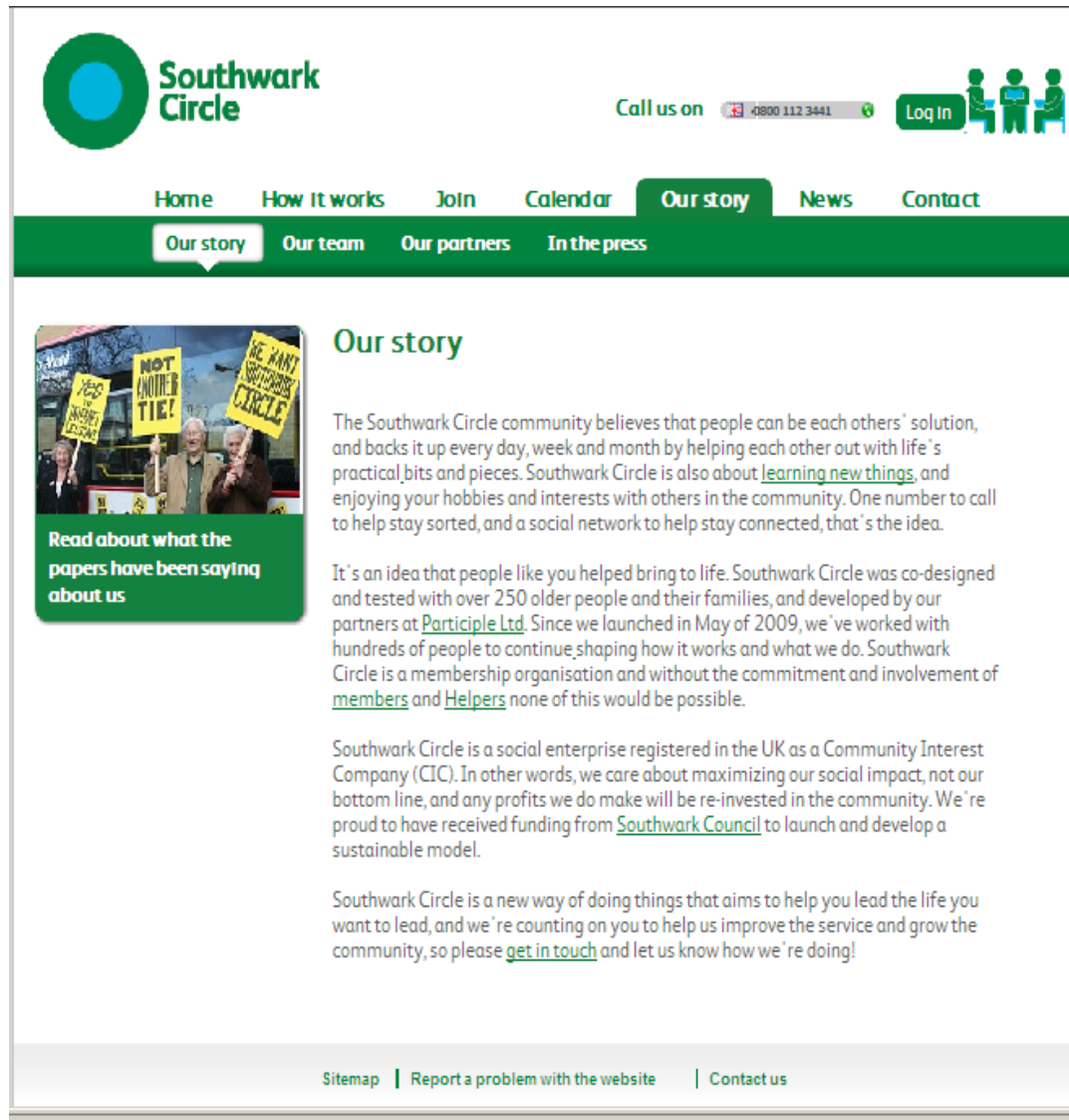
Three stages:

1. Basic data about the location of clinics, toilets, health, security, education, and water/sanitation, places of worship, etc.

2. A "storytelling" layer, capturing personal accounts, stories, and news of Kibera residents

3. Voice of Kibera website: an online news and information-sharing platform for the Kibera community.

Orchestrating unused assets (1)

Southwark Circle, UK: the neighbourly way to sort the everyday (1)

- LA funded a social enterprise team to spend time with 250 elderly in their homes and networks (ethnographic research) to involve in own service design ('DESIGN-THINKING')

- Focus on elderly people (but little distinction in practice)

- Networks of users, helpers/carers, volunteers, entrepreneurs and the LA, to solve any problem

- Elderly no longer seen as a burden or group to do something to – but rather as a resource for their self/mutual help

Orchestrating unused assets (2)

Southwark Circle, UK: the neighbourly way to sort the everyday (2)

- £2.4m LA savings being achieved over 5 years: a threefold return on investment

- People are core, but enabled by ICT, e.g.:
  - website for information and matching needs with solutions/volunteers
  - club and other events
  - earning/buying and spending tokens
  - access to other services
 - mobile/SMS alerts, ICT training, etc.
  - coordination and data exchange between LA, NGO and volunteers

PPCP (private-public-civil-partnership)

Tackling the ageing challenge at community level

Mextal BV (Netherlands)

- Commercial company with €7m turnover pa, 25 employees
- Partnership with LAs, community groups, other companies and dealers (like Philips, Samsung, Ericsson)
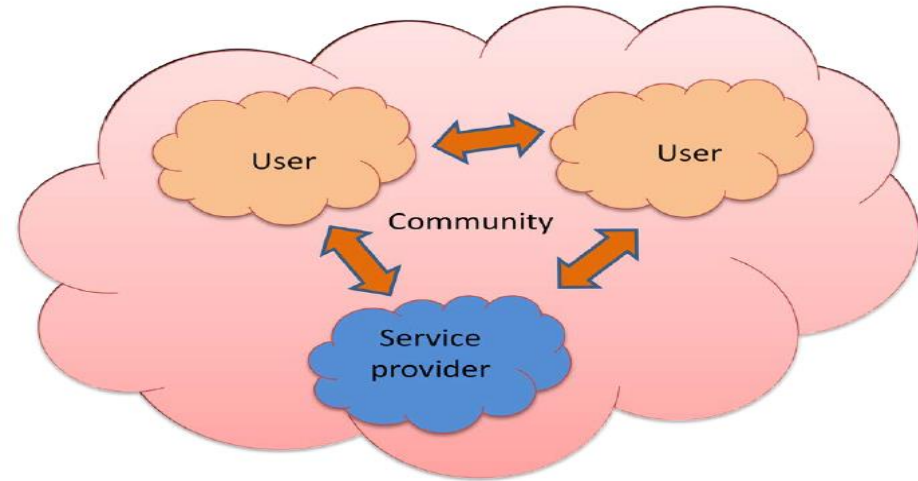
- Viedome Total Community Platform for older persons
- Using ICT to embed services and activities in everyday life and community
- Toolbox for personalising home care by user choice of technology and services across 8 pillars of support:

  care, comfort, security, information, advice, communication, entertainment, commerce