

Smartline: A new vision for health and housing

Wednesday 16 November, St Austell Conference Centre & Online

WELCOME

Welcome & Introduction

Belinda Broughton, Smartline Project
Manager, University of Exeter



House Keeping

St Austell Conference Centre

Please:

- Sign in, if you have not already done so
- Sign a photography consent form, if you have not already done so
- Consider venue COVID guidelines when moving around and use antibacterial hand-gel where provided
- Raise your hand to put questions to Q&A session moderator

If the fire alarm sounds, this is not a drill, make your way out of the building to the muster point in the front car park.

Toilets can be found on each floor.

Online

To submit a question online visit

www.slido.com

Enter the code 1300740

This meeting will be recorded

WIFI CODE

Network: SAPC_Guest

Password: Austell1981



Event Programme

Morning Session:

- 9:30 Registration
- 10:00 Welcome & Introduction
- 10:05 The Story of Smartline
- 10:15 Technology in Housing Keynote, George Grant
- 10:40 Session 1 Sensing the Home
- 11:20 Break
- 11:50 Session 2 Enterprise & Community Engagement
- 12:30 Lunch

Afternoon Session:

- 13:30 Digital Inclusion Keynote, Helen Milner OBE
- 14:00 Session 3 Digital Inclusion
- 14:45 Q& A Panel Discussion
- 15:15 Closing Remarks
- 15:30 Event closes

[Programme](#)



Event Engagement

- Vimeo for online delegates.
- Online questions on Slido
- WIFI Network: SAPC_Guest
Password: Austell1981
- Via twitter #wearesmartline



The Story of Smartline

November 2022

Emma Bland,
Assoc Prof of Practice, Environment, Health and Wellbeing
University of Exeter

What to expect today

- Keynote speakers: George Grant & Helen Milner providing context and vision.
- Diverse and wide ranging presentations and discussions.

By the end,

- Informed, engaged, challenged and motivated



Why are we here?

People with higher socio-economic position in society have a greater array of life chances and more opportunities to lead a flourishing life. They also have better health.

(Marmot 2010)

Poor housing conditions continue to harm health in England and widen health inequalities.

(Marmot 2020)



Why is this important

- Poorest communities have 20 years less 'good life expectancy' than richest (ONS).
- Poor housing conditions have a detrimental impact on health, costing the NHS at least £600 million per year. (Parliamentary Office Science and Technology)
- In UK, 10 mill people digitally excluded, 1 in 3 are social housing tenants (Lloyds Bank, HACT)



Have things changed?

- English Housing Survey (2020-21):
 - 4 mill homes failed to meet the Decent Homes Standard
 - Well-being levels have declined and loneliness increased
 - 839,000 homes report problems with damp



Smartline

- Smartline Partnership working together since 2017
- Funded by ERDF and Cornwall Council
- Role of digital technology in maintaining healthy homes and connected communities to support and improve health and wellbeing of individuals and families.





European Union

European Regional
Development Fund



HM Government



South West
Academic Health
Science Network



**University
of Exeter**



Keynote

George Grant
CEO, Broadcaster, Publisher and
Founder
Housing Technology



The logo for Housing Technology, featuring the words "HOUSING" and "TECHNOLOGY" in white, uppercase, sans-serif font on a red rectangular background. Below the main text, a thin white line separates it from a smaller line of text: "HOUSING | IT | TELECOMS | BUSINESS | ECOLOGY".

**HOUSING
TECHNOLOGY™**

HOUSING | IT | TELECOMS | BUSINESS | ECOLOGY

Housing Technology 2022

The E-State of Housing

Market Intelligence

Presentation to SmartLine

16 November 2022

George Grant | Housing Technology



**ANNUAL
TURNOVER
APPROX
£7 BILLION**

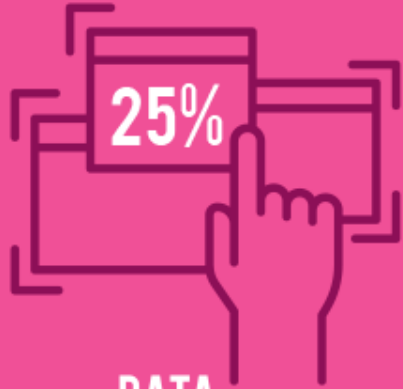
**85+
HOUSING
PROVIDERS**



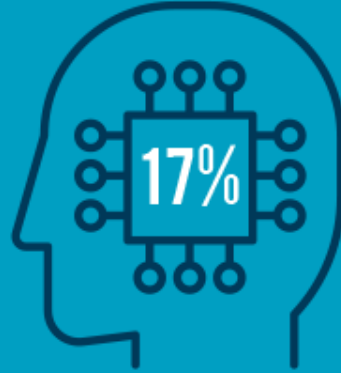
**100+
RESPONDENTS**



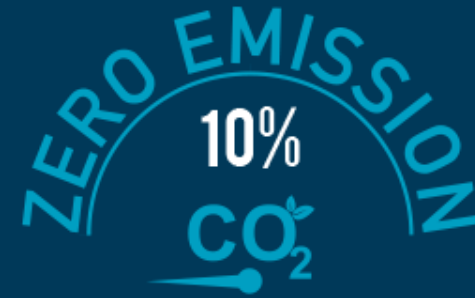
What do you
need to be
thinking
about?



**DATA
MANAGEMENT**



**DIGITAL
TRANSFORMATION**



**DECARBONISATION
& NET ZERO**

What do you need
to be thinking
about?



**BUSINESS IMPROVEMENT,
TENANT SERVICES &
ASSET MANAGEMENT**

How are you
going to do
it?

How are you going to do it?



+ BUY THE RIGHT INGREDIENTS...

...SECURITY, AUTOMATION & APIs
& A SPRINKLING OF HMS/FMS, SELF-SERVICE & COLLABORATION

Which
tech should
you be looking
at?

Which tech should you be looking at?



- Steady state
- Solid growth
- Emerging markets

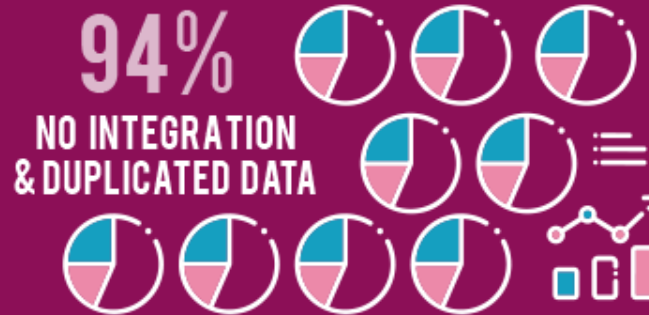


It's all in the
data...

It's all in the data...



96%
CULTURE &
BEHAVIOUR



78%
REGULATORY
COMPLIANCE



92%
SPREADSHEETS
& SILOES



86% DATA
HOARDING

94%



MAINTENANCE



The background is a solid pink color with a pattern of semi-transparent, overlapping geometric shapes. These shapes include triangles, hexagons, and rectangles, some of which contain internal patterns like horizontal or diagonal lines. The overall effect is a modern, abstract design.

Joining
everything
together
(no more spaghetti...)

Joining everything together

(no more spaghetti...)



92%

SILOED
APPS

90%

LACK
OF APIS

89%

LEGACY
SYSTEMS

88%

DATA
FORMATS

82%

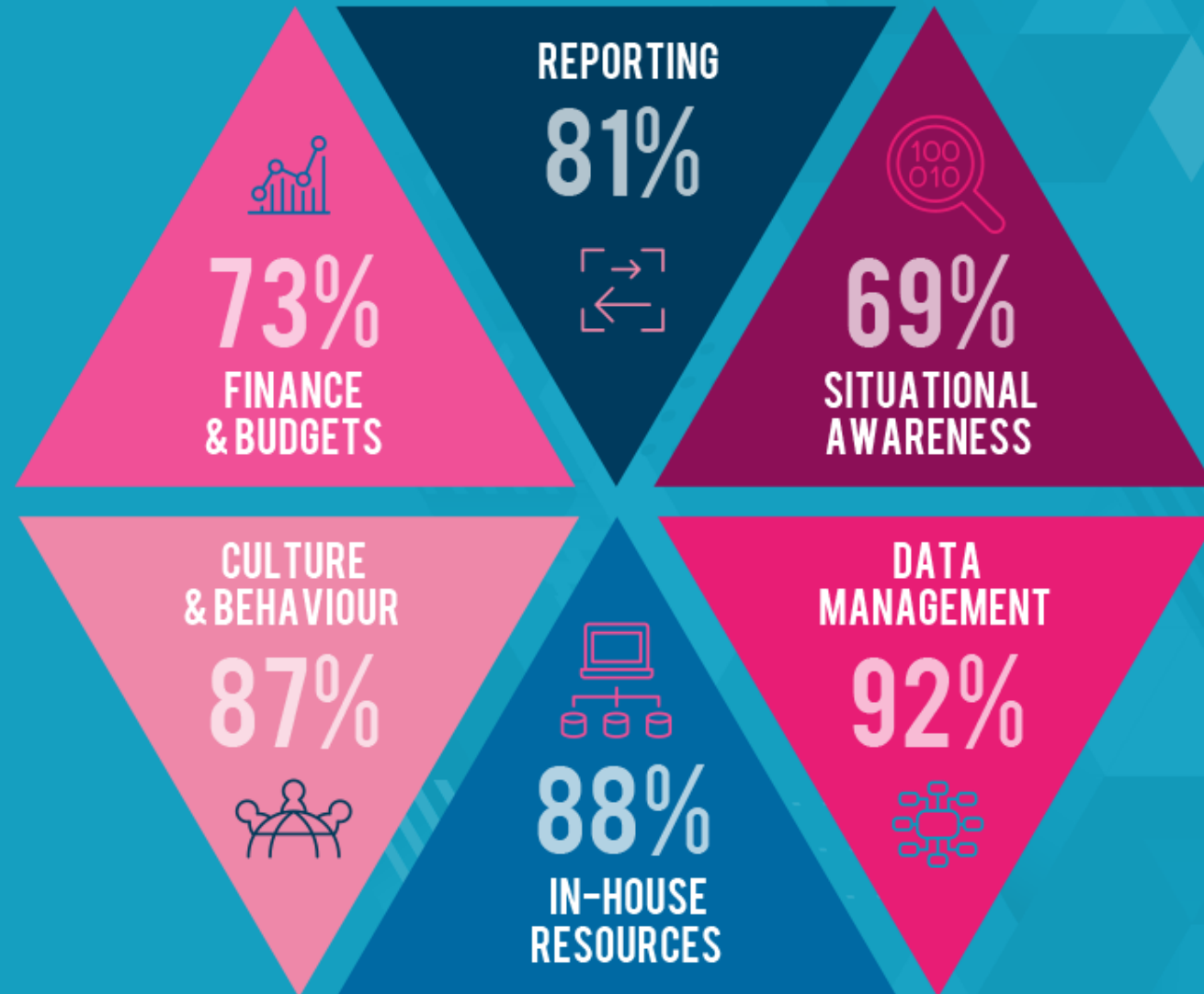
IN-HOUSE
EXPERTISE

74%

BUDGET

Are you doing
as you're
told?

Are you doing as you're told?





How will your tech be delivered?

How will your tech be delivered?

- All cloud, no on-prem



90%

CLOUD

49%

MANAGED
SERVICES

4%

ON-PREMISE

What's
your piggy
bank looking
like?

What's your piggy bank looking like?



Let's talk about the worldwide housing crisis

Let's talk about the worldwide housing crisis

Melting pot of bus/tech talents and the homes of the future
Join us at the nexus of politics, finance, technology & culture



Housing Technology by numbers

HOUSING
TECHNOLOGY™

HOUSING | IT | TELECOMS | BUSINESS | ECOLOGY

2,000 DELEGATES & GUESTS
AT OUR ANNUAL CONFERENCES



AT OUR



27,000+



OVERALL READERSHIP

2,100,000



EMAILS SENT TO READERS



3,500

NEWS & ARTICLES IN THE MAGAZINE



SUCCESSFUL CONFERENCES & EVENTS SINCE **2008**



IT SUPPLIERS COVERED IN THE MAGAZINE



20

REPORTS & GUIDES



ANNUAL CONFERENCES



OVER TWO MILLION WORDS WRITTEN

950

HOUSING PROVIDERS COVERED IN THE MAGAZINE



6,250

SUBSCRIBERS AT HOUSING PROVIDERS

90

MAGAZINES ISSUES AND HEADING UPWARDS



220,000 COPIES OF MAGAZINES PRINTED

105+ AT HOUSING TECHNOLOGY SPONSORS & EXHIBITORS

The background features a complex geometric pattern on the left side, composed of various shades of blue and pink triangles and polygons. Some shapes contain internal patterns like white stripes or small dots. The right side of the image is a solid, bright pink color, and the bottom right corner transitions into a solid blue color.

Thank you

Session 1: Sensing the Home

The role and value of remote environment monitoring technology to create healthy homes and improve health & wellbeing

Chaired by Joy Ashman Housing Strategy, Partnerships & Engagement Officer, Cornwall Council

with Dr Tamaryn Menneer, Dr Tim Walker, Dr Richard Woods, Research Fellows, University of Exeter and Anthony Ball, Public Health Practitioner Wider Determinants & Fuel Poverty, Cornwall Council



Session Overview: Sensing the Home

1. Participants and sensor network
2. Improving homes and health with sensor systems
3. Sensor data research
4. Smartline sensor dataset

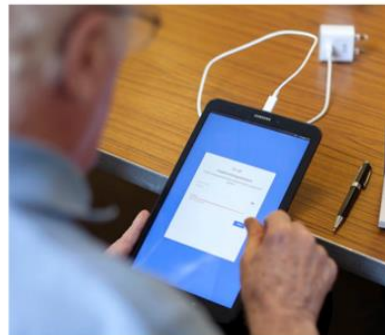
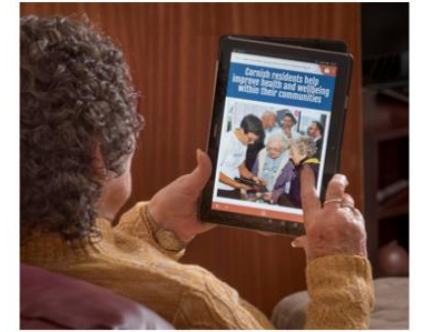


- 300 participants from social housing
- Installed sensors in all homes and completed surveys with participants



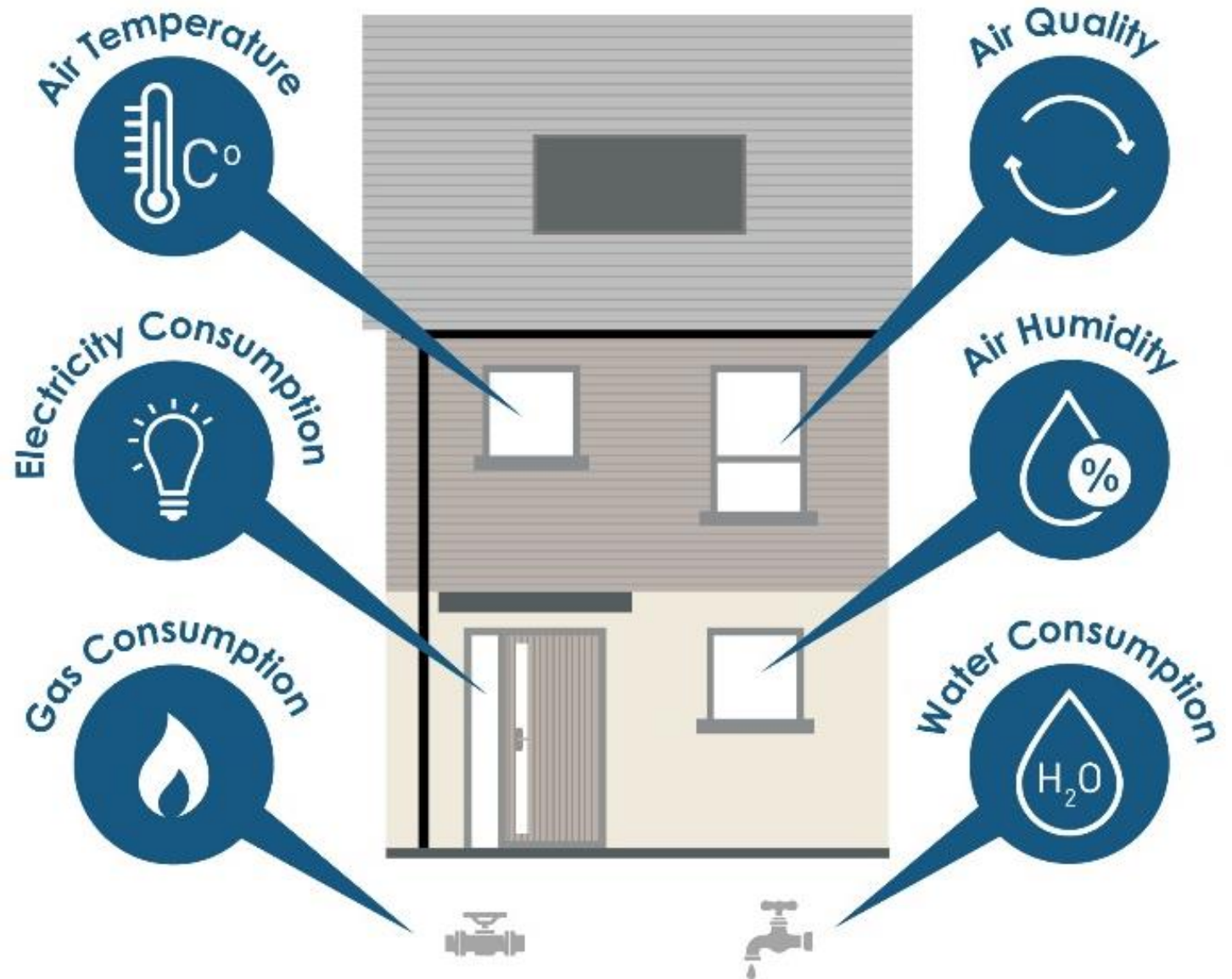
Survey data

- 95% white
- Two thirds female
- Average age 56
- One fifth no Internet
- 19.5 hours per day at home



Sensor data

- Temperature
- Humidity
- VOCs, PM2.5
- External
- Utilities



The indoor environment

- 80% of our time indoors
- Public health problems
- Home monitoring

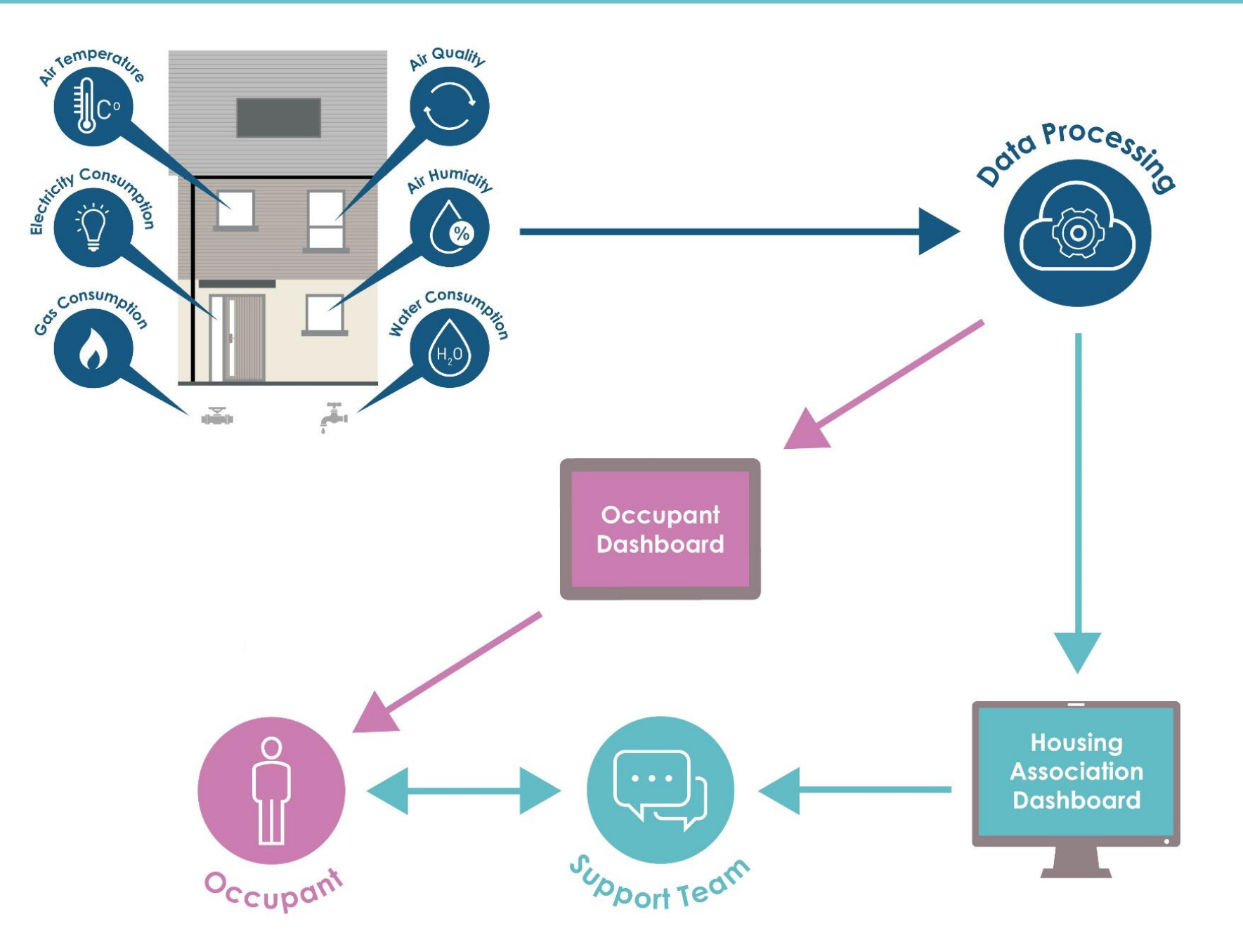


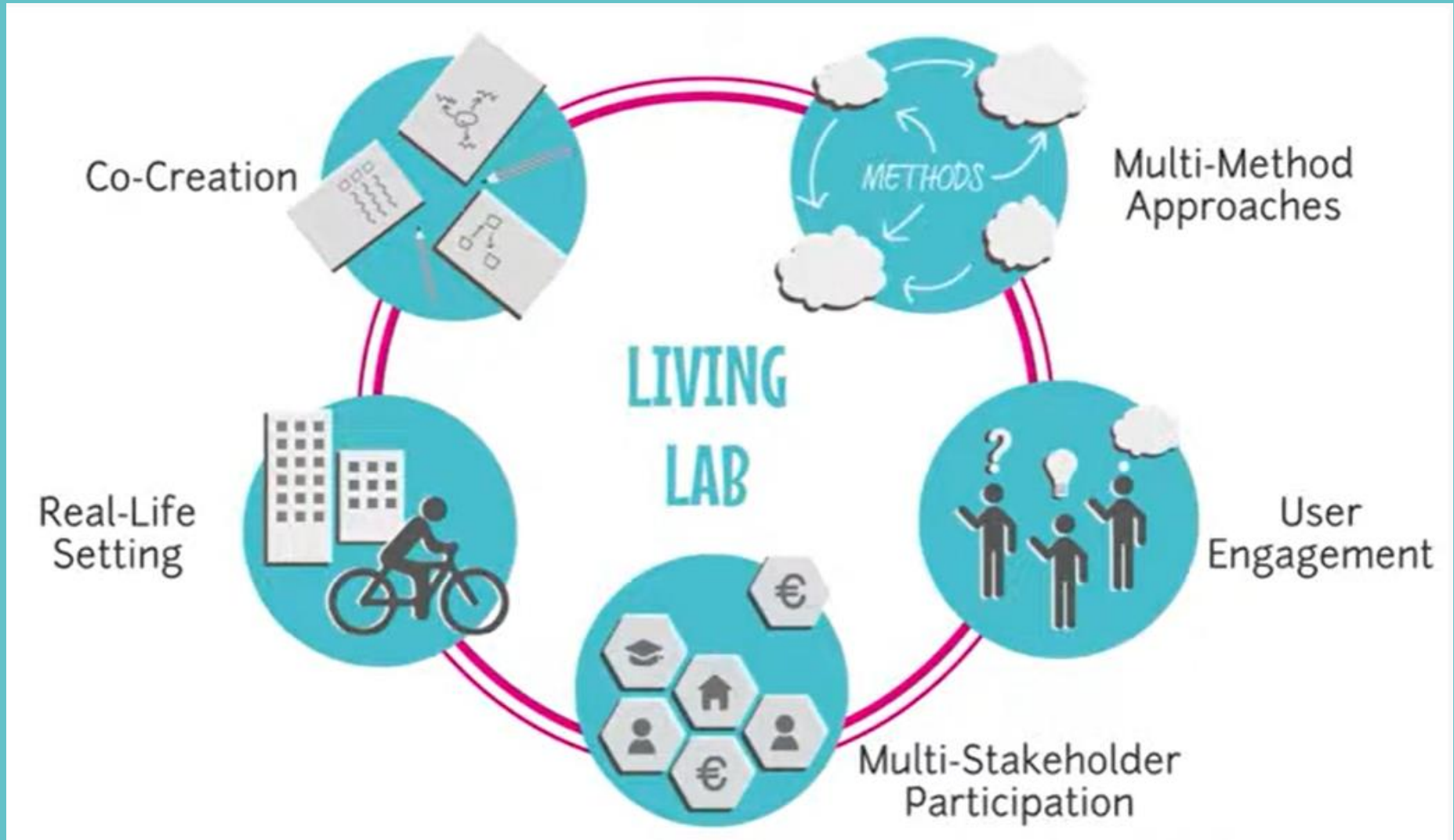
Improving homes and health with sensor systems

Are they acceptable?
Are they effective?

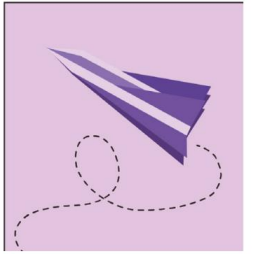
Dr Tim Walker



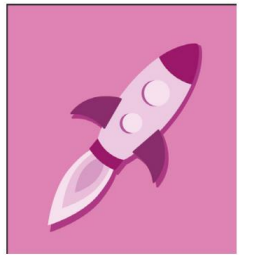




Exploration



Experimentation



Evaluation





TEST PROPERTY

[Learn more about the Smartline Project](#)



TEMPERATURE [Tell me more...](#)

Front Room

Last reading	Yesterday	This week	This month	This year	 Show data
21.2 °C	21.5 °C Wed 08-06-2022	21.5 °C From Mon 06-06-2022	21.6 °C June	21.9 °C 2022	

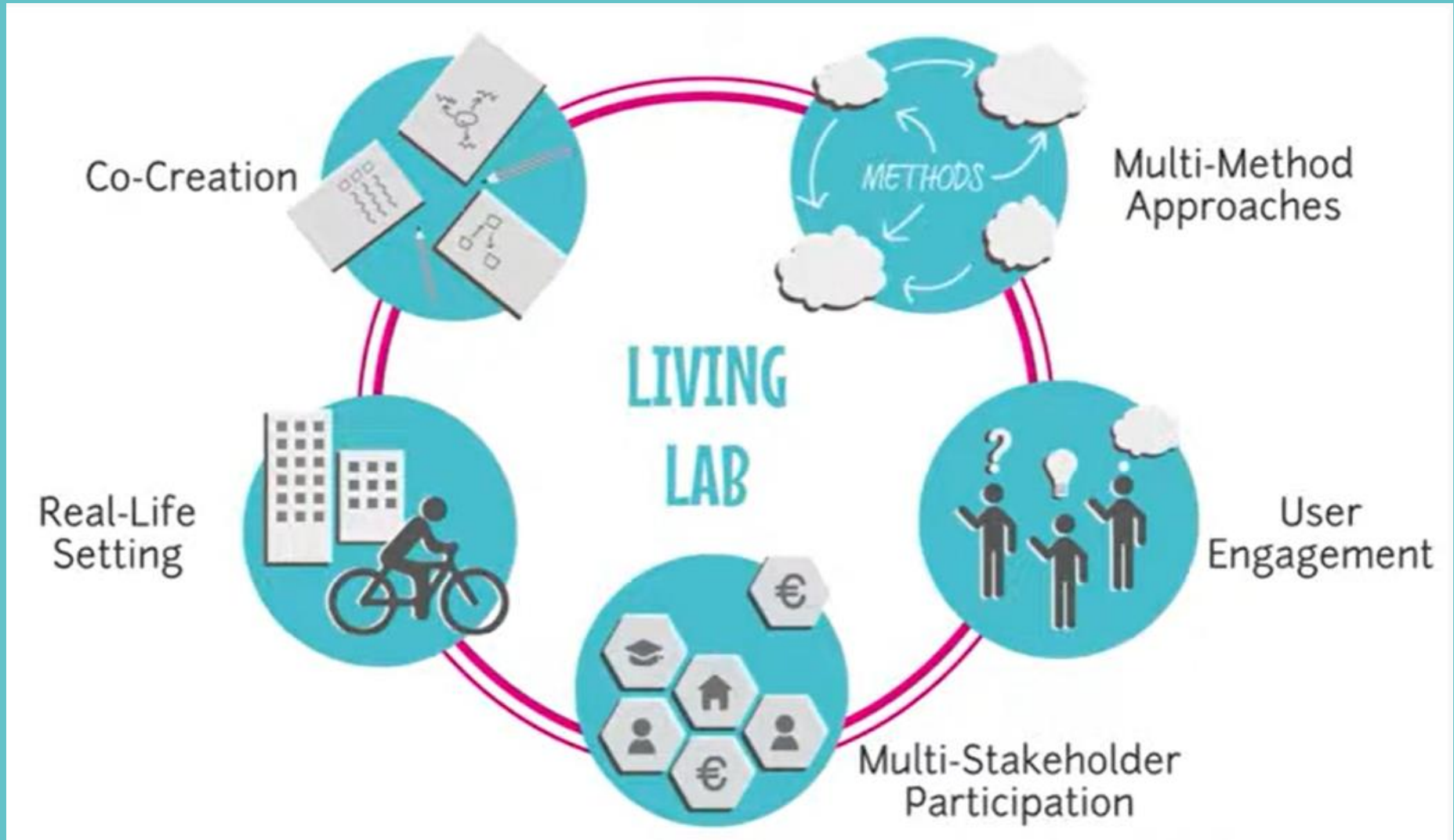
Current status: Comfort Zone
This is in the ideal temperature range.

Bedroom

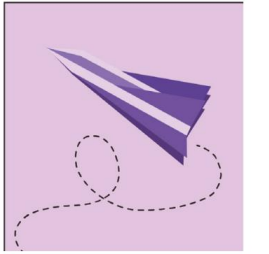
Last reading	Yesterday	This week	This month	This year	 Show data
21.6 °C	21.9 °C Wed 08-06-2022	22.0 °C From Mon 06-06-2022	22.3 °C June	22.1 °C 2022	

Current status: Comfort Zone
This is in the ideal temperature range.

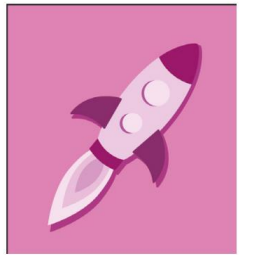




Exploration



Experimentation



Evaluation





TEST PROPERTY

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TEMPERATURE [Tell me more...](#)

Front Room

Last reading	Yesterday	This week	This month	This year	
21.2 °C	21.5 °C	21.5 °C	21.6 °C	21.9 °C	Show data
Thu 09-06-2022 9:59 a.m.	Wed 08-06-2022	From Mon 06-06-2022	June	2022	

Current status: Comfort Zone
This is in the ideal temperature range.

Bedroom

Last reading	Yesterday	This week	This month	This year	
21.6 °C	21.9 °C	22.0 °C	22.3 °C	22.1 °C	Show data
Thu 09-06-2022 9:58 a.m.	Wed 08-06-2022	From Mon 06-06-2022	June	2022	

Current status: Comfort Zone
This is in the ideal temperature range.



Occupant Dashboard (intuitive):

- Traffic light colour-coding to communicate risk;
- Explanations;
- Tips and advice;
- Timescales for plots.

● High (between 1000 and 10000 ppb)

Some types of VOC can cause health problems at high levels. Try opening a window to ventilate your home or using less cleaning products and cosmetic sprays.

● Very High (over 10000 ppb)

Very high levels of VOCs for prolonged periods of time can have serious effects on health. Try opening windows to ventilate your home and using less cleaning/cosmetic and DIY products that contribute to air pollution.

Potentially harmful gases in the air (Volatile Organic Compounds - VOCs) [Tell me more...](#)

Last reading

61.0 ppb

Tue 05-04-2022 12:57 p.m.

Yesterday

300.2 ppb

Mon 04-04-2022

This week

300.2 ppb

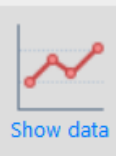
From Mon 04-04-2022

31

This year

876.8 ppb

2022



Introduction to VOCs in the Home

VOCs are gases emitted by a wide variety of things commonly found in the home. Paints and varnishes, cleaning products, furnishings and cosmetics can all contribute to the level of VOCs. As such, concentrations of many VOCs can be up to ten times higher indoors than outdoors.

Some VOCs can cause lung irritation, especially in children. They can also make respiratory allergy symptoms worse, such as asthma. Common short-

Current status: Acceptable

This is within the indoor acceptable range.



Coastline Dashboard (risk focused):

- 'birds-eye' view of all properties;
- Colour coded;
- Sortable;
- Detailed views.

Sensor Readings Colour Key

Temperature

- Cold (under 12 °C)
 - Cool (between 12 and 16 °C)
 - Comfort Zone (between 16 and 24 °C)
 - Hot (between 24 and 27 °C)
 - Very Hot (over 27 °C)
- °C = degrees Centigrade

Humidity

- Too Damp (over 65 %RH)
 - Comfortable (between 46 and 65 %RH)
 - Too Dry (under 46 %RH)
- %RH = percent Relative Humidity

VOCs


- Acceptable (under 1000 ppb)
 - High (between 1000 and 10000 ppb)
 - Very High (over 10000 ppb)
- ppb = parts per billion

PM2.5

- Good (under 12 µg/m³)
- Moderate (between 12 and 35.5 µg/m³)
- Unhealthy for sensitive groups (between 35.5 and 55.5 µg/m³)
- Unhealthy (between 55.5 and 150.5 µg/m³)
- Very Unhealthy (between 150.5 and 250.5 µg/m³)
- Hazardous (between 250.5 and 350.5 µg/m³)

eCO₂

- Very Good (under 350 ppm)
 - Good (between 350 and 1000 ppm)
 - Poor (between 1000 and 2000 ppm)
 - Very Poor (between 2000 and 5000 ppm)
 - Extremely Poor (over 5000 ppm)
- ppm = parts per million

Smartline Dashboard Logged in as coastline_test Log out 

Project View

















Show Colour Key 

Showing **DAILY** average sensor data for 149 system(s) on Tue 07 Jun 2022

Show WEEKLY averages

<< Previous Day Next Day >> or choose a specific date: Go

Search:

Coastline UPRN	Smartline UPRN	Frontroom Temperature	Bedroom Temperature	Frontroom Humidity	Bedroom Humidity	Frontroom TVOC	Frontroom eCO ₂	Frontroom PM2.5	View all data	View Participant Dashboard
7		23.4 °C	21.9 °C	55.6 %RH	60.2 %RH	136.4 ppb	1298.6 ppm	8.5 µg/m ³		
11		20.7 °C	19.8 °C	65.6 %RH	68.6 %RH	90.8 ppb	853.9 ppm	3.3 µg/m ³		
14		21.7 °C	21.9 °C	60.2 %RH	59.9 %RH	1584.7 ppb	2284.7 ppm	0.2 µg/m ³		
15		24.3 °C	23.8 °C	57.9 %RH	58.8 %RH	28.9 ppb	592.8 ppm	0.4 µg/m ³		
17		25.7 °C	26.2 °C	51.2 %RH	48.9 %RH	0.0 ppb	596.3 ppm	0.8 ppm		
35		21.5 °C	22.0 °C	59.3 %RH	55.2 %RH	59.5 ppb	793.6 ppm	0.0 µg/m ³		
50		21.0 °C	21.0 °C	70.4 %RH	69.9 %RH	15.5 ppb	504.8 ppm	0.7 µg/m ³		
52		22.4 °C	22.2 °C	62.4 %RH	64.5 %RH	No data	No data	1.8 µg/m ³		



Value and Challenges of Co-design

Value:

- Practical wisdom on what is sensible to pursue, rather than technologically possible;
- Increase system usefulness through tailoring to user needs;
- Fun.

Challenges:

- Recruiting a diverse user testing group;
- Requires a team with diverse skills;
- Implementation of all the new ideas.



Research Questions

Was the system acceptable?



Was the system used?



Was the system useful?



Acceptability

Attitudes:

- Ability of sensors to reveal behaviours and lifestyle choices;
= Fear of privacy intrusion and data misuse.

Other acceptability factors:

- Perceived usefulness;
- Technical support;
- Ease of use;
- Cost.



Was the system acceptable?

Positive attitudes:

- General concern for privacy and data use;
- Trusting relationship with Coastline;
- Coastline perceived as having credible intentions for data use.

“Welcome to share my data with Coastline, I have been a long standing tenant and they have been good to me”

(Martha, 62)

Perceived as useful:

- Improve design and management of future social housing;
- Although, no health related expectations.



“Looking after you, not at you”

Project tag line



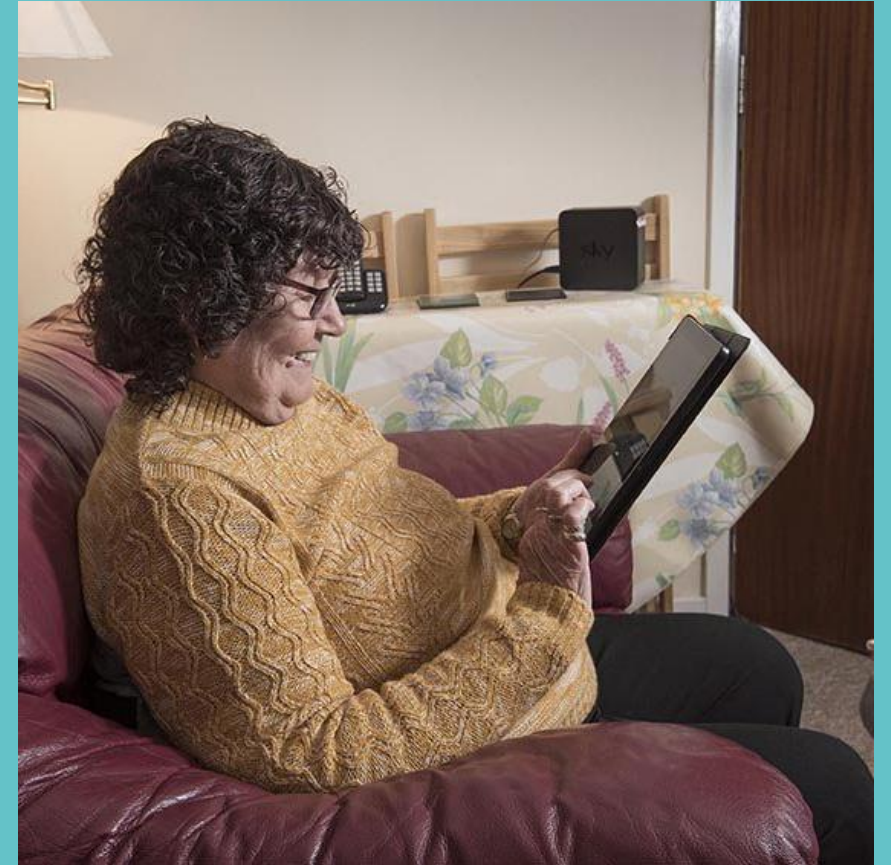
Was the system used?

Occupant Use:

- High intention to use initially;
- Low long term actual use;
- Few changes to how occupants manage their home occurred as result of using dashboard.

Coastline Use:

- Regular and successful use;
- Identifying high risk homes and intervening;
- System most useful in the winter.



Occupant	What did the sensor dashboard indicate?	Issues identified on home visit	What action was taken?
<p>Example 1.</p> <p>Family</p>	<p>High humidity (65-80%) downstairs.</p>	<p>Humid property with mould;</p> <p>Large fish tank in the living room, open vivarium in the hallway.</p>	<p>Advice and guidance on ventilation;</p> <p>Replaced fans;</p> <p>Installed Positive Input Ventilation (PIV) system.</p>
<p>Example 2.</p> <p>Family</p>	<p>Drop in temperature.</p>	<p>Fuel poverty;</p> <p>Caused by a change in circumstances leading to loss of income and benefits.</p>	<p>Emergency Hardship Fund (Coastline);</p> <p>Covid Winter Grant (Council), heated throw and energy vouchers;</p> <p>Support from a local energy charity:</p> <p>Top up vouchers;</p> <ul style="list-style-type: none"> • Change in energy supplier; • Warm Home Discount payment. <p>EPC rated high, but Coastline surveyor found loft installation removed (by previous occupant). Cause of high costs.</p>



Is the system useful for improving health?

- Identify and prioritise at risk and vulnerable occupants;
- Enable early intervention to support occupant health and wellbeing;
- Reduce stress among Coastline staff;

However, some risks and limitations:

- Responsibility to act;
- Resources and capacity to act.



Is the system useful for improving homes?

- Clearly and pro-actively identify building maintenance issues;
- Reduce long term costs through proactive repairs and efficient planning of maintenance work;
- Insight to inform Carbon Net Zero strategy, and live data to evaluate progress.



Conclusions

- System useful for identifying risk, but **need to be matched with human capacity** for intervention and social support;
- Research and innovation **not possible** without community participation and co-design;
- Housing Associations are **uniquely placed** as intermediaries to improve health and wellbeing among populations which face social and health inequities.



“What you might at first see as a technical problem is actually a social problem”

Coastline Support Team member



Sensor data research findings

Dr. Tamaryn Menneer

The indoor environment:

www.smartline.org.uk/research-hub

- PM2.5 increases with smoking but not vaping.
- Asthma
 - Mould / odour.
 - VOCs in household cleaning products.
- Fuel poverty and health.



COVID-19: Advice versus Instruction

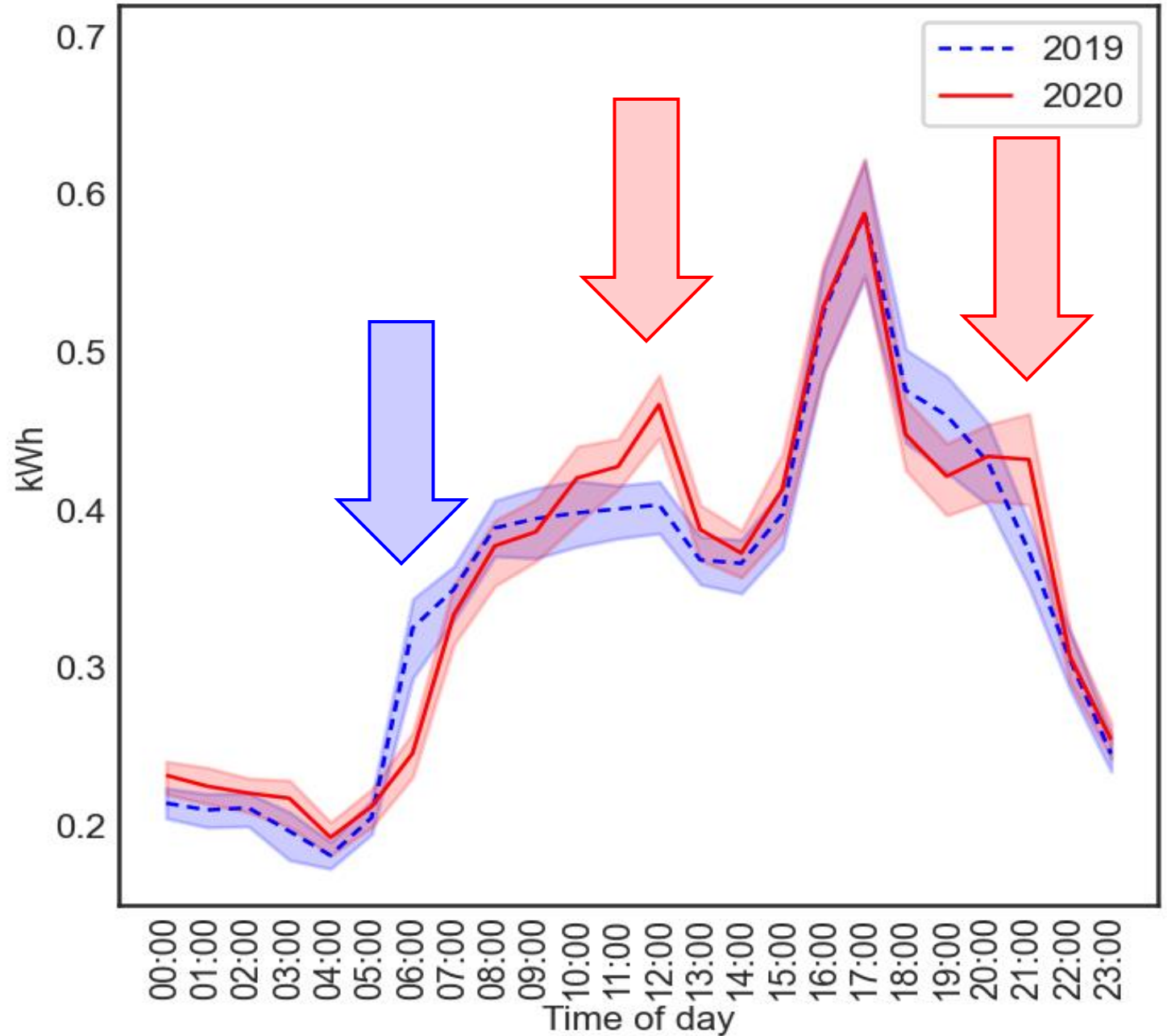
- Recommendations / advice
- Enforced lockdowns
- Behaviour change?

March 2020						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				
April 2020						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

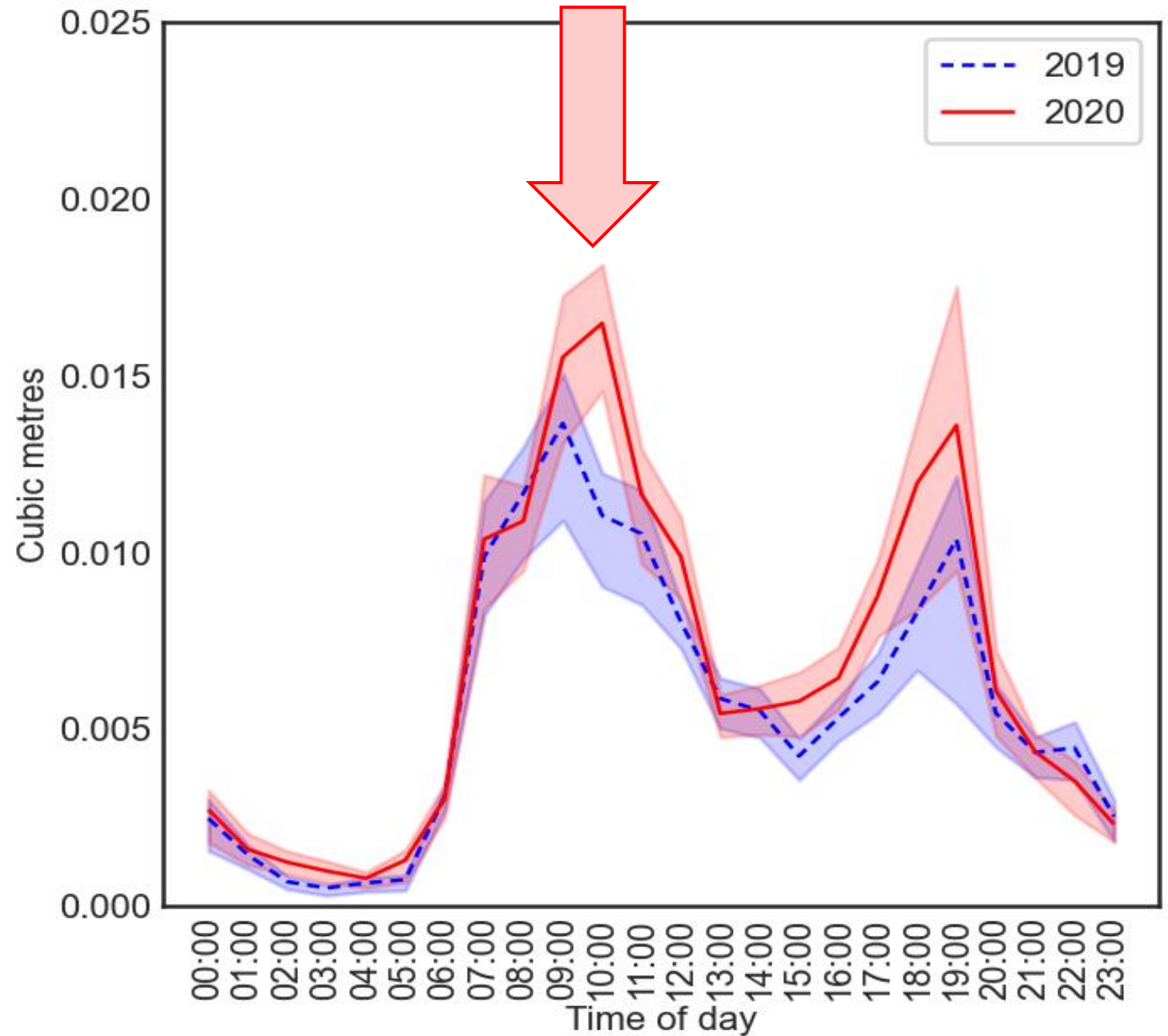
(Menner, Qi, Taylor, Paterson, Tu, Elliott, Morrissey, Mueller)



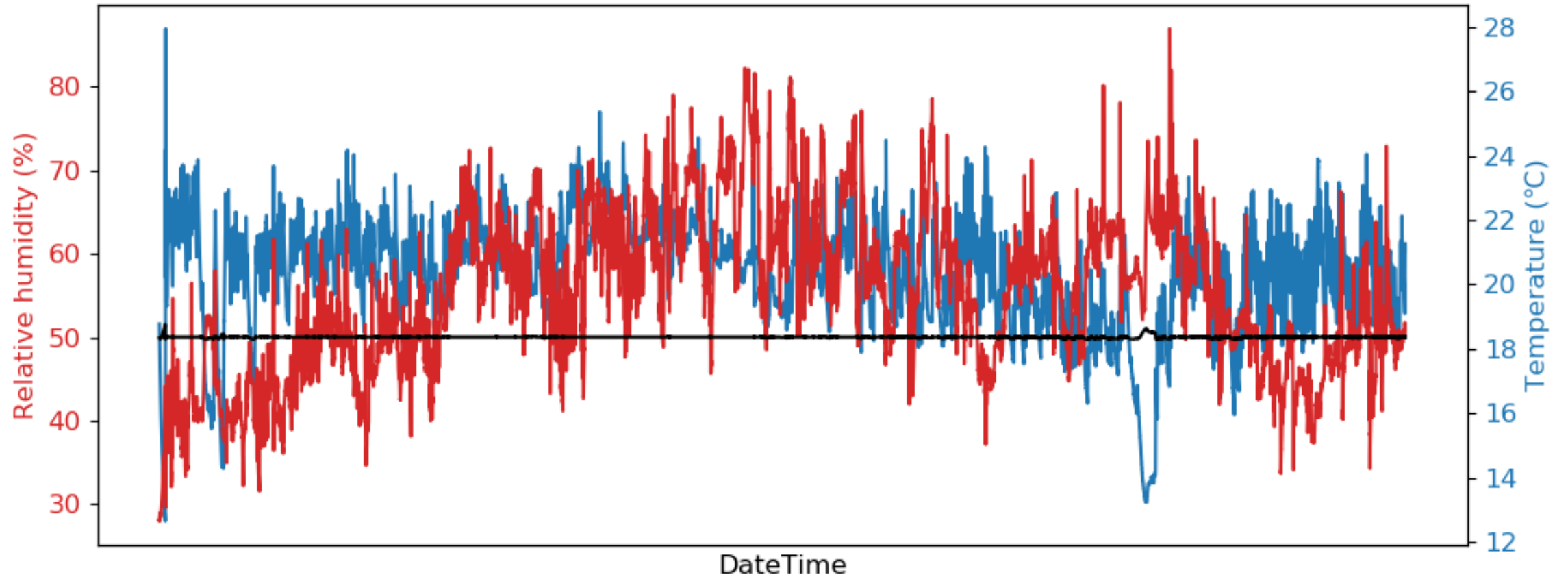
Electricity: Daily profile



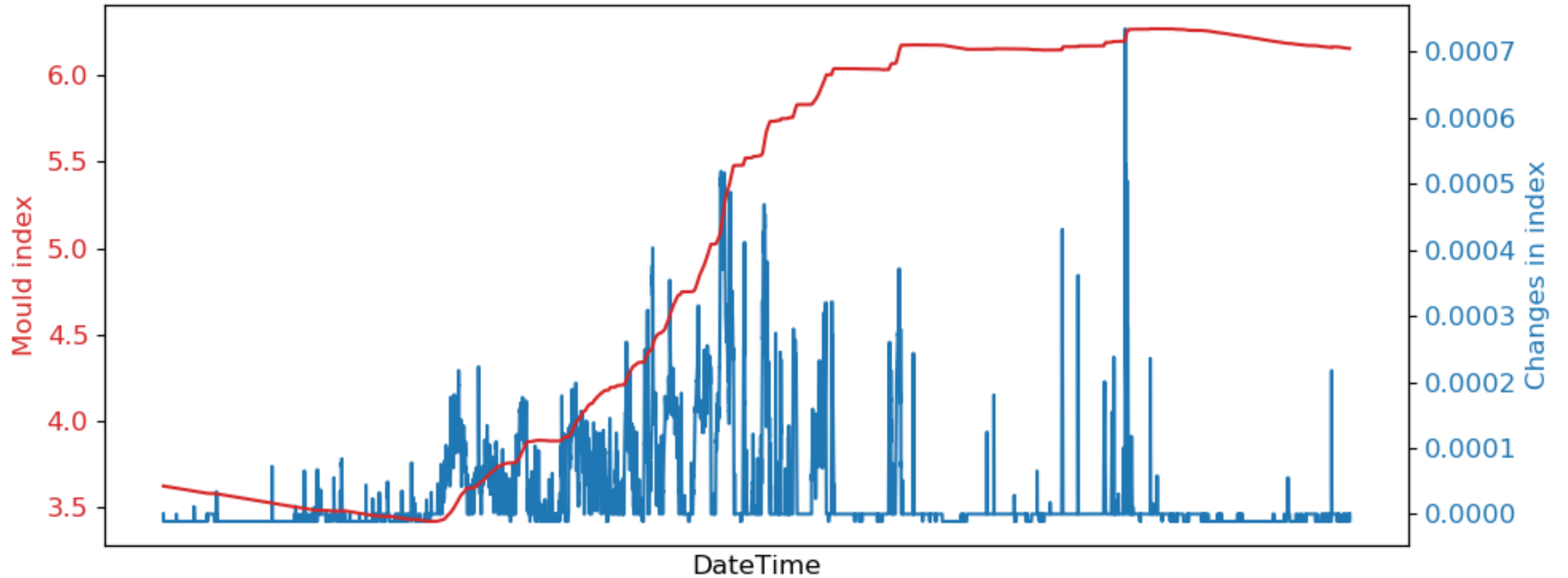
Water: Daily profile



Modelling mould

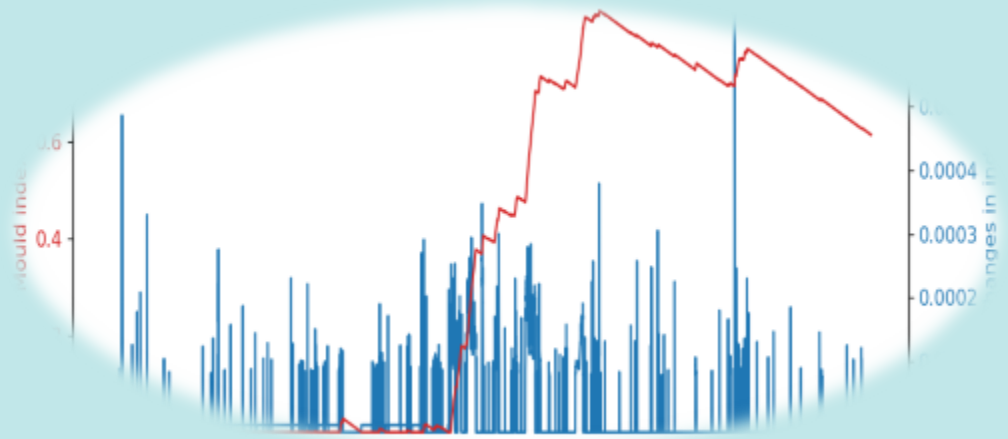


Model output



Evaluating the model outputs

Model outputs



70%

Survey responses

Does your home have
visible mould patches?

44% "Yes"

Has your home suffered
from a **mouldy/musty**
odour in last 12 months?

18% "Yes"



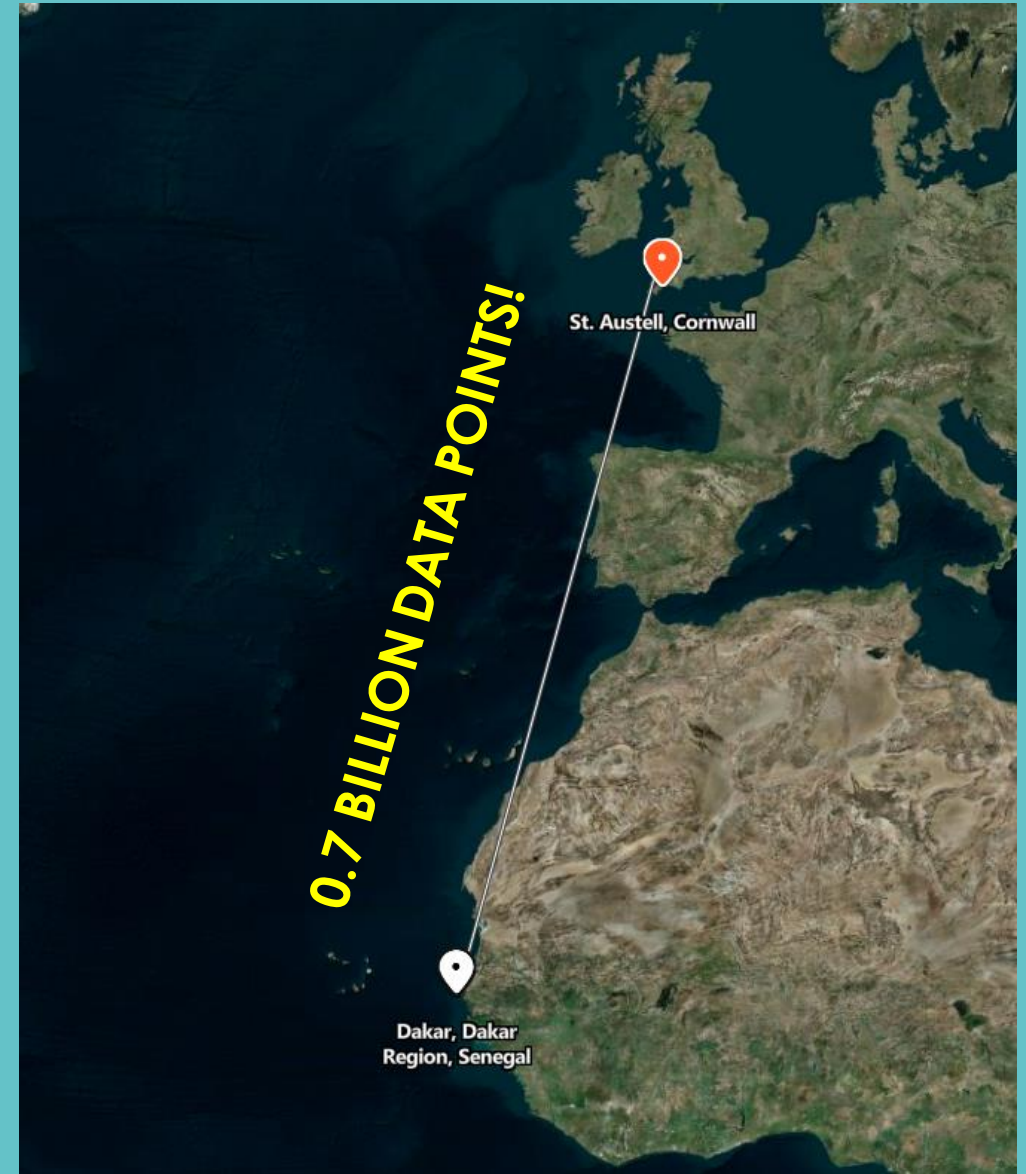
Smartline Sensor Dataset

- Quantity and Quality
- Unique in space and time
 - Existing Outputs
 - Future Legacy

Dr Richard Woods

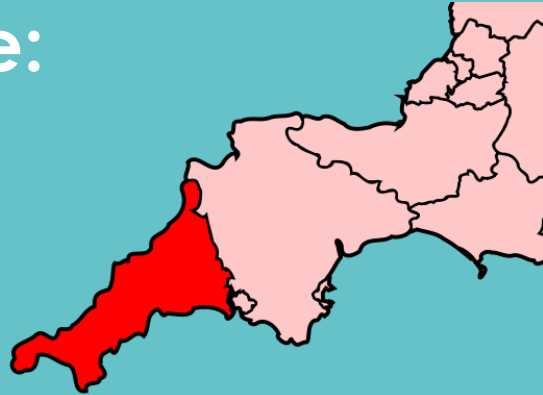
Quantity and Quality

- Up to **300 Homes**...
- ...up to **7 sensors** each...
- ...recording **15 parameters**..
- ...every **3 to 30 minutes**...
-**since 2017**



Unique in Space and Time

- Cornish Climate:
High Humidity
and Rainfall



- Global pandemic



- A range of participants

- Local climate extremes



- Several types of properties



- Cost-of-living crisis



Existing Outputs

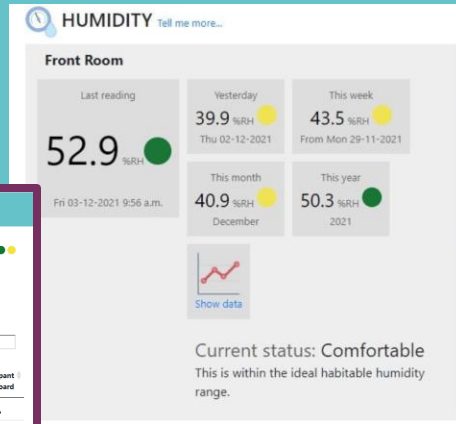
- Real-time benefits to participants

Smartline Dashboard

Project View

Showing **DAILY** average sensor data for 149 system(s) on Tue 07 Jun 2022

Coastline UPRN	Smartline UPRN	Frontroom Temperature	Bedroom Temperature	Frontroom Humidity	Bedroom Humidity	Frontroom TVOC	Frontroom eCO2	Frontroom PM2.5	View all data	View Participant Dashboard
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17		25.7 °C	26.2 °C	51.2 %RH	48.9 %RH	0.0 ppb	596.3 ppm	0.8 ppm	👁	👤
35		21.9 °C	22.0 °C	59.3 %RH	53.2 %RH	59.3 ppb	792.6 ppm	0.0 µg/m ³	👁	👤
38		21.0 °C	21.0 °C	70.4 %RH	69.9 %RH	15.5 ppb	504.8 ppm	0.7 µg/m ³	👁	👤
52		22.4 °C	22.2 °C	62.4 %RH	64.5 %RH	No data	No data	1.8 µg/m ³	👁	👤



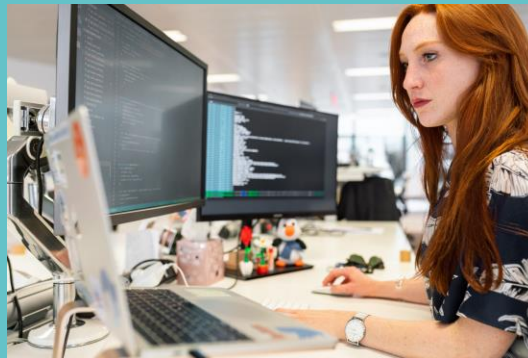
- Diverse published research outputs...

- ...using data from sensors, participant surveys, and project partners



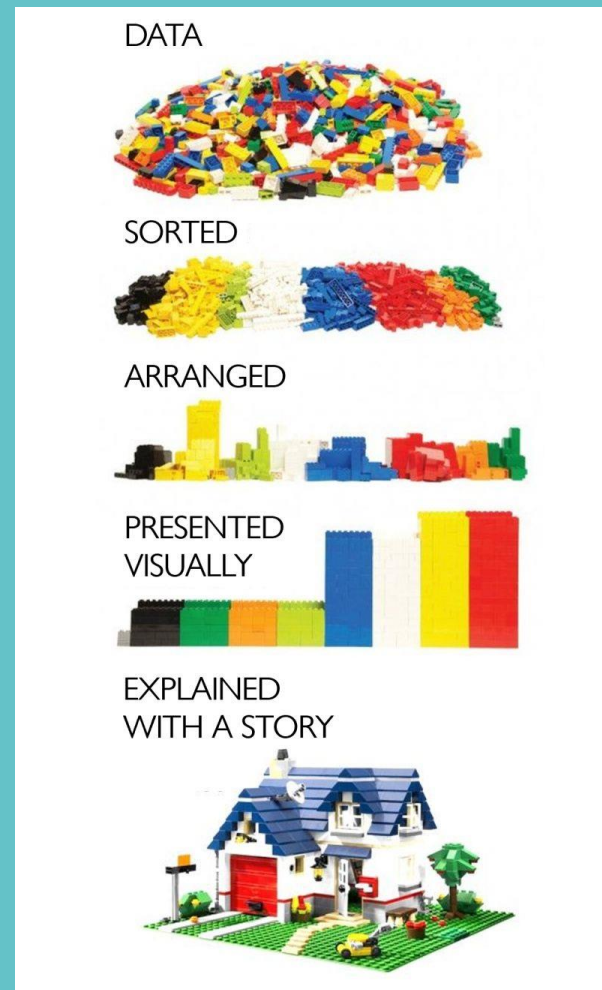
Future Legacy

- Diverse metrics support **retrospective** exploration



- **Big** dataset can reveal subtle trends, beyond seasonal patterns
- Mostly **open access**, with more metadata by request

- **Relevant** to myriad research topics
 - Health and Wellbeing
 - Fuel poverty
 - Energy efficiency
 - Environmental Monitoring Technology
 - Etc...



- Massive **effort** to curate the data offers savings to researchers!



Morning Break

Served in the Cedar Suite, 1st Floor

Next session will start at 11.50am

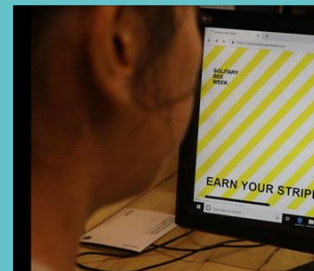
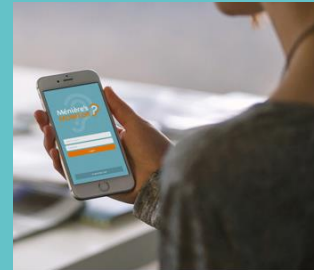


Supporting digital innovation across Cornwall and the Isles of Scilly

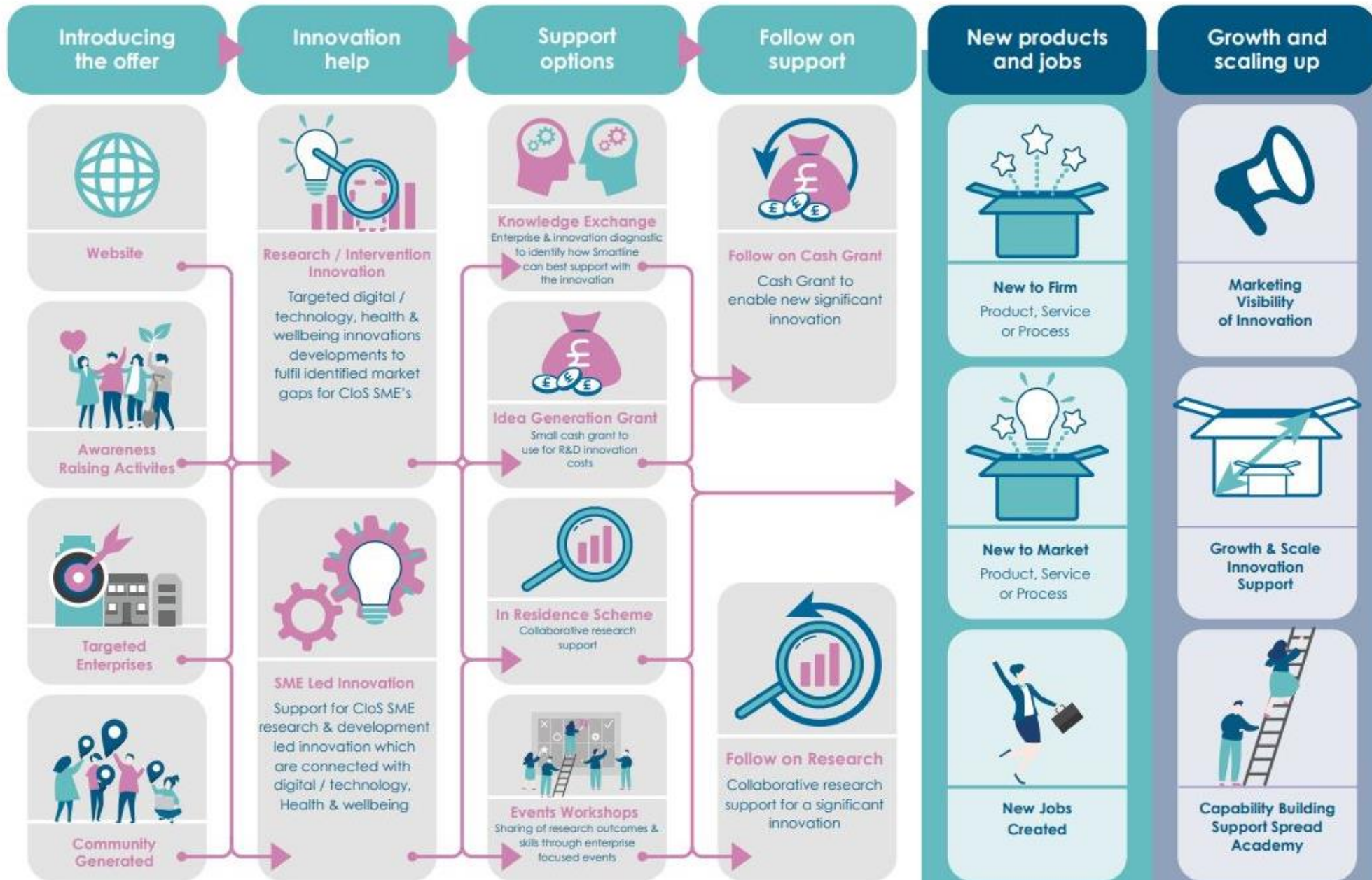
Emma Seymour – Knowledge Exchange Officer

Smartline Enterprise Support

- Exploring how technology can be used to improve people's health and wellbeing
- De-risking the RD&I process



Enterprise Engagement Journey



Supporting digital innovation

Smartline has worked with businesses across Cornwall's arts, entertainment, recreation, education, health, communication, technology and manufacturing sectors

Over **360** businesses have engaged with Smartline through our events and networking

135 local businesses have received direct financial or research support

Smartline is providing **£600,000** of grants...

...and over **3000** hours of research support to local businesses

Enabling...

70 local businesses to introduce new innovative ways of working within their business

39 new products and services to be brought to life to improve people's health and wellbeing



About the South West AHSN

Our focus -

Transforming lives through innovation in health and care

We work with partners across the health and care system to identify and spread innovation, build capability and support evaluation and learning

Our region

The South West peninsula stretches from the Isles of Scilly to Somerset, with a round 600 miles of coastline.

Infinitely varied, the region comprises rural and isolated communities on its moors and islands, along with significant urban populations in Plymouth and Exeter. It contrasts extremely prosperous coastal locations with some of the most deprived areas in Europe. A relatively stable core population is supplemented with a significant influx of seasonal workers and tourists that create additional challenges for healthcare services and opportunities for developing health - care technologies.

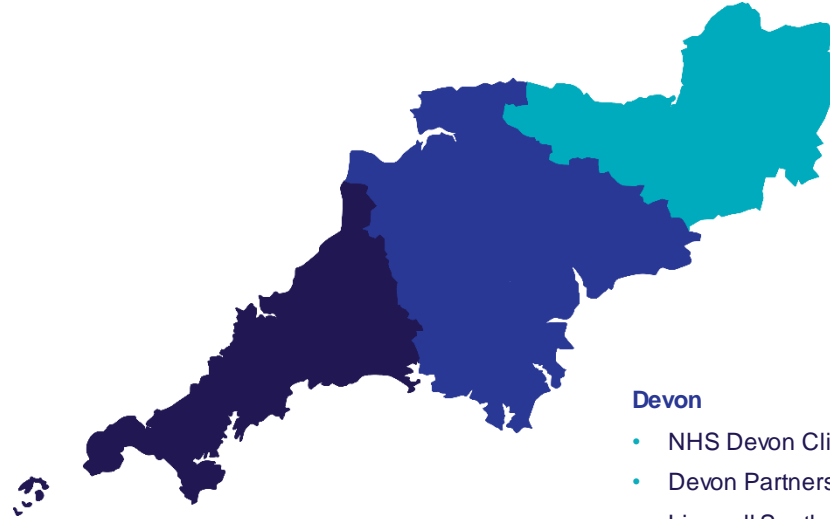


Our partners

We work with partners across the health and care system to spread innovative practice, build capability and evaluate & learn.

Regional/ national partners:

- University of Exeter
- University of Plymouth
- South Western Ambulance Service NHS Foundation Trust
- NHS England & NHS Improvement South West
- National Institute for Health Research Applied Research Collaboration (NIHR ARC) South West Peninsula
- National Institute for Health Research Clinical Research Network (NIHR CRN) South West Peninsula
- Resonance
- NHS Horizons
- Billions Institute



Cornwall and Isles of Scilly

- Cornwall and Isles of Scilly ICS / NHS Kernow Clinical Commissioning Group
- Cornwall Partnership NHS Foundation Trust
- Royal Cornwall Hospitals NHS Trust
- Cornwall Council
- Volunteer Cornwall
- Smartline
- EPIC - eHealth Productivity and Innovation in Cornwall

Somerset

- NHS Somerset Clinical Commissioning Group / Somerset ICS
- Somerset NHS Foundation Trust
- Somerset County Council
- Rutherford Somerset Diagnostic Centre
- The Community Council for Somerset

Devon

- NHS Devon Clinical Commissioning Group / Devon ICS
- Devon Partnership NHS Trust
- Livewell Southwest
- Northern Devon Healthcare NHS Trust
- Royal Devon & Exeter NHS Foundation Trust
- Torbay and South Devon NHS Foundation Trust
- University Hospitals Plymouth NHS Trust
- Devon County Council
- Torbay Council
- Plymouth Council
- Plymouth Health Innovation Alliance
- Torbay Community Development Trust
- One Northern Devon



How we work



Spreading Innovative Practice

We spread proven innovative practice across the health and care system by building networks, sharing knowledge, strengthening collaboration and providing practical support to our partners.



Building Capability

We help our partners build the culture and capabilities vital to the development, adoption and spread of innovative practice across the regional health and care system.



Evaluation & Learning

We support our partners to evaluate impact and apply learning to improve the delivery of health and care services. We share knowledge and provide rapid, actionable insights to inform improvements and spread innovative practice.

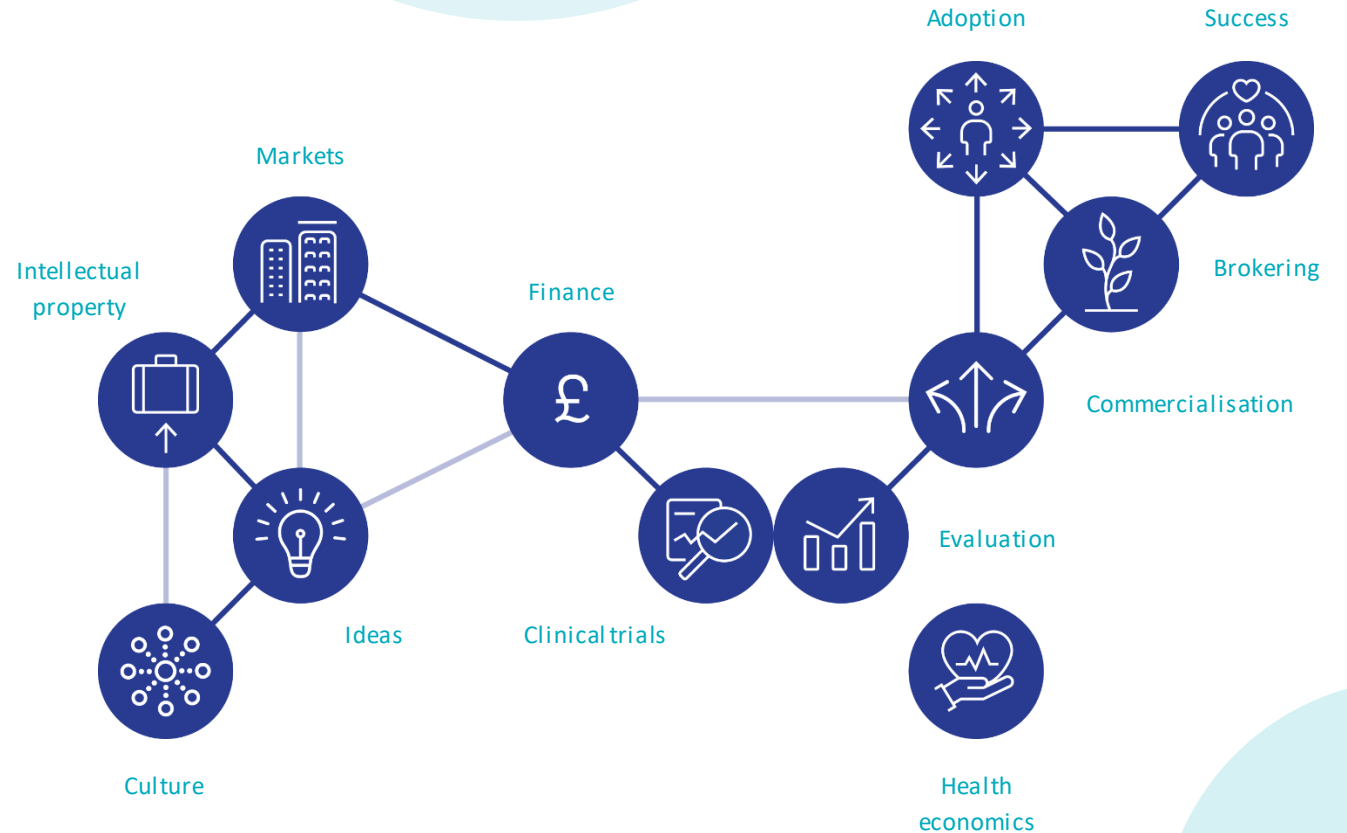
Our Innovation Exchange

Our Innovation Exchange is designed to help innovators implement solutions to meet the challenges faced by the health and care system in South West England.

We are an **innovation broker**. We help innovators understand the needs of our local health and care system and support them to build partnerships to improve patient care and generate economic growth in our region. We also provide signposting for early-stage innovators who have an idea that might require time and resource to reach the market.

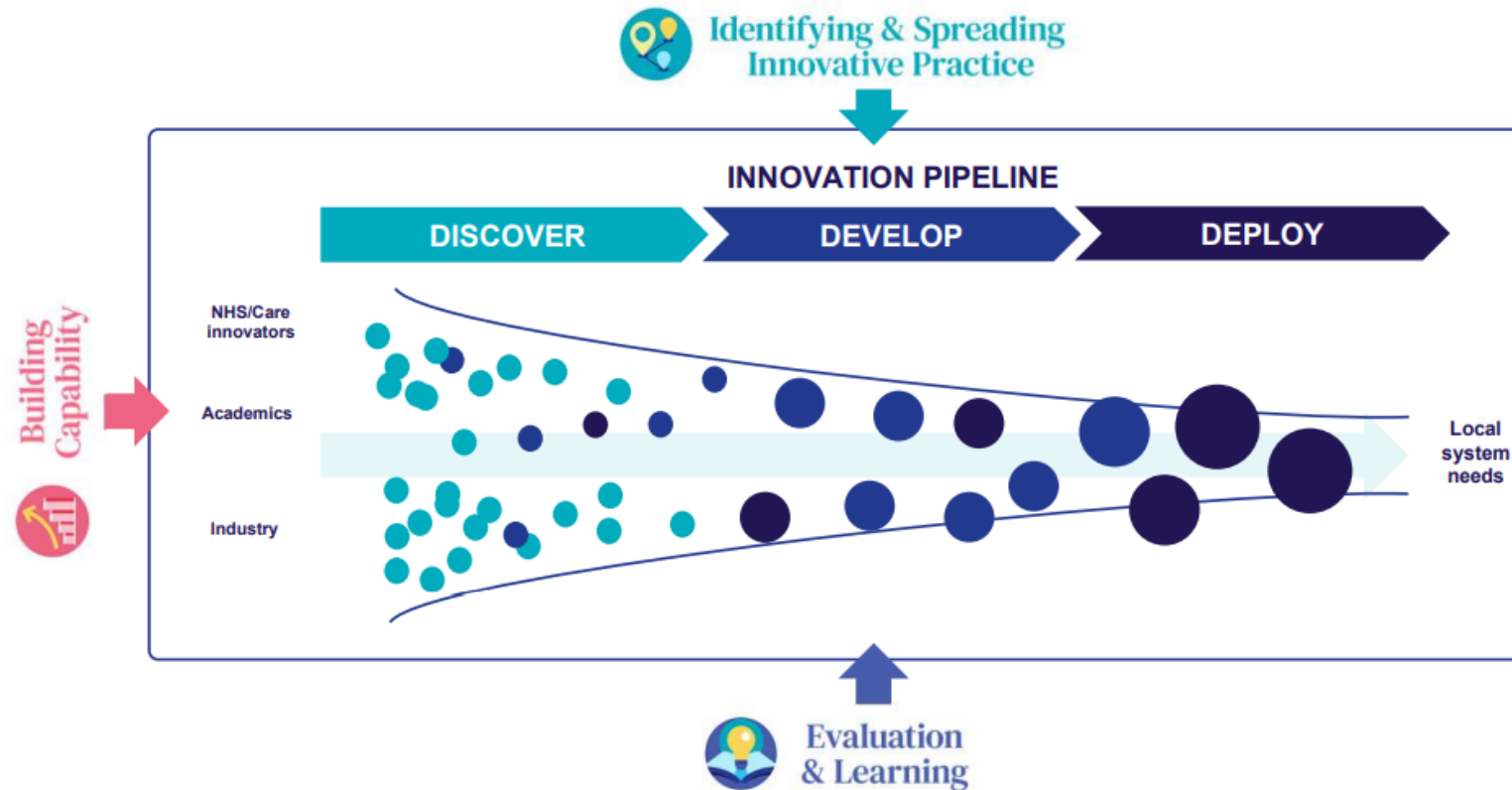
Our **Innovation Exchange platform, Pathfinder**, is a starting point for any innovator looking to take their innovation to the next stage of development.

Please visit the [Innovation Exchange website](#) for more information.



Working with our partners to build a pipeline of innovation focused on the needs of our local systems

- We are working with local research and innovation partners and the AHSN Network to build an innovation pipeline targeted towards the needs of our local systems.
- We apply our three core capabilities to help our local systems identify relevant innovations, evaluate and validate the impact of innovation in a real world context and spread high-value innovation.



Smartline Success Stories

- Julian Bose, Director, Inspire Cornwall CIC
- The DadPad gives new dads the skills and confidence to give the best care to their newborn and the best support to their partner
- Supporting family resilience and mental health by enabling the development of the DadPad App and digitally engaging supplementary products



Smartline Success Stories

- Nikki Veale, Helen Tite, Pat Taylor, iCareiMove
- To address and focus on our ageing society, in work, in life and in health, iCareiMove build successful on-line and live wellbeing communities with the vision to embed wellness into businesses with people at the heart of everything they do
- Supporting iCareiMove to successfully launch a new digital social impact reporting process, enabling them to report on the social value and social return on investment of their programmes

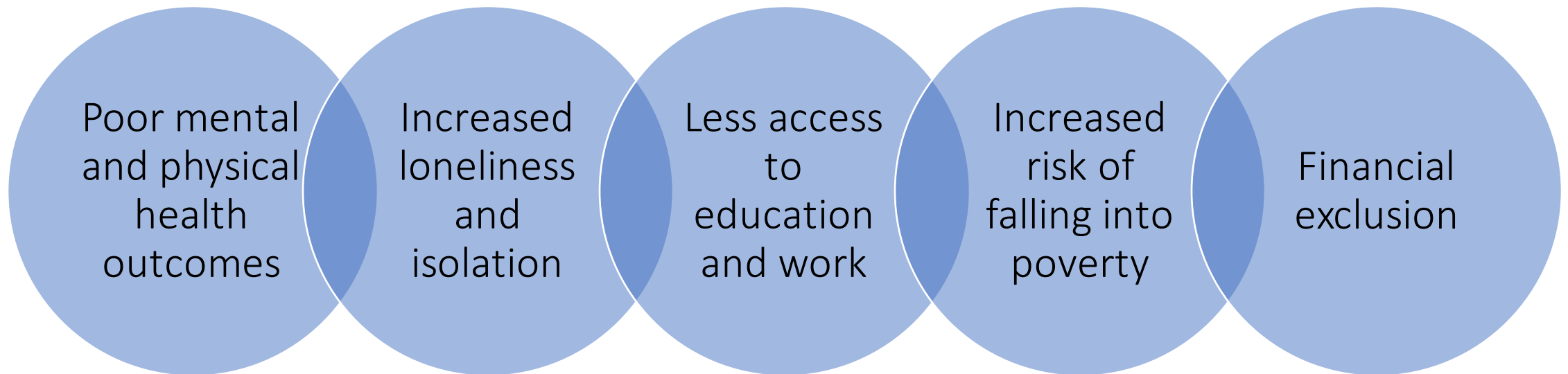


Building Stronger, more connected communities

with Karen Spooner Smartline, Community Development
Manager, Volunteer Cornwall

Where did we start?

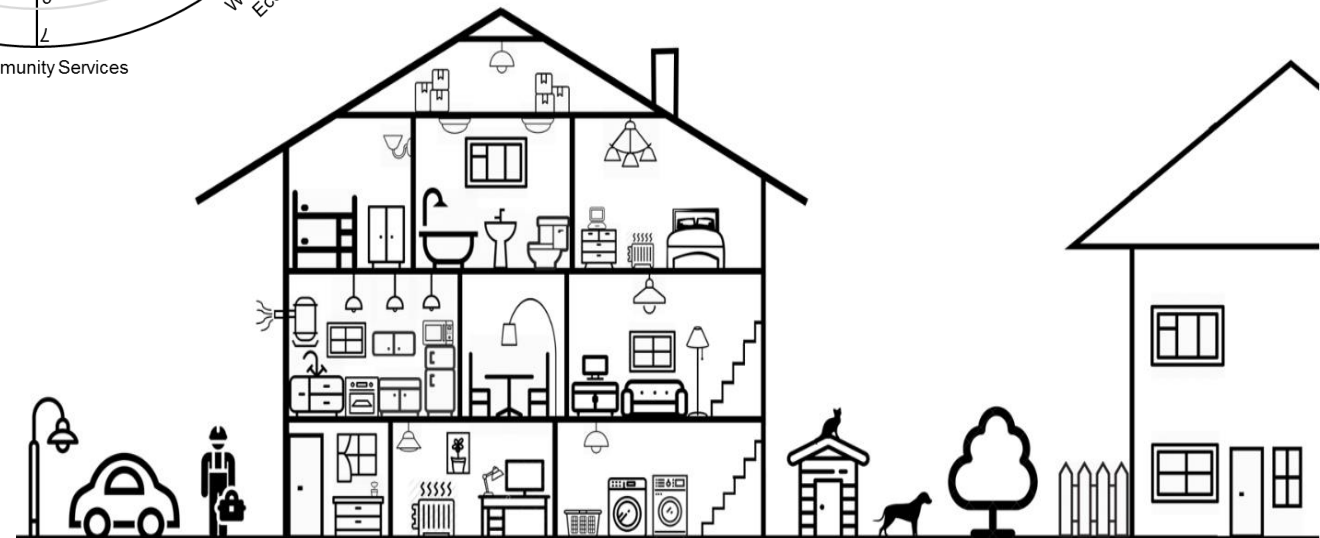
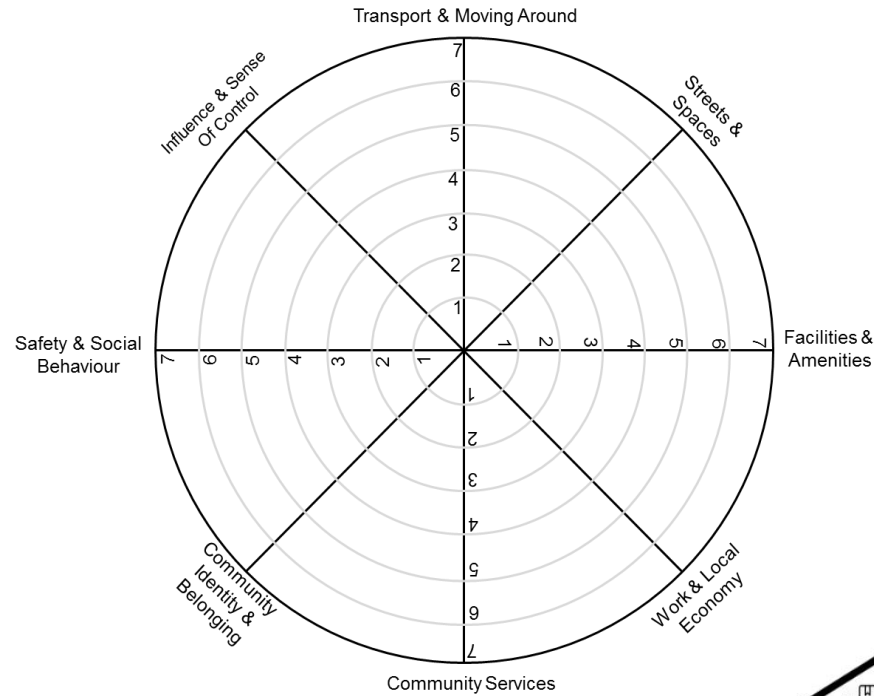
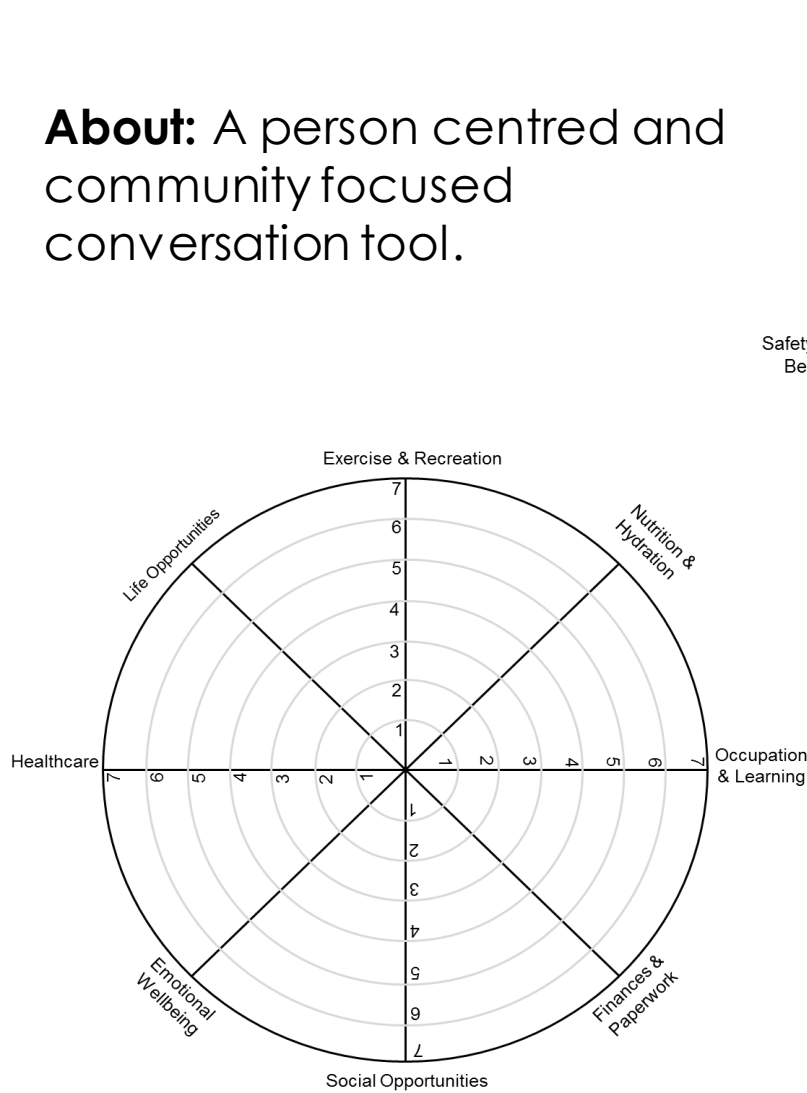
We know that Cornwall faces a high percentage of Social and Digital exclusion.



Guided Conversation

About: A person centred and community focused conversation tool.

Outcomes: Tool has enabled Smartline to link participants with local community organisations to improve wellbeing.



A sense of community

Salt dough
classes



Well women's
group



Online soap
carving



Exercise
classes



Coffee
mornings



A sense of community



Learning and successes



Inspired people to develop their own skills and work towards new career goals



Given skills and confidence to use internet technology



Connected people online, enabling the development of new friendships that have gone on to meet face to face.



Community work as a gateway to engagement in research.



Opportunity to solve personal challenges through the use of the guided conversation



Sustainability of projects – Community champions



Acceptability of digital technologies for health and wellbeing



The use of online forums to increase social connection during Covid pandemic

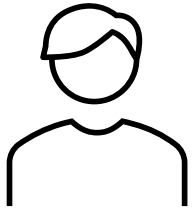


The use of telephone training during covid to improve IT skills



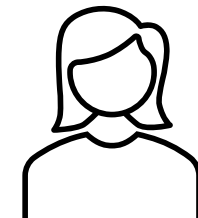
Partaking on our Seasonal Wellbeing surveys to support or data collection and analysis

Impact

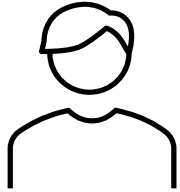


"This garden has meant that we are able to talk to our neighbours more and enjoy the space that we live in. I have met new people because of this".

"This project has allowed me to learn new skills to find out about my local area and to also support my volunteer role at our local museum. I will definitely be coming to Kresen Kernow more often"

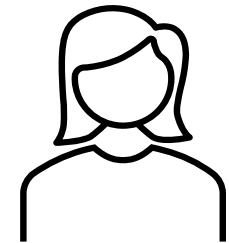


Impact



“Thank you Karen and Smartline for doing this for us. I honestly do not know how I would have coped over the last few years without your support and the opportunities that you have given to me. It has honestly made such a difference to me”.

“I enjoyed learning how to use my phone to take good pictures. I liked learning **how** to use the apps to help me edit my pictures and I was proud to have my pictures displayed at Heartlands when we had our exhibition”.





What next?



LUNCH

Served in the Cedar Suite, 1st Floor

Afternoon session will start at 1.30pm



Digital Inclusion Keynote Session

Helen Milner OBE, Group Chief
Executive, Good Things Foundation



Fixing the Digital Divide - for Good



Good Things
Foundation

Helen Milner
Group CEO
@helenmilner

4 million+ people

supported globally since 2010

Good Things Foundation is the UK's leading digital inclusion charity.

We want to Fix The Digital Divide – for Good.



Working with our strategic partners, by the end of 2025, we aim to:

Engage
1 million people
across the UK to benefit from digital inclusion



Grow the UK Digital Inclusion Network to over
5,000 organisations
giving everyone the chance to benefit from the digital world



We lead the way and innovate

Research-led and evidence based

Producing respected Digital Nation report yearly

Developing a *Blueprint for a 100% Digitally Included UK* to spur Government action

Partnering with leading academics to develop a Minimum Digital Living Standard

Creating partnerships with a shared goal

Creating the Data Poverty Lab with Nominet



Leading the National Databank, uniting industry and the third sector



Establishing a subsidiary charity in Australia

Building platforms for learning and measuring impact

Establishing the leading platform for place-based digital skills development



Fostering and supporting a network of thousands of community network partners

Combining strengths for social impact

Partnering with Reconome to develop the National Device Bank, providing refurbished devices at scale



People are digitally excluded because:

They
lack:

Motivation
to use the
internet

Confidence
with digital
technology

Digital Skills
to carry out
basic tasks

And/or, they cannot afford:

Device for personal internet use

Sufficient connectivity data

On very low incomes - even £10-£15/month social tariffs are a struggle

Lack of access due to connectivity - usually issue of quality not exclusion

DIGITAL NATION UK 2022

FACTS & STATS TO FIX THE DIGITAL DIVIDE FOR GOOD

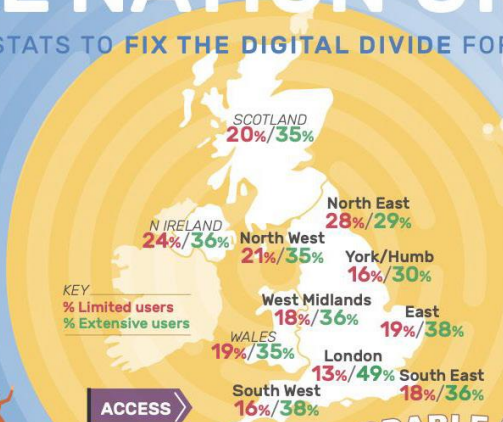
UK
DIGITALLY EXCLUDED

10m
LACK THE MOST BASIC
DIGITAL SKILLS

5.8m
People still
excluded in 2032
without action

1 in 20
UK households
have no home
internet
access

2m
UK households
struggle to
afford internet
access



£9.48 ROI
FROM BASIC DIGITAL
SKILLS SUPPORT

UK
DIGITALLY INCLUDED

30.8m
HIGHLY ENGAGED
USERS

22m
NHS APP USERS

Compared to extensive users **LIMITED USERS ARE...**

4 x more likely
from **low income**
households

10 x more likely
to be
over-65

8 x less likely
to
have **post-18**
education

7m
low-income
households are
going without
essentials

85%
of low income
adults say
connectivity
is essential in
their lives

1.2%
households on
Universal Credit
took a **social**
tariff in 2021

74%
of mixed ethnicity
and Black internet
users faced **potential**
online harm in the
last 4 weeks

16%
of 18-25s have no
access to a laptop
or desktop

36%
of workers lack
essential digital
skills for work

WHY PEOPLE ARE NOT ONLINE

11%
I'm worried
about **online**
safety

20%
It's too
expensive

21%
I'm **not**
interested

21%
It's too
complicated

MOTIVATION

SKILLS

BE ABLE & SAFE ONLINE

CONFIDENCE

SAFETY

COMMUNITY SUPPORT

Good Things
Foundation

#FixTheDigitalDivide

AFFORDABLE ACCESS

BE ABLE & SAFE ONLINE

BENEFITS OF BEING ONLINE

I get better value
The most digitally
engaged pay **£228 less**
on their bills per year
than the least engaged.

I'm happier
85% connect better
with friends and
family.

I'm better off
Manual workers with
high or very high digital
engagement earn **£421**
more a month than less
digitally engaged peers.

Better for the UK
£1.4bn invested in basic
digital skills over next
10 years returns **£12.2bn**
Net Present Value.

National Databank

National Device Bank

REFURBISHING
CAN SAVE **90%**
CO₂ EMISSIONS

77.6 KG

**National Digital
Inclusion Network**

**Learn
My Way**

Key data sources
Ofcom 2022, Lloyds Banking Group Consumer Digital Index 2021, Cetr 2022
Full sources at www.goodthingsfoundation.org/insights/building-a-digital-nation
National Databank: data donated by Virgin Media O2, Vodafone and Three

The size of the problem

Although 1.5 million more people went online during the Covid-19 pandemic, in some groups digital engagement actually declined; and the number of people without the most basic digital skills is not improving.

Nearly
1 in 5
adults

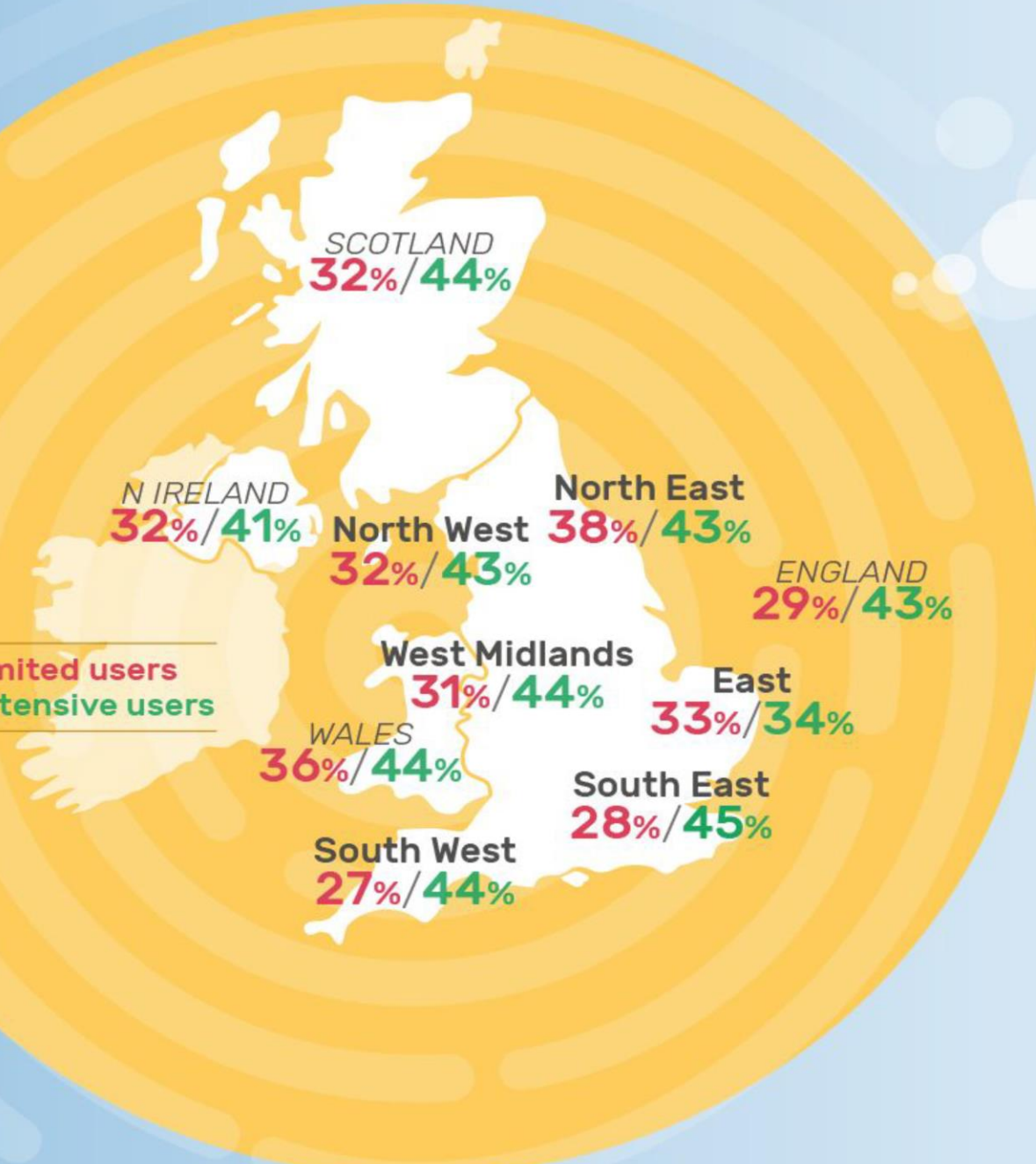
lack the most basic
digital skills needed
for everyday life

2
million

households struggle
with affordability of
internet access



KEY
% Limited users
% Extensive users



Good Things
Foundation

WHY PEOPLE ARE NOT ONLINE

36%
It's too
expensive

46%
It's too
complicated

37%
I don't have
the right
equipment

42%
Not interested
I see **no need**



The economic impact of digital inclusion in the UK

This report - commissioned from economists Cebr and supported by Capita - sets out the costs and benefits to investing in digital inclusion for all.

This report, launched by Good Things Foundation, sets out the economic impact of digital skills and inclusion in the UK. The report finds that investment of £1.4 billion could reap economic benefits of £13.7 billion for UK plc. This is £9.48 return for every £1 invested.

£9.48

Return for every £1 invested

£1.4 billion

in efficiency savings for government

£3.5 billion

savings for individuals through online shopping

I'm happier
85% connect better with friends and family.

I'm healthier
49% say digital helps manage and improve their physical and mental health.

I'm better off
Manual workers with high or very high digital engagement earn £421 more per month than less digitally engaged peers.

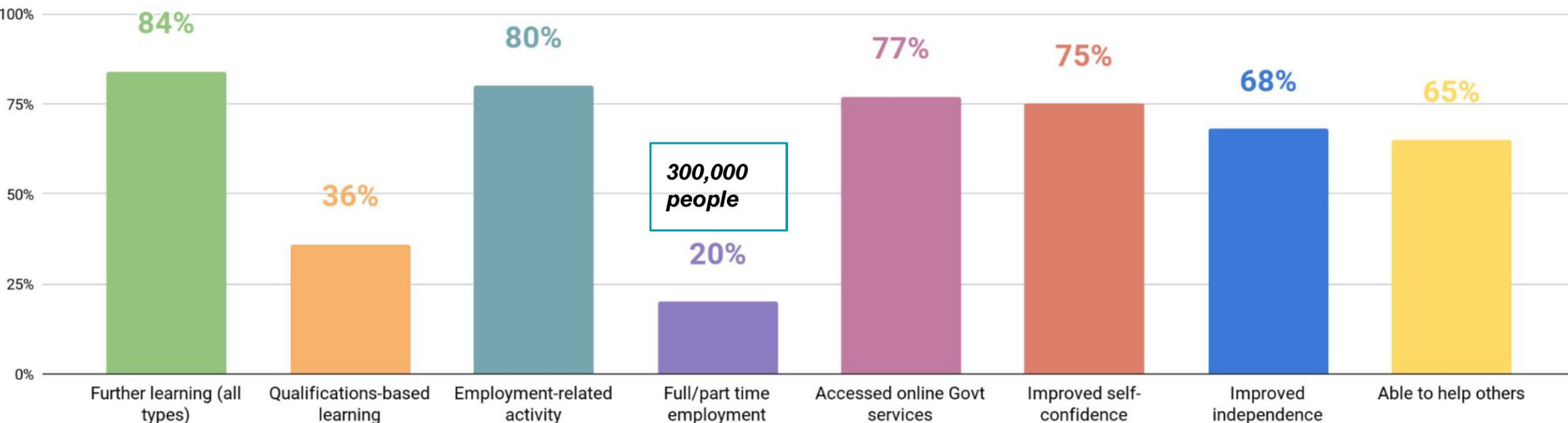
The UK gets good value
It's estimated the UK benefits by almost £15 for every £1 invested in helping people acquire basic digital skills.

I get better value
The most digitally engaged pay £228 less on their bills per year than the least engaged.



Impact across policy areas, across outcomes and impact

From 2014-2021, **1.5 million** people were supported to learn Essential Digital Skills through the Future Digital Inclusion programme. 77% faced social exclusion in different forms. After gaining digital motivation, confidence and skills:



Source: FDI data collected by Good Things Foundation through progression survey, 2014-2021

John's story

When profoundly Deaf Bridport resident John Phillips, whose only method of communication is sign language, received a free smartphone, he had no idea just how much it would transform his life.

“The phone has been an absolute life saver; it's opened up a whole new world to me.

“The best part has been contacting my friends again via WhatsApp because I had no contact with them for so long. We send each other videos and messages and it's been wonderful.”



Our track record

Good Things Foundation has over 10 years of experience in working with partners across the globe and helping people to benefit from the digital world.



We've reached over
4 million people
worldwide
(2010 - 2022)



We supported over
22,000 people
with free devices,
internet data
and support
(2020-22)



We have secured
500,000 mobile data SIMs
for the
National Databank
(2021 - 2023)

Our work drives positive outcomes for people



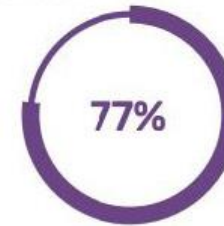
feel more confident about using online tools to manage their health⁷



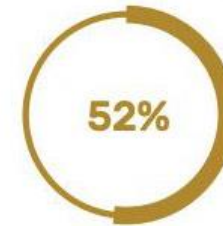
made fewer visits to their GP⁷



go onto employment related activities and **20% get a job**⁸



use online government services⁹



feel less lonely¹⁰



To Fix the Digital Divide change is urgently needed

1. The current pace of progress will not fix the digital divide



2. What works is a tailored and trusted approach to supporting our most vulnerable



3. The UK needs a strong social infrastructure for digital inclusion



The pandemic has made a difference:



2020

2021

48% → **32%**

of those offline say
'nothing' would encourage
them to get online

5% → **35%**

of people say 'local
support' would be the
easiest way to learn new
digital skills

Strathfoyle
Library, Derry,
Northern
Ireland

Age Connects,
Torfaen, Wales

Bettyhill Library
and Service Point,
Sutherland,
Scotland

Kerry's
Corner, Wigan

Smartlyte,
Balsall Heath,
Birmingham

Redbridge
Institute, East
London



WHY PEOPLE ARE NOT ONLINE

36%
It's too
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46%
It's too
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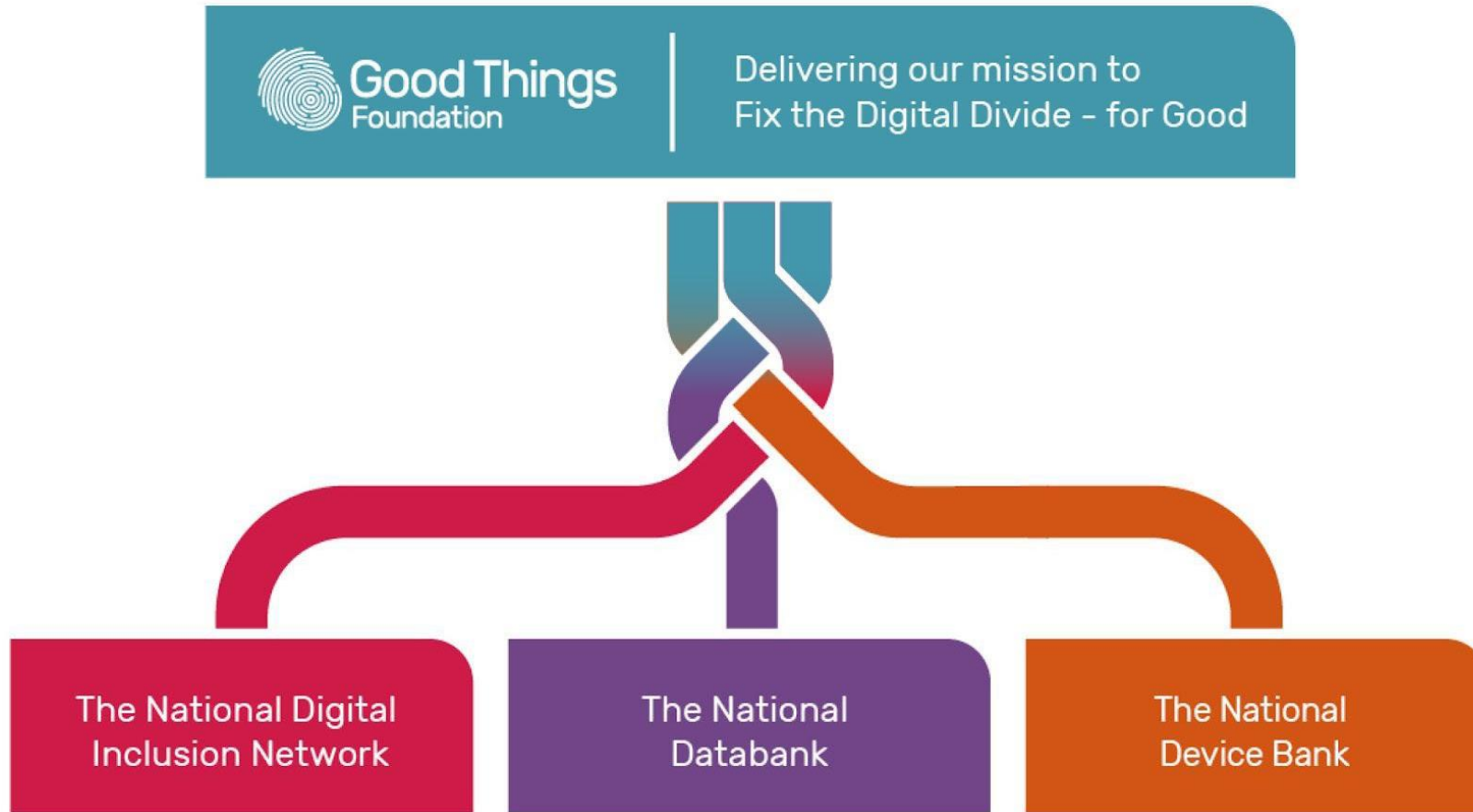
37%
I don't have
the right
equipment



42%
Not interested
I see **no need**



The pandemic: our pivot to a new offer for excluded people



We are establishing a strong, scaled social infrastructure for digital inclusion - UK-wide and sustainable







Find your nearest databank

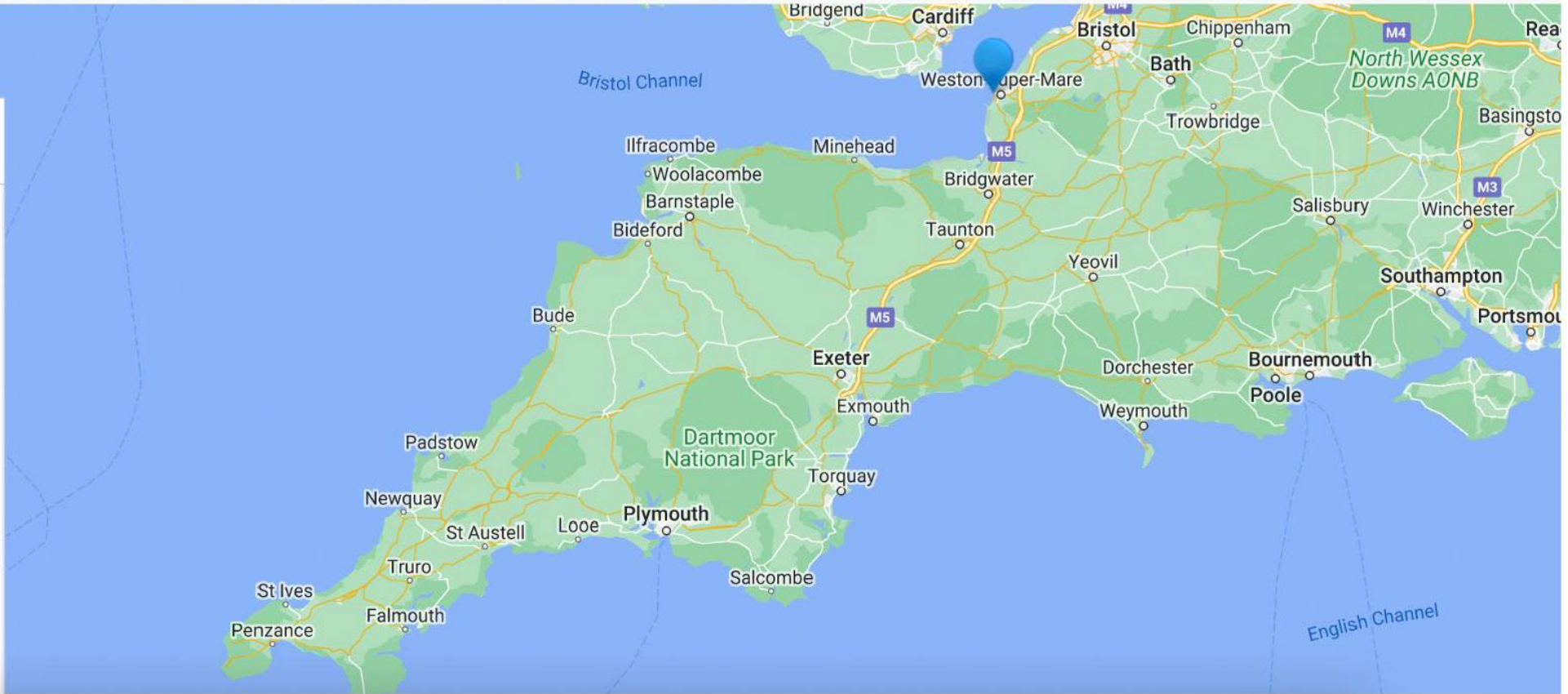
If you need more help staying connected, [Good Things Foundation's](#) growing network of databank partners can provide support. Enter your postcode to find your nearest databank.

Map Satellite

Show >

-  + Refugee Action Kingston
-  + Maryhill Integration Network
-  + Entraide
-  + Wearside Women in Need
-  + Glasgow Disability Alliance
-  + Stepping Stones for Families



Digital is now a wider determinant of health



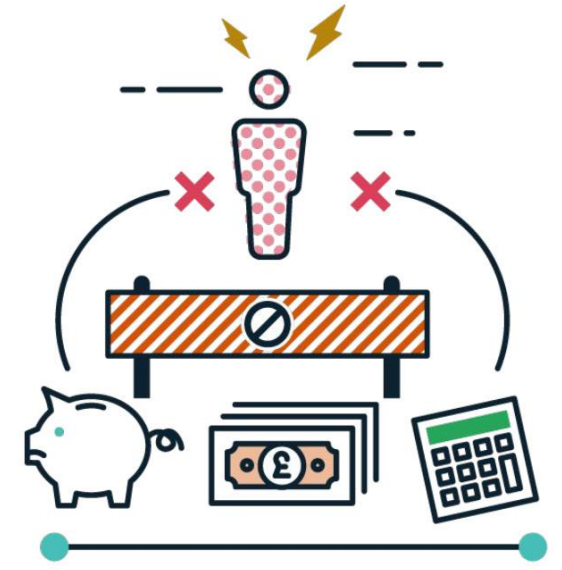
Jobs
Education



Social connection
Participation



Health
Care
Housing



Money
Benefits
Bills

NHS Widening Digital Participation 2012-20

Digital Inclusion in Health and Care

COVID-19 has changed the dial on digital and its role in health and care settings meaning the lessons learned and shared in this report could not be more timely.



21,178

people supported, including 824 people in co-design, and 1,350 digital champions

166,162

people made aware of digital health through Good Things' network of community partners

53,173

people improved their digital health literacy through 'Learn My Way'

Chapter 1 Improving digital health literacy	16
Chapter 2 Digital Health Hubs in Communities	21
Chapter 3 Digital health and people with complex lives	30
Chapter 4 Disability, dementia and digital health inclusion	36
Chapter 5 Older people, social care and digital inclusion	42
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Chapter 7 Upskilling the health and care workforce	50
Chapter 8 Conclusion and recommendations	56

Digital Lifeline



Good Things
Foundation

Supporting digital inclusion of
people with learning disabilities



5,500

people
supported in
under 4 months



2,354

pieces of
adaptive kit for
additional needs



24GB

of data - with
some top-ups
provided



146

community
partners across
England



5,500

Lenovo M10
tablets - gifted
not loaned



Some
support

to use it
and make it
accessible

The digital divide
for people with
learning disabilities



of disabled people
have never
been online
(vs. 3% of non-disabled people)¹



of people with learning or memory
disabilities do not have the
Essential Digital Skills for Life
(vs. 21% of total UK population)²

91% of people reported experiencing at least one benefit from Digital Lifeline³

After 3-4 weeks:⁴

- + 68% agreed 'I feel more confident'
- + 64% agreed 'my digital skills have improved'
- + 57% agreed 'I feel more connected'
- + 52% agreed 'I feel less lonely'
- + 32% agreed 'my online safety skills have improved'



After 4-7 months⁵ people said they:

- Had improved their digital skills
- 🌐 Were more motivated to get online
- 🔗 Were feeling less lonely and isolated
- ♥ Had improved health and wellbeing
- ✊ Felt more independent
- 🏠 Were better able to participate in their community



"It's been brilliant. It's opened up a lot of opportunities."

"It makes me feel more confident."

"The responsibility makes me feel like I can prove that I can look after other things."

"It's connected me to the outside world and made me feel less isolated."

"It makes me feel happy, It keeps me from getting bored.
It relaxes me. It helps me calm down if I'm upset."



And (almost) finally, some hints and tips

- **Embed into what you're already planning, embed in your priorities**
 - You need a plan, you need to prioritise, you need a budget ... but embed as much as possible to ensure it's sustainable and not just a project
- **Never reinvent the wheel**
 - There's no need for another basic digital skills platform
 - Eg Learn My Way, Digital Unite, Barclays Digital Wings, Lloyds Academy, Idea, BT Skills for Tomorrow, et al
 - The Databank and Device Bank exist - scaled and scaling up. Use them if needed
 - There's lots of research evidence and heatmaps available
 - Digital Nation, "Digital Inclusion Risk Index (DERI)"
 - There will be local community organisations near you who are already supporting digitally excluded people - seek them out, through the Online Centres Network or local links
- **Work in partnership**
 - Either to build on what's available (as above ++)
 - And/Or, co-design, co-develop, and deliver together
- **Be ambitious, but get going**
 - The need for action is now

And finally



Together, we can fix the
digital divide - for Good

@helenmilner @goodthingsfdn
helen@goodthingsfoundation.org

Digital Inclusion: readiness, barriers, adoption and assumptions

Buckingham S, Poole R, Walker T, Elliott L, Menneer T, Tu G, Bland E, Morrissey K

Background/context

Access:

- Varying access, lower amongst more vulnerable.

Support:

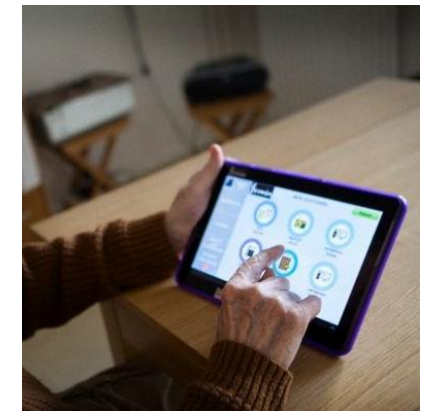
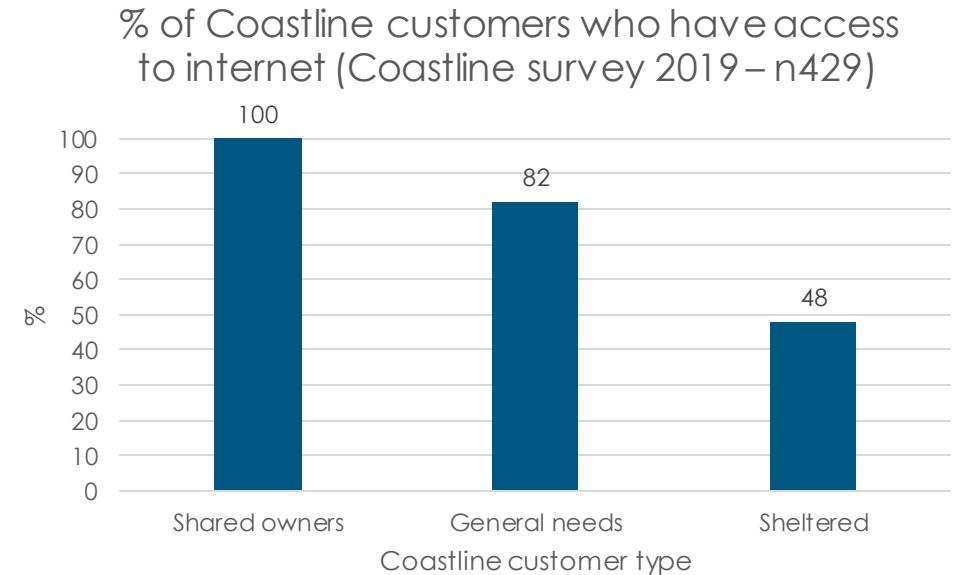
- High demand for basic training: turning on devices, setting up email accounts, sending emails, understanding internet safety etc.

Acceptability and usability:

- Very low uptake and usage of Smartline tablets – why?

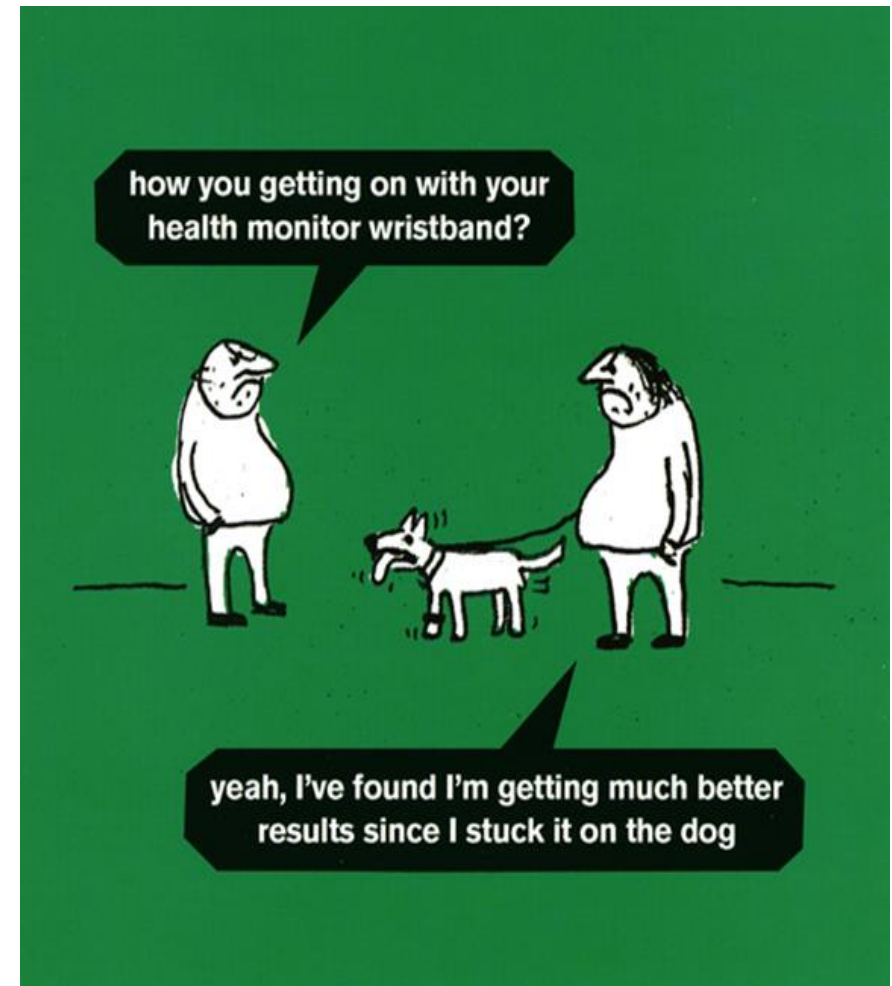
Overarching objective:

- Understand and improve digital inclusion in Smartline participants



Study 1: Acceptability of digital technologies for health and wellbeing

- What are people's levels of experience and skills with digital technology?
- What factors influence technology use (barriers and facilitators)?
- How willing are people to try new technologies?
- What are the preferred types of technology, including perceived usefulness and ease of use?



Methods

- Three focus groups in Camborne, Pool and Redruth (n = 19)
- Telephone interviews (n = 4)
- Purposive, maximal variation sample



Methods

- Discussions using a theory-based topic guide (e.g. Technology Acceptance Model, Davis 1989)
- Self-rated digital skills (UK Government Digital Inclusion Scale)
- Preference ranking of technologies
- Thematic analysis and descriptive statistics



Technologies



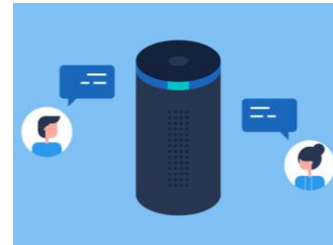
a) Wearable activity monitor (e.g. Fitbit®)



e) Video conferencing



b) Social messaging or networking (e.g. WhatsApp or Facebook group)



f) Virtual assistant (e.g. Amazon Alexa)



c) Smartphone app (e.g. walking or home-based exercises)



g) Soundscapes



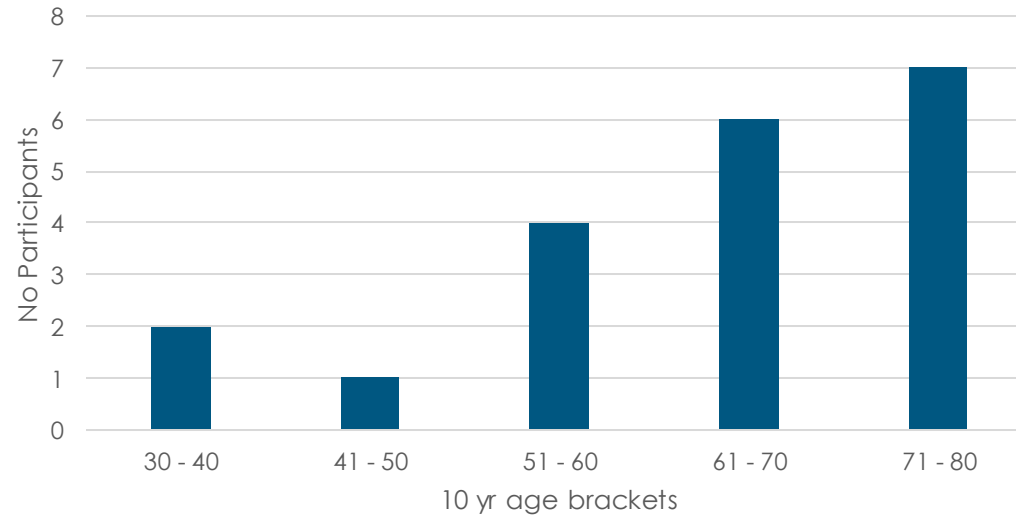
d) Social online gaming (e.g. poker, Scrabble, puzzles)



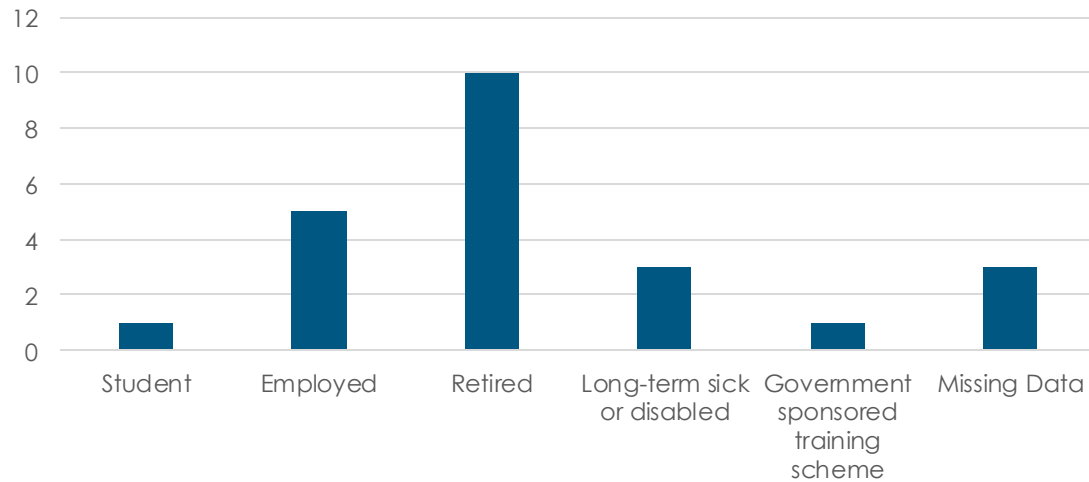
h) Electronic books and audio books (e.g. BorrowBox)

Participants

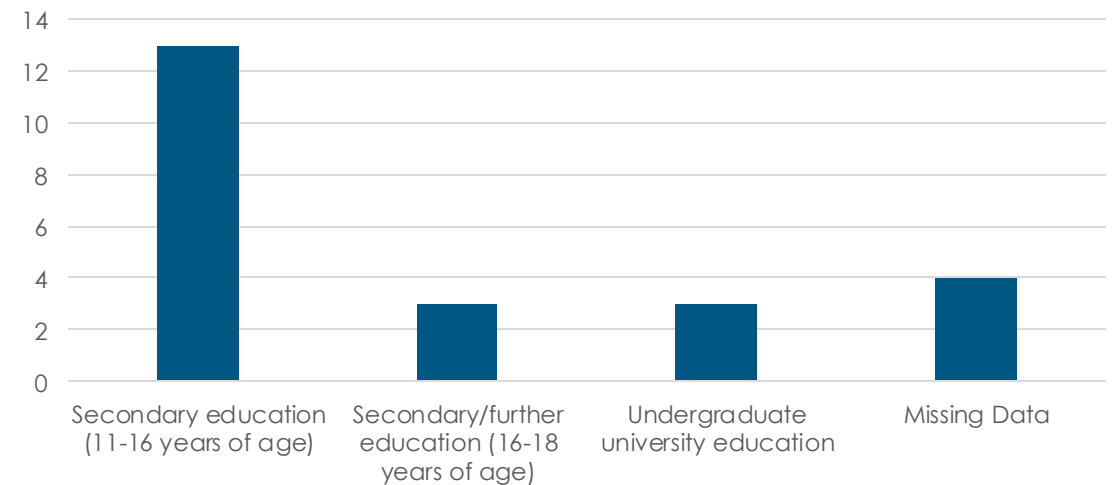
Age



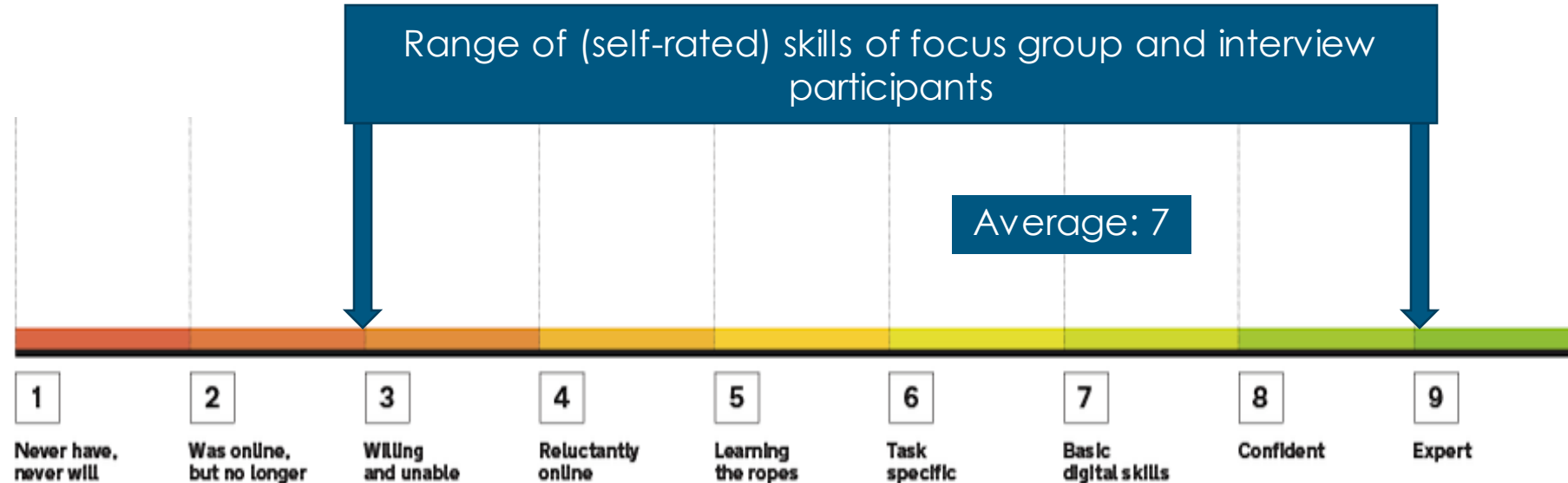
Employment Status



Education



UK Gov Digital Inclusion Scale (part of the Cabinet Office Digital Inclusion Strategy)



A typical quote from the **willing and unable** group is "I want to learn but I don't want to make a fool of myself"

A typical quote from **Confident or Expert** users is "It's convenient to do ANYTHING on the web – look up information, be entertained, go shopping and communicate with people."

- **Generally positive attitudes towards technology**

“... potential benefits for people with physical or mental health problems, but are we creating technology for bettering society or for technology’s sake?”

- **Willing to learn to use new technologies and improve skills**

“If it would do what it said on the tin, I would have a crack”

- **Lack of awareness of available technologies**

“[There are] so many products and versions of the same thing out there, I would not know which one would help me”

Factors influencing technology use

FUNCTIONAL

Access / availability

Cost

Digital skills

PSYCHOLOGICAL AND ATTITUDINAL

Knowledge and
awareness

Motivation

Confidence / fear of
getting it wrong

Attitudinal (e.g.
perception technology
is for younger people)

TECHNOLOGY- ASSOCIATED

Usability

Complexity

Usefulness

PHYSICAL / HEALTH

Fitness

Mobility

Poor memory

Sensory impairments

PRIVACY, SAFETY AND SECURITY

Preferred types of technology



1. Wearable activity monitor (e.g. Fitbit®)

Help achieve goals set by doctor, easy to use, very interested in heart rate and sleep monitoring functions.



2. Virtual assistant (e.g. Amazon Alexa)

Easy to use, seen as “useful for just about anything”, and “good for entertainment and information finding”. Particularly beneficial for people with health problems or limited mobility.



3. Social messaging or networking (social messaging preferred)

Connect with people with shared interests, perceived need for training in using different features.

Emerging themes – what did we learn?

- Need and desire to improve awareness and skills:

GETTING ONLINE STAYING CONNECTED

- Technologies should be easy to use and have a clear purpose for improving health and wellbeing: **USABILITY AND USEFULNESS**

- Technology should not replace human contact:

NEED FOR HUMAN INTERACTION

- Individual needs and preferences:


TAILORED INTERVENTIONS AND CHOICE




Further reading!

Qualitative Study

**DIGITAL
HEALTH** 

The feasibility and acceptability of digital technology for health and wellbeing in social housing residents in Cornwall: A qualitative scoping study

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Sarah Ann Buckingham¹ , Tim Walker² , Karyn Morrissey³  and on behalf of the Smartline project team

Abstract

Objective: The aim of this study was to explore the feasibility and acceptability of digital technology for improving health and wellbeing in social housing residents living in a deprived area in Cornwall, England.

Methods: Qualitative scoping study with focus groups and telephone interviews (23 participants in total). Focus groups and interviews were audio-recorded, transcribed verbatim and analysed thematically.

Results: Levels of use and experience with digital technology were diverse in this group, ranging from 'willing and unable' to 'expert' on a self-perceived scale. Overall, participants had positive perceptions of technology and were keen to try new technologies. Five categories of factors influencing technology use were identified: functional, physical / health, psychological and attitudinal, technology-associated barriers, and privacy, safety and security. Preferred types of digital technology were wearable activity monitors (e.g. Fitbit®), virtual assistants (e.g. Amazon Alexa) and social messaging (e.g. WhatsApp). There was a strong consensus that technology should be easy to use and should have a clear purpose. There was a need to

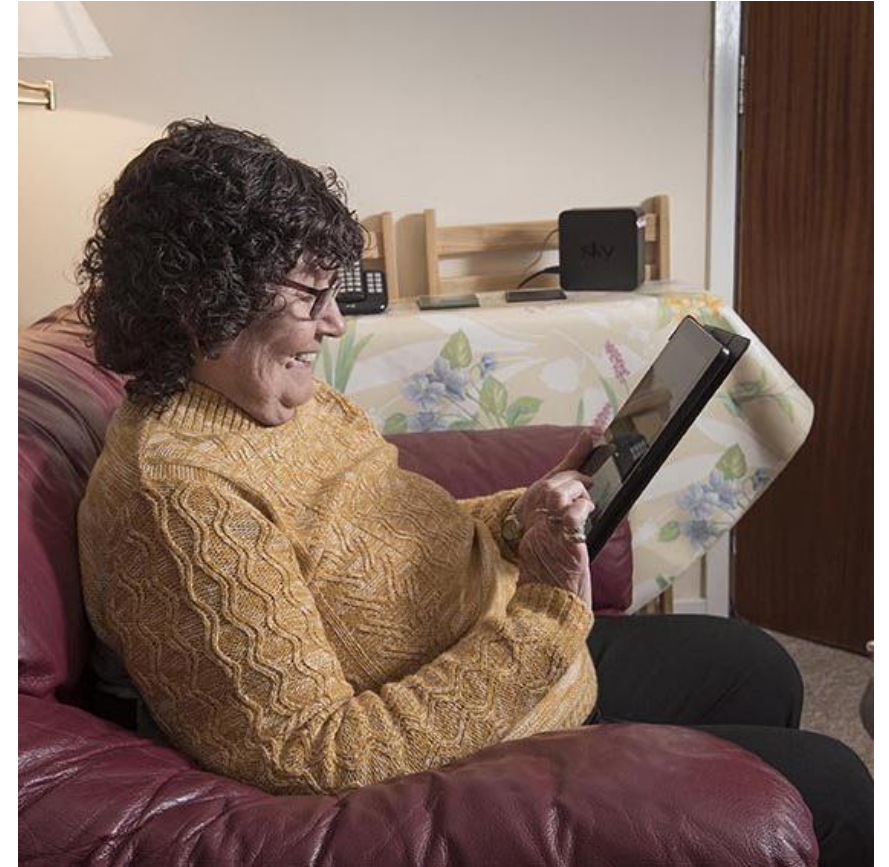
Study 2: Getting Online: Staying Connected

Project Aim:

Help Smartline participants to get online and use digital communications technologies (e.g. video calls and online messaging) with confidence

Design:

- Training delivered by Cornwall Council's Digital Inclusion Team (DIT)
- Redesigned as over-the-phone training intervention due to COVID social distancing regulations;



Demand for training:

- Moderate demand, 39% (67/168) of respondents were interested in potentially undertaking the training;
- Demand highest for training on video calling, primarily Zoom, and setting up and using devices;
- Demand affected by if friends use technology and if support available from family networks.

“I don't know anyone who I would call. I only have my sister and she doesn't use internet stuff”
(John, M, 55-64)

*“No help necessary,
grandchildren able to help”*
(Rebecca, 65-74, F)



Barriers to training:

- Personal health;
- Caring for a family member;

Acceptability of the training:

- Preference for face-to-face training;
- Concerns about effectiveness of over the phone training.

“I am apprehensive about if a phone conversation would be enough to get online, would prefer one-to-one and face-to-face. I learn best by doing”
(Michael, M, 65-74)



“I am interested [in the training], but my head is just full of decisions about my wife who will be moving to a nursing home, I need to focus on what is important to me now”
(Gareth, M, 55-64)

Findings

Effectiveness of training:

- No significant changes in digital or wellbeing outcomes
- Overall, training enabled participants to achieve their personal and digital goals.

Training successes:

- Mary now uses video calls to talk to her daughters at dinnertime;
- Julia learned how to order flowers and medicine;
- Susan learned about online safety and how to record and mix music;
- Mark learned how to use WhatsApp and video call.



Emerging themes – what did we learn?

Conclusions:

- There is both need and demand for digital training among social housing populations.
- Strong evidence that with flexibility and persistence from the training providers, participants' social and personal goals can be met.

Implications:

- Trusted local intermediaries (VCSO's, Councils, public libraries, and Housing Associations) are important for identifying and reaching those who could benefit from digital training.



Study 3: Click and Connect

A community-based online forum to increase social connectedness among Coastline housing residents

Research questions

1. The feasibility and acceptability of the forum
2. Users' motivations for joining and barriers and facilitators to engagement
3. The potential impact of the platform on social connectivity and mental wellbeing

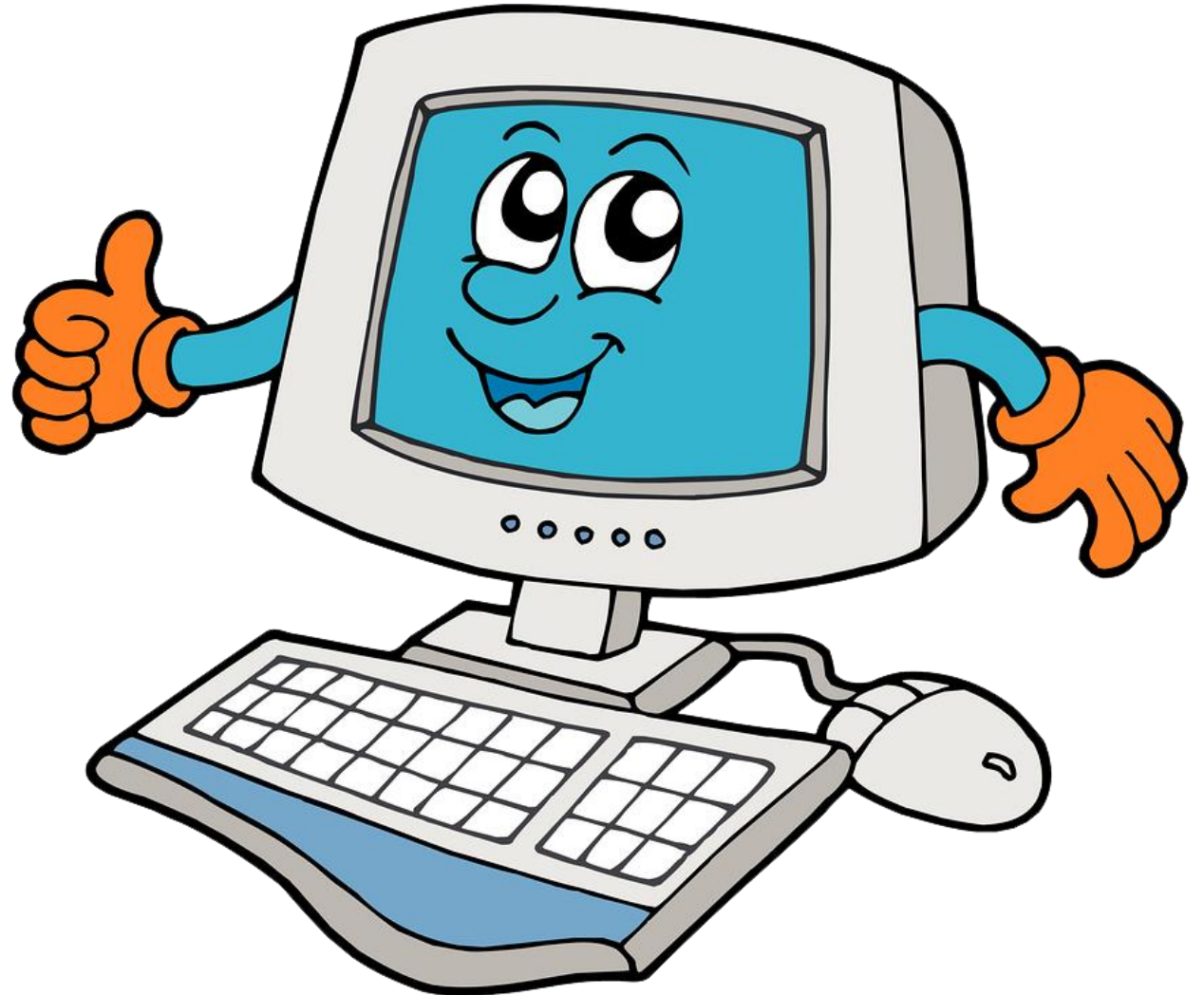
Design

Co-producing an intervention logic model

Process evaluation: feasibility, acceptability and potential impact of the intervention

Methods

- Co-production of a logic model
- Virtual participant observation
- In-depth interviews with residents
- In-depth interviews with facilitators



Feasibility

- The forum had over 500 posts including uploaded photos within threads
- The most contributed to forum topics were: local history, sport and exercise, music, pets and animals, and books and reading

Acceptability

- Generally acceptable to participants
- Technical issues were a frustration and barrier to engagement

Digital literacy

- The forum itself was helpful as a safe, enclosed space for residents to practice using their digital skills

I found it – I increased my skills, I've become much more confident with my skills. And um, how can I say, it's improved my mental health. [...] I had a problem getting medication because I live alone and [...] so I went online and I found that I can now order my meds myself via a pharmacy. And that today, they've been ordered. I'm doing it myself. It's made me become independent... by using the internet. I wouldn't have done that before. – PID4, female, Resident

Potential impact

- Increased digital competence and self-efficacy
- Brought into focus the identities of residents and staff within the online community
- Helped some participants to maintain a sense of connection between the online coffee mornings and receive community updates
- Reduced sense of social isolation
 - You're keeping in touch with people from the outside world even though you're within four walls. - PID7, male, Resident*
- Lack of critical mass for sustained engagement

Emerging themes – what did we learn?

- **Social and environmental contexts are important**
- **Context of an intervention may change over time**
 - **Relevant > redundant**
- **Real world interventions complement each other and overlap**



- 1. Need to improve digital competence and digital inclusion in social housing residents (and other vulnerable groups)**
Skills; access; awareness; knowledge; attitudes; confidence; motivation
- 2. Technology should complement human interactions**
- 3. Technology must be easy to use and fit-for-purpose**
- 4. Interventions must be tailored and flexible**
- 5. Collaboration and co-production**

Response Q&A Panel Discussion

- Tracey Roose, CEO, Age UK Cornwall & Isles of Scilly (Panel Chair)
- Mark England, Head of Innovation, Maintenance and Group Procurement, Coastline Housing
- Chris Jones, CEO, HomeLINK
- Prof Karyn Morrissey, Denmark Technology University
- Helen Milner OBE, Group Chief Executive, Good Things Foundation



Closing Remarks

Assoc Prof Emma Bland, Smartline
Principal Investigator, University of Exeter
&
Tracey Roose, CEO, Age UK Cornwall &
Isles of Scilly, and Smartline Advisory
Board Chair



Thank You

To find out more about Smartline, please visit our website at
<https://www.smartline.org.uk/>

or email us at smartline@exeter.ac.uk





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