STRATEGIES TO ADDRESS DEMAND IN REMOTE FIRST NATIONS COMMUNITIES

Learnings from the
Mapping the Digital Gap research project

Presenter:
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RADCOMM 16 November 2022

Erub co-researcher Lala Gutchen in her fishing dinghy, Torres Strait Islands
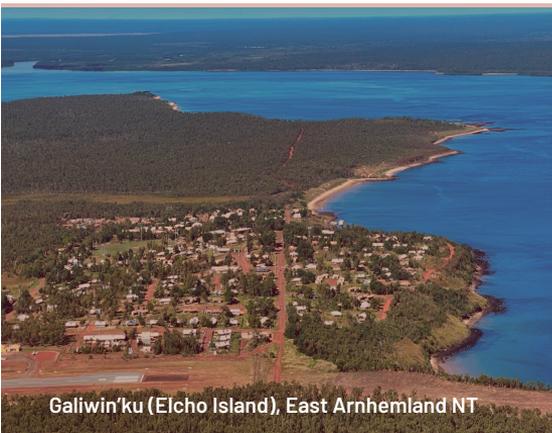
ABOUT THE PROJECT

4-year study of digital inclusion and media use in 10-12 remote First Nations communities 2021-24

Partnership approach

Track progress on Closing the Gap Target 17

Support local digital inclusion plans

Inform national policy and programs

Galiwin'ku (Elcho Island), East Arnhemland NT

Co-researcher Guruwuy Ganambarr surveys Alissia Wirrpanda, Gäṉgan Community, NT

Yuelamu, Central Desert, NT

FIRST NATIONS DIGITAL INCLUSION FRAMEWORK

ACCESS
Telecommunications Access
Last-Mile Access
Media & Information Access

AFFORDABILITY
Affordability of Services
Affordability of Devices
Affordability of Media Services

DIGITAL ABILITY
Digital Literacy & Engagement
Local Planning and Capacity Building
Jobs and Enterprise Development

SERVICE DELIVERY
Digital Government Strategy
Community-based Services
Online Services / Resource Design

INITIAL FINDINGS – TELECOMMUNICATIONS ACCESS

Mobile available in most larger communities over 150-200 people

4G services patchy, congested &/or unreliable in many sites visited

Limited access in small communities & homelands – mix of solutions

Pre-paid mobile the primary means of access, where available

Limited household fixed line phone/ Internet or satellite services

Public phones still used where no mobile coverage

Limited household online access during COVID-19 restrictions

Concern about potential impact of switch-off of 3G in 2024

Gäṉgan co-researcher
Djamika Ganambarr

ACCESS - FIRST MILE AND MEDIA

Wi-Fi:

Increased use of public Wi-Fi for accessing services, Wi-Fi Calling

Pros - enables local governance, content filtering, cost-sharing

Cons - speeds, data limits, range, operational costs

Wi-Fi Mesh an effective community solution, broader coverage

ICT Access:

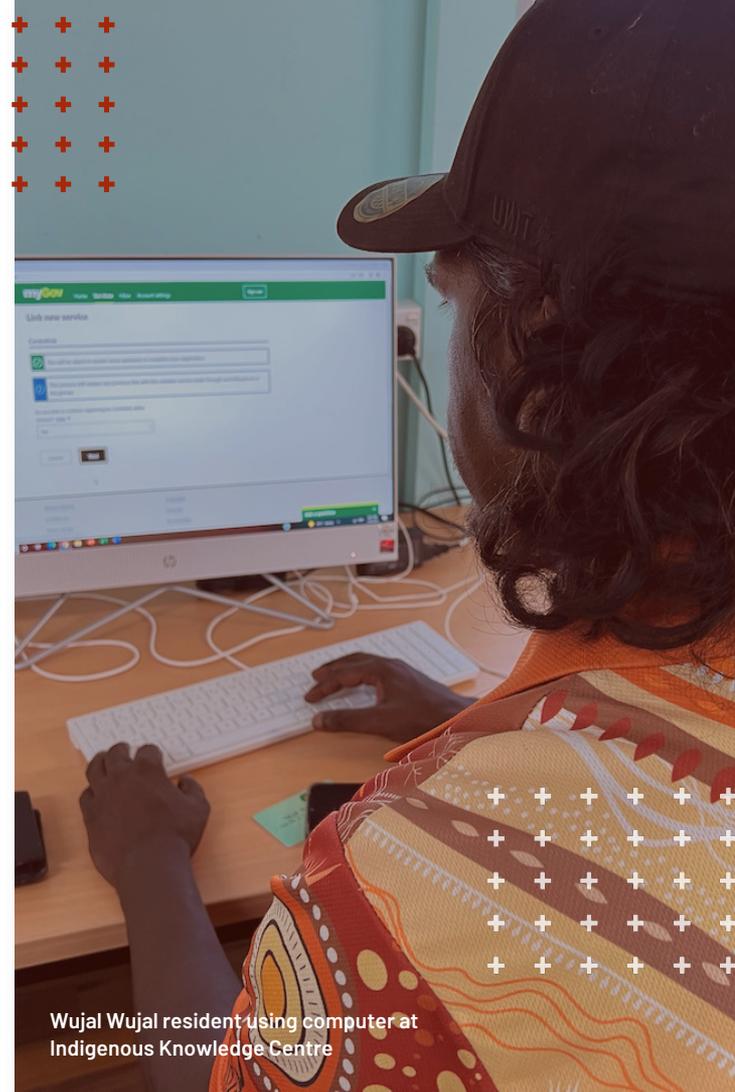Limited access to computers, printers, IT support in most sites

Need for computers and online access facilities/ learning spaces

Media & Information Services:

VAST TV not working in most homes ➡ increased cost, congestion

First Nations radio often only radio service, limited ABC

Limited news & emergency info, mostly face-to-face, social media

Wujal Wujal resident using computer at Indigenous Knowledge Centre

AFFORDABILITY

Data affordability a growing issue as demand increases

Limited shift towards from pre-paid to post-paid services

Affordability of devices a key issue, especially with rapid turnover
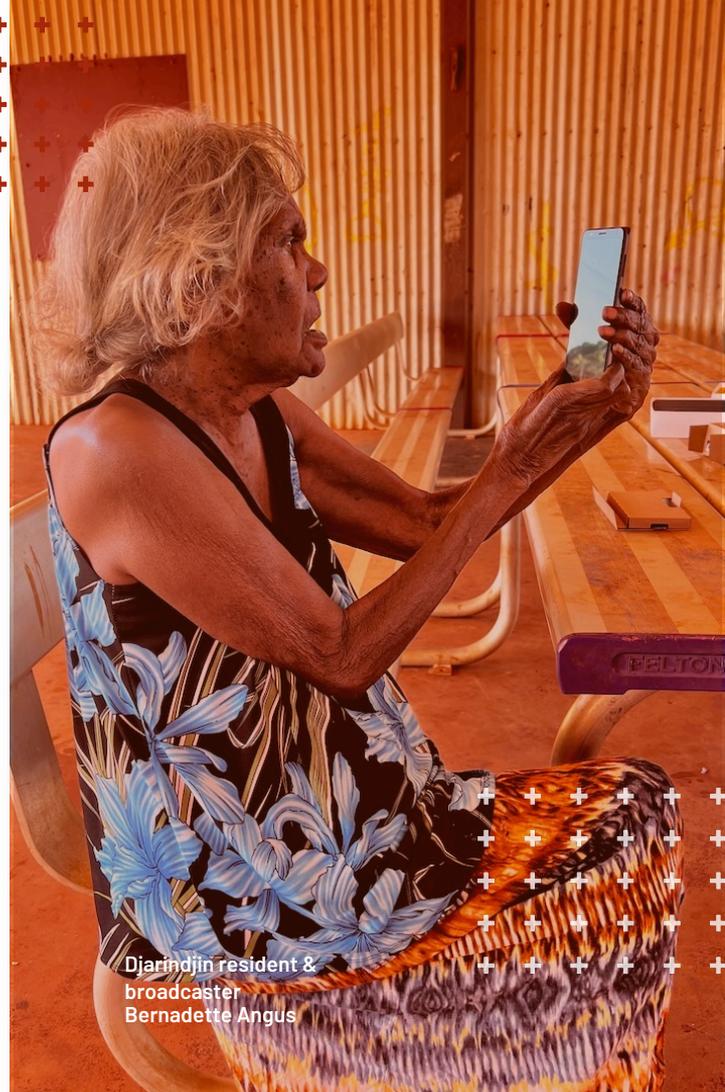
Transition to online government services means user-pays

DIGITAL ABILITY

Digital skills and online service use improved where there is access

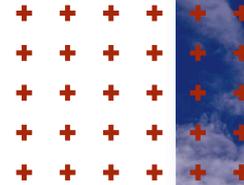Gaps– elderly, people with low literacy, disabilities, disconnected

Demand for appropriate training, support and local digital mentors

Cyber-safety and scams are a significant concern

Djarindjin resident & broadcaster Bernadette Angus

SUGGESTED DESIGN PRINCIPLES

Design & Planning:

- **Place-based** – Fit for purpose; whole-of-community needs

- **Culturally Appropriate** - Co-designed; Enables local governance; Builds community capacity

- **Coordinated** – Federal/ State/ regional planning and support

SMART Technology Solutions:

- **Scalable** – to multi-site delivery, increased demand

- **Mobile** – Broad coverage; enables use of mobile devices

- **Affordable –** pre-paid option; sustainable operations

- **Reliable –** consistent quality of service; seasonal factors

- **Trackable** – enables remote monitoring/support, local service

4G small cell and microwave link, Yuelamu NT

Examples from research sites

Kalumburu, WA - Wi-Fi Mesh Network

Installed November 2021(RCP/WA Gov funded, APN design)

SkyMuster backhaul, 7 repeaters for community coverage;

Hotspot plus Wi-Fi repeaters/VoIP phones in 128 dwellings

Gӓ̠ngӓ̠n Homeland, NT – 4G Small Cell mobile

NTG /RCP co-funding; Field Solutions Group design

Community want content filtering, Internet data off at night,
free access to government services

Wilcannia Community Wi-Fi Network

NBN project, Short-term COVID response to enable home
schooling and online service access in 91 homes

CfAT mobile hotspot, Yuelamu

Passive concentrator to access mobile beyond range

KEY MESSAGES

Addressing the needs of under-served communities and people, especially First Nations and excluded groups, is a public policy issue

Communications is now an essential service with digital transformation to online government services by 2025

Need for a clear transition plan from the USO to the USG

Indigenous Digital Inclusion Plan (due soon) to inform policy/ funding

Local digital inclusion plans promote whole–of-community solutions

Opportunities for market solutions driven by policy coordination and local governance

Tennant Creek NT

For more information

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