



# User journey mapping

A tool to improve user experience  
across your organization

# About this tool

Whether you are on your own or in a group, take a moment to let go of your expectations and distractions.

**The tool has three parts:**

- **Parts I & II lay the foundations.** Part I introduces the principles of designing with users in mind. It should take ~20 minutes. Part II introduces user personas. To know how your user experiences a journey, you need to understand them as a person or group to design for. It should take ~20 minutes.
- **Part III introduces our user journey mapping tool.** It provides a template for mapping how a community member experiences the different offers you provide. It should take ~45 minutes.

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# **Part I: Principles for designing with users**

Understanding and building for users becomes possible when we tap into the right mindset. We believe that this mindset consists of three principles:

**Empathy:** Deeply understanding your users – their needs, motivations, and challenges

**Collaboration:** Meaningful input and feedback from people who will actually use the service

**Iteration:** Experimenting, learning and adapting based on new information

Here is the thing: you have already got experience with these principles. So we are going to start with remembering.

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For each of the three principles above, write three short diary entries about a time you successfully demonstrated each principle. You might have truly understood and helped a friend after a difficult time (empathy), or worked with someone to do more than either of you could do alone (collaboration), or acted on feedback from a partner or colleague (iteration).

Do not overthink it. A few sentences per principle is perfect. The goal is to remind yourself that you already possess the mindsets for designing with users in mind, including empathy, which is particularly crucial for user journey mapping.

 Write about a time you were <b>empathetic</b>	
 Write about a time you were <b>collaborative</b>	
 Write about a time you were <b>iterative</b>	

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# **Part II: Building user personas**

We have just reflected on your own experiences with empathy, collaboration and iteration. Now, let us channel that towards understanding your stakeholders, by creating a user persona.

User personas are representative examples of specific people, based on real-world insight. By completing a persona, we are no longer designing for a vague “user” or “member”. We are designing for a specific human, or someone who is representative of a group that shares similar traits.

After building personas, we will take them through a user journey in Part III.

When building your persona, you can either:

1. **Focus on one real life user you know**, who has interacted with your organization in some way. This could be a member, government official, funder, member of the public, or anyone else who has ‘used’ your science organization.
  2. **Focus on a group of users you know**, and bundle their characteristics into one representative character sketch. Again, base this on real world insight!
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Here is an example of a persona from a science organization. As you can see below, the more specific, the better! Overleaf, you will find blank persona templates to build your own. We recommend you build two or three.

Name	Dr Sheena Thompson
Where do they live?	Based in Canada
What is their role?	Chemist at a pharmaceutical company.
What else is important about their demographics?	Has a PhD in Chemistry and 8 years of professional experience. Very ambitious.
How do they engage with your science organization?	They have been a member for the last 3 years, but with limited engagement
What are their goals for engaging with the organization?	Seeking professional development opportunities to advance her career.
How does engaging with your science organization help them towards a specific goal?	They might find people or organizations in the chemistry field that unlock their next role, or provide mentorship or career advice to her.
Write a specific scenario or task that they might engage in with your organization	Attend a networking event hosted by our science organization.

Name	
Where do they live?	
What is their role?	
What else is important about their demographics?	
How do they engage with your science organization?	
What are their goals for engaging with the organization?	
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# **Part III: User journey mapping**

Now comes the exciting part. You have created a detailed persona representing a real person or group of users. Next, we will follow your persona through an experience, as they seek to complete a task in order to fulfil a goal.

Before you write your own user journey you can examine two examples that are shown below. The first takes us outside the world of science and into a more familiar, everyday setting: a restaurant. It follows a customer named Dave as he arrives and orders a meal. Even in a common situation like this, you can spot key user actions, pain points, and opportunities for improvement.

The second example follows Sheena, our chemist from the example persona above. She has decided to attend a conference from our science organization to fulfil her goal of finding professional development opportunities.

When you are familiar with the format, take a blank user journey mapping template, or create your own. Start by taking one of the personas you have sketched. Then:

1. Sketch out the phases of a journey they might go through on the top of the map. This journey should help them to achieve the goal you have sketched for them in your persona. **To keep the user journey map simple, we recommend no more than three phases.**
2. At each phase, map the **actions** that the user takes as they go through their journey, and the **touchpoints** with your organization, if there are any. Again, let us keep things simple – no more than **three actions per phase**.
3. For each action, map the **emotions** your user feels, the **pain points** that your user might encounter (where they encounter obstacles or feel frustrated), and the **backstage processes** that the user does not see. Do not feel like you have to add an emotion, pain point, or backstage process for each action – focus on where you feel like emotions or pain points are highest!
4. Finally, circle the user actions in the journey where you think there is the chance to make the user feel more joy or less pain. Where you have circled, write the **opportunities** you can pursue to improve your user's experience.

To make the most of this section, focus the user journey on how things are today, not how you would like them to be in the future.

**Persona:** Dave

**Goal:** have a nice time at a restaurant, with his friends

PHASE 1: ARRIVING			PHASE 2: GETTING SEATED			PHASE 3: ORDERING		
Action Enters restaurant	Action Waits for host to be free	Action Greeted by host and reservation confirmed	Action Host, Dave and his friends walk to table	Action	Action	Action Reviews menu	Action Greeted by waiter, who tells him about daily specials	Action Asks questions and places order
Touchpoint	Touchpoint Sign asking Dave to wait	Touchpoint Greeting conversation	Touchpoint	Touchpoint	Touchpoint	Touchpoint Dinner menu	Touchpoint Daily specials conversation	Touchpoint Ordering conversation
Emotion <u>Relief</u> to have arrived after travel	Emotion <u>Fidgety</u> as they wait to speak to someone	Emotion <u>Happiness</u> to engage with a friendly face and that his booking worked	Emotion	Emotion	Emotion	Emotion <u>Excitement</u> as he reviews the menu	Emotion <u>Excitement</u> as he hears about the daily specials <u>Confusion</u> about what to order	Emotion <u>Relief</u> as he can stop looking at options <u>Excitement</u> about food incoming!
Pain point	Pain point Waiting around	Pain point	Pain point	Pain point	Pain point	Pain point	Pain point Overwhelmed by different options	Pain point
Backstage process Busser clears dirty table	Backstage process Back waiter resets table and tells host the table is free	Backstage process Reservation system and computer used by host	Backstage process Host informs waiter that Dave has arrived	Backstage process	Backstage process	Backstage process	Backstage process	Backstage process
Opportunity	Opportunity Could we have the table ready before the user arrives, if they've reserved?	Opportunity	Opportunity	Opportunity	Opportunity	Opportunity	Opportunity Could we list the specials inside the menu?	Opportunity

**Persona:** Dr Sheena Thompson

**Goal:** Seek professional development opportunities to advance her career

PHASE 1: AWARENESS			PHASE 2: ENGAGEMENT			PHASE 3: ADVOCACY		
Action Sees a post on LinkedIn	Action Clicks link and views conference webpage, including attendee reviews	Action Registers and pays	Action Researches conference events in advance	Action Attends conference	Action Participates in networking drinks after the conference	Action Follows up with people at the conference	Action Shares feedback on the conference	Action Writes about attending the conference on LinkedIn
Touchpoint Our LinkedIn profile and posts	Touchpoint Conference website	Touchpoint Conference registration platform	Touchpoint Conference website	Touchpoint Conference hall and side rooms	Touchpoint Conference foyer	Touchpoint LinkedIn, email	Touchpoint Googleform survey	Touchpoint Sheena's LinkedIn profile
Emotion <u>Curiosity</u> about the conference	Emotion	Emotion	Emotion <u>Enthusiasm</u> - wanting to get the most for her money	Emotion	Emotion <u>Determined</u> to make the most of the networking drinks	Emotion <u>Excitement</u> at new connections	Emotion	Emotion
Pain point	Pain point <u>Unsure</u> if the event is relevant to women in chemistry	Pain point	Pain point <u>Anxiety</u> that she won't make the most of meeting people, and/or doesn't know anyone there.	Pain point	Pain point Tired at the end of a long day with lots of learning and insights	Pain point	Pain point	Pain point Difficulty of capturing her time at the conference in an engaging way to her network
Backstage process We post regularly about the conference, through our page and network	Backstage process	Backstage process Payment taken	Backstage process Update conference agenda and attendee list as it is confirmed.	Backstage process Conference ops	Backstage process Conference ops organise drinks and snacks	Backstage process	Backstage process Host	Backstage process
Opportunity	Opportunity Add text or imagery to our webpage to conference webpages for inclusivity.	Opportunity	Opportunity Create some way for attendees to connect before the conference starts	Opportunity	Opportunity More opportunities for targeted networking during the day (which also makes networking easier for parents, or those who don't drink)	Opportunity	Opportunity	Opportunity Provide attendees with photos or key points from the speakers, which they can include in their own social media posts

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## From mapping to action

Congratulations! You have mapped a user journey that captures a persona as they engage with your organization to complete their goal.

Through this process, you have also identified key opportunities: moments where you can take action to improve user experience.

To finish, we share three short stories from outside the world of science, showing how well-known organizations have designed user journeys that create joy or help avoid frustration. These stories show how other sectors have made experiences more intuitive, trustworthy, or human, offering inspiration for improving experiences in your own organization.

In the spirit of **empathy, collaboration** and **iteration**, you can now think about particular areas of user experience to design for better.

### M-Pesa: a user journey founded on what their user already knows and uses every day

M-Pesa revolutionised financial inclusion by building a banking system based on USSD codes, a basic mobile technology that works through simple menus accessed by dialling codes like \*123#. It does not require internet access or a smartphone. Users can send money by entering a person's or business's phone number, specifying the amount, and confirming with their PIN. All they need is a basic feature phone. The journey eliminates the need for bank accounts, physical branches, or apps, building on what the user already has available to them.

Since M-Pesa launched in 2003, many other companies have created similar mobile money products. [GSMA estimates there to be 2.1bn mobile money accounts](#) worldwide.

M-Pesa is available 24-7, the transactions are secure, and users can achieve their goal of making transactions without any friction. Over time, as the user builds confidence, they might use other features such as savings, loans, and regular bill payments.

#### Think:

- *How can I make my user journey simpler, by building of what my user has and uses?*
- *How can I introduce novelty or complexity over time?*

## Uber: a user journey built to reduce uncertainty

Uber provides users with highly targeted, highly useful information the moment they book a taxi journey on the app. This includes an estimated cost of the trip, the model of the car, the name and a picture of the driver, and a messaging platform to message the driver.

Most notably, it also includes a map where the user can track the driver's progress, seeing how quickly they are making their way to the collection point.

Taken together, these features provide all the information a user needs to feel informed, at ease, and in control about their upcoming taxi ride. This information comes on screen at a key point in the user journey: just after they have booked.

The value of transparency is reinforced by studies in the behavioural sciences, most notably the '[certainty effect](#)' by Daniel Kahnemann and Amos Tversky. This can be summarised as: even when the reward for uncertainty is greater, most people prefer a fixed, certain outcome. In the case of Uber, by providing a good deal of relevant information, they remove uncertainty and (in doing so) minimise pain for their user.

### Think:

- *How can I reduce uncertainty, and provide my user with the information they need to feel in control?*

## Starbucks: a user journey that creates a 'home away from home'

Starbucks have crafted a user journey in line with their aspiration for cafes to be the "[third place](#)", in between your home and your work.

They recognise a user's goal when going to Starbucks is not only to drink high-quality coffee, but to connect with others and have a comfortable experience. By building a warm, welcoming, personal space, they support their users to do just that. This includes:

- Carefully chosen music to create a relaxed, inclusive atmosphere when the user walks in
- Asking the users' name, and calling it when their drink is ready
- Flexible, comfortable seating to encourage lingering, with people free to socialize, work, or simply unwind
- Decor that reflects the character and energy of local communities.

These aspects of the user journey come together to make a user feel at home – even when they are not.

### Think:

- *How can my user journey make my user feel more 'at home' and comfortable?*





## Work with the ISC to advance science as a global public good.

### About the International Science Council

The International Science Council (ISC) works at the global level to catalyse change by convening scientific expertise, advice and influence on issues of major importance to both science and society.

The ISC is a non-governmental organization with a unique global membership that brings together more than 250 international scientific unions and associations, national and regional scientific organizations including academies and research councils, international federations and societies, and young academies and associations.

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