

Neighbourhood Approaches to Digital Inclusion:

Using Behavioural Systems Mapping for Improving Intervention Outcomes for Older People

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Department for
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Who We Are

DG Cities was established in 2015 by the Royal Borough of Greenwich.

We deliver public sector innovation that aims to:

- Improve delivery for local communities
- Help the public to co-design evidence-based interventions
- Deliver public-first and budget conscious innovation



About the Funding

This is a research project funded by the R&D stream of the Government's *Digital Inclusion Innovation Fund*.

It will test Behavioural Systems Mapping (BSM) as a participatory approach to designing neighbourhood strategies that improve digital inclusion for older people (60+) and support better access to online services including those related to health and wellbeing.



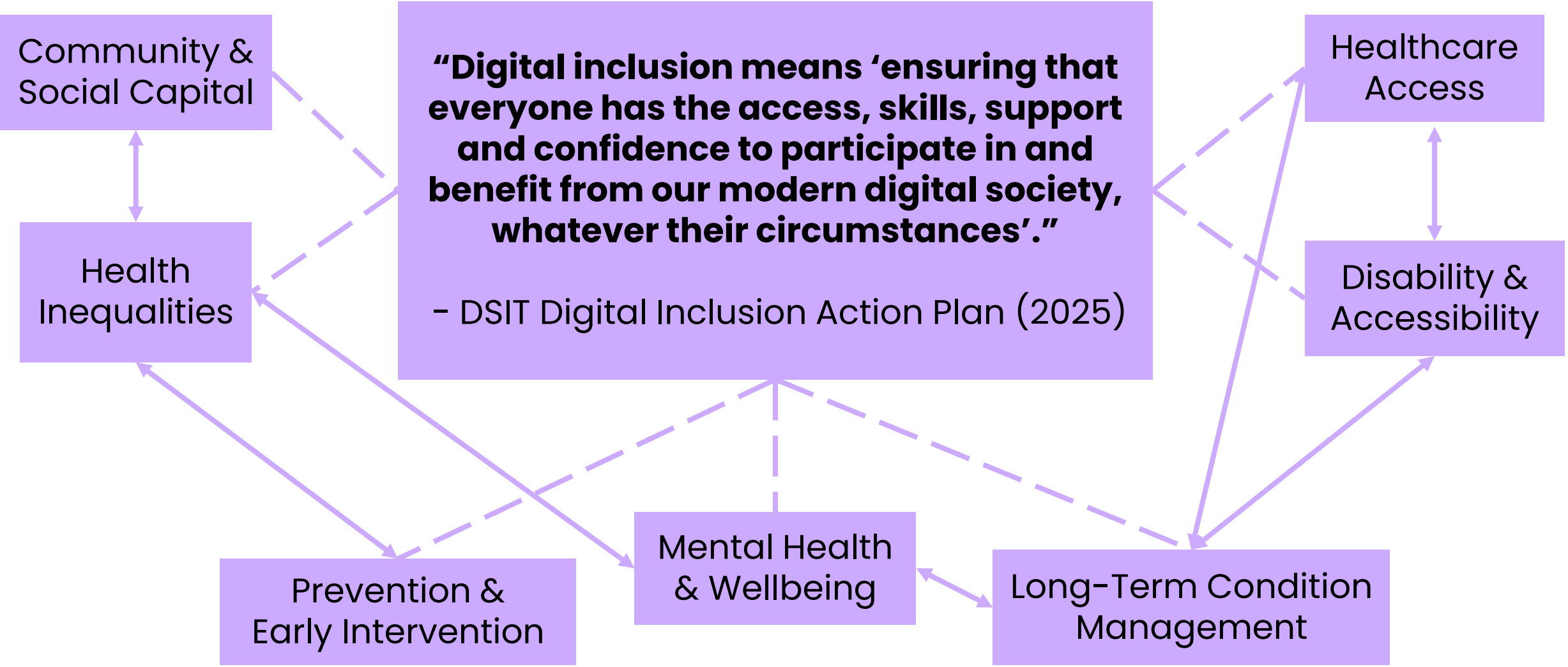
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Digital Inclusion: A Public Health Issue?



Why Neighbourhoods?

- Aligned with NHS 10 Year Plan of shift toward neighbourhood-based care
- The Independent Commission on Neighbourhoods finds digital inclusion is most effective when systems empower neighbourhood-level action
- Neighbourhoods provide the right spatial level to understand local barriers and tailor digital inclusion interventions more effectively
- Councils, health services, and the voluntary sector increasingly coordinate resources and impact at neighbourhood level (LGA Pride in Place study)
- Capacity building legacy through dedicated training + free national toolkit to embed BSM beyond the project

Why Behavioural Systems Mapping?

BSM creates a visual map that combines:

Behavioural Science



Systems Thinking



**Participatory
Approaches**

The A-B-C-D of BSM

COM-B Driver 1

COM-B Driver 2

DRIVER:

Something that influences whether a Behaviour is likely to happen or not;
e.g. pressure to comply with policy, fear of scams...

ACTOR:
A person, group,
organisation or
institution;

e.g. older
residents, GPs,
NHS...

Actor 1
+
Behaviour 1

CONNECTION: A causal relationship between two Behaviours; e.g. attending a digital skills course might decrease reliance on family members for digital tasks...

+

Connection

-

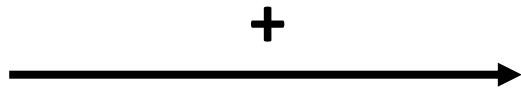
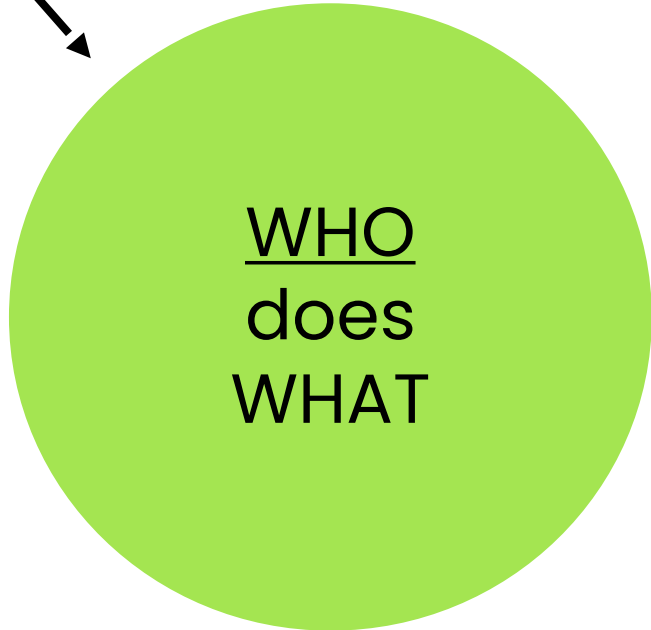
Actor 2
+
Behaviour 2

BEHAVIOUR:
An (in)directly
observable
action;

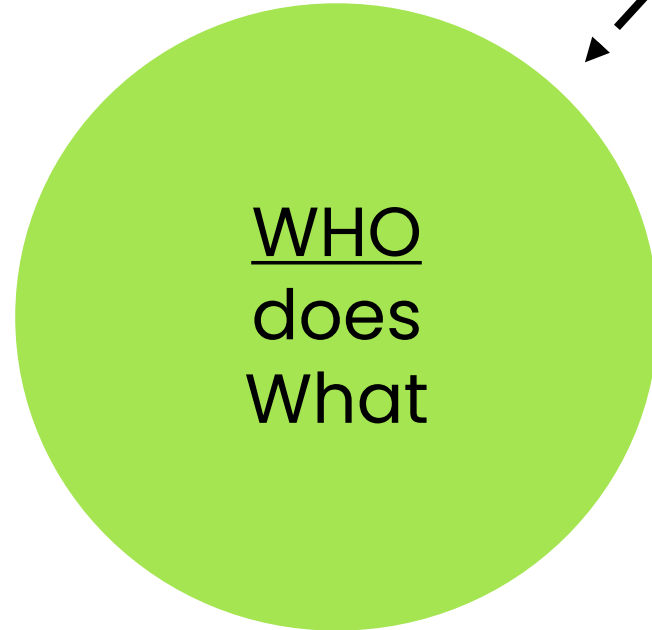
e.g. using the
NHS app to
book a GP
appointment,
renewing a
prescription
online...

Or...

WHY



WHY



Workshops at Pork Pie Library



Workshops at Pork Pie Library



Workshop 1

EYRES MONSELL & GILMORTON ESTATES DIGITAL INCLUSION BEHAVIOURAL SYSTEMS MAP REFLECTION PHASE 1

"What is the overarching goal we're working toward for digital inclusion of older people on the Eyres Monsell and Gilmorton Estates?"

Please share your thoughts.

Our goal is to improve digital inclusion of older people in a way that addresses wider issues of isolation, while also recognizing gaps in our understanding of how older residents currently use technology, their reliance on family and friends for advice, and the impact of lower educational attainment on the issue.

Key issues:

- Empowering older people to access essential online services independently and confidently.
- Building local confidence and helping confidence to scale digital inclusion as a way of being (local support).
- Improving quality of life and wellbeing through digital skills and meaningful engagement with online tools.
- Understanding real patterns of technology use among older residents and avoiding assumptions about skills, preferences, or reliance on informal support.
- Developing long-term, continuous, and sustainable solutions that factor being change rather than their own loss.

DSIT Action Plan Priorities to align with:

- D) Building confidence and supporting local delivery
- E) Community engagement

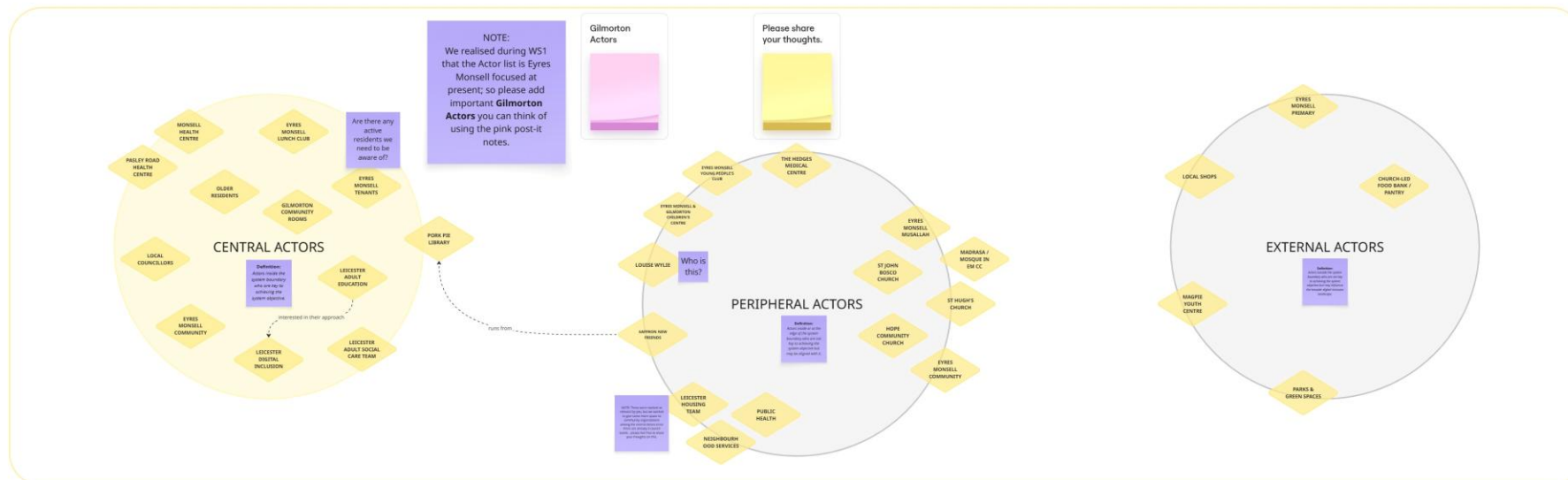
"What parts of the system are involved in achieving our objective on the Eyres Monsell and Gilmorton Estates?"

Please share your thoughts.

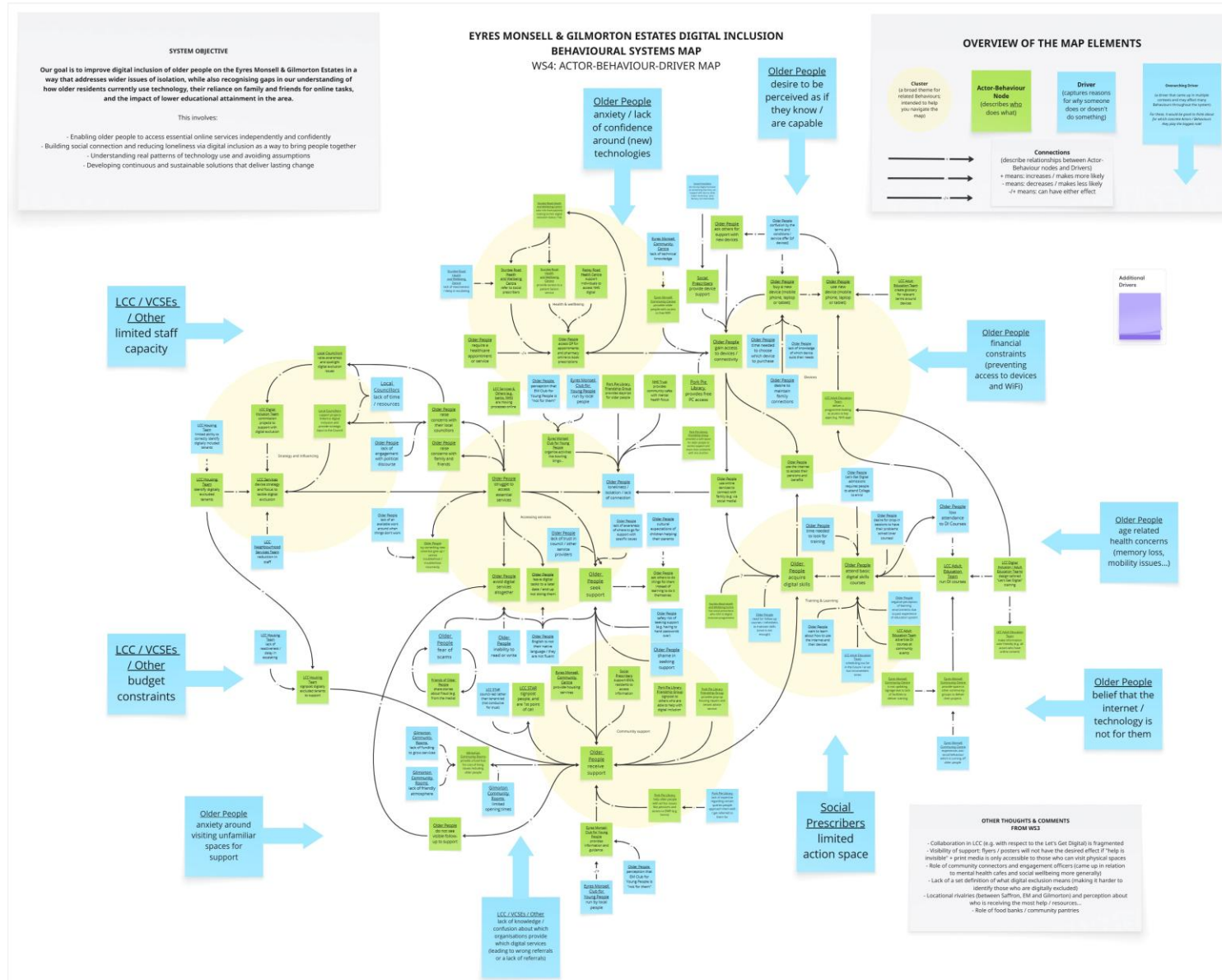
The system **is** **partially** **controlled** where older people engage with community life such as coffee mornings, community centres, the Post Office, the library, the EML, and the Gilmorton Rooms as well as **partially** **controlled** by the availability of local services, bus and access to local technology, and personal skills/attitudes/availability of digital skills. It also includes the frontline services and workers who respond and respond to digital needs, including GPs, housing officers, and community safety staff whose digital skills and responses may contribute to **partially** **controlled** **support** **pathways** **for** **people** **who** **cannot** **access** **online** **services**.

The system **may** **or** **may** **not** **include** wider contextual influences that affect older residents' digital inclusion but sit only partially within local control, such as the role of family carers, residents of all ages with mobility or cognitive barriers, open public WiFi availability, language barriers, and local non-digital support pathways for people who cannot access online services.

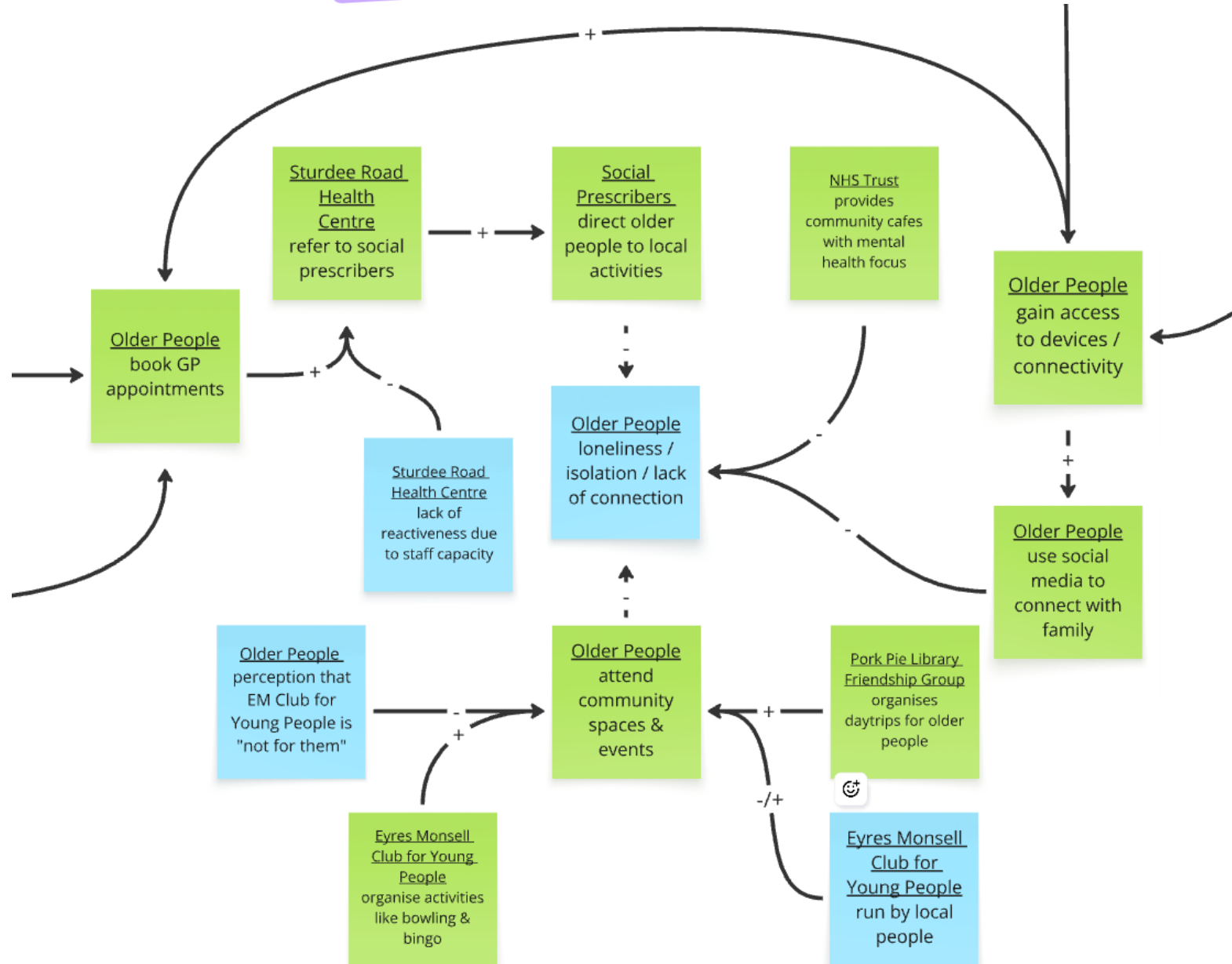
The system **does not** **include** broader structural or external factors that sit beyond the scope of local influence, such as the overall cost of digital, digital infrastructure provision, digital services that older people do not prioritise, disengaged family members, or the operators of social media platforms.



Workshop 3



A Closer Look...



Applying BSM Across Five Neighbourhoods

- Systems maps are highly dependent on local contexts: DI challenges for older people are varied and nuanced
- System maps are also a direct product of the experiences and knowledge of workshop participants
- Public participation adds value and validates findings, though it can be challenging; qualitative approaches are being used to capture insights
- System maps are complemented with neighbourhood-level quantitative and qualitative evidence (bespoke spatial analysis and individuals' stories)
- Use-cases extend beyond intervention design to building shared understanding of problems, context, and stakeholder relationships

Emerging Benefits and Limitations

▪ Benefits

- Reframes DI systemically
- Demonstrates complexity in a manageable way
- Builds relationships and shared understanding across system actors
- Interdisciplinary method that promotes collaboration
- Creates space for resource prioritisation
- Practical tool beyond the workshop

▪ Limitations

- Maps can be overwhelming
- Scope shaped by initial system framing
- Participatory approach requires local capacity

Next steps: Building the evidence base by testing BSM across contexts, implementing interventions & measuring long-term impacts

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Got any questions or suggestions?
Just send me an email!

lara.suraci@dgcities.com

If you want to learn more about our work,
follow us on LinkedIn:

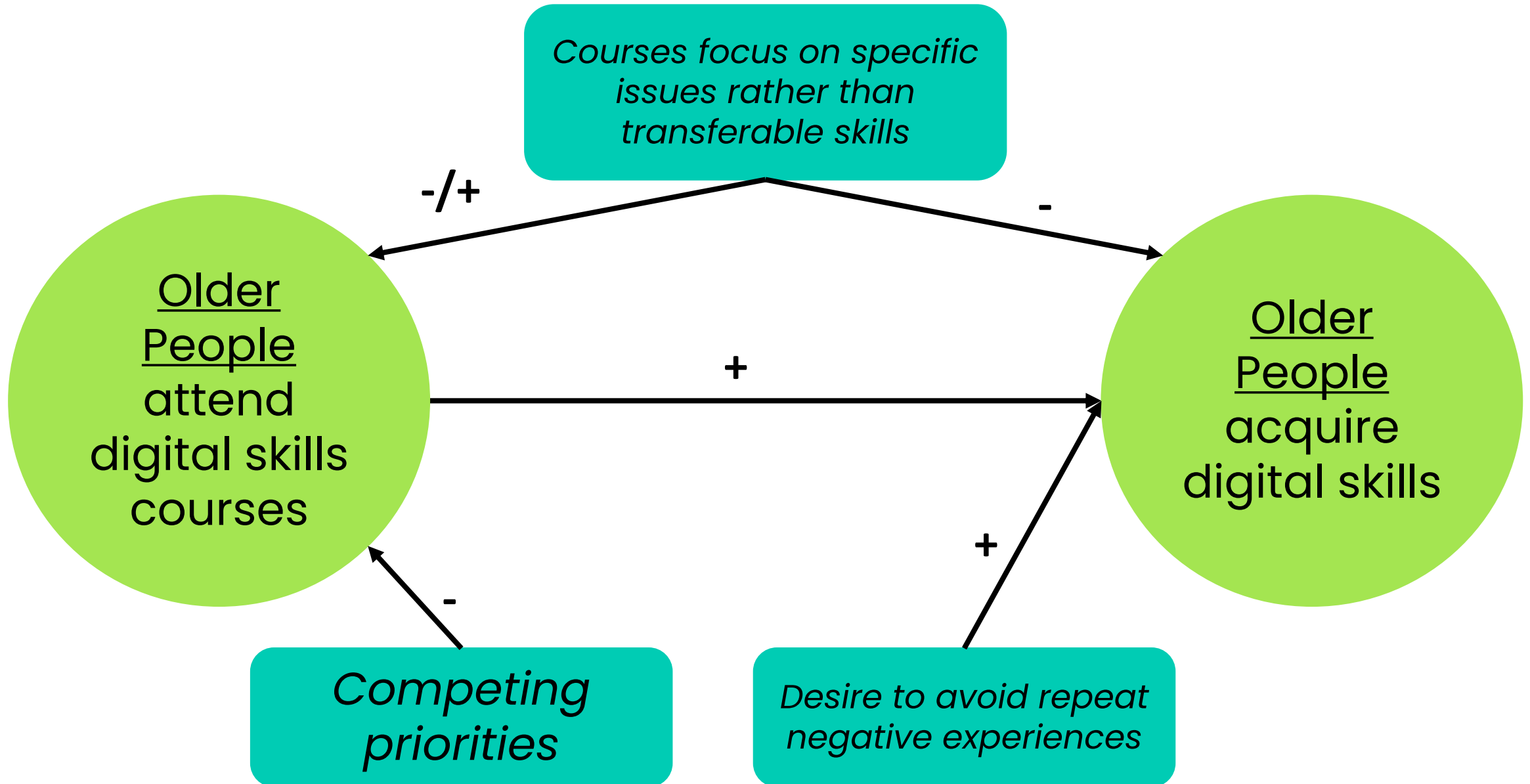
Thank You!



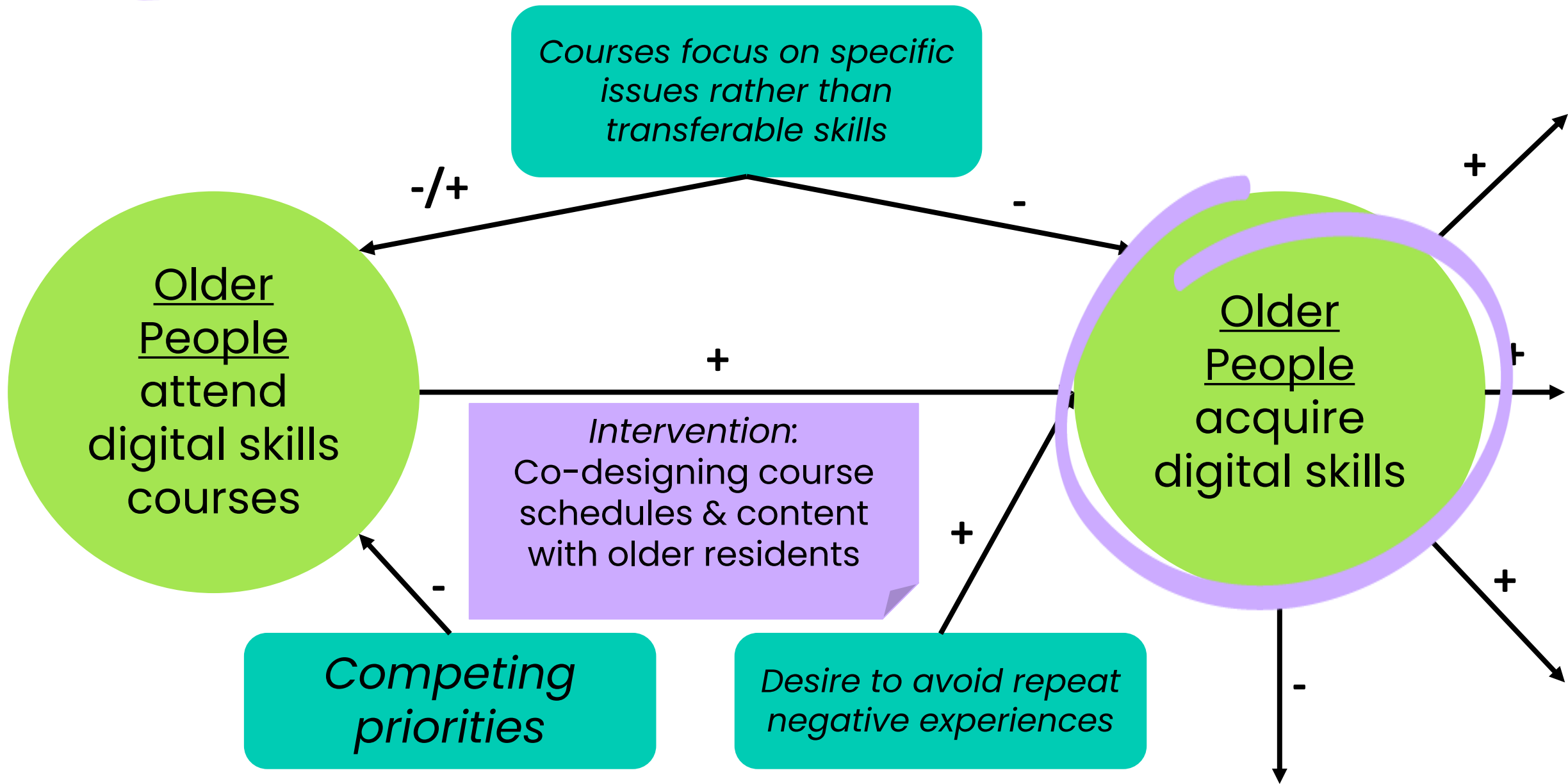
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Appendix

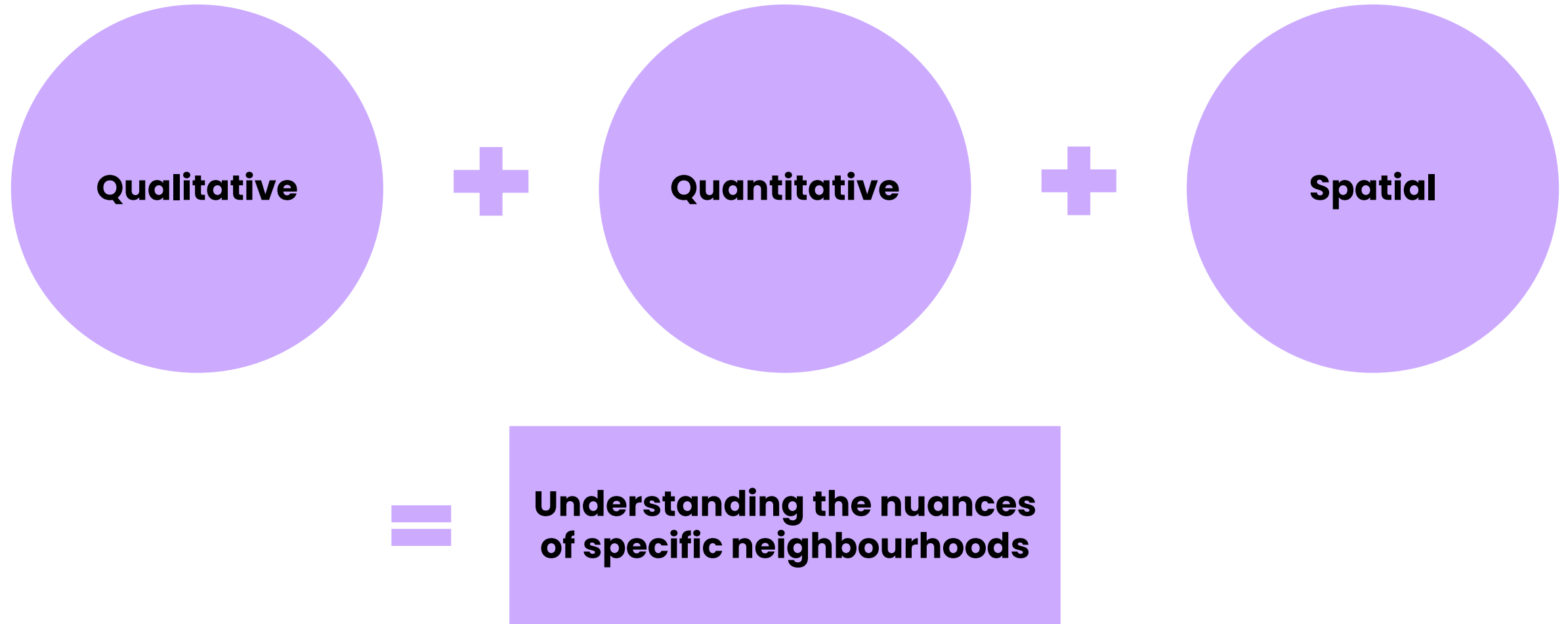
How To Read A Behavioural Systems Map



From Leverage Points To Interventions



Creating a Detailed Picture of Digital Exclusion



Standard Index Domains

Affordability: Income Deprivation Affecting Older People Index (IDAOPI)

Capability: Adult Skills IMD sub-domain, Digital Propensity or Hard-to-count

Connectivity & Infrastructure: Broadband availability and performance and mobile connectivity

Social Support: Proportion of single-person (65+) HHs

Access: Geographical Barriers to Services IMD sub-domain

Health & Wellbeing Constraints: Disability / Long-term condition that prevents day-to-day activities

This forms our overall, standard index for this project.

We also provide alternative indices that reflect other open data indicators + added value and insights of more bespoke local data and / or qualitative data.



Possible Bespoke Index Domains

Economic Activity or Status

Carer Status

Migration

Area Classification by Age

Bespoke Accessibility Indicator

Residence Type by Age

These are additional indicators which may strongly align with the system objectives of the selected neighbourhoods.

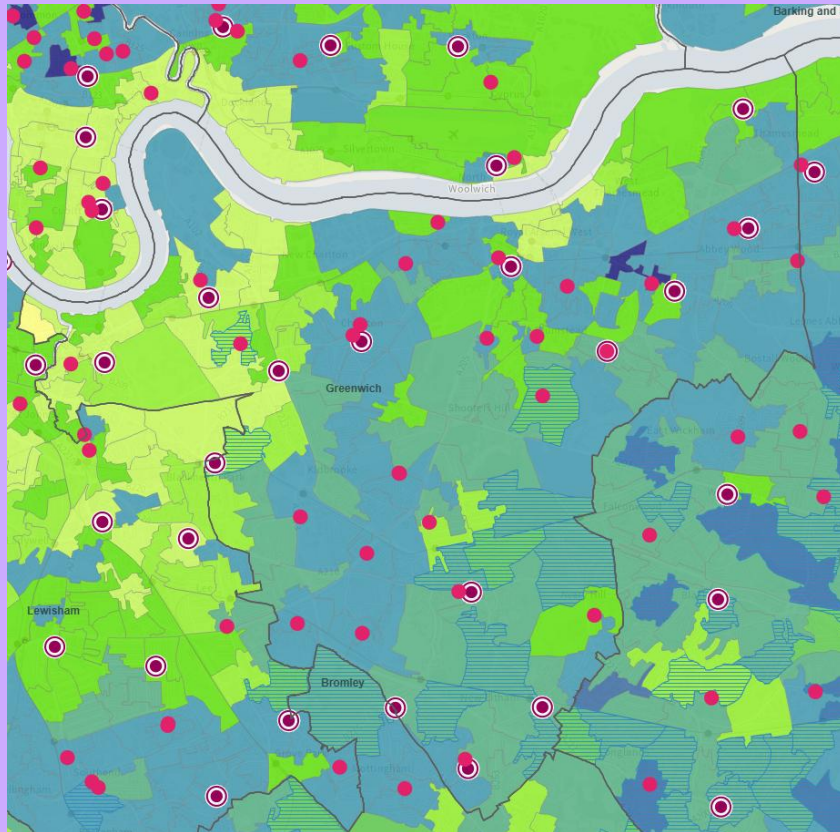
Health Deprivation

Public Transport Accessibility (PTAL)

Level of English Language

What This May Look Like

Example: LOTI map on digital exclusion, 2023



This view shows internet user classifications, libraries and community centres in RBG.

It does not yet contain local understanding – which is what we are trying to add.

This is at LSOA level; we are aiming to create neighbourhood-tailored outputs.

Is BSM Only Useful for Digital Inclusion?

