Catalyst
www.catalystproject.org/interactive
Can digital technology help to reduce barriers to engagement amongst adults with HFA?
“design must remain an empirical, social, interpretive & humanistic discipline, not one that is subservient to engineering convenience and technological fantasies”

{Blackwell, A. 2010}
CONTEXT:

SOCIAL!
TECHNOLOGY!
INNOVATION!
NEW DOMAINS!
IN THE WILD!
IMPACT!
RAPID!
SUSTAINABLE!
SPEEDPLAY!
SPEEDPLAY

• An innovation management framework which combines action research, participatory design, and agile development {4 steps}

• A mindset, that sees technologies as tools to understand social needs and to bring about change {6 ‘principles’}
WORKING DEFINITIONS

Action Research understand a social context & bring about change

Participatory Design ‘users’ as partners

Agile iterative software development approach
SIX PRINCIPLES

• **Equality** partners = research peers
• **Mutual help** share tasks
• **Self-direction** take primary responsibilities
• **Creativity** be *un*-disciplined with methods
• **Adaptability** be opportunistic with change
• **Responsibility** technology as part of the enquiry
Framework: 4 Iterative Steps

1. Prepare
2. Design
3. Build
4. Sustain

Each step is ‘paced’ by an output
'These people do not need much help but when they need it, they need it badly.'

'I am not good at technology, answering a phone is an achievement...’

'I had to go to the shop to buy bread and I had to stop, I was in complete panic’

{HFA adults, Carers & Families}
A MISMATCH?

“I would like to throw all labels away today, including Asperger’s syndrome, and move towards the dimensional approach. Labels don’t mean anything {...}”  
{Lorna Wing in Firith, Uta – 1989}
‘It is immense what we have achieved by having breakfast, a presentation and a walk’ {SF}
3 Components
1. Tactile Anxiety Device
2. Support Network
3. Anxiety Data Aggregator
BUILD PHASE

Core User Group (CUG)
(10; 5 mixed pairs)

2+ week cycle
Prototype
Refine
Review

Prototype
Refine
Review

Prototype
Refine
Review

6 Sessions with CUG pairs \{(v 1)\}
23 May (APB)
Autism Partnership Board
- Show & Tell \{(v 2.0)\}
- Team meeting

28 May
CUG 1 x workshop:
\textbf{v.2.0} demo & feedback

\textit{w/c 17 June}
CUG 1 x workshop
\textbf{v.3.0} demo & feedback

\textbf{3 July}
Build: Iteration 1
Build: Iteration 2
**diaspora** /dī-'as-p(ə)-rə, dē-/  

*origin:* Greek, διασπορά – “a scattering [of seeds]”

1. the privacy aware, personally controlled, do-it-all distributed open source social network

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**Embed Values in System Features**
Stuart Taylor something like this...communication linking anxiety special platform.....
Limited - Like - Comment

Maria Angola Ferrario
'social platform'
6 days ago

Maria Angola Ferrario
Communication Link for Anxiety Social Platform
6 days ago

Lucie
I like it.
6 days ago

Jen Southern
I like the diagonal one more than the square. nice name!
6 days ago

Stuart Taylor
It is better with icon above the name makes it look more like a pyramid seems more "stable"
6 days ago
Build: Iteration 3
<table>
<thead>
<tr>
<th>#</th>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reliability</td>
<td>The technology must cope with connection problems and lack of coverage</td>
</tr>
<tr>
<td>2</td>
<td>Usability</td>
<td>It is easy to use</td>
</tr>
<tr>
<td>3</td>
<td>Consistency</td>
<td>The technology behaves the same way every time it is used</td>
</tr>
<tr>
<td>4</td>
<td>Personalisation</td>
<td>I can modify the system to suit my own personal needs</td>
</tr>
<tr>
<td>5</td>
<td>Clarity</td>
<td>The interaction with the device is clear and unambiguous</td>
</tr>
<tr>
<td>6</td>
<td>Data Ownership</td>
<td>I own my personal data. Third parties cannot access my data without my explicit consent</td>
</tr>
<tr>
<td>7</td>
<td>Privacy</td>
<td>Full and clear control on who sees my post</td>
</tr>
</tbody>
</table>
SUMMER STUDY

3-weeks

6 participants (2x3)

Qualitative feedback

Anxiety self-logging

Usage automated logging
LESSONS LEARNED

“Everybody is unique”

Haptic Device
- Variety of devices; Embedded.

Anxiety Management
- Custom anxiety triggers; access to interaction history

Support Network
- Trust, consistency, ambiguity, ownership
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http://www.youtube.com/catalystcitizens
www.catalystproject.org.uk

Lancaster University, UK
Designing the ‘Experts’ out!