Using (Implementing) GSIM

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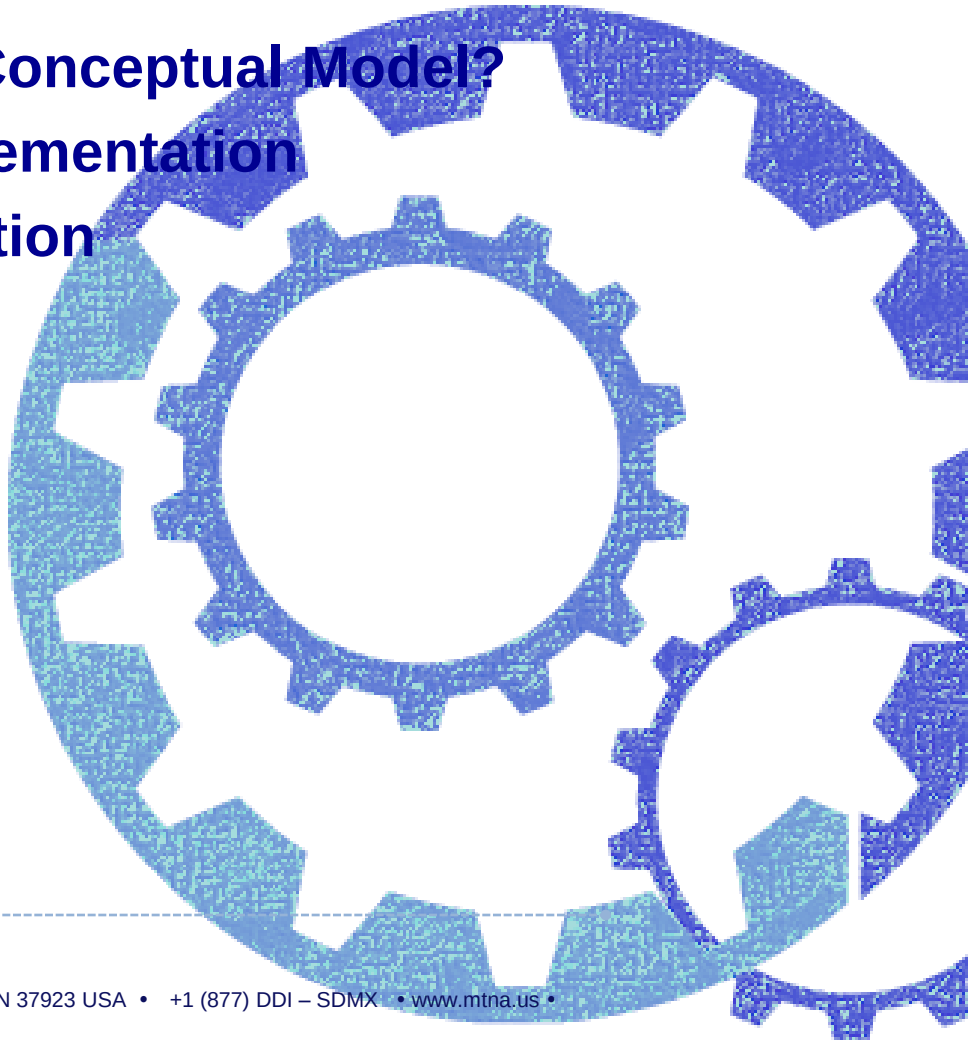
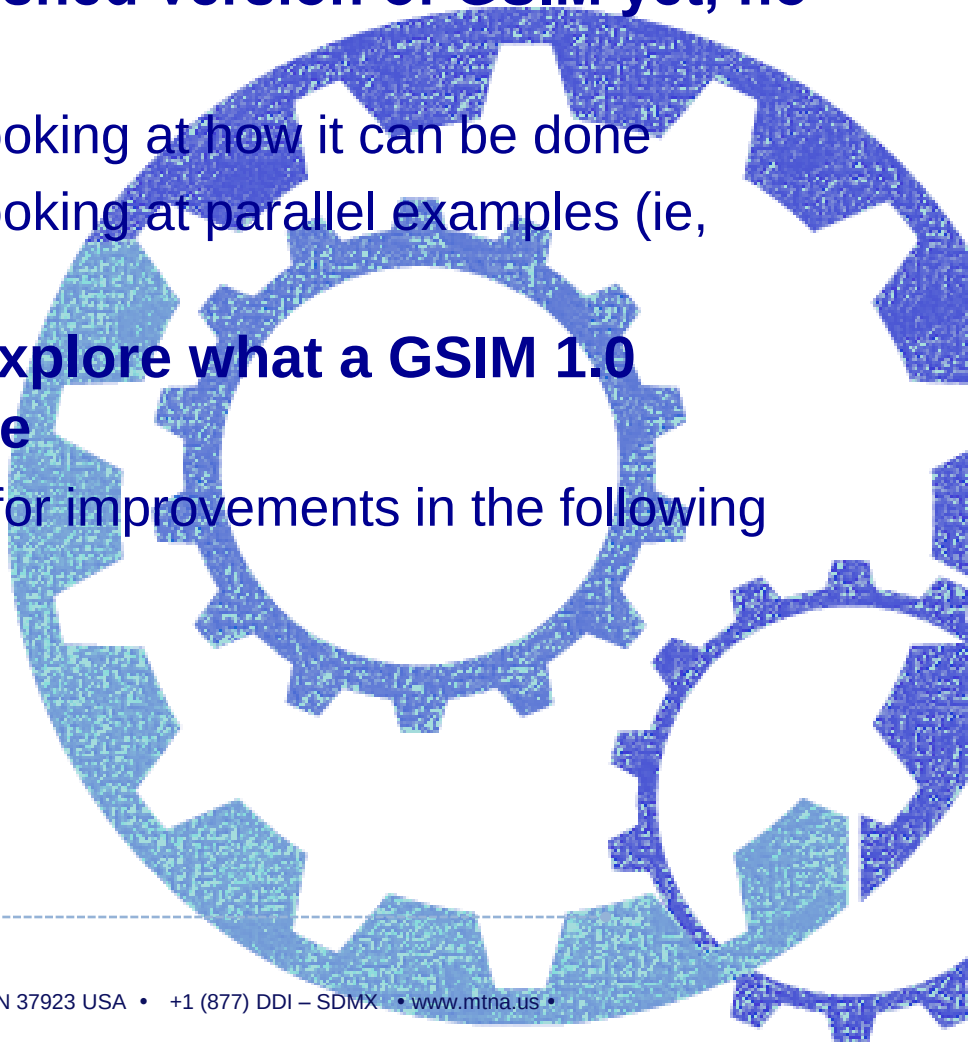
Introduction

- **Disclaimer**
- **How Can We Implement a Conceptual Model?**
- **Communication-Level Implementation**
- **Systems-Level Implementation**
- **Conclusion**



Disclaimer

- **Since we don't have a published version of GSIM yet, no one has implemented it (!)**
  - This does not stop us from looking at how it can be done
  - This does not stop us from looking at parallel examples (ie, GSBPM)
- **This presentation aims to explore what a GSIM 1.0 implementation will look like**
  - Implementation is important for improvements in the following versions after 1.0



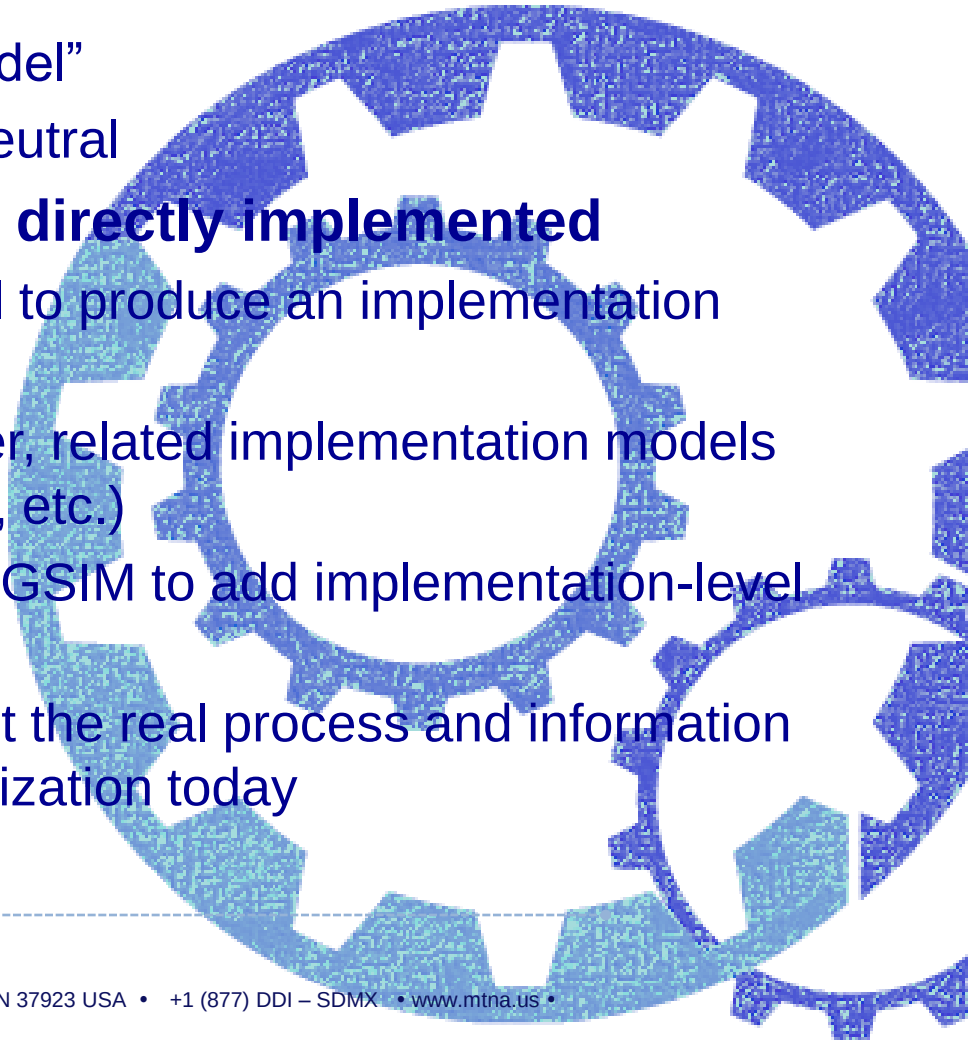
How Can We Implement a Conceptual Model?

GSIM is a *conceptual model*

- Also termed a “reference model”
- By design, platform and IT-neutral

Conceptual models cannot be directly implemented

- They require additional detail to produce an implementation model
- This may be mapping to other, related implementation models (DDI, SDMX, ISO/IEC 11179, etc.)
- This may be an extension of GSIM to add implementation-level detail
- This may be mapping against the real process and information models used within an organization today



Levels of Implementation

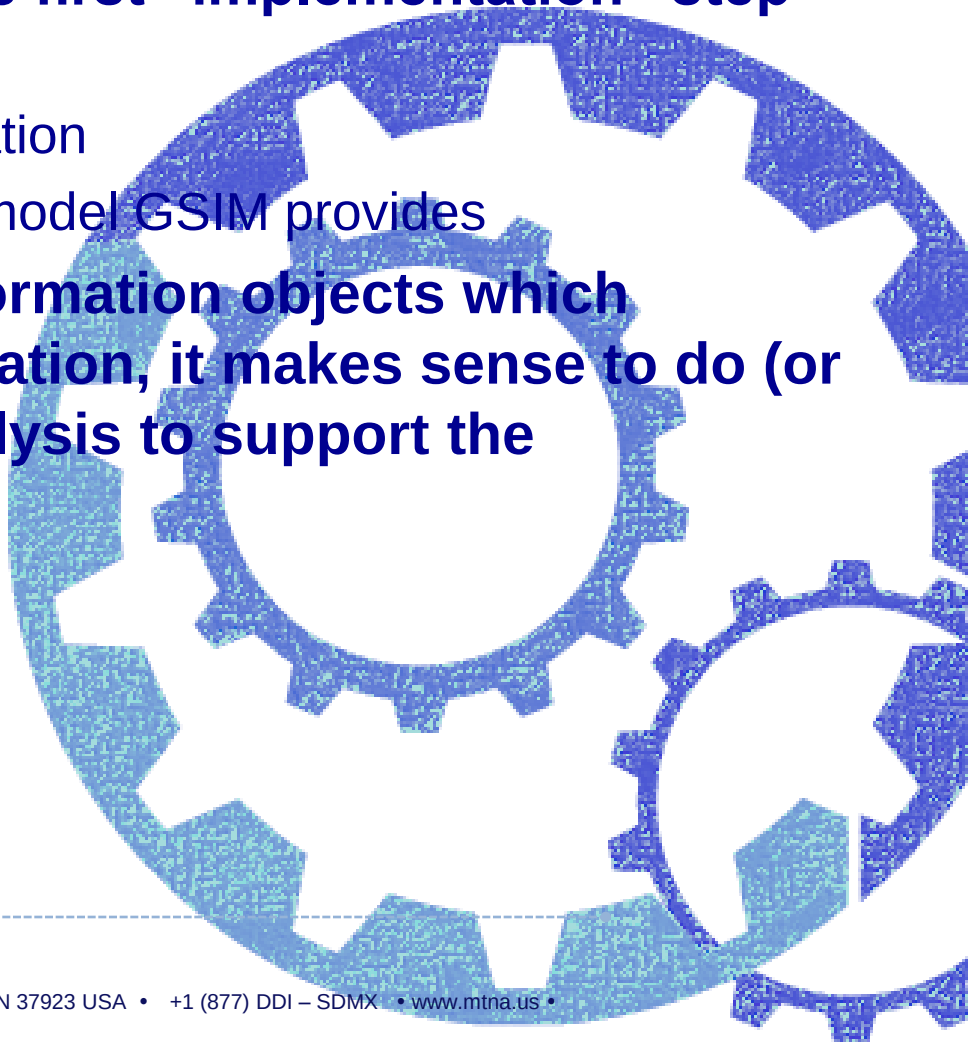
GSIM is designed to support more than one function:

- Communication within and between statistical organizations, at both a business and technical level
- Interoperability/reuse of IT systems and solutions within and between statistical organizations

We can understand these levels of implementation as supporting different business purposes

The First Step is Obvious

- **As we saw with GSBPM, the first "implementation" step is obvious**
  - Model your business information
  - Compare to the conceptual model GSIM provides
- **Since GSIM models the information objects which support GSBPM implementation, it makes sense to do (or use) your own process analysis to support the information analysis**



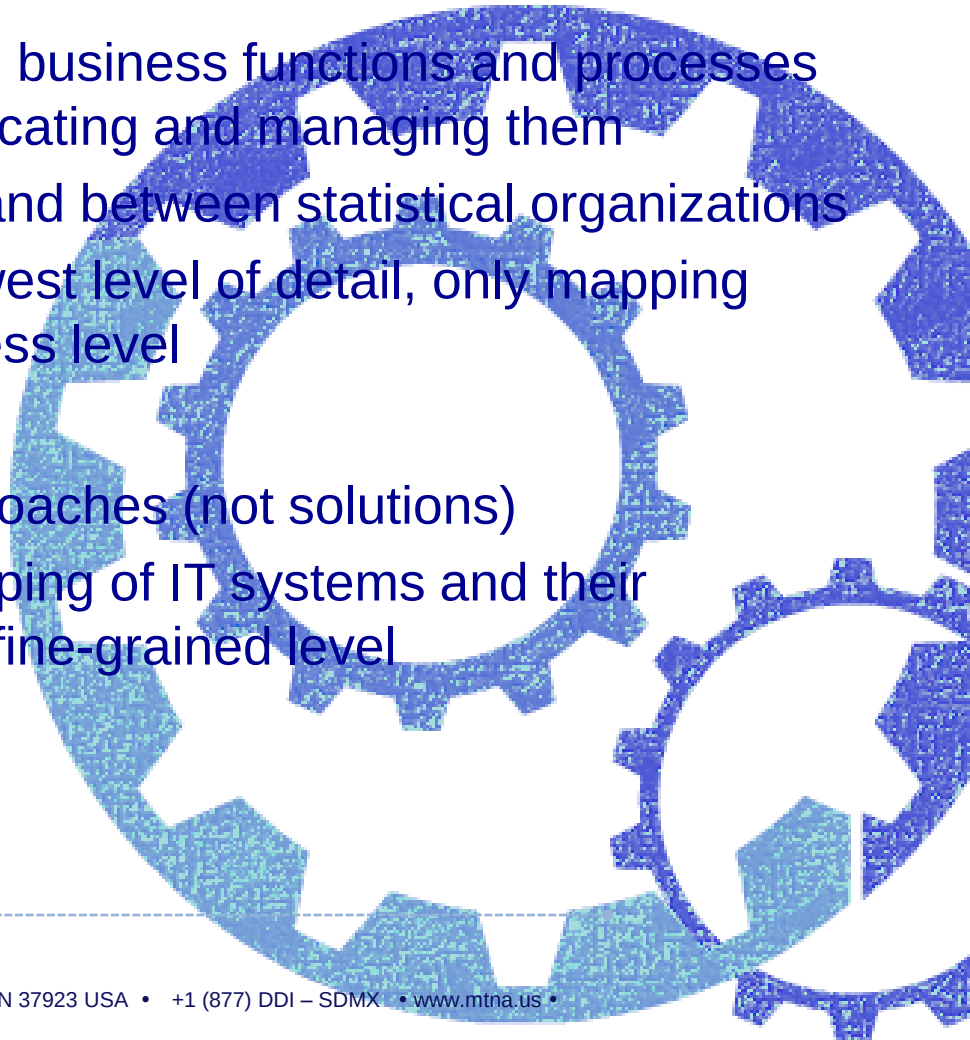
Communication Level Implementation

“Business” communication:

- GSIM is useful for describing business functions and processes for the purposes of communicating and managing them
- Between departments/silos and between statistical organizations
- This does not require the lowest level of detail, only mapping objects at the needed business level

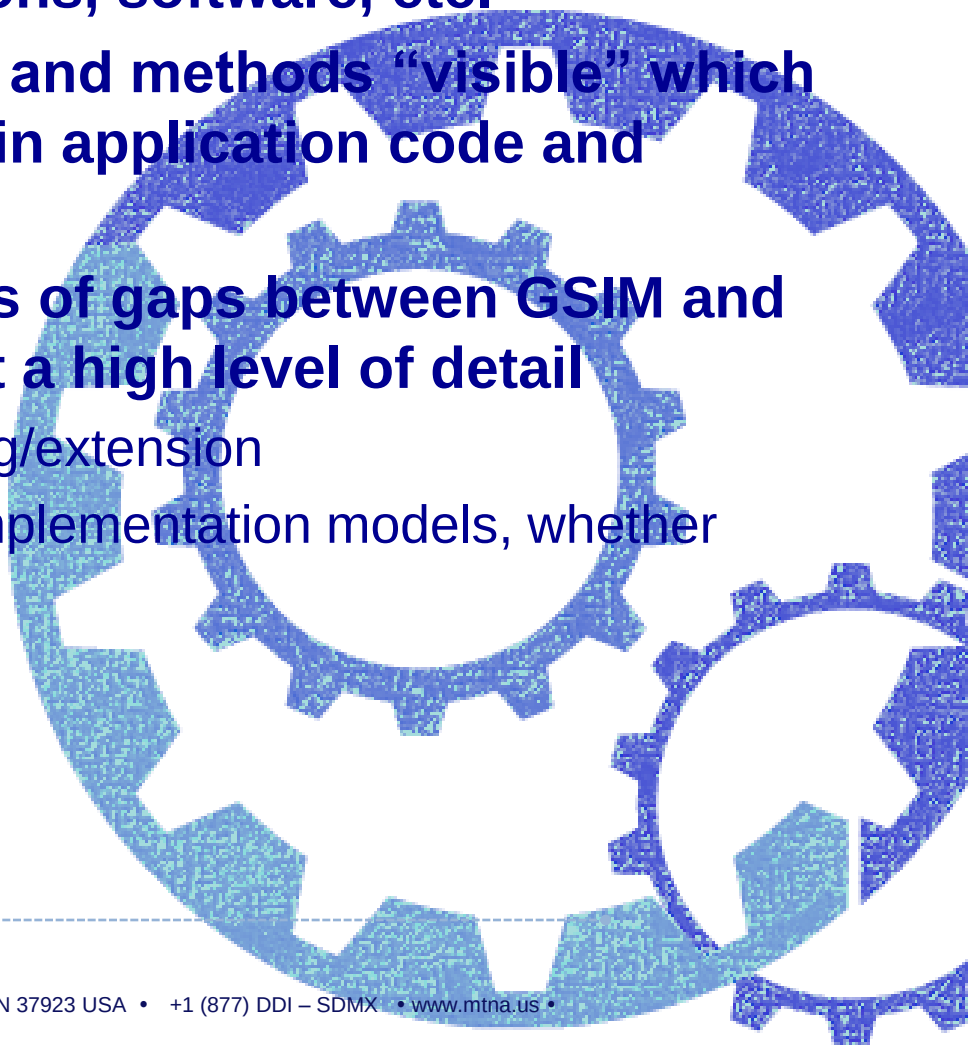
“Technical” communication:

- Useful for comparing IT approaches (not solutions)
- This requires a detailed mapping of IT systems and their functions against GSIM at a fine-grained level



Systems-Level Implementation

- **Useful for sharing IT solutions, software, etc.**
- **Makes business processes and methods "visible" which would otherwise be buried in application code and documentation**
- **Requires a detailed analysis of gaps between GSIM and IT implemention systems at a high level of detail**
  - Requires additional modelling/extension
  - May use mapping to other implementation models, whether standard or proprietary
  - May use both approaches



What Does This Look Like?

1. Analyse my current/target processes against GSIM

2. Identify gaps/needs, and extend the GSIM model

- Using the GSIM extension mechanism provided

3. Identify standard or non-standard models which will full support for IT implementation

- Specific about platform and IT capabilities must be added here

4. Document model extensions to GSIM, implementation models, and mapping (to SDMX, DDI, proprietary implementation models)

5. Implement systems as software, etc.

A Note about Standard Implementation Models

The DDI Alliance has made a commitment in principle to support the GSIM model

- This will result in a better model and XML schemas for implementing GSIM
- The model is already quite good for some GSIM areas (data description, survey data collection)

SDMX also provides a good model for implementing parts of GSIM

- Aggregate data description
- Documenting processes
- SDMX has not yet made a formal commitment, but this is to be expected (SDMX-DDI Dialogue has commitment from both groups, and GSIM is seen as important to how they will work together)

Conclusion

- **We don't know what GSIM implementation will look like, but we can form a good idea based on existing examples**
- **GSIM implementation depends on what GSIM is being used to achieve**
  - Communication level
  - Systems level
- **GSIM is useful both within and between statistical organizations**
- **Implementation experience will help us produce a better GSIM in future versions**