

The Anatomy of PSMA Australia

The structure and components for delivering pan-continental geospatial datasets in Australia

Presented by:

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Chief Executive

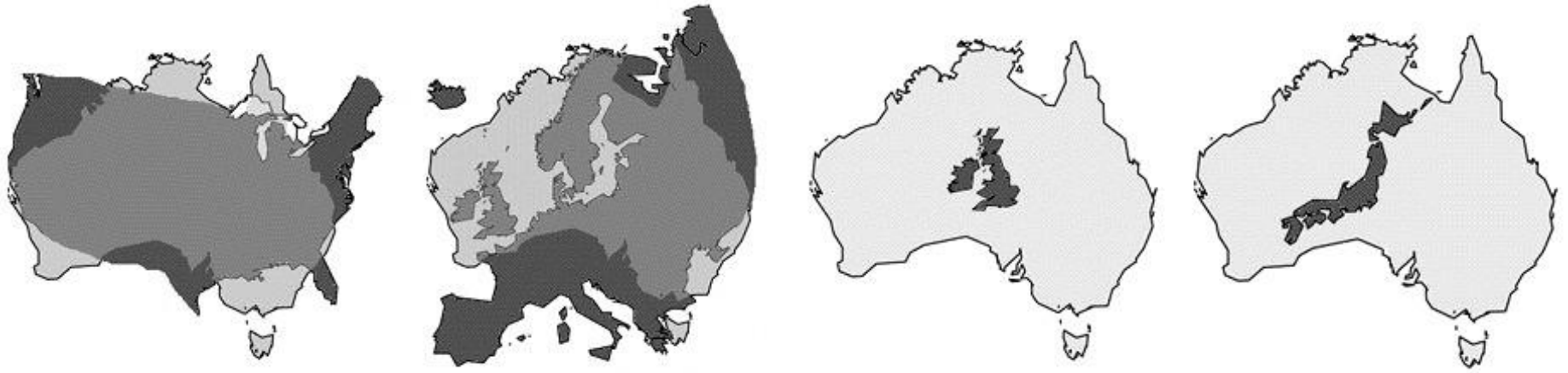
PSMA Australia Limited

Introduction & Context



Australia's Size

Land Area and Population



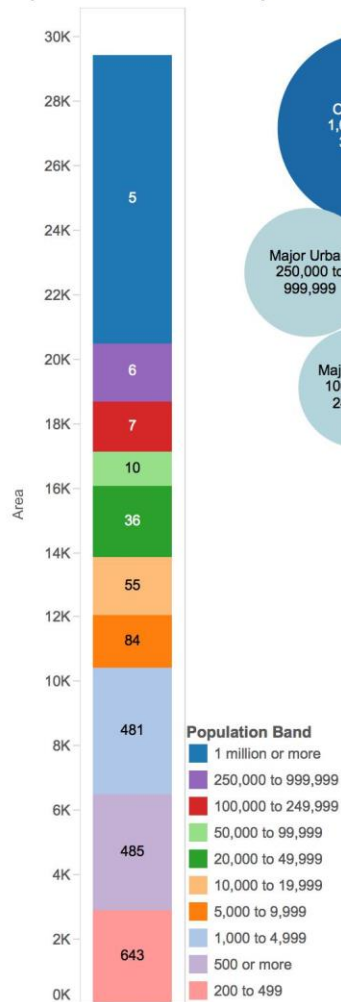
Population Densities (approximate)

Australia	2.4 persons per km ²
United States of America	29 persons per km ²
Europe	59 persons per km ²
United Kingdom	244 persons per km ²
Japan	336 persons per km ²

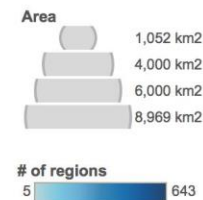
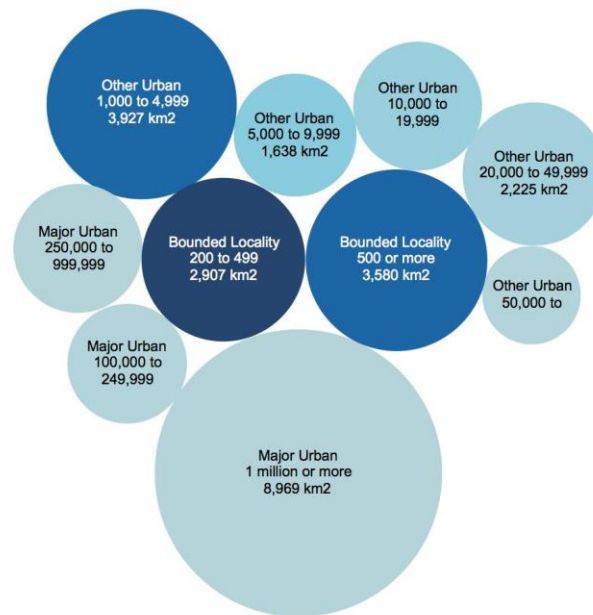
Australia's Size

Land Area and Population

Populated Area



Populated Area Coverage



The united states of Australia

Six states, two territories, one Commonwealth

Levels of government in Australia and some of their major areas of responsibility



*1 Federal /
Commonwealth
/ Australian
Government*

FEDERAL MATTERS SUCH AS:

SECURITY

DEFENCE

IMMIGRATION

ENVIRONMENT



*6 state and
2 mainland
territory
governments*

STATE MATTERS SUCH AS:

ROADS

PRISONS

HOUSING

PUBLIC TRANSPORT

POLICE and AMBULANCE SERVICES

MAPPING and LAND ADMINISTRATION



*~700 local
governments*

LOCAL MATTERS SUCH AS:

TOWN PLANNING

RUBBISH COLLECTION

WATER and SEWAGE

DOG REGISTRATION

LOCAL ROADS

The Conundrum



The Conundrum

“Necessity is the mother of invention”



The emergence of the digital economy gives rise to the need for aggregation of disparate geospatial data.



Market Failure arises due to significant risks (financial, political, technical, scale) and uncertain returns.

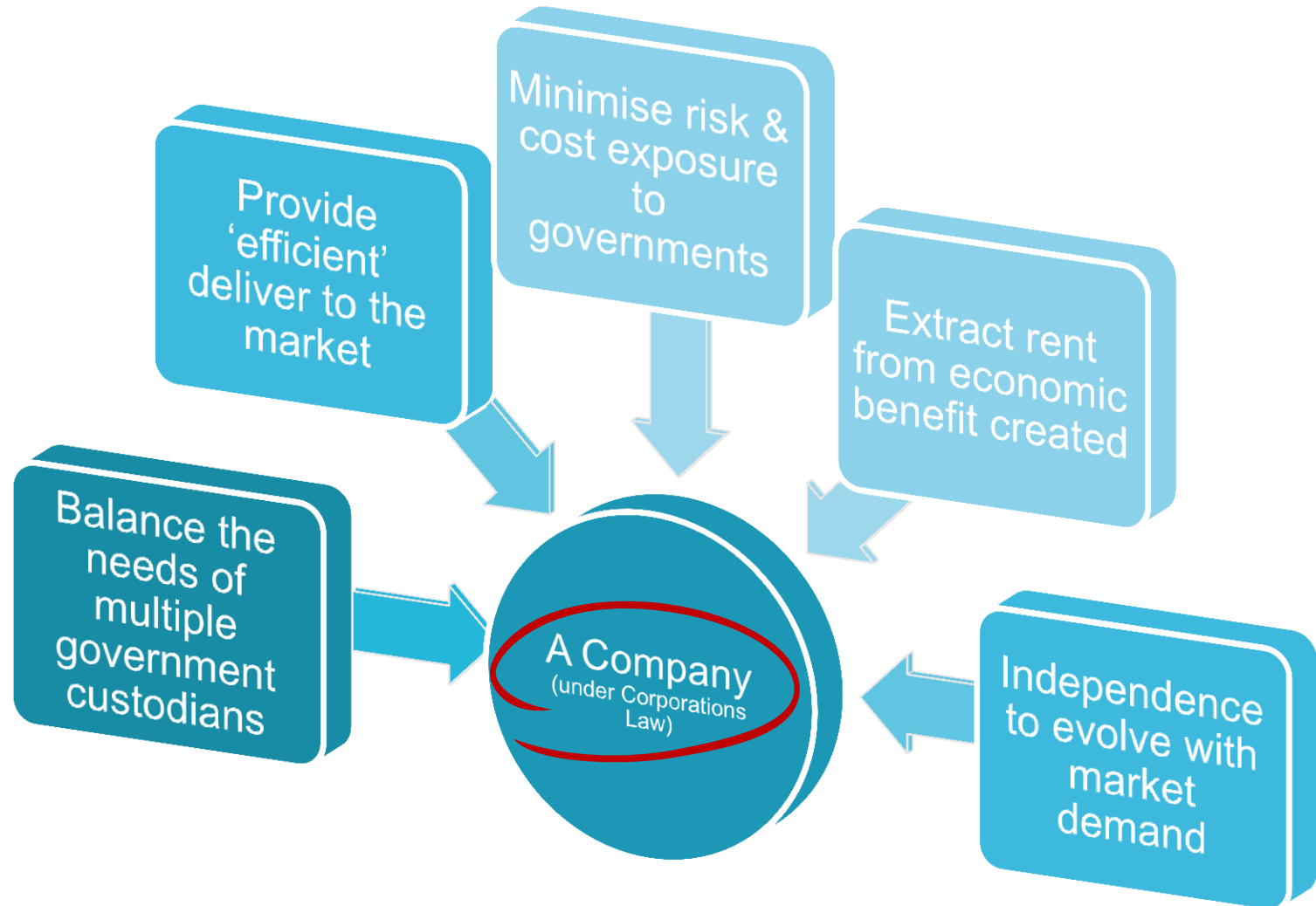


A viable solution must deliver sufficient confidence (maintenance, consistency, quality) to support investment.



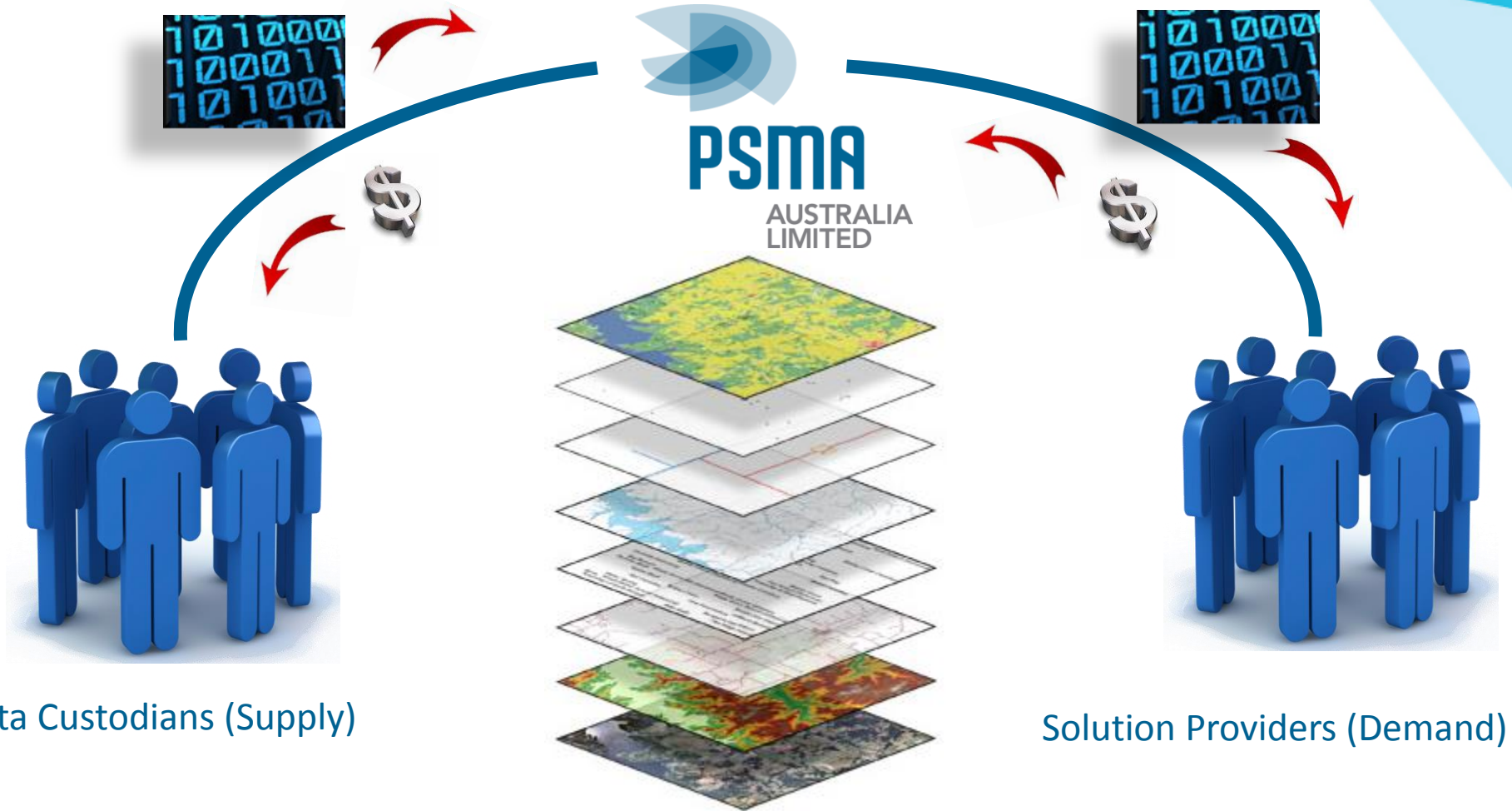
Each of the above requires an enduring solution; one that evolves with the market and is sustained by it.

The Needs & the Invention...



PSMA Australia

A Collaborative & Commercial National Solution



Collect

Standardise

Integrate

Extract

Deliver

An In-efficient Model

for Continental Spatial Data Delivery

Data Custodians

Solution Providers

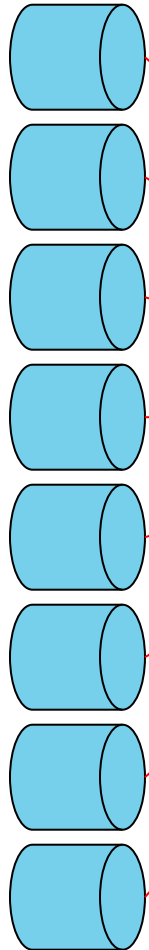


An Efficient Model for Continental Spatial Data Delivery

More resources for collection &
maintenance

Data Custodians

Governments of Australia



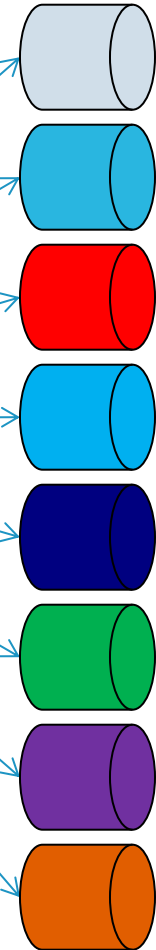
This model provides an extremely powerful mechanism for
coordination and assembly of fundamental national
datasets



The model focuses on the
removal of duplication through the establishment and
management of a strong relationships network.
The model is sustainable as it delivers the value required by the
market and the need for revenue ensures this focus.
Importantly, the costs accumulate with PSMA not the custodians.

More resources for
innovation

Solution Providers



Business Model Summary

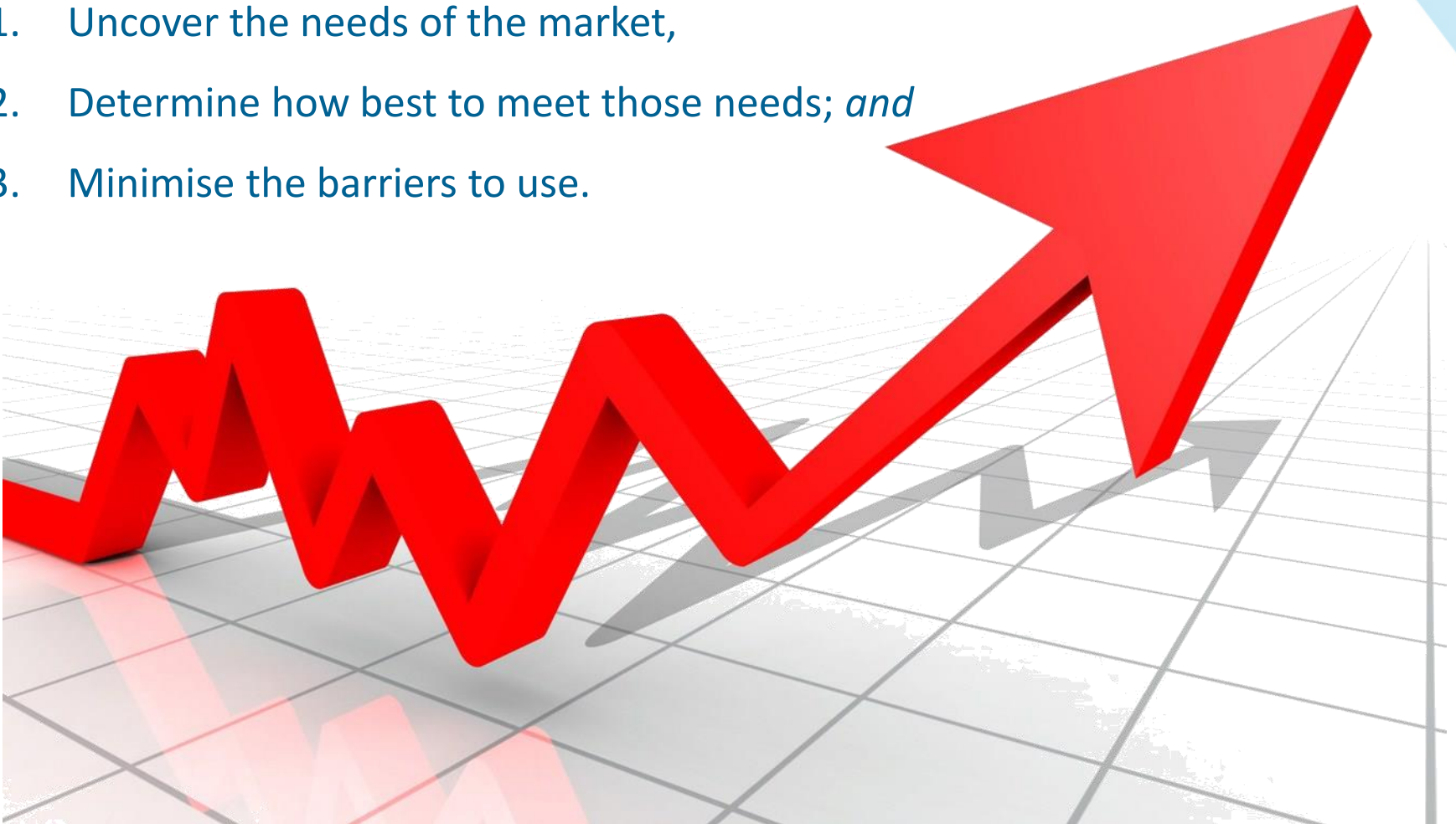
Key Aspects of PSMA Australia

- Unlisted Public Company limited by shares
- Effective, multi-disciplinary team
- Data harvesting, standardisation, integration & product development
- non-exclusive, commercial licensing agreements.
- ‘Wholesaler’
- Revenue through licensing fees
- Maintenance & Development
- *Government owned BUT not Government funded.*

Market Driven Solution

focused on *Value Maximisation* of geospatial data

1. Uncover the needs of the market,
2. Determine how best to meet those needs; *and*
3. Minimise the barriers to use.



Australia's Fundamental Data

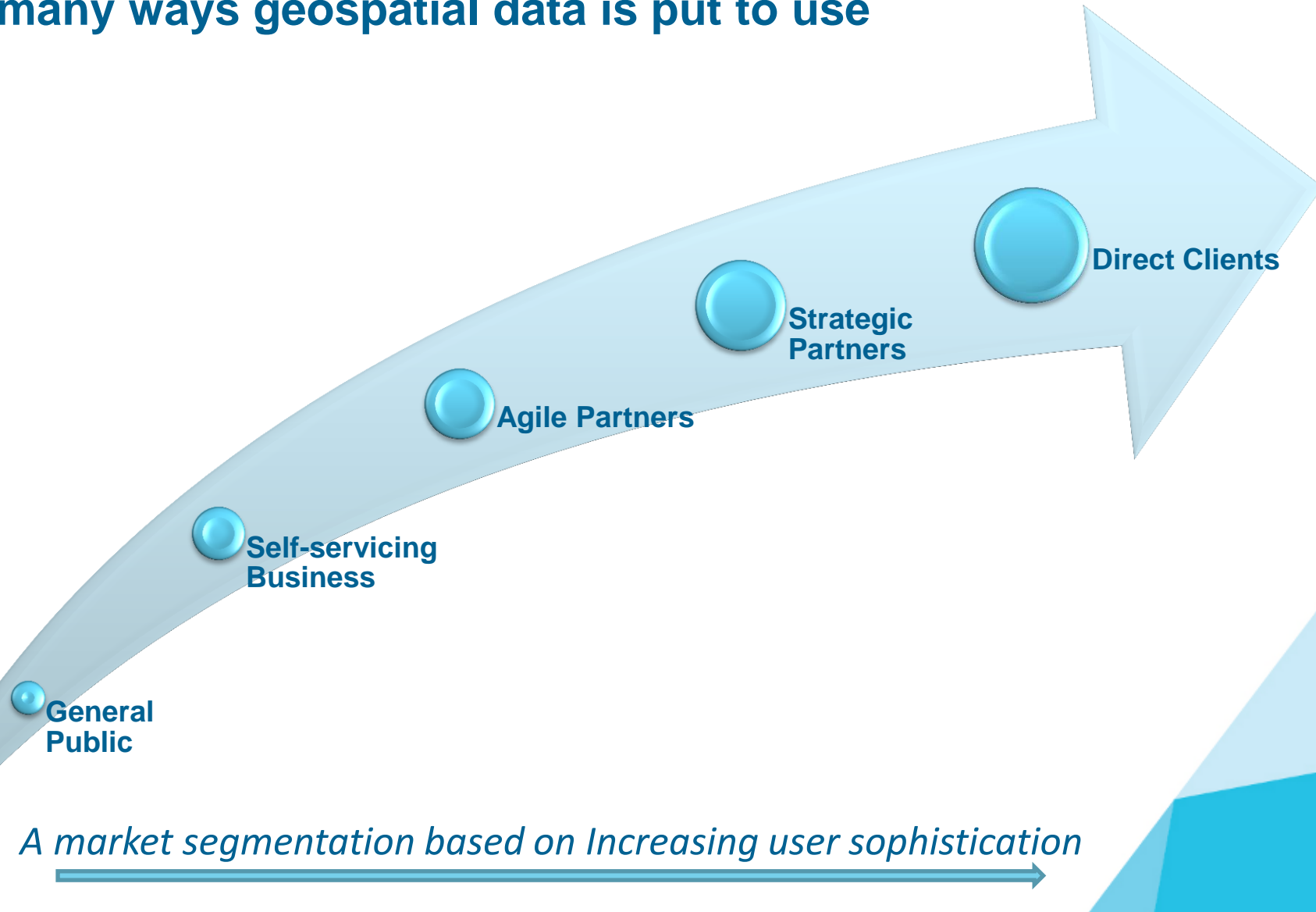
The Foundational Spatial Data Framework



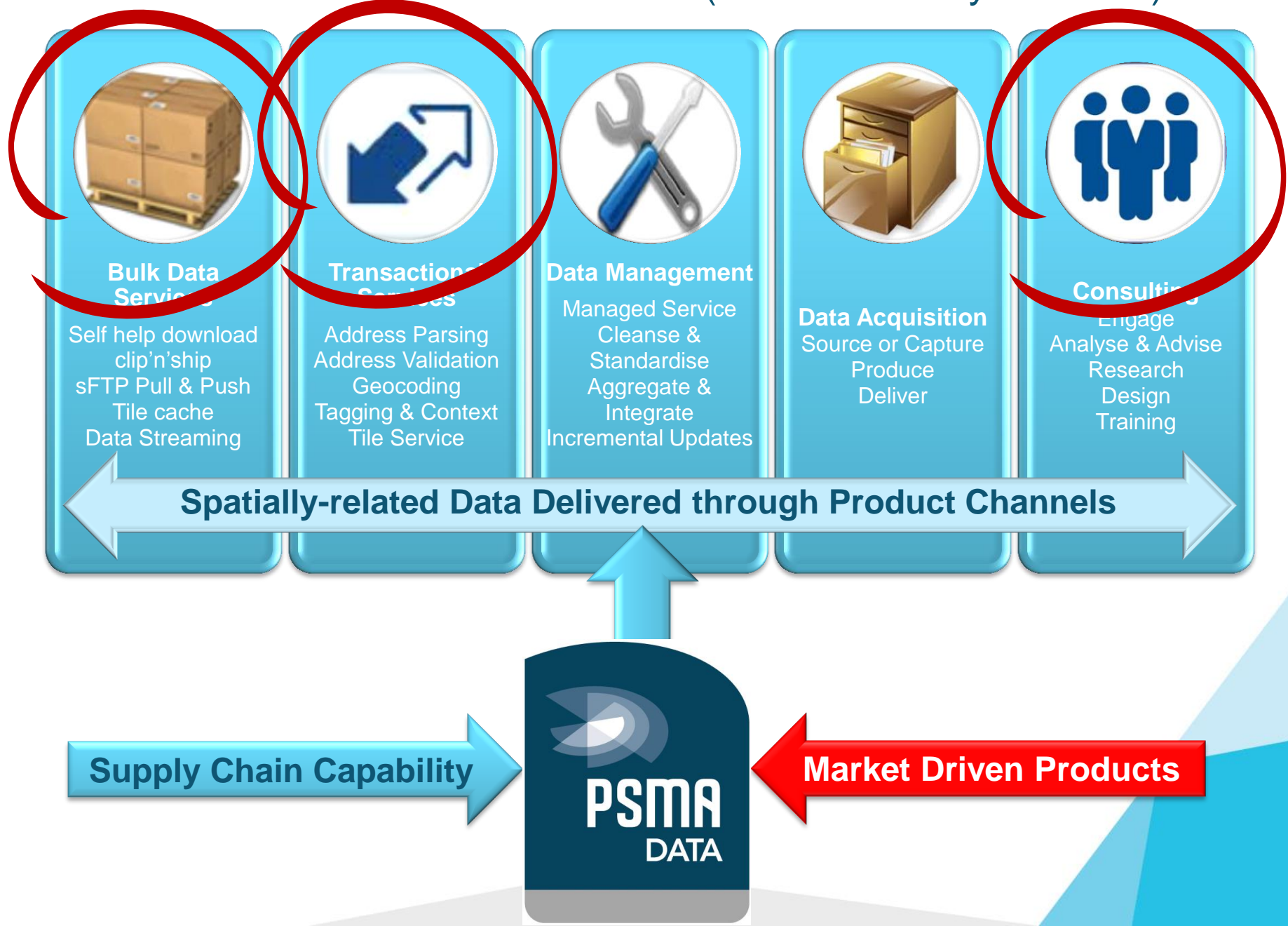
- ANZLIC (the Australian & New Zealand Spatial Information Council) has 10 identified foundation data themes.
- PSMA is currently involved in delivering aspects of 7 of these foundation themes through our national products.

A New View of the Marketplace

The many ways geospatial data is put to use

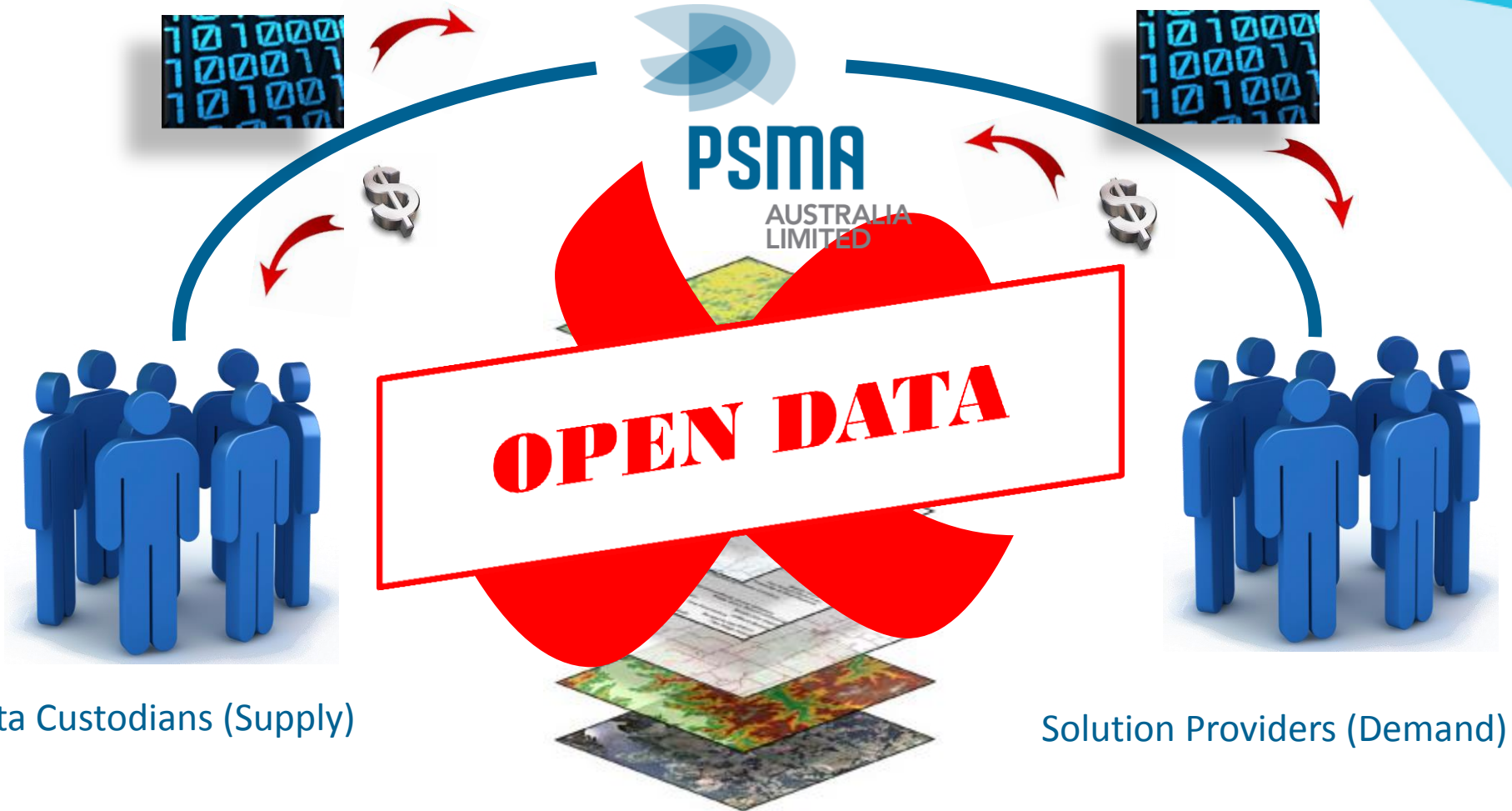


Our Product Channels (data & delivery services)



PSMA Australia

A Collaborative & Commercial National Solution



Collect

Standardise

Integrate

Extract

Deliver

Open Data Paradox

How can the PSMA model survive?

- Can PSMA Australia exist under a commercial model when all of its owners have adopted an Open Data policy?

Yes!

but it might look different to what you expect!

- In February this year, PSMA Australia's flagship product, G-NAF, the premium geocoded address dataset in Australia, was released to the market at no cost to the end user.
- This was achieved following a long negotiation with the Australian Government to establish a commercial deal that would enable this to occur.

Open Data Paradox

Governments rationale

- Shareholders support the current model
- PSMA Australia independent of governments' open data policies.
- PSMA Australia seen as adding value to Open Data.
- Australian Government pursuing Open Data based on 'greatest value to the economy', not ownership.
- PSMA Australia role shifts to one of geospatial data *'incubator'*.
- This hybrid model delivers a faster and greater impact to the economy with minimal downside.

The proof
of the
pudding...



... is in the
eating.

It tastes great so far!

What else is on the menu?



Details of the environment

Let's just imagine ...

Extracted attribute features

- 2D roof polygon
- Roof area
- Roof pitch/complexity
- Ground level coordinates for roof vertices
- Number of roof vertices
- Ground level building centroid
- Maximum roof height
- Swimming pool indicator
- Roof material
- Solar panel indicator
- Residential land use indicator

Related Property Information

- Geocoded Address
- Cadastre boundary
- Property boundary
- Zoning

Vegetation Height

- Tree height

Landcover

- Impervious surfaces
 - *Built up areas*
 - *Road and path*
 - *Bare Earth*
 - *Buildings*
- Vegetation
 - *Tree coverage*
 - *Grass coverage*
 - *Unspecified vegetation*
- Water
- Unknown
- Unclassified

Digital Elevation Model (DEM)

- 30m National DEM

...for every single building in the country!



Geoscape

Organisational Transformation

The future patterns need to be very different to the past



Transformative thinking is not a requirement of industry alone. We must also adopt a fresh approach to the problems that we are faced with.

Questions



Dan Paull

Chief Executive Officer

Answers

For more information...

A copy of this presentation is available for reference upon request. Other related information is also available so please ask.

Or Contact PSMA Australia

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Or visit our web resources at:

www.pasma.com.au