

# Digital Equity Framework Masterclass

City of Casey

### Statement of Acknowledgment

The City of Casey proudly acknowledges the Traditional Owners, Casey's Aboriginal communities and their rich culture and pays respect to their Elders past, present and future. We acknowledge Aboriginal people as Australia's First Peoples and as the Traditional Owners and Custodians of the land on which we work and live.

### Overview of the session

- a. Welcome and overview of the session- 5 min
- b. Overview of Digital Equity Framework and Process- 15 min
- c. ADII research 15 min
- d. Questions and Answer 20 min
- e. Digital Equity Framework development tools 15 min
- f. Case Study: Casey's Digital Equity Lab 5 min
- g. Discussion and next steps 5 min

### Housekeeping

- We will be recording the session
- Please turn off your camera if you are not presenting
- If you have any questions, please put them in the chat or raise your hand when there is a question and answer segment

### Hello!

- Pop in the chat:
- Your name
- Location
- Favourite app or digital technology

## Today's Speakers



### Indigo Holcombe-James

Postdoctoral Research Fellow, ARC Centre of Excellence for Automated Decision Making + Society

RMIT University



### Seb Cunningham

Health and Wellbeing Project Lead,

City of Casey



#### Laura Baker

Head of Smart City and Innovation,

City of Casey

# What is Digital Equity and why the focus now?

Embedding fairness in the development and implementation of digital systems, where digital tools, opportunities for building skills and confidence, as well as information distribution is tailored according to community need, such that all can participate in our increasingly online society, democracy, and economy

# COVID-19 and Digital Exclusion

COVID-19 proved to be the 'perfect storm' that highlighted and exacerbated digital exclusion, while also providing an opportunity to begin to address it...

- Renewed focus on 'the vulnerable' within community
- Rapid shift to online who would be most impacted and how?
- Appetite to test and try things to better understand and respond quickly to the rapidly evolving situation – 'all hands on deck'













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## Digital Activation Program

Largely focussed on older people who were living alone and needed support getting online for services and social connection











As a result of these collaborations and successes, the digital equity focus and approach was formalised within the Smart Casey Launchpad with a priority initiative to:

> Develop a digital inclusion framework that embeds equitable access to digital channels





#### **Equity & Inclusion**

To create an accessible and inclusive digital experience for our entire community, including vulnerable people and diverse cultural groups

### What is the Digital Equity Framework?

The purpose of the framework is to guide a coordinated, whole-of-organisation equity approach to address digital exclusion. It aims to provide:

A shared and comprehensive understanding of digital equity across Casey and those groups and places most digitally excluded

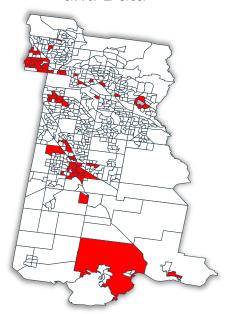
A consistent and pragmatic basis for guiding Council digital inclusion activities An ongoing platform for promoting partnerships to increase digital equity in Casey

A set of priorities for actior

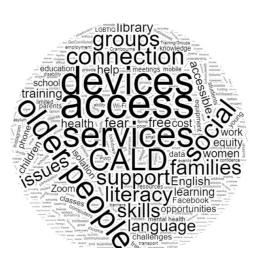
An initial group of internal and external partners to assist in the delivery of the framework

# Development of the Digital Equity Framework

Background Research and Data



Community & Stakeholder Engagement



Casey Digital Equity Framework Reference Group



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# Place-based digital exclusion across Casey - 'the data'

City of Casey suburbs (SA2s)	Socio-economic disadvantage	Low household income [<\$650 per week]	65+ population [ABS, 2019]	Low education [did not finish high school]	Profound disability [2020^]	Not in labour force [March 2021]	No internet access from home
1. Berwick-North	1,059	16%	19%	41%	2%	12%	11%
2. Berwick-South	1,060	9%	8%	36%	1%	14%	5%
3. Doveton	826	26%	15%	48%	6%	33%	22%
4. Hallam	946	17%	14%	41%	4%	25%	12%
5. Narre Warren North	1,084	8%	14%	40%	1%	14%	6%
6. Endeavour Hills-North	1,002	14%	14%	37%	3%	19%	10%
7. Endeavour Hills-South	1,009	14%	16%	35%	3%	17%	9%
8. Narre Warren-North East	1,024	12%	11%	43%	2%	16%	9%
9. Narre Warren-South West	975	16%	13%	44%	3%	19%	11%
10. Cranbourne	940	18%	13%	51%	5%	20%	14%
11. Cranbourne East	1,038	10%	6%	36%	1%	18%	8%
12. Cranbourne North	1,002	11%	7%	41%	2%	17%	8%
13. Cranbourne South	1,060	11%	11%	49%	2%	12%	9%
14. Cranbourne West	997	10%	5%	41%	2%	18%	7%
15. Hampton Park	927	16%	10%	41%	3%	23%	12%
16. Lynbrook-Lyndhurst	1,039	6%	6%	30%	1%	17%	5%
17. Pearcedale-Tooradin	1,031	14%	14%	55%	2%	9%	10%
18. Narre Warren South (East)	1,058	8%	9%	41%	2%	13%	5%
19. Narre Warren South (West)	996	10%	8%	40%	2%	19%	6%
City of Casey	1,004	13%	10%	41%	2%	18%	10%



#### Older People

- > Reduced loneliness for many
- > Increased use of telehealth
- Reduced petrol costs travelling to meetings and appointments
- Embracing online shopping for first time

- Lack of motivation to gain digital skills due to not seeing benefits or need
- Physical /biological barriers
- Digital literacy classes being at times and places that are not accessible
- Neglecting of health due to inability to use telehealth leading to health conditions becoming chronic



### Increased access for those who may not be able to travel due

- to geographical location (e.g. those with disability)
- Improved collaboration between service providers of benefit to clients accessing multiple services
- > Flexibility to access 'mock' and real interviews with employers
- Complexity of online service and application processes for government benefits and employment
- Compliance with ongoing government service requirements are increasingly online
- > Homelessness



#### 3 ...,

- > Created new accessible social groups
- Technology assisted those with sensory issues

- Lack of NDIS funding to provide online support to people with a disability
- Lack of funding for devices, support staff and Internet costs
- Carers not having knowledge or confidence to go online themselves so could not help their clients go online
- Lack of awareness of where to go for help with device access or learning digital skills
- online meetings not catering for the particular technology needs of people with different disabilities attending the meeting



#### LGBTIQ+ community

- More local and regional opportunities to collaborate on projects online
- More regional, national, and global digital opportunities to connect with other LGBTIQ+ people and events
- More tailored information and services available for LGBTIQ+ communities
- Abusive comments online, including on Casey Council social media
- Online forms and surveys not having enough space to put things in your own terms rather than having to check a predetermined box.



#### Women

- Previously socially isolated CALD women benefited from being digitally connected by attending short courses and activities for the first time
- Increased equity for some women around work life balance with the shift to working from home
- > CALD women excluded by husbands preventing them using devices or going to digital literacy classes particularly if mixed gender
- > Women not being able to participate in classes to learn digital skills because they are held in areas where there is poor public transport or because there is no occasional care
- > Conflict between work and home schooling due to time but also device shortages
- > Women living in family violence in 2020 were further isolated and trapped in abusive relationships as they lost access to their former face to face support services



#### **CALD Communities**

- Enhanced linkages with communities overseas bringing information and reducing isolation
- Secure chat communications that have capacity to reach large, but also specific cohorts
- Improved connection between ethnic leaders in metropolitan and rural areas
- Sessions could be held targeting CALD groups over a larger geographic area with strong attendances, as well as subsequent viewings of recordinas
- Previously socially isolated CALD women benefited from being digitally connected by attending classes for the first time
- Compared to migrants across the whole of Australia whose digital inclusion is often greater than the general population, many of those affected by digital exclusion in Casey were from people seeking asylum and refugee backgrounds
- Language and literacy as barriers to accessing online services and activities. Many CALD illiterate in own language. Older CALD community members have been losing English skills due to less face to face contact which then affects understanding of online content
- Many accessing Internet only via mobile phones leading to limited capacity to engage in range of complex online activities
- Control by men not allowing women to use the computer or access Internet
- Online services not only requiring one-time interactions but keeping up with
- Addressing traditional attitude issues to build trust and rapport with government difficult online with CALD community members

further communication via online means

CALD young people having to pivot to remote/online access for information rather than just 'turning up'



#### **Children and Young People**

\*The only subgroup within this section who could identify a benefit/positive was LGBTIQ+ young people who had positive experiences (covered in the LGBTIQ+ section)\*

- > Digital inequity of school children from vulnerable families leading to broader family stress. Families lacked devices (none or insufficient number), lacked Internet connections and had parents without digital skills
- > People making incorrect assumptions younger people have digital skills and therefore embarrassed to reach out for help
- > The concerns about the degree to which tertiary education will continue online and how that will affect learning outcomes and personal development
- > Lack of knowledge amongst young children of online safety



#### Small Business

- Real estate and professionals taking advantage of digital
- Berwick small businesses went successfully online to survive during COVID-19 (but other suburbs being left behind due to lack of motivation)
- Community Groups/Faith Groups
- Increased use of technology making groups more effective and accessible

- > Businesses not willing to go online to broaden customer base - wanting to stay face to face businesses using predominantly cash
- > Businesses less able to adapt to challenging conditions due to no ability to independently communicate with customers
- CALD food businesses most affected and only paper communications reach them

- > Older members struggling to access online meetings and activities (including faith communities)
- > Declining group memberships, as members did not get back involved after COVID-19

### Key Insights from the Digital Equity Framework

- The creation of online communities was a huge positive for many groups to connect and organise (e.g. CALD, LGBTIQ+, Disability groups)
- Assumptions about the digital skills of groups can be fraught with danger
- Beyond simply having digital access, motivation drives digital skills development even when the present and future benefits seem undeniable
- Traditional digital learning models require a rethink (e.g. 1-on-1 learning with 'non-experts' proved very effective with older learners)
- WiFi access points and digital learning opportunities that already exist are inadequately communicated to those who need them most
- Casey has significant place-based digital exclusion

# Looking forward

- Continued focus on research and data in this rapidly evolving space
- Increased partnerships for a regional approach
- Co-designing solutions with our community (e.g. Digital Equity Living Labs)
- An advocacy agenda that highlights the specific issues found within Casey





# Measuring Australia's Digital Divide

The Australian Digital Inclusion Index 2021







### **About the Index...**



The Index provides a national, state and regional level view of digital inclusion in Australia based on an individual score 0-100



Revised approach to data collection through A purpose-built survey instrument: the **Australian Internet Usage Survey** 



The three dimensions – **Access Affordability + Digital Ability** – form the core Index but the underlying components are updated and more future-focussed



The new Index reports on data collected in 2020 and 2021 with new **interactive data dashboard** 

### The Index construction is based on three dimensions



#### Access

How often, and through how many services and devices people are connecting to and using the Internet



### **Affordability**

The percentage of household income required to gain a good quality service with reliable connectivity



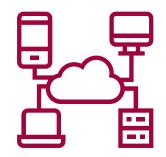
### **Digital Ability**

What people can do online, and their confidence in doing it

### Access

#### Four components:

- Frequency and intensity of use, ranging from no use at all to daily use
- Connection type, such as fixed broadband or mobile-only
- Data allowance and speed
- Types of devices, including desktops, laptops, smart phones, tablets, and an array of smart home devices





# **Affordability**

Relation between household income and the cost of an 'internet bundle' for an ideally connected single-headed and family household.

The internet bundle enables both quality and reliable connectivity through:

- A fast internet service, such as a cable (HFC) service, NBN 50 or above, or 5G wireless service
- Unlimited monthly data allowance through a fixed broadband service
- Mobile broadband or mobile phone data allowance above 61GB a month





# **Digital Ability**

Draws on the international **Internet Skills Scale** (Van Deursen, Helsper, Eynon)

#### **Six components:**

- Basic operational
- Advanced operational
- Information navigation
- Social
- Creative
- Automation



# The national picture 2021

**Australia 2021 = 71.1** 

Australia 2020 = 67.5

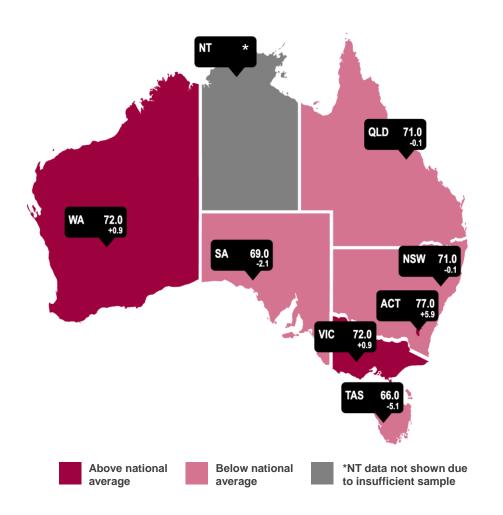
Increase of 3.6 points

#### Capital cities = 72.9

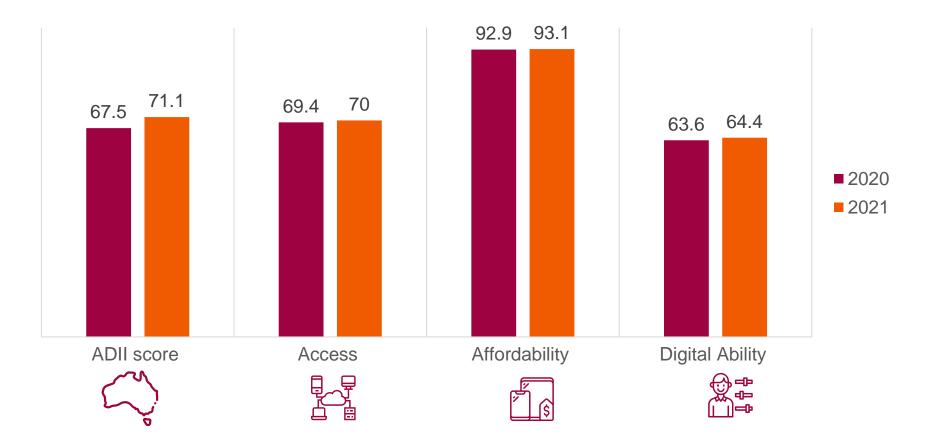
1.8 points higher than the national average

#### Regions = 67.4

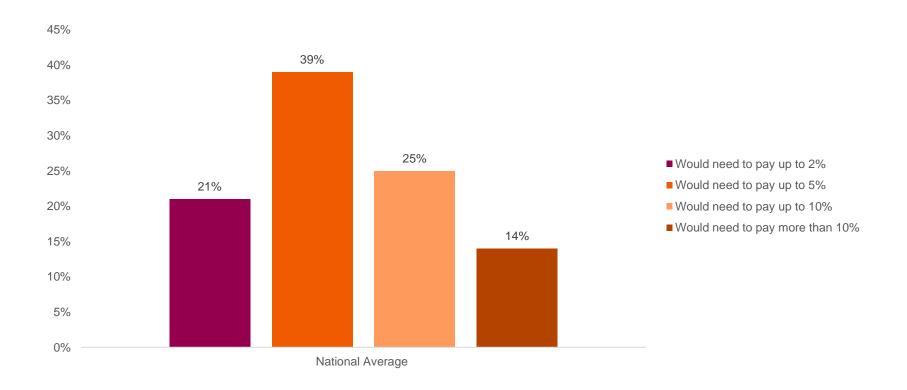
3.6 points lower than the national average 5.5 points lower than metropolitan Australia



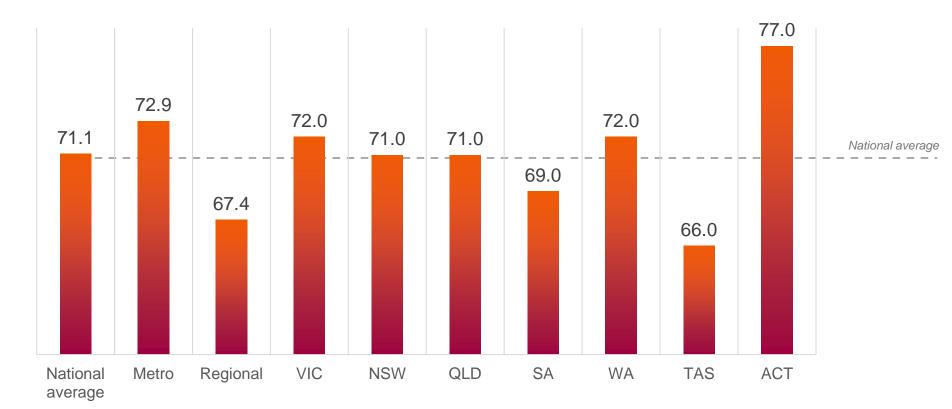
# Australia: digital inclusion across three dimensions



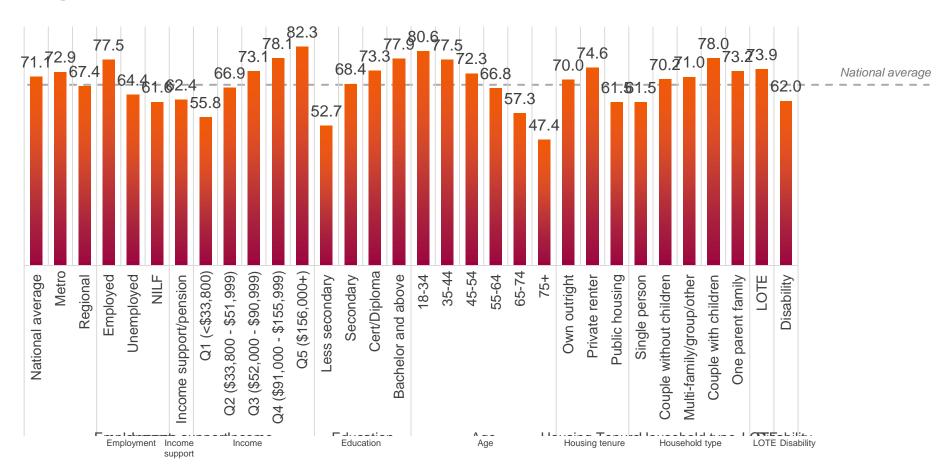
# **Affordability**



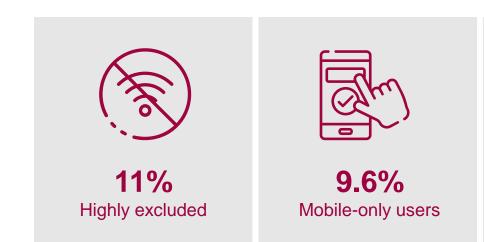
# Australia: Digital inclusion by geography



# Digital inclusion – social and economic distribution



# **Key findings**





# The critical gaps



15.9 Employment gap



26.5 Income gap



**33.2** Age gap



**25.2** Education gap

#### **AUSTRALIAN** DIGITAL **INCLUSION** INDEX

#### Toggle menu



#### **How Australians are using the Internet**





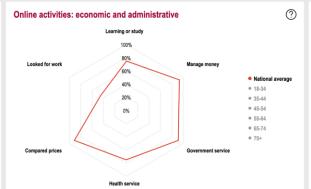


#### Insights

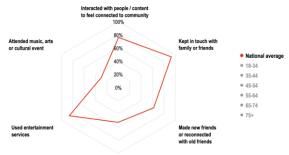
The activities Australians engage with online are strongly influenced by age. In 2021, where 82% of 18-34-yearolds have accessed a health service online, this drops to 52% of those over 75.

Nationally, in 2021, 93% of Australians use the internet to keep in touch with family or friends. This rises to 99% for 18-34-year-olds and falls to 87% at its lowest point for those over 75.

In 2021, 42% of Australians are not at all concerned that internet overuse negatively impacts their wellbeing.

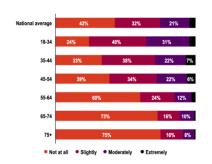






Engaged with club, organisation or group you found online

#### Are Australians concerned that internet overuse negatively impacts their wellbeing?



#### Where Australians connect outside the home

Place	Nat ▼	18-34	35-44	45-54	55-64	65-74	75+
Place of work or education	61%	81%	72%	70%	52%	17%	7%
Houses of friends or family	56%	79%	59%	49%	41%	34%	23%
Shopping centre, retail or service business	29%	40%	31%	27%	22%	17%	11%
Public space with free Wi-Fi	22%	32%	21%	19%	17%	14%	8%
Public library	11%	20%	11%	7%	7%	6%	5%
Public transport	5%	8%	4%	4%	6%	3%	2%
Government office	4%	6%	4%	3%	3%	2%	1%
Other place	9%	11%	10%	9%	9%	7%	8%
None of the above	17%	4%	8%	14%	23%	42%	58%

#### COVID-19 impact

Increased the range of activities you do o  $\sim$ 

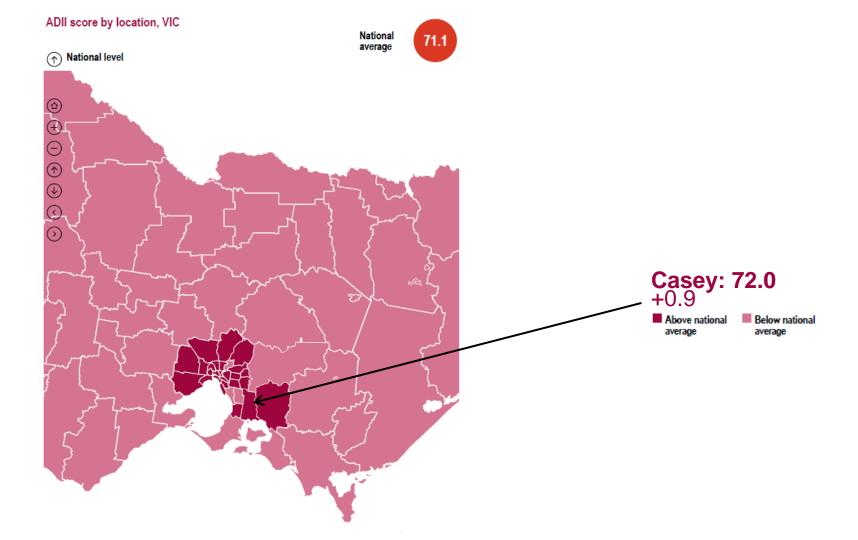
Data for this question was only collected in 2020.















# Measuring Australia's Digital Divide

The Australian Digital Inclusion Index 2021







### Question and Answer – 15 min

• If you would like to ask a question or share your ideas, please either raise your hand via Teams, type a question in the chat or email us at <a href="mailto:smartcity@casey.vic.gov.au">smartcity@casey.vic.gov.au</a>

• When you talk, state your name, organisation and role.

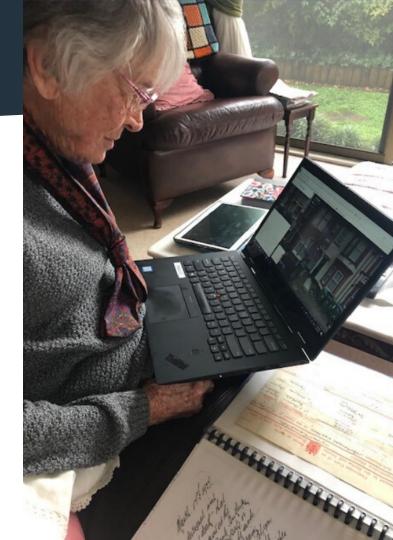
### Complex challenges for us to solve

One size does not fit all:

Everyone's digital experiences are different and require varying interventions.

Digital landscape is evolving:

Expectations on digital experiences is growing and changing rapidly.



### Casey's Innovation Process

#### **Phase 1: Discovery**

Understand the system as a whole, build a shared understanding of the issues, and identify where to intervene to generate the most impact.

#### Phase 2: Design

Zoom in and understand the specific human need, begin to design interventions that address the specific issues.

#### **Phase 3: Experiment**

Prototype and test your ideas, gather feedback and evidence to support the validity of the intervention to be implemented.



Systems Thinking mindset



Clearly defined problem
Shared understanding of the system



**Design Thinking mindset** 



Prioritised list of fit for purpose solution



**Evidence Based mindset** 



Validated solution ready for implementation

Hand over for implementation:

#### Phase 4: Embed

A validated outcome is selected for implementation and handed over to the appropriate team(s) and/or vendors



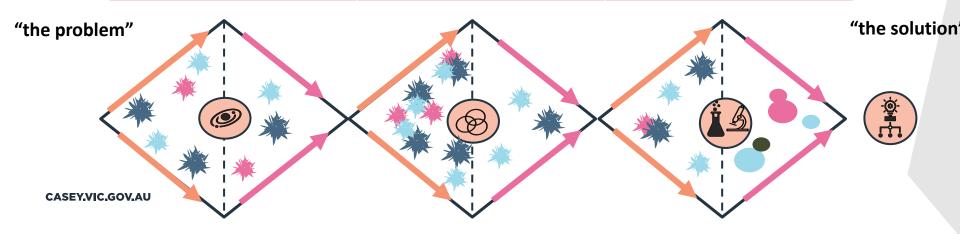
Implementation mindset



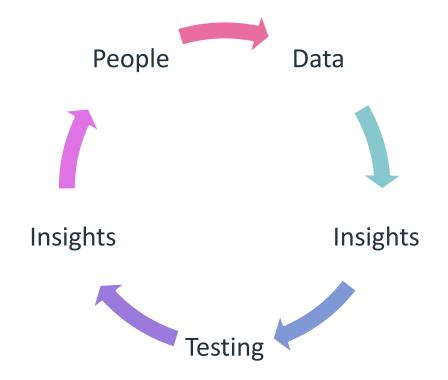
Implemented fit for purpose solution

# Innovation tools to develop the framework

Discover	Design	Experiment
<ul> <li>System map</li> <li>Digital empowerment paper</li> <li>Data and research analysis</li> </ul>	<ul> <li>Journey Maps and Personas</li> <li>Ideation sessions</li> <li>Co-design workshops</li> <li>Focus groups</li> </ul>	<ul><li> User testing</li><li> Observations</li><li> Community review</li></ul>



## Innovation in Practice



...And then we spoke to people!

# Discover: Systems Mapping and Digital Empowerment Paper



- Digital empowerment and equity are linked.
- Look at the system of policies, people, and platforms that impact community health and wellbeing as a result of increased digital equity.
- Mapped the key actors, their relationships and positive and/or negative relationships associated.
- Key finding was that increased digital equity didn't automatically mean empowerment.



'Digital empowerment' means having agency, ability and command of the internet, smart devices and other technology which enables everyone to thrive in the digital world.





# Definition

Create an overarching definition that is easy to communicate

Digital equity means to embed fairness in the development and implementation of digital systems.

# Data

Ensure data is accessible and can communicate the challenges.

Collate ABS, ADII, Lived Experience Data

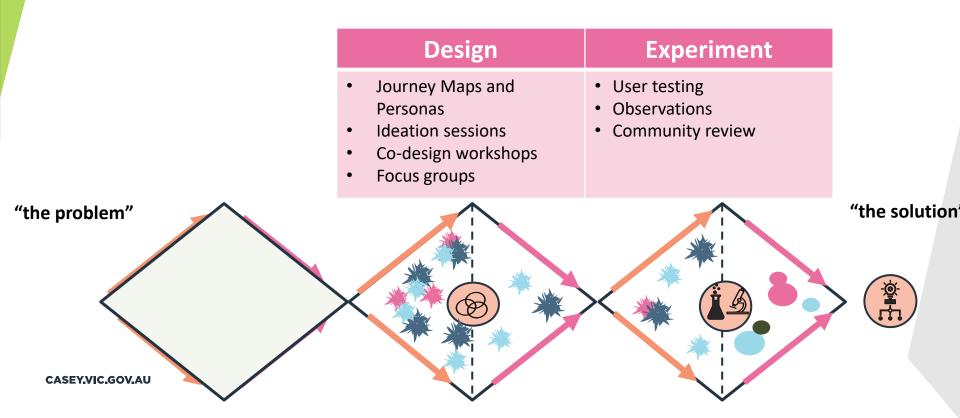
# **Demographics**

Describe who are we solving for and what are their needs

Understand the stories and experiences that impact digital exclusion

# **Challenge Statements**

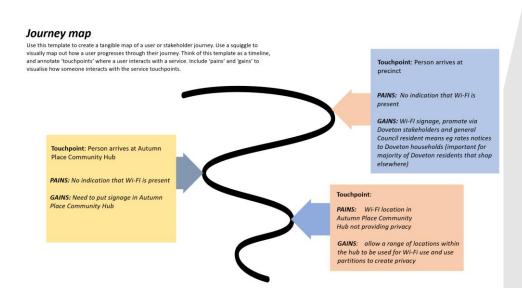
# Innovation tools to develop the framework





# Design: Journey Maps

- Completed journey maps from focus groups and insights from local community members as well as with Community Service Organisations.
- Understanding the touchpoints of how key community members interact with digital channels and what the pains and gains were.



# Design: Journey Maps



- These journey maps informed the personas.
- It helped us to see the similarities and differences of how people experience digital channels in Casey.
- Personas can be a challenge. Need to acknowledge that it is not necessarily representative and that everyone's experiences can vary.

### SUMMARY OF ONLINE BENEFITS AND CHALLENGES FOR DIFFERENT GROUPS



creased use of telehealth Reduced petrol costs travelling o meetings and appointments Embracing online shopping for

> Lack of motivation to gain digital skills due to not seeing benefits

Physical /biological barriers Digital literacy classes being at times and places that are not Neglecting of health due to inability to use teleheath

18 CITY OF CASEY /// DIGITAL EQUITY FRAMEWORK



### Increased access for those who to geographical location (e.g.

Improved collaboration between service providers of benefit to clients accessing multiple Flexibility to access 'mysti' and

for government benefits and

Compliance with ongoing requirements are increasingly Lack of NDIS funding to provide online support to people with a disability Lack of funding for devices support staff and Internet costs

Created new accessible social

Carers not having knowledge or confidence to go online themselves so could not help their clients go online

Lack of awareness of where to go for help with device access or

- Enhanced linkages with communities overseas bringing information and

Secure chat communications that have capacity to reach large, but also

Improved connection between ethnic leaders in metropolitan and rural areas

Sessions could be held targeting CALD groups over a larger geographic

is often greater than the general population, many of those affected by digital exclusion in Casey were from people seeking asylum and refugee

activities. Many CALD litterate in own language. Older CALD community members have been losing English skills due to less face to face contact

Many accessing internet only via mobile phones leading to limited capacity

Control by men not allowing women to use the computer or access Internet Online services not only requiring one-time interactions but keeping up with

Language and literacy as barriers to accessing online services and

Addressing traditional affluide issues to build trust and rapport with government difficult online with CALD community members

connected by attending classes for the first time Compared to migrants across the whole of Australia whose digital inclusion

which then affects understanding of online content.

backgrounds

rather than just 'turning up'



### More local and regional

More regional, national, and global digital opportunities to

onnect with other LGBTIQ+ people and events More tallored information and services available for LGBTIQ+

Abusive comments online including on Casey Council social media

Online forms and surveys not having enough space to put things in your own terms rather than having to check a



Previously socially isolated being digitally corrected by Increased equity for some women around work life balance with the shift to working from

CALD women excluded by devices or going to digital literacy

Women not being able to participate in classes to learn held in areas where there is poo is no occasional care



Real estate and professionals taking advantage of digital Berwick small businesses went suburbs being left behind due to lack of motivation)



Digital inequity of school parents without digital skills People making incorrect

The concerns about the degre to which tertiary education will continue online and how that will affect learning outcomes and personal development



Businesses not willing to go Older members struggling to access online meetings and activities (including fait) base - warting to stay face to face businesses using Declining group membership as members did not get back involved after COVID-19

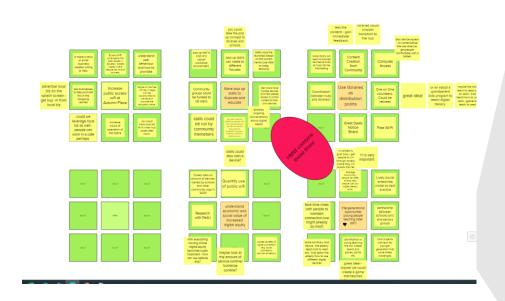
Businesses less able to adap communicate with customers CALD food businesses most

embarrassed to reach out for affected and only paper



# Design: Design Charettes

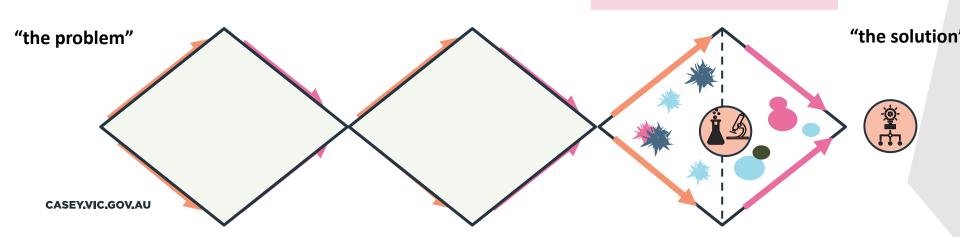
- Used lotus diagrams as a way to build on each others ideas.
- Cluster and link ideas across different challenge statements etc.
- Mapped them against feasibility, viability and desirability.



# Innovation tools to develop the framework

# **Experiment**

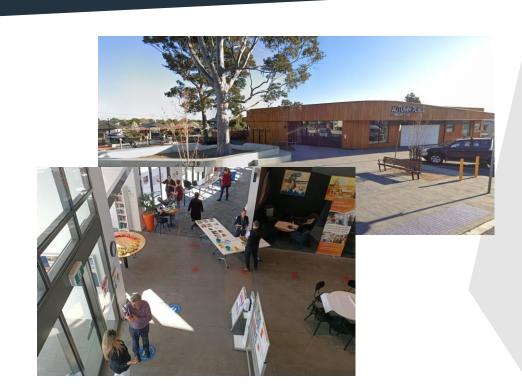
- User testing
- Observations
- Community review





# Experiment: User Testing

- Met with community members in the local environment.
- Observed them using the internet.
- Invited them to answer some questions.
- Findings were that privacy and a sense of security in physical spaces was important.



# Why these tools and this approach?

- They helped us to put the community at the centre of a digital/technology issue.
- It ensured that the community's voice was not just at a point in time, but rather throughout the development.
- It provided structure and process to the innovation program which allowed employees to pick up design thinking and innovation tools quickly.
- We constantly reflected on the use of tools and how they could be used through the Innovation program.

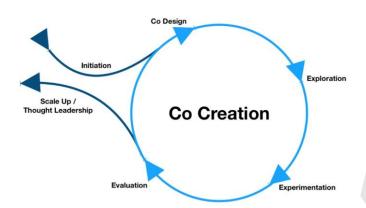
# Tips and Tricks

- Check out the ADII and use data to frame the problem to solve
- Take a test and learn approach. Put yourselves out there and use design thinking tools to facilitate the work.
- You don't need to have all the answers. When partners, community and employees come together, great things happen!
- You don't need to be a design thinking purist to be an innovator! Map the approach, find some tools and always check to make sure the community is at the centre of the process.



# Embed: Digital Equity Living Lab

# Public Sector Non Government Organisations Local councils State Government Provide long term prospective and regulatory role Casey Living Lab Research Institutes Universities Technical colleges Research groups Expertise and scientific rigor Casey Living Lab Casey Living Lab Industry Small Medium Enterprises Start-ups Industry bodies Practical knowhow and resources



# The Smart Casey Innovation Festival 23-26 November

https://conversations.casey.vic.gov.au/smartcasey/smart-casey-innovation-festival-2021



Other topics include:

Living Labs

Circular Economy

Internet of Things

Open Data

Community Innovation