

the fears and cheers of

Artificial Intelligence

A qualitative research by the Digital Experience Research Centre of NTT Data

users in tech

research series

Discovering and understanding the **underlying motivations** that bring people close to technology and their **behaviour** when they interact with it



we wanted to

unveil implications for

successful design of

AI based products



by understanding

what users know about AI &

how this affects their use of

products & services

we sat down and
had a chat with users

- 
- Late adoptors & Laggards
 - 18 – 65 years old
 - Mix of gender

**What we
uncovered**



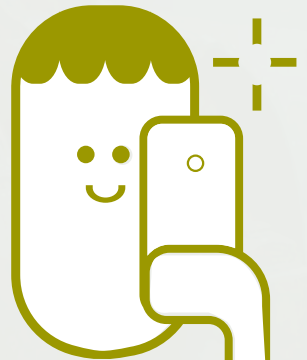
1

Users, heavily influenced by negative news media, **fear** an apocalyptic AI takeover

“

Robots will take over humans!

”



But cheer 'ordinary' AI applications incorporated in everyday life

“

AI is dangerous but smart products aren't

”



Design take away



The language of the user should be **understood and used** when introducing new products and services

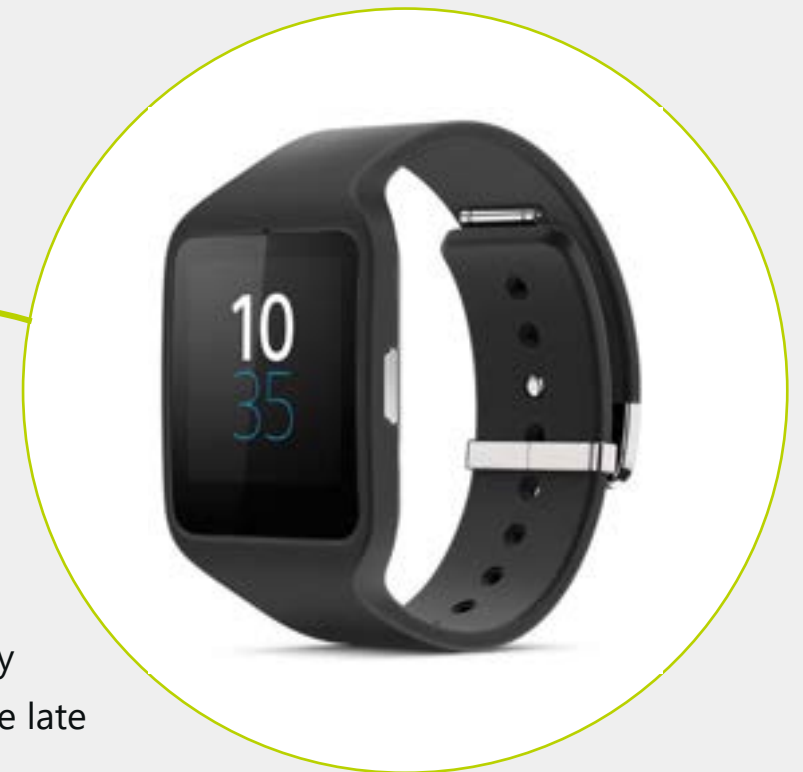
Design take away



The language of the user should be **understood and used** when introducing new products and services

Sony SmartWatch 3

Introduce **widely known, easy going terms such as smart and assistant** . Avoid using highly technological engineer-like jargon that may scare late adopters.



2

Users **cheer** what they know and
daily incorporate AI in a natural
way

“ I’m using Siri more
frequent now than when I
just bought my iPhone
one year ago ”

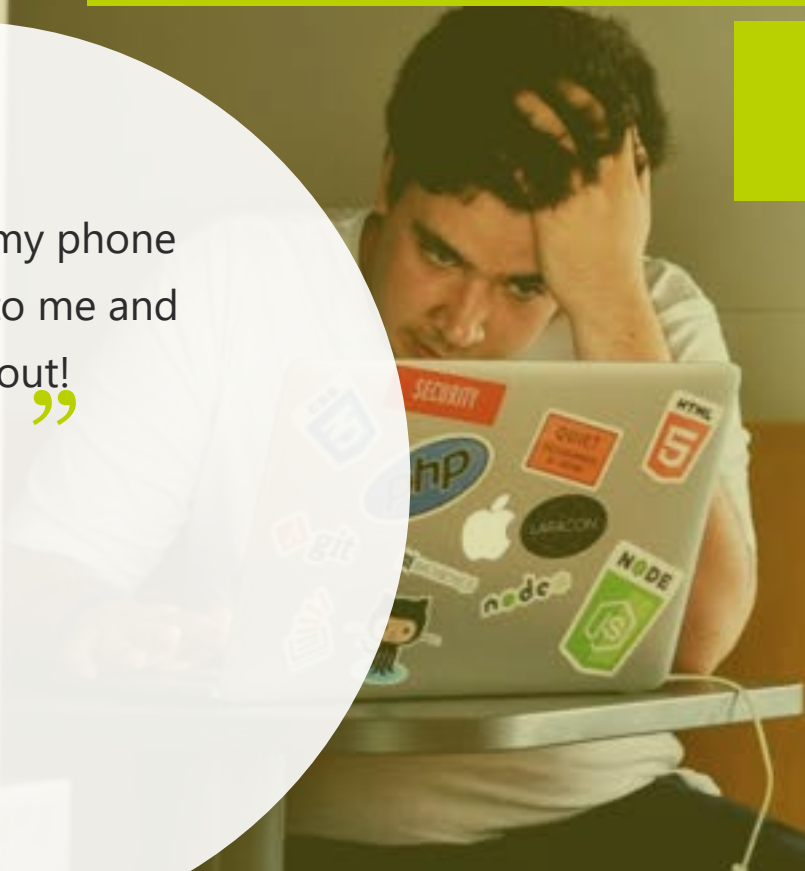
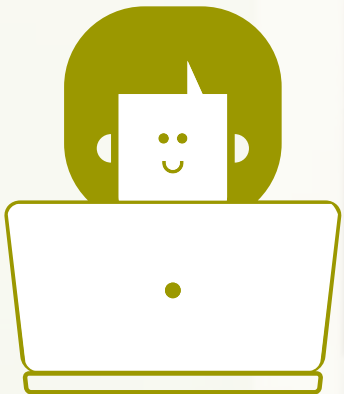


But remarkably **fear**
new AI capabilities that may go
beyond their control

“

The other day my phone
started to talk to me and
I freaked out!

”



Design take away



Products and functionalities should be **introduced gradually** and capitalize on what users already know

Design take away



Products and functionalities should be **introduced gradually** and capitalize on what users already know

Alexa Voice Service

Gradually disclose functionalities so users grow accustomed to what the new product has to offer – and don't recoil at capabilities perceived to be intrusive




3

Users **cheer** AI when it helps them to live safer and healthier lives

“ It would be wonderful if AI can help doing research to cure cancer ”





But **fear** AI when it is
perceived to replace human
interaction, emotional
intelligence and judgement

“

When humans have to
compete with robots, it's
an unfair battle

”



AI acceptance is higher when perceived to meet **functional and safety-related needs** – but **lower** when related to **emotional, interpersonal and self expression needs**



Design take away



AI products should **complement human aptitudes and skills** but never replace them

Design take away



AI products should **complement human aptitudes and skills** but never replace them

Self driving cars

Always give users the possibility to take control and regain power of the car. Users don't like to lose 'human' privileges, such as making complex decisions, to machines



Design take away

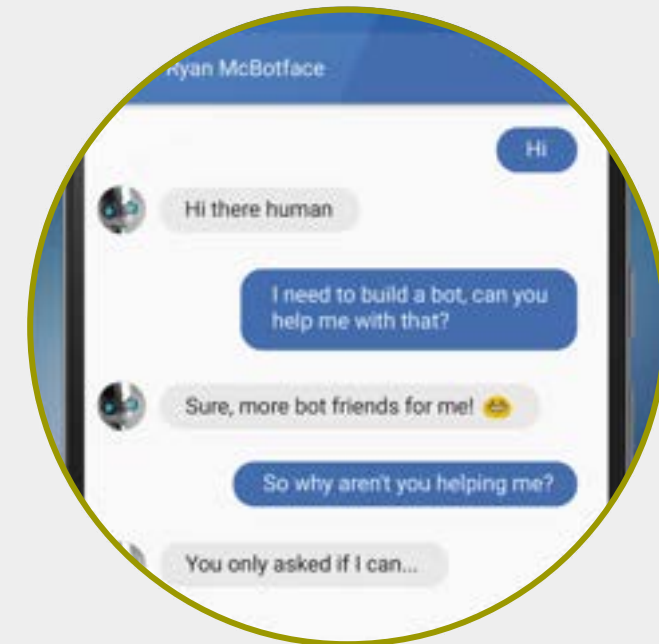


AI products should be developed in a way that they **enhance and safeguard human essence & values**

such as empathy , free will & self expression

Chatbot suggestions

Be honest with users about whether they're interacting with a machine, or not – e.g. add subtle design cues. Users appreciate human-like interaction with bots but don't want to feel cheated nor left aside by chatbots pretending to be human



What now

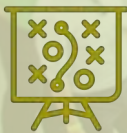


A top-down view of a wooden desk. In the center is a silver laptop. To the right is a white smartphone. In the foreground, a person's hands are holding a white coffee cup. To the right of the laptop is a small potted plant with green leaves. The background is a dark green overlay with white text.

**Boosting adoption of AI
based services & products
through human centred
design**

Users should be brought to the
centre of the design process

When
planning



While
creating



When
launching



**Boosting adoption
through human
centred design**

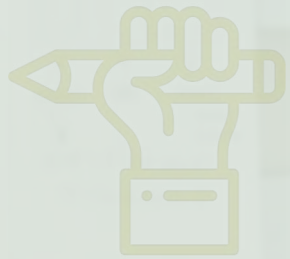
When planning

**Plan the right products for
the right people**

Boosting adoption
through **human
centred design**

When planning

Plan the right products for the right people



- ✓ Identify and address the **users' real pain points**
- ✓ Give the **end-control** to users – help them to feel in command

**Boosting adoption
through human
centred design**


While creating

**The acceptance of new products
will be higher when users co-
create and provide feedback**

Boosting adoption
through **human
centred design**

While creating

**The acceptance of new products
will be higher when users co-
create and provide feedback**

- 
- ✓ **Be transparent and show users how AI work** – knowledge is power!
 - ✓ Consider both **efficiency and emotional response** to decide on the suitability of AI applications

**Boosting adoption
through human
centred design**

While launching

**Help users to understand the
value the product delivers**



Boosting adoption
through **human
centred design**

While launching

Help users to understand the value the product delivers



- ✓ Provide **clear examples** of how the product will help users to meet their needs
- ✓ Find the **right tone of voice** – keep it natural and friendly
- ✓ Set the **right expectations** – avoid overpromising

Jorge Marquez – Head of ExD
jorge.marquez.moreno@nttdata.com

Inés Campanella – UX Lead
ines.campanella.casas@nttdata.com

Laura Martens – UX Senior Researcher
laura.suzan.martens@nttdata.com

Thanks!

[nttdata.com](https://www.nttdata.com)

Consulting, IT & Outsourcing
Professional Service

2018

Digital Experience
Research Center