Customer Journey Mapping

Public services need to adapt to the needs of their customers, the citizens. Often new e-services are technology-initiated, but Smart Cities start with the user.

This document places the customer journey mapping (CJM) process in the context of customer insight and business process improvement and provides practical guidelines on how to make the most of CJM.

1   Introduction

The Smart Cities project is an innovation network made up of thirteen governments and academic partners from six countries that is working to improve the development and take-up of e-services and e-government across the North Sea Region of Europe. Project partners are improving e-service-delivery by rethinking the basics of service delivery, by changing their innovation methodology, by transferring their best practices to other project partners, and by working with academic and research partners.

Public services need to adapt to the needs of citizens: e-services are often technology-initiated, but the Smart Cities approach starts with the user. This report illustrates how the City of Edinburgh Council, one of the partners in the Smart Cities project, has used **Customer Journey Mapping** (CJM) to ensure that services are designed and implemented in ways that recognise the specific needs of different groups of citizens – whether as part of a programme of **Customer Service Excellence** (CSE) or **Business Process Reengineering** (BPR).

This report provides a practical, friendly and informal overview of the customer journey mapping process, shares lessons from Edinburgh's experience in using CJM techniques through two case studies, and gives examples of how customer journey mapping can be used to improve practice more generally. A glossary and links to further reading and resources are also included.

www.smartcities.info

2   What is Customer Journey Mapping?

Customer Journey Mapping is one of the ways you can get a better understanding of your customers, gaining greater customer insight. It's a way of seeing things from the customer's point of view. It's not about just describing their experience, but also how they feel about what happens to them. CJM is a tool for gaining greater customer insight, and can be used as part of a business improvement process – with potential for both improving the customer experience and reducing the costs of providing a service.

In local government, customer journeys are often complex, with multiple interactions taking place over extended timeframes. Customer journey maps provide a clear view of a customer's view of how they interact with an organisation. They deliver a visual representation of the customer experience, allowing gaps to be quickly identified, and problems and solutions to be communicated to other staff in a simple and effective format. Here, the word customer means the end user of a service – typically a private individual. A citizen – whether defined by taxpaying status, residency or place of work – may also be a customer, but some customers of public services such as tourist information will not be citizens. (In local government in the UK, a customer is generally not the same as the client, which often refers to the person or organisation that funds the service.)

Customer Journey Mapping is also known as:
- Customer journeys
- User journeys
- User scenarios
- Customer lifecycle

What distinguishes CJM from data that might be gleaned from customer relationship management systems is its equal focus on emotional insights about the customer's experience. CJM mixes quantitative approaches with qualitative, experiential data. Customer journey mapping can help to identify how customers are treated during each contact that takes place. It should be viewed from the standpoint of 'how does the customer feel during a particular end-to-end experience?'.

Typical uses of customer journey mapping include:

- As part of a redesign or restructuring process, CJM can be used to draw up the perfect customer journey – or at least the best achievable one

- For training and insight material to help customer facing teams empathise with customers

- To identify where attention and investment is required to improve customer experience, or where savings can be made while increasing customer satisfaction

Relation to customer insight and segmentation
CJM has an obvious relationship with broader customer insight objectives. For local authorities that are trying to improve their citizens' experience of their services – or are trying to meet central government requirements to demonstrate that they understand their citizens – CJM helps meet the customer insight objective of understanding who customers are and what they need. More information on this subject can be found in the Smart Cities Customer Insight Guide (see the Resources section).

Relation to process mapping, improvement and Business Process Reengineering (BPR)
Many councils face an environment of budgetary pressure, technological change and increasing demands on services. As a result, business process mapping and BPR are being used to achieve service efficiencies and reduce costs while also aiming to deliver improved customer service (or at least, to minimise the impact on the customer experience). CJM can a valuable tool here in keeping customer focus at the centre of service change, while achieving efficiencies through joint working and moving people to less costly service channels

3 An overview of CJM: the how-to guide

To understand your customers, you first have to know who they are. If you can identify your different customers groups it gives you a much better chance of really understanding them. If you understand your customers you can deliver the service they need and want. You can also focus resources on who needs it most, and where they can be most effective.

This section describes a straightforward five-step CJM process.

Set-up the mapping context	Walking in the customer's shoes	Constructing the map	Taking Action	Evaluating results

Step 1 – Setting-up the mapping context

To understand your customers, you first have to know who they are and you have to choose what customer groups you are going to map. Gathering everything you know about your customers into one place allows you to make informed decisions.

The starting point for the journey must always be the customer, and the initial step is to decide **which** customer. The concepts of customer insight and segmentation come into play at this point.

Segmentation of your customers makes it possible to choose where to focus your work – for example you could target

- who has the greatest need,
- where is the current experience least satisfactory (number of complaints), or
- what customers have the greatest number of journeys.

Segmentation is used for dividing up customer groups to gain information on:

- who the customers are,
- what service they use,
- what is known about the customer – the customer insight, and
- what consultations have been done and what changes have been made.

You may already have a customer segmentation list – if not then one will have to be created.

The table below is an example of how the Edinburgh pension fund management team split all of their customers into different groups. It also enables them to target services and communication activities.

Segment Group 1: Scheme Members	Current Service	Description of needs characteristics to overcome	Consultation/ Changes	Priority
New Scheme Members				
Members				
Members approaching retirement				

Once this list has been created, it is important to keep it up-to-date and use it as much as possible, otherwise it will become out of date and will not be useful.

Step 2 – Walking in the customers' shoes

When you begin you might not have a lot of insight into your customers to use when segmenting them. But to make improvements that will meet the needs of customers, you need to find out as much as you can about your customers, tracking and describing customer experiences, and what happens to them and how they feel.

There are a variety of ways to gather information about customers and their current journeys. They all involve creation of the detailed notes that will be used for deciding where changes are needed. Focus groups or involving customers in mystery shopper exercises and video or diary experiences have all proven particularly useful. (Information on all these techniques is widely available, so they are not covered further here.)

The key is to start by being clear about the objectives and composing the relevant critical questions. The research phase can then begin to understand your customer's journey by:

- recruiting real customers to recall the journey in focus groups or carry out one-to one interviews,
- get customers or knowledgeable staff to "walk the journey" (mystery shopping),
- recruit customers and ask them to walk through the journey in real time, and
- look out for unexpected links to other services that the council provides (e.g. additional state benefits, support for people with physical or language difficulties).

Step 3 – Draw the map

Now that you have collected your evidence, you need a way to bring out the important points so that it's easier to see where changes are needed. This is where the CJM comes into its own. Customer Journey Maps are a way to mix images and text to represent a series of interactions between a customer and an organisation.

	Customer Information:	This customer group receive payments of council Tax Benefit and Housing Benefit. This group are not pensioners. They have no obvious means of support from government agencies or organisations and a regarded as a hard to reach group.					Title: New Claims for Housing/Council Tax
Date							
Key Journey Steps		Finding out if they were potentially eligible for benefits.	Making an application for benefits.	Application queries/help	Handing in documents at the office	Letter and benefits received.	Query with benefits paid
Actions / thoughts and feelings at each step		I felt lost' 'I had applied before in England so I knew about the benefits and looked on the Council website' 'Staff were slightly reluctant to provide information'	I would have liked to make my application on-line but it only took me so far' 'the application is probably easier for Scottish people' 'from	I have a small child and couldn't visit the office, the help line was difficult to get through to' 'the staff in the office I visited were excellent'	I prefer to hand documents in, I have lost documents in the past' 'staff at the office were helpful and polite'	When the letter arrived, I thought I was not entitled to benefits, I didn't know what I was going to do' 'I felt the process was very smooth and well done'	I have not followed this up yet' 'The member of staff dealing with my case was not available' My landlord has told me to write to the council I am unable to write'.
Customer experience chart							
Moments of Truth		😫	😟	😳	🙂	😳	😟
Could this step have been avoided?		X	X	✓	X	X	✓
Customer improvements - improvements made		It would be helpful to know what the entitlement benefits are.	Application process made easier.			Letters could clearly state how often payment will be made. F56Letters for back dated payments could be clearer so there is no confusion regarding eligibility of benefits.	

These are set out in a grid format, with a column for each key step. It is important to start by being clear about the journey and customer that is being mapped. Edinburgh uses these rows:

- Key Journey Steps - all the key journey steps customers go through in chronological order
- Actions / thoughts & feelings at each step
- Customer experience chart (often called a 'heartbeat chart')
- Moments of truth. A graphical representation of the customer's emotional state and their satisfaction levels at each step of the process.
- Could this step have been avoided
- Customer improvement and suggestions
- Learning, improvements and suggestions

It is possible to add other information too – for instance to capture which parts of the internal organisation are responsible for handling each step. The example below shows the customer journey of citizens claiming state support for rent and local taxes.

Step 4 – **Taking action & measuring success**

The most important thing to do is use the information you gather to improve the service. It will not help or change anything if you do not take action as a result of what you have learned and then measure your success – which is why Steps 4 and 5 are closely related

Once the customer journey mapping process is completed, it is possible to identify and implement solutions that improve the customers' experience.

Typically, they will fall into the following areas:

- **improving process** or service design – for example cutting out unnecessary steps. This could be linked to a business process review process.
- **communications planning** – to provide clearer or more targeted information
- **staff training** – providing more training or support to key members of staff

As a result of the information gathered during CJM, Edinburgh's pension team were able to:

- **Cut out unnecessary steps** – they particularly wanted to eliminate the last step in their journey, where scheme members phoned to find out whether or not they were in the pension scheme and often felt confused and unhappy.
- **Deliver clearer more targeted information** – The team gained insight into the lack of understanding people had, and how they wanted to know more about pensions but found the pension jargon was off-putting. They now know that their customers would like regular road shows to be available and as they find this an easier way to find out about pensions, how to pay additional contributions etc..

In summary

Document the new customer journey. Work out what indicators to use for measuring the success of the process, and make plans for a follow up evaluation study to measure the impact of your work after 6-12 months – which leads on to Step 5.

Step 5 – **Evaluating the results**

Once action has been taken, you will need to allow time for the changes to take effect, and then measure their effects. You must plan to evaluate your CJM work at the start of the process.

The point of evaluation is to check whether the changes have been successful. A post-change evaluation should be scheduled at the same time as the changes are implemented – anything from 6 months to two years later.

The evaluation will work best if clear baseline data can be gathered which can be compared against the changed system. In the evaluation, the customer journey should be re-mapped to compare against the original, and indicate where the journey has improved. The maps can be benchmarked for future comparison. Once this has been done, it is possible to evaluate the results by checking if the changes have worked. This could be the reduction in:

- the numbers of steps in a procedure,
- the amount of time taken for the process,
- the volumes of work/telephone calls being handled, or
- a reduction in complaints.

4 The CJM experience of the City of Edinburgh Council's Finance Department

This section describes why the City of Edinburgh Council's Finance Department chose to develop customer journey mapping within the department, its importance, how they have developed their mapping techniques, and how they intend to develop it in the future. It puts the CJM process described in the previous section into context.

Case study 1 – The internal customer – joining the pension scheme

The Finance Department decided to develop customer journey mapping as a result of the UK Cabinet Offices' Customer Service Excellence Award (CSE). The award places emphasis on the importance of public services developing customer insight.

"Customer journey mapping gives us more depth and understanding than the 'yes/no' answers that a survey does. It allows us to ask 'why' and to better understand how customers feel."

The Investment and Pensions Division within the Finance Department started to use customer journey mapping in 2008. After using the Cabinet Office's resources, the first customer journey mapping exercise was not successful. The reasons for this were a mixture of the overwhelming mass of guidance information from the Cabinet Office, a lack of time to understand and absorb the information properly before the annual CSE assessment, and a culture within the service what was somewhat process led, rather than customer led.

The second mapping attempt of the Investment Division captured their customers' views much more effectively. Unlike the previous mapping effort, which had set out the journey's steps before they spoke to the customer, this time a conscious effort was made to ensure that it was the customer who set out the steps of their journey.

Unfortunately feedback showed that staff found the resulting maps difficult to use and hard to understand. The search began for an easier journey map using the communities of practice on **idea.gov.uk**. This led to an offer from Stoke-on-Trent City Council to let Edinburgh help test a simple customer journey map they had developed. A feature of the maps was that they use smiley face icons and a supporting guide to enable all staff to understand the process. Edinburgh found that these maps were more user friendly for staff, and it was easier for everyone to see where customer service needed to be improved.

Case study 2 – The citizen as customer – applying for state benefits

Business process reviews (BPR) were starting to be used throughout the department and this gave the team a reason to take the customer journey mapping a stage further. BPRs aim to map out current work processes and to identify improvements and savings. Although the business process review considered customers to an extent, it did not provide the depth of insight needed nor look at the customers' journey. The BPR team felt it was vital that to ensure that customer insight was integral to any changes within the department, and it saw CJM as the starting point to enable customer insight to have a direct impact on the process review.

Lothian Pension Fund won the 2010 customer service excellence award and the assessor commented that their work on customer journey mapping was to be commended.

LGC Investment Awards 2010
www.lgcinvestmentawards.co.uk

www.smartcities.info

One example of this was an analysis of people who receive payments of Council Tax Benefit and Housing Benefit which are administered by Edinburgh's Finance Department. Because these customers have contacted the council directly, rather than using a support service to apply for benefits, this customer group are particularly difficult to engage with and are regarded as a hard-to-reach group. A sample of eight individuals was used to construct a CJM of the process.

This work led to the identification of a variety of particular issues/needs within this 'new claims without support segment':

- Customers who **had not** applied for benefits before found it difficult to find out whether they were eligible for benefits, and what benefits there were available. The customers who had previously applied for benefits had heard about the benefits through friends and family, not through the council.

- The key journey step for those with a disability/language barrier was the application process. They struggled to submit the application, and a number of errors were made at that stage of the journey (and reception staff were taking on the role of helping them to complete the form, but this was not always done correctly). It seems that this disability/language barrier had not been identified before, and some of these customers have struggled to follow up with queries about errors that they feel have occurred in the process.

As a result of the CJM work it has been possible to identify areas where service can be improved by reducing the number of errors made in the application process, and therefore reduce the time taken by council staff on these claims.

This development is an important one for the future of both customer journey mapping and business process reviews in the Council. Although customer journey mapping does help bring about savings, it is often difficult to demonstrate this, while business process reviews will ultimately be unsuccessful without fully understanding what the customer needs and wants. By merging the two methods, the Division hopes to be able to demonstrate that delivering an excellent service to customers can also bring about savings.

Guidance for small organisations
Small organisations may need to take an informal approach to customer journey mapping. This would be likely to include sensitivity to the end-to-end experience of dealing with the organisation, including making an initial approach, coping with any bureaucratic experience when enrolling (where appropriate) or engaging with the service, and any follow up to the service received. An organisation which is aware of the customer journey will be able to demonstrate how it is working to improve the customer's whole experience of approaching, dealing with and following on from interacting with the organisation.

5 Conclusions & general lessons

There are some lessons from Edinburgh's experience using customer journey mapping (CJM) with business process reviews (BPR) which could be useful when planning for success. After a BPR project in the Revenues & Benefits division, it was obvious that some savings had been achieved, but the Edinburgh team have found that they need to plan carefully to show how they will measure the savings, and where they have come from.

They have also found that the changed processes need to be continually reviewed so that any failure to deliver the promised results can be addressed – and this applies where the changes are as a result of both CSE or BPR programmes

High-level sponsorship has helped to highlight the impact of the BPRs, and the use of Lean methodologies has been encouraged by Heads of Service. Change Management requires this level of sponsorship as well as engagement and reinforcement of the ideals and need for change. As these business process reviews have been led from the front line of the organisation, it is imperative that communications about results and outcomes are continued to maintain the project's momentum.

The cost of delivering internally led projects is largely made up of staff time: in some parts of Edinburgh Council project managers were relieved of their day-to-day duties to allow them time to participate in the project. However, in other areas staff were expected to deliver these changes in addition to performing their usual tasks. As a result of this experience, Edinburgh has recognised that expecting staff to perform their usual duties whilst also delivering on change in this way has a negative effect. They established a quality team with the responsibility of supporting the review process within teams, and sharing knowledge amongst the wider community to encourage an environment of continuous improvement.

The front-line staff involved may not have had significant project management experience. This lack of experience, and the difficulty of delivering this work in addition to existing workloads can lead to a lack of progress in the implementation of improvement plans. There is therefore a need to ensure that improvement plans are appropriately resourced and managed. If external expertise is brought in, then consultancy costs can be significant.

Summary

Customer Journey Mapping is a particularly useful tool to help describe the customer's experience of a series of services, their thought processes, and their reactions. It can help to ensure a consistently good service experience, optimising outcomes for all customer groups, increasing efficiency and ensuring that services, which often span organisational boundaries, are designed right the first time.

The lessons learned from customer journey mapping are crucial to systems planning. CJM helps identify siloed, isolated or badly integrated systems, and to plan a more efficient experience by reducing duplication and shortening the length of processes. Once service providers have a better understanding of the customer experience, it becomes possible to set meaningful performance indicators and standards and allow them to track and measure progress.

In brief

- Don't expect success first time. Learn from your mistakes (and successes) – and make sure you have the management support that will let that happen.

- Support from government programmes (or the prospect of awards) can provide an incentive to start the process, and provide support when it is underway.

- Look for other similar organisations that have already succeeded with similar approaches. Online communities of practice such as communities.idea.gov.uk provide a useful resource.

- It may be challenging to find indicators to demonstrate the benefits, but it is necessary to do so, particularly in an environment that requires all changes to be justified in terms of cost savings

Glossary

Business Process Re-engineering/Business Process Improvement. A systematic approach to help an organization optimize its underlying processes to achieve more efficient results. **BPR** began as a private sector technique to help organizations fundamentally rethink how they do their work in order to dramatically improve customer service, cut operational costs, and become world-class competitors.

Channel choice. A channel is used to refer to the route of communication/ interaction between the citizen/customer and local government: possible routes include face-to-face contact, paper (e.g. via leaflets and mail), telephone, e-mail and Internet/websites. **Channel preference** is implicitly related to channel choice: channel preference is influenced by feelings of confidence (self-efficacy) in using different systems. These are influenced (but not wholly determined) by expectations, by previous experiences, as well as by socio-economic and other externally measurable factors.

Co-design. Activity where the users of a planned new system collaborate in (a) defining what the system should do (problem definition), (b) the development process and (c) acceptance of the project results. There are strong links between co-design, CJM and customer insight.

www.smartcities.info

Co-production. Delivering public services in an equal and reciprocal relationship between professionals, people using services, their families and their neighbours. Where activities are co-produced in this way, both services and neighbourhoods become far more effective agents of change. Co-design can be an element of a co-produced service.

Customer is used to mean the end user of the service – typically a private individual (a citizen), but a business may also be a customer. In local authorities, a **customer** is generally not the same as the **client**, who is the person or organisation that funds the service.

Customer insight is the process of understanding who your customers are and what they need, in a wider context of (re)designing and marketing services to meet needs more effectively while also achieving efficiencies through joint working and by moving people to less costly access channels. More information can be in the **Smart Cities Customer Insight Guide** (see the Resources section)

Customer journey mapping is the process of tracking and describing all the experiences that customers have as they encounter a service or set of services, taking into account not only what happens to them, but also their responses to these experiences. Used well, it can reveal opportunities for improvement and innovation in that experience, acting as a strategic tool to ensure every interaction with the customer is as positive as it can be.

Customer profiling allows partners to identify and use the most appropriate service channels for different target groups, and to proactively provide services that will meet customers' needs. This will ensure that services are designed and implemented in ways that recognise the specific needs of different groups of citizens. See also **customer insight**.
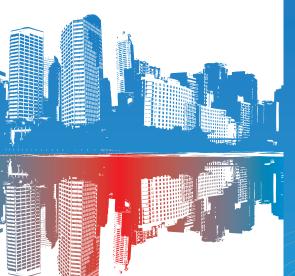
Customer service excellence is a UK Government standard aimed at delivering public services for all that are efficient, effective, excellent, equitable and empowering – with the citizen always and everywhere at the heart of public service provision.

Segmentation is a key part of customer profiling approaches that subdivides people with distinctive shared needs and characteristics into groups (or segments) which can then be targeted by service providers.

6   Resources & further reading

Smart Cities material
Information on Customer Insight can be found in the Smart Cities Customer Profiling Guide which can be downloaded from www.smartcities.info/customer-profiling or directly at: www.smartcities.info/files/Customer Profiling Guide 2010 final.pdf

See also:
- **Customer profiling to target service delivery** www.smartcities.info/files/Smart_Cities_Research_Brief_Customer_profiling_to_target_service_delivery_0.pdf
- **Process modelling** www.smartcities.info/files/Smart_Cities_Research_Brief_Process_Modelling_0.pdf
- **Using Personas** http://www.smartcities.info/files/Smart_Cities_Research_Brief_Using_Personas.pdf

Online resources
The UK Government created a lot of material on Customer Service Excellence between 2007-2009. This material can be accessed through the archive project via:

http://bit.ly/ukgov_CSEHome

Their guidance on CJM can be found at:

http://bit.ly/ukgov_CJM

The local government communities of practice hosted by I&DeA (now LGID) provides support to practitioners in the UK. It supports many specialist searchable communities of practice

http://communities.idea.gov.uk (Registration required)

Background reading
This report is useful for a European cross-country comparison:
Deloittes & IndiGov (2008) Study of the Measurement of E-Government User Satisfaction And Impact: Supplied documents. European Commission : Information Society and Media Directorate General

Two useful background articles on CJM and customer insight by Tracy Caldwell:

A route to insights. (16 February 2010)
www.kable.co.uk/data-management-customer-contact

Customer Journey Mapping. (23 February 2010)
www.guardianpublic.co.uk/customer-journey-mapping

www.smartcities.info
www.epractice.eu/community/smartcities

The Smart Cities project is creating an innovation network between cities and academic partners to develop and deliver better e-services to citizens and businesses in the North Sea Region. Smart Cities is funded by the Interreg IVB North Sea Region Programme of the European Union.

Smart Cities is PARTLY funded by the Interreg IVB North Sea Region Programme of the European Union. The North Sea Region Programme 2007-2013 works with regional development projects around the North Sea. Promoting transnational cooperation, the Programme aims to make the region a better place to live, work and invest in.