

Sigma Healthcare

Mastering SAP – Implementing SAP
Material Flow System

13th November 2023



Agenda

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Sigma Healthcare

Who we are, what we do ?

02

Sigma's SAP implementation

Timeline of SAP build & Hobart DC Physical build

03

Implementing EWM & MFS

What we did at Hobart DC between Sigma & TCT.

04

Outcomes

So what did we get out of the implementation ?

05

The Project

A closer look at the technology deployed.

Sigma Healthcare – 110 years young!

- Sigma Healthcare is a leading Australian full line wholesale and distribution business to community pharmacy.
- We have one of the largest pharmacy networks in Australia, with over 1,200 branded and independent stores supported by an engaged team and world-class infrastructure.
- Sigma is focused on building the strength and penetration of our range of private and exclusive label products, has an expanding presence in the provision of third-party logistics services to the pharmaceutical industry.



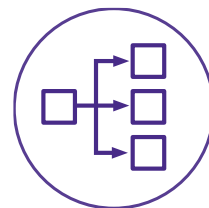
Logistics



Over \$400m invested
in to renew our entire
DC infrastructure



9 DC's distributing to
customers across
Australia



Over 14,000 SKU's

98%

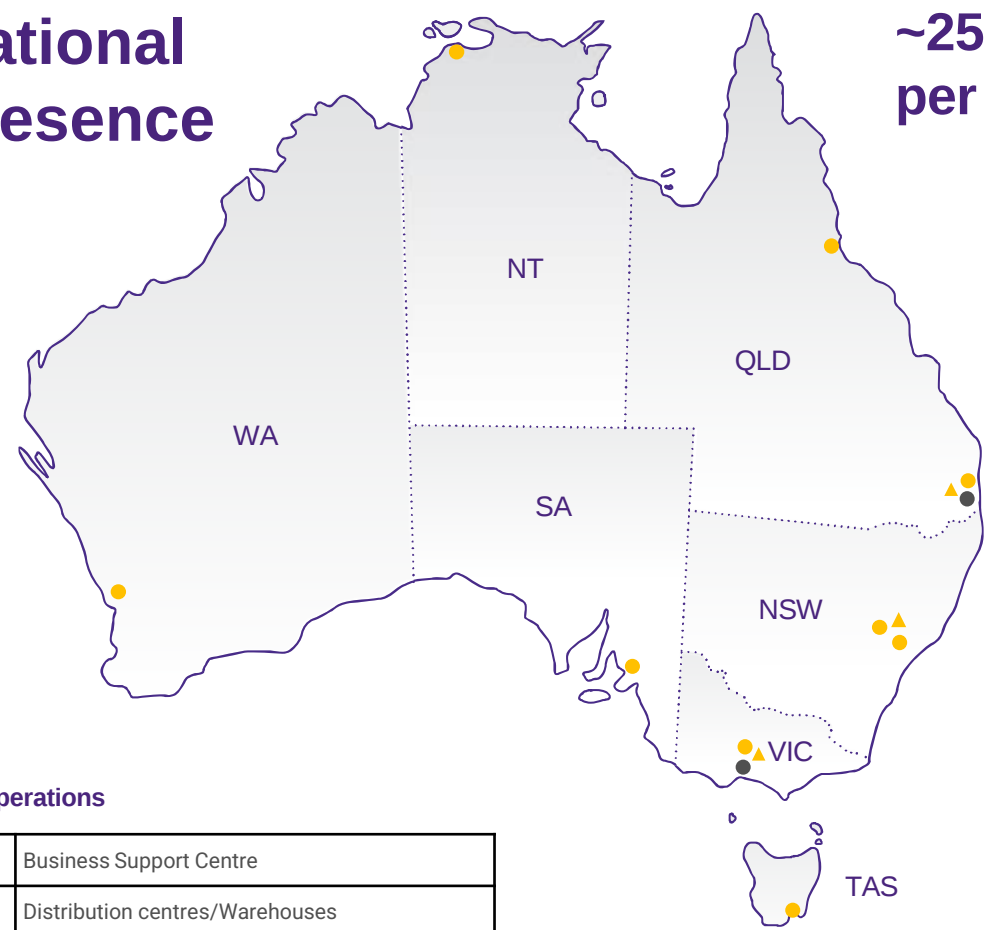
Delivery in Full
(Month to Date)

96%

Delivery on Time
(Month to Date)

National presence

~250m Units
per annum



Operations

●	Business Support Centre
●	Distribution centres/Warehouses
▲	MPS TGA licenced packing facilities

New DC Network – generational transformation

Kemps Creek NSW – 41,000sqm



Berrinba QLD – 16,000 sqm



Truganina VIC – 39,000 sqm



Hobart TAS – 4,500 sqm



Canning Vale WA – 16,000 sqm



Pooraka SA – 10,000 sqm



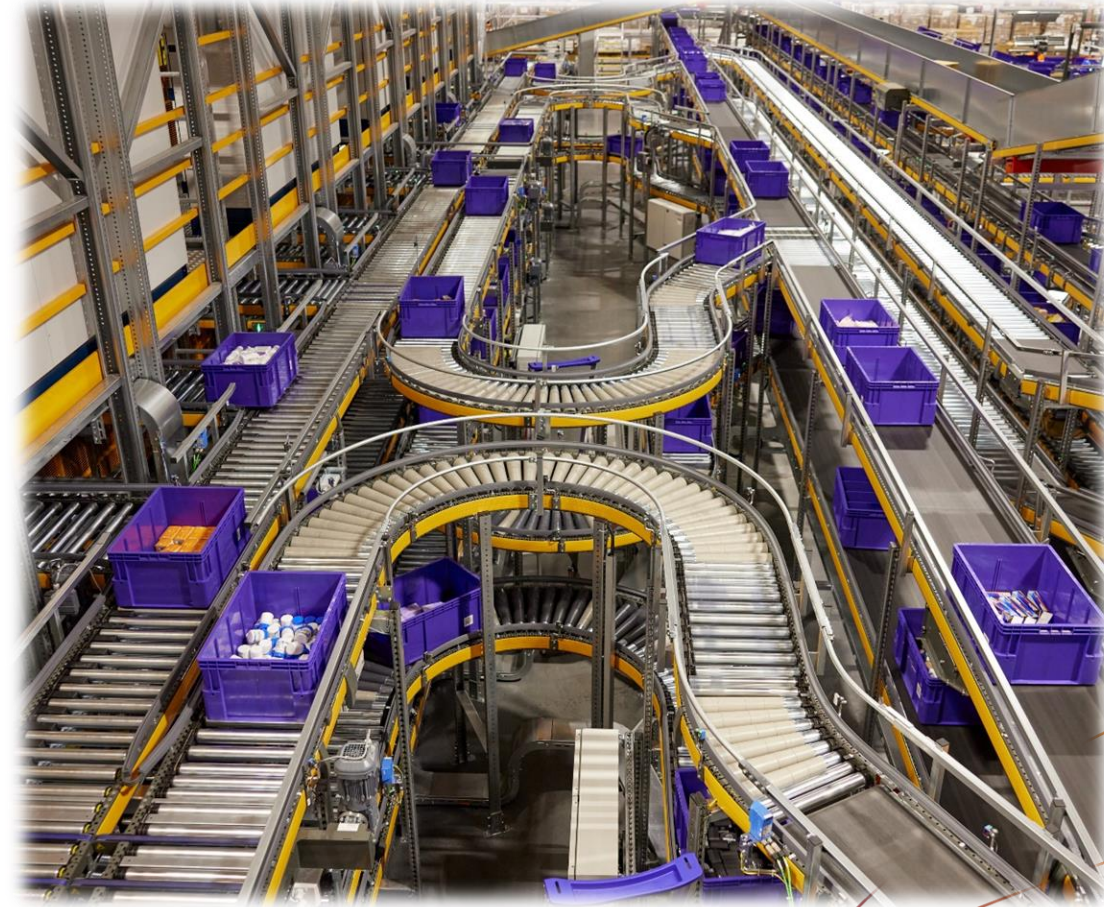
Wholesale operations

Overview

- Sigma supplies to over 4,000 customers across all 8 of Australia's states and territories
- Delivers +220m units per annum across +15,500 SKUs in the product portfolio

Recent performance (1H24)

- 113m units delivered in 1H24
- **Over 99% Delivery in Full (DIF)** every month
- Improved inventory management
- 12.7% **reduction in logistics costs** versus 1H23



Retail pharmacy presence

Overview

- We support one of the largest pharmacy networks in Australia, with over 1,200 aligned pharmacies
- Our pharmacy network includes 427 branded pharmacies, primarily across Sigma's renowned brands: Amcal and Discount Drug Stores
- Amcal brand has more than 85 years of heritage
- Discount Drug Stores is a discount pharmacy offering value and convenience – rated 2nd in Canstar Blue's customer satisfaction
- PriceSave is our newly launched independent pharmacy offering with over 400 members
- In the process of merging the Guardian brand with Amcal to drive scale and enhance the ability to engage the customer



Our branded pharmacies

				
427	228	111	63¹	25¹
# of stores	# of stores	# of stores	# of stores	# of stores

Total # of stores

Sigma's SAP Journey

- **Project commenced January 2020.**
- **Implemented in August 2021.**
- S/4 HANA 1909
- Extended Warehouse Management (EWM)
- IBP
- ARIBA
- Concur
- OpenText
- **'Big Bang' Go-Live across the country during the Covid pandemic.**



Build of Hobart Distribution Centre

- Last of the DCs to be replaced and not as large a footprint.
- Build commenced in October 2021.
- Site opened in November 2022.
- Appointed '**The Config Team**' as the System Integrator to deliver both SAP EWM and the Material Flow System (MFS) integration to the conveyor automation.



EWM & MFS Rollout @ Hobart DC

Why EWM / Material Flow System (MFS) ?

PROBLEM STATEMENT : We wanted to deploy a solution without a middleware layer as the conveyor / PLC was being re-used from an older facility & being repurposed. We had no WCS to use and it would be cost prohibitive to purchase.

Before architecture was - PLC <> Legacy WCS <> Middleware <> EWM

Looking for simpler solution, lower cost, didn't want to face a full re-implementation.

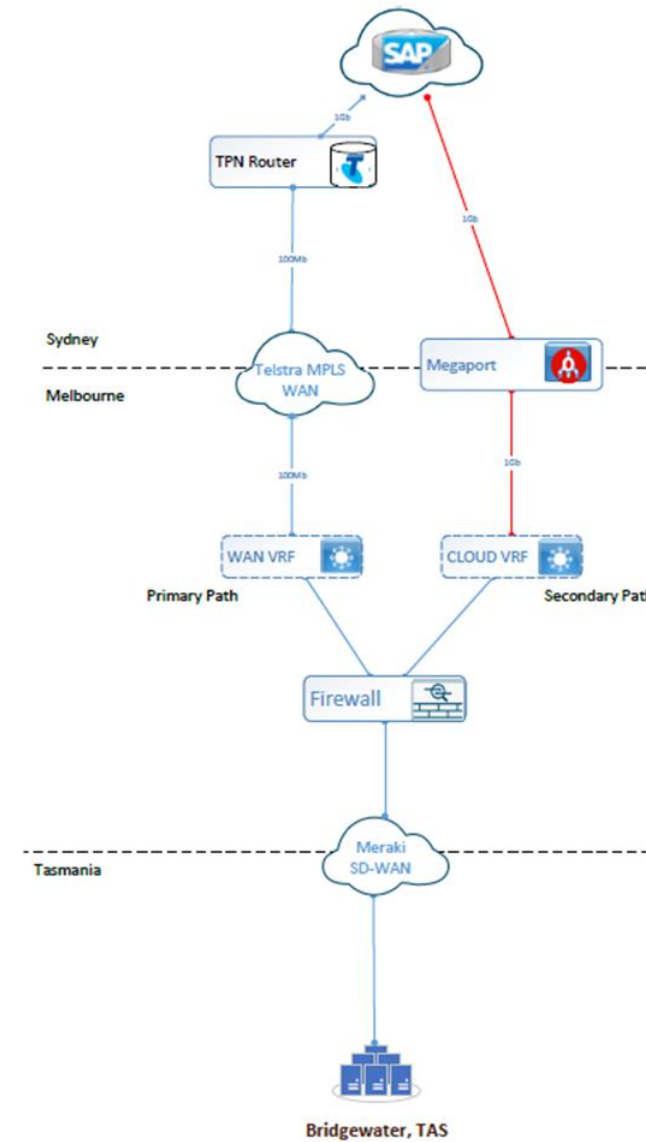
After architecture - PLC<>EWM



Communication timing

Latency from Hobart ➔ SAP – AVG 37ms

This is the same for RF network.



Outcomes

- Achieved the desired end state design with MFS and no middleware.
- Lower cost of operation / ownership for the site.
- Reliability
 - Zero failures.
 - Auto-recovery is built in the event of failure.
 - Direct integration and visibility via Warehouse Monitor.



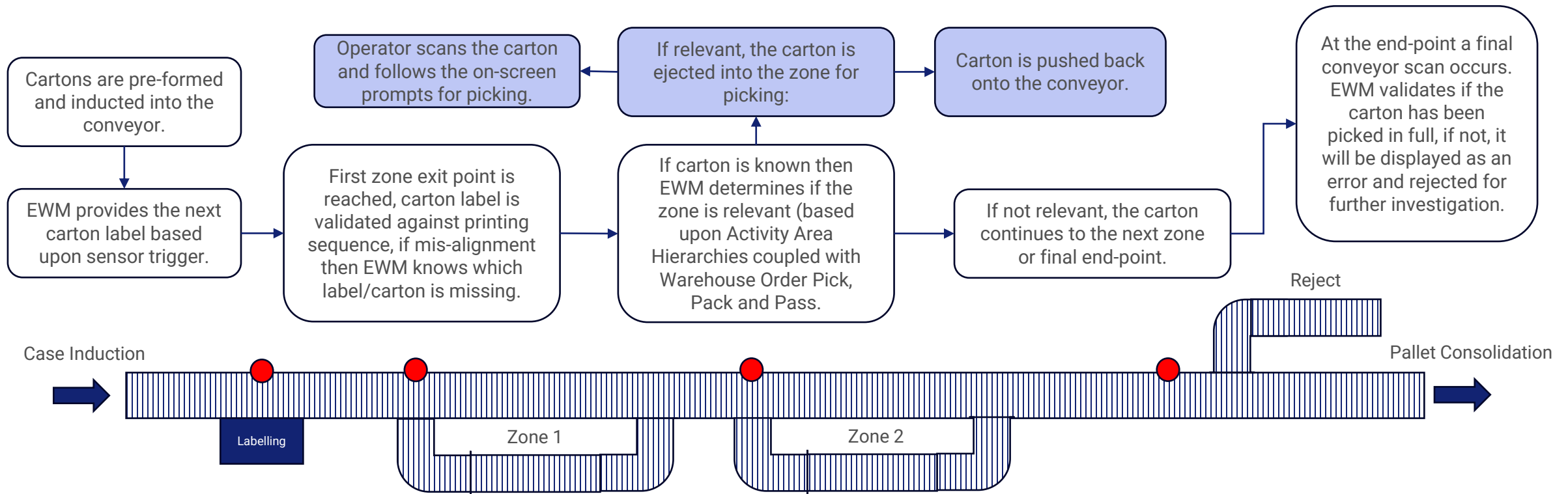
The Project: A Closer Look

Stephen Hackett

Australian Practice Lead, The Config Team

What about the Solution Itself?

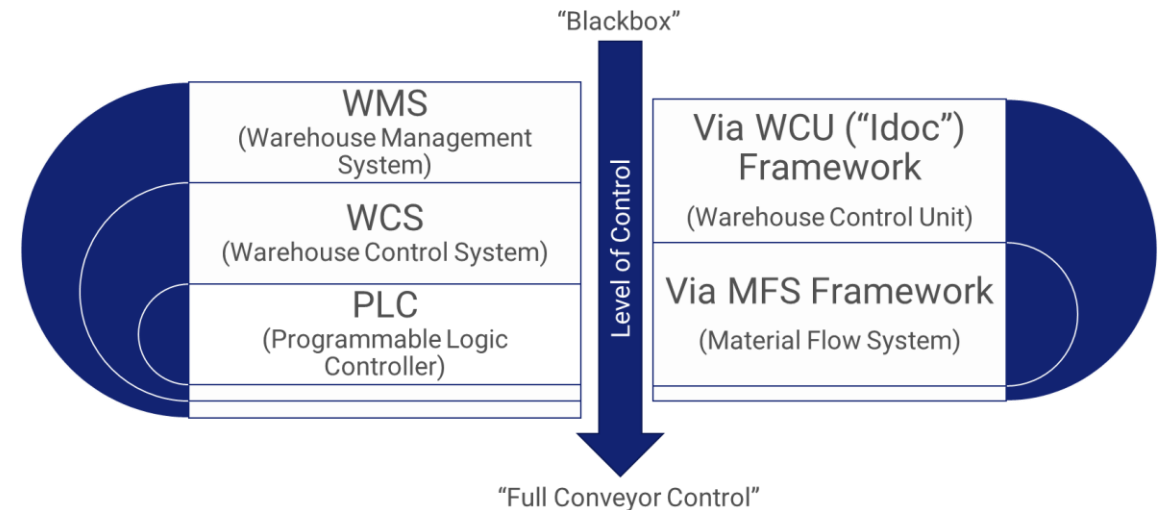
- Replenishment is controlled outside of the conveyor using traditional carton live storage replenishment (i.e. pick from the front, replenish from the rear).
- The pick route is split into zones, with the conveyor routing pallets into each zone (fully controlled by EWM-MFS).





MFS vs. WCU

- MFS is a very broad solution and can cater for different integration requirements.
- WCU based (IDoc) integration does have its place.
- The art is knowing which solution, WCU or MFS, to apply and when.
- There are valid scenarios where direct controlling automation at the PLC level is no ideal, nor necessary.
 - For example:
 - MFS to directly control LGV's in a warehouse.
 - Hi-speed, Hi-density case storage solutions.
- MFS can still be considered even if you decide to integrate at the WCS level.



MFS / PLC Integration @ Sigma

- Conveyor system with routings can be mapped in standard MFS (as Communication Points).
- EWM's Layout Storage Control can easily handle standard routings and exception mappings.
- Because EWM is in full control, we can always dynamically change what the picker's task list (Warehouse Order) should contain.
- The requirement for additional apps (**label verification** and **end of line check**) could be easily built as EWM knows the entire history of the carton/tote.
- As the chosen automatic provider, Conveyor Logistics was happy to discuss telegram structures with the SAP team. There was no WCS available (unless the they built one).



What was the project size and duration?

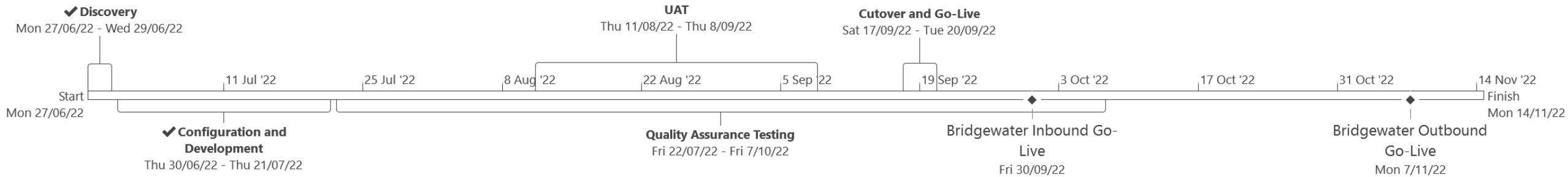


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Stakeholder(s)
Project Manager
Subject Matter Expert / Business Process Owner (Sigma-wide)
Local Site Experts

5

Delivery Manager
Solution Architect
Technical Architect
Functional
Technical Consultant



4 Months

Deciding on the Integration Approach

- **Key points to consider** when looking to connect EWM with automation solutions:
 - Decide on the **level of integration** BEFORE you (or your business representatives) approach automation providers.
 - Which system is the **source of truth** (typically it is the lowest level).
 - Will **EWM dictate** the **putaway** and **removal** locations? You can't have it both ways!
 - Is there any specific business criteria that must be considered for stock selection (apart from BBD/SLED)?

- **Clarify your terminology** with your automation providers.
 - Are they expecting you to use their own WMS... but they call it a WCS.
 - Will they be managing order release or replenishment inside their "*black box*" requiring notification of orders well in advance?

- Don't be fooled by "we cannot guarantee throughput".

- Automation providers are hardware people **first**.

Thank You