

Community co-design

A guide to working collaboratively
through design



Lessons from Food Loop (Defra EVO514)

About Food Loop

The Food Loop project was a collaboration between the Policy Studies Institute, SEED Foundation and the London Borough of Camden (LBC), together with a local community waste service provider. It was funded by Defra's Centre of Expertise on Influencing Behaviour (CEIB).

Food Loop was an action research project that ran on the Maiden Lane Estate in North London between March 2009 and November 2010. The project was based on the broad hypothesis that one of the best ways to get people to care about food waste is by making the local benefits of recycling and composting visible, and by ensuring that people are able to design a food waste system that best meets their needs. The project tested an innovative, participatory process called co-design. This guide details the learnings from the co-design process, as practiced in Food Loop.

This Guide is the result of an action-based research project funded by Defra (Food Loop EVO514) that investigated solutions to the problem of food waste on an inner London housing estate using co-design. The project sought to implement and improve the service that collects and disposes of domestic food waste to reduce the biodegradable waste sent to landfill; and also to turn that waste into compost so it could be used to grow fruit and vegetables and improve the quality of the local green spaces. Working closely with residents (who were the users of the waste services) as well as the Local Authority and community groups, a new local composting service was co-designed and delivered using the methodologies presented in this Guide.

For more information about the Food Loop project, please see:

<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=16694>.

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Who is this guide for and what will it help you to do?

This Guide introduces the concept and processes of co-design. It outlines the key steps in a process which can help build a deep understanding of local needs so that local services can be better designed and delivered to meet those needs. This guide is primarily aimed at people who may undertake co-design within a service, but we also hope it will be of use to policy makers who want to enable others (in public bodies, community groups or local authorities) to use co-design methodologies to design, implement and improve services.

This guide presents the findings from a co-design research project ('Food Loop') which used co-design to implement and improve a new food waste collection and composting service. Before the reader embarks on their own co-design projects, we should note that there are already several other projects and groups working on defining and refining the idea of 'co-design'. This guide is not meant to duplicate these efforts; rather, we have tried to demonstrate some of the practical techniques used and lessons learned from one specific co-design project, in the hope that these are useful and replicable elsewhere.¹

In addition, it is worth noting that this is a guide to community co-design. While co-design has been used in the NHS² and in many different types of private company, this guide is specifically aimed at people who are interested in changing the way that services are introduced, operated or changed within a specific area. This could be an estate, village, town or even local authority. It is worth remembering that an improved, co-designed service model made in one specific area could be rolled out in other, similar areas (if appropriate).

Based on our project experience, this guide will introduce you to the different phases of the co-design process; what each step entails; and how these methodologies can help you understand local needs and re-design and deliver local services.

1 Notably, NESTA's Public Services Lab and the New Economics Forum have recently (2009 to the time of writing in 2012) produced working papers and reports examining where co-design has been used, and challenges to expanding and refining the use of co-design. These can be accessed here: http://www.nesta.org.uk/areas_of_work/public_services_lab/coproduction

2 Projects such as User Centred Healthcare Design in Sheffield bring service users and providers together to understand patient experiences and collaboratively develop service solutions. Further information can be found online here: <http://www.uchd.org.uk/>

What is co-design?

Co-design (or 'collaborative design', 'co-production' and 'participatory design', as it is also known) is way of designing services that has been used in the public and private sector, as an innovative way to tackle some of society's most complex and deeply rooted problems. It involves working with the groups with an interest in a service.

In the Food Loop project, we co-designed a new food waste recycling and composting service. We worked with residents on an estate, the local council, the company hired to deliver the food waste service, the local community centre, local gardening groups and others. By working with these groups, a new food waste collection service was introduced on the estate, and adapted to suit the specific needs of the community. A new food-growing space has been created using compost produced on site.

Co-design can be used to help with...

- the introduction of a new service (e.g. the introduction of a new recycling service),
- possible changes to an existing service (e.g. revising the way that local parks are maintained),
- addressing difficulties people may be experiencing with an existing service (e.g. difficulties people encounter while trying to get access to services at a community centre)



The pros & cons of co-design

In the Food Loop project we found that using a co-design methodology has many benefits, but there are also downsides. We have briefly outlined these below. For more information, please refer to the Food Loop technical report, available at xxx
It can be seen that co-design is not a 'quick fix' but a long term investment in building trust and working with communities.

Pros	Cons
<ul style="list-style-type: none">• Co-design can work with users right from the outset to 1) identify a problem 2) implement a service or product to rectify this problem 3) ensure it is rolled out and implemented in an effective way.• Designs created through co-design are tailor-made to the input of the users. This helps address very specific problems and issues that the service user, service provider or other stakeholders have.• The in-depth approach to co-design means that service providers are able to target specific problems, including some that would otherwise be 'invisible' through normal methods of consultation.• Co-design is an inclusive process that brings in service users, service providers and other stakeholders into the design process.• Where service users and other stakeholders can see their input in action, they can feel empowered and a sense of ownership.• Co-design is particularly powerful for those involved in the process. This can create ambassadors for the service among the wider community.• Through its in-depth and personalised approach, co-design can rebuild trust in areas where the relationship between service users and service providers has broken down.• Publicly demonstrating that service users and other stakeholders have been involved in the co-design process can build support for it in the wider community.	<ul style="list-style-type: none">• Co-design usually requires more resources and time than traditional consultation, due to the in-depth insights that have to be gathered and processed.• Co-design is reliant on the participation of all stakeholders in the design process, but particularly the service provider. If the service provider is unwilling to modify their service offering, this can disrupt the whole process.• In areas where service users may be sceptical of the intentions service interventions or the service provider, it can prove difficult to work with a broad group of service providers.• Co-design exposes services and service providers to higher levels of scrutiny than other methods of design and consultation. This can be perceived as a threat to their independence and capabilities.• Care needs to be taken to ensure that during the co-design process service users are not 'drowned out' by other stakeholders.• Turning the inputs of a co-design process into a product or service intervention can often require the expertise of a design professional, who may have to be brought in.• The iterative nature of co-design can require lots of meetings and intensive bursts of activity to get service interventions right.• Because it is a process that is flexible and to some outcomes will be unknown, the co-design process requires a budget and time to be set aside for outputs that are not clearly defined.

The key stages of co-design

Co-design actively involves people right at the start of the intervention process. The work should begin by scoping out the problem or need you would like to solve and the service issues you would like to address. Discuss the issues with all local stakeholders to build a comprehensive picture of the situation. Through this you will become familiar with the key community members and learn about the social, political and economic influences shaping the area.

With a strong understanding of the local context, a range of tools and approaches can be used to gather detailed service information. Working with a group of individuals directly engaged in the service, you will learn about their personal experiences and gain close insights into the service operation.

With a body of visual and written information gathered about the service, you will be ready to work with your community team to generate new ideas. The participants will be able to voice their opinions and concerns and you will work together to turn those into new service propositions. Working with a design professional will help the ideas become practical solutions, and you will soon have models and service designs ready to try out.

The community team will put the new design ideas into action and a process of testing and iterating begins, refining the designs and making alterations until they meet the community's needs and improve the service experience. At this stage the service changes can be recorded in a 'Blueprint' that documents all the stages of the new service design. It acts as a guide for the wider community and will inform others about the changes you have made. At this stage the service is ready to be rolled-out. You will be able to implement the changes you have designed, and improve the quality of your service.

In the pages below, the co-design methodology is outlined in greater detail. There are some suggestions (2-5) which are not essential to a co-design methodology, but will help you gain deep insights into the community's needs and maximise interaction with the project participants. We recommend these tools as ways of helping you to gather information and to encourage creative community participation. We have found them useful, but you can choose to use them or not, as you see fit.

1 Define the need

What is it

The first stage in any co-design process is identifying the problem. This could be a need for a new service, improvements to an existing service, the design of a product or the implementation of new method of linking up existing services or stakeholders.

How to do it

Identify drivers for a change – are local residents dissatisfied with an existing service? Or are local authority targets driving the need for a co-design process to be used? Conduct desk-based research on the local area. Identify any competing or complimentary services already being offered. List possible options for service delivery, and then involve community groups, the local authority and other stakeholders, for example, in a local meeting. Discuss the various options available, and local people's wants and needs for the service offer.

What to document

List the responses of the different stakeholders to the proposals, and the pros and cons of each. Work with these to refine options for service delivery, and then present these to stakeholders again.

What will it achieve

This will ensure that the local community's needs are heard from the beginning and will give you various options to follow up and develop into a service or product later in the process.



2 Immersion

What it is:

Immersing yourself in the service to understand how all elements interlink.

How to do it:

Spend time in the places where service is or will be delivered. Spend a whole day or make several visits at different times and days of the week. Talk to the users. Learn about the local history and the social and political context. Understand how the problem manifests itself and how it affects people close to it. Introduce the project to the users and agree how you will work together.

What to document:

Look closely at the details of the situation. Take photos, make films, sketch and write notes on your observations. Map the stakeholders and their areas of influence. Sketch how the users deal with the problem and engage with the service.

What it will achieve:

You will gain valuable insights into the users' situations and the challenges they face. You will understand the wider context of the situation and be able to empathise with the users and providers, and the challenges they face. You will get to know the people, their circumstances and the places where the need occurs. This phase can help you detail how all the actors and aspects of the service come together. You will understand the context of the problem and be able to empathise with the user.



3 Empathy tools

What it is:

Trying the problem or need out for yourself to gain first hand experience. Put yourself in the user's shoes to deeply understand the context and the problem you are trying to solve.

How to do it:

Empathy tools can be a range of things that allow you to experience the problem or need for yourself. For example, if the issue you're looking at is water scarcity, try spending a day using only 50 litres of water and see what happens. The experience of trying the problem out can help you understand how it affects the people you want to solve it for.

What to document:

Take photos, make films and write notes throughout your tests. Create a detailed visual description of what you experienced and try to demonstrate what you have learned about the issue. Ask users to document their experiences too and capture the findings in a group feedback session.

What it will achieve:

Experiencing the problem first hand will give you strong insights into the user's situation and their difficulties. It might also indicate specific areas of the problem that need solving.



Key Point:

Engage your users in this activity as well. For example, give them a camera to document their own experiences, this will help you gather further insights.



4 User journals

What it is:

A diary kept by the users at the centre of your design challenge.

How to do it:

Provide all the users with a notebook and ask them to document their daily experiences. Be sure to ask them any specific questions you would like them to think and write about. For example, if the subject is recycling services, ask them to comment on positive and negative encounters they have with that service.

What to document:

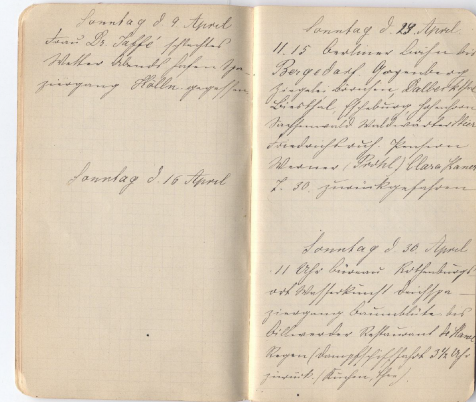
Once all the notebooks have been returned to you, look for similarities in the experiences the users have had. Visualise the feedback perhaps by mapping all the stages of the service and plotting the positive and negative comments in different colours along it.

What it will achieve:

You will soon see clusters emerge and specific problem areas will become clear. Journals give you strong user feedback and enable you to understand the problems as well as the benefits the users are experiencing.

Key Point:

Use the notebook as a way of communicating with the users. Use labels, questions or pictures to remind users what they should consider when filling in their journal.



5 Shadowing

What it is:

Close observation of different users' interactions with the system or service you are re-designing.

How to do it:

Accompany a range of users and staff on their encounter with the service. For example, for waste services, accompany the waste collectors on their rounds and spend time with several residents at home during daily routines. Be a fly-on-the-wall. Do not interfere with the users' normal habits but closely observe what they do.

What to document:

Being sensitive is crucial with this stage. With user permission, use audio or video recording, take some photos and make notes on what happens. Later on, draw these resources together to create a detailed illustration of the users' service experiences.

What it will achieve:

You will gain insights into different users' interactions with the service. Shadowing a range of users will offer clues from different vantage points and the recordings and notes will become a visual accompaniment to the user journals. Gaining closer, individual insights can add a more personal perspective to the service encounters observed during the Immersion phase.

Key Point:

Shadow service staff to find out how long the collections take, the kinds of conversations they have and any difficulties they encounter in delivering the service.



6 Co-creation

What it is:

The co-design workshop. Bringing all stakeholders together to generate new ideas.

How to do it:

Get all the users, service providers, staff and project team together in a workshop. Collate all the documentation you have gathered from the previous stages. Pin up the photos and sketches and project the videos. Provide paper, pens and model-making materials, discuss everything you have found out, sketch changes and make it fun! Remember that the service users and staff are the experts at the front line of the problem, encourage them to suggest what to change and be ambitious with the ideas.

What to document:

Document everything. Quickly mock-up the ideas in whatever form works best - drawings, models or anything else. Photograph them, take notes and develop them. It is very important for these to be working models, helping the ideas and conversations move forward.

What it will achieve:

This workshop will create new ideas and will make possible changes to the current system visible and tangible.

Key point

It is important that the person facilitating the workshop is familiar with all the phases of the project and is confident at visualising ideas. Scenario-building is a good technique for encouraging people to think broadly about the problem. Ask participants to put themselves in another user's shoes, for example, how would teenagers or the elderly feel about the new service you are designing? It will help the team consider the ideas they are generating from all angles.



7 Prototyping

What it is:

Developing ideas generated during the previous stages into usable solutions to be tried out.

How to do it:

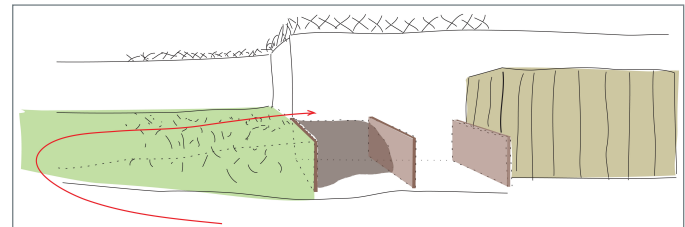
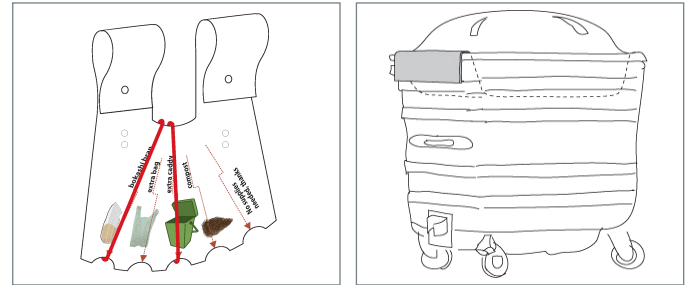
Working with a designer, develop the mocked-up ideas into more workable tools, change the materials if necessary and refine how the alterations to the service will be delivered. Work with the service provider and staff to ensure the designs are realistic and usable.

What to document:

Document all stages of the prototyping process. Sketch the changes you are making, test the evolutions of the designs as you trial them and record the stages of development.

What it will achieve:

This process will turn the ideas developed through the co-creation workshop into near-finished tools and techniques for transforming how the service or system is delivered and the experience it offers the user.



Key point

Prototyping can be used for the development of products, services, systems or spaces, as shown above. Clockwise from top: communications dial for improving the food waste collection service; re-designed food waste storage container; and designs for new compost storage space.

8 Testing

What it is:

The moment for putting the ideas into action.

How to do it:

This is the stage when the ideas and tools developed are tested beyond the workshop, to see how a wider user group responds and how the ideas work in practice. Introduce the changes to the service delivery into the everyday working of the system. Allow the users and staff to trial the tools they have co-designed in their everyday situation to see how it impacts on the problems they were experiencing with it.

What to document:

Document the use of the new tools and how the users and staff now interact with the system or service. Use film, photos, sketches and notes in the same way as you conducted the earlier Shadowing phase. Also ask the users to feedback about their new experience as they did through the User Journals.

What it will achieve:

It will uncover the successes as well as the failings of the new designs and identify areas for further work.



On the left is a new communications dial in use on a food waste caddy. Below is a service information leaflet co-designed with users, later delivered to all participating households in the scheme.

How do I do it?

1. Line your caddy with the compostable bag provided and sprinkle some Bokashi bran in the bottom.
2. Fill your caddy with food waste.
3. Sprinkle a hand full of Bokashi bran on top of each layer of food you add.
4. Close the lid and push the handle across the top to lock it.
5. Use your dial to let us know what extra supplies you need.
6. Every Monday morning, tie the bag and leave it inside the caddy. Leave your caddy outside your front door by 8am. It will be collected by 9pm.

Why not keep this helpful little poster somewhere close to your caddy? →

THANKS!

Thanks for joining Maiden Lane's composting scheme. Recycling your food waste is your first step towards helping make Maiden Lane a greener place to live.

By recycling your food waste you will:

- Help to produce valuable compost to use on your estate.
- Become more aware of how much food you throw away. People already taking part say they waste less food and save more money.
- Help to tackle climate change. Food waste in landfill sites creates methane, a powerful and harmful greenhouse gas.

It's free and easy – just put your caddy out for collection by 8am every Monday morning.

What can I put in my caddy?

Yes please	No thanks
You please! Put these things in your caddy. <ul style="list-style-type: none">All food scraps and leftoversFruit and vegetable peelingsCheeseCooked meat and fish - including bonesAll fruit and vegetablesTea bags and coffee groundsBread and pastriesCornies and takeaway food	No thanks, don't put these things in your caddy. <ul style="list-style-type: none">Non food itemsRaw meat and fishCigarette buttsLiquids and oilsPaper and cardboardMetals and plasticsFood packagingRubber and glassPlastic bagsAnimal waste and supplies

9 Iteration

What it is:

The re-working and refining of the designs based on the findings from the Testing phase.

How to do it:

Reconvene a workshop, ask how the users found the Testing phase and how successful the new tools were. Focus on the unsuccessful areas. Sketch and model new ideas and potential solutions to overcome the problems. When the changes are made, you will have to test again, and re-iterate if the problems persist.

What to document:

Document the difficulties the users found with the tools and the specific areas that need further development. Through photos and filming, document the workshop discussions and record all the changes to the tools through the new sketches and models.

What it will achieve:

Iterating the designs should resolve the problems users encountered with them. It is a phase to make further and perhaps final adjustments to the designs before the improvements are rolled out, but remember that there can be several phases of iterating and testing to get the design right.

Key point

The iteration process may take more than one phase. Be prepared to test and iterate again until the problems with new tools and service design are resolved.



10 Blueprinting

What it is:

Finalising the designs and creating the blueprint of how the new service operates so that it can be rolled out.

How to do it:

In a collaborative workshop, work through all the steps of the new service delivery in detail. Create a schematic map of the stages of the service and at what point all the new tools are used.

What to document:

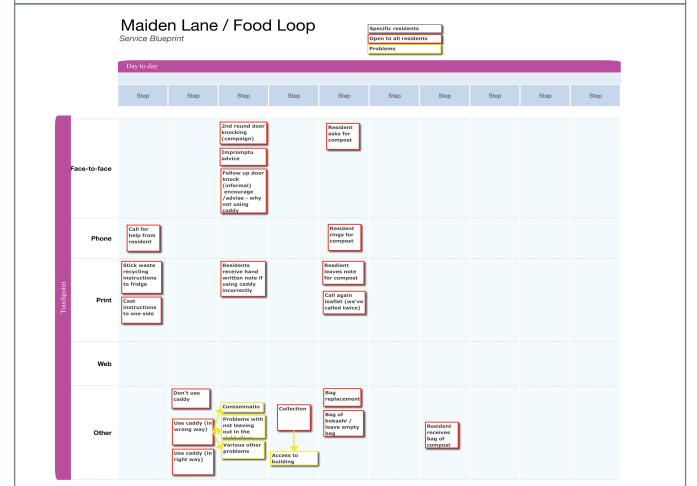
Map the stages of the service, plotting the tools, techniques and actions required at each one. Create a finished document that encompasses all the details required to deliver the new service or system that you have designed.

What it will achieve:

It will be the definitive guide to your new system or service delivery. It will allow your colleagues and other users to understand the important details of the service and to know the steps they need to take to deliver it successfully. It is all the elements you have co-designed in one clear system diagram.

Key point

The service blueprint can explain the stages of the service over time, but can also clearly show all the points of contact users and staff have with the service and what form they take. For example, it will help you decide if phone calls, face-to-face contact or websites will most effectively deliver a stage of the service.



11 Evaluation

What it is:

Seeing how the service design stands on its own and improves the service experience for users and staff.

How to do it:

Shadow the service users, staff and providers interacting with the service. See how the Blueprint comes to life and improves the quality of the service. Monitor a range of participants and continue to observe the service over time. Evaluation is an iterative process that feeds in across the phases of co-design work. It is not something to do just at the end, but a way of monitoring your progress and the effectiveness of your designs as you go.

What to document:

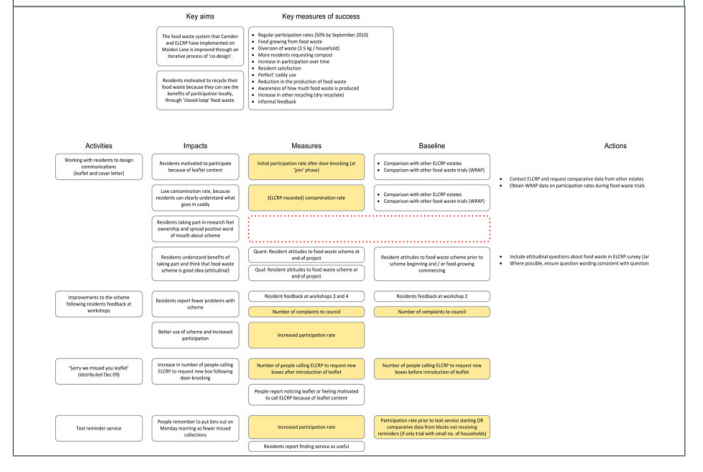
Map the changes in the service delivery you have achieved. Assess how you think this impacts on and improves the service experience for everyone. Consider the activities, their impacts, specific elements to assess, baseline comparisons, key aims, how to measure success and any further action to take.

What it will achieve:

Evaluating the service design and Blueprint will test how robust the changes you have delivered are. Continued monitoring will enable you to see how the service users and staff take ownership of the design and how the Blueprint becomes a tool for their everyday use of the service.

Key point

Future users, staff and service providers will have to be able to use the Blueprint too. It must be accessible to new stakeholders and the service must be able to adapt and evolve as new problems arise or circumstances change. The Iteration process may continue, so Evaluation is the opportunity to test that the Blueprint is dynamic enough to keep pace with the changing demands of the service.



Further information

We hope that this brief guide to a co-design methodology has proved useful. For further information about the Food Loop project, please see the Maiden Lane technical report, available at:

<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=16694>.

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