Innovation and Big Data at Statistics Netherlands

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Drivers for innovation

Expectations of society

• New and more timely outputs
• Budget cuts
• Administrative burden targets
• Flexible data collection
• Open data

Opportunities
How the programme works

Innovation funnel

Collect lots of ideas based on strategic goals Statistics Netherlands
How the programme works
Innovation funnel

Central innovation support:
- Establish collaboration with external partners
- Finding internal sponsor (management commitment)
- Help preparing Proof of Concept (one-pager)
How the programme works

Innovation funnel

1 2 3

Proof of Concept

- Limited paperwork
- Just do it!

Our Innovation lab is used a lot!
- “Open” and “secured” IT-environment
- Brainstorming and working together
How the programme works

Innovation funnel

Implementation
• So far >100 ideas,
  >50 Proofs of Concept
Statistics Netherlands and Big Data

- Innovation programme
- Methodological research programme
Traffic detection loops: daily pattern
Sentiment indicator using social media
Daytime population: 24-hour animation

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- Very sparsely populated
- Sparsely populated
- Normally populated
- Densely populated
- Very densely populated
Roadmap approach to Big Data

- Position paper for Board of Directors
- Roadmap Big Data:
  - Identify outputs to be based on Big Data
  - For each output, define time target and ownership
  - Let owner identify conditions to be fulfilled
  - Commit supporting services to fulfilling the conditions
  - Prioritize other activities (e.g., methodological research, HR)
- External validation of the Roadmap
- Roadmap updated twice a year for Board of Directors, and monitored monthly
- Deputy Director General responsible at strategic level
- Coordination group for Big Data
Roadmap: Current data activities

Focus projects:
- traffic loop data for transportation statistics
- mobile phone data for daytime population statistics

Other data projects:
- internet data for price statistics
- use of bank and credit card transactions for statistics
- social media for detecting trends in social cohesion
- internet data for encoding enterprise purchases and sales
- use of smartcards of public transport for statistics
- internet data for statistics on job vacancies
Roadmap: Accompanying measures

- HR
- IT infra
- Data collection
- Methodological support
- Privacy
- Etc.

Lot of national and international collaboration!
The future