Developing the North through Connectivity:
Fostering digital ability for innovation in Far North Queensland.

Dr Amber Marshall

Introduction

My **mission** is to empower **regional, rural & remote** organisations and individuals to **convert connectivity** into meaningful **social & economic outcomes** for communities, and thereby develop regional Australia.

Research	Consulting
• PhD in virtual communications • Went bush in 2015 • Now looking to apply in RRR areas	• Strategy • Upskilling • Publications

Today

CONNECTIVITY + INNOVATION = REGIONAL DEVELOPMENT

PART 1 – Regional Development in FNQ | Federal & State agendas

PART 2 – Connectivity in FNQ | State pf play

PART 3 – Innovation in FNQ | Cairns & Atherton Tablelands

PART 4 – Preliminary research | Reality on the ground in FNQ

PART 5 –Key messages | From here

Developing the North – Federal G'ment

- Northern Australia can grasp its full potential and become an **economic powerhouse** within our great country.

- We will fix the roads and **telecommunications**, build the dams and deliver the certainty that landholders and water users need.

- Governments alone cannot develop northern Australia, they can only **set the right environment** for businesses to profitably invest and communities to flourish.

- The north will only truly achieve its potential with the participation of all the **people who live there**, including Indigenous Australians.

Our North, Our Future:
White Paper on Developing
Northern Australia
Overview

Advance Queensland – State G'ment

- Advance Queensland is a comprehensive suite of programs, based on international evidence of 'what works', designed to create the **knowledge-based jo**bs of the future.

- The programs will **drive innovation**, build on our natural advantages, and help raise our profile as an attractive investment destination.

- Advance Queensland will position Queensland as a place where entrepreneurs, industry, universities and government collaborate to **turn great ideas into commercial products** and businesses that create jobs.

Part 2 - Connectivity in FNQ

- Digital Inclusion Index 2016 national and state level
- BIRRR national survey (talk about later on)
- CentreCare/Partners in recovery local survey

DII 2016 – National Results
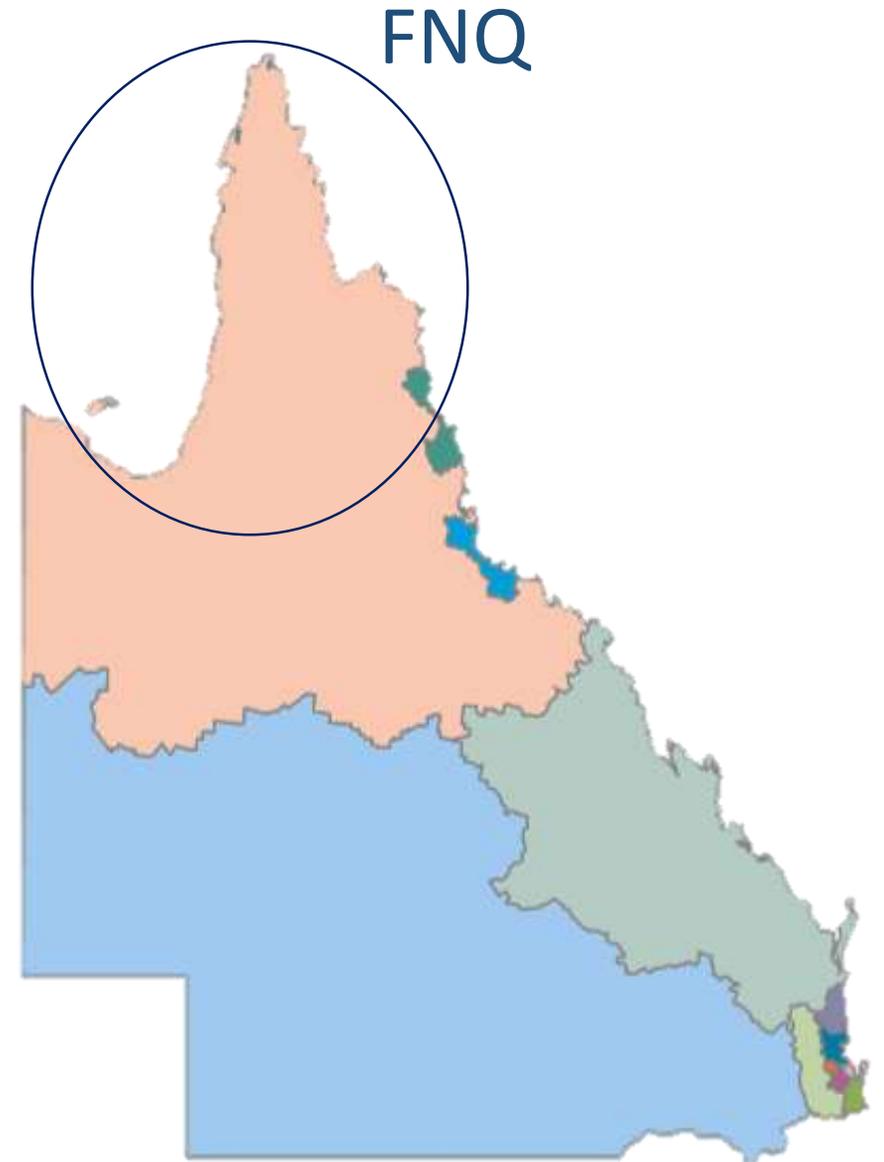
Key finding: Geography plays a critical role

- Nationally, digital inclusion is now substantially higher in capital cities than in country areas.

- The **'Capital–Country gap'** has widened overall, but not everywhere.

- This 'geographic digital divide' is largely due to **widening gaps in Digital Ability & Affordability**, while the Access gap has narrowed.

- **Regional and local initiatives** are needed to address the geographic digital divide.

Digital inclusion is not just about computers, the internet or even technology. It is about using online and mobile technologies as channels to improve skills, to enhance quality of life, to drive education and to promote economic wellbeing across all elements of society.

PART 2: CONNRCTIVITY IN FNQ

DII - State results

- Comparing Brisbane's score with the average for Country QLD, the **'Capital–Country digital divide' has widened** just slightly over three years .

- The Capital–Country **Access** gap has narrowed steadily over time, while the gaps for **Affordability** and **Digital Ability** have both widened.

- **North West Queensland** region has <u>worst</u> rating in the state of Qld and is in bottom 3 in Australia.
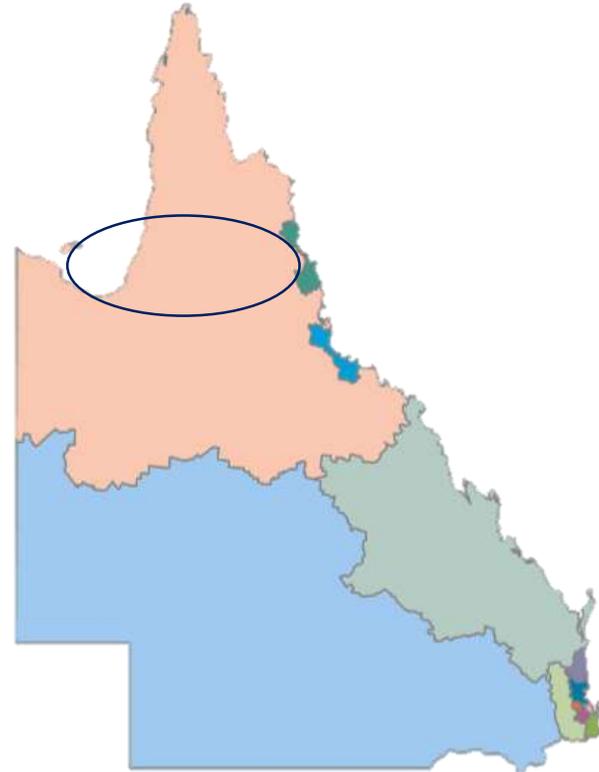
PART 2: CONNRCTIVITY IN FNQ

Connectivity in the Bush survey – local results

84% experienced issues in last 6 months

- Ability to connect
- Speed of connection
- Cost of internet
- Data restrictions

Uses of bush internet:

- 82%: Business/Work
- 93%: Personal
- 79%: Social
- 56%: Health Information
- 59%: Education (inc. children)

18 Towns / Suburbs in total, covering the southern and northern Gulf Catchment and Tablelands Shires.

PART 3 – Innovation in FNQ (Cairns)

- Regional start-up eco system study (2015): Bundaberg, Ipswich, Townsville, Rockhampton, Mackay, Toowoomba and **Cairns**.

- Cairns is emerging as a strong digital technology hub.

- Cairns has a **higher density of start-ups** per capita than South East Queensland. YET local start-ups haven't raised anywhere near as much $$$.

- Most technology start-ups are **based out of the CBD**, and a number benefit from support from centres like theSpace co-working hub.

- The startup scene in Cairns spans **multiple sectors**, including education and agriculture. A number of tourism and construction startups exist in Cairns, alongside a growing professional services sector.

Regional Queensland 2015
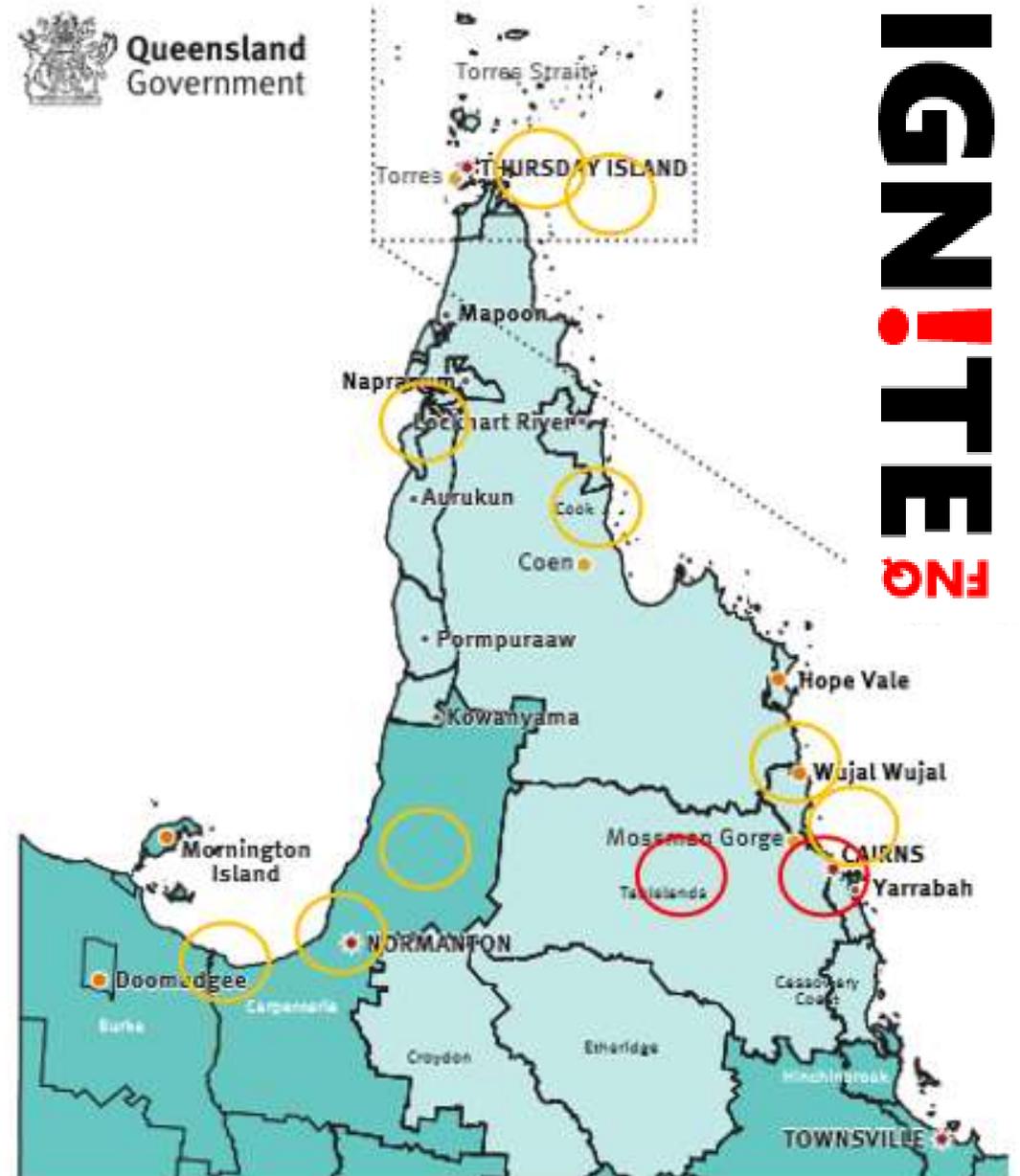
STARTUP ECOSYSTEM REPORT

Innovation in Atherton Tablelands

- Co-working spaces in Mareeba and Atherton

- Startup & Innovation Tablelands
  - A social enterprise delivering programs to encourage and support an entrepreneurial mindset, grow innovation opportunities.

- WiRE (Women in Rural & Remote Enterprise)
  - WiRE Index Survey (ongoing)
  - Atherton seminars
  - Online resources, network & webinars

- Various groups & organisations:
  - Mareeba Chamber of Commerce
  - Mareeba Business Women's Club

WiRE — WOMEN IN RURAL, REGIONAL AND REMOTE ENTERPRISES
Your dream business or community venture starts with you

StartUp & Innovation Tablelands

Advancing Regional Innovation Program (AQ)

- Twelve Queensland regions have access to a dedicated fund of $500,000 each

- Applications must be collaborative & involve a lead applicant with at least 5 partners

- Eligible activities include:
  - creation of innovation spaces
  - delivery of learning and capability development programs
  - mentoring and networking programs to connect entrepreneurs with each other and with industry and to coordinate local efforts

Advancing Regional Innovation Program - Regional Areas

Ignite FNQ

- Consortium of FNQ organisations, businesses and institutions: theSPACE, Envision, JCU, CQU, CRC, TSC, NGRMG, RDA

- Vision: Connect and empower diverse FNQ communities by fostering innovation to build social, economic & environmental prosperity.

- Hub & Spoke model of ecosystem delivery

- Outreach locations: Wajul Wajul, Cook, Torres Strait, Weipa, Etheridge

PART 4 – Preliminary research

- Basalt Bash & Beauty – Mount Surprise – June 12-14, 2017
- Organised by Agforce & Northern Gulf Drought ambassadors
- A chance to connect, share and learn on various topics
- Around 50 women from remote stations in Gulf Savannah

- I held 2 x workshops of 6 women on 'Getting connected in the bush'
- Presented research then asked for their experiences
  - Technical: Speed, stat, cost, installation
  - Social: Education, health, networking, family & friends,
  - Economic : Ordering, banking, accounting, reporting, weather

**Constraints
What can't
you do?**

**Opportunities
What would
you do?**

PART 4: REALITY ON THE GROUND IN FNQ

Technial insights consistent with BIRRR Regional Internet Access Survey 2016

	Mobile Broadband	Satellite
Data allowance and times	Data anytime but limits imposed (e.g. 20GB/month) Congestion during 'peak' times	Off peak times are impractical (typically between midnight to 7am) Data limits (e.g. 25GB/month)
Data cost	Typically $5-10/GB (plus top ups)	Average $16/GB (top ups often N/A)
Speed up/download	7 Mbps download/ 6Mbps upload Shaped when cap is exceeded	1-5Mbps download & upload Shaped when cap is exceeded
Reliability of connection	Can't get signal Frequent drop outs	Issues delay & clarity (VOIP & Skype)
Other	Purchase extra hardware (e.g. Yagi antenna, approx. $500) Locked into contracts	Issues with installation Locked into contracts Not available to everyone

PART 4: REALITY ON THE GROUND IN FNQ

Further insights (social & economic)

- Quite savvy with internet infrastructure

- Some disinterested, and others happy to lump it a lot of the time

- Easy to identity 'constraints' but less so 'opportunities'

- Know they need internet for basics (education, health, networks, business), but not what potential lies in digital economic participation

- Don't what they don't know!

- The digital divide is widening at a rapid rate with limited signs of making connections between capital and country where outcomes are concerned.

- Limitation: On the very 'remote' end of RRR

Key messages

CONNECTIVITY +	INNOVATION =	REGIONAL DEVELOPMENT
- Is inadequate - Not enough to just "plug in" anyway - Digital ability (& literacy) is key, along with access & affordability	- Not only startups & agtech - Emphasise incremental innovation - Innovation in RRR areas is context specific – must solve real problems in real time	- Grand visions of Northern Australia as economic powerhouse will not be realised without digital innovation - Grassroots development properly supported by regional centres is essential

Research Problem

- **The Challenge:** Moving from getting connected to **converting** into outcomes – this is why my research will focus on digital literacy and digital ability

- **Gap in knowledge: Context matters!**
  - FNQ faces vastly different conditions for leveraging connectivity than do city-dwellers whose 'digital ecosystem' is typically much richer.
  - greater choice of technology and greater speed/reliability of service results in more/different opportunities for digital innovation.
  - It stands to reason that processes of digital innovation in RRR areas will also differ, yet we have almost no understanding of this.

- **Research Question:** By what **processes** can/do FNQueenslanders harness connectivity to improve existing business processes and/or create new services?

- **Approach:** Conceptualise innovation as **resilience, coping & ingenuity** (Instead of off-the shelf model)

- **Methodology: Co-creation of digital innovations** in situ through hub & spoke model - in parallel to Ignite FNQ's hub & spoke model of innovation

PART 5: KEY MESSAGES & FROM HERE

From here

1. Open discussion about 'what next?
2. Feedback
3. Partners
4. Funding

Thank you!

(Contact me on: amber@resilientcommunications.com.au)