



The co-design playbook

Strategies for collaborative innovation



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Introduction

Co-design is a method for working closely with end users and stakeholders to explore new ideas and develop solutions that meet their needs. At Jisc we are firm believers in the power of the co-design process. It's clear, simple and agile and helps us to create better products and services for our members.

We developed this collaborative approach as a way of working with our members and we wanted to share it with you to make sure you get full value out of it too. We think that you will find it a useful model to explore.

This is our co-design playbook, describing a number of 'plays' that we have used and found helpful in guiding co-design activities. Plays are ways of answering questions and developing new ideas through activities and they help us to understand problems, users and markets more deeply.

Co-design is an evolving practice. With this playbook we want to share approaches we have found useful in our work. We know we still have a lot to

learn about how to improve co-design so this is a snapshot of where we are now rather than a finished and complete method.

As co-design is a collaborative endeavour, we welcome input and feedback – and we are keen to hear how you use the plays in your own organisation. Please share your thoughts with **Andy McGregor, Jisc's deputy chief innovation officer**, at andy.mcgregor@jisc.ac.uk.



Part one: Co-design



Why does Jisc co-design?

Co-design is our collaborative innovation model. It is designed to involve our users, Jisc members, in all aspects of our R&D work. Through co-design we are better able to develop new services that address pressing issues in higher and further education through technology.

Co-design projects involve a range of different stakeholders working together to create innovative, practical and effective products and services for HE and FE.

Why should you co-design?

At Jisc we developed this collaborative approach as a way of working with our members. We wanted to share it with you to make sure you get full value out of it too.

We believe that co-design can help you to:

- » Create **better products and services**
- » Ensure your work is **valued and valuable**
- » Help partners **work with you more easily**
- » Increase **participation of end users** in the creation of products and services
- » Be more **transparent** about roles, direction and progress
- » Run more flexible projects and **increase the speed** of response and delivery
- » Better **integrate ideas** from co-design into your other activities

For the staff of academic **institutions**, co-design is a means to get directly involved in the creation of services you need to support you doing your job easily and efficiently, as well as placing digital technology at the centre of your operations.

For **students**, co-design is an opportunity to get involved in shaping their own experience of HE and FE.

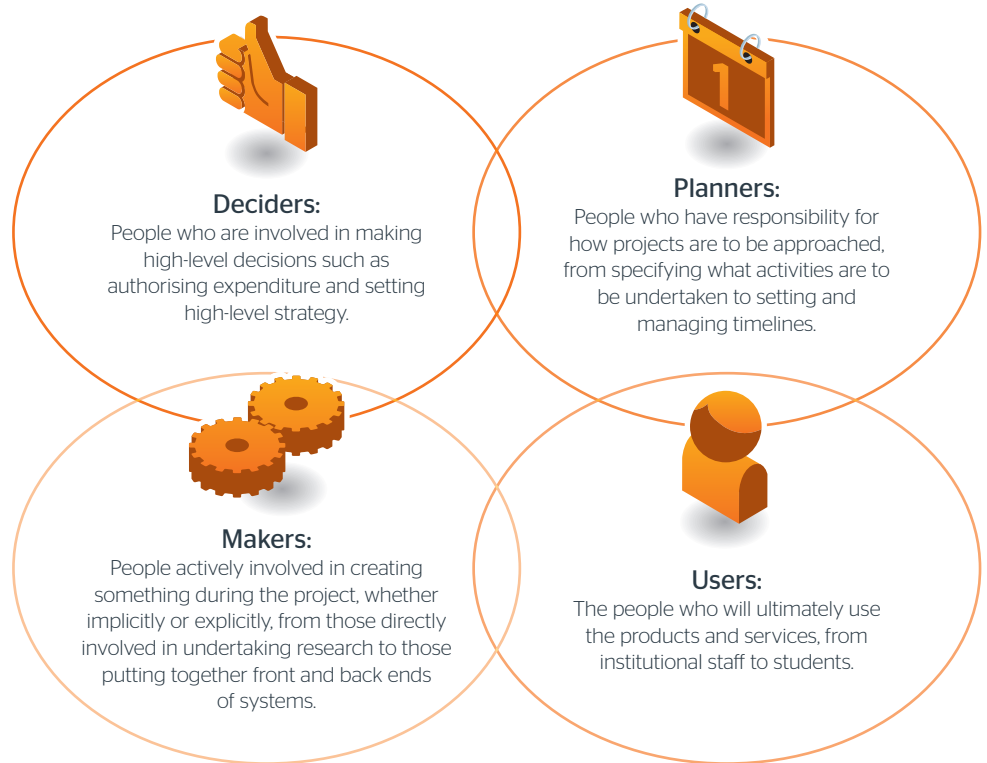
Who is involved in co-design?

Co-design is all about collaboration. Engaging colleagues, stakeholders, and end users is a crucial part of a successful co-design process.

Clearly, there may be many different kinds of people involved in co-design work. A large-scale project might involve multiple teams within an organisation, people working at different levels across several educational institutions and students.

We focus on roles.

There are four key roles people can play within the context of a co-design project: **Deciders**, **Planners**, **Makers** and **Users**.





Deciders

Deciders are people who are involved in high-level decisions about projects. They work in a strategic capacity within co-design initiatives.

Key responsibilities

- » Setting challenges and targets
- » Allocating resources to a project (ie acting as a signatory)
- » Estimating risk against impact at an overarching project or project portfolio level
- » Final project reviews
- » Representing a co-design project at a high level to an audience of peers and the sector in general

Key engagement factors

- » Heavily time pressured, so in need of support. They require ways of engaging in the co-design process that are easy, require little preparation, and allow them to participate in effective ways
- » Effective summary communications are a must, especially to keep informed of progress (without overloading)



Planners

Planners are responsible for setting up projects and managing processes as projects progress. They may include project managers, senior makers and external partners who manage resource use during a collaboration, such as CTOs and CIOs.

Key responsibilities

- » Ensuring the right activities are planned to achieve an effective end result
- » Keeping a project within an appropriate time frame and budget
- » Reviewing outputs of each project phase to ensure things are kept on track
- » Dealing with unforeseen eventualities (like the failure of a method to yield the expected and/or required result) and re-planning accordingly
- » Organising dissemination of project materials throughout the process to other audiences

Key engagement factors

- » A person's role as a planner will often overlap with other roles (eg deciders or makers), placing additional demands on their time
- » Managing across institutions will often mean that planners from different places will have to work together to coordinate activity, which can be challenging
- » Planners need to receive regular, manageable communications about the operations of (especially) makers



Makers

Makers encompasses all the people who are involved in actively developing a co-design project at the frontline. For example, researchers, web designers, back-end developers, communicators, expert consultants.

Key responsibilities

- » Makers will be responsible for specific tasks (eg create a user interface, perform a piece of research) or a range of tasks in a given area (eg be involved in research, design, or development in general)
- » Makers also need to engage with all critical project steps to keep abreast of progress and ensure their work is integrated into the whole

Key engagement factors

- » Makers may be easy to engage individually. Bringing to bear their various skills through collaboration is the greater challenge
- » Makers may have other demands on their time, requiring careful planning and/or flexibility to bring their best to a co-design team
- » While a given maker may bring a particular area of expertise to a project (eg GUI design or copywriting), it is worth involving them in other areas too - web designers can be informed and inspired by participating directly in research, for example, even if they do not have sole responsibility for it



Users

Users are the most important group to engage if we are to ensure a co-design initiative's long-term success. They are the people who will eventually use the products and services that co-design projects develop. They may include professional institutional staff (eg tech support), academics (teaching, research and management) and students.

Key responsibilities

- » Informing the co-design process of what they, and people like them, need from the products and services developed through co-design
- » Participation in co-design workshops, interviews, and other approaches

Key engagement factors

- » Users can be difficult to reach, so engagement will often require collaboration with others
- » We do not expect them to have (or to require) an understanding of the details of 'backstage' systems, management structures, project processes, etc except where this impinges on their experience as **users**

Part two: Engagement



Engaging people in co-design

Co-design involves working effectively with people. Therefore, a lot of effort should be dedicated to engagement in any co-design project. This section outlines some approaches that can be used to engage all the relevant stakeholders.

Ways to engage: activities

Co-design activities can be ongoing, such as steering groups, or one-offs, such as workshops, and both types can be used to engage stakeholders. Activities to consider include:



Co-design plays

The plays in this book aren't solely ways to engage but many of them (such as workshops) will have – either as activities or outputs – a strong engagement component to them, which should be considered as part of the mix.



Workshops

Workshops are used within projects when direct input from internal staff or partner stakeholders is required. Both a play and a way to engage, in some instances it may be worth running a workshop purely for its engagement value.



Feedback

This is used where a project has reached a conclusion or significant milestone in its development and where external validation is being sought for the outcomes at that point.



Student voices

Publicising input from students is an effective way to reflect the importance of the student perspective and can help to persuade other students to engage with the project.



Panels

Panels are used as mechanisms for reviews and feedback to engage stakeholders and provide the project team with a sounding board.



Reviews

Reviews are used at project level where external and expert feedback is required in addition to an internal project review.



Steering groups

Steering groups can be formed for each initiative to set direction and choose projects and interventions.

Ways to engage: content, formats and outputs

The content produced as part of co-design is a useful way to engage with audiences and attract them to the project, and it can be packaged and communicated in a variety of ways.



Project status updates

Status updates are a concise summary that allow anyone wanting to find out about the project to understand quickly its key elements. They are the workhorse of engaging internally and with stakeholders who may be directly involved in a project, and should be made available online for anyone to access.



Project narratives

Developing a project narrative is important to communicate what the project is about as well as its history, rationale and future. This can be used as much in an exhibition or event as it can for a case study once completed.



Blogs and vlogs

Project blogs and vlogs are a good way to keep an open channel of engagement with interested audiences where resource permits. However, these should be seen as an ongoing engagement rather than a one-off.



Social media

As with blogs and vlogs, using social media as a way to engage audiences is highly effective where the mix of content, audience and context makes sense for particular projects.



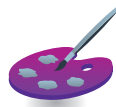
Presentations

Presentations should be used sparingly, when another format would not work, and should not become the lowest common denominator for engagement.



Case studies

Case studies are useful but, like presentations, should not be relied upon as the sole means of communicating about a completed project to remote audiences.



Exhibitions

Exhibitions can be used to tell the story and showcase examples from a project or intervention once completed.



White papers

White papers can be a highly effective way to engage with certain types of project stakeholders.



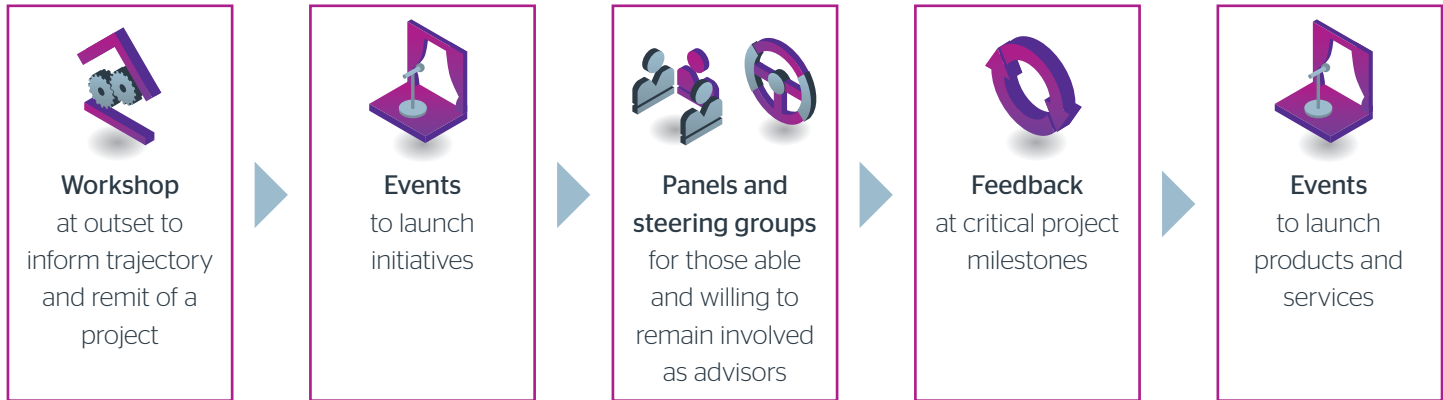
Events

Events can be used to launch a co-design initiative such as a new co-design year or project.

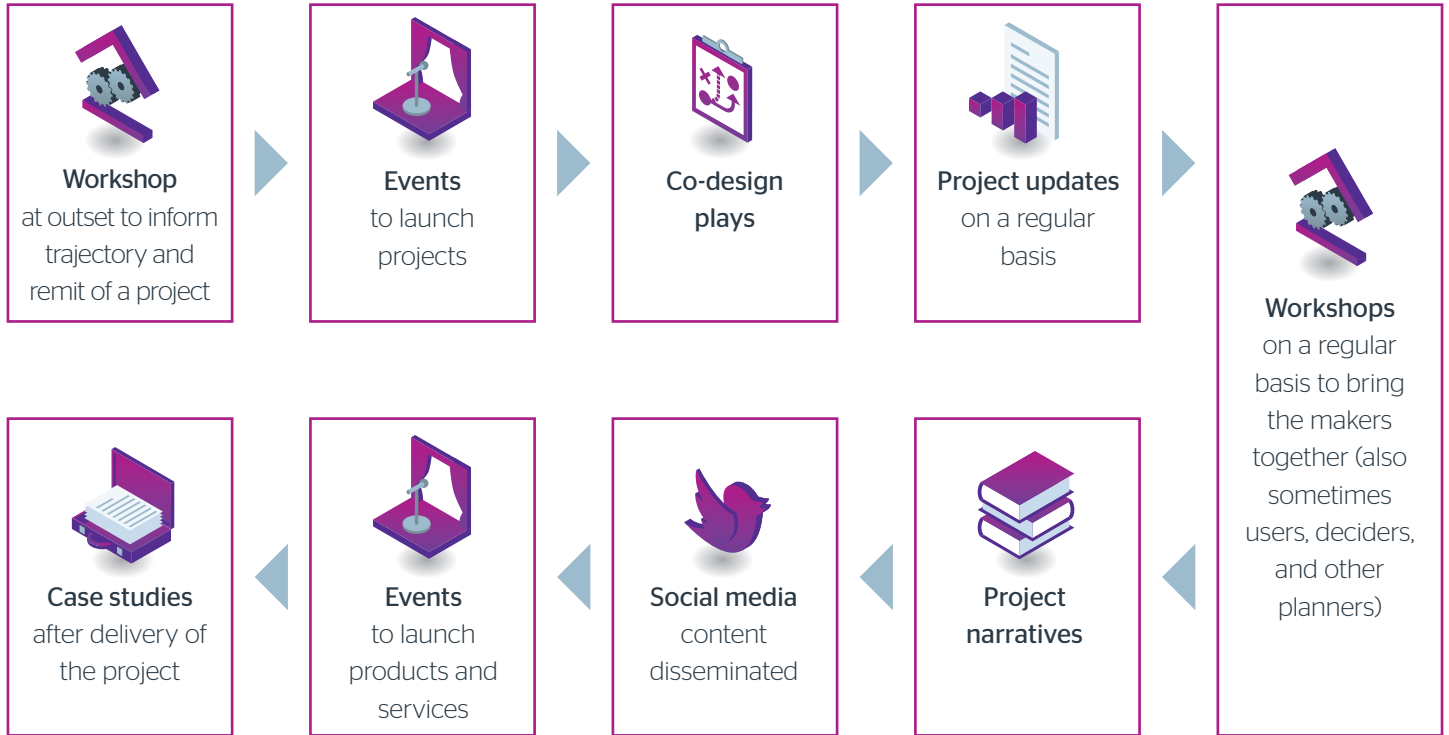
Engagement paths for key roles:

Example ways to engage in the project process

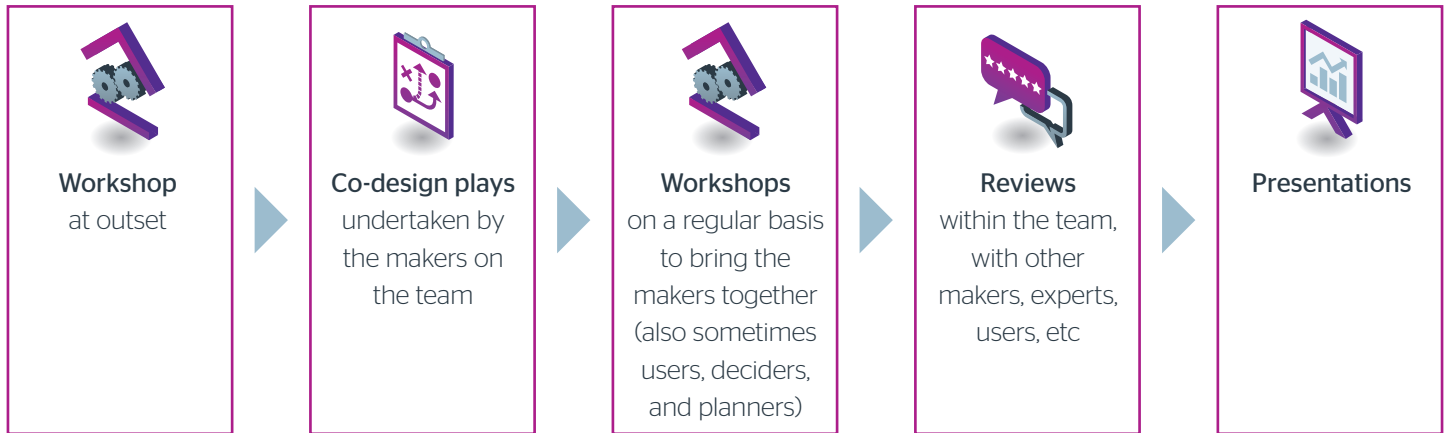
Deciders



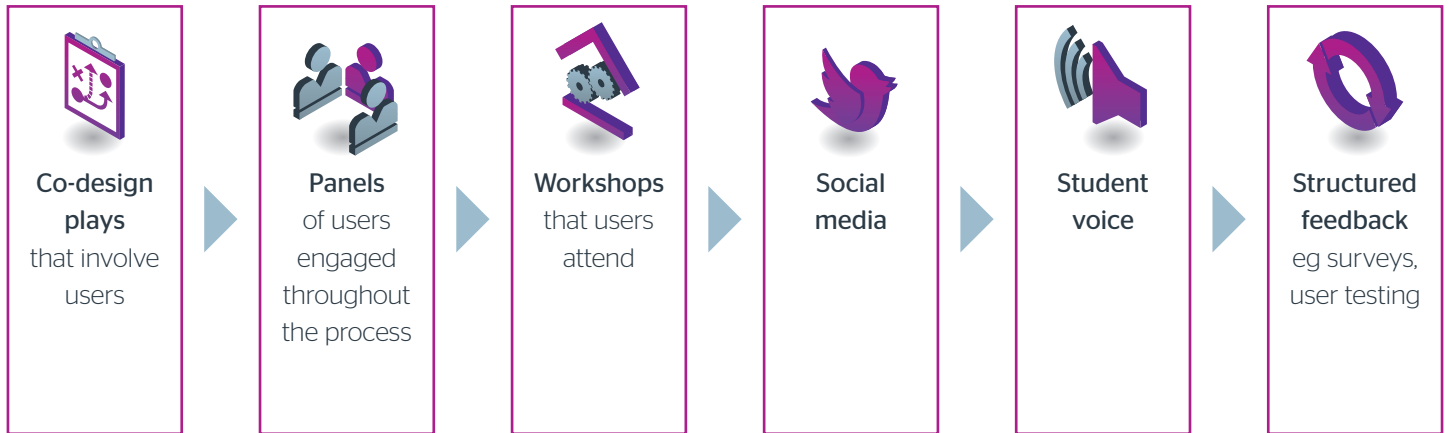
Planners



Makers



Users



Part three: The playbook

Using co-design

The playbook outlines how Jisc does co-design and describes a number of plays that can be used to guide your co-design activities.

Introduction

Plays are ways of answering questions and developing new ideas. They are not intended to be prescriptive and there is no 'right way' to undertake them. They can be adapted to the needs of an individual project.

The plays explained here are arranged in three different groups, according to the kinds of activity they are designed to assist:

- » **Understanding** the problem or opportunity in more depth
- » **Imagining** what might be done with these insights
- » **Building** products and services

Understand, imagine and **build** plays are activities that are useful throughout a project, not just in the planning stages at the start of a project.

Plays can also interact. Intuitively, a project begins with understanding the situation, then we imagine the possibilities, and finally we build something we have imagined. However, building a prototype can be the best way to understand a situation.

Some of the plays are more general and are easily scalable and applicable to many different kinds of projects; others can help to answer more specific, focused questions, and these are noted on the card.

To help you choose and plan activities, each play has an at-a-glance summary of variables so you can make decisions based on your needs and resources more easily:



Qualitative or quantitative?



How much time?



How many people?



Core team size?



Cost



Specialist skill required?

Play categories: understand, imagine and build



Understand

How do we learn about opportunities and challenges when we're exploring a given area?

'Understand' plays involve developing understanding and insight. This includes qualitative and quantitative approaches, and also packaging data and findings in such a way that they can be distributed to partners and the public in the future.



Imagine

How do we develop visions of the future and strategies to bring them about?

'Imagine' plays involve producing perceptions of what the future - of the sector, of technology, of individual experiences - might look like. This will often involve considering a range of scenarios, but the overall purpose of this work is to produce a positive vision - an aspirational state of affairs to be actively pursued. Imagine plays also include developing strategies to reach a particular goal.



Build

How do we work out what is the right thing to build and how to build the thing right?

'Build' plays involve constructing something new, whether products or services. In the case of **products**, this will typically mean developing minimal viable prototypes that will go through iterative cycles of design and gathering feedback. Designing **services** will also usually involve creating service blueprints that describe how the service functions, and associated customer journeys or other materials that bring to life the experience of using the service.

Understand

How do we learn about the opportunities and challenges around developing a product or service?





Understand

1. In-depth interviews with users



Qual



60 - 90 mins



6 - 10



1 - 3



Med



High

Aim to interview a set of users for at least an hour, alone, in pairs, or in a larger group, depending on the kinds of questions to be asked and the resources available.

Remember that this work is intended to inform and inspire, not to prove beyond dispute, so small numbers are acceptable. Six to eight interviews is often sufficient for a small project or a phase of a larger one and even two or three can be useful in the early stages of a project.

Write discussion guides beforehand - not exhaustive lists of questions, but the key points that you want to cover with them. Share with them any materials that are appropriate, such as things that already exist (for example, existing web interfaces) or new ideas that you have (prototypes etc).





Understand

2. Map existing user journeys



Qual



2 - 3
days



3 - 6



1 - 3



Low



Med

User journeys map a user's experience across a timeline. These are vital ways of both understanding how a product or service is used, and of identifying how this could be made better (whether creating a new product or service, or redesigning an existing one).

Journeys are best developed on the basis of research with users. They can be as simple or as complex as is necessary. In the example below, from Jisc's 2015 Summer of Student Innovation, there is a very simple set of phases.

| User journey | | | | |
|---|--|---|---|---|
| Before | Sign-up | Set-up | Use | Change |
| Hears of the product for the first time | Finds website and log in | Familiarises and uses the service for the first time. | Engages in regular use, and adopts into daily routines. | Unforeseen event for user or product occurs |
| Considers use | Takes action to activate service or sign into a formal agreement | Adapt product to own preferences | | Altered use |
| Does online research | | | | Stops using |



Understand

3. Engage stakeholders



Qual



60 - 90 mins



6 - 10



1 - 3



High



Med

Stakeholders need to be involved in the core of the process. Wherever possible one or more stakeholders should be brought into the project team. In the early part of a project, engaging stakeholders can be as simple as the core team 'finding out what is already known' - collecting and giving visibility to existing knowledge that is dispersed throughout their organisations, as well as assessing the needs of institutions. This can be achieved informally, or through workshops, interviews and other means.



Helpful in answering:

What do our stakeholders need from this project?



Understand

4. Talk to the experts



Qual



60 - 90
mins



6 - 10



1 - 3



Med



Med

Engaging people who have expert insight into the area you are working in can be a powerful way to enhance a co-design project by giving a 'sector perspective', especially in relation to short and long-term trends. Identify and approach relevant experts to take part in workshops or interviews with the project team. Don't just rely on experts, though. They bring a 'big picture' vision that is a useful complement to, but not a replacement for, understanding the experiences of end users.

Helpful in answering:

What do our stakeholders need from this project?





Understand

5. Find out what end users think



Qual



60 - 90 mins



6 - 10



1 - 3



Med



High

A key group to engage is end users. They provide a rich source of insight into how and why they use the kinds of products or services you will be designing, and their participation can inspire new ways of looking at a situation as well as ensuring that you build something they will find useful, usable, and desirable.

However, sometimes it is not obvious exactly how to get access to end users. If you know exactly what you are looking for and want to speak to a sizeable cohort of people, participant recruitment agencies can be useful but can be costly.

Otherwise, an effective method is to speak with people who are in regular contact with the types of end user relevant to the project or intervention, and ask them for help bringing you together with the right kind of people. When you have engaged with them, you can also ask them to recommend other people they know that might be willing to take part.

Helpful in answering:

What do our stakeholders need from this project?





Understand

6. Interview end users in context



Qual



15 - 60 mins



6 - 10



1 - 3



High



High

Contextual interviews are similar to in-depth interviews but are conducted in people's personal contexts, whether at work, at home, or in some other relevant place. This allows you to explore their day-to-day life with them, see how they use things and develop conversations based on what you observe.

As with any interview, it's useful to have a plan to guide the conversation, with a list of areas to be covered, while still allowing enough freedom for the subject to open up and discuss wider concerns.



Helpful in answering:

What is the context of use?



Understand

7. Ad hoc interviews



Qual



15 - 60
mins



6 - 10



1 - 3



Med



Med

To understand end users quickly, conduct interviews 'on the street' or in another suitable place where you can approach them (such as during breaks in a conference). Keep the interviews short and to the point (15 minutes or less), focusing on a few key questions. This produces less deep insight into how individual users see the world, but is useful to try out ideas quickly and get a sense of general patterns.



Helpful in answering:

What is the context of use?



Understand

8. Immerse the team in the environment where products and services will live

To understand the context in which a product or service will be used, arrange to accompany end users as they go about their everyday life (shadowing). This allows you to identify behaviours and situations that you would not have known to ask about in an interview setting (and that interviewees would not have remembered or thought it relevant to tell you about).

When appropriate, ask questions while shadowing users; when it is not, simply observe and take notes. (Video recording is a helpful way to do this, and is readily shareable with others in the team). Alternatively, arrange to take on the role of an end user for a day (supervised!), so that you can get a deep insight into the context in which the products or services you are designing will ultimately be used.

Helpful in answering:

What is the context of use?



Qual



2 - 3
days



N/A



3 - 5



Med



Low





Understand

9. Deploy 'cultural probes'



Qual



2 - 3
days



3 - 4



1 - 3



Med



High

When it is difficult to arrange to accompany or observe users, consider creating 'cultural probes' for them: materials you can give them to take away and bring back. Examples include diaries you ask them to complete about their day-to-day life over the course of a week, or a camera with a list of things you are interested in seeing pictures of.

Questions given as prompts work better if they are not too specific; you will learn as much about the users through how they interpret your questions as you will from their explicit answers. 'Take a picture of something you have to do that you find boring' will produce more insight than 'take a picture of your car'.

Helpful in answering:

What is the context of use?





Understand

10. Survey the field as it stands



Qual



5 - 10
days



1 - 20



1 - 3



Low



Med

Thoroughly review existing products and services in the area, and share these insights across the team.



Helpful in answering:

What can we learn from other products, services and users?



Understand

11. Investigate how others have approached related problems



Qual



2 - 3
days



6 - 10



1 - 3



Low



Low

Consider which organisations work in an analogous space to the one you are investigating. One exercise, for example, is to think about how another organisation might approach the design of a system or interface: how would Apple, Amazon or the Wikipedia team build it? In a more mundane sense, when designing a particular feature of, or interaction with, a service or product, consider who else does this well - conduct a survey of how different sites handle and return search results when designing a system that performs that function, for example.

Helpful in answering:

What can we learn from other products, services and users?





Understand 12. Go on a service safari



Qual



2 - 3
days



6 - 10



3 - 5



Low



Med

Service safaris involve experiencing other services and products that you may not be familiar with. They are a good way to understand what makes the difference between a good service experience and a bad one. It's also quite fun and can get members of the development team into the right mindset for the task ahead.

Helpful in answering:

What can we learn from other products, services and users?





Understand 13. Engage with 'extreme users'



Qual



2 - 3
days



6 - 10



1-3



High



High

To gain deep insight into some of the issues surrounding the project, look for 'extreme users' of existing systems. For example, if you are looking to replace or redesign an existing interface, locate people who use that interface (or a similar one) all the time, and also people who have never used it. Understanding these extremes will enable you to think about the full spectrum of people who might have to use something you design, and how you cater for very different uses.



Helpful in answering:

What can we learn from other products, services and users?



Understand

14. Create a 'day in the life'



Qual



1 day



1-6



1-3



Low



Med

Map out a typical day in the life of your users, from when they wake up to when they go to sleep. This allows you to compile a large amount of information and understand with more clarity when and where people have interactions relevant to the area that you are exploring.



Helpful in answering:

How can we map and share our insights?



Understand

15. Draw up personas



Qual



2 - 3
days



4 - 8



1-3

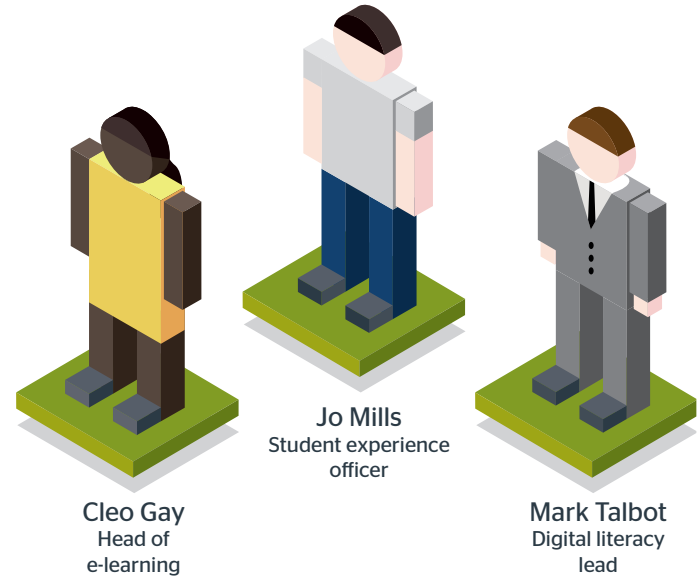


Med



Med

Create a series of fictional characters based on your insights, one for each main pattern of behaviour you have seen. Give them a name, some background information, a set of likes and dislikes (what activities do they enjoy, what do they find annoying, boring or upsetting). Personas of this kind allow you to focus your investigations on what kind of experience you are developing for your users in a structured way, while still feeling 'human'.



Helpful in answering:

How can we map and share our insights?

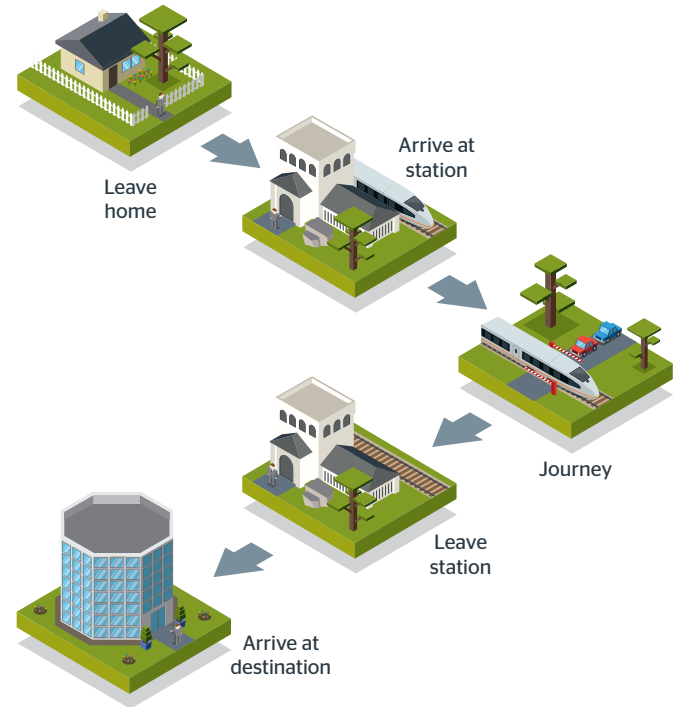
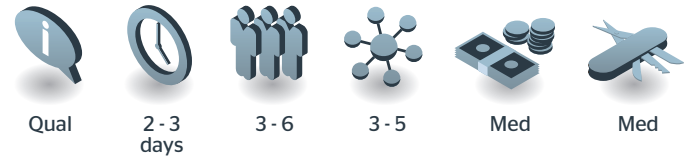


Understand 16. Map user lifecycles

Extend customer journeys over longer time periods, rather than specific interactions with something you want to design. Typical phases of a user lifecycle might be 'acquisition' (how do people become aware of the system), 'early life' (how do they learn to use it), 'in life' (how do they typically use it), and 'maintain' (what happens when something goes wrong, and why would people stop using it). These enable a much longer-range view of how and when people will engage with something you are designing.

Helpful in answering:

How can we map and share our insights?





Understand

17. Draw actor and factor maps



Qual



2 - 3 days



1



1 - 3



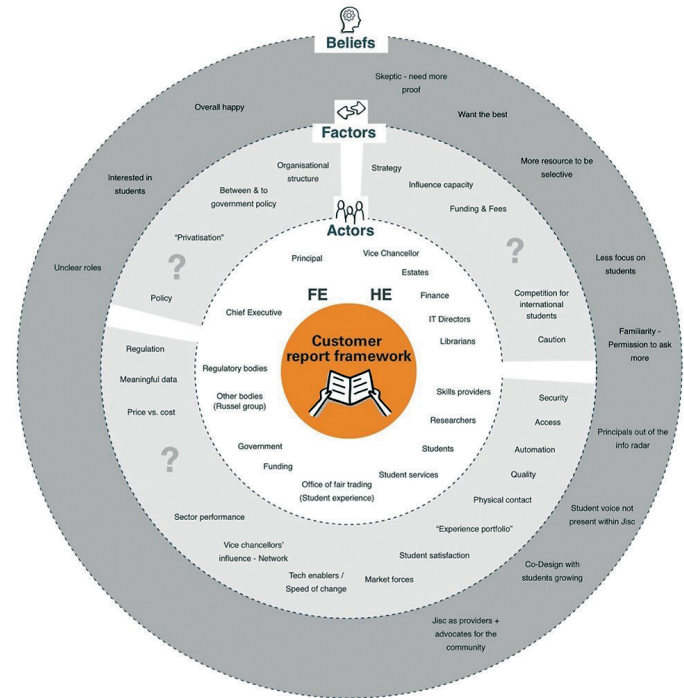
Med



High

Actor and factor maps are an effective way to represent visually all the relationships that exist between stakeholders, systems, technologies, regulatory frameworks, alternatives competitors, business models etc in a service.

Mapping these ecologies can help ensure that you have a complete overview of the landscape in which the service or product being designed will need to operate.



Helpful in answering:

How can we map and share our insights?

Imagine

How do we develop visions of the future,
and strategies to realise them?





Imagine

18. Create future user journeys



Qual



2 - 3 days



3 - 6



3 - 5



High



High

Current user journeys when using a system can be easily turned into **future user journeys**, and the structure of the journey makes this process much easier.

Going through the current journey, identify all the points where a new product or service might provide a better experience for the users. Later on, the kinds of systems that would enable these better experiences can be designed - the point is to concentrate on the user journey before considering technical constraints.

Sketch these ideas - they do not have to be realistic or well-drawn! - and add descriptions, then map them against their position on the journey. This is a highly effective way to create and to share new ideas.



AWARE: A Jisc Account Manager explains the benefits



CONSIDER: Head of IT looks at the goals for the institution & considers how best to implement an institution-wide change in digital capability



COMMIT: As new lecturers have to undertake some training when joining, he decides to integrate the new training into their induction programme



FAMILIARISE: A new lecturer watches an introductory film about the process



IMPLEMENT: They use the diagnostic tool to assess their strengths and weaknesses.



Imagine

19. Create a range of scenarios



Qual



2 - 3
days



5 - 10



3 - 5



High



Med

Develop a range of future scenarios for the current project or programme. Make sure there are enough to show very different images of 'how the world might be'. Too few will mean useful ideas are omitted, too many will mean a lack of sufficient detail in each. Three or four detailed scenarios is usually enough. Extrapolate from current trends but do not try to predict - scenarios are tools to inspire discussion and debate, so 'unlikely' but plausible ideas should also be included.

Helpful in answering:

How can we make the future tangible?



Institution led/high level strategic

*Top-down directed change
Led by senior staff*



Individual led, proactive change

*Led by departmental or faculty heads
or other change agents*



Team focused/mid level strategic

*Horizontally spread change
focused on developing
teams and groups of staff*



Imagine

20. Tell compelling stories about the future



Qual



1 day each



5 - 10



1 - 3

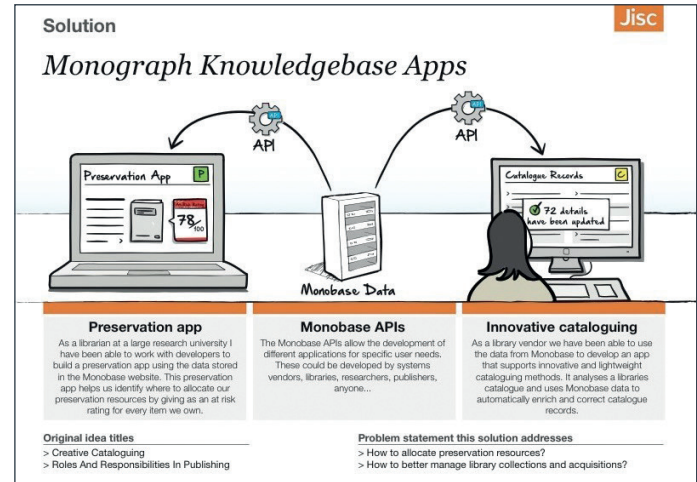


Med



Med

Find ways of making future scenarios feel concrete and tangible for discussion within the team and with others. Prose is helpful but images and film are also useful - consider what skills you might draw on to bring your scenarios to life (working with students, illustrators, filmmakers, concept designers, etc). Try designing bits and pieces of this world to make it feel 'real': what would an email look like, or a diary entry, or a receipt from buying something?



Helpful in answering:

How can we make the future tangible?



Imagine

21. Use framework models



N/A



2 - 3 days



1 - 3



1 - 3



Med



Med

Use models such as the ‘Design Double Diamond’ or the Business Model Canvas to help guide what it is that you’re trying to define. There are numerous different tools widely published and available that can be a useful way to very quickly establish the building blocks of the strategy, product, or service that you need to articulate and specify.

| The Business Model Canvas | | Designed for: | Designed by: | Date: | Version: |
|--|---|--|--|---|----------|
| Key Partners <p>Who are our Key Partners? Who are our Key Suppliers? Which Key Resources are we acquiring from partners? Which Key Channels are we leveraging from partners? Which Key Customer Segments are we serving from partners?</p> <p>Key Partners: Suppliers Distributors Complementors Channels Suppliers</p> | Key Activities <p>What Key Activities do our Value Propositions require? Our Customers' Expectations? Channels? Suppliers? Key Partners?</p> <p>Key Activities: Production Logistics Distribution Service Support</p> | Value Propositions <p>What Value do we create for our Customers? Which set of our Customer's problems are we seeking to solve? Which set of our Customer's needs are we satisfying? Which Customer Segments are we targeting? Which Channels are we using to reach them?</p> <p>Value Propositions: Performance Reliability Design Customization Price Convenience Availability Consistency Risk Reduction</p> | Customer Relationships <p>Through which Channels do our Customer Segments want to be reached? Which types of relationships are we building with them? Which types of Channels are we using to reach them? Which types of Channels are we using to reach them? How are we interacting with our customers?</p> <p>Customer Relationships: Personalized Self-Service Automated Co-creation Community Peer-to-peer Non-personal</p> | Customer Segments <p>For whom are we creating value? Who are our most important customer segments? Which segments are most attractive? Which segments are most accessible? Which segments are most defensible?</p> <p>Customer Segments: Mass Niche Segments Markets Markets</p> | |
| | Key Resources <p>What Key Resources do our Value Propositions require? Our Channels? Suppliers? Key Partners? Key Activities?</p> <p>Key Resources: Intellectual Property Channels Partners Suppliers</p> | | Channels <p>Through which Channels do our Customer Segments want to be reached? Which types of Channels are we using to reach them? Which types of Channels are we using to reach them? How are we interacting with our customers?</p> <p>Channels: Direct Indirect Personal Non-personal Owned Earned Shared Sponsored Paid Owned Earned Shared Sponsored</p> | | |
| Cost Structure <p>What are the most important costs incurred in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive? Which Key Channels are most expensive? Which Key Customer Segments are most expensive?</p> <p>Cost Structure: Variable Fixed Semi-variable Variable Fixed Semi-variable</p> | | Revenue Streams <p>For what value are our customers really willing to pay? How are they currently paying? How would they prefer to pay? How would they prefer to pay? How would they prefer to pay?</p> <p>Revenue Streams: Transactional Subscription Usage-based Advertising Commission Royalty License Rental Leasing Resale Brokerage Intermediation Asset Sale Service Fee Access Fee Convenience Fee Risk Reduction Social Network Reputation Status Power Influence Security Safety Health Well-being Happiness Fun Entertainment Education Self-Improvement Self-Expression Self-Realization Self-Fulfillment Self-Actualization</p> | | | |

Helpful in answering:

How can we create shared frameworks to guide action?



Imagine

22. Create a set of service principles



N/A



5 - 10 days



5 - 10



1 - 3



Med



Med

Set service principles that will guide your organisation with respect to the end user experience for your specific product or service. They can function both as a source of inspiration and also a way to decide between competing alternatives (possibilities that are a better match to the framework being rejected).

The number may vary depending on the size and scope of the project, but three to five is usually adequate (although there may be sub-principles). These principles should be based on research with end users, and should guide all design development.

Helpful in answering:

How can we create shared frameworks to guide action?

REPORTING MODEL

Reporting principles

1. A practical and purpose-driven offer
2. Right reporting, right place, right time
3. Support internal buy-in
4. Be mindful about the differences
5. Proactively improve the customer experience

Our offer is purpose-driven, evolving in line with our customer's needs. This means it's relevant and robust.

We use a common language to communicate our offer – to **help our customer understand** and become familiar with our full portfolio of services.

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11

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12



Imagine

23. Construct roadmaps



N/A



5 - 10 days



1



3 - 5



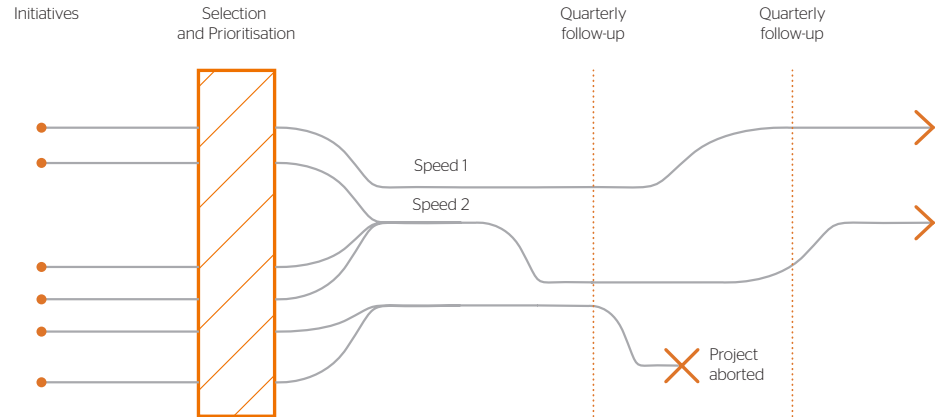
High



Med

Create roadmaps of what needs to be built over time. Identify the dependencies that each stage of the build will have on the previous one in order to prioritise concepts and organise workflows. Roadmaps are useful for the development of a single product or service, but can also be considered at a larger level (eg programme rather than project scale): a series of services and platforms to be built over a multi-year period, serving as a common reference point for different teams.

Co-design vision roadmap



Helpful in answering:

How can we create shared frameworks to guide action?

Build

How do we work out what is the right thing to build, and how to build the thing right?





Build

24. Make and test lo-fi prototypes



N/A



3 - 5 weeks



1 - 3



3 - 5



High

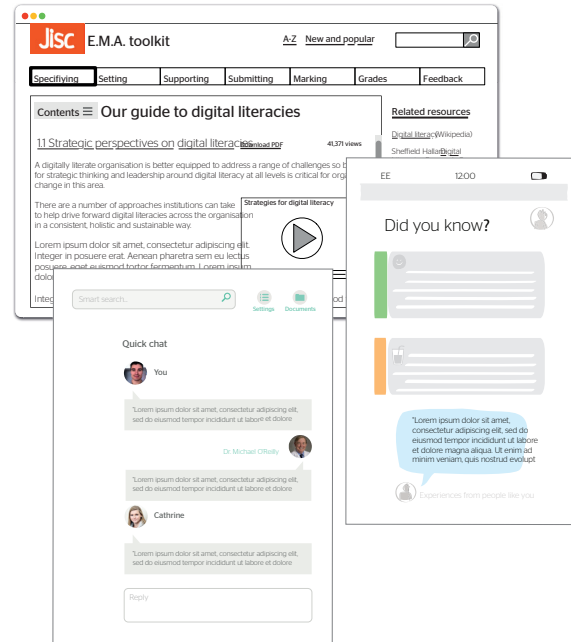


High

Sketch interfaces and user journeys quickly on paper (even hand-drawn and improvised if necessary), or any other materials that are simple and easily accessible. Get these in front of makers, users and planners as soon as possible in order to get feedback on the desirability, feasibility and viability of new ideas.

For example, roughly mock up profile pages and interactions on paper to explore both usability and people's broader concerns about security, privacy and the time they are willing to invest in a system. The key to lo-fi prototyping is to do it early, ugly and often. In other words, do it as soon as you can to test out your ideas, don't worry about the level of finish to it, and do it iteratively.

There is a wide range of free and very easy to use wireframing tools that allow you to build a basic digital mockup of your idea that you can put in front of users.





Build

25. Make and test digital prototypes



N/A



3-5 weeks



1-3



3-5



High



High

Use agile methodologies to develop functional versions of proposed systems through an alpha-beta-live process, with an expanding range of functionality and larger user group at each major iteration. Although the agile methodology is powerful in itself, it is also useful to integrate this process with the development of journey maps, service blueprints, and other co-design methods described on these cards.



Helpful in answering:

How can we prototype ideas?



Build

26. Prototype analogue interactions



N/A



3 - 5
weeks



3 - 6



3 - 5



High



High

Where services have an analogue component, from a phone support service to running a large scale co-design workshop, develop 'theatrical' techniques to experiment with how the service works. For example, a phone support service can be developed iteratively through simple role-play between 'service staff' and 'end users' (including real end users).

More complex, immersive experiences can also be designed. For example, mocking up a room with staff to trial co-design activities. There is even benefit in getting stakeholders and users to go beyond role-play and to 'body-storm' through an idea. This is where you get people to physically act out how they envisage using a product or service.

Helpful in answering:

How can we prototype ideas?





Build

27. Blueprinting a service



N/A



3 - 5 weeks



3 - 6



3 - 5



High



High

Describe a target service experience for users, with a clear and visual overview through clearly identified phases and stages of the customer experience. This one-page overview of the service can be constructed internally, but is also a good way to engage other stakeholders in the service.

| Digital Capability Service Blueprint | | BEFORE | | BEGIN | | DURING | | | AFTER | | |
|---|--|--------|----------|---------|-------------|-----------|-----|-----|------------|---------------------|------|
| | | Aware | Consider | Consult | Familiarise | Implement | Run | Use | Contribute | Change of situation | Next |
| INSTITUTION | Insights | | | | | | | | | | |
| | Organisation facing | | | | | | | | | | |
| | Staff facing | | | | | | | | | | |
| | Student facing | | | | | | | | | | |
| | Systems facing | | | | | | | | | | |
| | Research facing | | | | | | | | | | |
| | External facing | | | | | | | | | | |
| NEEDS | Service Scenarios | | | | | | | | | | |
| | Digital Leadership Development "XYZ" | | | | | | | | | | |
| | Staff/student digital network 'Digital employability' | | | | | | | | | | |

Helpful in answering:

How can we communicate how a service works?

Part four: Examples

This final section of the playbook offers two examples of how Jisc used a number of the plays to design and carry out recent projects.

Example 1: Online directories

A project to explore what products or services Jisc might build around online directories

The brief

To explore whether it makes sense to build a digital directory of UK online courses for students.

Project requirements

We had built an online prototype directory internally, using a small sample of courses. Following this, we needed to discover:

- » How can a directory of online courses deliver value for different users?
- » What will differentiate this Jisc online directory from others in the marketplace?
- » Determine what value this opportunity will bring to Jisc, intermediaries and end users, in order for Jisc to decide whether to commit further resources to technical development and partnership building

Plays used



Understand

In-depth interviews
with users



Six prospective online course
students recruited through
personal networks.



Understand play

Talk to the experts

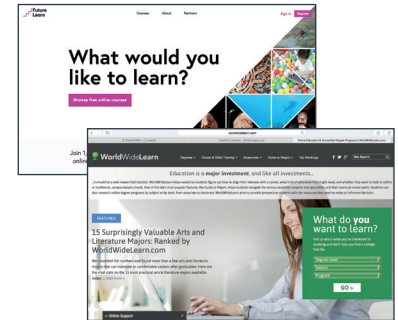


Two academics from TALL at
Oxford University.



Understand play

Survey the field as it stands

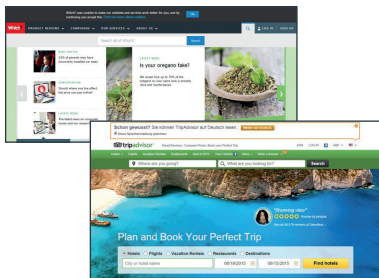


We reviewed five competitor
websites: World Wide Learn,
Future Learn, Distance Learning
Portal, Get Educated, and
eLearners.



Understand play

Investigate how other people have approached related problems

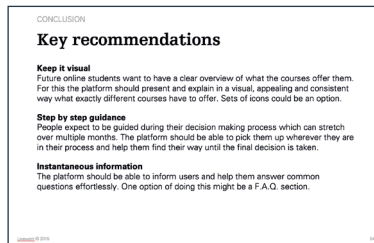


We reviewed 47 successful digital services that operate in an analogous fashion, for example Which?, Trip Advisor and Amazon.



Imagine play

Create a set of service principles



Nine key recommendations drawn from the user research, expert research, review of competitor websites and review of sites and services operating in analogous ways.



Understand play

Engage institutions



Representatives from several institutions were invited to a workshop, along with multiple Jisc teams.



Understand play

Personas

Nadja, 34

- Lives in a rural village
- Has a 10-year-old son
- Has a job in a small town
- Has a car and a dog
- Has a dog and a cat
- Has a dog and a cat

Barriers

- She needs help with this decision

Motivations

- Change of career
- Better financial stability
- Career progression over time

Barriers

- Doesn't know what she should study in order to achieve the goal
- She needs help with this decision

Barriers

- She needs help with this decision

Motivations

- Change of career
- Better financial stability
- Career progression over time

Barriers

- She needs help with this decision

Motivations

- Change of career
- Better financial stability
- Career progression over time

Barriers

- She needs help with this decision

Personas created for three users based on the user research were used as workshop materials to stimulate discussion about different types of user and their particular needs and behaviours.



Understand

User journey

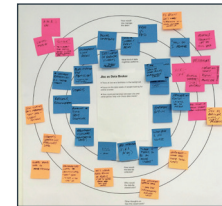


Very basic user journeys created as a template to guide discussion in the workshop.



Imagine play

Create a range of scenarios



Three potential roles Jisc can play with regards to online directories were each explored as a separate exercise in workshop: Jisc as data broker (backstage data management), Jisc as matchmaker (providing a web product), Jisc as advisor (offering an interactive service).



Build

Lo-fi prototyping

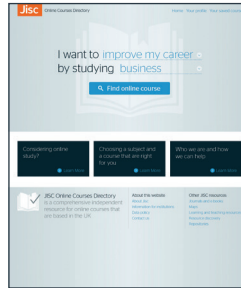


Materials prepared in advance to help participants in the workshop create paper prototypes of potential websites for the scenarios.



Build play

Create a digital prototype



In the form of nine key recommendations drawn from the user research, expert research, review of competitor websites and review of sites and services operating in analogous ways.

Example 2: Summer of Student Innovation

Running a design sprint with student teams

The brief

To engage students in developing their ideas for new technologies that can improve education, research and student life.

Project requirements

The Student Summer of Innovation 2015 involved two design sprints to engage the students in developing their ideas further, with a view to piloting the most successful products in institutions. This required designing an approach that we could run with the student teams during the four days they were with us.

We used the following plays to develop a design sprint that would allow the students in order to help them develop, test and present their ideas. This approach was influenced by the **Google Ventures design sprint** (gv.com/sprint) method.



Imagine play

Tell compelling stories about the future

ACTIVITIES – DAY 1

1. Your idea as a poster

60 mins

Objective
Meet the mentors and share your idea with peers.

How?

Teams sketch their idea as a poster or advertisement, which would quickly explain the product or service to a potential user. You should consider including:

- The name of your idea
- A sketch of it in use (could be a collage or photos)
- Or, it could be a description of the user experience
- Or, a process flow, but it PLEASE keep it visual!

This share with one of your fellow learners.

What have you learned? What sounds good? What doesn't?

[Paul has photos of this activity from last year]



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Drawing up a poster that communicated the basic idea behind the product or service.



Understand play

Survey the field as it stands and investigate how other people have approached related problems

ACTIVITIES – DAY 1

2. Unpacking your idea

90 mins

Objective
Unpack and understand different aspects of your idea, so that you can understand any gaps to be filled and the improvements to be made.

How?
Try to answer as many questions as possible using the templates.

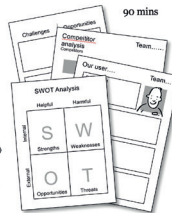
- Who's your user?
- Competitor/audit (who, positive, negative)
- Market analysis (size, trends, opportunity)
- Challenges and Opportunities (for my product or service)

20 minutes apiece for each.

Note: Use CAPITAL LETTERS and write with BHPARPIES whenever possible.

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Exercises for each, as well as other approaches (like SWOT analysis) to contextualise their idea.



Imagine play

Construct roadmaps

ACTIVITIES – DAY 1

3. Planning for the week

60 mins

Objective
Plan and define the team's goals and to-do's for the next three days.

How?

Using the template, define what you need to do and when.

- How developed is your idea?
- What do you need to concentrate on?
- Compare with the sprint agenda, develop yours
- Create a plan but remember to stay flexible. You can always revisit activities should you need to.
- Stick it on the wall and cross things off as you complete them.

Work with your mentor.

Share your general plans and actions with the group.

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Create a plan for the week, including enablers and division of tasks.



Imagine

Create a future user journey

ACTIVITIES - DAY 2

4. Designing and developing your idea 3 hours

Objective
Develop a concept

How?
Think about your service, using a storyboard, and after that:

- Interview users
- Conceptualise

How?
• Choose one or better

Work with users

ACTIVITIES - DAY 2

5. Review slots 90 mins

Objective
• Develop ideas in any other aspect of the idea

ACTIVITIES - DAY 2

6. Focus your design 90 mins

How?
• Work from the storyboard to create a prototype

Objective
Reduce your ideas and begin to decide what will be in the final concept which you will prototype on day 2

How?
• Remember to be realistic

Use on month or as part of your design process

How?
• Be brutal! This is a sketch, not a masterpiece!
• Decide what's in and what's out!
• Also think about the user perspective (How, where, when, why) and even a logo, for your product or service.

- Remember the user!

Prototype storyboard

Storyboard

Storyboard

Storyboard

Pursued in order to develop the idea further. Review these with others in the room, and focus the design down to what can be prototyped.



Build

Lo-fi prototyping

ACTIVITIES - DAY 3

7. Building a (wireframe) prototype 3 hours

Objective
Create a prototype to test and ultimately pitch on day 4

How?
Using the wireframing software, and any other tools

How?
• Pace yourselves!
• Divide and conquer if necessary
• If necessary only prototype the key screens critical to the story, you can always fill the gaps with "screens"

- Support and training on using the tool is available, make the most of it

Build out how to get the best out of your use

Useful tips

Storyboard

Storyboard

To create a wireframe prototype.



Understand, build
Perform a set of ad-hoc interviews

ACTIVITIES - DAY 3

8. User testing sessions 90 minutes

Objective
An opportunity for teams to get critical feedback on their wireframe prototypes

How?
Show your work to progress the idea, or maybe someone else's product or service to bring

- You can get a user to look at your work from the user
- Use the list of simple user
- It's never too late to find
- Remember: not just the content but

This is optional - you can use prototypes - but even just be visible.

ACTIVITIES - DAY 3

9. Building a prototype (continued) 90 mins

Objective
Continue building your prototype

How?
Using the wireframing software, and any other tools

- Final couple of hours now
- Stay focused
- If necessary only prototype the key screens critical to the story, you can always fill the gaps with "screens"
- Build, test, refine.
- Double check everything, does the content make sense? Any locking mistakes? Check the content!

Build out how to get the best out of your use

Useful tips

Storyboard

Storyboard

To refine the prototype and ensure that it works as well as possible.



Understand play

A final round of user testing

ACTIVITIES - DAY 4

10. Preparing your pitch 3 hours, 45 mins (to include with 11)

Objective
Organise and coordinate

How?
Get everyone
Stay hard on
The user
A great
A shared
A shared

ACTIVITIES - DAY 4

11. User testing 90 minutes

Objective
An opportunity
with them on
service

How?
Share your
service
of services to
getting feedback

ACTIVITIES - DAY 4

12. Pitches 3-5 mins per team

Objective
Present your ideas so that your judges love it!

How?
Create a coherent and convincing story about your product or service. Demonstrate that you have researched your ideas, understand your users, anticipate your priorities and share feedback from testing.

- You'll have time 3-5 minutes
- Place what you're going to show, which's going to say it and what to do
- Be clear, be honest, be persuasive!
- Finally, have fun, enthusiasm sells!

Remember - there will be prizes for the pitches, and which teams have had responses to their users

Through **ad-hoc interviews**, not just on the prototype but on the 'story' behind the project, to develop ideas about how to deliver a pitch of the final idea.

Start co-designing

We are keen to hear what you think of the
playbook and how you are using it.



For more information

on how Jisc uses co-design, our visions for the future of technology in education and research and the projects we are currently working on, please visit our website

jisc.ac.uk/rd



Share your thoughts on co-design and the playbook with

with Andy McGregor, Jisc's
deputy chief innovation officer

andy.mcgregor@jisc.ac.uk

Share our vision to make the UK the
most digitally advanced education
and research nation in the world

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