The Toolkit **Pre-Discover Stage** engages with touch awareness and sensitisation, getting you to:

- Think through 'touch' in new ways.
- Reflect on what touch might mean and feel like in different contexts (for you and others).
- Focus on types of touch, bodily sensations and social and cultural boundaries.
- Observe and reflect on your design process.
- Begin to think about possible contexts for your research.





### How does touch convey emotion? What else has to happen for this to work?





## How/ have any recent events changed touch?





### What kinds of touch are private? What kinds of touch are public?





# When is touch too long (or too short)?





### When does it matter who touches?





## How does it feel to be touched?





## Who finds it difficult to touch? Who doesn't?





# What kinds of touch are encouraged, by whom?





## What kinds of touch are problematic? And why?



**Pre-Discover** 

# Who touches as part of their work? Can you give examples of 'expert' touches?





## What kinds of touch do you have to learn?





# How might different age groups experience touch differently?

#### **Pre-Discover**

Act out and explore how some of these kinds of touch differ: Touch for safety - compliant touch - supportive touch - guiding touch affective touch - funny touch - healthy touch painful touch - unwelcome touch.





# Explore 10 types of touch 'sensation'. Keep these to hand when you are exploring your design.



### Go and touch someone: How could you do it differently? What's 'good' or 'bad' touch in this context?



#### **Pre-Discover**

You have 5 minutes to find 3 unusual textures. Explore what they feel like - where else might you find these kinds of textures? Try this activity in your home or when you are out and about.



### What is your oldest touch memory? Re-enact and describe the sensations in as much detail as possible.



#### **Pre-Discover**

In pairs: **Person 1**: Should be blindfolded, roll up their sleeves and lay their forearm out, inner arm and palm facing upwards (resting on a table / flat surface).

Person 2: Find 2-3 small / medium sized objects (e.g. a banana, coin). Rest the object first on Person 1's forearm - can they tell what it is? Now try resting it on their finger tips - does this change their response? Swap roles. Refect on any diferences.





# Explore some of the ways in which touch can be gendered. Is touch ever gender-neutral?



#### Act out your response to when... ...someone is too close. ...you have wanted to be touched. (missing touch).





# Explore and enact how touch can be inclusive or exclusive for specific social groups.



#### **Pre-Discover**

#### Imagining touch physicality: Explore a specific environment, e.g. the beach. What might you feel (wind, sand...)? Now pick another context - what can be felt / touched?



#### **Pre-Discover**

### Act out a story in which touch is used to communicate... In this story: What do you communicate through touch? Who or what can communicate with you through touch?





## Explore the 'mouth-feel' of a favourite food.



### Explore and enact some of the ways that touch can be cultural. Can touch ever be universal and culturally-neutral?





Feel it!





# Imitate an animal's touch! How do you sense and touch differently?





### Shake someone's hand - what do you notice?





### Exaggerate a touch.





Touch together.





#### Compare touches.





# Touch at home. Touch in public. (If it's a person, only with their permission).





# Touch an object - does it feel the same to you as to the person next to you?





## Touch meaningfully.



**Pre-Discover** 

# Explore different touch preferences and boundaries





#### Touch out of context.





#### Does it feel how you expect it to?





#### Touch a thing. What do you notice and feel?





#### Touch a human (with their permission!).





#### Touch casually.

The Toolkit **Discover Stage** engages you with the context and user(s) for your design and explores how to embed touch awareness and opportunities for touch in this process. It helps you to:

- Develop an initial idea, a problem, challenge or inspiration.
- Unpack it through existing experience(s): how is touch involved in your chosen experience and context?
- Use different exploratory design activities: map stakeholders, do contextual user research, secondary research...
- Generate a narrative around an experience: who, what, where, when, why and how?
- Empathise with your users and open up possibilities through exploration.





### What would the current experience be like without touch?





### What does touch add to the current experience?





#### What kinds of touch are currently involved?





### Are there any touches here that you haven't considered?





### How does touch constrain or enhance the experience?





#### How intuitive is touch in this context?





### Who or what is communicating through the tactile?





#### How does the current experience feel 'tactile'?





# What do you know about the role of touch in this context, what are you assuming?





### Who or what else could be part of this experience?





#### Are there any non-human touches?





#### What are the user's feelings?





### Where are opportunities for touch or being touched?





### Do you have a favourite object that you touched as a child?





#### Are there any hidden or secret touches?





#### How/ have any recent events changed touch?



#### Make a map of your target users' feelings through touch to enable you to empathise which their experience.



#### List and describe as many different tactile sensations and qualities as you can in this context.





### Observe your user, ignoring in turns their chest and head.





#### Document what materials are touched. How is/ could the feel of the materials be described?





### Document what parts of the body/ies are touched, and how often.



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#### Discover

#### Try acting out key moments blind-folded / with ear plugs - what do you notice about touch? Note how touch changes throughout, if at all.





#### Ask your user to take you on a sensory tour, making explicit how things in their environment feel, taste, move, sound, look...



### Document a first person perspective of the experience. Now try it from the third person. What can you feel differently?



#### Narrate and audio record the touch experience (think out loud): Try this from different participants' perspectives.





#### Map touch. Trace it. Act it out. Draw it. Film it. Record its sound. Tweet it.





# What if you removed vision or sound from the touch?





#### Heighten one of the senses, what happens?





#### Add a human touch.





### Take away a human touch within the current experience.





Make gaps.





### View the experience from another perspective.





### Tell the user's story without sound.





#### Add or remove repetitions.





Fill gaps.





#### Change the weather.





### Make it shared / Make it solitary.





### Add a different type of communication.





### Provoke through constraining the sensory experience.





Amplify emotions.





### Disgusting touch.





#### Touch without emotion.





### Add a (non-) human touch.

### The Toolkit **Define Stage** guides you to filter, synthesise and clarify your ideas:

- What is most relevant to your chosen user experience focus, and how does touch feature in this?
- Look for themes, patterns and insights from the Discovery phase.
- Brainstorm opportunities for innovation. Exclude some users and focus in on your key target user group.
- Tell a story... or possible stories.
- Formulate your Vision Statement, consider key constraints (budget, brand alignment, resources, ethics...) and decide on a direction for your design.



### What do you know now that you didn't know at the beginning?





#### How might touch be used differently?





### How might we use touch to enhance the experience of the user?





### What's central to how things feel?



## How might we amplify - remove - redefine (the experience of) touch?



### How might we shift the focus away from sound or vision?



# How might we use the sensation of touch to communicate, alert, soothe, prevent, entertain, acknowledge...?



### What kinds of touch are secondary - could you bring them to the fore?



### How might touch be something that takes account of diversity?



#### How might touch relate to other senses?



### How might users become touch experts or develop new touch skills?



### How might we reframe people's experience of touch?



### How might this work for younger and older users?



#### What features of other specialist tactile communication systems (e.g. Tactile Morse code, Braille) might be useful for your design?





### How does your design create a boundary between public and private touch?



### How might your design use touch to help the user gain knowledge?



#### Define

#### Unpack the experience: What's central? What sensations are involved? What's missing? Where is the touch? Who or what could touch differently?





#### Enact and explore an affective dimension to your touch: Affection / Greeting / Inclusion / Playful affection / Playful aggression / Symbolic





## What is the tactile A-Z of your design? Choose the five touches that matter the most.





#### What touches are missing from this context?



#### Define

Enact and explore the body: Where does touch happen? What other parts of the body could touch involve? What is the reaction to touch? Whose bodies? How does it feel? How else could it feel on the body?





#### Quick fire questions about touch - What? What is touch? What is touched? What touches?





### Quick fire questions about touch - Who? Who touches? Who is touched?





#### Quick fire questions about touch - Where? Where is touch? Where in the environment? Where on the body?





### Quick fire questions about touch - When? When does touch happen? What's the duration of the touch? Is there a pattern or rhythm to it?





#### Quick fire questions about touch - How? How are things / people touched? How does touch happen? How intrusive is it? How does the environment feel?





### Quick fire questions about touch - Why? Why is there touch? What are its functions?





### Specify the touch.





#### Edit your materials.





Act it out.





### Name the problem.





### Mock it up.





### Digitally augment a cat's touch.

### The Toolkit **Develop Stage** supports experimentation and iteration. It helps you to:

- Develop potential design solutions.
- Test and explore them with users through experience prototyping.
- Layer touch into your process: what could the experience be and what could it feel like? What kinds of sensations could be involved, where on the body? What kinds of touch experiences does your solution deliver?
- Collaborate with users in working through your experience narrative.





### How is touch received?





### What is the function of touch in your design?





### How does your concept enable or restrict mobility or movement?





## How is touch used to separate or connect in your design?





## How could a user access touch feedback from the design experience? What could it feel like?





### Does the design work offline?





# Is touch...heightened? supplemented? extended? reconfigured?





### How adaptable is your touch experience?





# What new kinds of touch are you designing?





### How is your design delivering touch?





### How intrusive is touch?





### How welcome will the touch experience you design be?





### How do users know what touch means?





### How might this work beyond language?





### Is your touch gender-neutral?





# How is the way you touch your design different from touching a phone?





#### Is touch individual or shared?





### Can you ignore touch? What responses do you expect?





### Where has the touch gone?





## How would you describe the touch experience you are creating for your user?





#### Do you need multiple senses?





### Are you designing an existing touch experience or a new one?





### What materials are you using?





### Can your design do it without an app?





# Does your design use or disrupt any existing social rules of touch?





# Why might a user of your design not want touch?





# What do the touch points in your design assume about the relationship its users have with touch?



## How does your design touch the body of the user? What kind of user-body does that suggest or imagine?





# What kind of touch does your user want?





# Does your design of touch go beyond it being an alert?





# What kinds of touch are illegal and what kinds of touch are unethical?



Explore who is in control: Does your design filter/ block touch? Should it? How...? Can you switch it on and off? Who's controlling? Can touch be amplifed / manipulated / modifed / redirected...? What difference does it make?

Suggested time: 5-15 minutes



## Explore distance: What kinds of distances are at play? Geographical or perceived...? Stretch it. Add or remove in-between. Enable or restrict distance.

Suggested time: 10-20 minutes



## Sustainability: How social is your design? What resources are you drawing on? Who else is affected by your design?

Suggested time: 5 minutes



# Explore touch functions: Is touch used to 'activate'? Does touch provide 'feedback'? Do you use touch to 'sense' things? What do you sense? What other roles could touch play?

Suggested time: 5 minutes



Explore touch and time: Is touch synchronous or asynchronous? Is touch fleeting, quick, slow? Does your design work across tme zones? Does your design fit into the rhythm of people's lives? Is there a touch memory?

Suggested time: 15 minutes



## Quick fire round: Propose 8 solutions.

Suggested time: 2 minutes





# List all the things that your design can touch in this context.



## Bodystorm\*: Imagine 4 new sensory experiences for your context.

## \* wikipedia.org/wiki/Bodystorming

Suggested time: 10-15 minutes



# Find some materials you wouldn't usually work with. How would each change your design?

Suggested time: 20 minutes





# Map how touch has appeared or disappeared in your process.

Suggested time: 5 minutes

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#### Develop

Explore and enact sharing touch: Is the touch replicable? What histories or memories or traces might the touch in your design carry? Are any touches recorded in the communication process (and how will you safeguard this, if so)?

Suggested time: 15 minutes



## Mediating touch: Does the technology emphasise or strip or foreground or decentre touch? Is touch direct or indirect? How does touch enable or constrain?

Suggested time: 15 minutes



Explore ethics: What kind of touch does your design foster or encourage? What's untouchable? Can you produce ethical signposts for your design? What are the consideratons for users' privacy?

Suggested time: 20-30 minutes



## Enact and explore what categories of touch (e.g. every-day-expert, human-nonhuman) your design promotes?

Suggested time: 5 minutes



## Enact and explore different types of gaze that might accompany the touch experience you have designed? Which one works best? Why?

Suggested time: 10-15 minutes



## List touches starting with A D S T. Enact them. How would adding 2 of these to your design change the user experience?

Suggested time: 5 minutes





# How 'visible' is touch? - Hide it!





# Think about touch in a world without phones or touch screens.





# Enchant an object with touch.





# What if you reversed the touch?





### Make it loose?





# Lose the vibration?





# Got a button? - Take it away!





# Make it last? Shorten it?





## Make it soft?





### Change its texture.





## Make touch central.





# Make it tight?





## Make it small?





# Increase the touch possibilities and constraints of your design.





### Marginalise touch.





### Add or remove a tickle.





### Make touch indispensable.





### Amplify touch.





### Make it big?





### Make time for touch.





### Try a different material.





### Go beyond touch conventions.





### Extend touch beyond the arm and hand.





### Communicate a feeling through touch.





#### What if it vibrated?





### Could the non-human feel?





### Does the 'machine' touch?





#### Erase the touch.





### What touch is precious?





# What laws and rules around touch might your design provoke?

The Toolkit **Deliver Stage** supports you to represent, produce, and communicate your touch design:

- Move towards a higher-fidelity design (production or investor ready).
- How might you use touch to brand or market your design?
- How does touch feature in the ways in which different stakeholders or users might encounter, 'handle' and experience your product or service?
- How might you guide users through the experience quite literally, what are the 'touch points', and how will you help users navigate them?





### What expertise do you need to make this real?





# Where will you source your materials for production?





# How might touch change your materials (longevity, durability, safety standards)?



# Who will touch your device during the making, packaging and retail process?





# What are your target consumers' wider interests?





### How will consumers buy your product?





# What could your device send data to, or receive data from?





### Could your design work without an app?



### Does your user need to register for a service? How will they do this? How /where could your users manage their accounts?





### Does your design work with other smart devices? What devices do your users already own?



#### Deliver

Do you need servers for touch data? There will be different types of data. Personal user data - ID etc. and touch data. Is touch data considered personal?





# Do users pay a subscription? What is the benefit to them? Is it long term?





#### Hack a current advert or device for your design.

Suggested time: 30 minutes





### Share your touch specification with a colleague. Do they understand it?

Suggested time: 10 minutes



# Explain and act out your design to someone from another generation. What feedback do you get?

Suggested time: 20-30 minutes





# Imagine and act out what will happen to your design in five, ten and twenty years.

Suggested time: 20-30 minutes





# Role play that you are the manufacturer - what questions might you have?

Suggested time: 10 minutes





#### Sell with a touch.





### Link your device with something unexpected.





### Connect it to everything! Connect it to nothing.



Deliver

### Access your touch data.





### Who will own the touch data?





### What's the bigger picture?





### Put it in an unfamiliar shop.





# Can the touch change during the design experience?