New Zealand

Developing a hub for e-Social Science in NZ: Linking the GRID with emergent social data technologies and networks
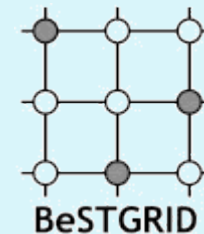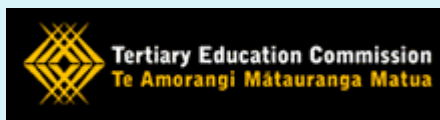
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THE UNIVERSITY OF AUCKLAND
NEW ZEALAND
Te Whare Wānanga o Tāmaki Makaurau

The University of Auckland

Building KAREN Communities for Collaboration

3 July 2007

Tertiary Education Commission
Te Amorangi Mātauranga Matua

NZSSN
SOCIAL STATISTICS NETWORK

BeSTGRID

Presentation overview

- Project overview; partners, components and objectives
- Business service model
- Data service setup
- Middleware – Nesstar
- Benefits of GRID/KAREN to service
- Issues
- Using the service – more information

- Questions?

TEC Data Service Project

- Development/pilot project

- "Developing a hub for e-Social Science in NZ: Linking the GRID with emergent social data technologies and networks"

- Start date 1st July 2007; project term 12 months

- Funded by the Tertiary Education Commission (TEC)

- Data service proposed name – SSDASH; "Social Science Data Archive Service House"

Parties/Partners

- Internal – The University of Auckland's Departments of Sociology, Statistics and Political Studies, and BeSTGRID

- External – AUT, ASSDA, Statistics NZ

- Advisory – BRCSS, Massey, Canterbury, Data Saving and Sharing Committee (SPEaR, MSD)

Project Aims/Vision

- Develop an advanced social statistics data service utilising BeSTGRID and other remote access technologies in NZ and overseas

- Develop NZ's research infrastructure in line with global best practice and create a distributed data archive with state-of-the-art cataloguing & access

- Improve the speed and capacity for data cleaning & compilation, analysis and dissemination

- Maximise Public Good Funded research investments by providing a facility for saving and sharing data

Project Objectives

- ▪ Integrate with GRID nodes (via BeSTGRID) capable of functioning as a research access point.

- ▪ Enhance supply of social science data to GRID-linked researchers

- ▪ Enhance demand for, and capability in use of, GRID-enabled data services
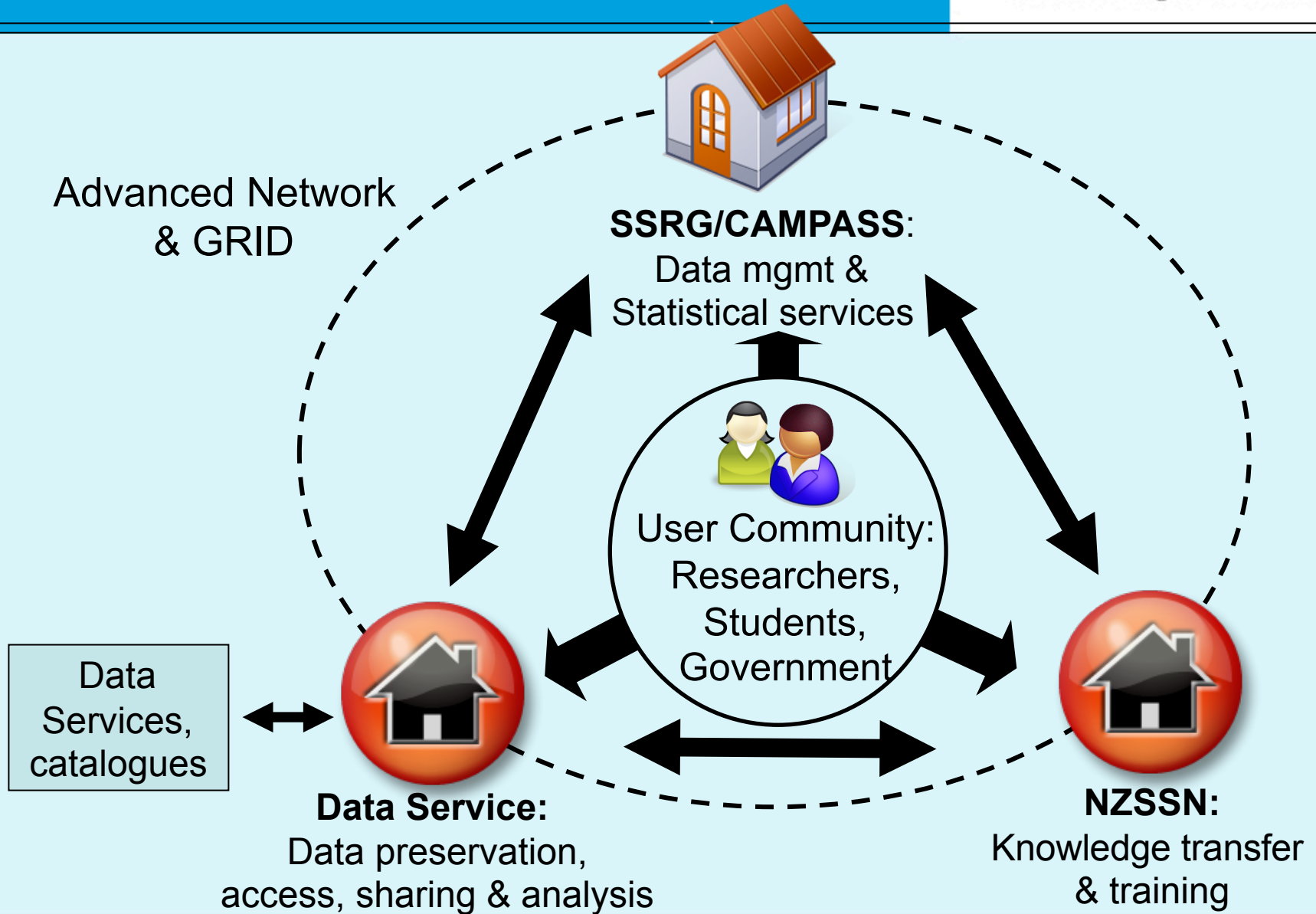
Project Components Overview

- **Data acquisition and preservation**
  - Using international standards, protecting, enhancing and extending research investment value

- **Awareness and usability**
  - Promoting data archive services use including seminar and training programmes

- **Increase data accessibility**
  - Delivered through secure Internet and BeSTGRID

- **Analytical capability**
  - Providing the access point and training required to analyse social data

- **Workforce and demand**
  - Increasing the capability of the research workforce, both public and private, to analyse complex databases
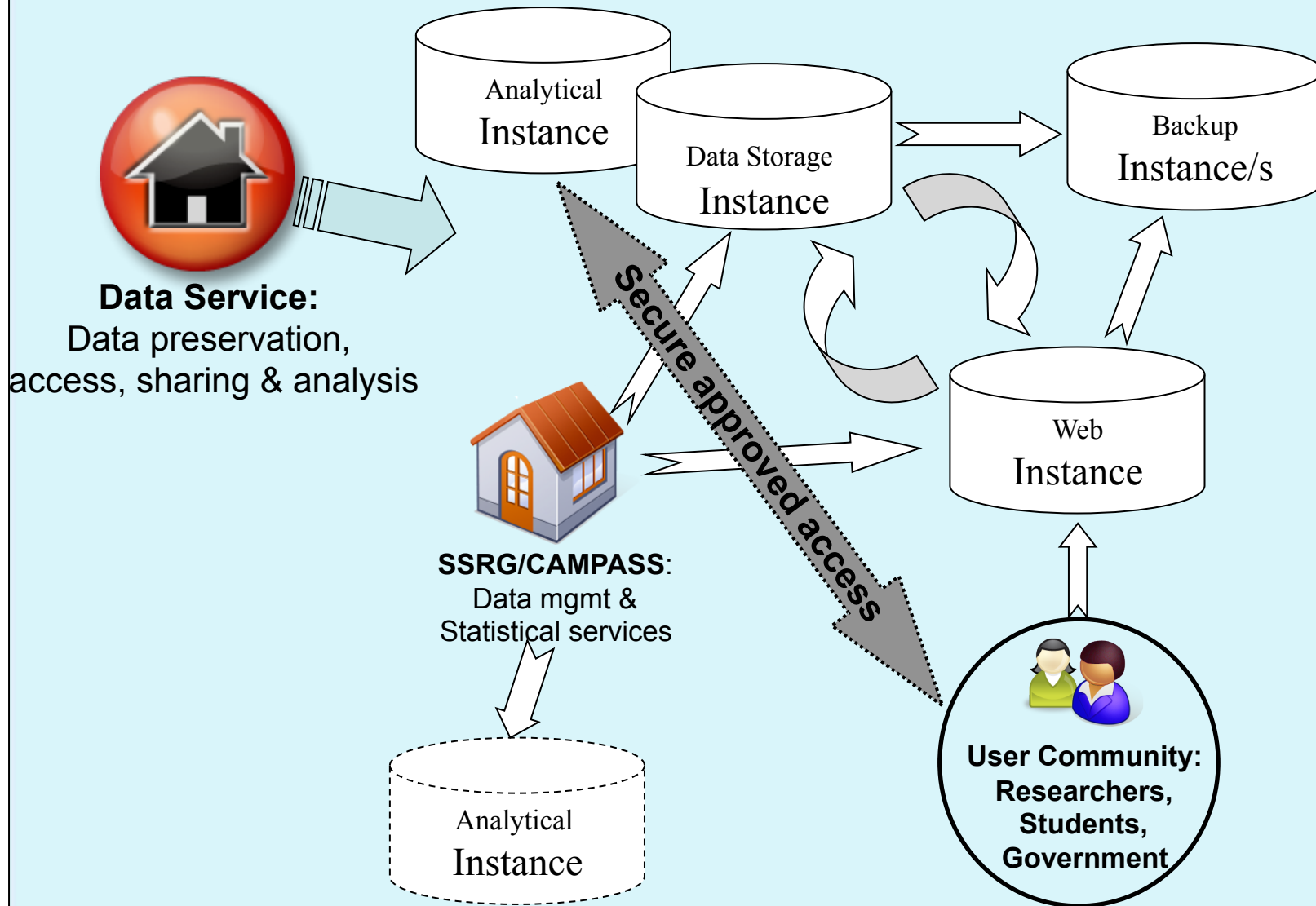
Business Service Model

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Advanced Network
& GRID

SSRG/CAMPASS:
Data mgmt &
Statistical services

User Community:
Researchers,
Students,
Government

Data
Services,
catalogues

Data Service:
Data preservation,
access, sharing & analysis

NZSSN:
Knowledge transfer
& training

Data Service Setup

Data Service:
Data preservation,
access, sharing & analysis

Analytical
Instance

Data Storage
Instance

Backup
Instance/s

SSRG/CAMPASS:
Data mgmt &
Statistical services

Web
Instance

Secure approved access

Analytical
Instance

**User Community:
Researchers,
Students,
Government**

Middleware – NESSTAR
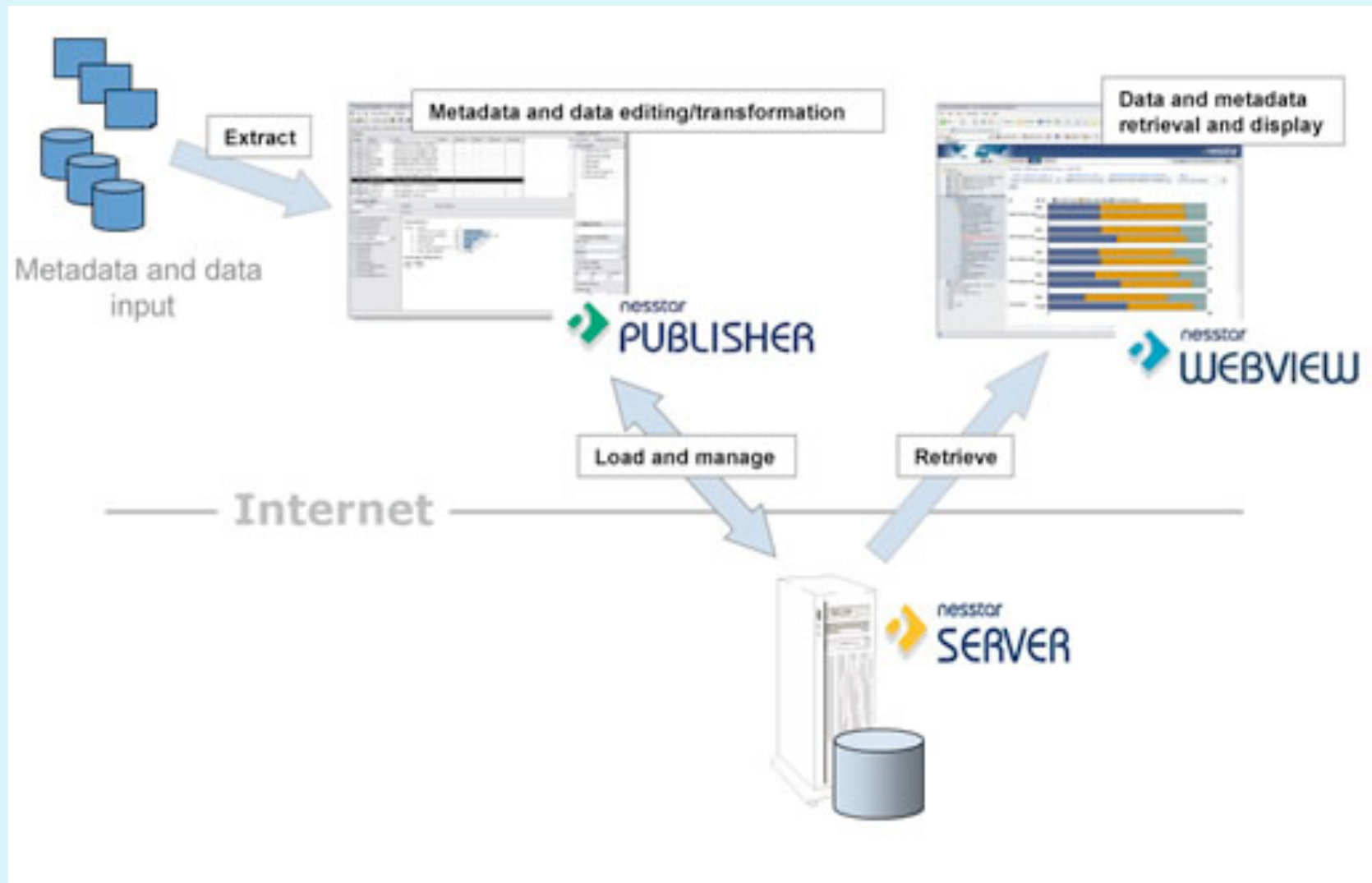
Benefits: GRID Technology and KAREN

- Enable greater computing capacity
- Speed up computationally intensive queries
- Enhance potential for inquiry
  - More complex questions
  - More data
  - More complex methods
  - Faster results
  - Better outcomes
  - Greater representation, larger datasets/samples
- Collaboration – national, international
- Distribution – nodes and ownership

Benefits: Data service and integration

- ▶ Preserves and protects NZ research investments
- ▶ Improves efficiency – use and reuse of databases for research and teaching
- ▶ Increases options for postgraduate, and undergraduate studies
- ▶ Reduces inequalities - access to key resources for education
- ▶ Increases real life teaching opportunities – projects, activities and examinations
- ▶ Improves the ability to plan research activities via highlighting gaps in knowledge.
- ▶ Enables strong international partnerships in research and research education
- ▶ Utilises emerging technologies for the social sciences in NZ
- ▶ Encourages co-operation between researchers
- ▶ Encourages consistency in data collection

Issues: Data service and integration

- Uptake and sustainability
- Maintaining confidentiality
- Maintaining public confidence - participant consent
- Investigators control of data
- Intellectual property
- Overstretching analysis – appropriateness
- Reporting and public perception
- Development and implementation of policies

Using the service – more info?

- Contact Daniel, d.patrick@auckland.ac.nz

- For further information about this and other projects of the Social Statistics Research Group, please visit:

http://www.nzssn.org.nz

Questions?