

Teaching SDMX: issues and best practices

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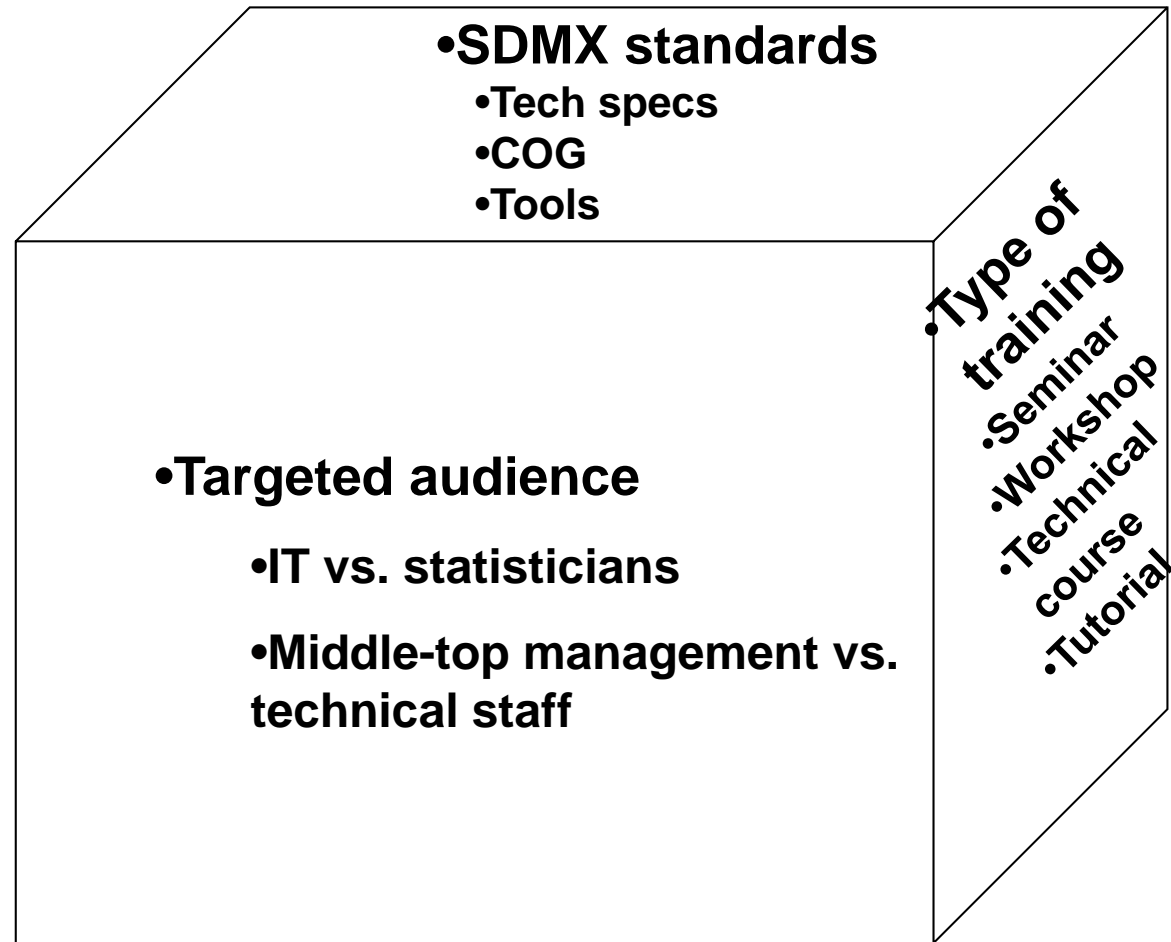
SDMX training is a fundamental issue

- Most organisations still haven't fully understood the potential benefits
- A false start could hamper the potential benefits SDMX would bring to an organisation
- The community has not yet fully developed

SDMX training is not an easy task

- SDMX standards deal with a previously neglected theoretical and technological gap in the statistical process
- They address statistical and IT questions at the same time
- Difficult to design standard training formats

Multi-dimensionality of SDMX training



What is SDMX?

From the trainer's perspective

- Programming language?
- Conceptual meta-model for statistical (meta)data?
- Set of IT tools?
- Methodology for statistical exchange?
- IT architecture for statistical exchange?
- Set of content standards?

Target audience: what are they interested in?

- **Top managers**
 - Strategic issues and cost/benefits
 - Usefulness for their organisation
- **Middle managers**
 - Reference process, implementation strategies
 - Purposes of the SDMX sections, training resources
- **Technical staff: statisticians**
 - Underlying model, contents and tools for final users
 - What is a DSD?
- **Technical staff: IT specialists**
 - Technical aspects of tools and implementation patterns
 - In-depth knowledge of the model and ML
 - Architectural standards

Diversified training for SDMX sections

- Technical specifications
 - **Information model:** details for IT staff, overview by examples for statisticians
 - **Markup languages:** IT staff only
 - **Registry architecture and tools:** general concepts and their use in the statistical process for statisticians, development aspects for IT staff
 - **Data exchange architectures:** overview for managers, guidelines and technical aspects for IT staff
- Content Oriented Guidelines
 - Used in structural definitions and to set up examples of data/metadata exchange frameworks

Different training formats

- Seminar
 - Introductory, one-way, mixed audiences of middle-top managers. Strategic and organisational issues
- Workshop
 - Hands-on, interactive, brings together the people who will work on implementing SDMX
- Technical course
 - Basic skills for specialized groups
- Tutorial
 - Step by step introduction through case studies
 - Suitable for on-line training

Tools

- *Intensional* level tools
 - DSD and MSD tools and databases
- *Extensional* level tools
 - Templates
 - Metadata editors
 - Registries
- To support training on technical standards and demonstrate SDMX benefits
- Training on specific tools only after adoption
- Always make it clear why tools are introduced

Main issues

- Mismatch between audience, type of event, topics covered or technical depth
- Too many topics in the same event
- Wrong approach to the type of event
- Wrong way of presenting SDMX

A suggested approach to SDMX training design

- Find the starting points
 - Expected output
 - Target group
 - ...
- Decide the type and format
 - Overview seminar for top management
 - Workshop on DSD design for both statisticians and IT specialists
 - Technical course on registry development in Java
 - ...
- Choose the teachers