## FUTURE DIALOGUES

Whose voice will control the future?

2018

DJCAD, University of Dundee

Gary Gowans, Tommy Perman, Martin Skelly

### TODAY

- Prototyping Everything
- Research presentations (L2 Graphics Studio)
- Next week!

# WEEK 3 UPDATES

### ANYTHING TO SHARE?

https://learningspaces.dundee.ac.uk/future-dialogues/

### PLAYING WITH IDEAS

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	<b>WEEK 11</b>	
w/c 15/01/16	w/c 22/01/16	w/c 29/01/16	w/c 05/02/16	w/c 12/02/16	w/c 19/02/16	w/c 26/02/16	w/c 05/03/16	w/c 12/03/16	w/c 19/03/16	w/c 26/03/16	



# PROTOTYPING EVERYTHING

Prototypes are representations of a design before a final artefact exists

Experience prototypes allow you to demonstrate what it will feel like to use a thing





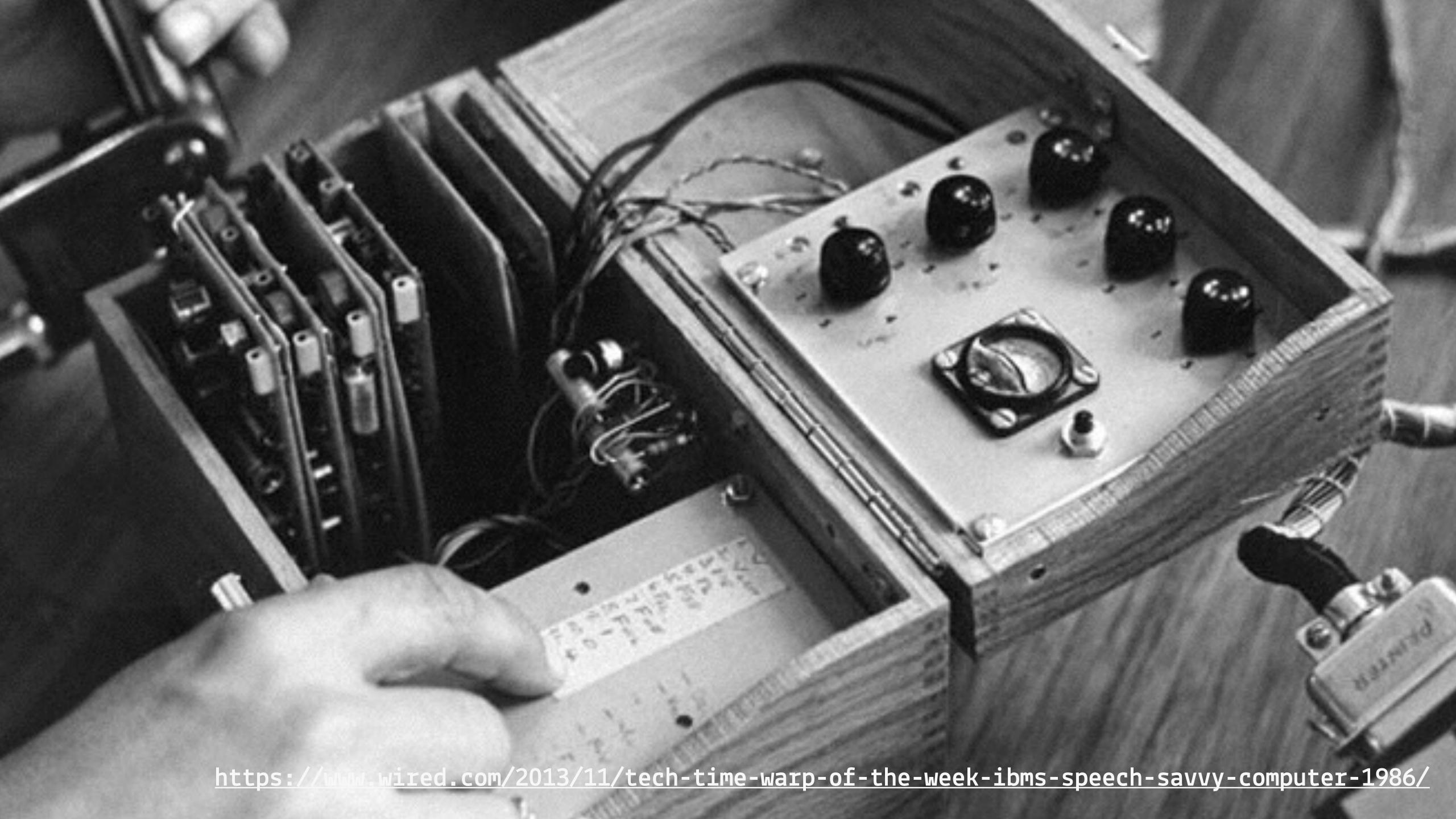


### 'Pretotyping'

http://www.pretotyping.org/uploads/1/4/0/9/14099067/ pretotype\_it\_2nd\_pretotype\_edition-2.pdf

# IBM Speech to text experiment, 1980's





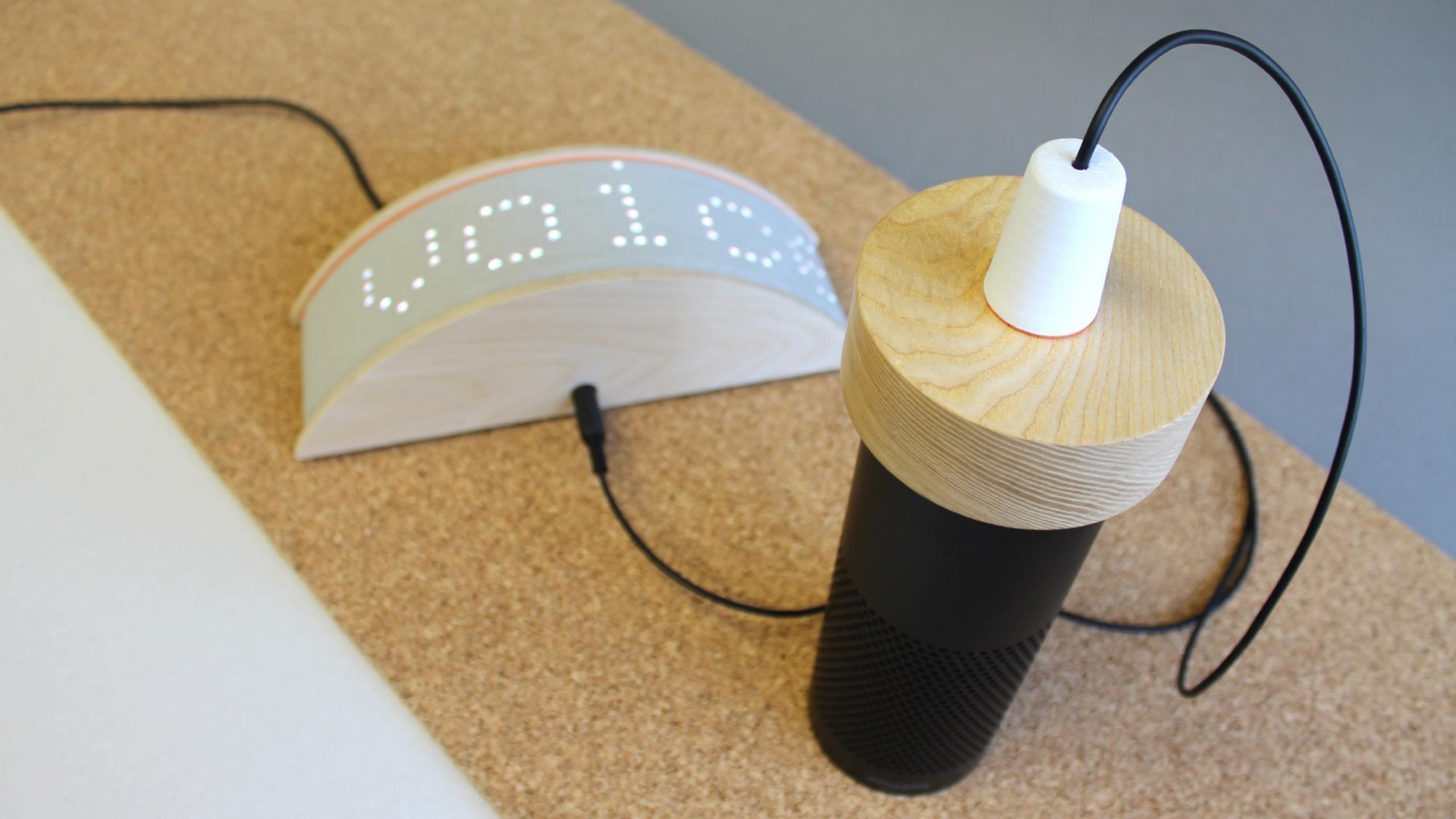
# Jeff Hawkins original Palm Pilot prototype



Pretotyping is a way to test an idea quickly and inexpensively by creating extremely simplified, mocked or virtual versions of that product to help validate the premise that "If we build it, they will use it."

'fake it until you make it'

# How can this be applied to your projects?



A series of provocative prototypes to raise awareness, encourage debate and enable change IoT amplifies major Internet health issues such as decentralisation, trust, privacy and security

Voice is a leading category of connected devices in peoples homes

# Approximately 11,000,000\* devices with alexa's ears are listening right now

\* <a href="http://www.seattletimes.com/business/amazon/amazon-has-sold-more-than-11-million-echo-devices-morgan-stanley-says/">http://www.seattletimes.com/business/amazon/amazon-has-sold-more-than-11-million-echo-devices-morgan-stanley-says/</a>

Always on is becoming the norm, but what do people expect from this new category of product?









1. Cloud Pets data breech:

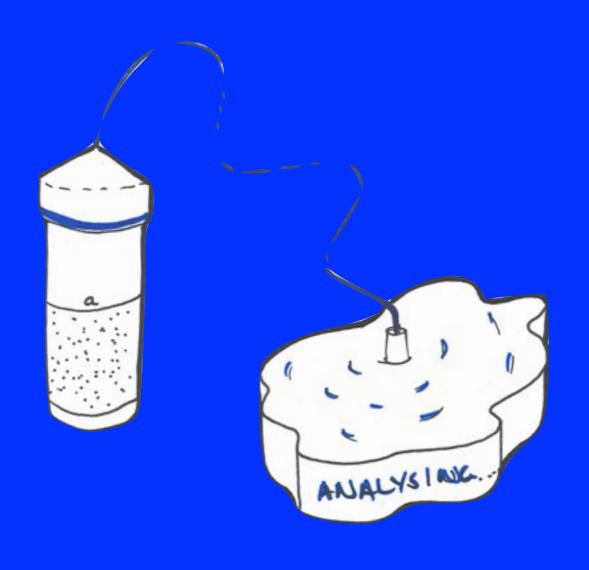
https://mccunewright.com/cloudpets-toys-present-latest-iot-data-breach-scandal/

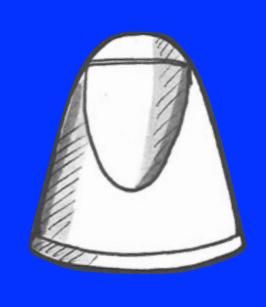
- 2. Cayla IoT toy banned as surveillance device in Germany:
  <a href="http://www.cso.com.au/article/614555/germany-bans-q-iot-doll-cayla-illegal-spy-device/">http://www.cso.com.au/article/614555/germany-bans-q-iot-doll-cayla-illegal-spy-device/</a>
- 3. Alexa evidence cited in murder trial:
  <a href="https://www.wired.com/2017/02/murder-case-tests-alexas-devotion-privacy/">https://www.wired.com/2017/02/murder-case-tests-alexas-devotion-privacy/</a>
- 4. Samsung SmartTV Original Privacy Policy compared with 1984 quote: <a href="https://twitter.com/xor/status/564356757007261696/photo/1?ref\_src=twsrc%5Etfw">https://twitter.com/xor/status/564356757007261696/photo/1?ref\_src=twsrc%5Etfw</a>

### INTRODUCING

# A collaborative project that spans Mozilla's voice research efforts

Three provocative prototypes to raise awareness, encourage debate and enable change







#### **AGENT**

Acts as an agent on your behalf to allow open flexibility across several siloed platforms.

#### **ACTOR**

Explores listening behaviours and a transparent visual language for listening machines.

#### **ADVISOR**

Explains current commercial platforms, the value of voice data and gathers labelled local voice data.

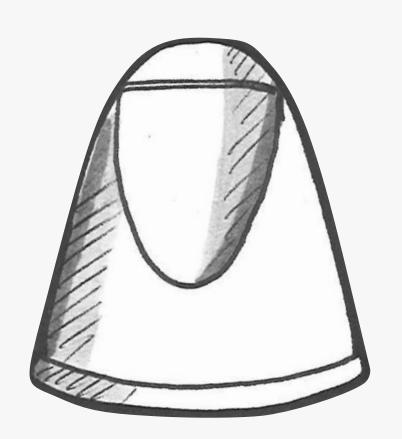
# ACTOR

#### **ACTOR**

What does listening look like? We all know a good listener, but how can we embody human listening queues in the behaviour of conversational interfaces.

The actor prototype will explore how a products form can shape our experiences when speaking with machines.

A series of directional microphones will be layed out on the plinth, when they detect speech the product will rotate towards you to show active listening. When it hears a keyword, the textile dome lifts up to show active listening.



#### <u>Aims</u>

- encourage debate around 'always on' listening behaviour that is becoming the norm
- playful / entertaining to bring people over to the three devices with noise and movement

#### **Inspiration**

- stage mimes / R2D2

ENCOURAGE DEBATE - 02

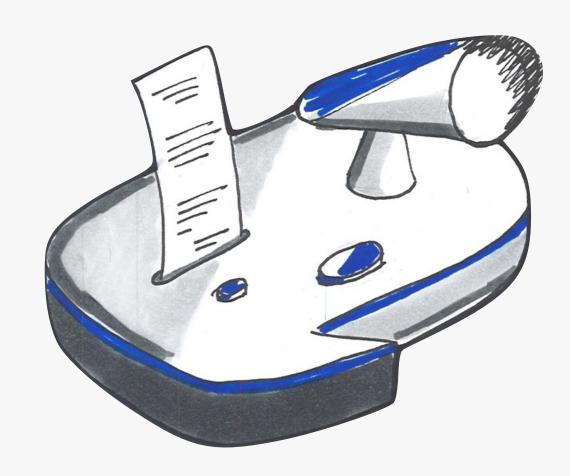
# ADVISOR

#### **ADVISOR**

Advisor raises questions around ethics / inclusion / localisation & diversity issues within voice and IoT. Advisor encourages visitors to record labelled speech data into the object and displays the percentage accuracy of typical engines and why the data is important to enable accuracy. It also poses ethical questions around voice, and allows users to vote their opinion with push buttons.

When you leave the device you receive a print out with your responses and the average response rate from exhibition visitors to the questions along with a print out explaining where to go to add your voice to deep speech database with link to iPhone app / web form sign ups.

Pre-recorded content and context of questions based on local communities where object is on display, e.g. Dundee & Taipei to explore language / accent / bias etc.



#### Aims

- Encourage visitors to think deeply about issues
- Provide a call to action / info on how to get involved

#### <u>Inspiration</u>

- Voting booth / Starlight / accents / localisation

ENABLE CHANGE - 03
ADVISOR

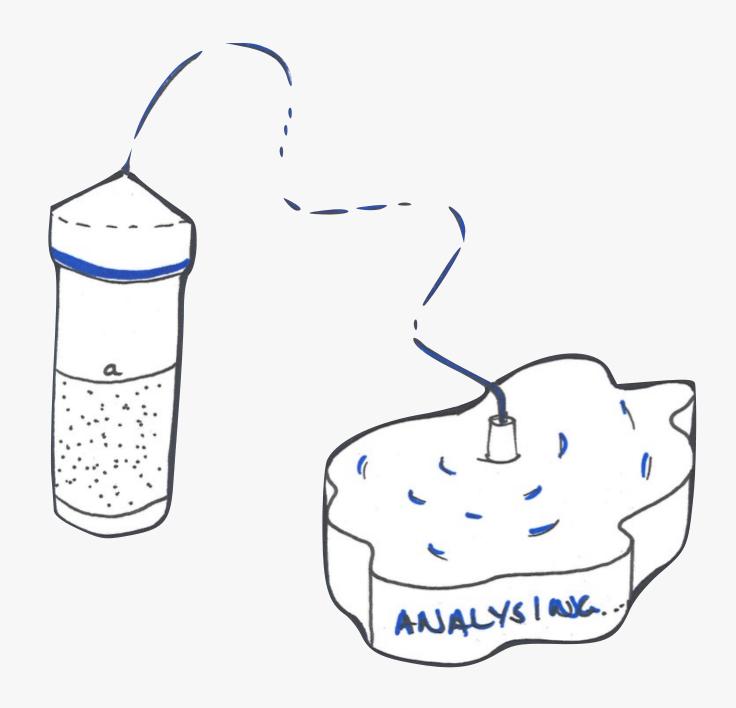
## AGENT

#### **AGENT**

Agent acts as a translator between a user and different conversational user interface platforms, for example amazon alexa, google home and samsung.

Agent keeps you in control of your own voice data, and the valuable deep learning remains on your local device. Your agent interacts with other companies siloed voice platforms on your behalf.

Allows incognito mode when speaking to voice platforms, can be used to mask or change your voice when speaking with conversational interfaces to stop them gaining data that you would prefer not to offer.



#### <u>Aims</u>

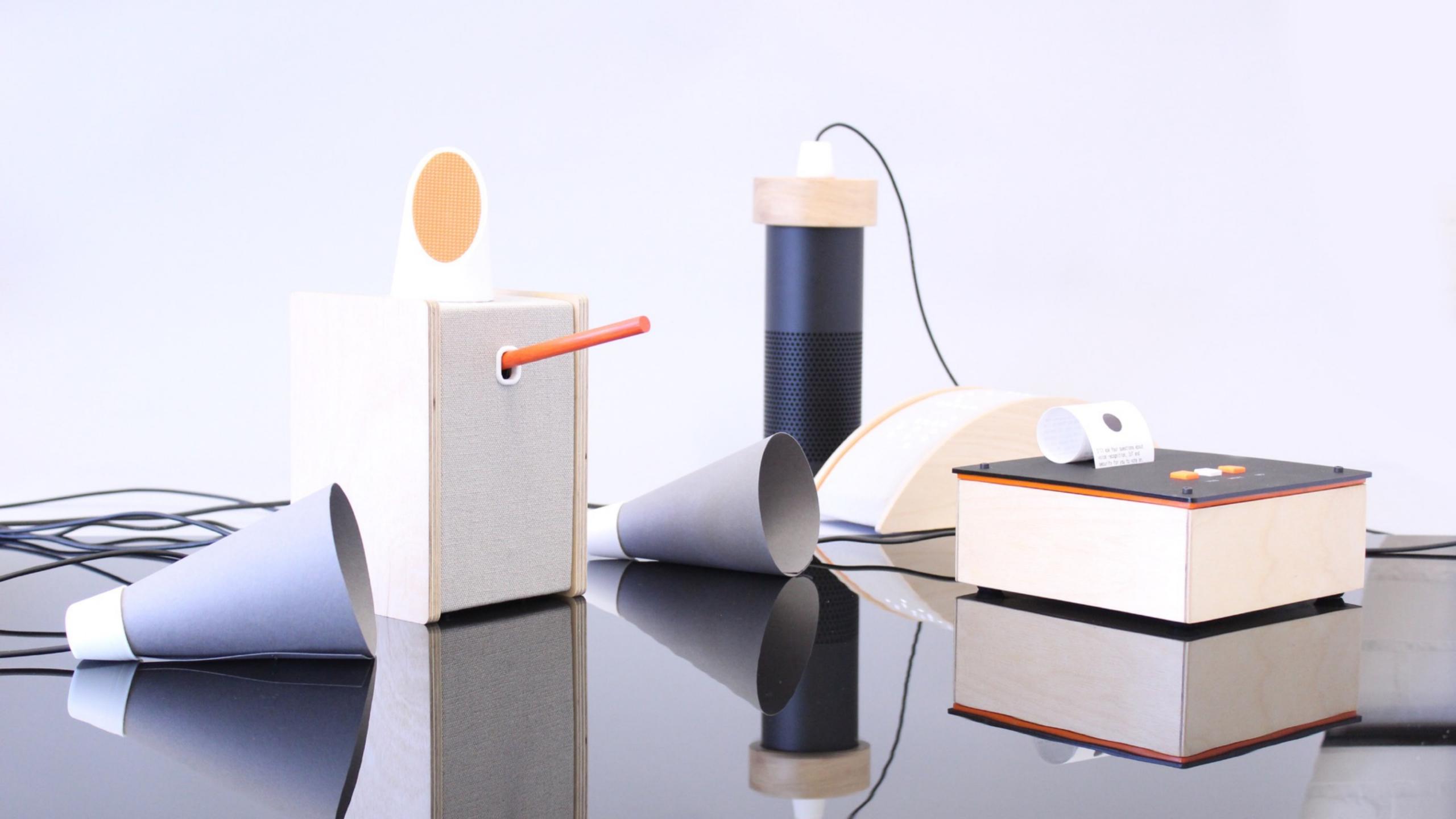
- explain downside of siloed approach of leading companies in voice, through metaphor of current open web
- educates about value of data and how algorithms are trained using users voice captures and sold on

#### **Inspiration**

- metaphor of siloed web

RAISE AWARENESS - 01

## nobody got it...







### Eddi

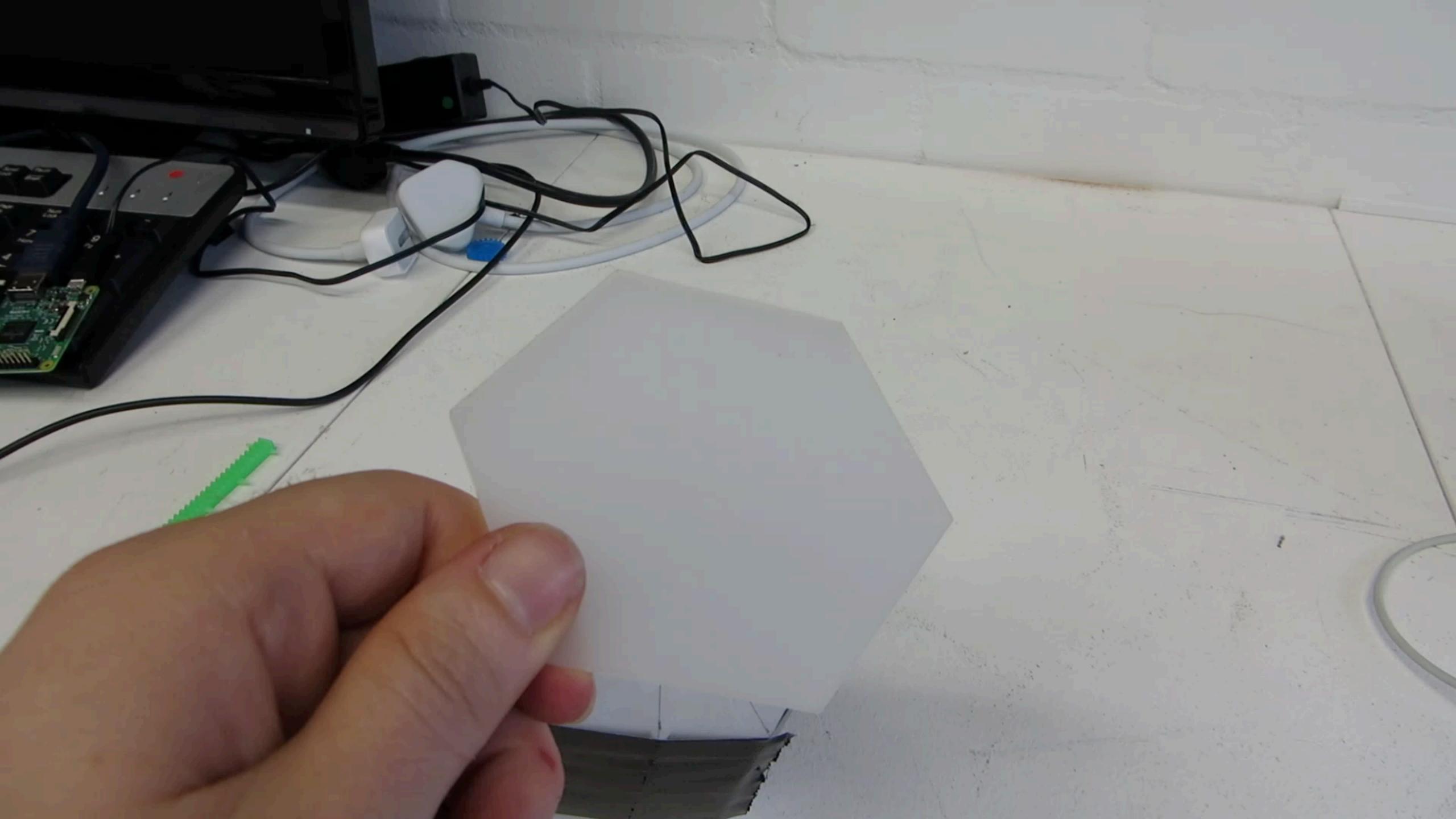
Growing with you

#### Karma

Your voice as you want it

### Sig

Your programmable companion



## PROTOTYPING FUTURES

"Design today is concerned primarily with commercial and marketing activities but it could operate on a more intellectual level.

It could place new technological developments within imaginary but believable everyday situations that would allow us to debate the implications of different technological futures before they happen."

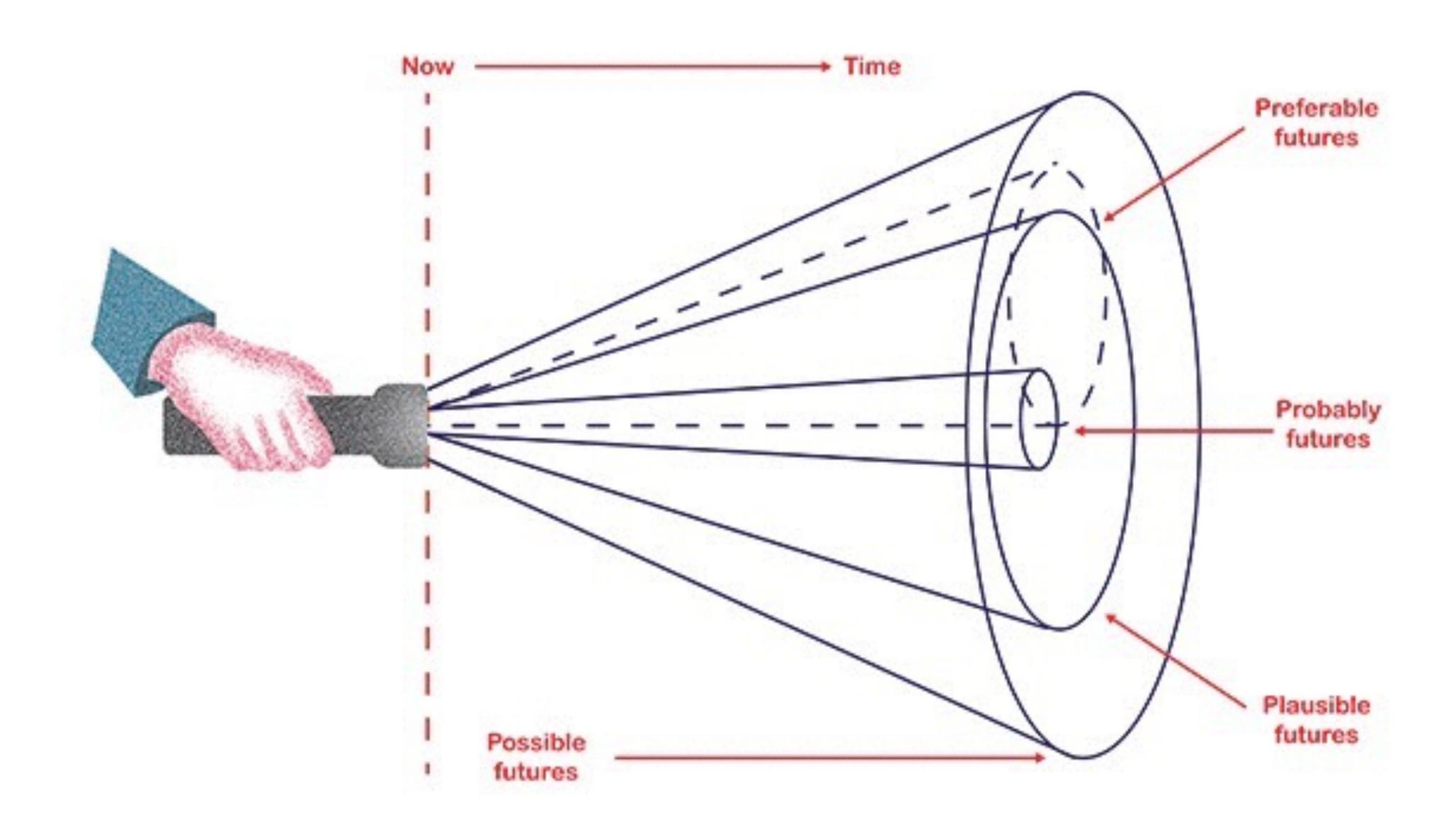
- Anthony Dunne and Fiona Raby

## What if?

"By creating scenarios around these "what if" questions with tangible and realistic objects, designers can fabricate an experience of that possible future."

- Isa Kolehmainen

https://www.nesta.org.uk/blog/speculative-design-design-niche-or-new-tool-government-innovation



https://www.nesta.org.uk/blog/speculative-design-design-niche-or-new-tool-government-innovation

# PROVOCATIONS

# Do teams make prototypes or do prototypes make teams?

# How can you prototype a service or an experience?

# How can making inform your idea generation process?

Taking forward more than one concept until the end of the play stage allows you to experiment

#### Everything is a prototype

# FURTHER INSPIRATION

#### Experience Prototyping Paper

by Marion Buchenau, Jane Fulton Suri.

https://hci.stanford.edu/dschool/resources/prototyping/SuriExperiencePrototyping.pdf

#### Sketching User Experiences: The Workbook

by Saul Greenberg, Sheelagh Carpendale, Nicolai Marquardt and Bill Buxton.

#### Pretotype It

http://www.pretotyping.org/uploads/1/4/0/9/14099067/
pretotype\_it\_2nd\_pretotype\_edition-2.pdf

#### Sketch Modelling at Bang & Olufsen

http://journal.beoplay.com/journal/2015/10/14/the-man-and-the-cardboard-model

# ANY QUESTIONS?

### NEXT WEEKS LECTURES

(Week 4)

Friday 9th Feb - Dalhousie 2G11 Lecture Theatre 4

09.15 - 10.15 - Tommy

Storytelling through interdisciplinary practice

10.30 - 11.30 - Gary

Grids in Practice

# TO THE STUDIOS!

#### **Future Dialogues Tutorials**

Graphic Design Level 3 Seminar Space, Friday 2 February

Morning Start	Afternoon Start	Time Blocks		
10:30 am	2:00 pm	15m		

Time	Slot	Team Name						
10:30 am	1	Moon Jelly	Ferns Mairi	Park Rachel	Knibb Lola	Webster Olivia	Weepers Lorena	Malavet Kevin
10:45 am	2	Tiki	Coull Lewis	Beckett Zoe	Joseph Crispin	Johnston Harriet	Hill Saskia	Gardiner Ewan
11:00 am	3	Wave	<b>Dewar</b> Taylor	Gaylor Bradley	Smith Rebecca	<b>Matthew</b> Justine	<b>Devlin</b> Ciara	Maccallum Max
11:15 am	4	Chroops	<b>Brier</b> Jordan	Cunningham Millie	Sadowska Jagoda	Hutchison Ines	Mcdonald Ewan	
11:30 am	5	Curiously Cinnamon	<b>Hirst</b> Samuel	Freeman Anna	<b>Vettraino</b> Arianna	Hill Sarah Jane	<b>Burton</b> Jamie	
11:45 am	6	Dominators	Mcgovern David	Wilson Lily	<b>Prentice</b> Alice	Shaw Niamh	Shankland Erin	Johnstone Charles
12:00 pm	7	Blah	Cruz-Costa Renato	<b>Wilkinson</b> Megan	<b>Dalgleish</b> Sophie	Flynn Euan	Gilruth Cherie	Shaw Calum
12:15 pm	8	Miyagi Dolphins	<b>Laird</b> Callum	Walker Rachel	Reid Robbie	Fleming Kerry	<b>Heath</b> Alice	Twene Kish
12:30 pm	Lunch							
2:00 pm	9	K9	O'Neill Callum	<b>Hall</b> Jade	<b>Wheelan</b> Jamie	Spence Alana	Kennedy Lewis	
2:15 pm	10	Freeman	French Iona	Connor Neil	Tolland Sorcha	Mcindoe Greg	Bachelet Tiffany	Wood Ruaridh
2:30 pm	11	Resonance	Shek Karen	Snood Aaron	Smith lain	Thomson Rebecca	Hirst Rachel	Morris Ben
2:45 pm	12	Six Pack	<b>Lindsay</b> Helena	Christoforou Stephe	Smith Jess	<b>Docherty</b> Graeme	Burke Kim	<b>Urquhart</b> Lewis
3:00 pm	13	Oreamno	<b>Delatousche</b> Jessie	Mcgreevy Elle	Rooney Cara	Turbitt Emma	Thomson Hannah	Langley Alex
3:15 pm	Break							
3:30 pm	14	Òraid	Chestnutt Ellen	Shankland Lauryn	Tinney Marion	<b>Mclaughlin</b> Nicole	Black Douglas	<b>Mclaren</b> Nathan
3:45 pm	15	Onsei	Merchant Catriona	Cohan Rebecca	Elder Louise	Bowman Lucy	Benjamin Iman	<b>Walsh</b> Hal
4:00 pm	16	Turtle Interpretation	Farrar James	Mccreadie Beth	Bastow Andrew	Cameron Leah	Gilmour Laura	Turner Ross
4:15 pm	17	Phoni	Andreoglou Ioannis	Rathie Greg	<b>Hunter</b> lain	Swann Zoe	Cairns Naomi	Robertson Peter