

Pursuit of Perfect Master Data

One Master Data Error is One Too Many

Sep 04, 2025

Agenda

- About Cambrian Lab
- What Prompted Us to Pursuit of Perfect Master Data
- 5 Steps to Perfect Master Data
 - Master Data Assessment for Business Excellence
 - Error-proofing using Poka-Yoke principles
 - Intelligent Master Data Governance
 - End-to-end Processes for Master Data Management
 - Continuous Master Data Error Correction
- How to Validate if the Strategy is Working
- How to Get Started

Panelists

Kris Gorrepati

- 20+ years experience in New Product Development and Introduction and Supply Chain Manufacturing
- SAP, Samsung, Ford, Caterpillar
- Auto, High-tech, Software
- Michigan Tech (Mech Engg.), UCLA

Hiren Shah

- 20+ years experience in ERP, CRM, Finance, Manufacturing
- SAP, Ford, Samsung..
- Auto, High-tech, Software
- Michigan Tech (Elec Engg.), University of Chicago

About Cambrian Lab

Mission: To Provide Effective and Practical Solutions for Supply Chain Excellence

Team

Supply Chain, New Product Development and Technology Experts from SAP, Samsung, Siemens, GM, Ford, Applied Materials

Industries

Automotive, High-tech, Semiconductor Equipment, Medical Devices, Consumer Products, Food and Beverage, Chemicals...

Locations

SF Bay Area, Detroit, Houston

Expertise

- New Product Introduction, Supplier Development and Master Data Management
- Enterprise and Supply Chain Technology (ERP, SCM, Manufacturing, CRM, Sourcing, Finance)

Examples of Our Work with Different Industry Customers

Embedded Systems, Memory and HPC Computing Systems Manufacturer

NPI Engineering, Master Data
Management

Global Industrial Manufacturer

Master Data Management
(Materials, NPI)

Tier 1 Global Automotive Supplier

NPI Product Release, Materials, BOM

Global Network Equipment Manufacturer

Supplier Development and
Collaboration

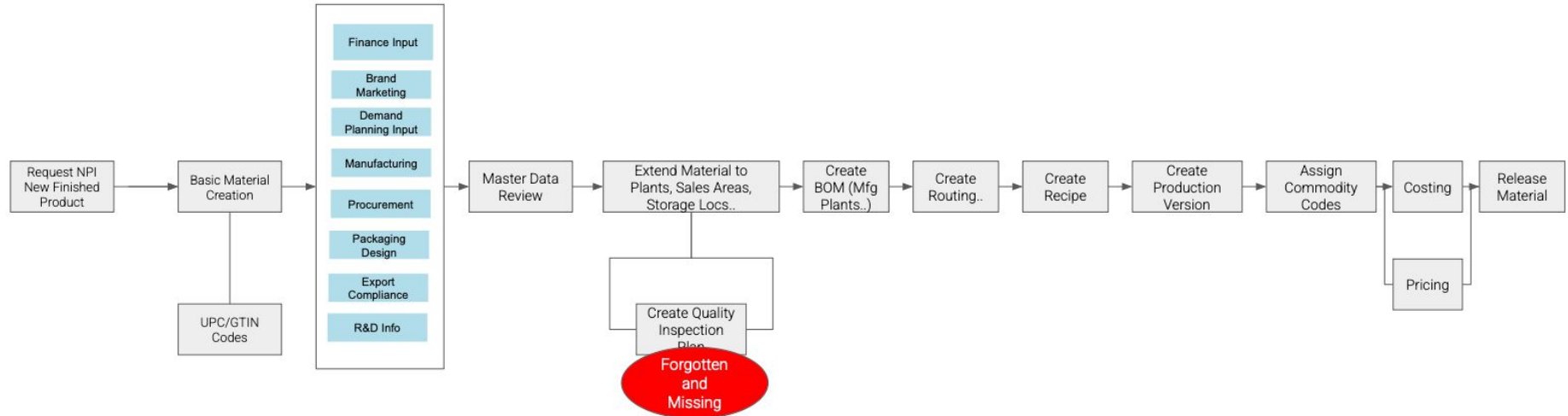
Global CPG Company

Master Data Management
(Materials, Costing, PLM)

Specialty Chemicals Leader

Master Data Management
(Materials, Customers, Suppliers)

What Prompted Us



Time sensitive material arrived at Distribution Center and could not be shipped to customer due to lack of quality inspection plan

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5 Steps to Perfect Master Data

- Assessment of Master Data for Business Excellence
- Error-proofing at the source - Poka-yoke principles
- Intelligent Governance
- End-to-end Master Data Processes
- Continuous Error Correction is Mission-critical Systems

Master Data for Business Excellence - A More Meaningful Way to Evaluate Master Data

Quick Win: SEO keyword optimization for top 500 SKUs could boost organic traffic by 35% within 30 days

Recommended Actions

HIGH

Automate lead time data collection via supplier portal integration

HIGH

Deploy cost reconciliation workflow for BOM components

MEDIUM

Implement AI-powered SEO keyword suggestions for product descriptions

MEDIUM

Enable temperature monitoring alerts for sensitive SKUs

LOW

Schedule quarterly pricing consistency audits

Priority Actions

5 ITEMS



Standardize supplier lead time data across 2,300 SKUs



Complete BOM cost reconciliation for manufactured goods



Enhance SEO keyword coverage for 1,850 e-commerce SKUs



Update storage requirements for 425 temperature-sensitive products



Validate pricing consistency across regional markets



Finished Goods Master Data Assessment

84%

Sales Readiness (15%)

88%

Category Management (40%)

92%

Brand & Portfolio Structure (35%)

85%

Regulatory & Compliance Classification (25%)

88%

Finance Readiness (20%)

76%

Supply Chain Readiness (18%)

79%

Manufacturing & Production Readiness (15%)

78%

Logistics (12%)

72%

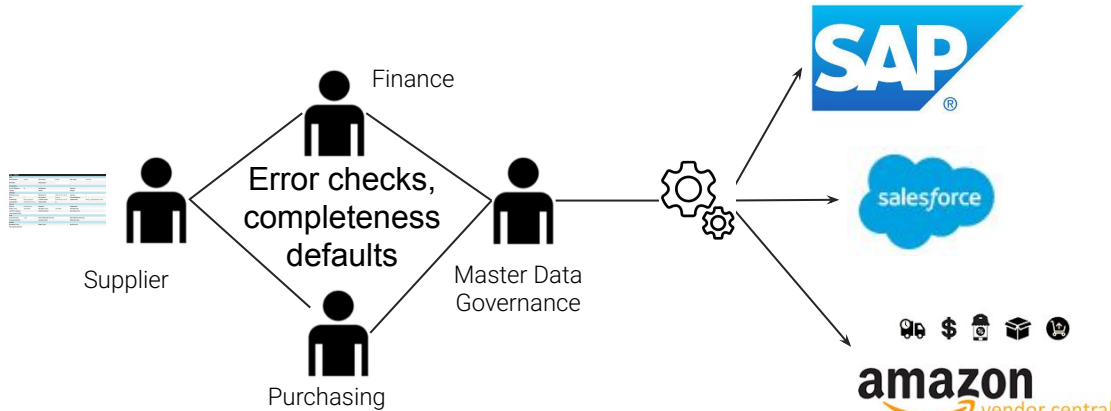
Digital Commerce & Customer Experience (12%)

86%

Search Marketing & Discoverability (8%)

74%

Empower Business Teams to Lead, Create, and Govern



Faster and simpler
with digital workflow

Driven by business
stakeholders

Business focused

Error-proofed

Intelligent

Integrated

Supply Chain Ready

*Inventory levels
Logistics flow
Supplier risk
E-commerce readiness
.....*

Error-proofing at the Source - Poka-Yoke techniques

Simplification

Required Values

New Material Request And Creation - NMRC00023

Info

Current Activity

Data

Members

Roles

WorkFlow

Related Processes

Log

Graph

Process Report

Test

Current Activity: Prepare and Submit Request (Current Status: Activity started)

You are a PerformerPerformers: ZFlow At

Submit

Cancel

Activity Comment

Instructions: Please enter data in the form below and save or add files to the process then click to continue process

Basic Info

Plant*:

Denver

New York

Production Line*:

A

Sales Category*:

ARIEL [CN003]

Width (mm):

Height (mm):

Target Percent*:

Packages Per Unit*:

Packaging Type*:

NO WRAPPER

WITH WRAPPER

Description Info

Matl Description Prefix:

Plant Code:

CD00

Demand Type*:

Made to Order

Copy From Material:

Diameter (mm):

Length (mm):

Units Per Pack*:

<- Select ->

Target Package Weight*:

Label Type*:

<- Select ->

Calculated Matl Description:

zmdm.zflow.io says

INFO : Following fields cannot be blank:
End Use
, Target Percent
, Units Per Pack
, Packages Per Unit
, Target Package Weight
, Matl Description Prefix

OK

Error-proofing at the Source - Poka-Yoke techniques

Default Values

Basic Info Description Info Material Info Accounting Info Costing Finishin

Basic Info

Plant: ☐ Dallas ☒ New York

Plant Code: CN00

Production Line: F

Finish: ☒ ONGRADE ☐ OFFGRADE

Demand Type: ☒ Made to Order ☐ Made to Stock

Smaller List of Possible Values (Drop-down)

Purchasing Org:

Account Group*:

<- Select ->

✓ Inventory (0001)

Non Inventory (0004)

Employee (ZEMP)

Freight (0005)

Country*:?

Intelligent Governance

Standardization

Description Info ⓘ

Matl Description Prefix:

ARIEL

Calculated Matl Description:

ARIEL,,F,777:650,2/3,2,NW,R,S

Material Description En:

ARIEL,,F,777:650,2/3,2,NW,R,S

Material Description Fr:

ARIEL,,F,777:650,2/3,2,NW,R,S

Sales Text En For Dist Ch 10:

ARIEL,,F,777:650,ROLL

Sales Text En For Dist Ch 30:

ARIEL,,F,777:650,ROLL

Sales Text Fr For Dist Ch 10:

ARIEL,,F,777:650,ROLL

Sales Text Fr For Dist Ch 30:

ARIEL,,F,777:650,ROLL

Calculated Values

Launch Pad Administration Data Maintenance New Process

Ne

Process InfoCurrent StepProcess ProjectsProcess DataMembersRolesWorkFlowRelated ProcessesProcess Log

Current Activity: Prepare Request and Submit (Current Status: Activity started)

SubmitCancel

Activity Comment

Label Type: <- Select -> Config Material:

Description Info

Calculated Matl Description: 12345678901234567890123456789012345678901234567890

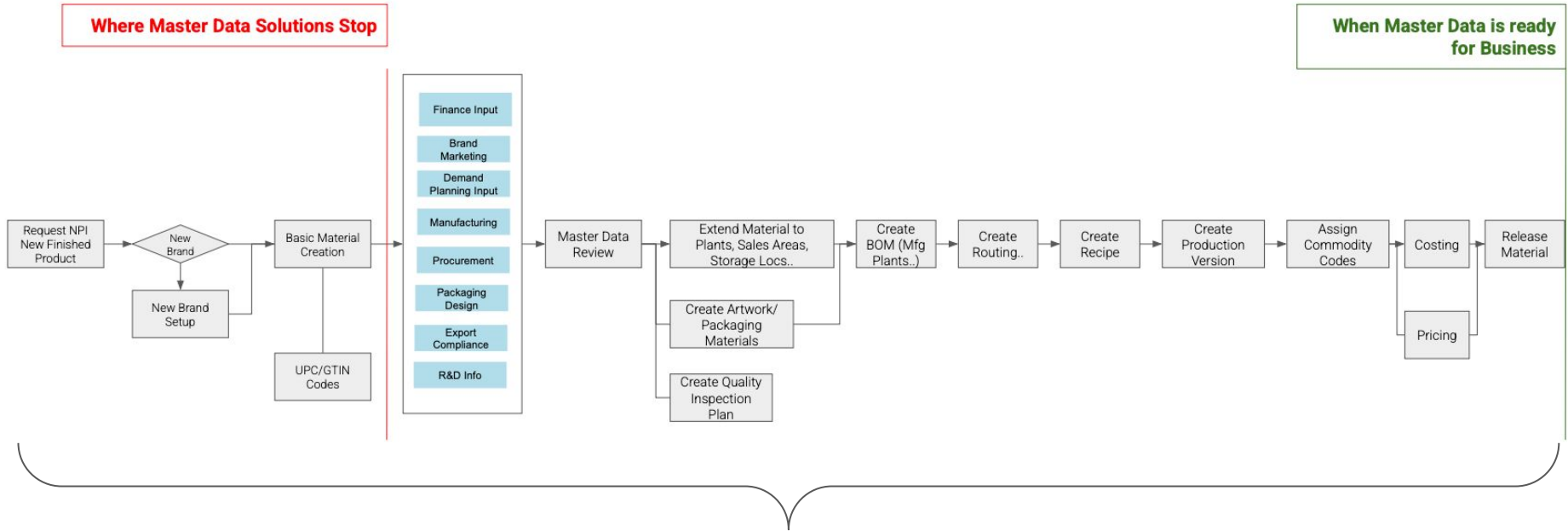
Material Description Fr:Material Description Fr:

says

Calculated Material Description should not be longer than 40 characters

OK

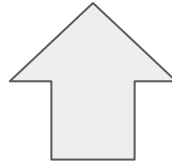
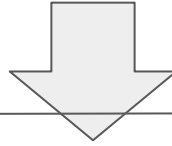
End-to-end Processes for Master Data Management



Cross-functional Collaboration, Automation and Integration

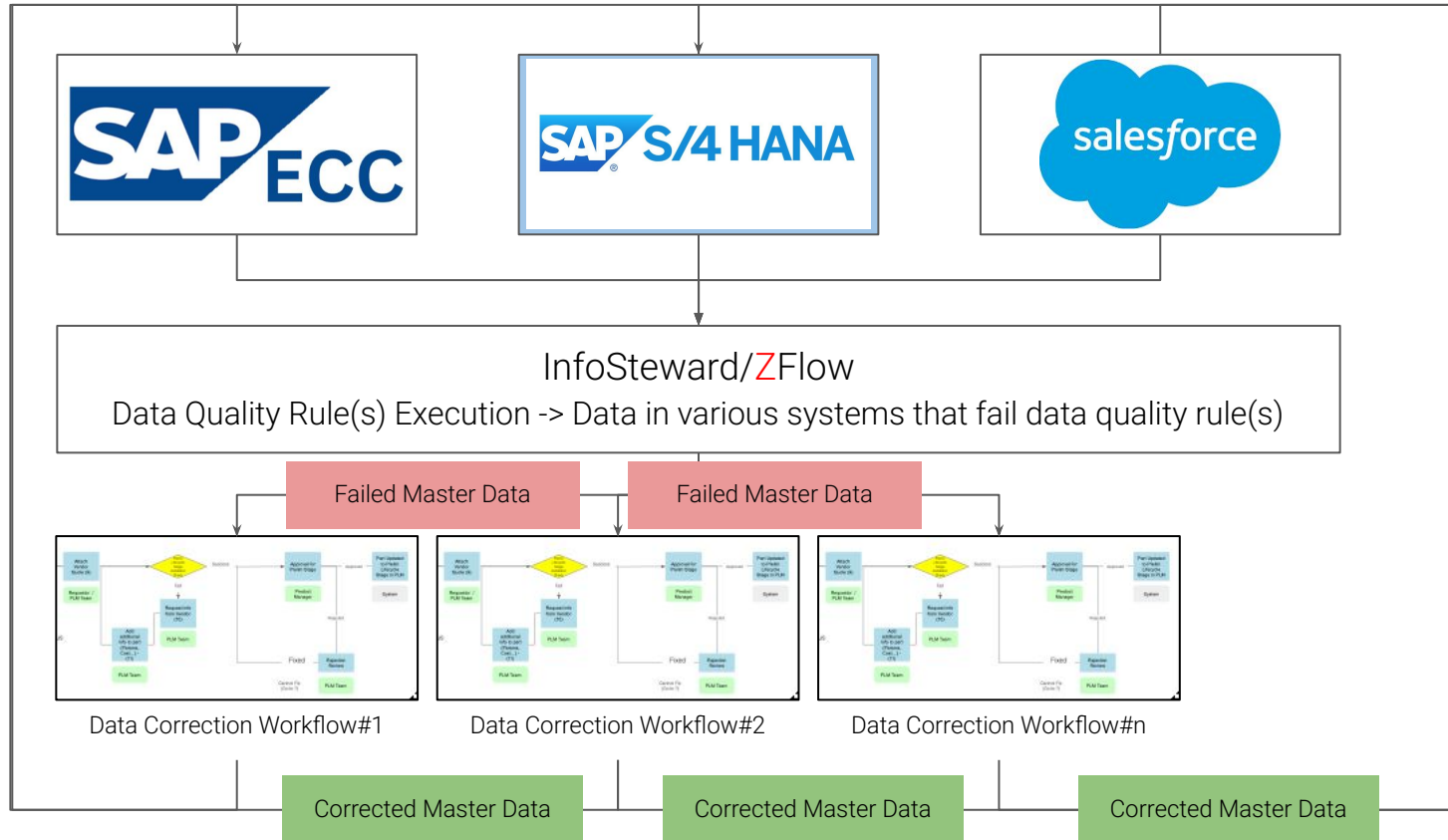
Continuous Error Correction in Mission-critical Systems

Error-proofing (Create/Update Master Data)

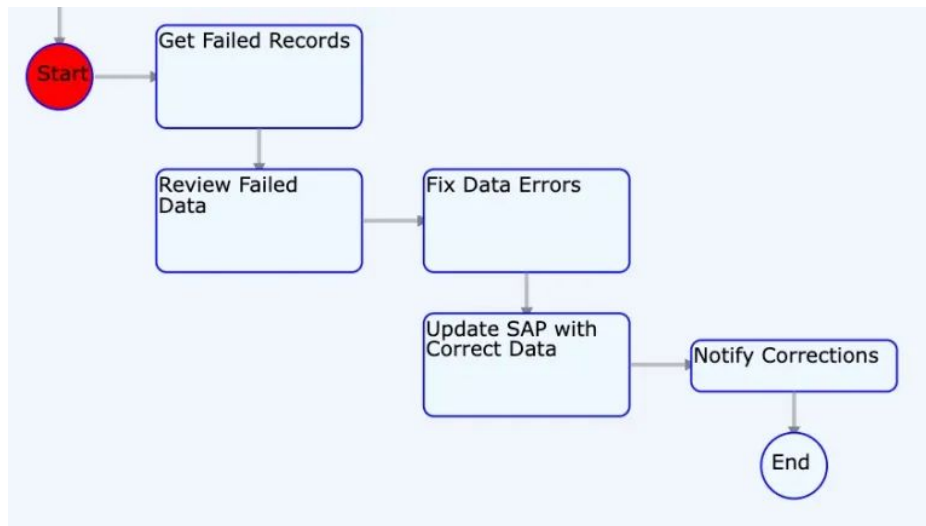


Error correction (Existing Master Data)

Continuous Error Correction Workflows



Continuous Error Correction Workflows



Info | **Current Activity** | Data | Members | Roles | Workflow | Log | Graph | Process Report | Test

Next Activity: Start Master Data Error Correction - Availability Check - DHCAVCHK000001

[▶ Start Process](#)

Data Health Check Name:

Run Date: [\[x\]](#)

Notes:

Availability Check Data Errors

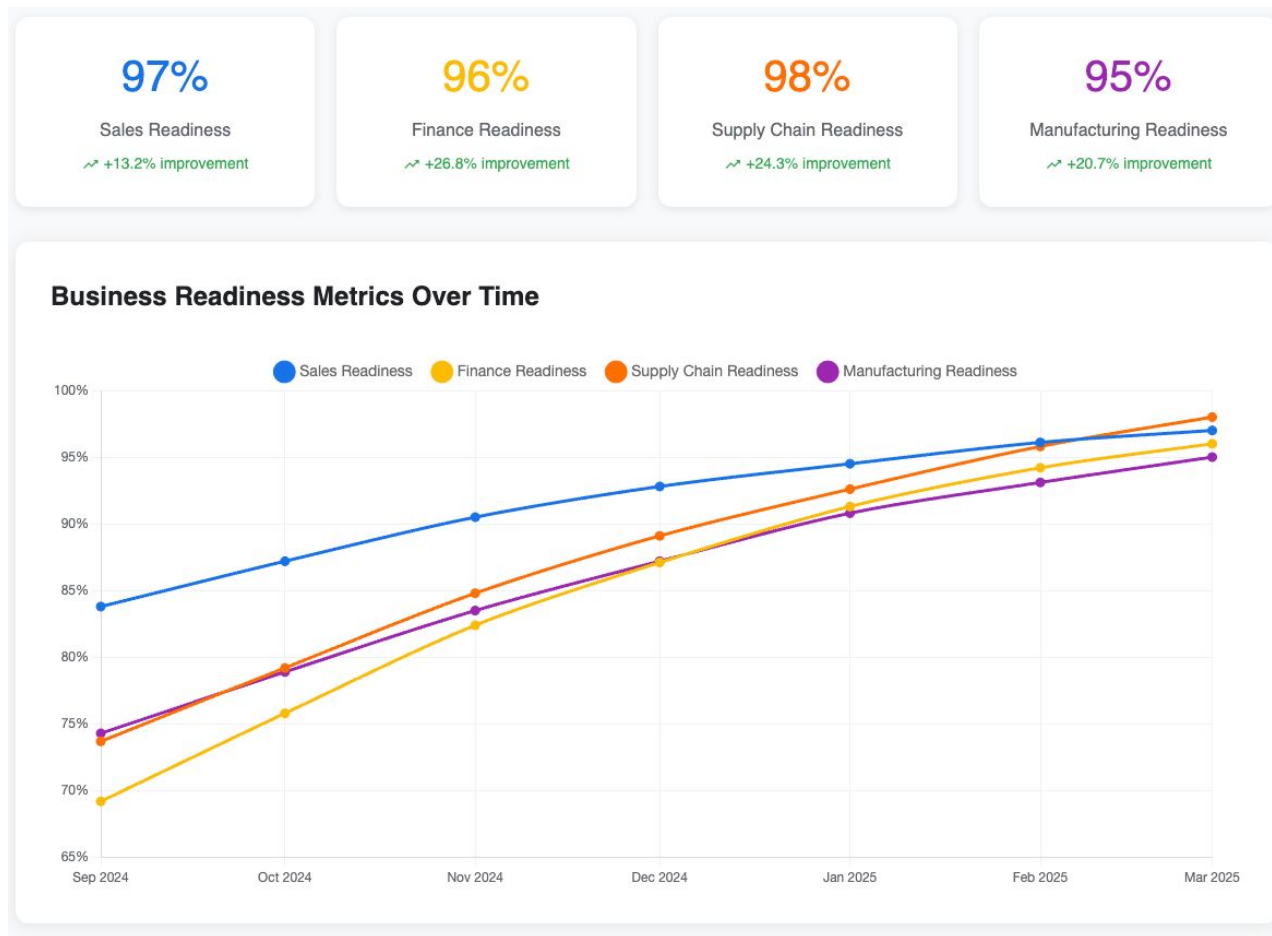
Availability Check Item [Add New](#) [Select All](#) [Delete All](#) [Paste Data](#) [Export](#) [Datatable](#)

	#	Material Number	Plant	Division	Availability Check
<input type="checkbox"/>	1	<input type="text" value="MAT123"/>	<input type="text" value="AK01"/>	<input type="text" value="10"/>	<input type="text" value="ZATP"/>
<input type="checkbox"/>	2	<input type="text" value="MAT124"/>	<input type="text" value="AK01"/>	<input type="text" value="10"/>	<input type="text" value="ZATP"/>
<input type="checkbox"/>	3	<input type="text" value="MAT125"/>	<input type="text" value="AK01"/>	<input type="text" value="10"/>	<input type="text" value="ZATP"/>

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Improvement is the Only Validation



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Getting Started

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- **Error-proofing at the source - Poka-yoke principles**
- Intelligent Governance
- End-to-end Master Data Processes
- Continuous Error Correction is Mission-critical Systems

If you can only
do one thing

Summary

- ❑ *Proven success in many industries*
- ❑ *Easy to adopt and loved by business users*

[Test Drive](#)

[Free Pilot](#)

For More Information

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