

Heinzel goes **S/4 HANA** together with Tieto**EVRY**

INSIGHTS | CHALLENGES | SUCCESS FACTORS

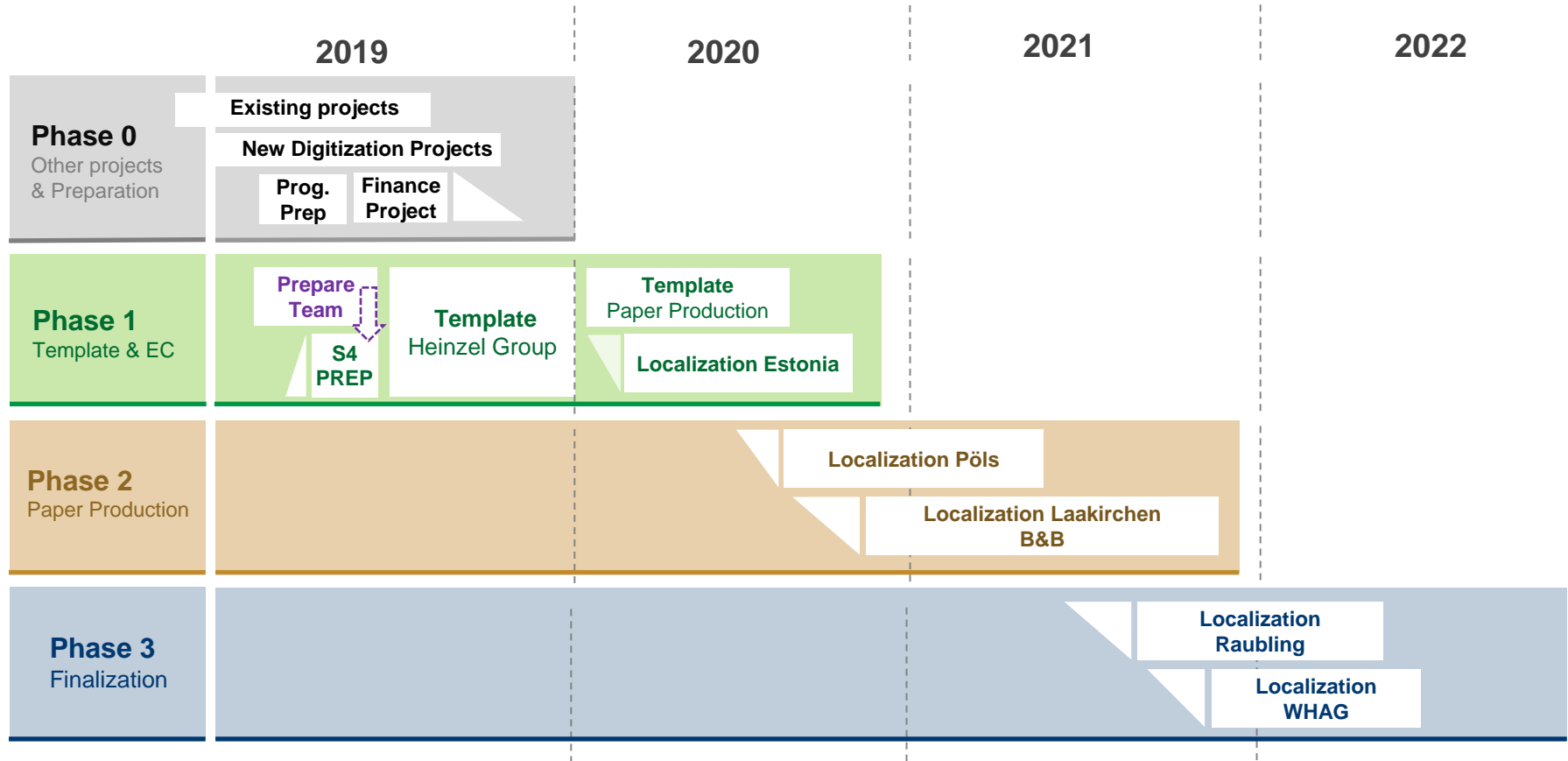
A journey towards an Intelligent Enterprise
with SAP S/4HANA in **Pulp & Paper Industry**



Webinar at SAP Mill Conference
27th – 29th April 2021



Roadmap Heinzeln goeS/4 HANA



Heinzel goeS/4 HANA - Solutions Overview



SAP Solutions used

- SAP Analytics Cloud for Budget & S&OP Planning
- SAP MDG for Master Data Management
- SAP BW/4 HANA
- SAP PO for communication customer/vendor
- SAP PCo for connecting to machines



SAP Modules

- | | | |
|---------|---------|-------|
| • FI/CO | • SD | • HCM |
| • MM | • LE/LO | • GTM |
| • PP | • WM | • PM |
| • QM | | |

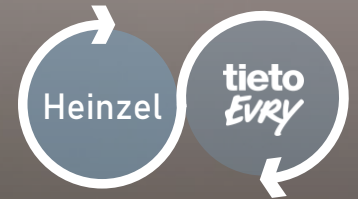


SAP Add ON's / Accelerators

- | | |
|---|--|
| <ul style="list-style-type: none"> • SAP Blockplanning 2.0 + aATP/CTP • SAP eMES with native Fiori • Order Cockpit based on CDS Views • Stock Cockpit based on CDS View • Transport Monitor for Paper • Customer Info Record • FSC/PFSC Solution | <ul style="list-style-type: none"> • mobile solutions for WM in UI5 • Advanced order confirmation logic • Equipment Cockpit for mounting of materials or equipment's • TIPS: Tips Trim 19/19/19 (Trim/windows/MS SQL Server) |
|---|--|

Agile Approach

A unique way for the project team to adapt agile framework utilizing fully remote working approach



Solution Validation & GAP Identification

Design Workshops (Template Phase)

Preparation

TietoEVRY prepares content based on **S/4HANA best practices, industry practice** and available state-of-the-art solution enhancements of HG (supported by HG team)

Heinzel team leads & support (business) prepares process requirements. IT department bring in actual realized GAPs, which are still valid.

Content

Workshops

- Walk-through SAP S/4HANA best practices, Tieto TIPS paper industry solution, realized HG solutions
- Fit-Gap to existing business processes requirements and analyze S/4HANA and TIPS compatibility
- Validate and prioritize gap list from the feasibility study
 - Delta design for gaps
 - Define and approve To-Be business processes

RESULTS

Agreed Process Definitions, GAP Backlog & Meeting Minutes

Published for attendees. Accepted within defined period.

Deliverable

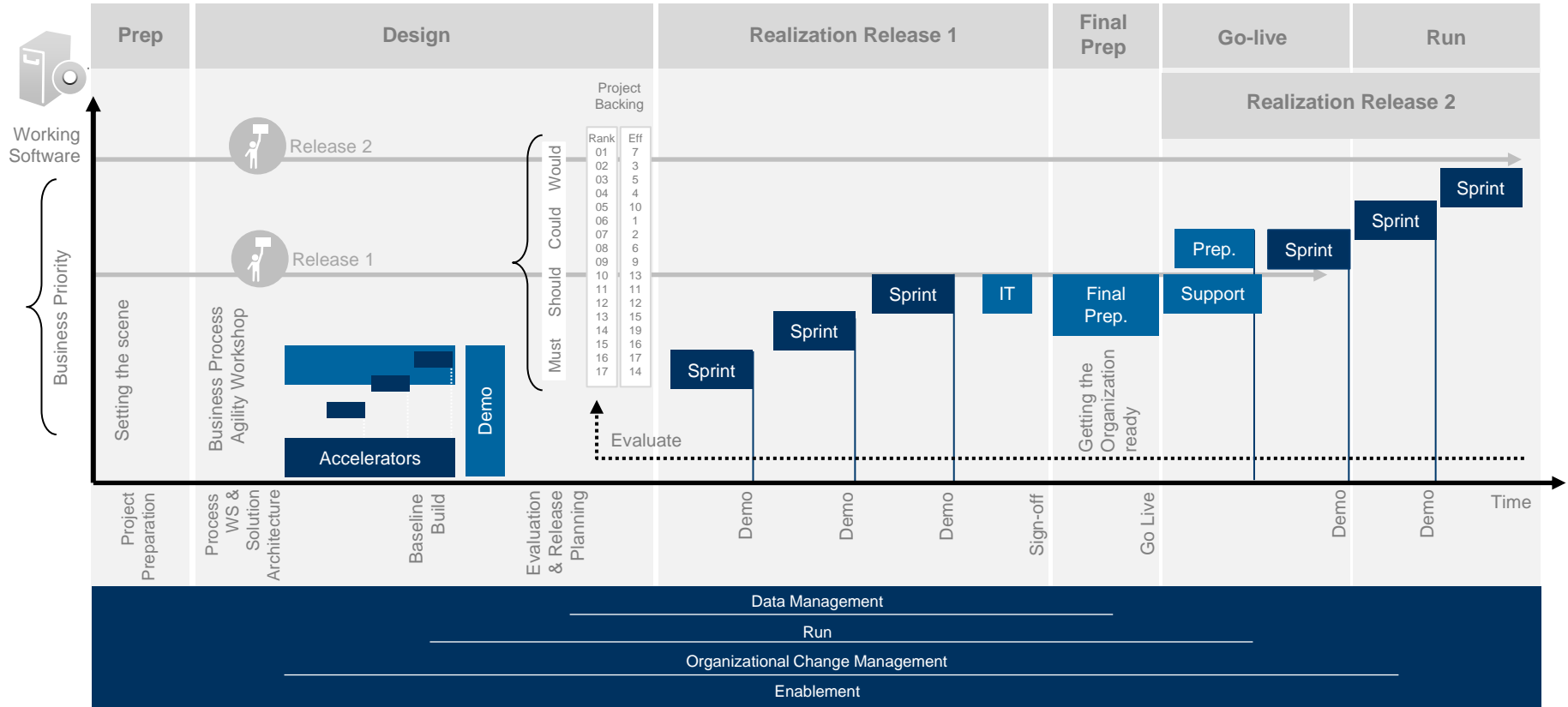
Design Documentation

RESULTS

- To-be business process definitions and flows
- Solution Design Documents
- Prioritized backlog for gaps
- User Stories / Functional specifications
- Effort estimations

Use of S/4HANA best practice content, Tieto TIPS Paper Industry Solution and existing state-of-the-art HG solutions and document GAPs instead of traditional blueprinting.

Agile Implementation Methodology used



Roles & Responsibilities



Support/Process Expert

Deliver the solution to the mill by

- Checking template/process fit
- Making the templates work for the mill
- Ensuring harmonization
- Educating users
- Handling user problems
- Detecting rollout problems



Process Lead

- **Template Builder**
 - Solving mill business problems with the template toolbox
- **Process Champion**
 - Driving best practice across mills
- **Aid during the localization**
- **Go-to-Point** for all changes requests regarding the solution



IT & ext. Consultants

- Discusses solution possibilities for business challenges
- Configuration & adaptation of SAP
- 2nd and 3rd level support



Online facilitation for workshops due to Covid-19



Step 1

Prior to Workshop

1. Prepare content & plan carefully
2. Choose the right set of tools & test

Step 2

Check in to workshop

1. Set the scene, make sure participants understand the plan structure, roles and tools
2. Create a psychologically welcoming space

Step 3

On going workshop

1. Keep it together & clear, monitor the schedule.
2. Include many brakes for people to have time to think.
3. Facilitate conversations actively.

Step 4

Closing the workshop

1. Present results & next steps
2. Retro perspective round with participants to make sure things were understood jointly.

AFTER

1. Share notes & material.
2. Review summary & follow up actions.

heinzel® goeS/4 HANA

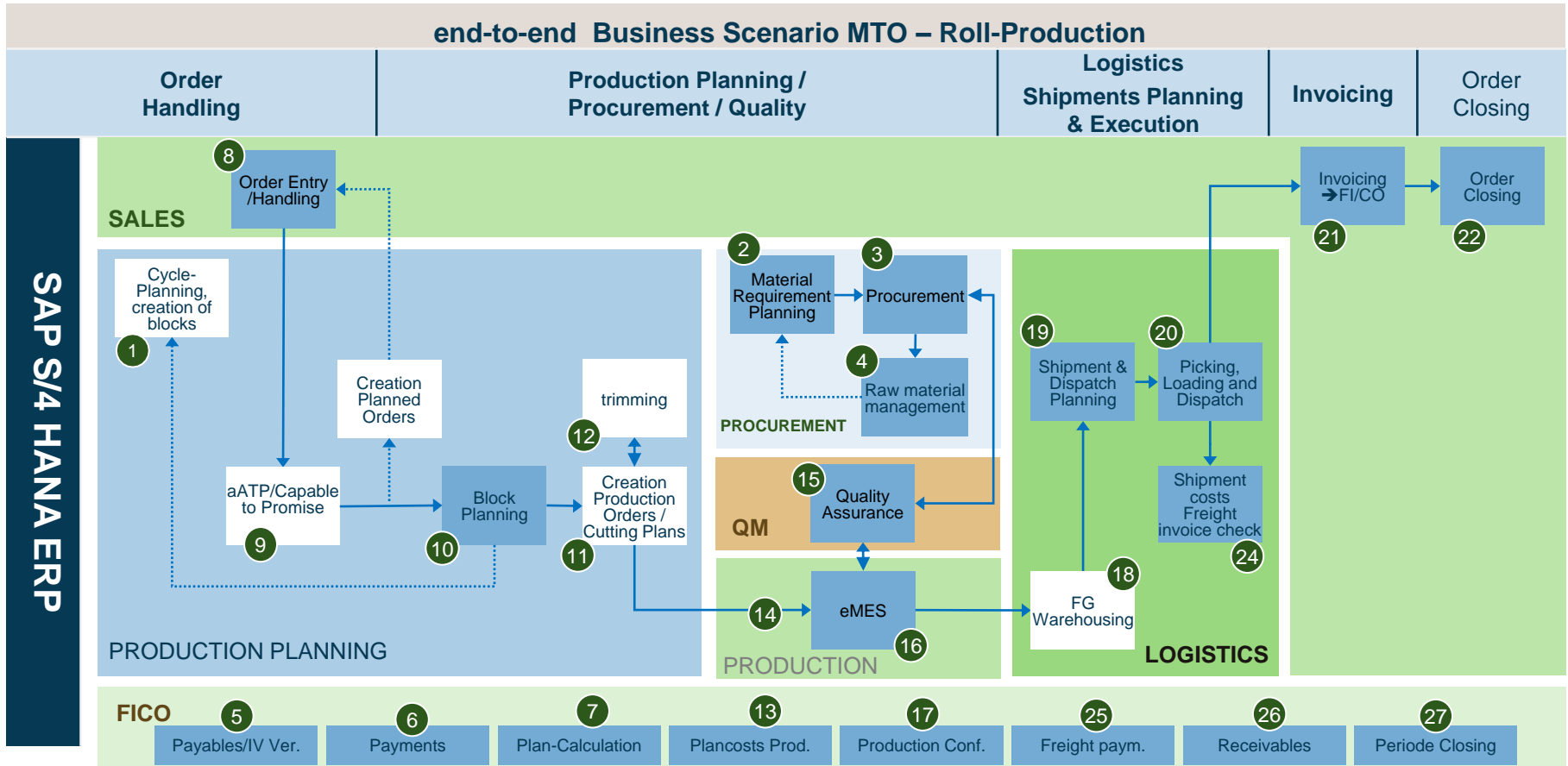
with tieto *EVRY*

Highlight's & Success Factors

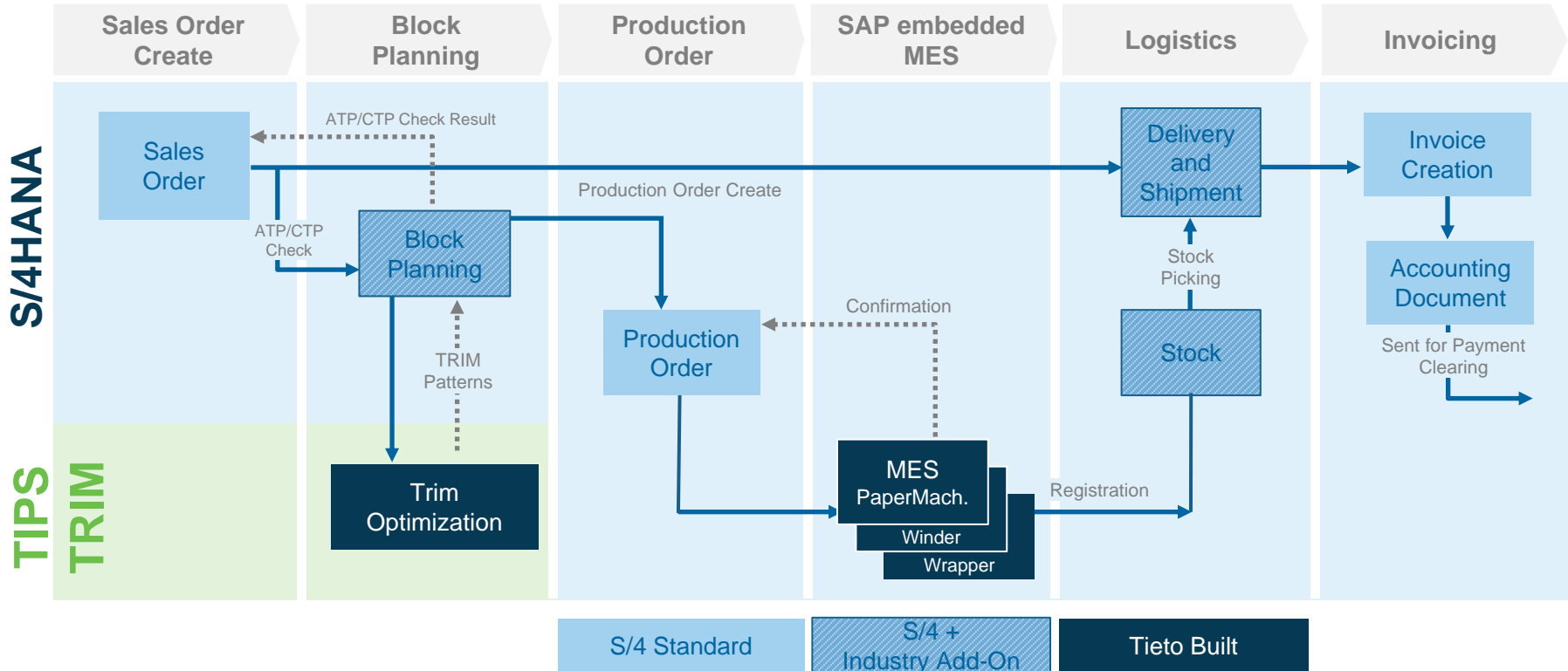


Best Practices for Pulp & Paper used as starting point

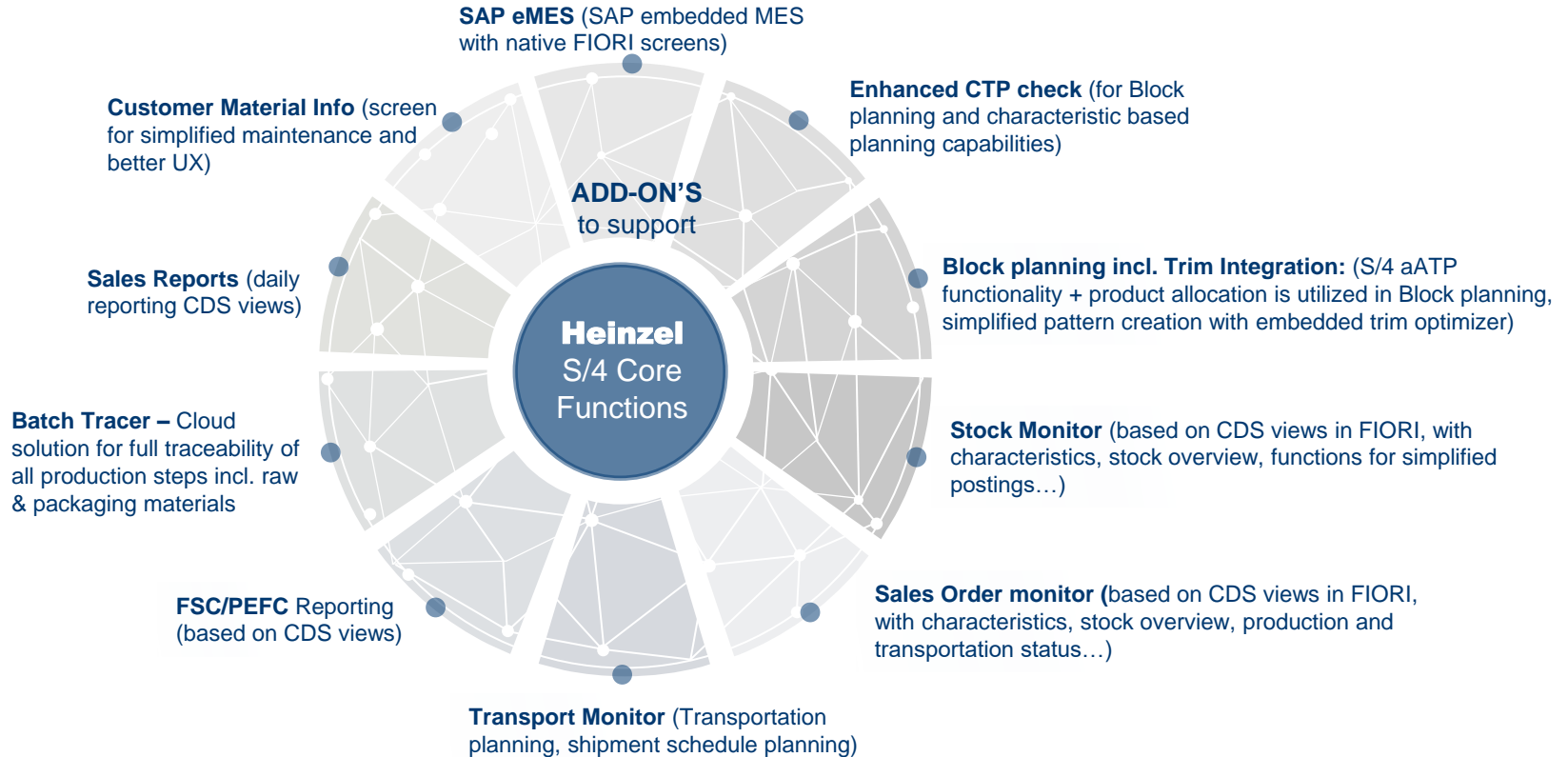
end-to-end Business Scenario MTO – Roll-Production

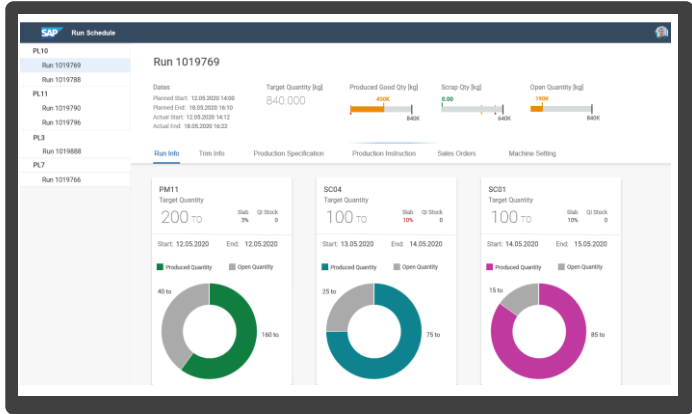


Clear view what needs to be enhanced



ADD-ON'S to Support Heinzl Group Competitive Edge Solutions





SAP Paper Machine Workscreen

Plant: HTM1, Workcenter: HTM1PM01, Shift: Early, User: Max Mustermann

Run	Intr.	Status	Material	Target quantity [kg]	Produced quantity [kg]	Open quantity [kg]	Start date	End Date
1019768		●●●●●	100001JR	114,000	39,718	74,300	15.04.2020 14:08	15.04.2020 16:10
1019758		●●●●●	100006JR	40,000	21,000	19,000	15.04.2020 16:10	15.04.2020 16:30
1019761		●●●●●	100008JR	46,680	19,880	26,790	15.04.2020 16:10	15.04.2020 16:10

Status	Reel Number	Diameter [mm]	Length [m]	Width [mm]	Weight [kg]	Material	Text	Timestamp
NEW	10223882001820	3,765	161,000	5,500	40,000	100001JR	Bag 40 gsm	14.04.2020 08:15:50
NEW	10223882001822	3,765	161,000	5,500	40,000	100002JR	Bag 40 gsm	14.04.2020 10:21:02

Reel Number	Iron	Diameter [mm]	Length [m]	Width [mm]	Weight [kg]	Material	Text	Run	Production End	Quality
10223882001810	10	3,765	161,000	5,500	38,000	100001JR	Bag 40 gsm	1019768	14.04.2020 04:13:32	In Spec
10223882001808	11	3,402	156,000	5,500	40,000	100002JR	Bag 40 gsm	1019767	14.04.2020 02:05:00	In Spec
10223882001807	42	3,622	155,000	5,500	37,845	100002JR	Bag 40 gsm	1019766	14.04.2020 23:52:21	Out Spec

Design Thinking and rapid prototyping

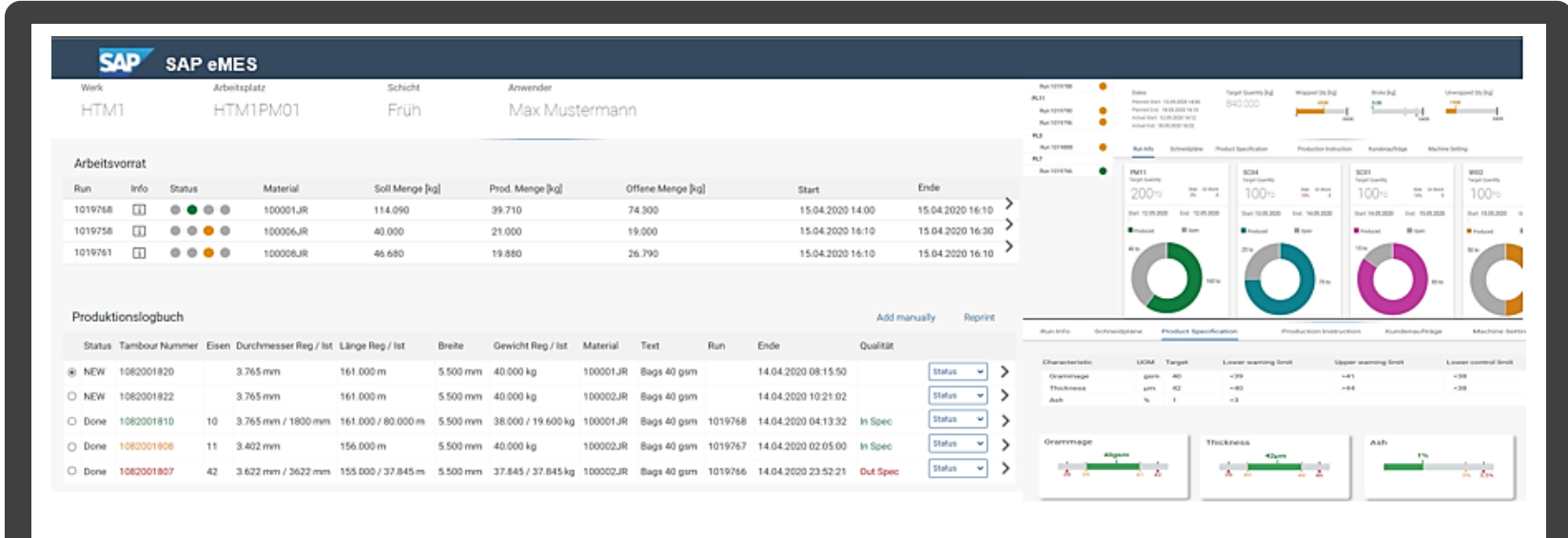


The way to eMES on Fiori:

- Axure is used in **MES** project team to plan, prototype, and hand off to developers, all without code.
- Involve End Users from the very beginning to get best possible User Experience for **UI** Screens.
- TietoEVRY's experts supporting the agile way from Design Thinking to UI prototyping – kickstarted with existing "Best Practices" for **eMES** solutions
- Challenging the Status Quo

'Simplicity & Automation' in focus of MES Team

SAP eMES Towards More Automation Capabilities



eMES VISION:

“Our eMES seamlessly connects your eco-system as it’s fueled by data, supported by AI & managed by people”



eMES MISSION:

“Create eMES processes to support fully automated production being able to run in manual mode too - laying the foundation towards “AUTONOMOUS MILL”



Block planning Highlights

OCK / RUN	Run No.	Block ...	Free Ca...	Search Key	Occupied Capacity KG	Search Key Description	Start Date	Start Time	End Date
Paper Machine Production	V		0		0		05.04.2019	10:52:29	11.04.2019
PO 1001901	5737 P		0	395000	22,400		05.04.2019	10:52:29	05.04.2019
PO 1001921	5591 P		0	393800	215,384		05.04.2019	15:54:29	08.04.2019
PO 1001937	5736 P		0	394500	105,605		09.04.2019	15:12:26	10.04.2019
PO 1001934	5735 P		0	394500	108,000		10.04.2019	00:00:00	11.04.2019
PO 1001954	5393 P		0	710000	46,200		10.04.2019	10:59:09	11.04.2019
Block 60074 - 26.03. 07:25	B		20		40,110		25.03.2019	18:55:37	26.03.2019
Run 5355 - 26.03. 07:05	5355 R		20	812800	40,110 PAPILLON 28		25.03.2019	18:55:37	26.03.2019
Buffer 60080 - 26.03. 08:25	U		60		0		26.03.2019	07:25:37	26.03.2019
Maint 60063 - 26.03. 19:45	M		680	Instandhaltung			26.03.2019	08:25:37	26.03.2019
Block 60064 - 02.04. 06:45	B		289		495,623		26.03.2019	19:45:37	02.04.2019
Run 5601 - 28.03. 19:23	5601 R		289	376100	157,289 FEHSAM 36 LS NC TVO		26.03.2019	19:45:37	02.04.2019
Run 5742 - 02.04. 01:56	5742 R		289	376200	338,414 FEHSAM 36 LS NC TVO		26.03.2019	19:45:37	02.04.2019
Buffer 60065 - 02.04. 07:45	U		60		0		02.04.2019	06:45:37	02.04.2019
Maint 60066 - 02.04. 15:45	M		480	Kurzzeitstand	0		02.04.2019	07:45:37	02.04.2019
Block 60068 - 09.04. 04:05	B		4,154		287,294		02.04.2019	15:45:37	09.04.2019
Run Smart Factory 14:54	5716 R		4,154	374600	155,454 FEHSAM 32,5 LS TVO		02.04.2019	15:45:37	09.04.2019
Run Smart Factory 15:14	5598 R		4,154	373900	77,580 FEHSAM 38 LS NC TVO		07.04.2019	15:45:37	09.04.2019



Full integration into SAP standard procedures for **MTO processes** based on TietoEVRY solution map



Simplicity - simple UI, simple handling, simple workflows



Industry standard block planning running on S/4 – utilizing **Blocks and Runs**



Online **ATP/CTP** during Order entry / change with backwards / forward scheduling



synchronization with production
(current production rate faster or slower as planned)

→ Maintain standard cycle

→ Add / insert standard cycles into machine program

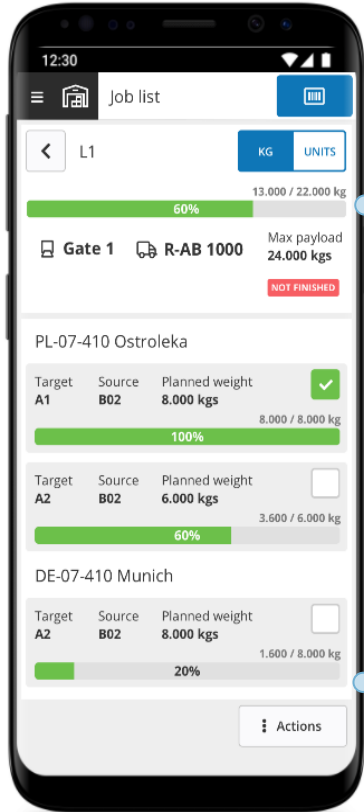
→ Create / copy / cut & paste / delete blocks

→ Enlarging / reducing block capacity

→ Automatic shifting of subsequent blocks along the timeline

→ Create / update / delete maintenance blocks

Logistics Highlights



Fiori mobile solutions fitting for Heinzl Group :

WM put away, transfer posting & unpack

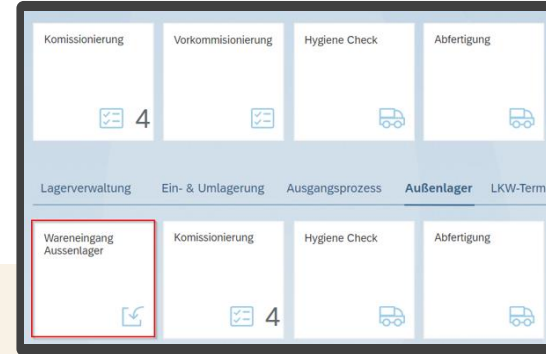
WM inventory

Truck self registration

Truck hygiene check and clearance

Delivery: Picking and Pre-picking

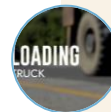
Warehouse Overview with Paper specifics



Time Slot Management Solution: UI5 application to open/change/cancel shipments & time slot booking by Logistic Service Provider & automatic notification

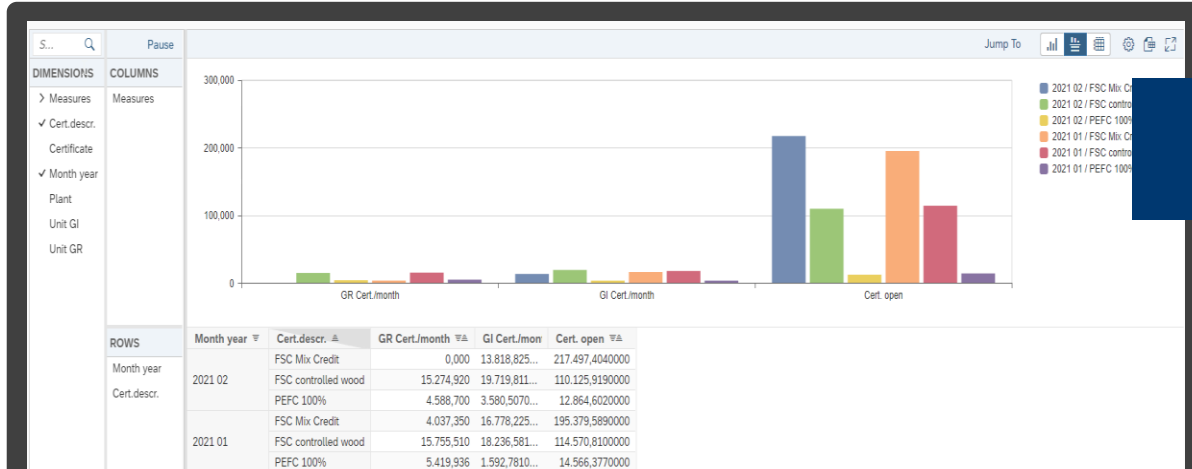


Automatic forwarder Ordering: using different channels (email notification, transporeon integration) to maximise automation, supporting best price determination and geographical capacity check



Loading instructions visualization: UI5 application for loading instructions at registration with 'multi language' capability for the drivers and loading securing materials overview

Sales Highlights




FSC/PEFC Solution & App from TietoEVRY

Balance of sold quantities **vs** received quantities


Sale Order Entry: S/4 standard functionality – enabling **aATP, PAL** (product allocation) and **full integration to Block planning** + utilization of variant configuration.



Agency Workflow: Integrated Workflow in sales and production planning for critical requests with release process by a Fiori App



Customer Material info-record: Characteristic values are filled automatically in configuration of Sales Order entry to improve UX and avoid mistakes.



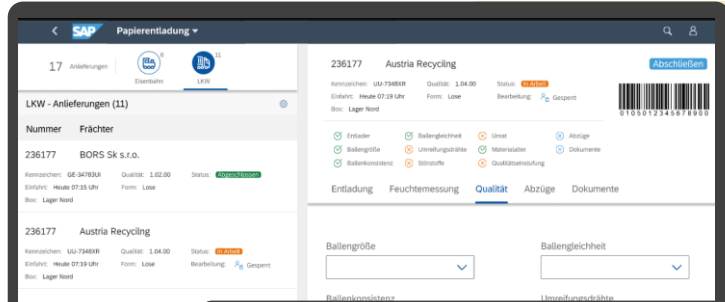
Sales Order-Monitor: overview of sales order-, production- and delivery status with all needed Pulp & Paper specific information



Sales Analytics / Sales Reporting: Real time analytics of sales volume, profit margin or incoming sales orders

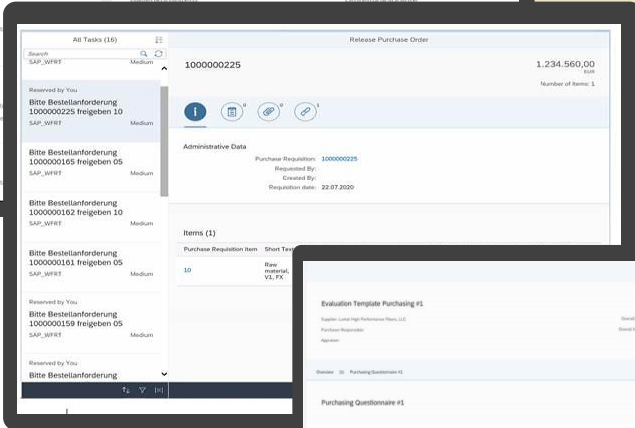


Purchasing Highlights



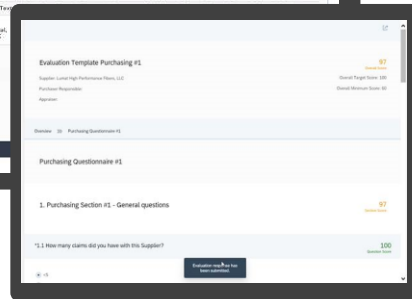
'Paper for Recycling' solution on Fiori with rapid prototyping

- Delivery monitor
- Tracking of deliveries
- Weight & moisture measurement
- Claim-Handling



Purchase Requisition Cockpit

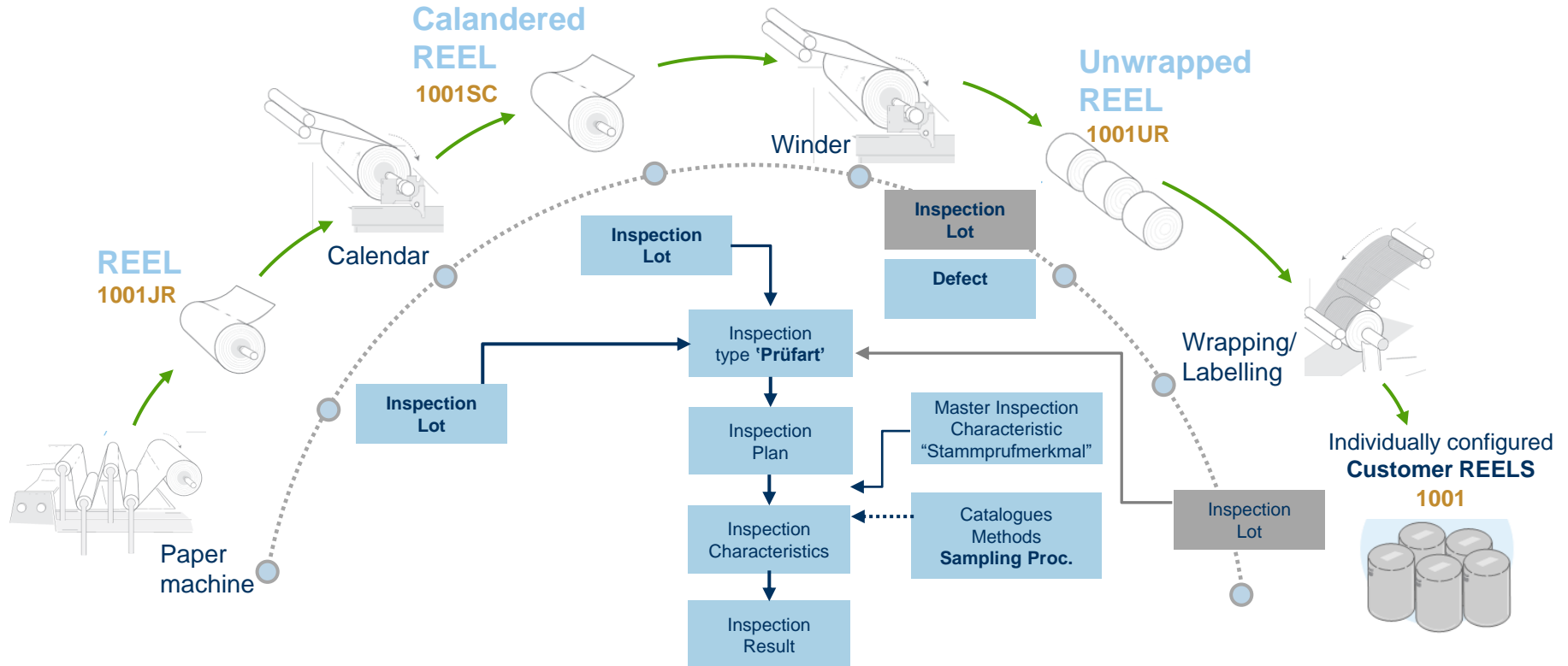
Fiori based purchase requisition release (MyInbox), for mobile devices (Mobile Phone, Tablet, etc.)



Consolidated "Supplier Evaluation" - Fiori

- Selection of suppliers to be assessed
- Criteria & weighting
- Questionnaires to employees

Integrated QM for production processes



Reporting & Analytics



User profile
Manager
#XXX users



Analyst /
Controller
#XXX users



Operations
#XXX users

SAC Analytics
Dashboards /
reports

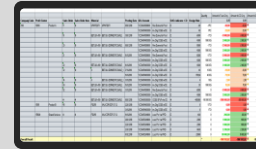


MGMT REPORTING

ANALYSIS



Analysis
for Office
(Excel add-in)



ANALYSIS

BPC PLANNING (S&OP)



Fiori apps /
reports /
Embedded
Analytics



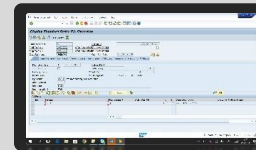
MGMT REPORTING

OPERATIVE REPORTING

ANALYSIS



SAP S/4HANA
GUI



OPERATIVE REPORTING



Key-takeaways

heinzel® goeS/4 HANA

with tieto *EVRY*

- **Innovation and Transformation** starts on business side, driven by people
- **Involve stakeholders** and end-users as early as possible for rapid prototyping utilizing design thinking
- Define your **perfect mix** of agile methodologies considering SAP Activate methodology
- Prioritize **core** over edge
- **Focus on innovation** in terms on ask what we can do in the future that we were not able to do before
- From **challenge** comes change, each Stream in the projects need to have challengers of the status-quo
- **Culture & Team** spirit eats Strategy For Breakfast, Innovation For Lunch, And Digital Transformation For Dinner