



US Connect 2024
Poster PP14

Software Product Lines Framework: How to manage end-to-end metadata-driven automation at scale

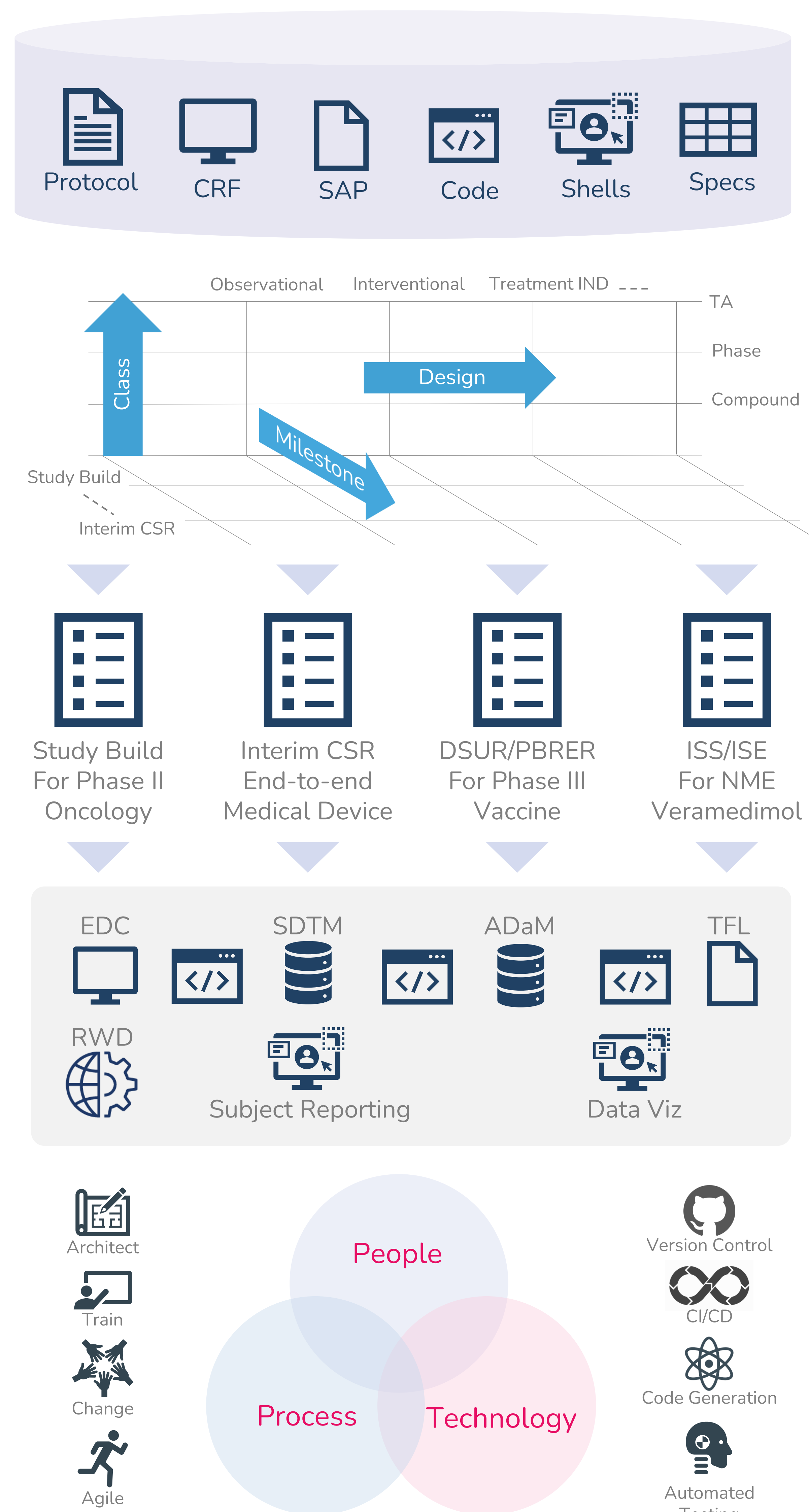
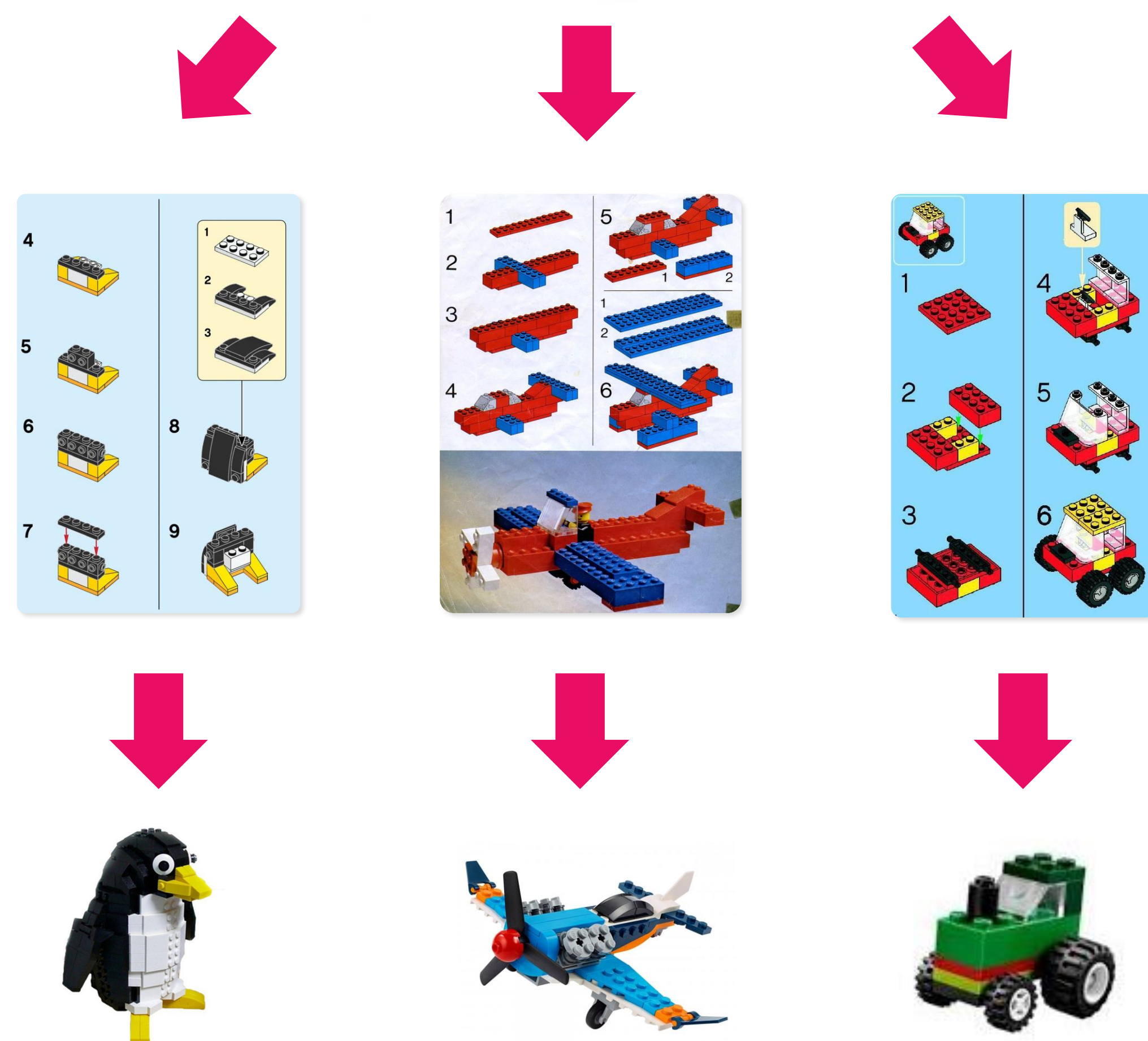


Stuart Malcolm, Head of Standards, Efficiency, and Automation, Veramed

What is a Software Product Line?

“ A **software product line** is a set of software-intensive systems sharing a **common, managed set of features** that satisfy the specific needs of a **particular market segment or mission** and that are developed from a common set of core assets in a **prescribed way**.

A Framework for Software Product Line Practice, Version 5.0
Software Engineering Institute
Carnegie Mellon University



Standards Library

- Common asset base
- End-to-end reusable components
- Machine readable
- Version controlled

Common Trial Features

- Categorization to meet business needs
- That share common features, e.g.
- Molecule, Therapeutic Area, Milestone, etc
- Define asset selection and configuration

Trial Production Plan

- Defines how to create the trial
- Using common features and core assets
- Used to generate all trial artifacts..
- E.g. Code, data, documentation, etc.

Standard Architecture

- Abstraction of all supported trials
- Minimize maintenance of common assets
- Standard and consistent trial setup
- Maximize reuse and improve quality

High-Performance Team

- Substantially improved efficiency, consistency, and re-usability
- More time on value-added activities
- Better insights, faster.

References

Software Engineering Institute, Carnegie Mellon University. [https://www.sei.cmu.edu/ISO 26550:2015 Reference model for product line engineering and management](https://www.sei.cmu.edu/ISO%2026550:2015%20Reference%20model%20for%20product%20line%20engineering%20and%20management)
AD11 Automation of the CDISC Pilot Study, PHUSE EU Connect, 2022

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