

# Cognitive communities

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Vision, knowledge, experience,  
commitment

# What does “strategy” mean?





# Connectivity strategy, UFB Programme in NZ





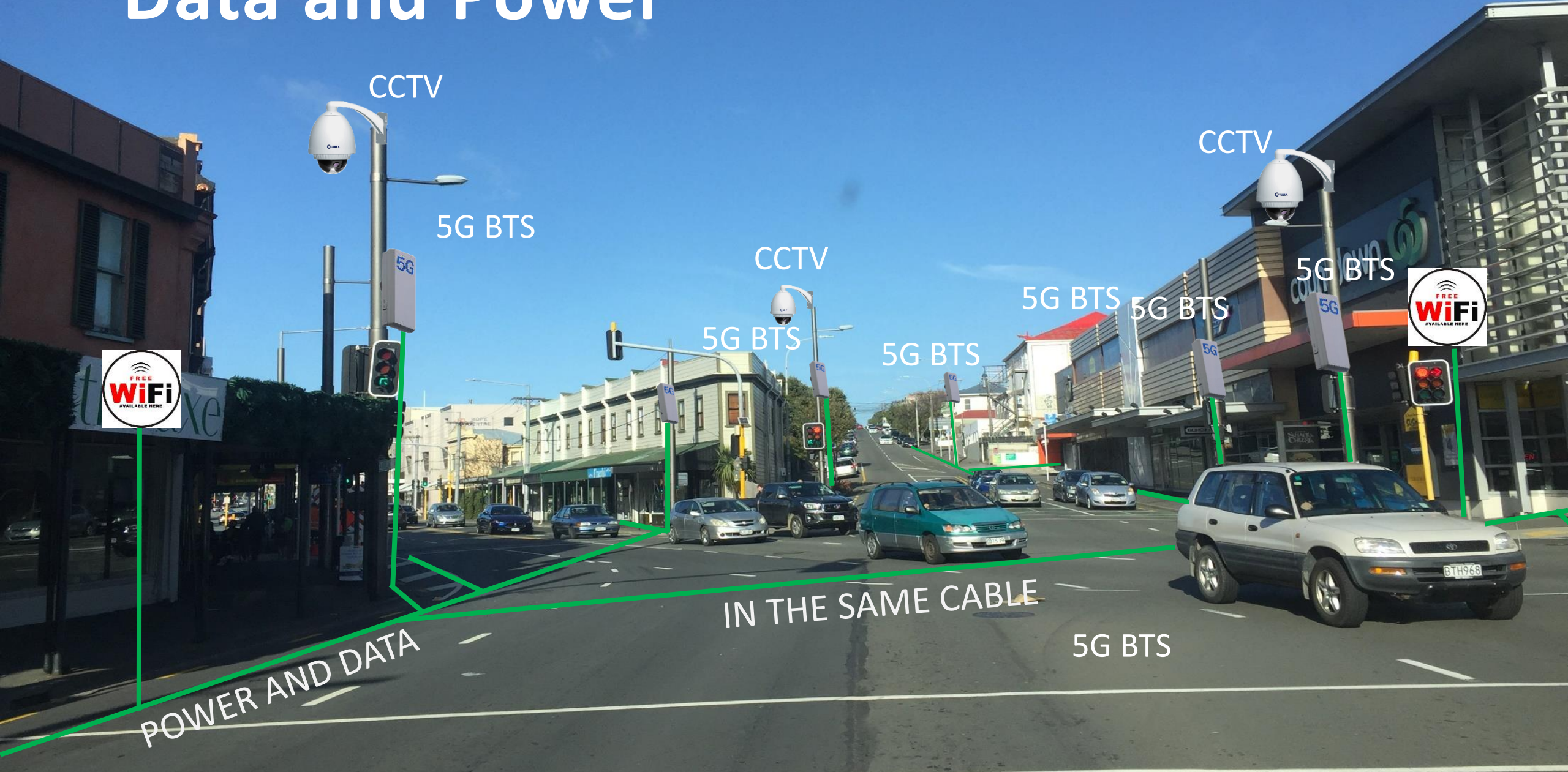
# Layer one technology strategy in UFB





5G, Public WiFi and Security require

# Data and Power



CCTV

5G BTS

CCTV

5G BTS

5G BTS

5G BTS

5G BTS

CCTV

5G BTS



POWER AND DATA

IN THE SAME CABLE

5G BTS





*enliven*  
Positive Ageing Services



Presbyterian  
Support Central



# Smart and safe homes

Enliven creates elder-centred communities so that older people have companionship, meaningful activity and fun in their lives. These things add life to life!







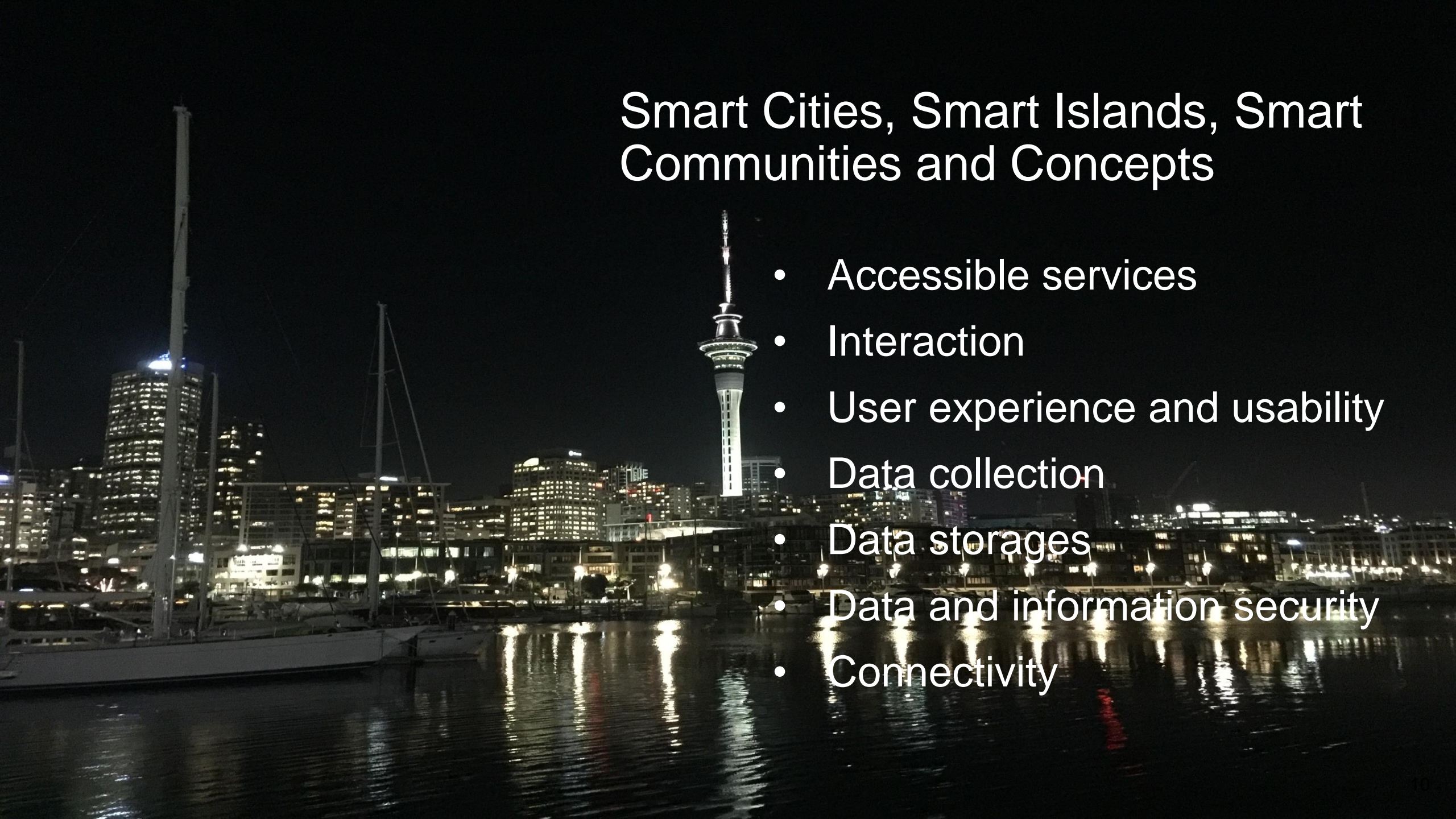
# Smart Cities, Smart Islands, Smart Communities and Concepts





# Smart Cities, Smart Islands, Smart Communities and Concepts

- Accessible services
- Interaction
- User experience and usability
- Data collection
- Data storages
- Data and information security
- Connectivity





Smart Energy

Education

Waste Management

Smart Communication

Smart Transportation

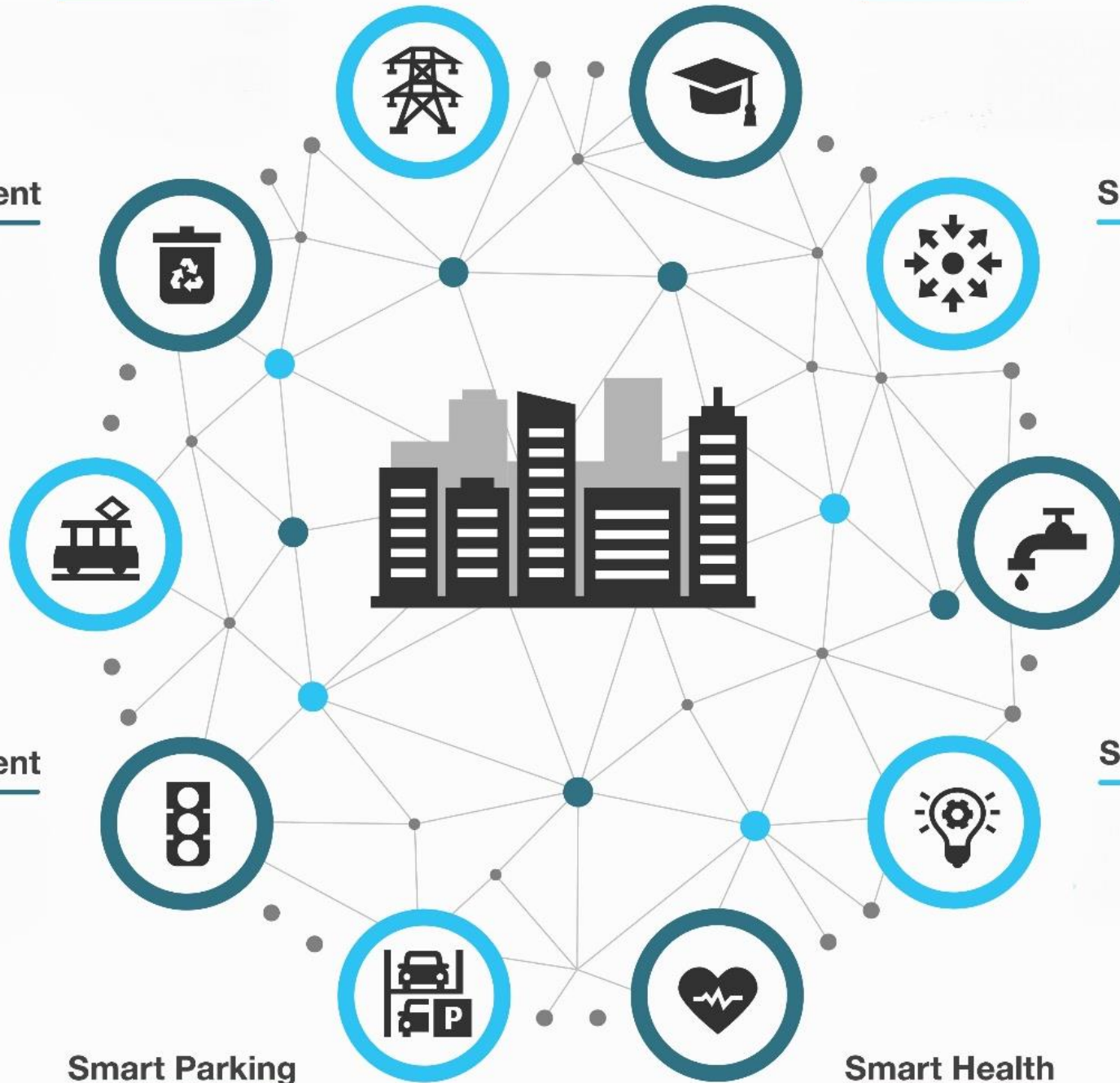
Water Quality

Traffic Management

Smart Street Lights

Smart Parking

Smart Health





# Smart Wellington, NZ

## Goals

- People centered city
- Connected city
- Eco city
- Dynamic central city





# How to achieve the goals?



With their partners Wellington City Council has implemented:

- a flexible and future-proof IoT backbone making the installation of sensors simple, inexpensive
- an inter-agency platform facilitating cooperation across the social and community agencies in the city
- machine learning and advanced analytic processing
- putting virtual reality engagement platforms in place to make that data accessible, useful and understandable
- developing our Civic Hacking communities to create new citizen-made apps, websites and services using city data.

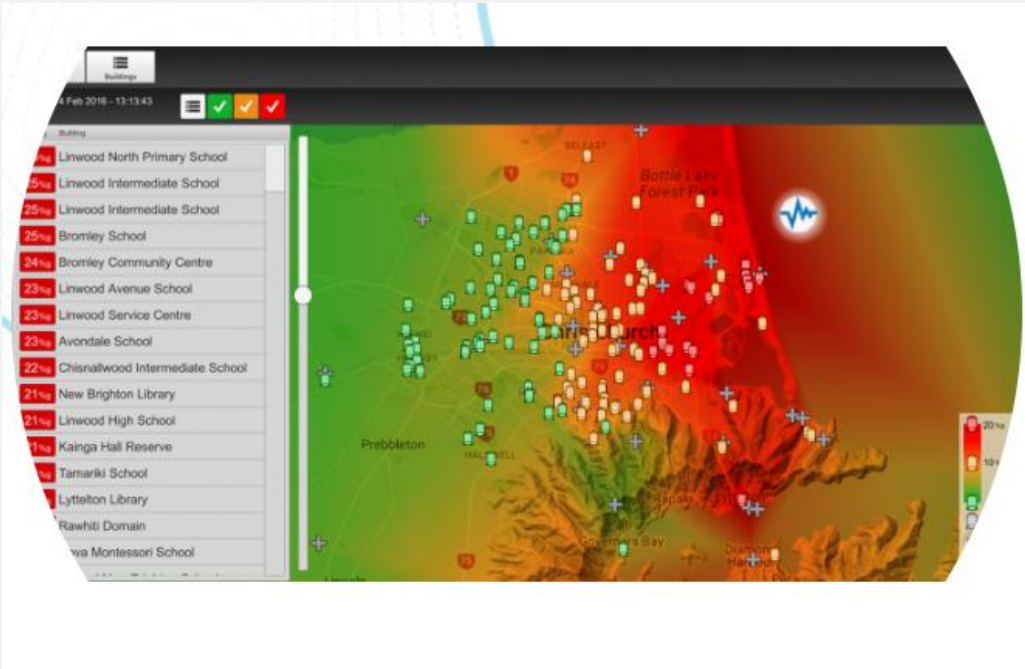


# Climate change and Smart City





# Other smart city projects, NZ



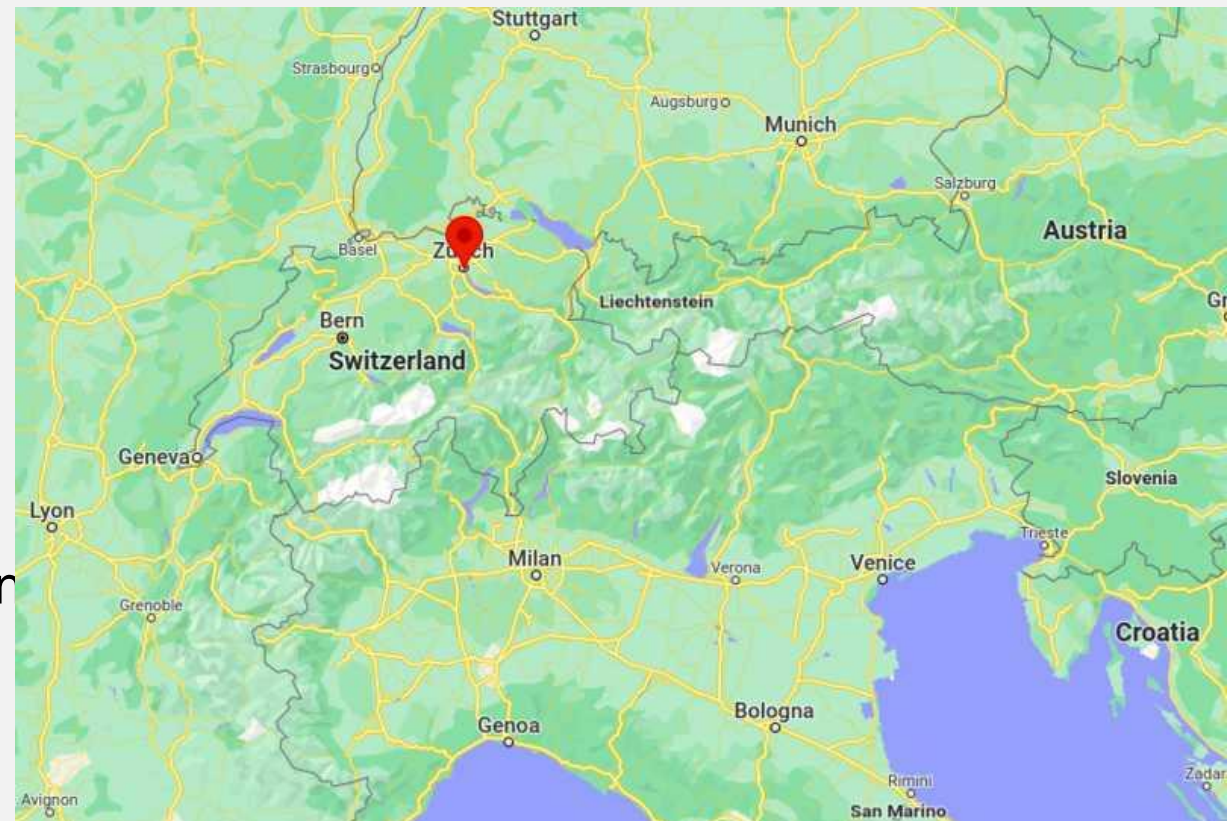




# Smart Zurich Strategy

“Good ideas are developed and implemented in a smart city”

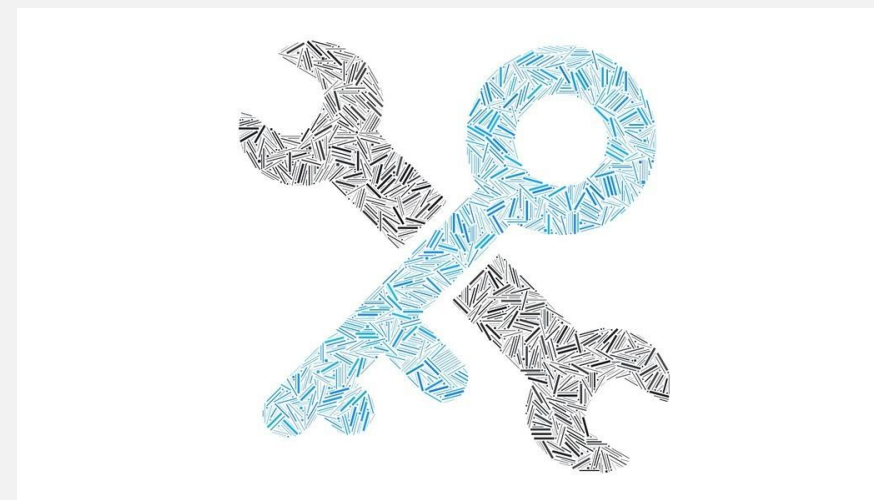
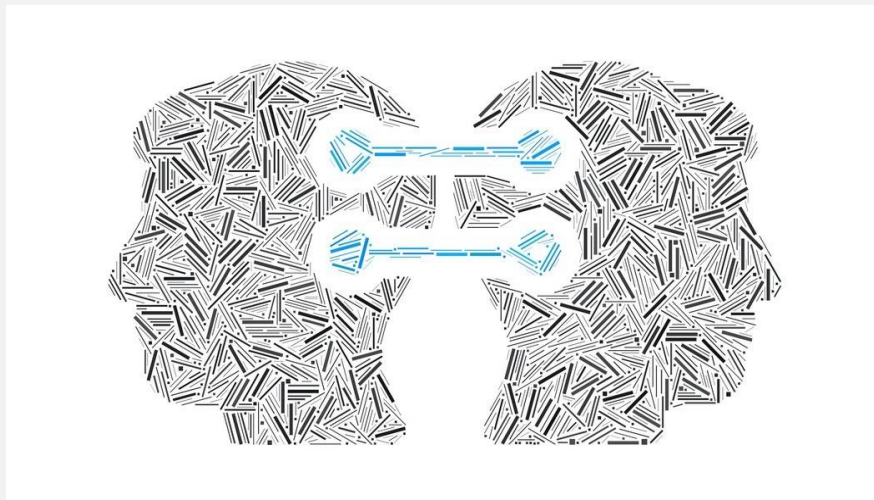
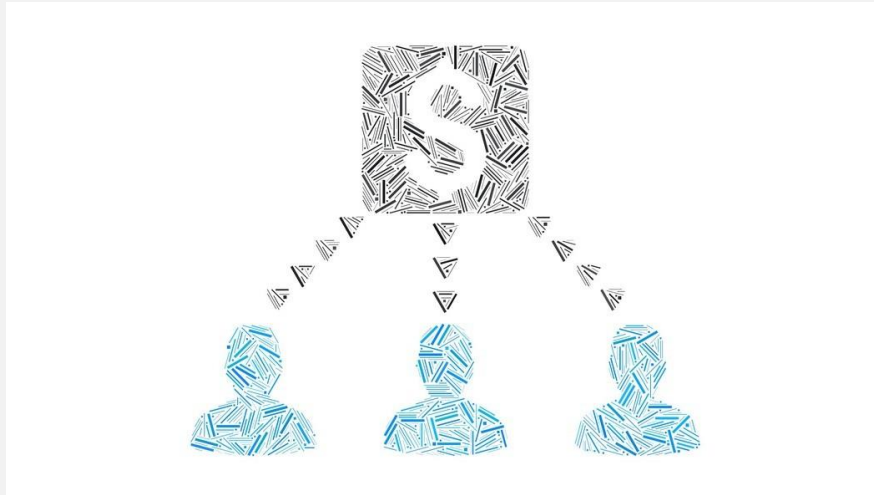
- innovation in the city administration of Zurich
- testing, learning and promoting innovative projects
- digital change is an opportunity for the city
- the aim is to maintain and further expand the high quality of life in Zurich today and in the future, to promote sustainable development and to strengthen Zurich as a location for innovation and business.







# Smart Zurich Strategy, key focus areas





# SMART ISLANDS

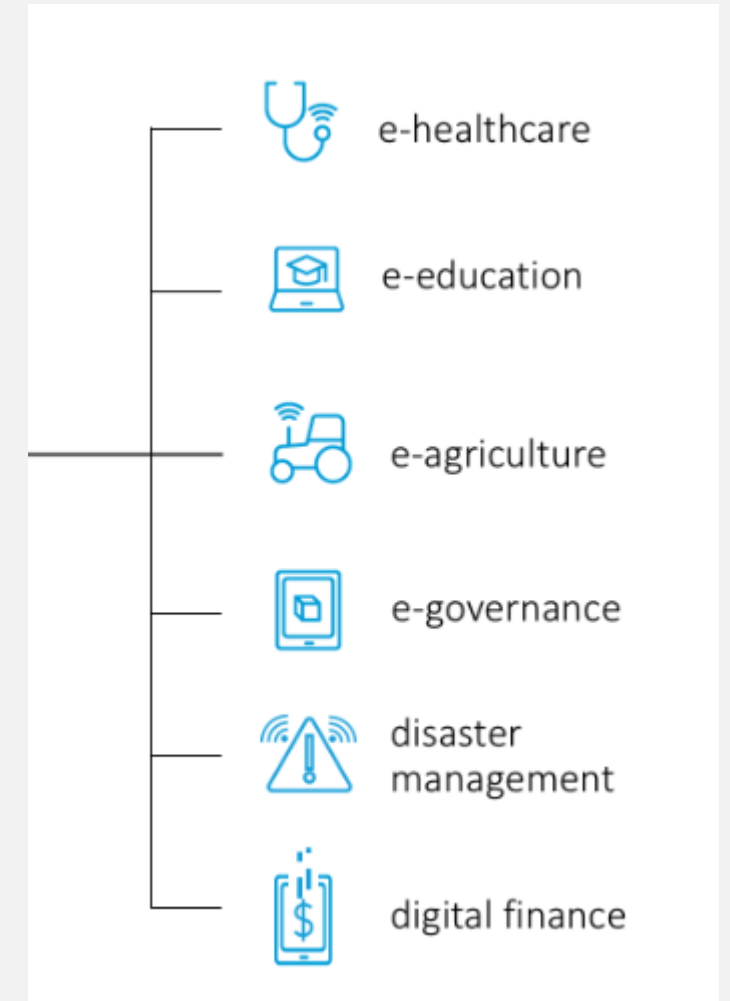






## ITU Smart Islands programme

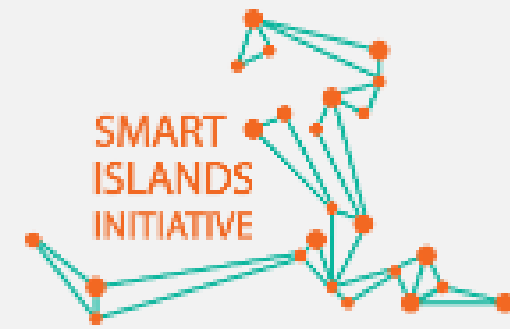
- Smart Islands is a programme that adopts an innovative approach to deliver **connectivity and scalable and sustainable services** to disadvantaged island communities.
- The Smart Islands programme aims at transforming rural and coastal communities and improving their well-being and livelihood by **connecting them to a range of digitally enabled services.**







## European Union Smart Island Initiative

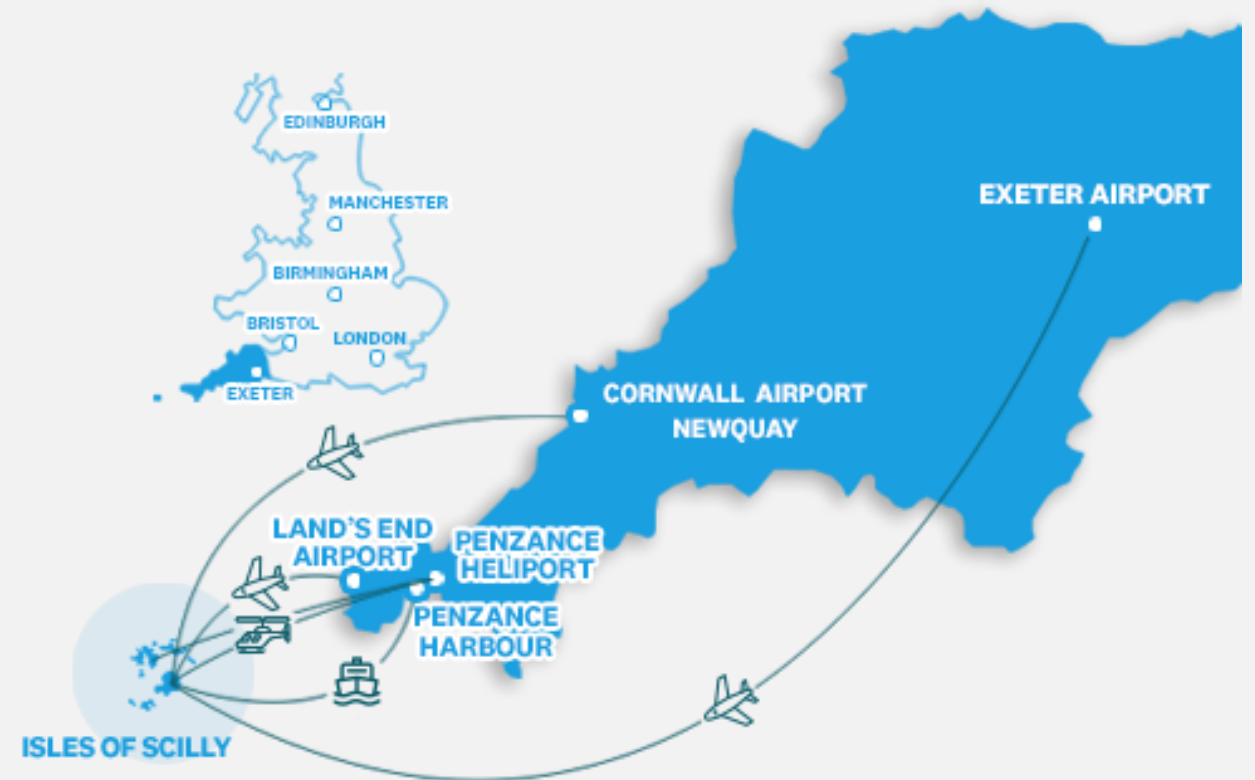


### A SMART ISLAND IS...

- the insular territory that embarks on a climate resilient pathway, combining climate change mitigation and adaptation efforts, in order to create sustainable local economic development and **high quality of life** for the local population by implementing smart and integrated solutions to the management of infrastructures, natural resources and the environment as a whole, **supported by the use of ICT**, all while promoting the use of innovative and socially inclusive governance and financing schemes.



# Smart Islands, Isles of Scilly

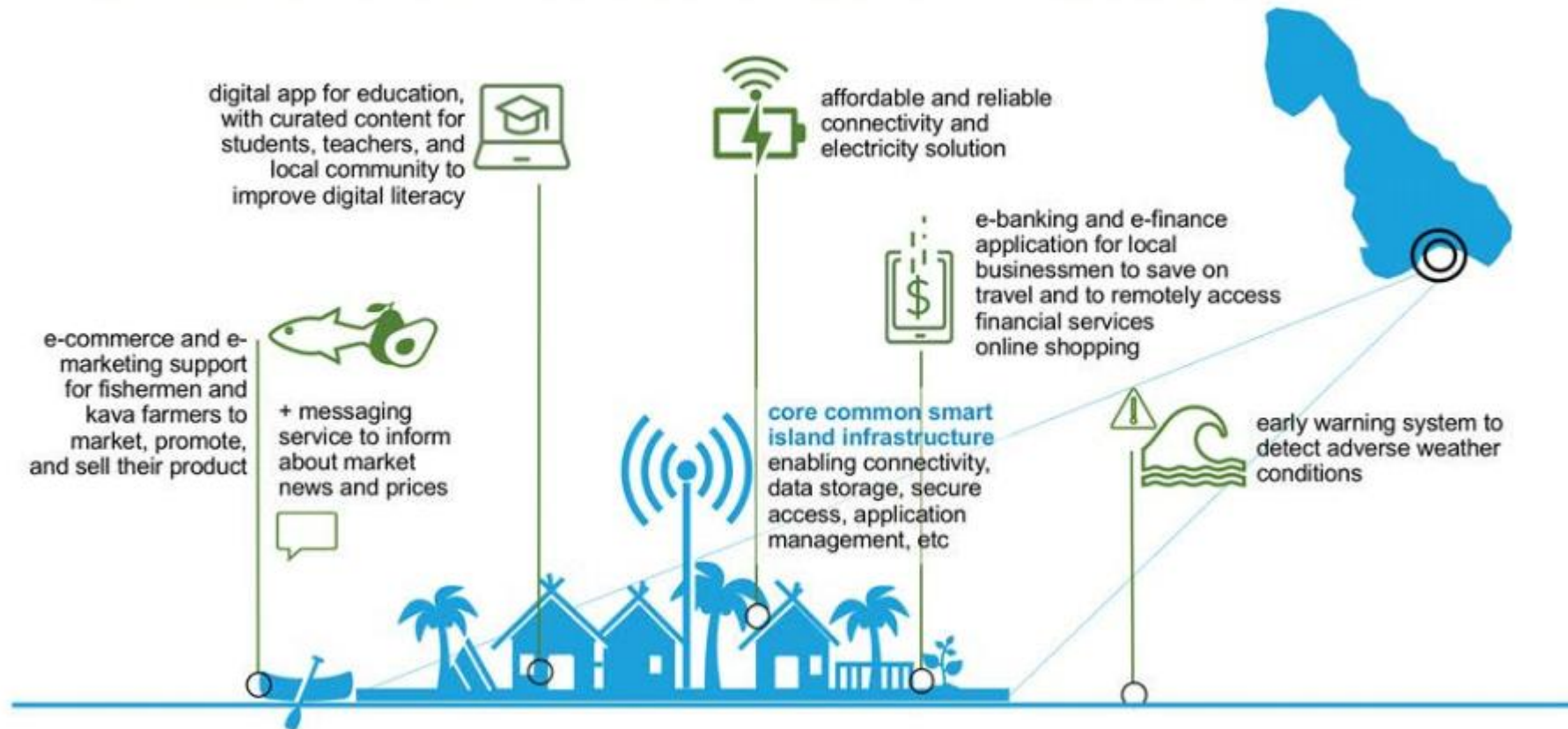




# South Malekula, A smart island of Vanuatu



## SMART ISLANDS: NEW SOLUTION





# Digital FSM Project





# WORLD'S FIRST COGNITIVE CITY

## SMART CITIES

*Reactive*

BUILT ON SENSORS

COMPUTE POWER

REAL-TIME

USES 1% OF DATA

## COGNITIVE CITIES

*Predictive & proactive*

BUILT ON TRUST

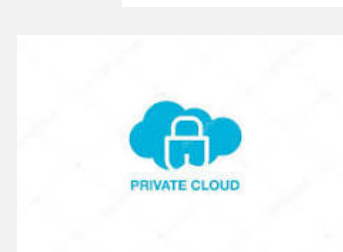
HUMAN EMPOWERMENT

AHEAD OF TIME

USES 90% OF DATA

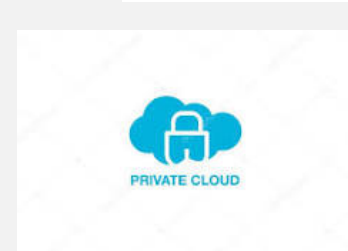
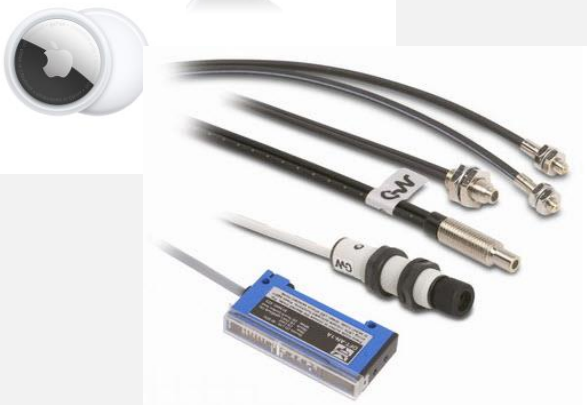


# The Foundation of all smarts



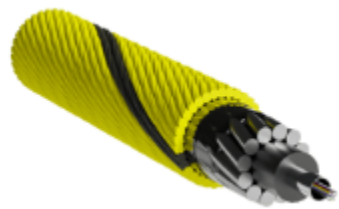


# CONNECTIVITY

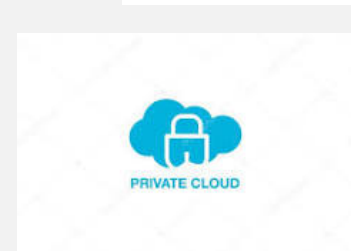




# CONNECTIVITY



Submarine cable



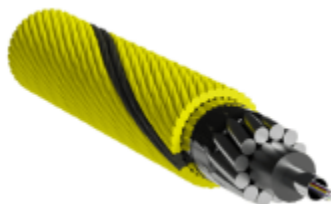




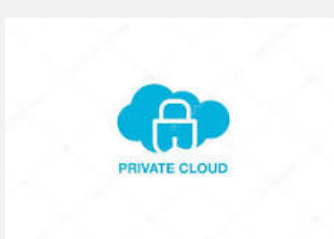
# CONNECTIVITY



Micro duct pathway



Submarine cable

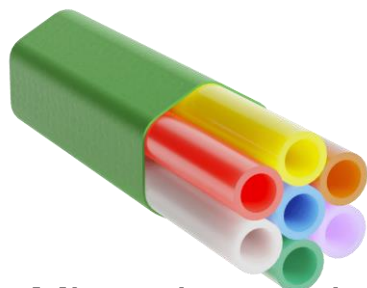




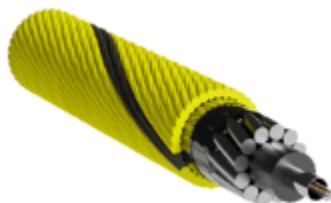
# CONNECTIVITY



Air-blown fibre



Micro duct pathway



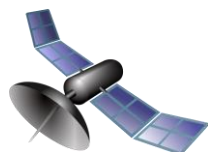
Submarine cable







# CONNECTIVITY



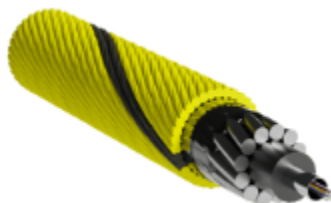
Satellites



Air-blown fibre



Micro duct pathway



Submarine cable

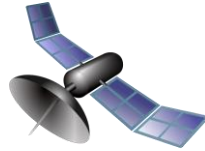




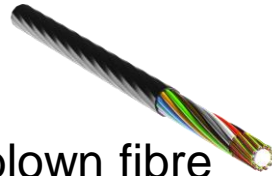
## CONNECTIVITY



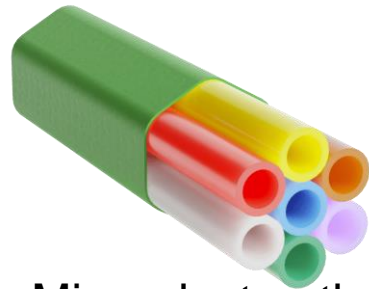
Wifi and Cellular



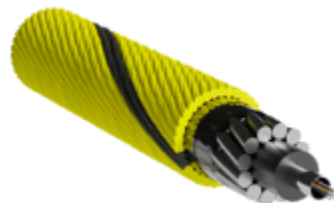
Satellites



Air-blown fibre



Micro duct pathway



Submarine cable







# Rural Smart Communities







data  
security



# Disaster recovery





# DRS Project in Auckland



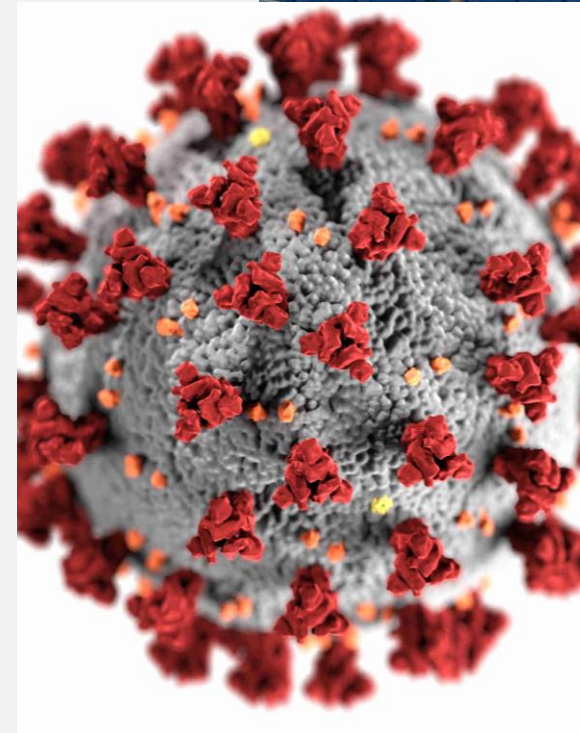


# DRS Project in Auckland

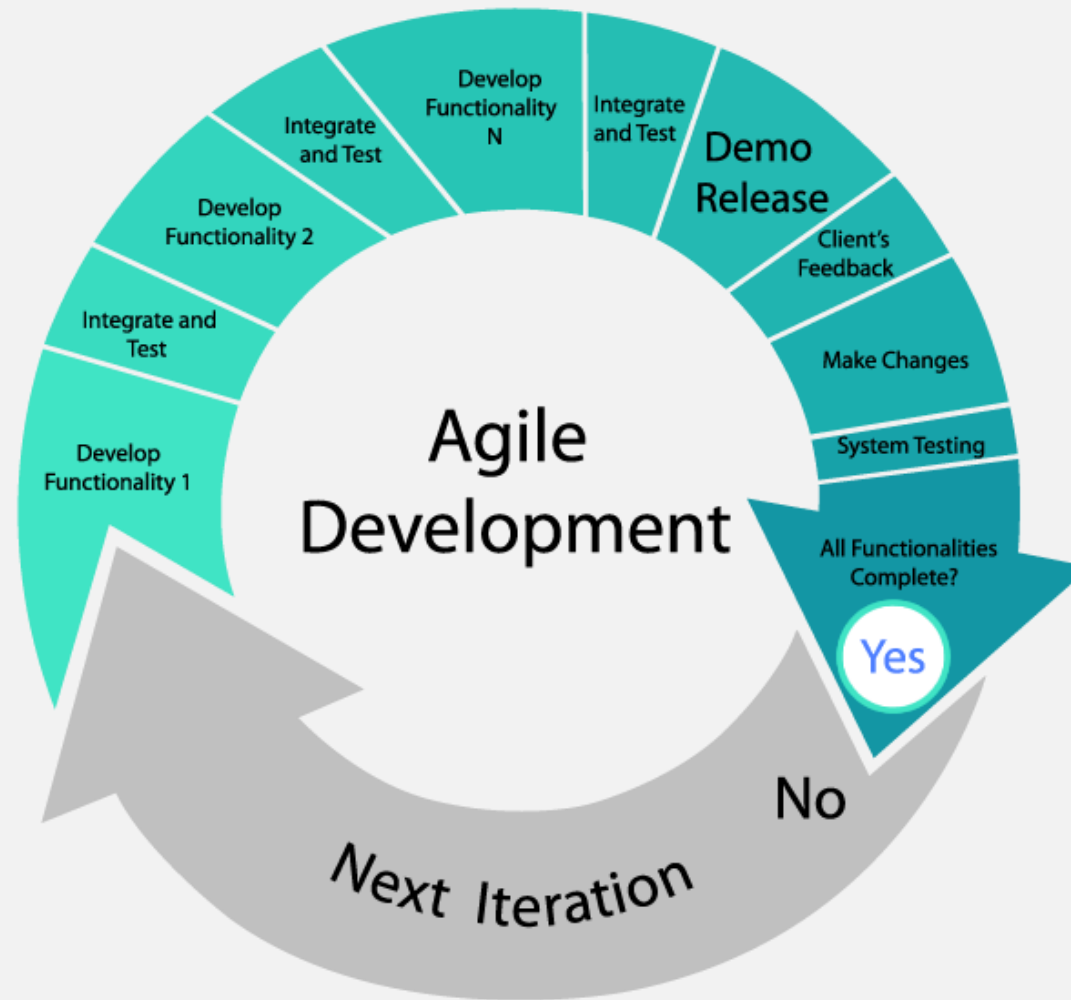




How well prepared were we? How well prepared are we?



# Agility and resilience





**CARRY ON BRICKING**



**WE WILL FIX IT ON THE  
NEXT AGILE SW DEVELOPMENT ROUND**



The logo consists of a cluster of white geometric shapes: circles and hexagons, arranged in a pattern that suggests a network or a molecular structure. 

# exatronic

A lasting link to the future.