

Catalysing Transformation SAP's Innovations in the Paper and Packaging Industry

Kai Aldinger, SAP June 19, 2024



Market Consolidation & Portfolio Optimization

Smurfit Kappa and WestRock Announce Transaction to Create a Global Leader in Sustainable Packaging

05

JUN



Business | Deals

Mondi to Buy DS Smith for £5 Billion and Create Packaging Titan

Smurfit Kappa Acquires Bag-in-Box Plant in Bulgaria: A Strategic Move to Boost European Growth

D November 07, 2023 & By Packnode @ 1272 Pageviews @ 0 Reviews



Deals

Exclusive: Brazil's Suzano readies \$15 billion bid for International Paper,

sources say

By Anirban Sen

May 8, 2024 1:04 AM GMT+2 - Updated 3 days ago

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Challenges in the Paper and Packaging Industry



Keep pace with market developments

Various events and long-term trends on the supply and demand side of commodities and energy lead to significant and different price developments and fluctuations in the various sub-industries.



Merge & Acquisition, sale and closure of operations

Companies are compelled to make business adjustments due to overcapacity and demand alterations, encompassing strategic acquisitions, mergers, and facility closures.



Differentiate by new technology (AI)

Technology provides businesses the chance to enhance process automation and efficiency, while also serving as a strategy for competitive differentiation.

Deal with IT obsolescence

Many IT systems in manufacturing, while functional, are technologically outdated and finding personnel for maintenance is increasingly difficult.



Tapping into new business areas

Residual and raw materials from the pulp and paper industry hold the potential to supplant various fossil resources with sustainable alternatives. There is also potential for sustainable **heat and power generation**.



Sustainability as a business imperative and driver

Sustainability offers many opportunities for companies in the sector. However, it also presents many new challenges in terms of reporting and transparency.



Manage demographic change

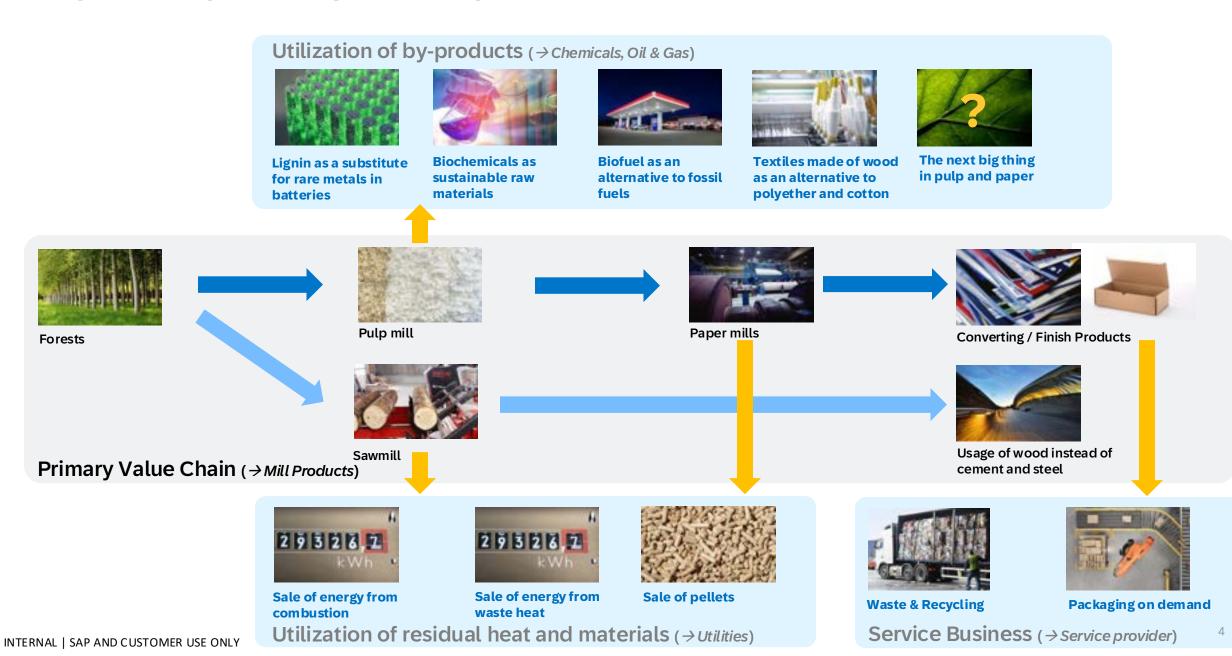
Due to the aging workforce in many companies, many experts are nearing retirement. Companies must retain this expertise internally or seek self-reliance.



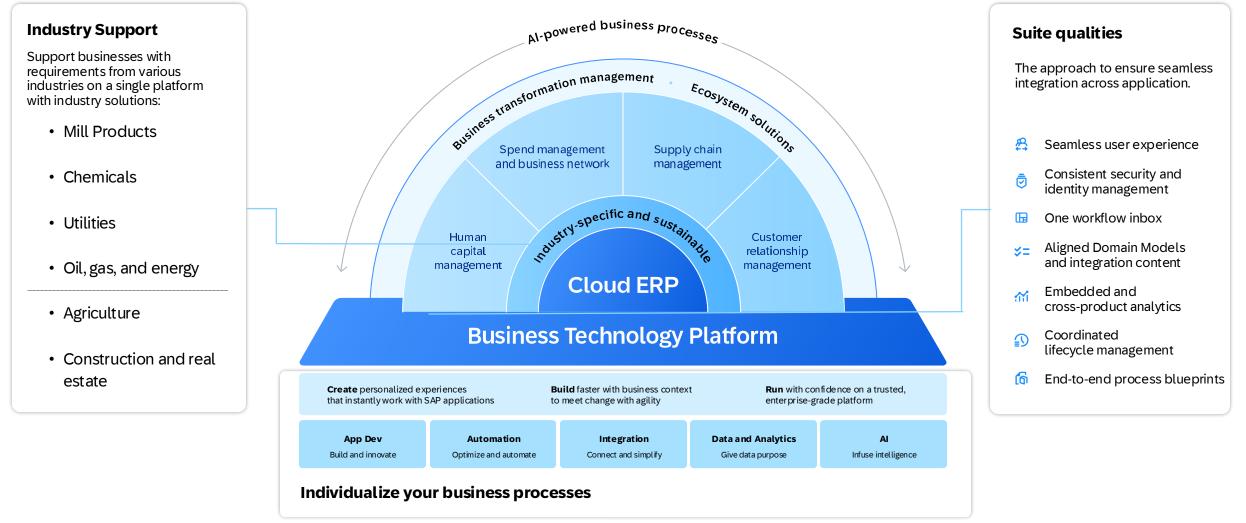
Master the circular economy

Despite the circular economy's industry dominance, businesses face hurdles due to increasing demand, consumer behaviour changes, and rising costs and accessibility problems of recycled raw materials.

Pulp and Paper Companies expand into New Business Areas



SAP Portfolio | Empowering Paper & Packaging Companies in a World of Transformation



Innovation and Roadmap^{*} | Forest Products, Paper and Packaging



Drive customer centricity

Order confirmation with prod. constraints SAP S/4HANA advanced ATP - SBC

Order confirmation with transportation SAP S/4HANA advanced ATP - BPS

Streamline Configurable Product Sales SAP Intelligent Product Recommendation

Available on SAP Store

Product Configuration Cubicus by aicomp

Dynamic Pricing Price f(x)

SAP Green Token

S&OP Planning for conf. materials

SAP Business Networks - Global Track & Trace

Visibility in the origin of raw materials

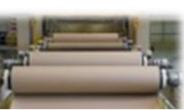
Circular Economy & raw material sourcing

SAP DSC - IBP and S/4HANA MPS

Visibility into Supply Chain

SAP S/4HANA for Waste and Recycling

Build supply chain resilience



Optimize and collaborate on assets and operations

Manufacturing Execution & Integration SAP Digital Manufacturing (for Mill Products)

Digital Manufacturing for Mill Products DM4Mill by delaware

Tank Planning SAP Manufacturing Planning & Scheduling

Production Planning Optimization SAP Manufacturing Planning & Scheduling

Mobile devices for Asset Maintenance SAP Service and Asset Manager



Leverage the power of Generative AI SAP Business AI



Run data-driven and intelligent business processes

SAP S/4HANA Suite SAP Industry & Cloud Solutions SAP Business Technology Platform SAP Partner Solution



Race toward sustainability

EU Deforestation-Free Regulation Satellite-based Monitoring by LiveEO
EU Deforestation-Free Regulation SAP Green Token & SAP Ariba
Carbon Accounting SAP Sustainability Footprint Management
ESG Reporting SAP Sustainability Control Tower
Tax on non-reusable plastic packaging SAP Responsible Design and Production

INTERNAL | SAP AND CUSTOMER USE ONLY

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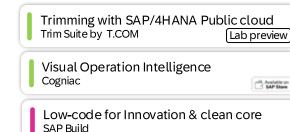
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SAP Intelligent Product Recommendation

Reimagine the customer experience for complex configurable products

Challenge

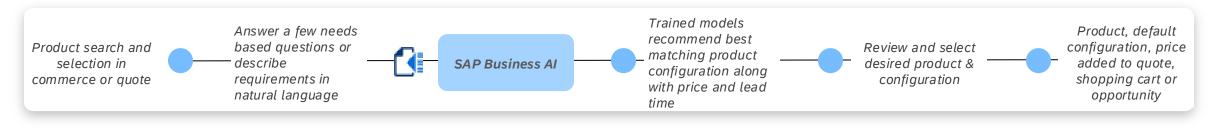
- Customers and salespeople struggle to find the right solution to meet their unique needs because your products are described in technical product-oriented terms
- Manufacturer struggles to expand into new markets because it is too much time consuming and costly to find and train salespeople
- Challenging to sell through e-commerce sales channels because products are too complex and your product offering too broad
- Supply chain team has limited visibility into useful information in the sales pipeline

Solution

- Digital sales assistant that leverages machine learning to streamline the quotation process and e-commerce customer experience for configurable products
- Provides AI based recommendation of optimal products and configurations to meet the customer's needs along with ML based prediction of lead time, price, CO2 footprint, etc.
- Out of the box integration with S/4HANA, SAP CPQ, SAP Commerce and a dynamically generated run time UI reduces time and effort to implement the solution

Benefits

- Reduce time, effort & technical expertise required to create a quote or shopping cart
- Strengthen customer loyalty and trust, by recommending solutions best suited to the customer's functional and business needs
- Minimize dependence on sales experts thus freeing up time to focus on complex and high value opportunities
- Decrease time required for training sales reps and channel partners get reps selling successfully sooner
- Reduce customer lead times and increase supply chain efficiency by providing transparency into sales pipeline



	Business Impact Reference			
1-10%* 60-95%* Increase revenue with better product personalization Reduced time to create quote/budgetary estimate for complex products	1-25%* Reduce inventory carrying cost	10-25%* Time reduction to effective sales rep	 Purpose built machine learning application No data scientist required by customer Out of the box integration with SAP CPQ, Commerce Cloud & S/4HANA *SAP Value Management 	"we think that a tool like this could help us with better, faster and more efficient sales" "let me know when this is available and I will buy it" "When can I have it?Monday is not soon enough. How about tomorrow?"

INTERNAL SAL AND COSTOMEN OSCONEN Note: This is current state of planning and may be changed by SAP at any time without notice.

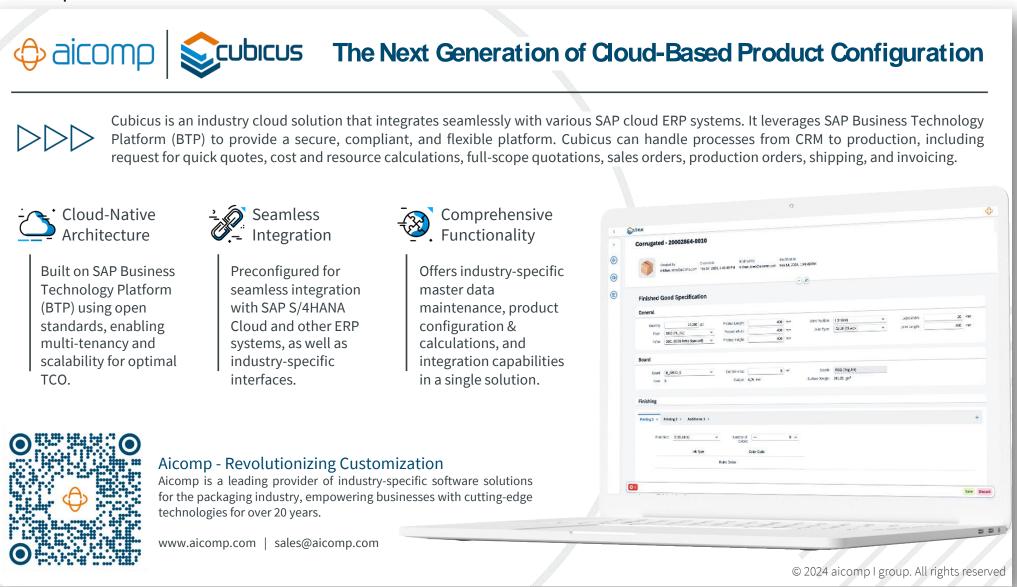
SAP Intelligent Product Recommendation – Packaging AI Model

Select a product category, and do the following • Enter requirements in the testbox(can be edited), or provide • Avoid entering personal data in test box.	weds attributes, or do both.	*
Product Calegory.*	0	
		Show Products

aicomp

Variant configuration for Mill Products on BTP

cubicus by aicomp



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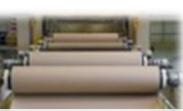
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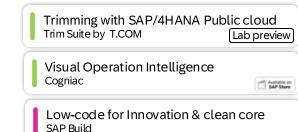
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SAP Supply Chain Planning Platform

Connect strategic and operational planning with real-time visibility and execution

	Digital Business Planning	
Execute SAP S/4HANA Productionn planning and scheduling, order promising (aATP) and MRP	 Plan SAP Integrated Business Planning (IBP) for Supply Chain S&OP, Demand, Response & Supply, Inventory, Control Tower, DDMRP Synchronized Planning for Production Digital Twin of the entire supply chain Predictive and Prescriptive Decision Support Real-time scenarios and Intelligent Visibility Impact Analysis & Optimization MRO inventory planning 	C
rough cut capacity plan to feed manufacturing and production planning and scheduling	SAP Business AI Leverage AI technology to improve forecast accuracy, user	SAP Analytics Cloud (SAC) Financial planning, steering and financial impact analysis on enterprise level
	experience, master data quality & manage supply chain risk	

SAP Digital Supply Chain Planning – SAP IBP

Scenarios for Integrated Supply Chain Planning for Configured Make-to-Order

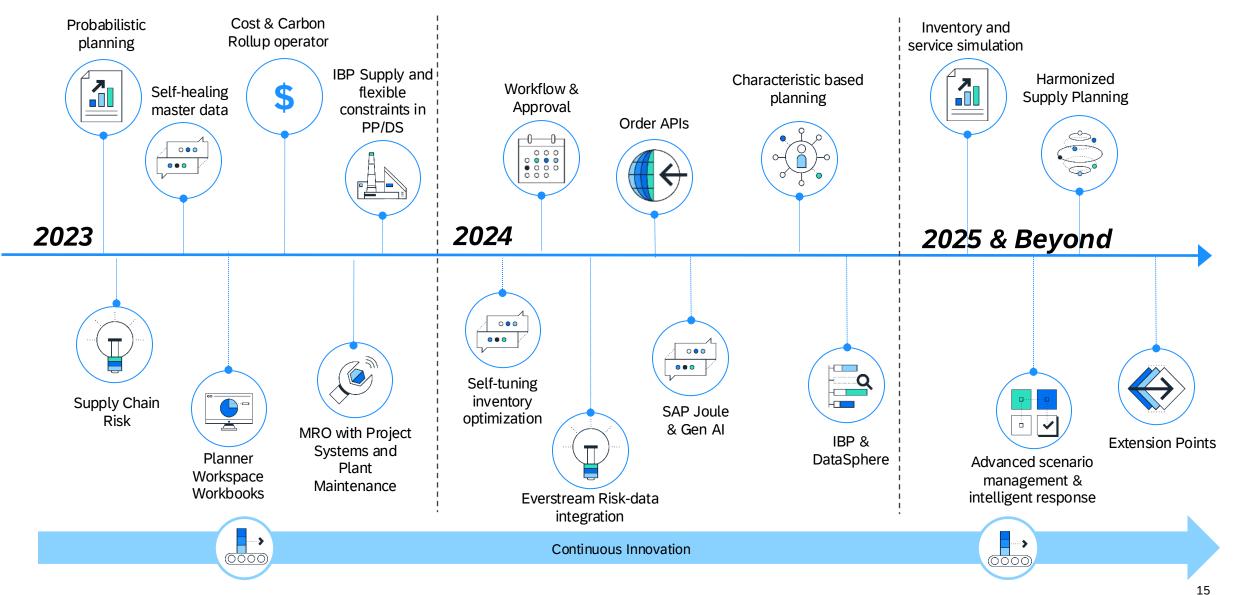
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Cost Calculation and **Profitability Simulation** (e.g. with energy and raw prices)

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SAP IBP Upcoming Innovation Highlights



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This is the current state of planning and may be changed by SAP at any time

SAP IBP Revolutionizes Planning with GenAI: Harnessing Artificial Intelligence for Smarter Decision Making

Explanation of Complex Solvers & Optimization Results

Planning Assistant

Advanced scenario management & intelligent response

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Cubicus by aicomp

Dynamic Pricing

Price f(x)

Order confirmation with prod. constraints

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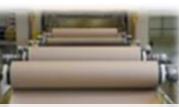
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Race toward sustainability

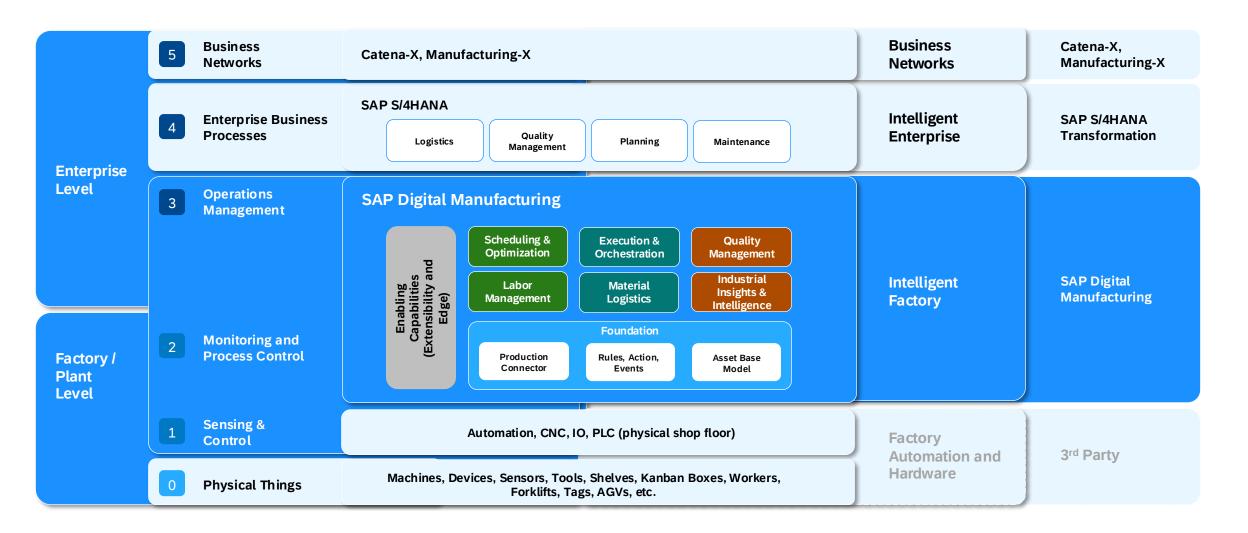
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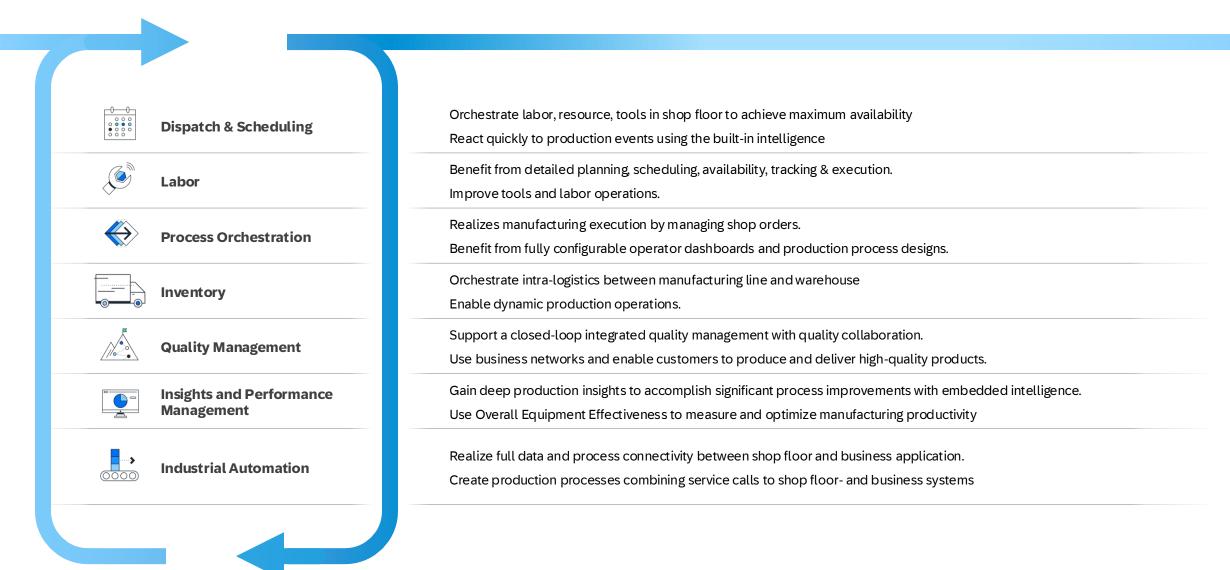
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SAP Digital Manufacturing Strategy Claudius Link, Senior Vice President Digital Supply Chain Manufacturing, SAP Pfeifer Group: Implementation of SAP S/4HANA and SAP Digital Manufacturing in the Wood Processing Industry Stefan Hammert, Hood of Group IT, Pfeifer Hotz

SAP Digital Manufacturing solution blueprint



Key Business Capabilities Overview

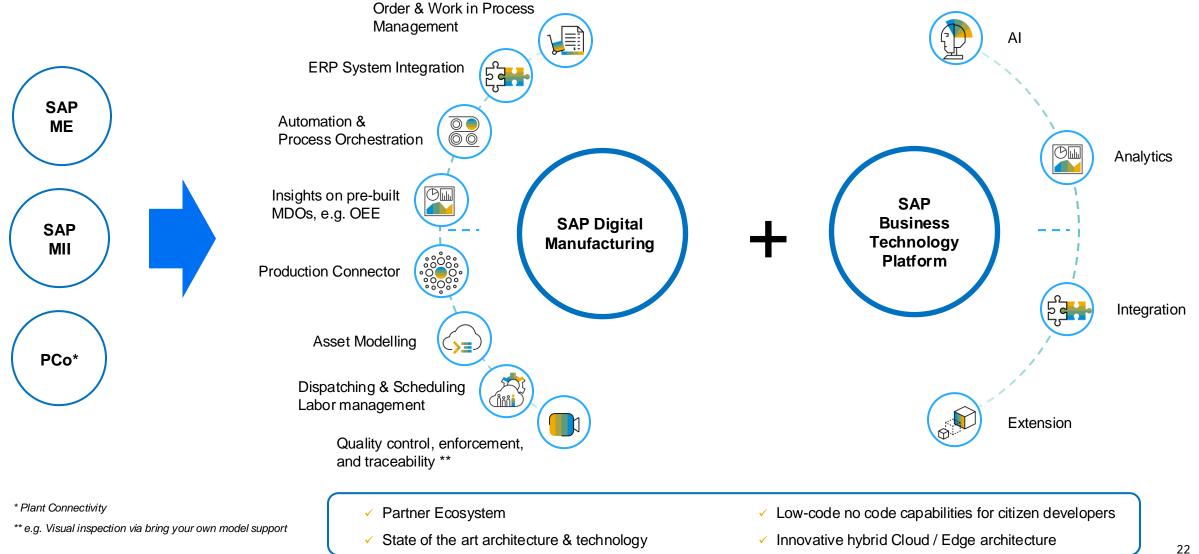


SAP Digital Manufacturing – Resource Orchestration and Dispatching

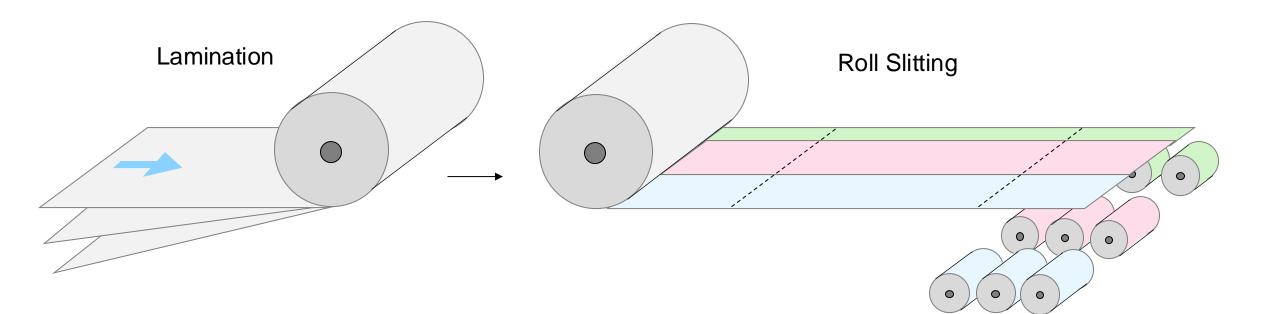
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Elevate SAP MES (OP) to SAP Digital Manufacturing

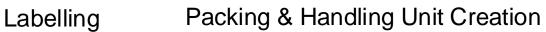
Transformation Strategies: High-Level Overview

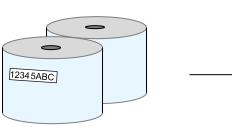


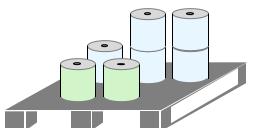
Manufacturing processes in the Paper and Packaging Industry Lamination, Slitting, Labelling, and HU Creation (and tracing all of these back)



Individual rolls can be represented in inventory by classified batches and in manufacturing by SFC (Shop Floor Control number)







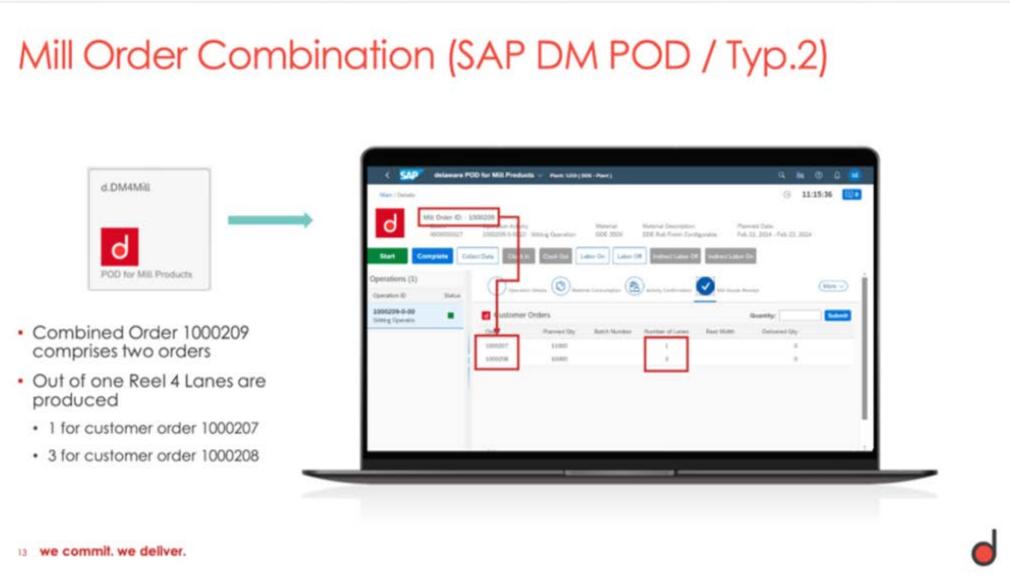
19 June 15:50 - 16:20

Daudius Link, Senior Vice President Sigital Supply Chain Manufacturing

delaware

Digital Manufacturing for Mill Products

DM4Mill by delaware



Innovation and Roadmap^{*} | Forest Products, Paper and Packaging



Drive customer centricity

Order confirmation with prod. constraints SAP S/4HANA advanced ATP - SBC

Order confirmation with transportation SAP S/4HANA advanced ATP - BPS

Streamline Configurable Product Sales SAP Intelligent Product Recommendation

Available on SAP Store

Product Configuration Cubicus by aicomp

Dynamic Pricing Price f(x)

Build supply chain

resilience

SAP Green Token

S&OP Planning for conf. materials

SAP Business Networks - Global Track & Trace

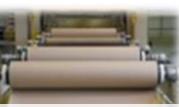
Visibility in the origin of raw materials

Circular Economy & raw material sourcing

SAP DSC - IBP and S/4HANA MPS

Visibility into Supply Chain

SAP S/4HANA for Waste and Recycling



Optimize and collaborate on assets and operations

Manufacturing Execution & Integration SAP Digital Manufacturing (for Mill Products)

Digital Manufacturing for Mill Products DM4Mill by delaware

Tank Planning SAP Manufacturing Planning & Scheduling

Production Planning Optimization SAP Manufacturing Planning & Scheduling

Mobile devices for Asset Maintenance SAP Service and Asset Manager



SAP S/4HANA Suite SAP Industry & Cloud Solutions SAP Business Technology Platform SAP Partner Solution

Leverage the power of Generative Al SAP Business AI



Run data-driven and intelligent business processes



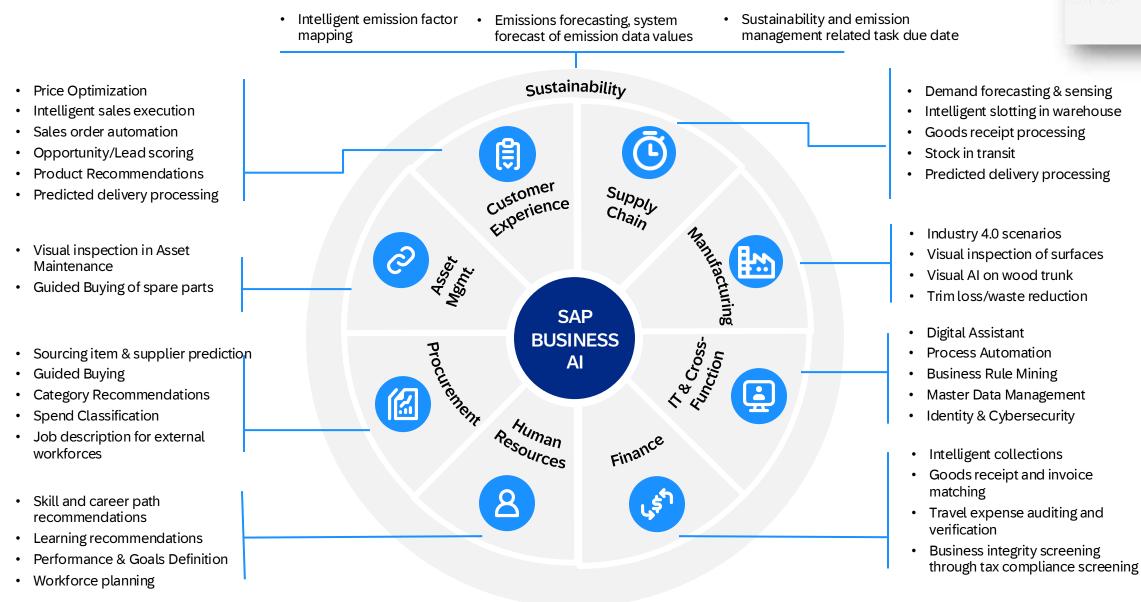
Race toward sustainability

	U Deforestation-Free Regulation atellite-based Monitoring by LiveEO	Available on
	U Deforestation-Free Regulation AP Green Token & SAP Ariba	
	Carbon Accounting AP Sustainability Footprint Management	
	SG Reporting AP Sustainability Control Tower	
Т	ax on non-reusable plastic packag	ing

SAP Responsible Design and Production

INTERNAL | SAP AND CUSTOMER USE ONLY

Mill Products Industry | AI powered scenarios across business functions



SAP AI Roadmap for Mill Products

19 June 15:50 - 16:20

Koy Kretschmer, Business Development

SAP Business AI

Manager, SAP

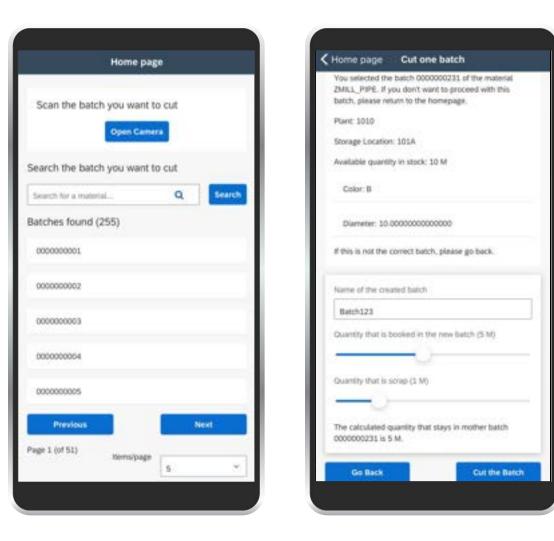
SAP Build Apps – Powerful features for full-stack visual development

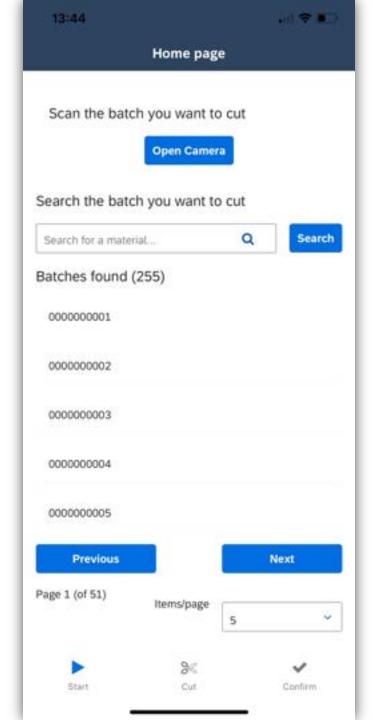
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Industry Use Case: Cutting with SAP Build Apps

Use Case Description:

- Selection of batch that needs to be cut manually or by scanning a barcode
- Insert quantity for new batch and scrap
- Confirm it and cut the batch
- Integration into S/4HANA Cloud, public edition via APIs





20 June 10:45 – 11:15

Drive Industry Relevant Innovation With Low-Code / No-Code While Keeping the Core Clean Andreas Steinwender, Product Manager, SAP

T.CON

Trimming with SAP S/4HANA Public Cloud TRIM SUITE by T.CON



Innovation and Roadmap^{*} | Forest Products, Paper and Packaging



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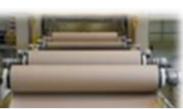
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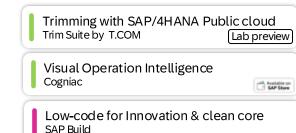
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SAP Responsible Design and Production

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19 June 14:40-15:10

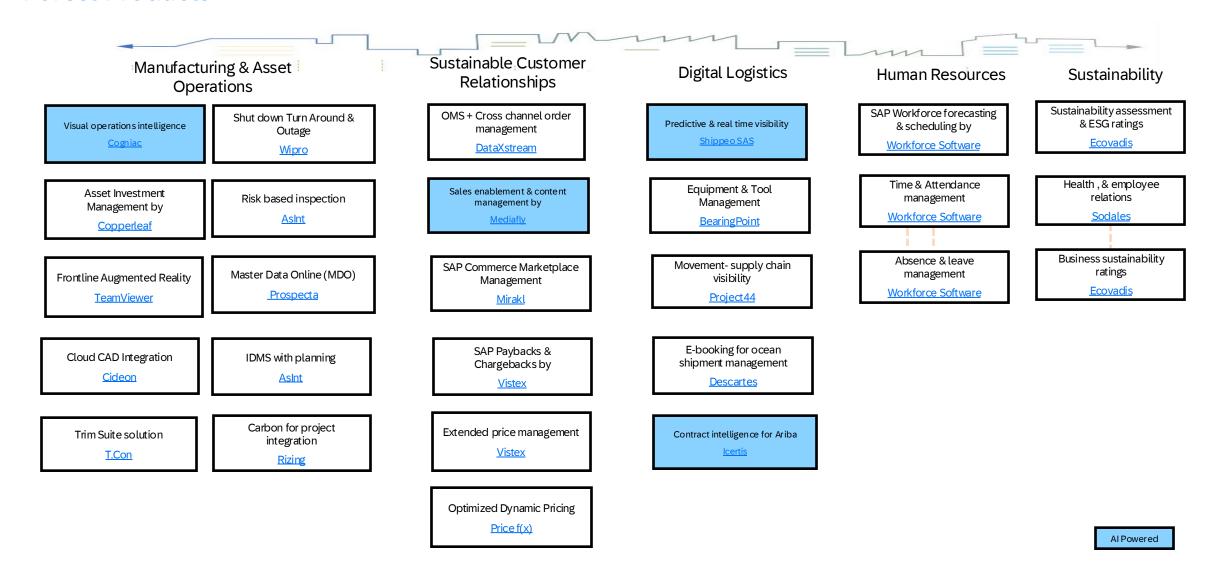
Proving Deforestation-Free Origins of Agricultural Materials and Comply with the New European Union Deforestation Regulation (EUDR) Gloria Figoroa, Senior Product Marketing Manager, SAP

SAP Solutions to Support EUDR Compliance

Zooming in on EUDR's Two Components



Ecosystem & Industry partners solutions examples Forest Products



Paper & Packaging - Summary

- Direction Focused on Industry
- Continual Investments in SAP Solutions with a Strong Emphasis on AI Technologies
- Expanding Portfolio of Partner Solutions
- Multiple Channels for Customer Influence
- Clearly Defined Industry Roadmap
- Long-Term Commitment



105 countries with SAP customers in Paper and Packaging industry

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SAP Roadmap for Mill Products Roadmap Explorer

Thank you.

Contact information:

Kai Aldinger SAP SE

