Digital Factory Transformation
Digital Logbook Solution

DIGITAL FACTORY

DIGITAL LOGBOOK

Supply Chain Wizard
Digital Factory Solutions

SUPPLY CHAIN WIZARD

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Supply Chain Wizard – Services & Solutions for Digital Supply Chain

SUPPLY CHAIN WIZARD CONSULTING

Management Consulting

TRACK & TRACE

DIGITAL TRANSFORMATION

DIGITAL COLLABORATION

IoT & BIG DATA

BLOCKCHAIN

Serialization (Track & Trace) Consulting

- Program Setup & Strategic Planning
- Project Management & Implementation / Integration
- ROI / Value Beyond Compliance & Sustainability

Supply Chain Consulting

- Supply Chain Strategy Design
- E2E Process Optimization
- Process Automation
- Advanced Analytics
- IoT & Big Data
- Blockchain & SC Security

Strategy | Execution | Transformation

SUPPLY CHAIN WIZARD SOLUTIONS

Software Solutions

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Digital Logbook

DIGITAL LOGBOOK

Industry Challenge

At Pharmaceutical sites, all activities should be recorded to logbooks to comply with GMP regulations.
Having manual logs such as written or excel sheet logbooks are of common practice. This limits the further analysis of the logs. Maintaining the logbooks become too costly when manual methods are used and security concerns arise.

What you get?

Digitize all room logs capturing line activities within the factory floor
Access your data at all times and instantly
Improve security and quality by using personal digital signatures to sign and approve activities
Comply with GMP regulations

How does it work?

Supply Chain Wizard installs Digital Logbook in 1 day at client site
Line operators log each activity / task with only 2 clicks or touch
Multiple levels of security ensure the GMP compliance of the logbook
Logbook data is stored digitally and is accessible at all times for further analysis or audits

Why you need it?

Operator Friendly: Digital Logbooks removes the need of paper logs or manual registry methods
Performance: Ability to analyze site activities by capturing them instantly and analyzing them to optimize performance
Anomaly detection: Understand “regular” vs. “unexpected” events/activities with machine learning algorithms
Save Time: instant access to current and historical logs during approvals or audits

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SCW Digital Transformation Journey

DIGITAL FACTORY

Digital Factory Journey

Track & Trace Compliance

Impact to the Factory:

- Reduced OEE
- Reduced Throughput
- Higher Maintenance
- More Rejects
- Higher Overtime
- Higher COGS

DATA

- Quality Events
- Line Performance
- Activity Data
- Maintenance Data
- Labor Data
- Environmental Data
- Financial Data

DIGITAL LOGBOOK

DASHBOARD

- OEE / Performance
- Labor / Asset Analysis
- Capacity / Utilization
- Cost of Goods Sold

OEE TRACKER

LABOR TRACKER

DECISIONS

Scheduling:
- Line / Staff Scheduler

Planning:
- Demand / Capacity / Inventory / Supply

Maintenance:
- Planned / Predictive
- Asset Replacement

SCHEDULER

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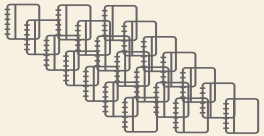
Digital Logbook – Problem

DIGITAL LOGBOOK

At Pharma, multiple logbooks are required for every room

Managing and maintaining information is difficult:

- Each Pharma site keeps 100s of paper based logbooks
- There are 6+ different types of logbooks
- 1000s of logbooks are actively managed or archived at a given company



All logbooks should comply GMP rules

GMP Compliance is a challenge:

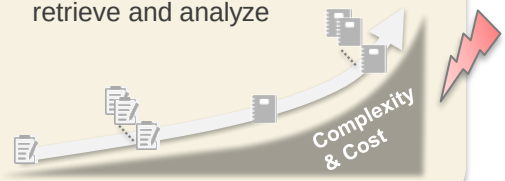
- All logbooks are **paper based**
- Archiving requirements for years
- Readily available for addressing issues on site
- Audit trails
- Structurally organized, indexed, traceable logs

GMP Compliance

Paper based logbooks present difficult challenges

Very expensive & effort-heavy w/ limited to no value:

- Difficult to maintain / archive
- Long and difficult analysis for annual product reviews
- Expensive to maintain, store, retrieve and analyze



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Digital Logbook – Solution

DIGITAL LOGBOOK

GMP Compliant

Compliant with requirements

Control over all processes

Live & central quality checks & approvals

Digital Logs

Digitally available logs

Faster reaction times to audits

Better security with digital authentication

Fits to Pharma 100%

Developed with Pharma Clients with detailed URS

Flexible & Scalable

Historical logs
Approvals
Audit trail
Daily local backups

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Digital Logbook – Additional Benefits

DIGITAL LOGBOOK

Microsoft

Partnership

Microsoft co-development investment on Azure

*Microsoft **One Commercial Partner** program*

*Better security and scalability with Azure **Hybrid-Cloud***

Reporting & Analysis

Seamless integration to OEE Tracker

24/7 live access to all logbooks w/ advanced analysis

Integrated to ERP Database (optional)

+

BLOCKCHAIN

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Why Digital Logbook with Blockchain?

CONVENTIONAL LOGBOOKS

Paper based

Slow Reaction Time to Audits

Difficult to Consolidate & Analyze

Expensive to Maintain

VS

DIGITAL LOGBOOK

100% digital & Pharma-grade

Audit-ready & Transparent

Real-time Access & Analysis

Secure & Easy to Maintain, Affordable

+

BLOCKCHAIN

Immutable, Protected

Fraud-proof Accountability

Decentral, Business Cont.

High Compliance

Microsoft Azure

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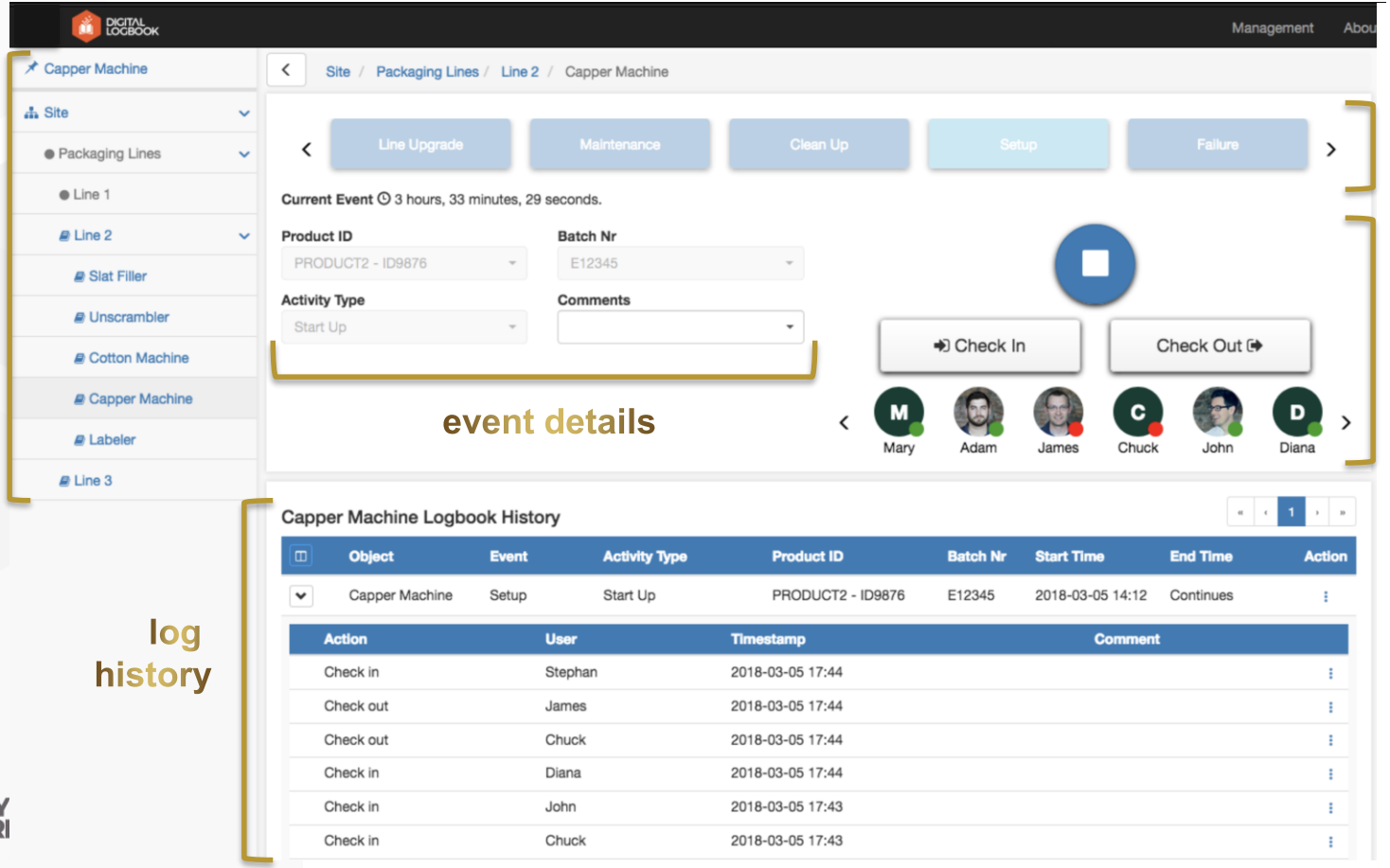
The Digital Logbook – Home Screen



Hierarchical Structure of 'Loggable' Objects

log events

check-in check-out functions& user history

event details

log history

The Digital Logbook – Approve Screen

DIGITAL LOGBOOK

log filters to quick access

export options

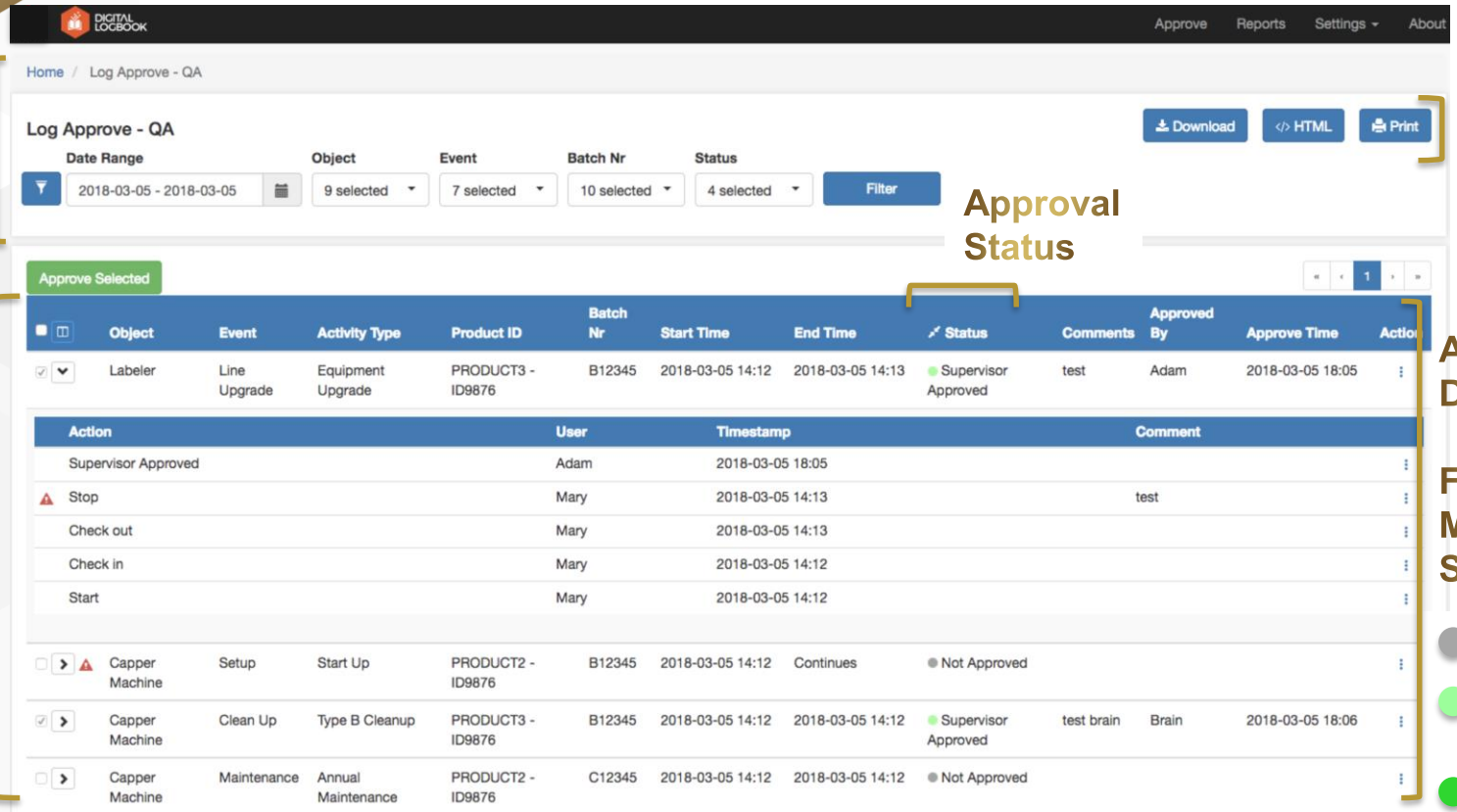
Approval Status

Approval Details

log history & edit status

Flexible Multi-level Status:

- Not Approved
- Supervisor Approved
- QA Approved
- Admin Approved



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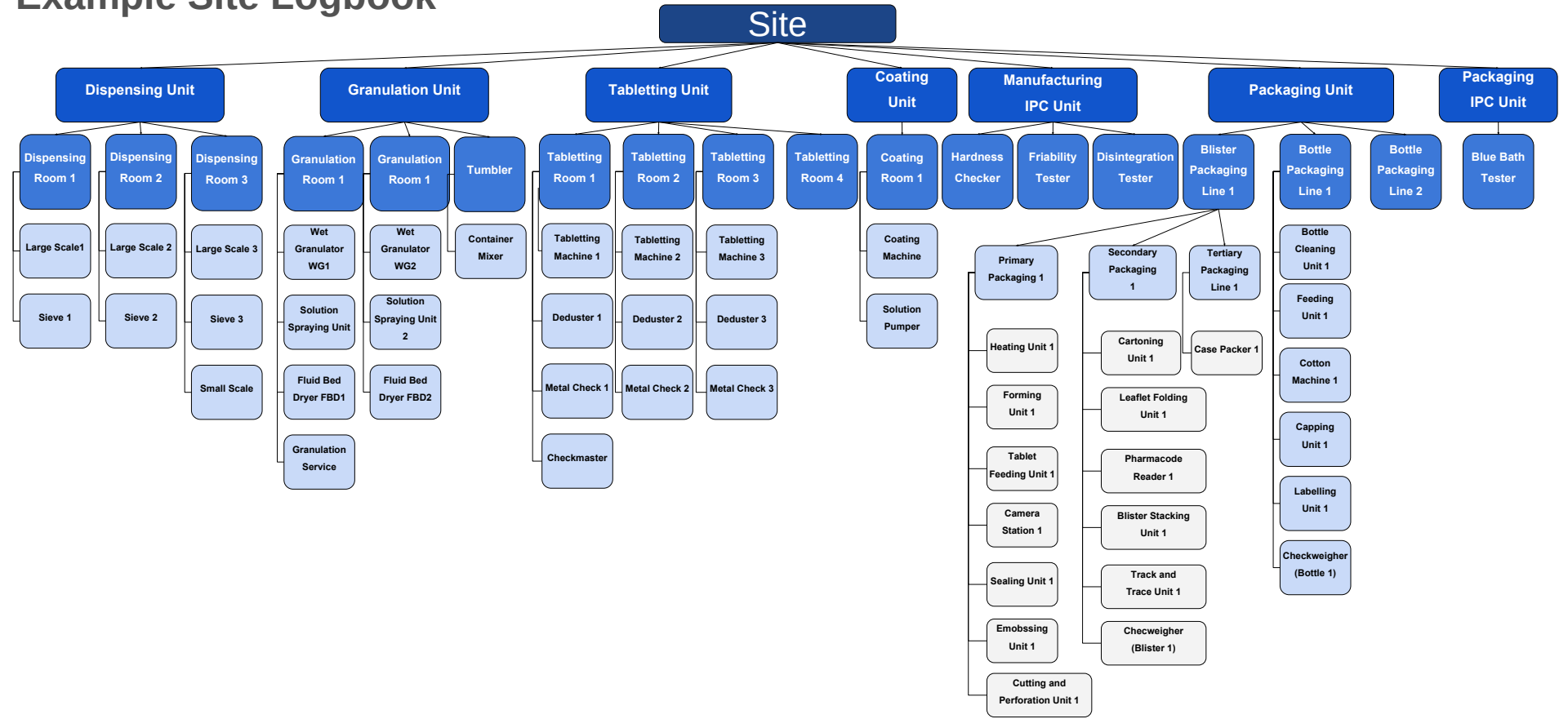
Example Site Logbook



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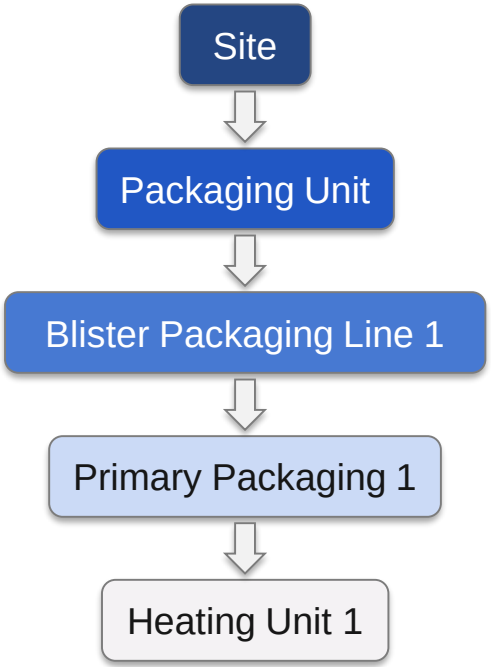
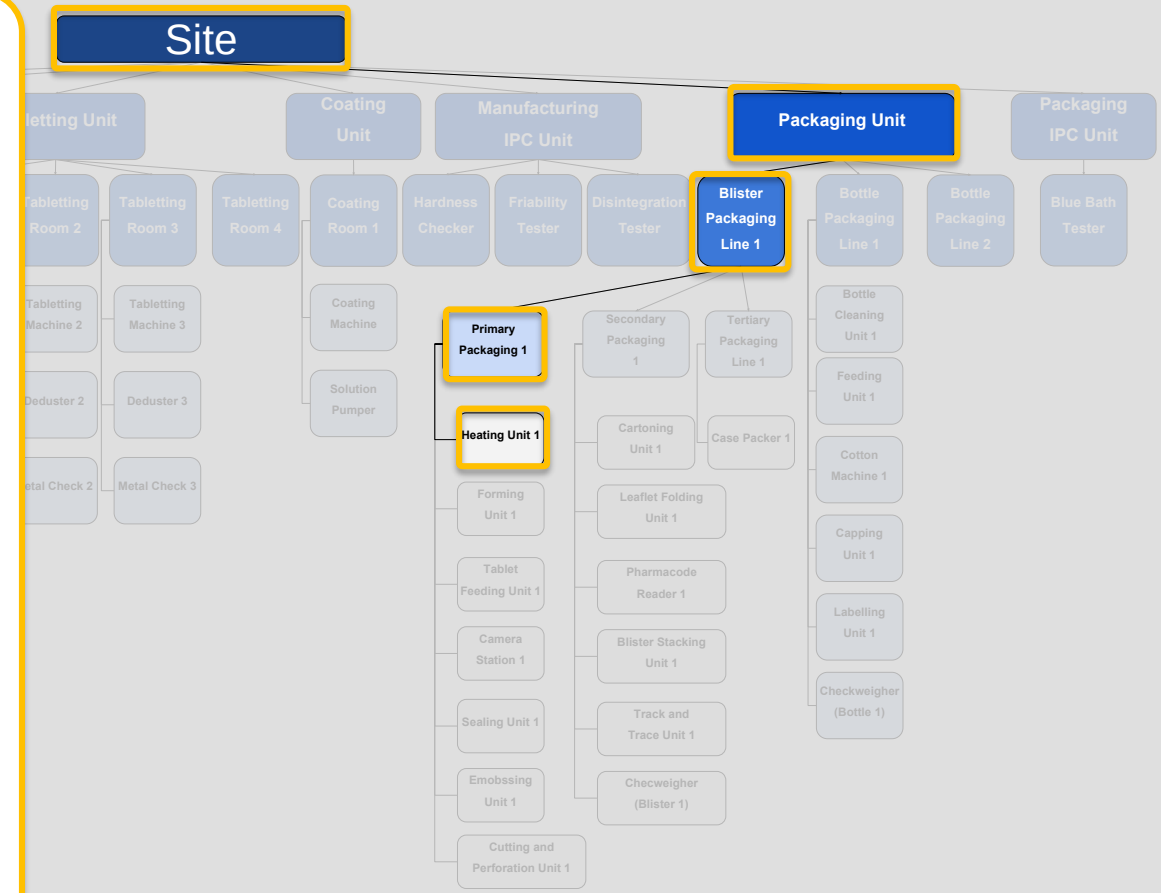
Site Logbook Hierarchy



For each logbook:

- Customizable ‘loggable’ status
- User or role specific access management



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1 Introduction to Supply Chain Wizard

Overview, Services, Solutions, References

2 Digital Logbook

Digitize paper based logbooks

3 Digital Factory Journey

Journey, Quick wins & Establishing fundamentals

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Potential Digital Factory Initiatives

Track & Trace Compliance

- OEE Tracker roll-out in Packaging & Manufacturing

Digital Factory Transformation

- Digital Logbook Pilot & Proof of Concept (PoC)
- Scheduler Pilot & PoC

Digital Factory Future

- Predictive Maintenance PoC using Logbook/OEE & IoT technology

Thank you

Questions
Comments

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