Standardization

Using Standards to Improve the Efficiency and Service of the Research Unit

David Michelsen, dam@dst.dk

SE DANMARKS STATISTIK

High Demand for Data

- Register-based research at Statistics Denmark:
 - 3,717 projects
 - 4,793 researchers
 - 12,617 project accounts
 - 491 research institutions
- Differences in scope and focus
 - Subject areas
 - Research purposes



Resources Available

- Research Services:
 - I head of office
 - 1 secretary
 - 15 consultants
 - 1 IT specialist



- Differences in service
 - Personal approach to programming
 - "Inheritance" of projects from former employees



Different, Yet Similar

- Creation of a population
- Selection of controls
- Extraction from registers
- Preparation of external data



What Is a Standard?

 A standard is a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose.

http://www.iso.org/iso/home/standards.htm



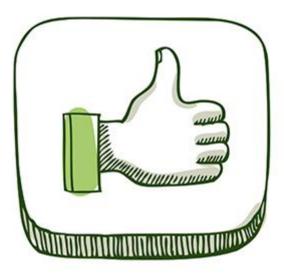
Standard Programming

- Consistency in naming
 - Registers, variables, folders, population files
- Divide all code segments
 - Changeable code vs constant code
- Programming principles
 - Macros
 - Integration
 - Metaprogramming



Pros of Standard Programming

- Researcher
 - Speedy deliveries
 - Documentation
- Statistics Denmark
 - Efficiency
 - Data security
 - Statistics on data deliveries
- Employees at Research Services
 - Easier to swap projects
 - More time for counselling, development etc.



Cons of Standardization

- Errors, if there are any, are multiplied
- Complex maintenance
- Ad hoc may become difficult
- May lead to loss of compentencies





Thank You for Listening

Any questions or comments?

