



# The Impact of New Information Technologies on Creation, Access and Use of Statistics

*Second Australian National Summit on Open  
Access to Public Sector Information*

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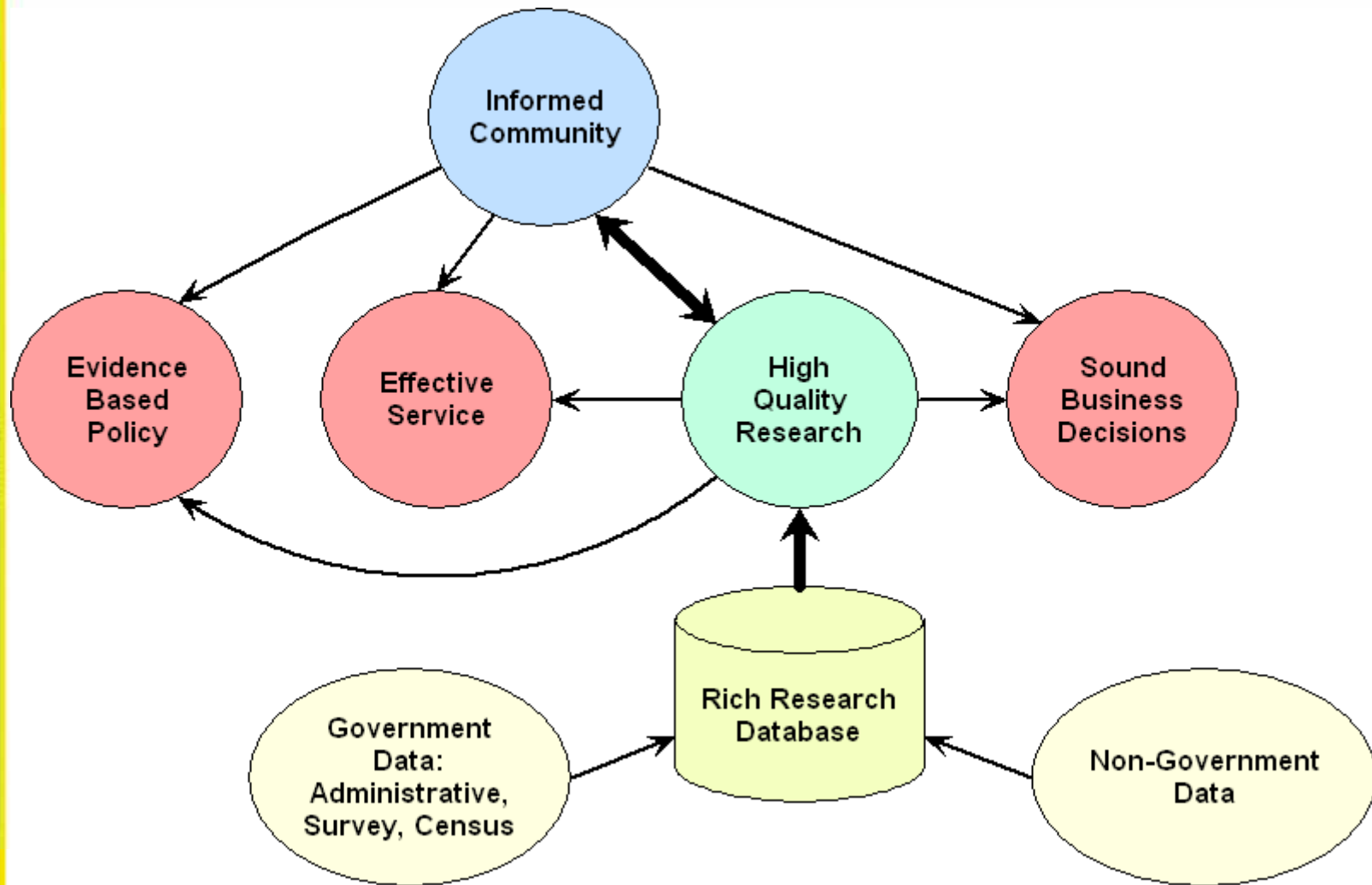
statistics for informed

decision making

**Susan Linacre**

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# Valuing an Informed (and Demanding) Community



# Some questions we might expect to know the answer to

What proportion of Australian teachers studied Maths in their last two years of school and is this changing?

How many children attend preschool and who is missing out?

Across Australia, how much variability is there in sentencing for a given crime?

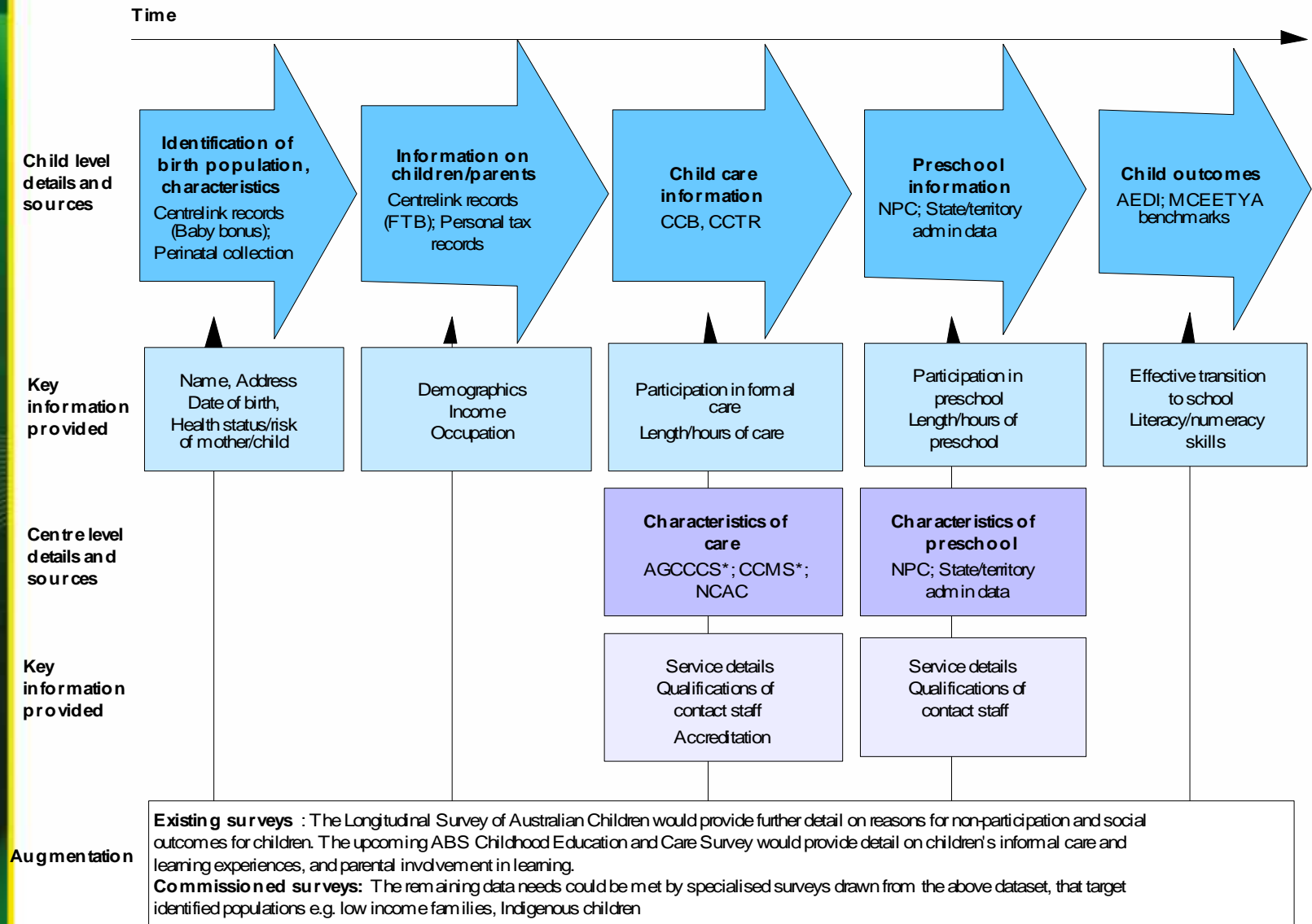
What proportion of humanitarian migrants have a long term job within 12 months, and who misses out?

How does life expectancy in Australia vary for different socioeconomic groups?

What is the impact of family breakdown on a child's year 3, 5 and 7 performance?

On average what are the total health care costs for someone with diabetes compared to someone without?

# Early Childhood Learning and Outcomes - some relevant datasets



\* Beyond 2006, the AGCCCS may not be conducted again in its current form. Data collection mechanisms to supplement these data are being investigated, which include the CCMS

# Statistical Administrative Data:

Secondary Use  
or  
Strategic Use?

# New Technologies and NSO Impacts ...

*'Social computing' and broadband everywhere: blogs, wikis, virtual worlds, media sharing, podcasts, 3+G networks, webinars, personal GPS etc.*

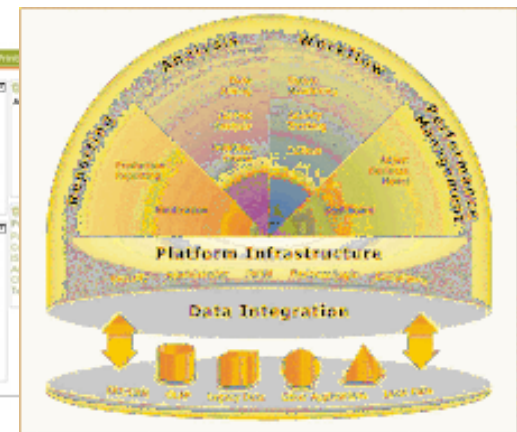


# with commercial IT business taking this seriously ...

Microsoft Social Computing Group - <http://research.microsoft.com/scg/>

IBM Social Computing Group - <http://www.research.ibm.com/SocialComputing/>

# and open source quantitative analysis tools ...





# and analysis/visualisation sites.

**Swivel**

Upload and explore data.

**Spotlight: Food production sets up energy**

**Have Official Statistics?**

**Business Bloggers**

**5207 Data Sets**

**GAPMINDER**

TED 2007 - THE SEEMINGLY IMPOSSIBLE IS POSSIBLE

GAPCAST #1 - HEALTH, MONEY & SEX IN SWEDEN

GAPMINDER WORLD 2006

HUMAN DEVELOPMENT TRENDS, 2005

**U.S. Census Bureau**

**HURRICANE DATA**

**Demographic Profile of Hurricane Wilma Affected Counties**

Click on a county in the population map below to view the statistics for that county.

**FIPS County Code - Total Population**

**Shelters - Broward County, Florida**

**Schools - Broward County, Florida**

**Demographic Characteristics from Census 2000 Summary File 3**

Sub-County	Total County
Total Population	400,200
Total Households	142,000
Total of 65 years and over	84,000

# Fundamental Questions?

- What's out there? [Visibility]
- How can I find it? [Search]
- Is the information resource in reasonable shape? [Information Asset Management]
- Can I access it? [Access Conditions / Controls]



# Fundamental Questions... a producer's view

- What information can I put out there and how?
- How can I maximise it's value as part of the 'research base' while safeguarding confidentiality?
- How can I manage quality in the data?
- How can I usefully describe the data and it's quality?



# National Statistical Service

**A co-operative set of activities across Australian governments to build a community that is well informed through high integrity statistical information.**

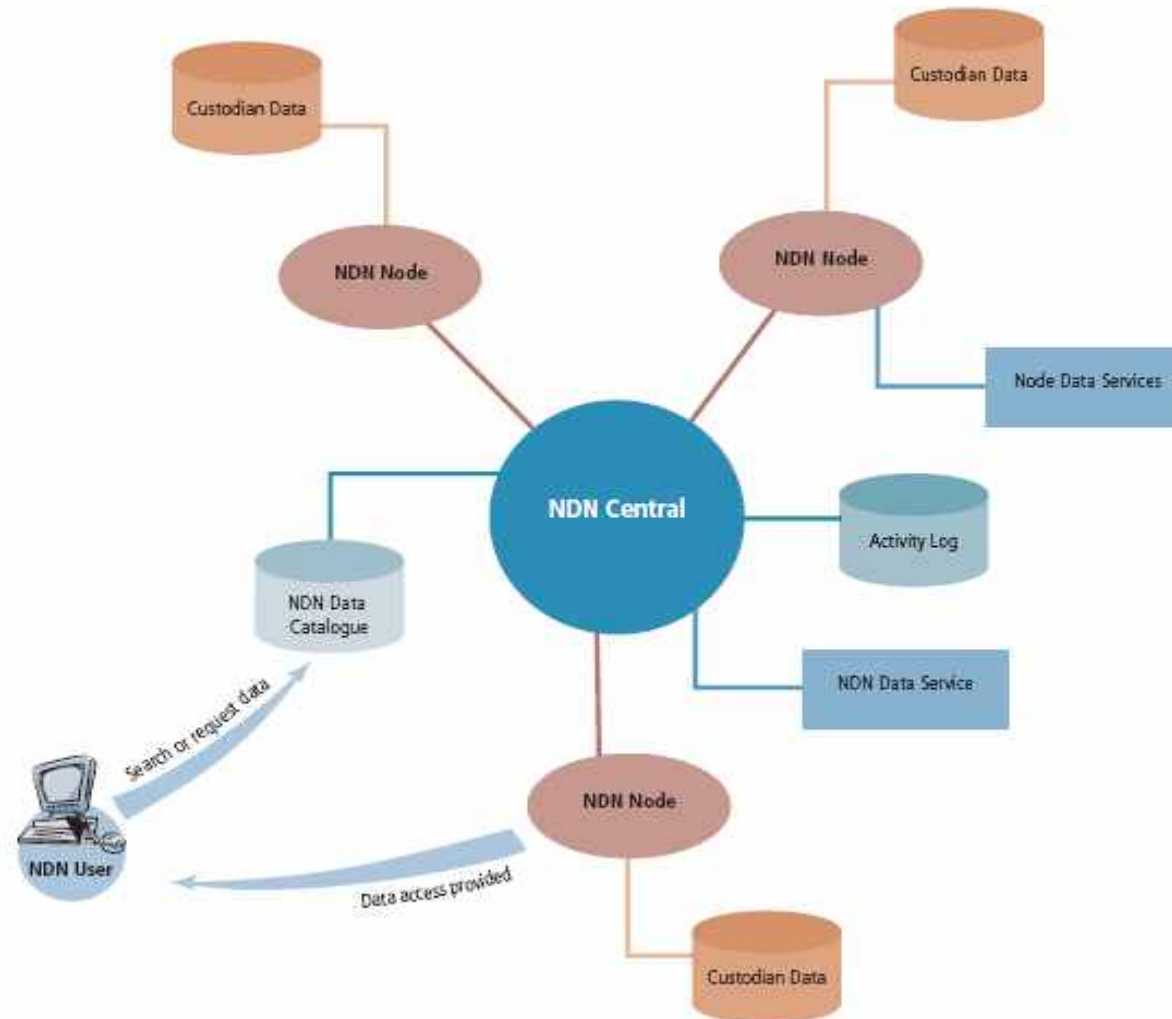
Includes jointly:

- Making administrative data available for statistics
- Building and using common statistical and technical infrastructure to support this
- Promoting statistical values: seeking an informed community; pursuing high integrity in data; respecting individual privacy
- Building the capability for producing better statistics and for making better use of statistics

## **NDN Consortium Principles**

- Data
  - managed as an asset
  - exposed as broadly as practicable
  - used responsibly
    - conditions of use
    - privacy principles, applicable laws
  - quality of data clearly described
- Work collaboratively, avoid duplication of effort

## NDN Architecture – using open source technology and standards



# NSO Collaboration Opportunities

## Owner/Custodian Services

## Researcher/Analyst Services



- *Shibboleth – Identity Management*
- *Geospatial Services*
- *Federated Searching*
- *Statistical Web Services*
- *RSS Feeds*
- *Tagging of Information Resources*

- *DataFerrett integration*
- *Privacy Preserving Analytics*
- *Creative Commons*
- *Automated workflows*
- *Warehousing of Resources*
- *Connections to other networks*

# NDN Future: Opportunities and Challenges

- Greater COAG focus on outcome based performance measures
- Increasing focus on evidence based policy making
- Continuing issue of agencies 'letting go' of data and making it available for research and use
- Managing quality and integrity of data, actual and perceived
- Metadata production and management
- Privacy legislation that recognises statistical use of information as different from administrative use
- Move from paradigm of 'secondary use' to one of 'strategic use'
- Resourcing... the need to build joint approaches and to prioritise



# The Impact of New Information Technologies on Creation, Access and Use of Statistics

# *THANK YOU*

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