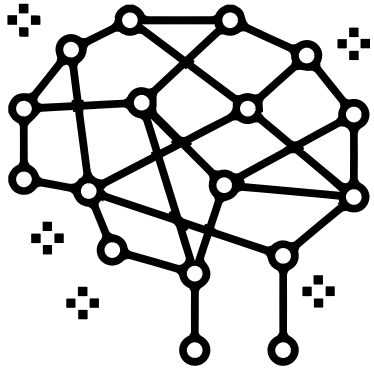
Design Principle

SUBCLUSTER

Description of what the AI-system should achieve from the (needs & attitude) perspective of the user.



Detailed description on how the AI-system should achieve the principle as described above, taking into account AI and brand experience elements that benefit the individual experience of the user.

DESIGN LEVEL

Main Cluster

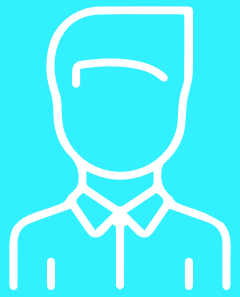
SUBCLUSTER

Deloitte.
Digital

DESIGN LEVEL

Personal AI

INDIVIDUAL



Individual Journey
The AI-system should increasingly engage the user where it counts, when it counts.

Behavioural Adaptation
The AI-system should adapt and differentiate to the behaviour of the user.

Hyper-Personalisation
The user should be engaged through individually differentiated AI-generated content.

SUMMARY CARD

Personal AI

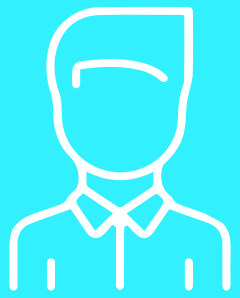
INDIVIDUAL

Deloitte.
Digital

SUMMARY CARD

Personal AI

EMOTIONAL



Attitude Matching
The user should be able to feel the brand throughout the individual journey.

Sympathetic AI
The user should feel understood by the AI-system in order to drive engagement and build a long-term relationship.

Human-Like AI
The AI-system should establish an emotional connection with the user to drive engagement and loyalty.

SUMMARY CARD

Personal AI

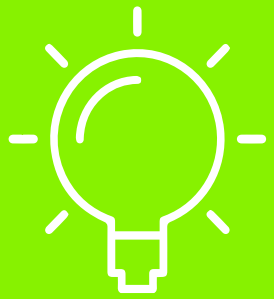
EMOTIONAL

Deloitte.
Digital

SUMMARY CARD

Intuitive AI

INTUITIVE



Natural Flow

Users should experience a natural flow when navigating through their individual journey.

Natural Interaction

The user should not need to invest a lot of effort in learning to use the AI-system.

Interaction Cost

The user should experience a minimum interaction cost, instead of a more difficult and demanding interaction.

SUMMARY CARD

Intuitive AI

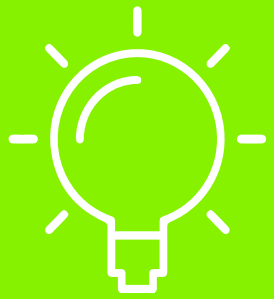
INTUITIVE

Deloitte.
Digital

SUMMARY CARD

Intuitive AI

EXPECTATION



Communicate Flow

It should be clear to the user what will happen throughout their individual journey.

Manage Expectations

The user should understand the abilities, as well as the boundaries of the AI-system.

Guiding Usecues

The user should know what to expect from the user interaction, providing them clearly with defined (use)cues.

SUMMARY CARD

Intuitive AI

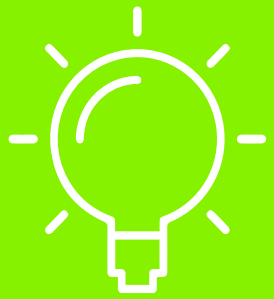
EXPECTATION

Deloitte.
Digital

SUMMARY CARD

Intuitive AI

PREDICTION



Design for Convenience

The number of required steps that the user must take to end up at the desired channel should be minimised.

Agentive Technology

The AI-system should give the user a peace of mind (on a daily level).

Fluid UI

The user should experience a fluid user interaction while manoeuvring through the interface flow.

SUMMARY CARD

Intuitive AI

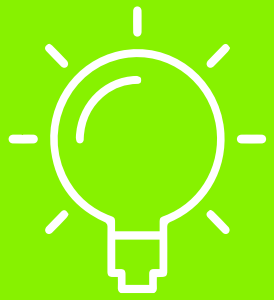
PREDICTION

Deloitte.
Digital

SUMMARY CARD

Intuitive AI

INTEGRATION



Ecosystem Curation

The number of required steps that the user must take to end up at the desired channel should be minimised.

Consistent Experience

The user should have a coherent, integrated experience throughout the entire interaction.

Integrated UI-Flow

The user should be able to easily navigate to the AI-system through a variety of devices & channels.

SUMMARY CARD

Intuitive AI

INTEGRATION

Deloitte.
Digital

SUMMARY CARD

Beneficial AI

INDIVIDUAL

Value Alignment

The user should feel that the AI-solution has an actual individual added-value.

Goal-Orientated AI

The user should feel that the AI-system helps them to achieve their ultimate motivation and desires.

Accessibility

The user should feel included, with the AI-system adapting to their individual (dis)ability.

SUMMARY CARD

Beneficial AI

INDIVIDUAL

Deloitte.
Digital

SUMMARY CARD

Beneficial AI

SOCIAL

Socially Beneficial

AI-systems should positively impact the user as well as their (in)direct social environment.

Inclusive AI

AI-systems should engage all people and empower everyone that is involved.

Community

Ideally, the user should feel as if their individual experience is part of something bigger.

SUMMARY CARD

Beneficial AI

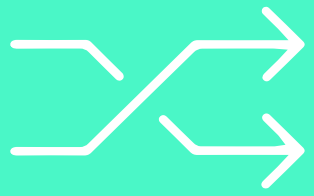
SOCIAL

Deloitte.
Digital

SUMMARY CARD

Responsive AI

CONTROL



User Consent

The user should have the feeling that they remain in control of their own experience flow.

User Intervention

At all times, the user should be able to intervene with the actions of the AI-system.

Escape Hatch

The user should not feel locked-in or forced to use the AI-system at any time during the interaction.

SUMMARY CARD

Responsive AI

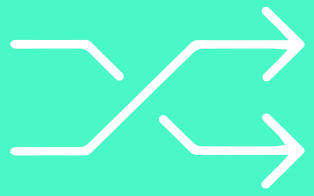
CONTROL

Deloitte.
Digital

SUMMARY CARD

Responsive AI

ADAPTIVE



Availability Dependency
The user should automatically be redirected to the channels that are available.

Contextually Adaptive
The AI-system should adapt according to the state and context of the user.

Respect Medium
The AI-system should respect the (messaging) medium through which the user is engaged.

SUMMARY CARD

Responsive AI

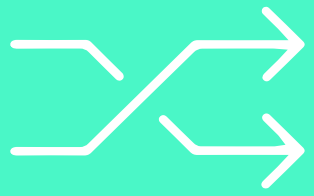
ADAPTIVE

Deloitte.
Digital

SUMMARY CARD

Responsive AI

FEEDBACK



Feedback Loop
The user should be able to provide feedback on the AI-system at any point within the experience flow.

Human-Like Feedback
Users should be made aware that they are (co-)responsible for building and improving their own individual experience.

Two-Way Communication
The user should feel that they are truly engaged in a two-way communication stream.

SUMMARY CARD

Responsive AI

FEEDBACK

Deloitte.
Digital

SUMMARY CARD

Explainable AI

ROBUSTNESS

Human-in-the-Loop

It should be clear for the user in what way an actual human-agent might be involved or contacted.

Data Trade-Off

It should be clear to the user for what reason their personal data is being gathered and used.

User Authentication

In order to establish trust with the user, the AI-solution should feel safe, secure and robust.

SUMMARY CARD

Explainable AI

ROBUSTNESS

Deloitte.
Digital

SUMMARY CARD

Explainable AI

TRANSPARENCY

Identify Stakeholders

In order to build trust with the user it is essential to be transparent about their data flow and those involved.

Glass-Box AI

The user should be able to comprehend the reasoning behind the output of the AI-system.

AI-Labelling

It should be clear to the user if and when they are dealing with an AI-system and/ or AI-generated content.

SUMMARY CARD

Explainable AI

TRANSPARENCY

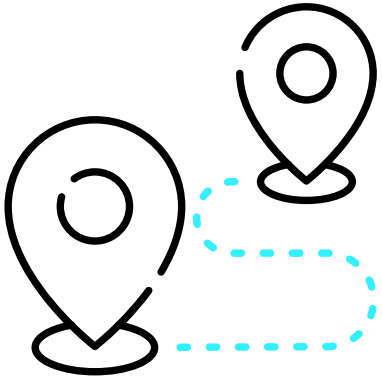
Deloitte.
Digital

SUMMARY CARD

Individual Journey

INDIVIDUAL

The AI-system should increasingly engage the user where it counts, when it counts.



Building on individual user preferences and experiences, the navigation throughout the user journey should increasingly become more individual in a sense that it builds on past engagements and directs users to the right channels at the right time. Hereby slowly decreasing the required user effort and responsibility in the process.

SERVICE DESIGN

Personal AI

INDIVIDUAL

Deloitte.
Digital

SERVICE DESIGN

Behavioural Adaptation

INDIVIDUAL

The AI-system should adapt and differentiate to the behaviour of the user.

By using behavioural (e.g. social) user data, combined with demographic (e.g. gender, age) and/ or cultural values the AI-system should (slightly) adjust its behaviour to match that of the user. Such an individually differentiated experience should build on previous interactions, slowly becoming more personal.

UX DESIGN

Personal AI

INDIVIDUAL

Deloitte.
Digital

UX DESIGN

Hyper-Personalisation

INDIVIDUAL

The user should be engaged through individually differentiated AI-generated content.

The AI-system is able to automatically generate, maintain and improve user profiles, driving personalised engagement through hyper-personalised content. This way the user can also be kept engaged by providing them with daily/ weekly custom and relevant content and/ or updates.

UI DESIGN

Personal AI

INDIVIDUAL

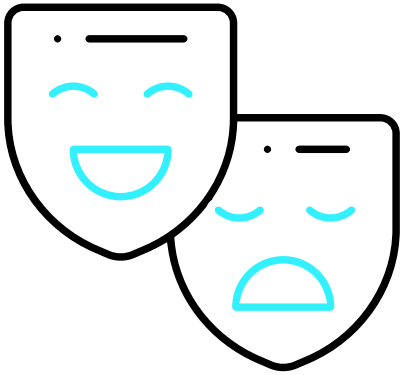
Deloitte.
Digital

UI DESIGN

Attitude Matching

EMOTIONAL

The user should be able to feel the brand throughout the individual journey.



The AI-solution should make the user aware of the driving purpose, passion and beliefs of the brand behind the experience flow it offers. Furthermore, the AI-solution should retrieve the beliefs of the user in order to match those with the beliefs of the brand (emphasise matching aspects).

SERVICE DESIGN

Personal AI

EMOTIONAL

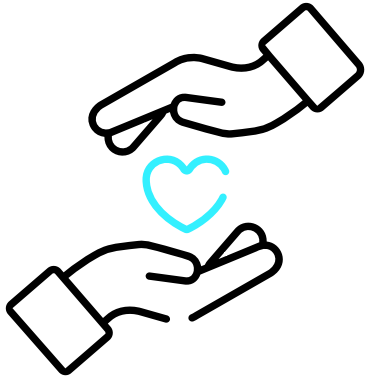
Deloitte.
Digital

SERVICE DESIGN

Sympathetic AI

EMOTIONAL

The user should feel understood by the AI-system in order to drive engagement and build a long-term relationship.



The AI-solution should be able to pick-up on the user sentiment and adjust its interaction accordingly (e.g. tone of voice, positivity, personality traits). Such an emotional connection also evokes sympathy from the side of the user, allowing them to forgive the AI-solution for any mistakes or its inability.

UX DESIGN

Personal AI

EMOTIONAL

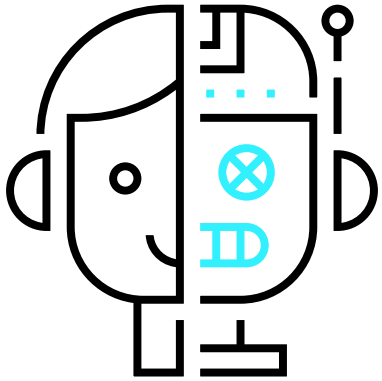
Deloitte.
Digital

UX DESIGN

Human-Like AI

EMOTIONAL

The AI-system should establish an emotional connection with the user to drive engagement and loyalty.



The AI-systems could have human-like traits such as the shape of a (human-like) avatar or other human-like characteristics such as a voice (e.g. natural responses that are not 'too fast' or robotic). However, if such human-like characteristics are 'just off', people might experience it as unpleasant (uncanny valley').

UI DESIGN

Personal AI

EMOTIONAL

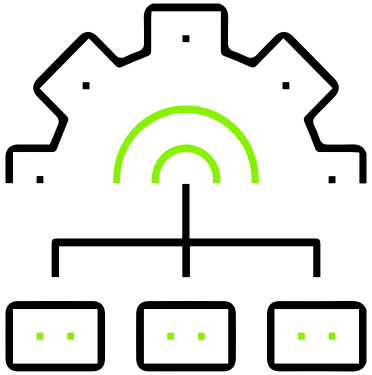
Deloitte.
Digital

UI DESIGN

Natural Flow

INTUITIVE

Users should experience a natural flow when navigating through their individual journey.



The AI-solution should be easily accessible and readily available (24/7) without being obtrusive in case it's not necessary. The AI-solution should remove any complexity for the user when navigating to the appropriate channel, meaning it should enable a smooth transition between various touchpoints.

SERVICE DESIGN

Intuitive AI

INTUITIVE

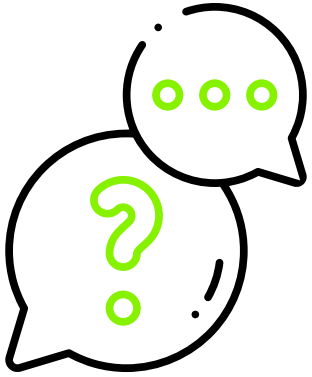
Deloitte.
Digital

SERVICE DESIGN

Natural Interaction

INTUITIVE

The user should not need to invest a lot of effort in learning to use the AI-system.



AI allows for the use of conversational input such as voice and/ or text in combination with natural language processing techniques. Hereby, the human-computer interaction should become more intuitive as it is closer to an actual human-to-human interaction.

UX DESIGN

Intuitive AI

INTUITIVE

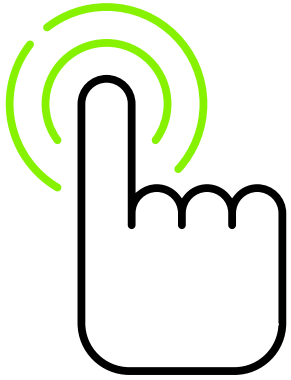
Deloitte.
Digital

UX DESIGN

Interaction Cost

INTUITIVE

The user should experience a minimum interaction cost, instead of a more difficult and demanding interaction.



The (conversational) AI-system should provide users with a clear, intuitive interface that only contains relevant suggestions and information. This includes a minimum of reading, scrolling, looking for relevant information, comprehending information, clicking, touching, typing, waiting, attention switches and memory load..

UI DESIGN

Intuitive AI

INTUITIVE

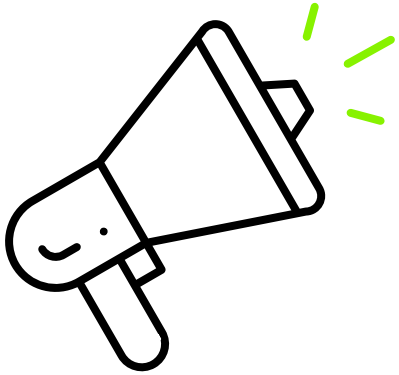
Deloitte.
Digital

UI DESIGN

Communicate Flow

EXPECTATION

It should be clear to the user what will happen throughout their individual journey.



The AI-system should explain what steps the user might expect it to take and which channels will be involved. Hence, it should be clear for the user why they are interacting with the AI-solution, what channels/ stakeholders are involved and what the expected output will be.

SERVICE DESIGN

Intuitive AI

EXPECTATION

Deloitte.
Digital

SERVICE DESIGN

Manage Expectations

EXPECTATION

The user should understand the abilities, as well as the boundaries of the AI-system.

The user perception of the AI-solution will be shaped by their expectations, based on their previous experiences. Hereby, the AI-system should manage such expectations by educating the user, or by designing the experience in such a way that users can discover the various functionalities/ limits on their own terms (design for discovery).

UX DESIGN

Intuitive AI

EXPECTATION

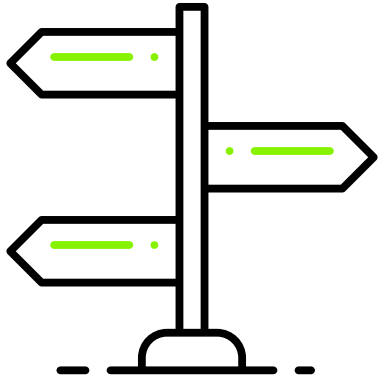
Deloitte.
Digital

UX DESIGN

Guiding Usecues

EXPECTATION

The user should know what to expect from the user interaction, providing them clearly with defined (use)cues.



The AI-system should provide the user with relevant (audio)visual or tactile cues that it is recording/ processing their interaction (e.g. voice or text input of the user). Furthermore, the user should also be educated about the functionalities of the AI-system e.g. through a support menu, a first-time tutorial, or a slow introducing of new functionalities.

UI DESIGN

Intuitive AI

EXPECTATION

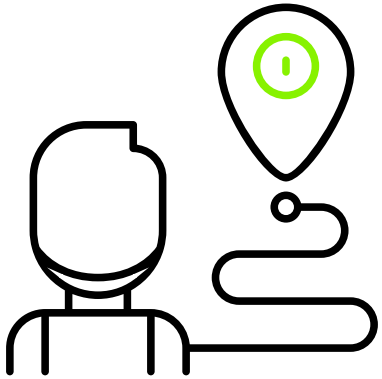
Deloitte.
Digital

UI DESIGN

Design for Convenience

PREDICTION

The number of required steps that the user must take to end up at the desired channel should be minimised.



The AI-system should use predictive analytics in order to determine the probabilistic individual experience flow of the user so that the user can be redirected (or get suggestions) to the relevant channels/ touchpoints without taking too much effort.

SERVICE DESIGN

Intuitive AI

PREDICTION

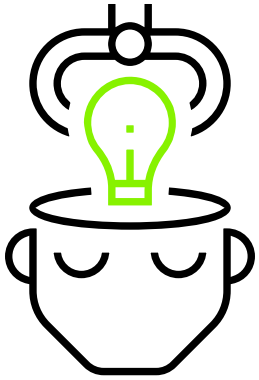
Deloitte.
Digital

SERVICE DESIGN

Agentive Technology

PREDICTION

The AI-system should give the user a peace of mind (on a daily level).



Through prediction and pattern recognition, the AI-system could act on behalf of the user once they have their consent, without constantly having to ask for their manual input and effort (e.g. activation). This is especially ideal for low-risk, repetitive tasks, or for notifying the user of inconsistencies (or critical situations).

UX DESIGN

Intuitive AI

PREDICTION

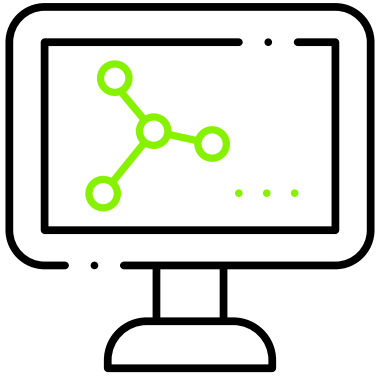
Deloitte.
Digital

UX DESIGN

Fluid UI

PREDICTION

The user should experience a fluid user interaction while manoeuvring through the interface flow.



In order to simplify the overall user interaction, the AI-system should adapt its content (e.g. UI structure such as conversational interface, portrayed information or suggestions) according to the user's probabilistic intent and lead them through an adaptive custom user interface.

UI DESIGN

Intuitive AI

PREDICTION

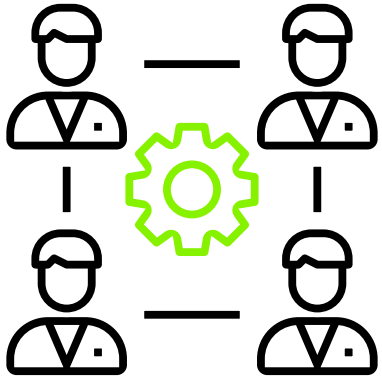
Deloitte.
Digital

UI DESIGN

Ecosystem Curation

INTEGRATION

Even when multiple channels and/ or stakeholders are involved, the user should have a congruent experience.



The AI-system should connect all relevant stakeholders and integrate all relevant internal and external (e.g. 3rd party) channels and systems. The AI-system should thus regulate the relevant processes and (data-)flows in order to provide the user with a fluent and coherent experience flow.

SERVICE DESIGN

Intuitive AI

INTEGRATION

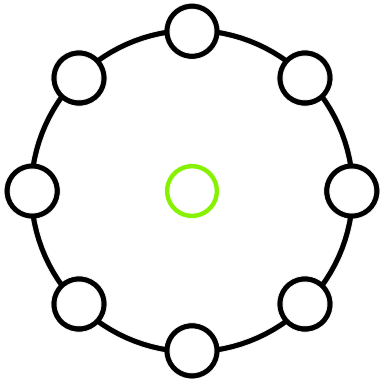
Deloitte.
Digital

SERVICE DESIGN

Consistent Experience

INTEGRATION

The user should have a coherent, integrated experience throughout the entire interaction.



The user should be able to interact with the AI-solution through various types of devices and channels, switching whenever s/he prefers. By linking the individual user profile (e.g. through intelligent dashboard) to all relevant channels, the experience will remain consistent from the perspective of the user.

UX DESIGN

Intuitive AI

INTEGRATION

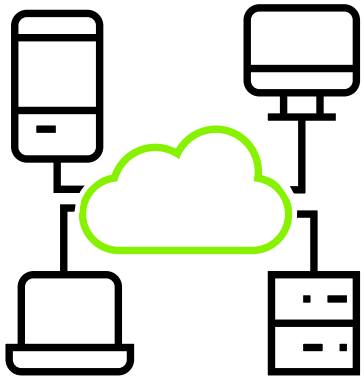
Deloitte.
Digital

UX DESIGN

Integrated UI-Flow

INTEGRATION

The user should be able to easily navigate to the AI-system through a variety of devices and channels.



The AI-system should be integrated within various types of channels/ interfaces including in existing mobile & web (GUI) channels (e.g. as a widget). Even when the user engages with the AI-system in a different device/ channel, the content stream and the UI flow should still be aligned and consistent.

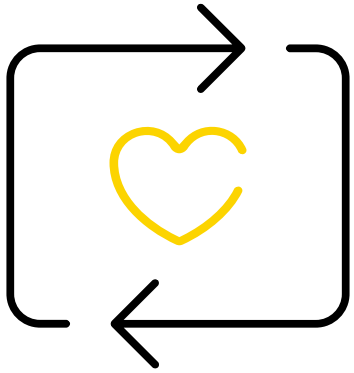
UI DESIGN

Deloitte.
Digital

Value Alignment

INDIVIDUAL

The user should feel that the AI-solution has an actual individual added-value.



The AI-solution should benefit the individual and empower them in their envisioned activity. Hereby, the AI-system should be designed in such a way that it aligns with the beliefs, norms and values of the user group in mind. Such alignment will allow users to better understand the actions and intents of the AI-system.

SERVICE DESIGN

Beneficial AI

INDIVIDUAL

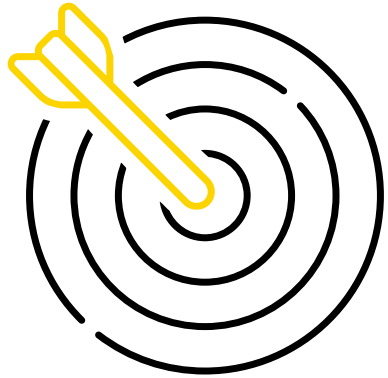
Deloitte.
Digital

SERVICE DESIGN

Goal-Orientated AI

INDIVIDUAL

The user should feel that the AI-system helps them to achieve their ultimate motivation and desires.



It is important that the AI-solution actually helps the user to achieve its (explicit as well as latent) end-needs and desires. The AI-solution should infer this from the user and then communicate the added-value it has for the user, helping them to set-up and achieve their personal goal.

UX DESIGN

Beneficial AI

INDIVIDUAL

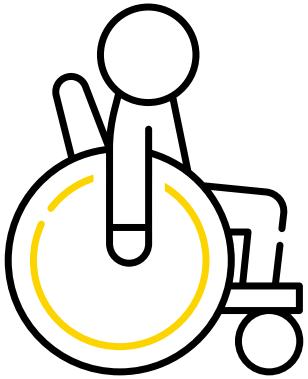
Deloitte.
Digital

UX DESIGN

Accessibility

INDIVIDUAL

The user should feel included, with the AI-system adapting to their individual (dis)ability.



The AI-system should be designed for accessibility, and adjust according to the (dis)abilities of the user. Hereby the interface should be robust and e.g. adapt to users that are left- or right-handed, (colour)blind, deaf, or deal with accents/ dialects in case of conversational systems.

UI DESIGN

Beneficial AI

INDIVIDUAL

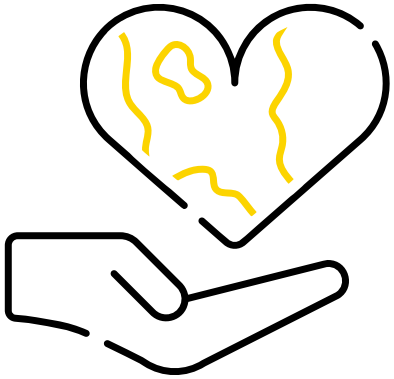
Deloitte.
Digital

UI DESIGN

Socially Beneficial

SOCIAL

AI-systems should positively impact the user as well as their (in)direct social environment.



As AI-technologies touch society as a whole, it should be considerate, or even benefit all parties and communities involved and be thoughtful about society (corporate social responsibility). This added value should be clearly communicated to the user as well as society.

SERVICE DESIGN

Beneficial AI

SOCIAL

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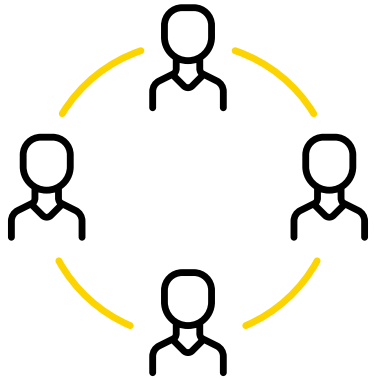
SERVICE DESIGN

Inclusive AI

SOCIAL

AI-systems should engage all people and empower everyone that is involved.



AI-systems should be inclusive in a sense that it understands a broad range of the context, needs, experiences and expectations of the people who use them, preventing unintentionally exclusion of certain users or user groups.

UX DESIGN

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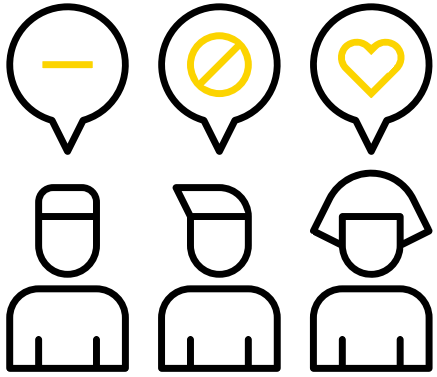
UX DESIGN

Community

SOCIAL

Ideally, the user should feel as if their individual experience is part of something bigger.



If possible, the AI-system should link the user to a (brand) community of like-minded people (e.g. link to community influencers, or elements of gamification). Furthermore, it should be clear to the user in what way they could contribute to this community/ society.

UX DESIGN

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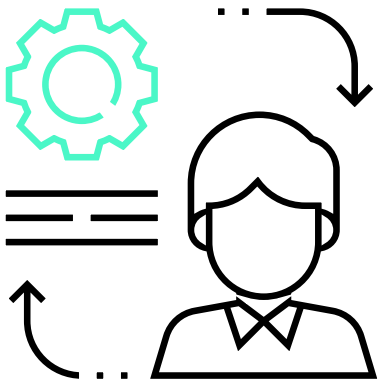
UX DESIGN

User Consent

CONTROL

The user should have the feeling that they remain in control of their own experience flow.



Even though the AI-system automatically creates inferences about the user which enables it to send the user to the right channel, the user should always be able to check the assumptions the AI-systems makes. This way the user can choose to opt-out, make adaptations or manually choose another (human-agent) channel.

SERVICE DESIGN

Responsive AI

CONTROL

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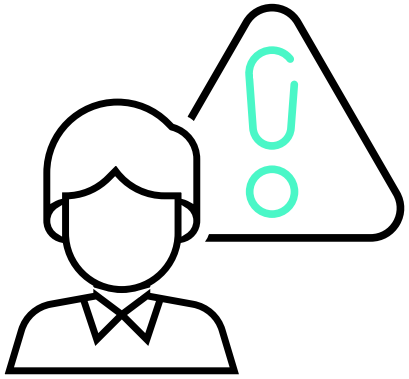
SERVICE DESIGN

User Intervention

CONTROL

At all times, the user should be able to intervene with the actions of the AI-system.



Although the AI-system might at times act on behalf of the user, they should always have the ability to intervene with the AI-solution when it performs a certain (incorrect or undesired) action by interrupting the activity, and/ or making adaptions to its assumptions.

UX DESIGN

Responsive AI

CONTROL

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UX DESIGN

Escape Hatch

CONTROL

The user should not feel locked-in or forced to use the AI-system at any time during the interaction.

The user should have the possibility (at any given moment) to stop the interaction with the (conversational) AI-system and go back to a regular channel, GUI or actual human agent without having to put in too much effort (e.g. through an exit/ stop button or voice/ text command).

UI DESIGN

Responsive AI

CONTROL

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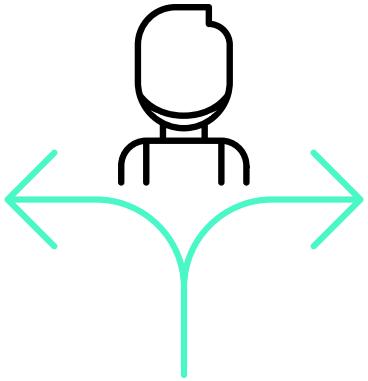
UI DESIGN

Availability Dependency

ADAPTIVE

The user should automatically be redirected to the channels that are available.



The experience flow should be dependent according to the availability of certain touchpoints/ channels (e.g. no link to 'human' agent at night or when there is a waiting queue), and automatically choose the most relevant experience flow for the individual.

SERVICE DESIGN

Responsive AI

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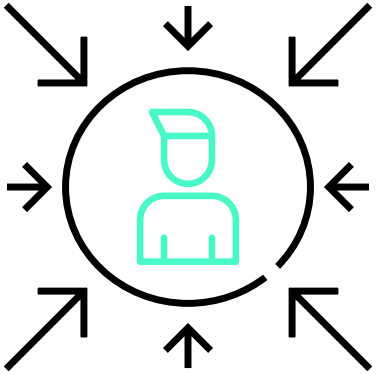
SERVICE DESIGN

Contextually Adaptive

ADAPTIVE

The AI-system should adapt according to the state and context of the user.



The AI-system should adapt to the actions, timing and (digital) environment of the user. The AI-solution should thus adapt its own actions, output and behaviour for instance when the user is unable to talk, write, read, or when it might be inappropriate within the user's context (e.g. sensitive output in a public setting).

UX DESIGN

Responsive AI

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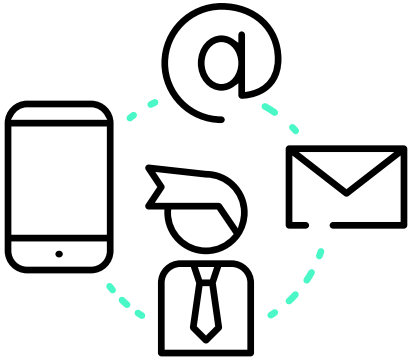
UX DESIGN

Respect Medium

ADAPTIVE

The AI-system should respect the (messaging) medium through which the user is engaged.



When communicating through 3rd party channels (e.g. Facebook) or other (messaging) mediums (e.g. text message) or unconventional interfaces (e.g. AR, VR, projection mapping etc.) there might be certain restrictions (or unexplored opportunities) to the AI-generated content and/ or interface.

UI DESIGN

Responsive AI

ADAPTIVE

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UI DESIGN

Feedback Loop

FEEDBACK

The user should be able to provide feedback on the AI-system at any point within the experience flow.

The user should have a constant possibility to judge the quality and give feedback on their individually differentiated experience flow. The AI-solution should ask for feedback and confirmation throughout the flow (e.g. through A/B-testing), and remember (and adjust to) any alternate touchpoint preferences.

SERVICE DESIGN

Responsive AI

FEEDBACK

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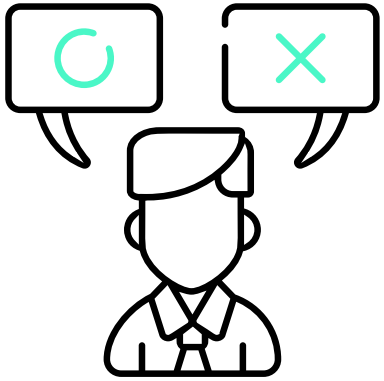
SERVICE DESIGN

Human-Like Feedback

FEEDBACK

Users should be made aware that they are (co-)responsible for building and improving their own individual experience.



The AI-solution should communicate to the user that the differentiated experience can only improve with the help of user feedback. Users should be given the possibility to deliver such feedback in an intuitive, human-like manner (e.g. through a conversational interface, emoticons and/or pictures).

UX DESIGN

Responsive AI

FEEDBACK

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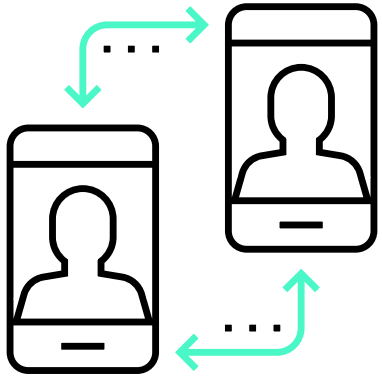
UX DESIGN

Two-Way Communication

FEEDBACK

The user should feel that they are truly engaged in a two-way communication stream.



The AI-system should allow users to provide feedback on the human-computer interaction and individually differentiated content at any time. By giving users the ability to judge the quality and communicate anything, anytime (e.g. thumbs-up or thumbs down- button, voice/ text input field), they will truly feel engaged.

UI DESIGN

Responsive AI

FEEDBACK

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UI DESIGN

Human-in-the-Loop

ROBUSTNESS

It should be clear for the user in what way an actual human-agent might be involved or contacted.

The brand behind the AI-system should be accountable for its actions. Therefore, in case of an erroneous, critical, high-emotional or unexpected situation the brand should be notified and the user should be able to get in touch with an actual human-agent (escalation).

SERVICE DESIGN

Explainable AI

ROBUSTNESS

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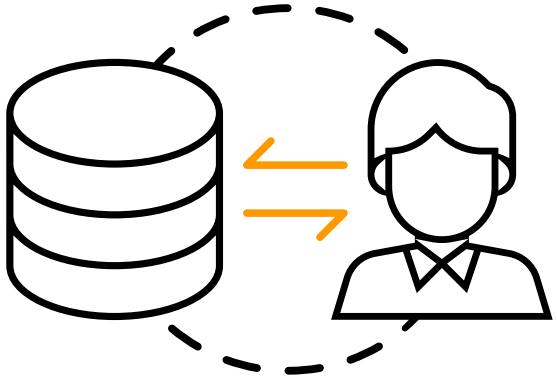
SERVICE DESIGN

Data Trade-Off

ROBUSTNESS

It should be clear to the user for what reason their personal data is being gathered and used.



The AI-system will require personal data in order to achieve higher-level personalisation. Clearly communicate to the user what their data is used for and what they will get in return for this data/ personalisation trade-off (win-win situation). After their consent, only use that data for that specific purpose.

UX DESIGN

Explainable AI

ROBUSTNESS

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UX DESIGN

User Authentication

ROBUSTNESS

In order to establish trust with the user, the AI-solution should feel safe, secure and robust.

The AI-system should validate whether it is dealing with the customer that it assumes it is dealing with in order to successfully differentiate the individual experience. This can be done e.g. through logging in and/ or other means of user authentication (2FA, biometric, voice or pin etc.).

UI DESIGN

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ROBUSTNESS

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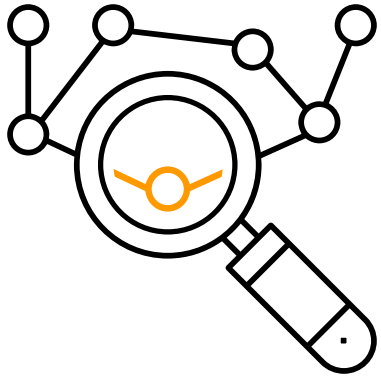
UI DESIGN

Identify Stakeholders

TRANSPARENCY

In order to build trust with the user it is essential to be transparent about their data flow and those involved.



As AI-systems are able to connect various stakeholder, the user should be made aware what personal data is used in order to facilitate the individual experience flow. Furthermore, it is essential for the user to know which parties (e.g. partner organisations) are involved, and what the relevant data streams are.

SERVICE DESIGN

Explainable AI

TRANSPARENCY

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SERVICE DESIGN

Glass-Box AI

TRANSPARENCY

The user should be able to comprehend the reasoning behind the output of the AI-system.

The user should have access to the decision process that led to a certain output, conclusion or action. Hereby, the AI-solution should intuitively communicate the reasoning behind a decision. This way the user will better trust the output, and remain critical in the case of false assumptions.

UX DESIGN

Explainable AI

TRANSPARENCY

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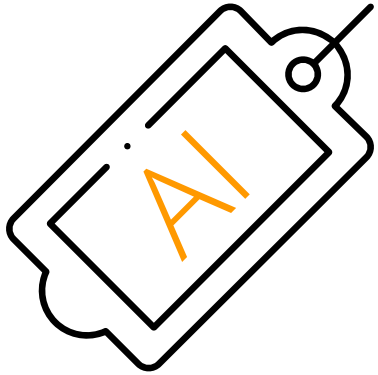
UX DESIGN

AI-Labelling

TRANSPARENCY

It should be clear to the user if and when they are dealing with an AI-system and/ or AI-generated content.



In order to generate user trust, set user expectations, and enable users to remain critical of the output of the AI-system, there should be a clear indication when a (conversational) AI-system is involved, e.g. by labelling AI-generated responses and/ or content.

UI DESIGN

Explainable AI

TRANSPARENCY

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UI DESIGN