User-Centric Data Standards Browser
From concept to reality

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Data Standards
GSK

Meet the Speakers

Igor Klaver

Title: Data Standards Lead

Organization: GSK

In this role, Igor supports study teams in SDTM related questions and supports maintenance of standards and is working in improvement projects for data standards.

Igor holds an MSc in Biology and joined GSK in 2006, where he held several positions in data management from data management, to clinical systems and standards with affinity for lab data and data flows.

Katarzyna Konarzewska

Title: Data Standards Lead

Organization: GSK

Katarzyna holds a Ph.D. in Biology from the Nencki Institute and has completed postgraduate studies in Project Management. Since 2017, she has held various positions, including those supporting systems, working as a Clinical Data Scientist in Centralized Monitoring, Data Analytics Manager, and eventually finding her niche in data standards.

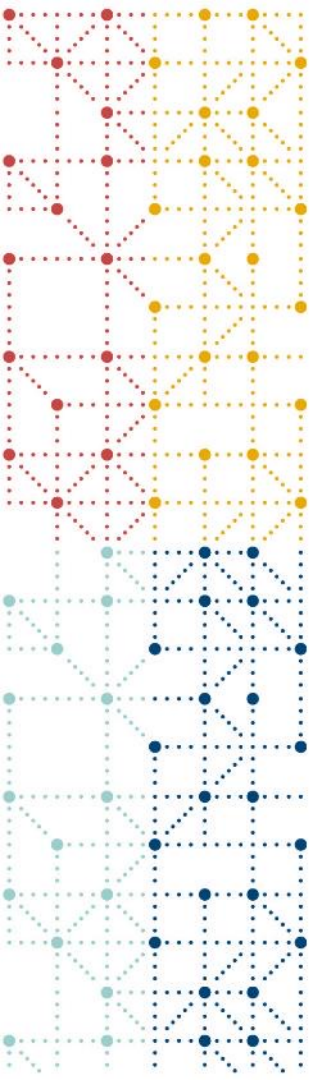
Disclaimer and Disclosures

- *The views and opinions expressed in this presentation are those of the author(s) and do not necessarily reflect the official policy or position of CDISC or the participating organizations.*

- *The author(s) have no real or apparent conflicts of interest to report.*

Agenda

1. Problem Statement
2. Data Standards Browser Product explained
3. Introduction to Design Thinking
4. Design Thinking applied to Data Standards Browser



Introduction

Problem statement

Fragmented Information: Standards were scattered across multiple sources and users are facing different access process and user experiences.

User Difficulty: Users had trouble locating the necessary documents don't know how and where to search and identify if they are looking at the right version.

Access Management: documents were not easily accessible, and access was not effectively controlled

Increased Requests: Instead of checking the existing standards themselves, users frequently submitted requests for assistance.

Data Standards Browser Vision

User focus: DSB aims to disclose clinical data standards starting from the user's point of view and provide a unified intuitive experience.

Efficiency: The application provides fast, accurate, and easy access to standards.

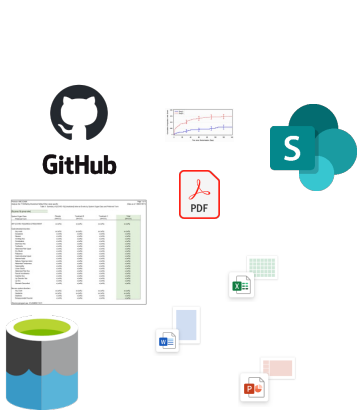
Empowerment: It supports various roles, ensuring secure and role-based access to data.

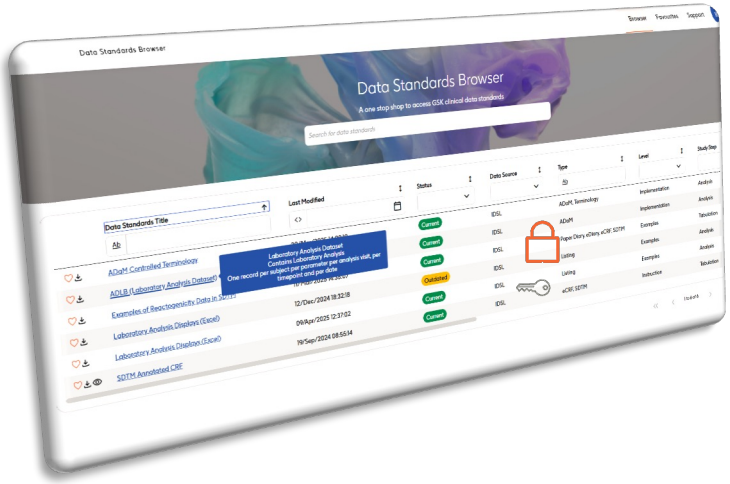
Scalable System: Maintains high data security and compliance standards.

Supports Growth: Accommodates growing user needs and increasing variability of data sources and representations.

Constraints

- Changing back-end architecture
- Users having new expectations

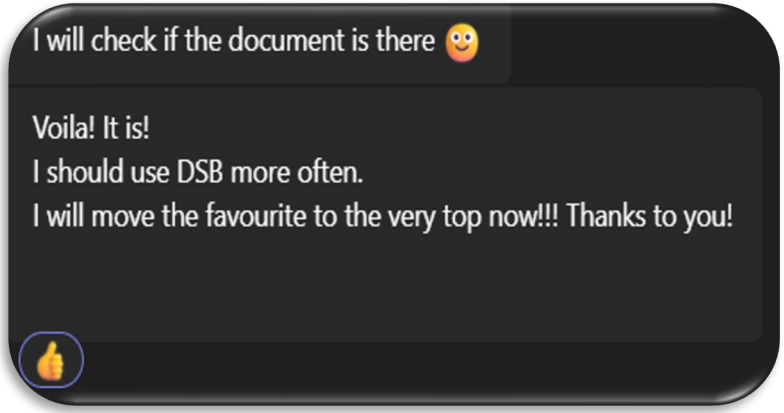




Data Standards Browser Adoption

~700 Users Logged in at least once

~25 Standards Downloaded per day



~1000 Standards Curated

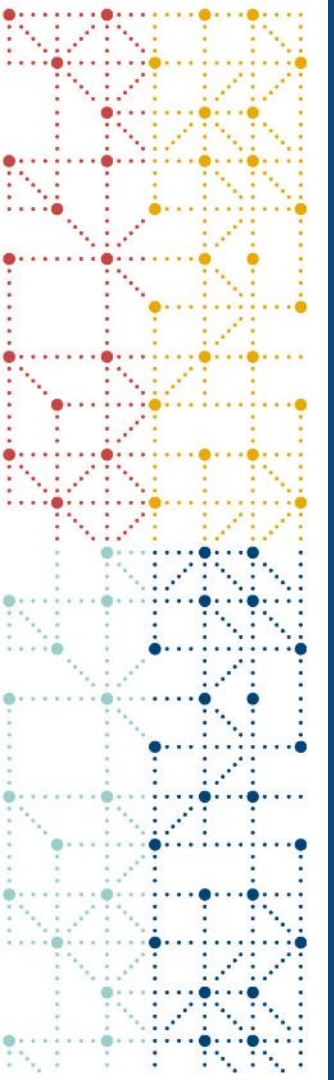
+316 Expected

~600 Standards accessible for users

~300 Related to Analysis

~300 Related to Tabulation

~200 Related to Collection



There’s a technical name for the absence of user research: Guessing.

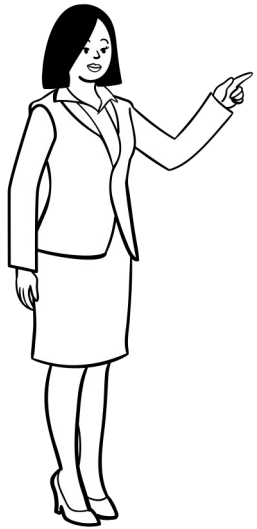
Jared M. Spool

Design Thinking

- **Focus:**
  A human-centered, iterative problem-solving process that leverages creative and analytical approaches to understand users, challenge assumptions, redefine problems, and create innovative solutions.

- **Nature:**
  Non-linear process; stages are interconnected.

- **Collaboration:**
  Involves cross-disciplinary teams to foster diverse perspectives and innovation.



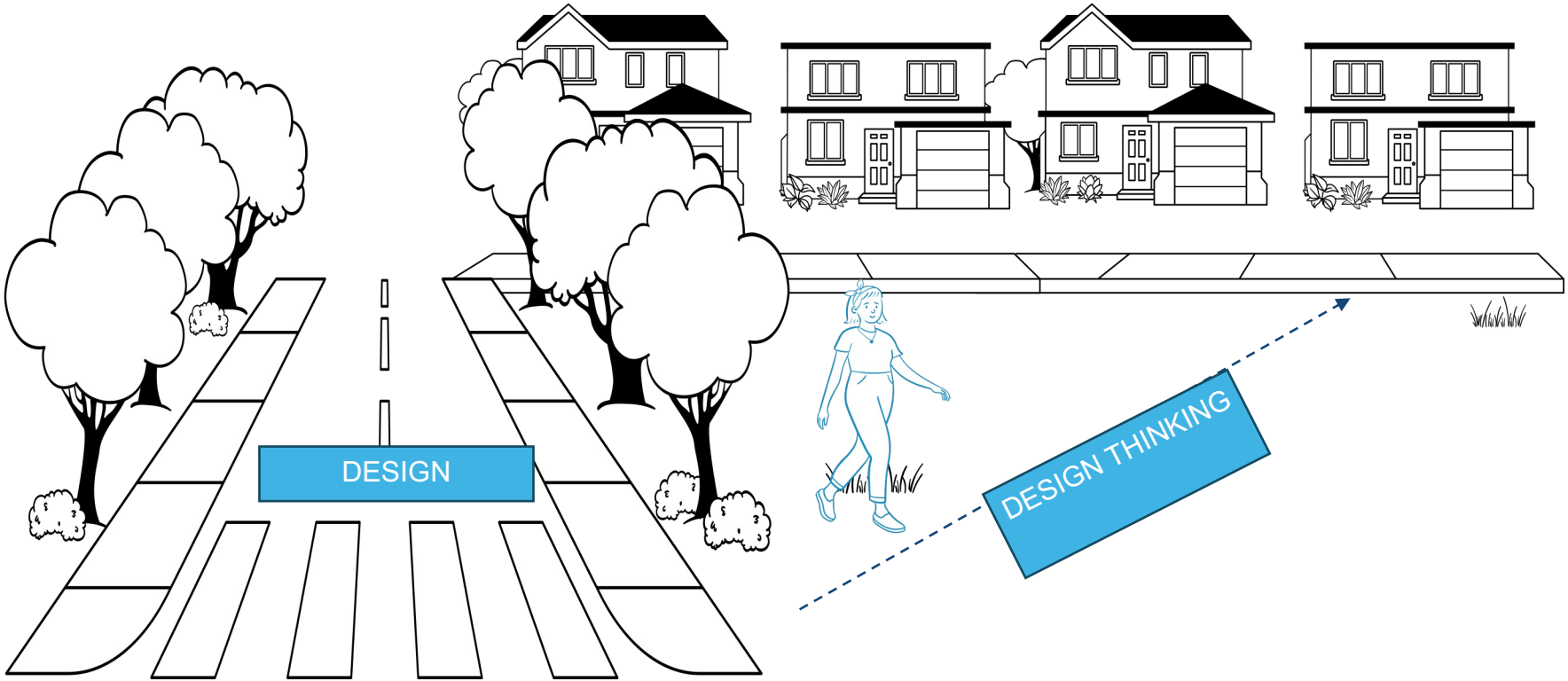
Empathy
- Understanding users' needs and experiences through observation and engagement.

Define
- Clarifying the problem by synthesizing insights from empathy.

Ideate
- Generating a wide range of creative solutions through brainstorming.

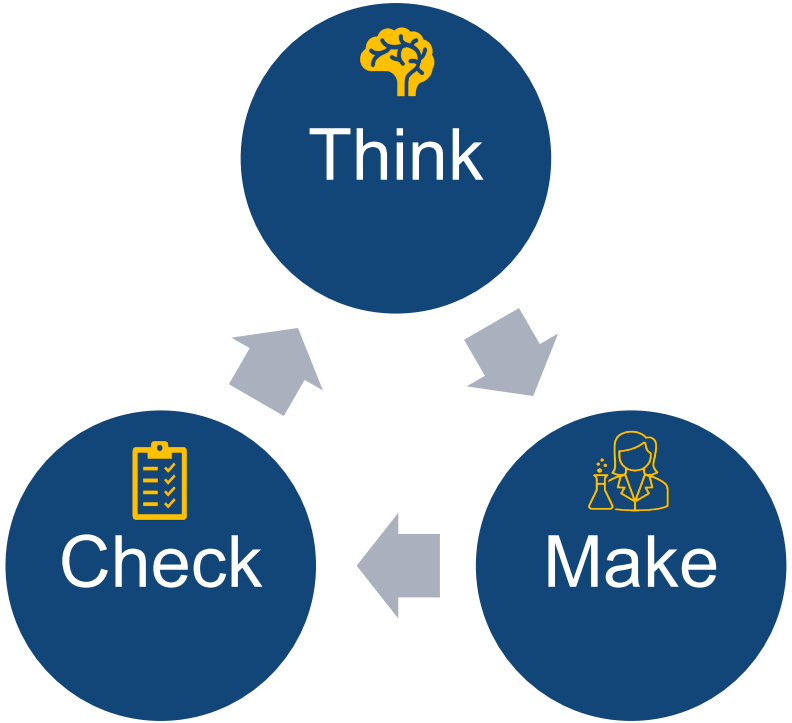
Prototype
- Building tangible representations of ideas to test and iterate quickly.

Test
- Gathering user feedback to refine concepts and solutions.


DESIGN
DESIGN THINKING

Lean UX

- **Method:** Collaborative, iterative design process.
- **Integration:** Complements agile with rapid cycles and continuous improvement.
- **Cycle:** Think, make, test - repeat.
- **Goals:**
  - Foster collaboration.
  - Minimize time, effort, and resources.
  - Develop MVPs quickly for early feedback.
  - Incremental product enhancements through continuous feedback.



User Research	• Understand needs through interviews and testing.
Personas	• Create profiles to focus design.
Prototype & Test	• Develop and refine through iterations.
Information Architecture	• Structure for easy navigation.
Visual & Accessible Design	• Ensure appeal and inclusivity.
Continuous Evaluation	• Use feedback and analytics for improvement.

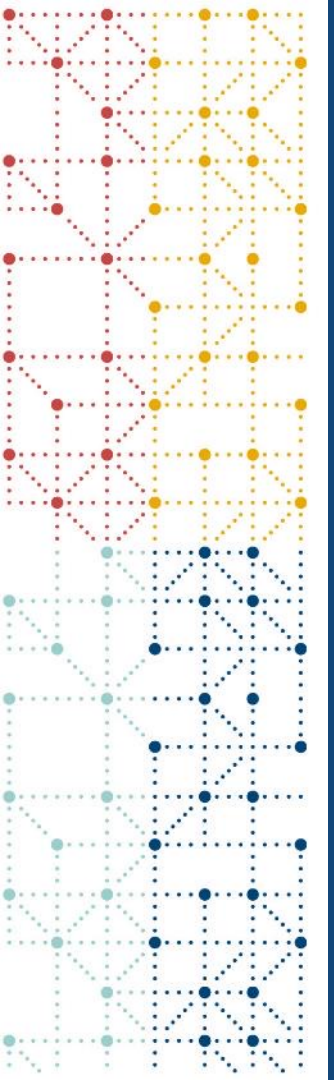
Focused on Data Standards members

Workshop
Change Champions Forum

- **Objective:** Gather user feedback to improve the Data Standards Browser (DSB)
- **Plan**:
  - **Interactive Exercise:**
    - Participants identified documents and search phrases for DSB
  - **Group Discussions:**
    - Breakout sessions to test search phrases and gather feedback
- **Key Outcomes**:
  - Identified areas for performance optimization, enhanced search functionality, in-browser document viewing, and user interface improvements
  - Valuable user feedback to guide future enhancements of the DSB

SUS survey

- **Purpose:**
  - The System Usability Scale survey is designed to evaluate the usability of digital products.
- **Structure:**
  - 10 questions with a Likert scale response format, where participants rate each statement from 1 (strongly disagree) to 5 (strongly agree).
  - The questions cover various aspects of usability, including ease of use, functionality, and satisfaction.
- **Scoring:**
  - Scores are calculated to yield a single usability score that ranges from 0 to 100.
  - Higher scores indicate better usability, with scores above 68 generally considered above average.



Design Thinking:

- **Boost Satisfaction**
- **Boost Efficiency**
- **Boost Engagement**

Overlook User Input?
Anticipate Challenges and Lower Adoption.

Thank You!