

Design Standards for Administrative Data

A Case Study Approach



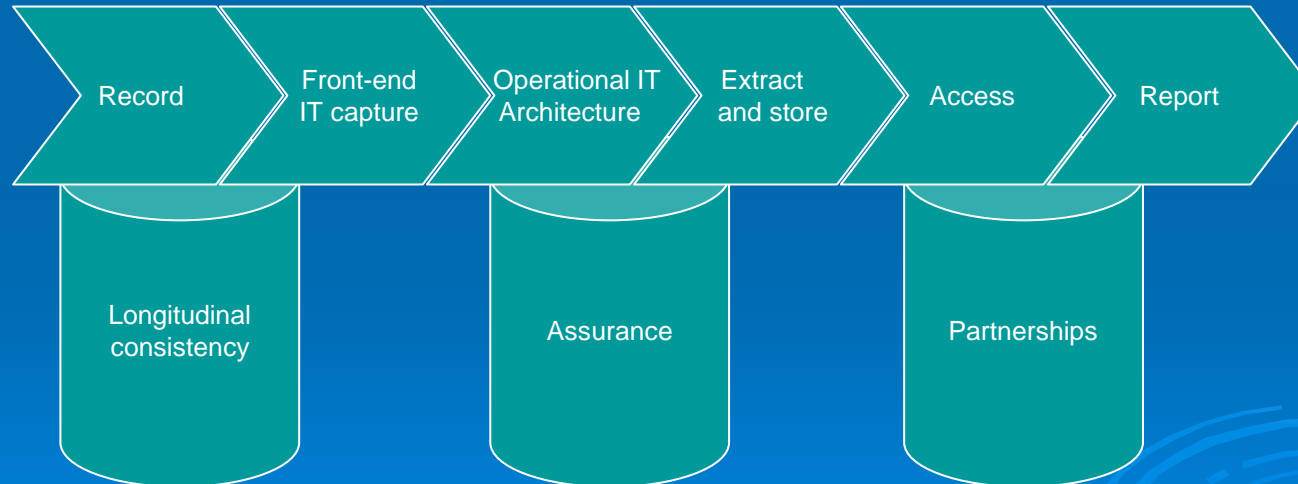
Gavin Knight, National Statistics
Manager, Police National
Headquarters

Background

- Police Statistics Strategic Plan
- Surveys vs Admin data



Real
world



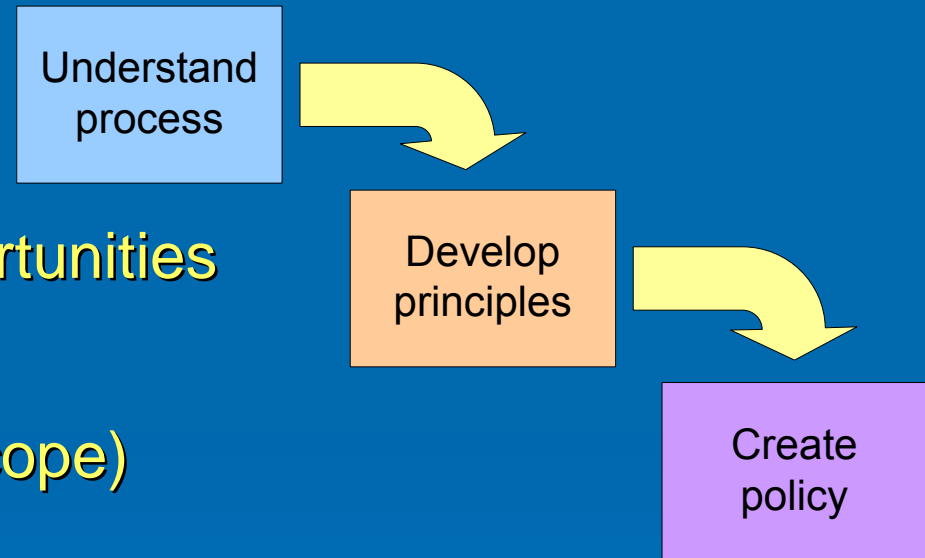
Informed
decisions

Project Phases

➤ Case-study NZ Police

➤ 3 phases

- Determine process opportunities
- Develop principles
- Create policy (beyond scope)



Methodology

- Case-study: New Zealand Police
- Phase 1: Nov 06 – March 07
 - Process for creating and modifying forms and IT applications
- Phase 2: April – August 07
 - Develop design principles for administrative data

Project team

- Police
 - Gavin Knight (project manager)
 - Fiona Morris (Stage 1)
 - Chris Worsley (Stage 2)
- Statistics New Zealand
 - Simon Thompson
 - Barb Lash
 - Bridget Murphy/Liping Jiang (Stage 1)
 - Matt Flanagan (Stage 2)
- Education
 - Robyn Smits (Stage 2)
- Health
 - Karolyn Kerr (Stage 2)
- Justice
 - Jason Gleason (Stage 2)

Phase 1 Methodology

- Project team as steering group
- Contracted Integration Works
- In-depth interviews with Police SMEs
 - Identification of SMEs (initial and subsequent)
 - Interview structure
- Documentation review
- Phase I report a synthesis aimed at implementation success

Phase 1 Findings

- Data-capture framework
 - Design guidelines
 - Data quality
 - Circumvention
 - Initiating changes
 - Business ownership
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Phase 1 Recommendations

- Minimise change to maximise likelihood of successful implementation
- Standardised on two (new) processes
- Establish guardians
- Create design standards
- Separate functional from SME business ownership

Phase 2 Methodology

➤ Literature review

- "Quality Protocols" of the *(New Zealand) Official Statistics System*, produced by Statistics New Zealand.
- "A Guide to Good Survey Design" (July1995), produced by Statistics New Zealand, ISBN: 0-477-06492-2
- "Best Practice Guidelines for Classifications", used by Statistics New Zealand's 'Classifications and Standards' unit
- "Official Statistics System Administrative Data Guidelines"
- "Draft principles for designing forms, processes and IT applications to ensure desired statistics have acceptable quality" (August 2006), a desk-file used by the Statistics Unit at PNHQ

➤ Focus group of SMEs

- 6 workshops over 5 months

Phase 2 Findings

- Many 'survey' design principles are relevant to admin data, sometimes with changes in terminology and/or conceptualisations.
- Admin data is frequently designed for operational purposes without due consideration to statistical information implications, unlike survey data.
- Quality of admin data must be engineered to support operational BAU naturally producing quality data, unlike surveys, which can be specifically designed for the purpose of gathering statistical data.
- Significant commonality between different agencies suggests generic principles are appropriate.

Examples of findings & principles

- Statistical information is seldom the primary objective
- Implementation requires integration with business processes
- Respondent burden manifests differently
- Granularity of categorisation needs to reflect business process relevance
- Success depends on having an effective data-dictionary framework

Phase 2 Recommendations

- 18 recommendations
 - Process and accountabilities
 - Design-rules for guardians
 - Ensuring compliance
 - Implementation

Conclusions

- Not scientifically empirical, but a useful understanding developed.
- Commonality of issues and conclusions/principles across organisations
- Resources required
 - Standard documented processes,
 - An organisation-wide data dictionary,
 - Allocation of defined roles and responsibilities,
 - Documented guidelines & templates for staff to undertake these responsibilities,
 - Organisational policy to assist and ensure compliance
 - Audit, to ensure compliance

Next steps

- New Zealand Police
- Statistics New Zealand
- Other agencies

Questions?

