How to increase simplicity of MES Automation on a large-scale project

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Agenda

- Our Goal & Principles
- Benefits / Challenges
- Influencers and Stakeholders
- Our Results
- Key Message
"The ability to simplify means to eliminate the unnecessary so that the necessary may speak."
The goal of standardization in Automation can be felt in many areas of the organization

Identifying a common strategy or solution to be used across areas.

What are some examples of areas that can be simplified?

• Documentation
• Processes
• Recipes
Standardization is successful if founded on certain principles
What to consider in early stages to maximize benefits

Align with corporate culture and ambition e.g. think bigger, simplicity and agility

Simplify training, easier to execute tasks and stay within regulatory compliance

Agreement on prioritization of critical tasks requires stakeholder management and negotiation

Modularization can require more initial investment for long-term benefit
Standardization has many assumed benefits but also potential challenges in planning and delivery.

Benefits:
- Simplicity
- Cost savings
- Validation
- Process improvements
- Reusability
- More stable solutions

Potential challenges:
- Complexity
- Collaboration/effort
- Re-validation
- Increased risk
- Generalization

Standardization benefits focus on simplicity of design, which impacts many areas.
Results of Standardization – Documents

Before standardization

![Number of SOPs and JIs]

After standardization

Approx. 40% reduction in SOPs and JIs
Results of Standardization - Recipes

Before standardization

- # Recipes
- # Batch Reports

After standardization

- 90% reduction in Recipes Objects
- 95% reduction of BR Objects
Time for an activity!
Batch Record I

Section A (color)
• Requirement 1 (shape)
• Requirement 2 (shape)

Section B (color)
• Requirement 1 (shape)
• Requirement 2 (shape)
• Requirement 3 (shape)

Section C (color)
• Requirement 2 (shape)

Sections:
• Red
• Green
• Blue

Requirement:
• Circle
• Square
• Triangle
What is your recommendation to create **a standardized batch record** that maximizes benefits and minimizes challenges?
# Example Standardized Automation Process

![Diagram of Standardized Automation Process]
**Results of Standardization – Automation Process**

**Before standardization**

# unique activities

**After standardization**

- Approx. **85% reduction** of manual objects
- Created few automatic objects
# Answer sheet

<table>
<thead>
<tr>
<th>Batch record A (P1/P3)</th>
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Requiring early support across disciplines and systems to maximize benefits and overcome challenges.

- Thai Le