

# MASTERING SAP Connect

5 – 6 JUNE 2025

ROYAL PINES RESORT | GOLD COAST

## The Power of the One Way Workflow: How TasNetworks Transformed Maintenance Monitoring with SAP Signavio

David Kruijver

Digital Solutions Leader, TasNetworks

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An SAPinsider Company





## David Kruijver

Digital Solutions Leader, TasNetworks

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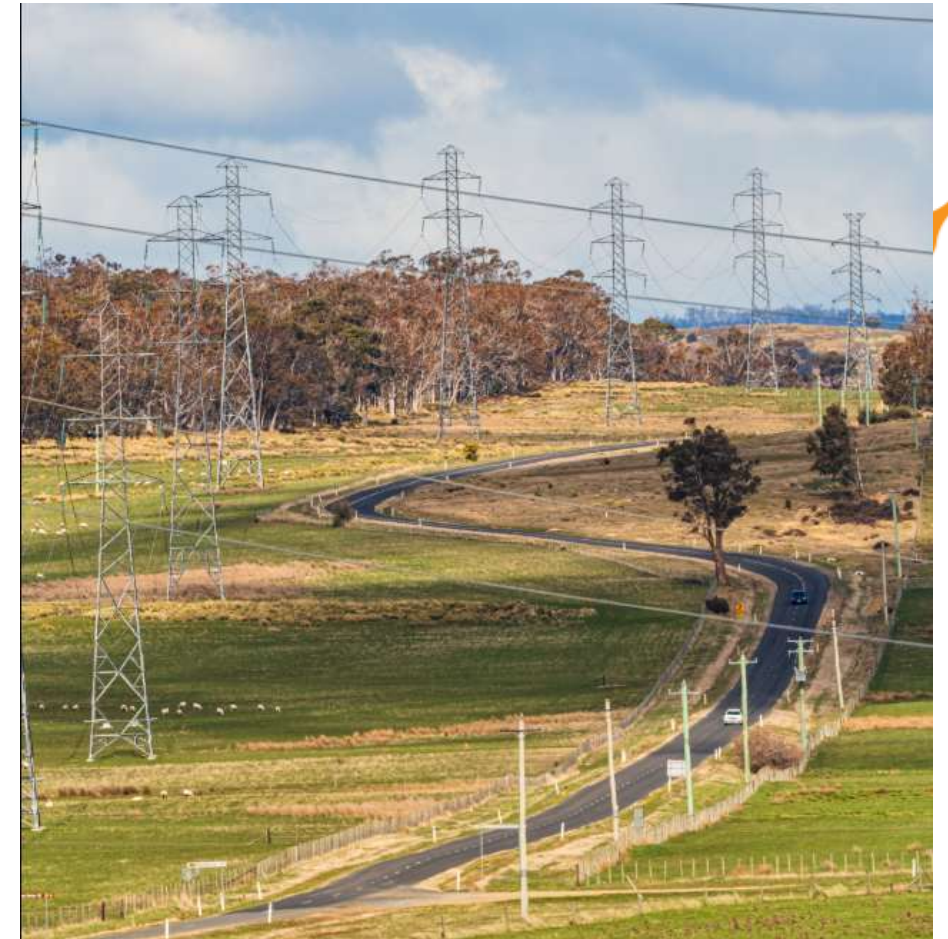


# Flawless SAP implementations?

- TasNetworks is the electricity transmission and distribution utility in Tasmania
- First implemented a wholesale business transformation with SAP ECC in 2018
  - Included EAM, with MRS and Work Manager
- Notification and Work Order data content and their processes based on SAP 'Best Practices'



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# The business murmurings



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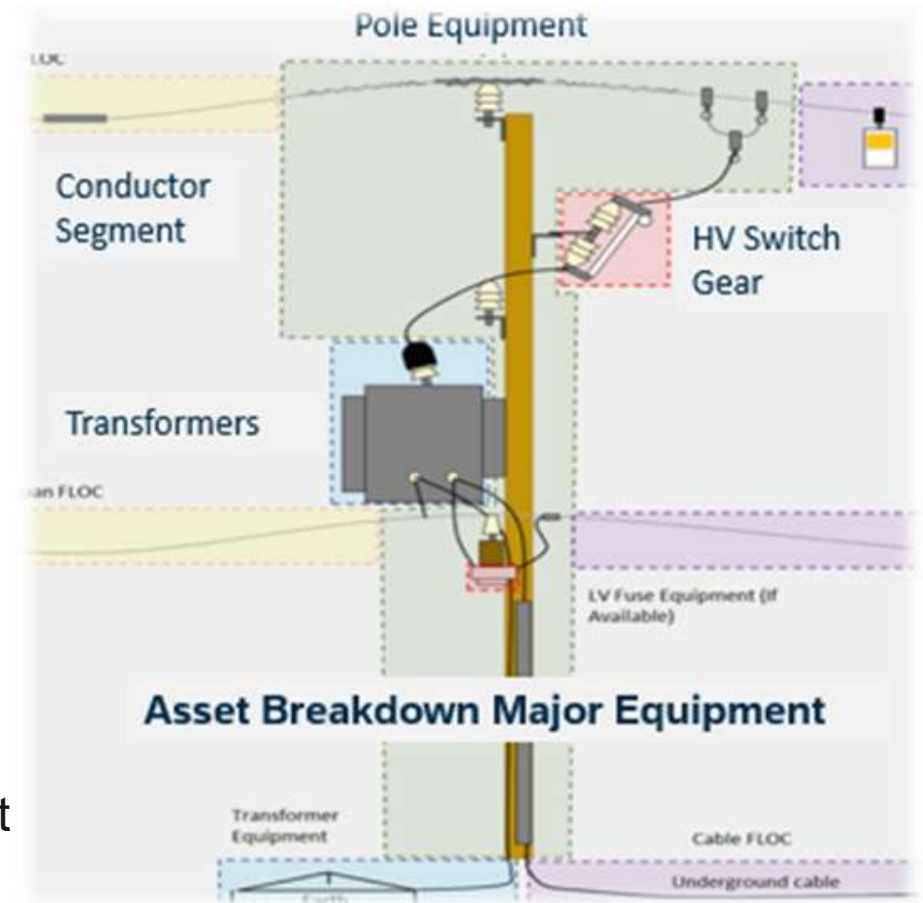
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# Flawless SAP implementations?

- Engaged SAP to perform an audit on the EAM implementation



- Moved to S/4HANA 2022 (ON PREM) in 2023
- Between 2018 and 2025 there have been several changes in senior leadership, including significant organisational redesign across the EAM teams
- In 2022, it was recognised that perhaps works management business processes were not optimal and needed rework and data was out of control





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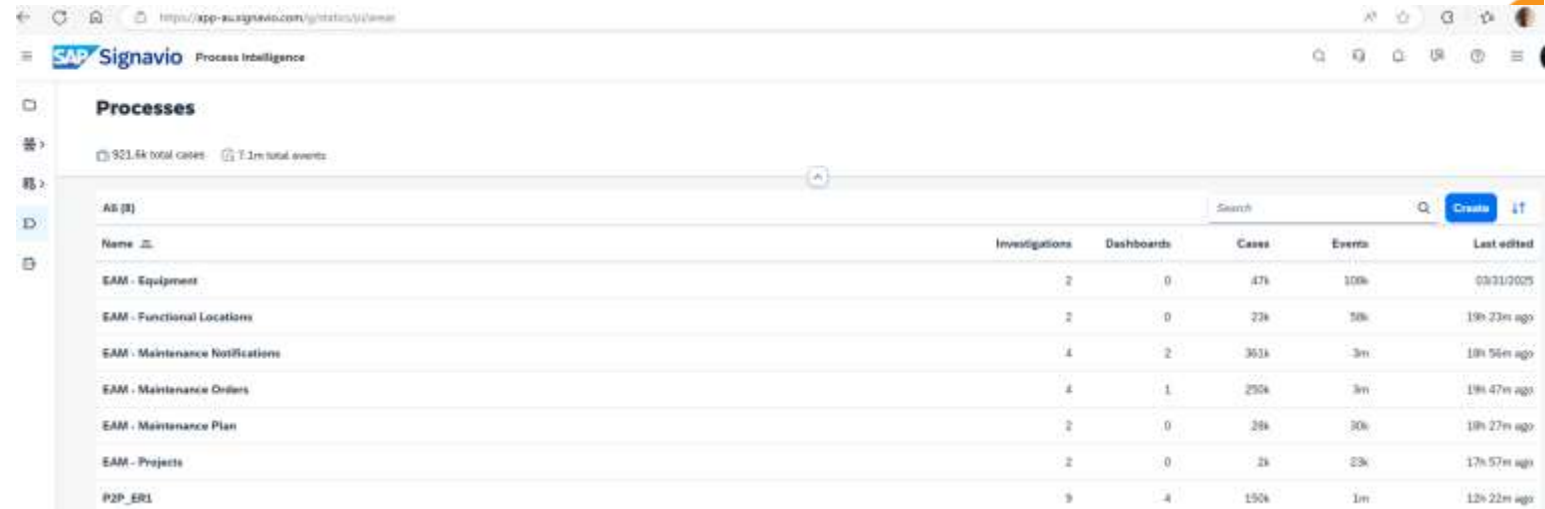
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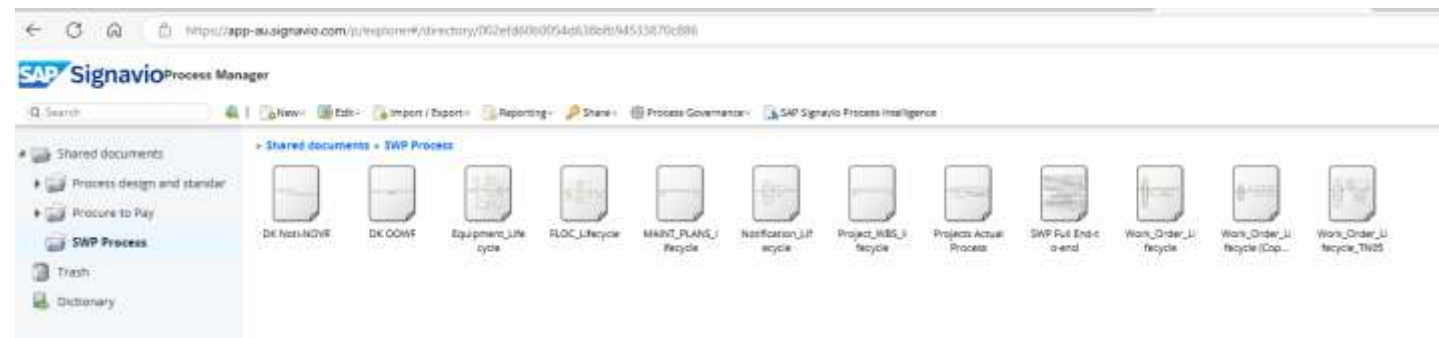
# How are we using Signavio?

- Primarily used to track and monitor process throughput
- Dashboard key metrics
- Compare our process metric performance against other SAP users
- Measure against 'best practices'
- Already established across our Procure to Pay process

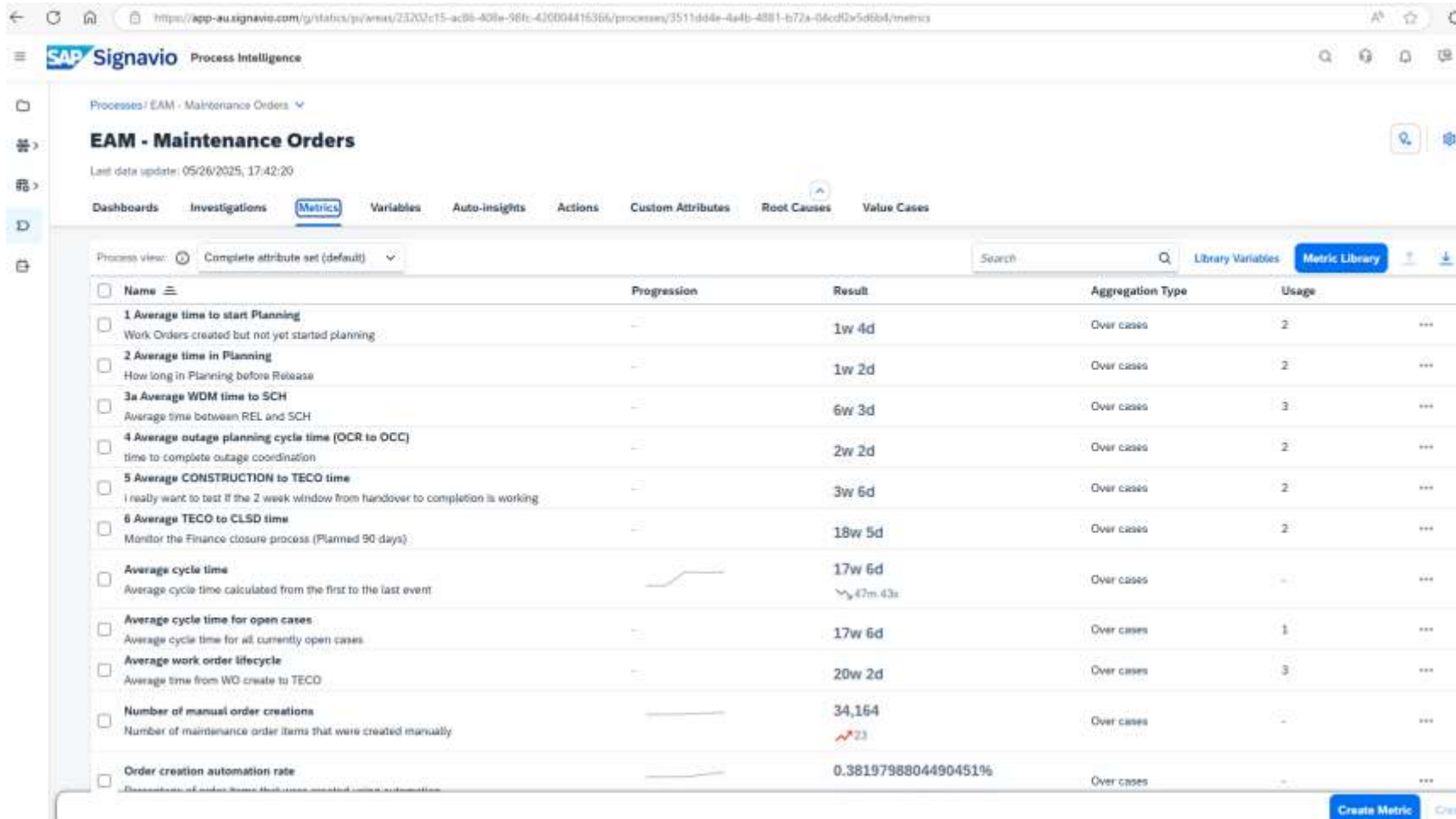


The screenshot shows the SAP Signavio Process Intelligence dashboard. At the top, it displays 'Processes' with a summary of 921.6k total cases and 7.1m total events. Below this is a table listing various processes and their performance metrics.

Name	Investigations	Dashboards	Cases	Events	Last edited
EAM - Equipment	2	0	47k	100k	03/11/2025
EAM - Functional Locations	2	0	22k	50k	19h 23m ago
EAM - Maintenance Notifications	4	2	363k	3m	18h 56m ago
EAM - Maintenance Orders	4	1	290k	3m	19h 47m ago
EAM - Maintenance Plan	2	0	26k	30k	18h 27m ago
EAM - Projects	2	0	2k	23k	17h 57m ago
P2P_ERL	9	4	150k	1m	12h 22m ago



# Signavio process metrics



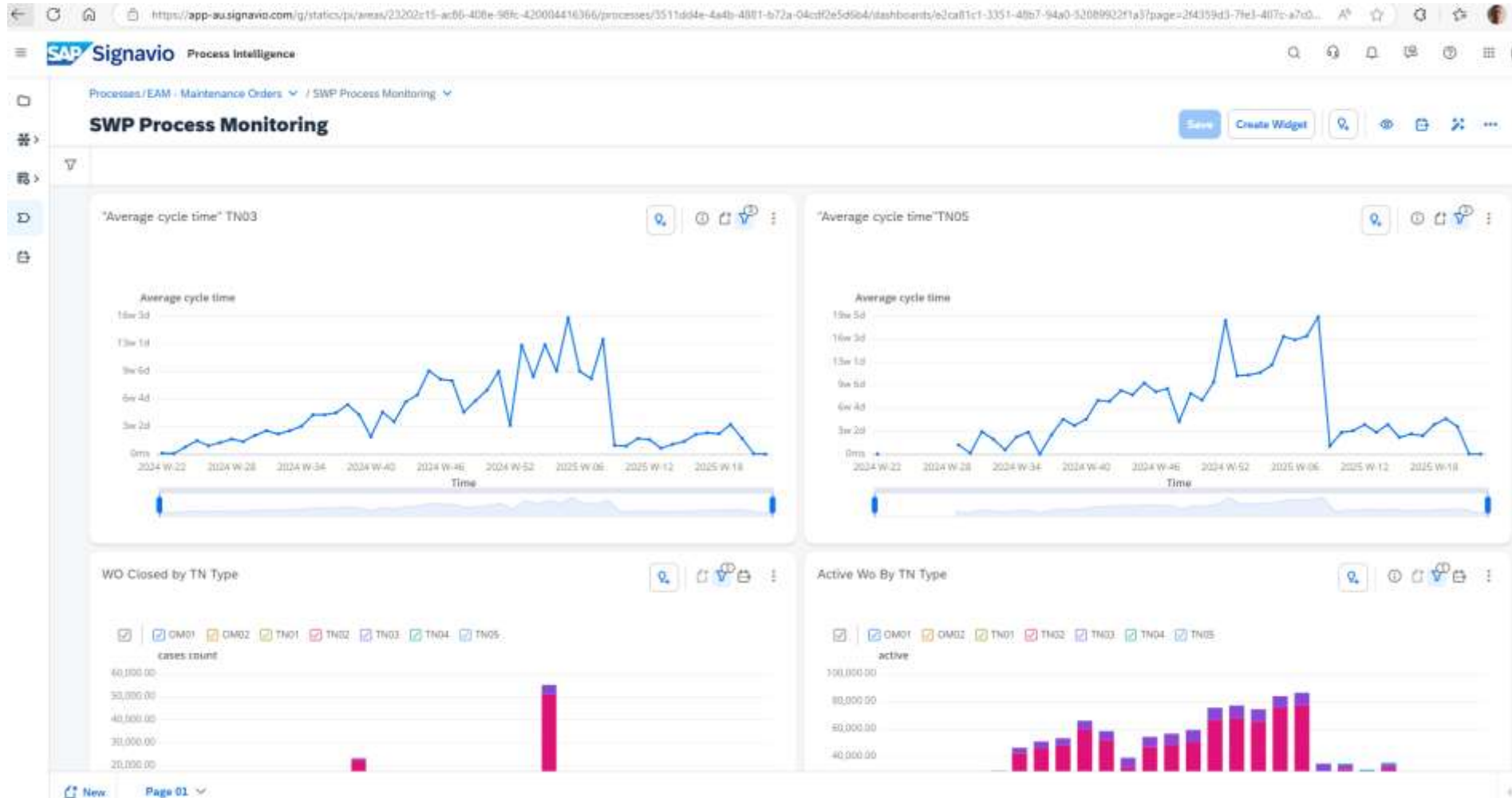
The screenshot shows the SAP Signavio Process Intelligence interface. The main title is 'EAM - Maintenance Orders' with a last data update of '05/26/2025, 17:42:20'. The 'Metrics' tab is selected in the navigation bar. Below the navigation bar, there's a 'Process view' dropdown set to 'Complete attribute set (default)'. A search bar and 'Library Variables' button are also present. The main table lists various metrics with columns for Name, Progression, Result, Aggregation Type, and Usage. Each row includes a checkbox and a small line chart icon. The metrics include average times for planning, construction, and TECO, as well as cycle times and order creation rates.

<input type="checkbox"/>	Name	Progression	Result	Aggregation Type	Usage
<input type="checkbox"/>	1 Average time to start Planning Work Orders created but not yet started planning		1w 4d	Over cases	2
<input type="checkbox"/>	2 Average time in Planning How long in Planning before Release		1w 2d	Over cases	2
<input type="checkbox"/>	3a Average WDM time to SCH Average time between REL and SCH		6w 3d	Over cases	3
<input type="checkbox"/>	4 Average outage planning cycle time [OCR to OCC] time to complete outage coordination		2w 2d	Over cases	2
<input type="checkbox"/>	5 Average CONSTRUCTION to TECO time I really want to test if the 2 week window from handover to completion is working		3w 6d	Over cases	2
<input type="checkbox"/>	6 Average TECO to CLSD time Monitor the Finance closure process (Planned 90 days)		18w 5d	Over cases	2
<input type="checkbox"/>	Average cycle time Average cycle time calculated from the first to the last event		17w 6d 47m 43s	Over cases	-
<input type="checkbox"/>	Average cycle time for open cases Average cycle time for all currently open cases		17w 6d	Over cases	1
<input type="checkbox"/>	Average work order lifecycle Average time from WO create to TECO		20w 2d	Over cases	3
<input type="checkbox"/>	Number of manual order creations Number of maintenance order items that were created manually		34,164 23	Over cases	-
<input type="checkbox"/>	Order creation automation rate Percentage of order items that were created using automation		0.3819798804490451%	Over cases	-

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# Signavio process dashboarding



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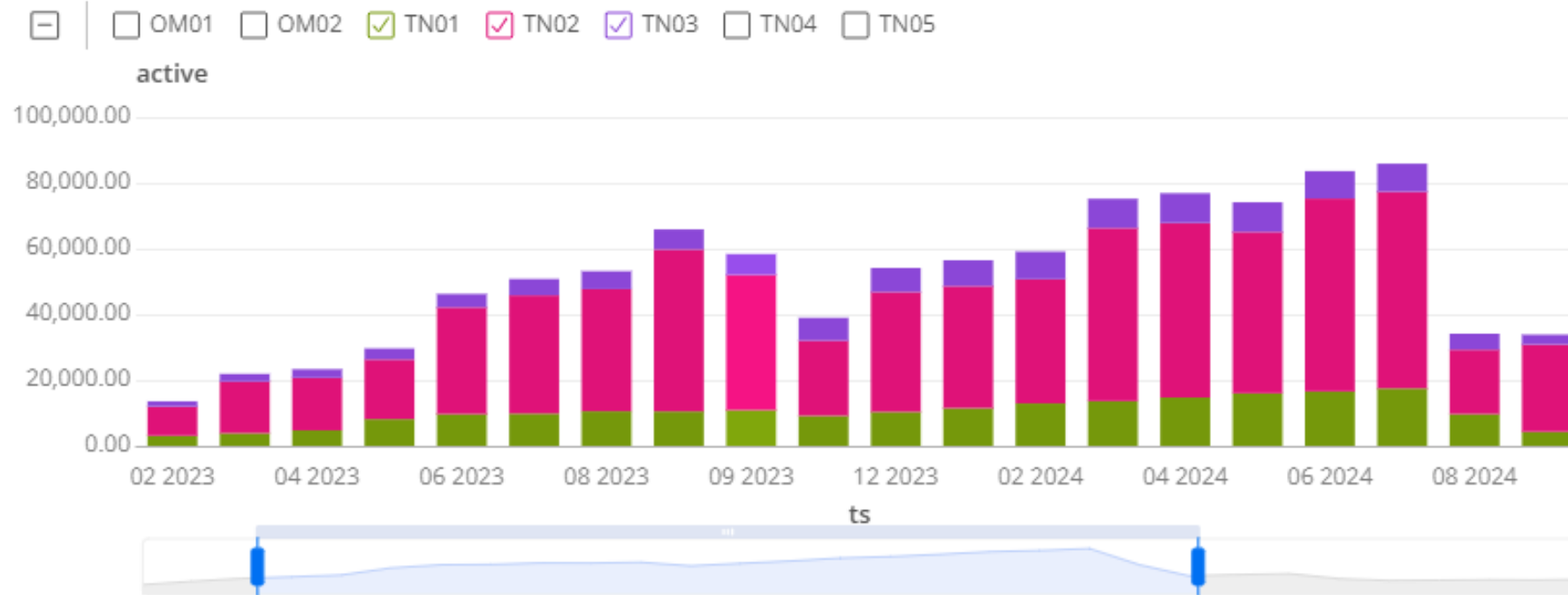
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# The data symptom

Active Wo By TN Type



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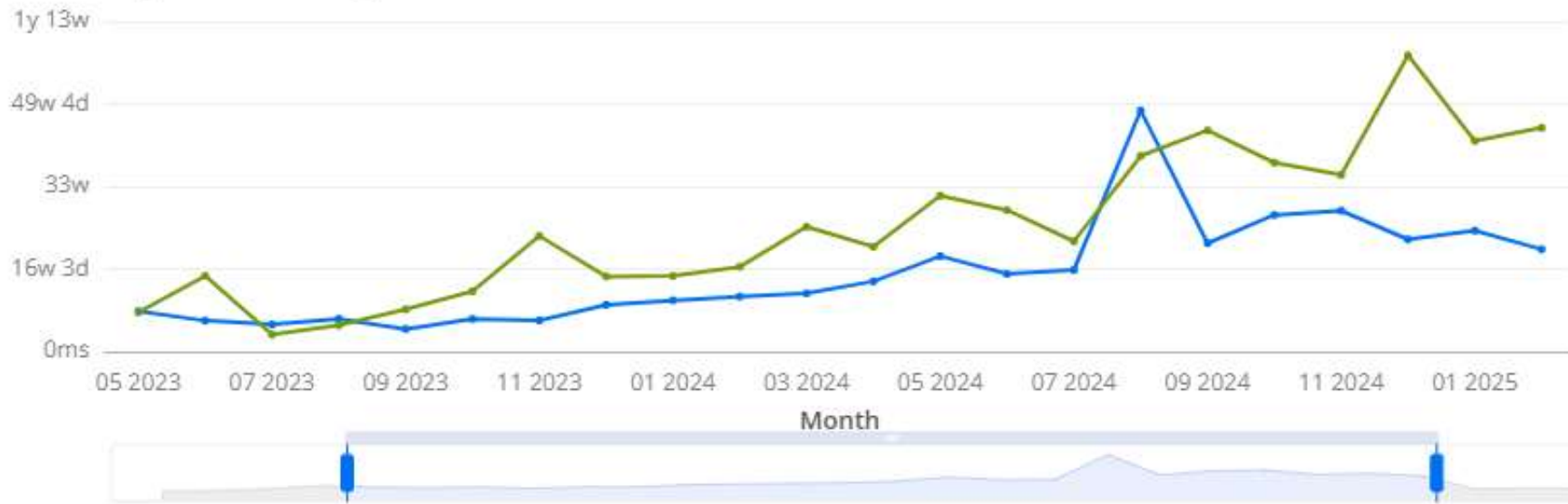
# The data symptom

WO Ageing



☐ TN01 ☐ TN02 ☒ TN03 ☐ TN05

Average work order lifecycle



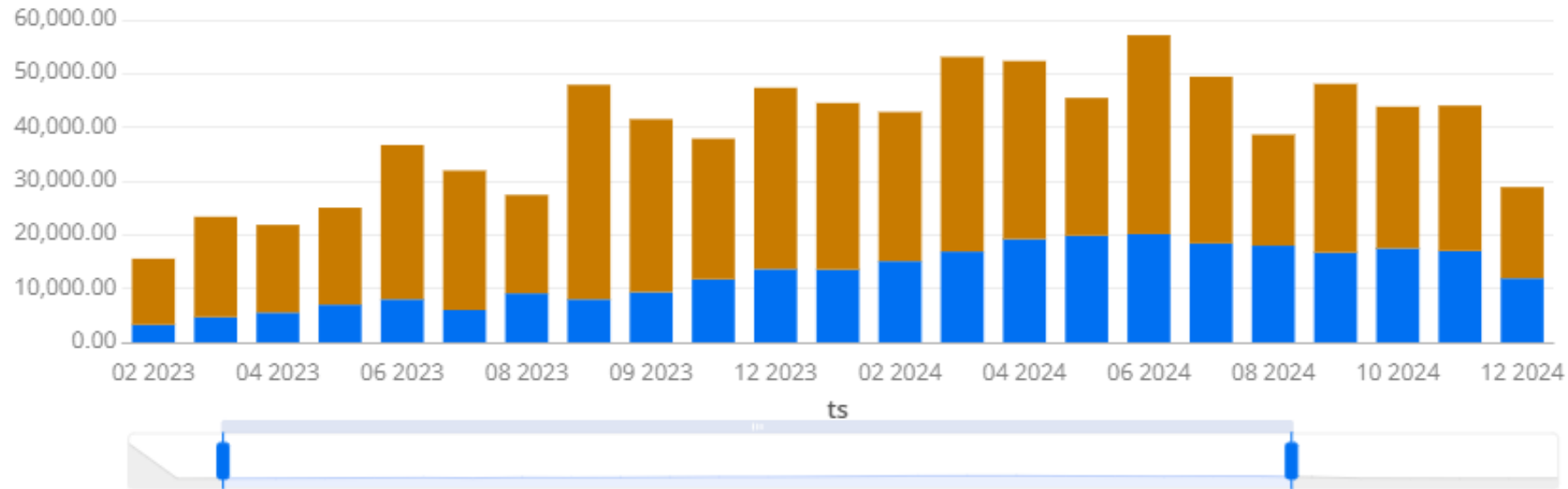
# The data symptom

Open Notis



☒ | ☒ M2 ☒ M1

active

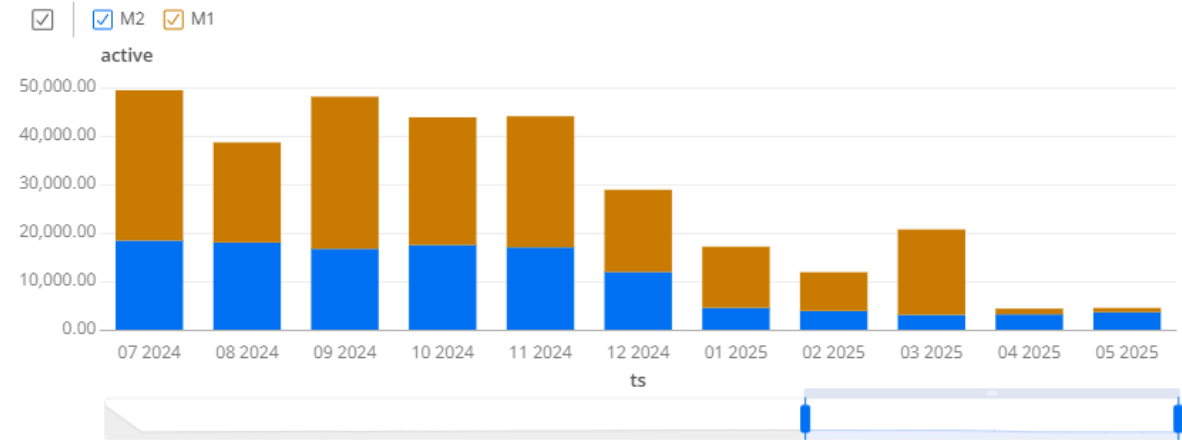


# Actions taken

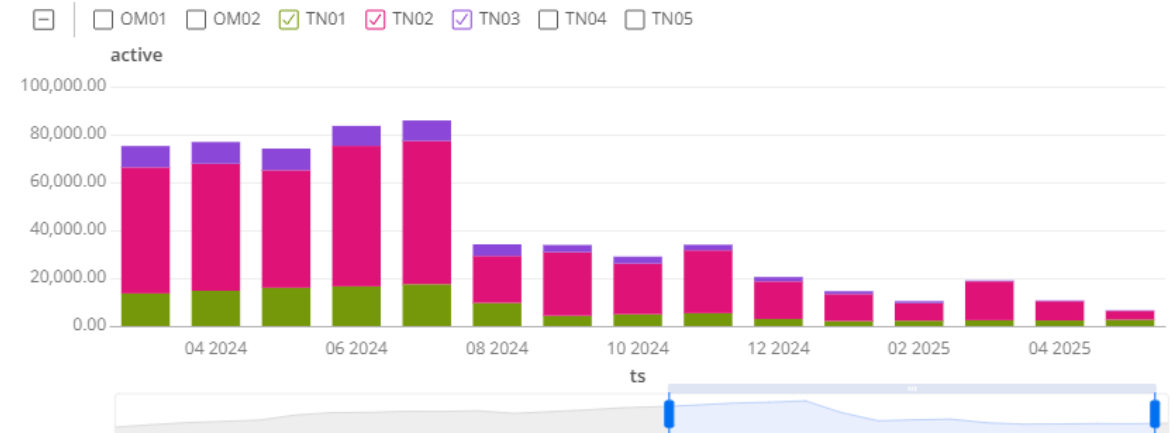
- Do a data cleanup!!!
- Create a new 'One Way Works Flow'
  - Based on LEAN thinking
  - 'Pull' work from Notification pool
  - Clear metrics and handoffs
  - Move Planners closer to field teams
- Develop a Works Management Standard
  - Defines the process, metrics, and data quality expectations
- Created a new 'simpler' Work Order' type (TN05)
  - Enable better bundling of work
  - Automated features
- Delivered a significant retraining effort

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Open Notis

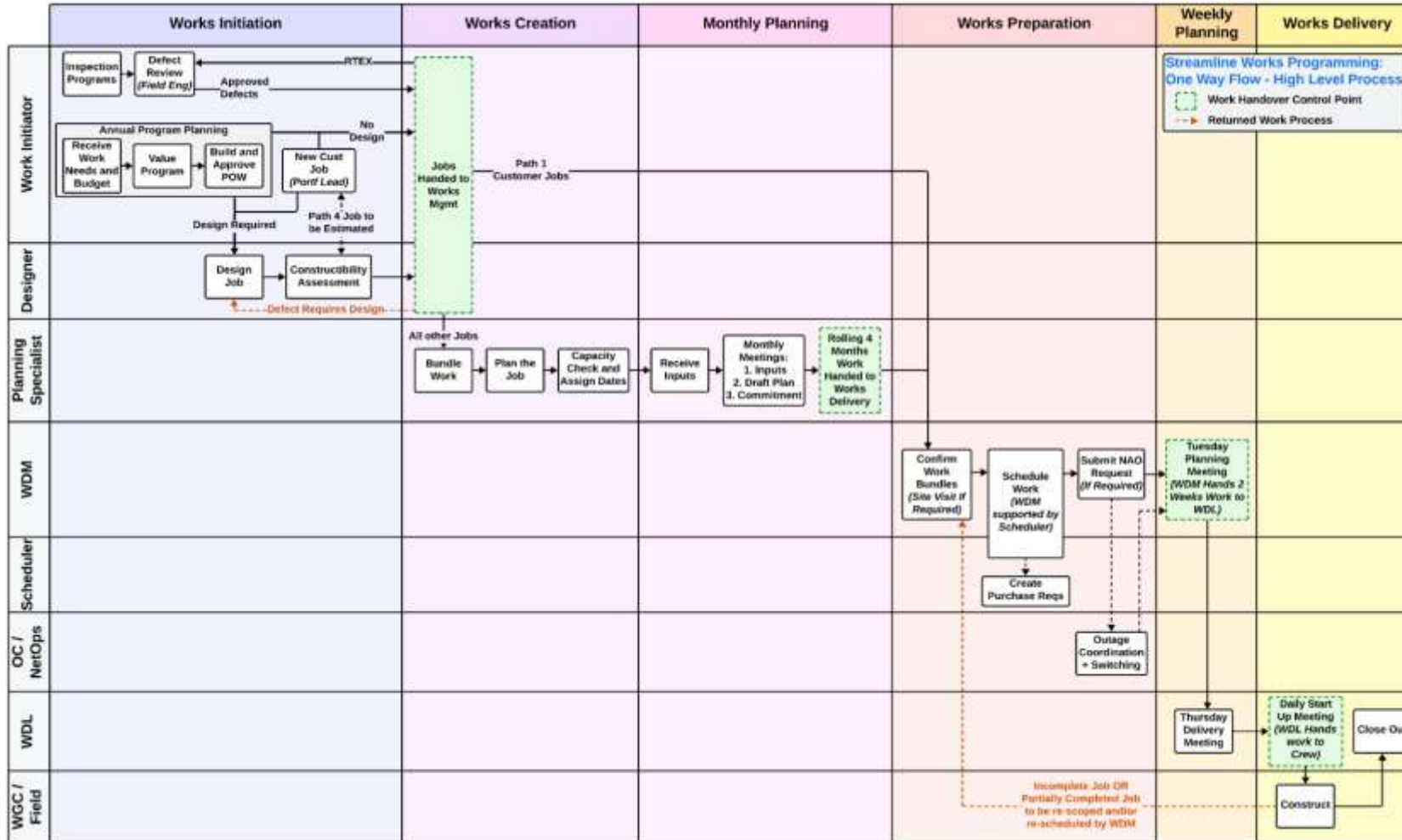


Active Wo By TN Type





# The 'One Way Flow'



# Works Management Standard



4.3	Work Order (WO)	23
4.3.1	Which Work Order Type to Use	23
4.3.2	Noti's on Work Orders	24
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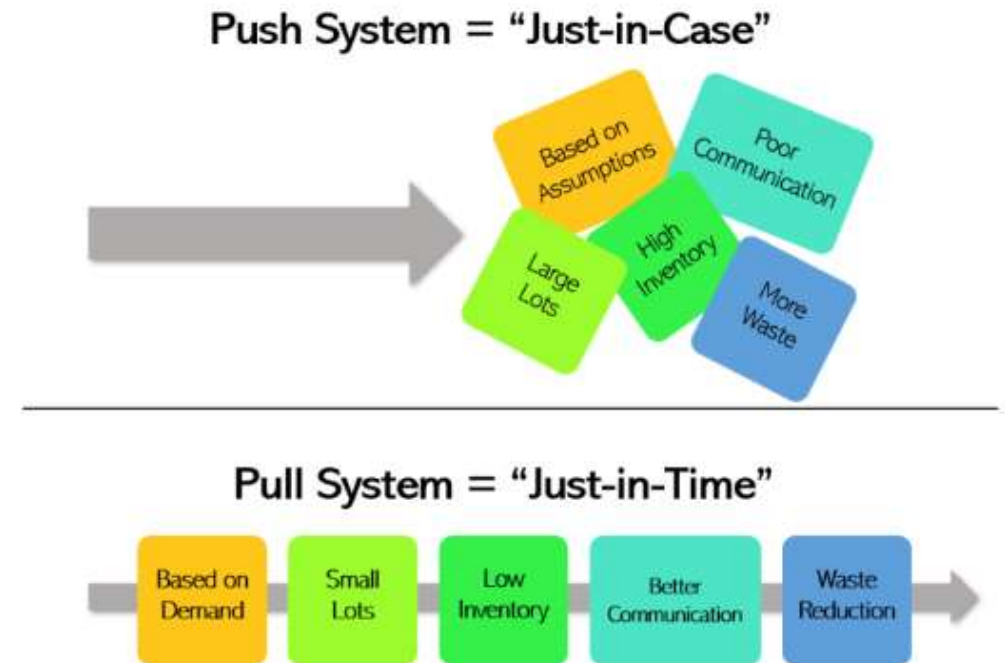
System Quick Reference Guides	
✓	Name
	01. QRG_How to Create M2 Defect Report Notification
	02. QRG_How to Create M1 Service Request Notification
	03. QRG_Customer Work_How to Create M1 Service Request Noti
	04. QRG_How to create Design Work Order & Noti
	05. QRG_How to create a Shell Construction Work Order
	06. QRG_How to create a TN05 Work Order with bundled Noti
	07. QRG_All about Revision
	08. QRG_How to use a Job Card
	09. QRG_Who populates a Nao Creation Sheet
	10. QRG_Who processes a Nao Creation Sheet
	11. QRG_How to bulk update on Noti & Work Order
	12. QRG_Noti Management within TN05 Work Order
	13. QRG_When to confirm and return assigned operations - Field Crew
	14. QRG_Roles and related Business Client Variants
	15. QRG_How to close a TN05 Work Order
	16. QRG_How to raise an external service request
	17. QRG_Receive an invoice for external services
	18. QRG_How to Schedule within TN05 Work Order
	19. QRG_How to Schedule in MRSS Planning Board

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# Moving Notis from 1 to 3&10 Year ‘Priority’

- To ‘assist’ in Notification resolution, engineering teams applied ‘risk based’ practices and enabled new priorities
- In theory, 3 and 10 year notis should create a pool that can be ‘pulled’ from over time, making Order planning easier
- Automated the recommended ‘action’ to resolve a notification



# Notification verification and automation (NOVR)

- Notification object part and symptom are matched with asset criticality (ABC Indicator) and a new 'condition score'... to determine a priority, the activity to be performed and financial categorisation (Functional Area)
- Automate the notification description generation

Notification TASK verification on creation of noti.										
	Catalog Pr...	ObPt	Symp.	AssetCrtct	CBM	Priority	AcCdGp	Code	Functional Area	
<input type="checkbox"/>	7506	0333	S082	5	3	6	NOVR	TN01	REPOL	1
<input type="checkbox"/>	7506	0333	S082	5	4	7	NOVR	TN01	REPOL	
<input type="checkbox"/>	7506	0333	S082	5	5	8	NOVR	TN04	REPOL	
<input type="checkbox"/>	7506	0333	S085	1	1	1	NOVR	TN02	EMRES	
<input type="checkbox"/>	7506	0333	S085	1	2	2	NOVR	TN02	EMRES	
<input type="checkbox"/>	7506	0333	S085	1	3	6	NOVR	TN02	AROCO	
<input type="checkbox"/>	7506	0333	S085	1	4	8	NOVR	TN04	AROCO	
<input type="checkbox"/>	7506	0333	S085	1	5	8	NOVR	TN04	AROCO	



# Notification verification and automation (NOVR)

Notification: 200680608 M2 ✓ Replace Crossarm LV 101324 TAG NO

Notific. Status: OSNO NEW NOVY

Defect Details Address Data System Availability Malfunction Data Location Data Task list

Reference Object

Functional loc.: T-12-OH-4900000001-56 101324 OHST-Tag No

Equipment: 1200002697 101324 TAG NO Stobie Pole

Subject

Coding: TNSN0002 \$106 Ground Patrol

Description: Replace Crossarm LV 101324 TAG NO

23.05.2025 08:10:30 AUSTAS (MDTM)  
 NOVR Validated: Stobie Pole, Crossarm LV, Rot/Deterioration  
 Condition: 3  
 Criticality: 2 - Low  
 Replace, 365 Days, RELSA  
 XRM - Crossarm decay, needs replacing.  
 No access issues identified

Notification	Description
200680608	Replace Crossarm LV 101324 TAG NO
200680609	Restake Pole Lower 179943 TAG NO
200680610	Repair Pole Lower 101322 TAG NO
200680611	Restake Pole Lower 179944 TAG NO
200680612	Low service
200680613	Low service
200680614	Reinspect Crossarm LV 238766 TAG NO
200680617	Reinspect Pole Lower 179947 TAG NO
200680618	Replace Pole stake 237420 TAG NO
200680621	PVT Low service
200680623	Reinspect Pole Lower 179945 TAG NO
200680629	Restake Pole Lower 186264 TAG NO
200680631	PVT Restake Pole Lower 220961 TAG NO
200680633	Replace Crossarm LV 505023 TAG NO

No.	Acty Code ...	Acti...	Activity Code Text	Activity Text	Ac...	Qu...	Start Date	Time	End Date	Time	Created By	Created On	Creat...	Changed B
1	NOVR	TN01	Replace			0		00:00:..	23.05.2025	08:07:..	COADL	14.06.2024	11:20:3..	GALEC
2	GENERIC	A004	Replaced	EWCAttached		0		00:00:..	23.05.2025	08:07:..	GALEC	23.05.2025	08:07:2..	

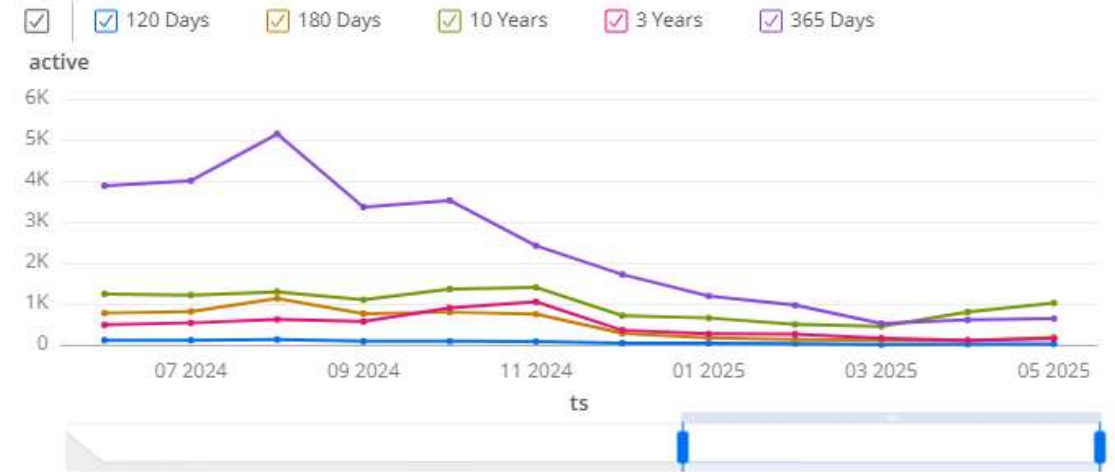
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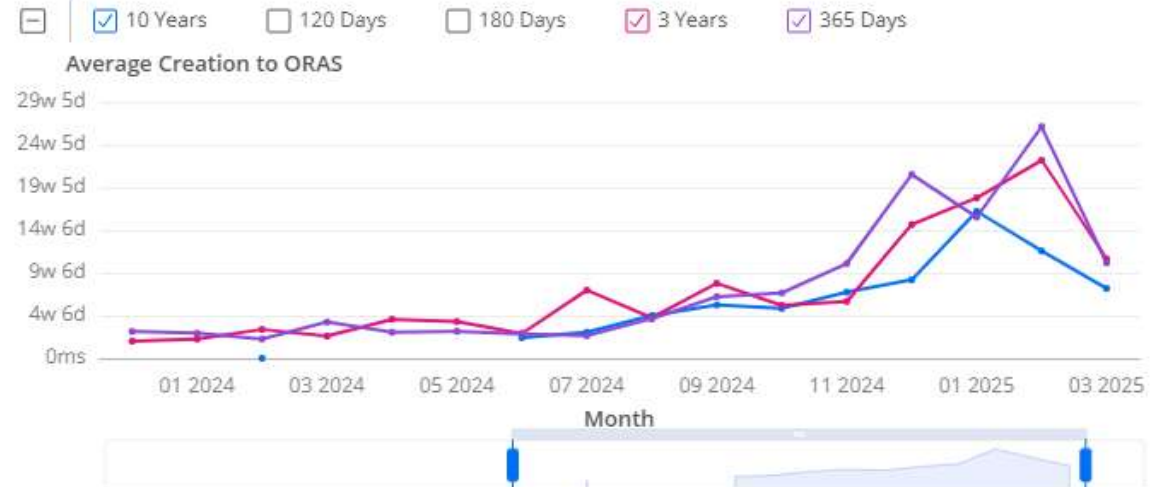
# 3 and 10 year Notis?

- The 'pool' of 3/10 year Notifications has not necessarily behaved any different to our existing 180/365 day Notifications
- Signavio is measuring the time to assign Notis to Work Orders
- If anything, the 10 year Notifications are being assigned to Orders quicker than other priorities

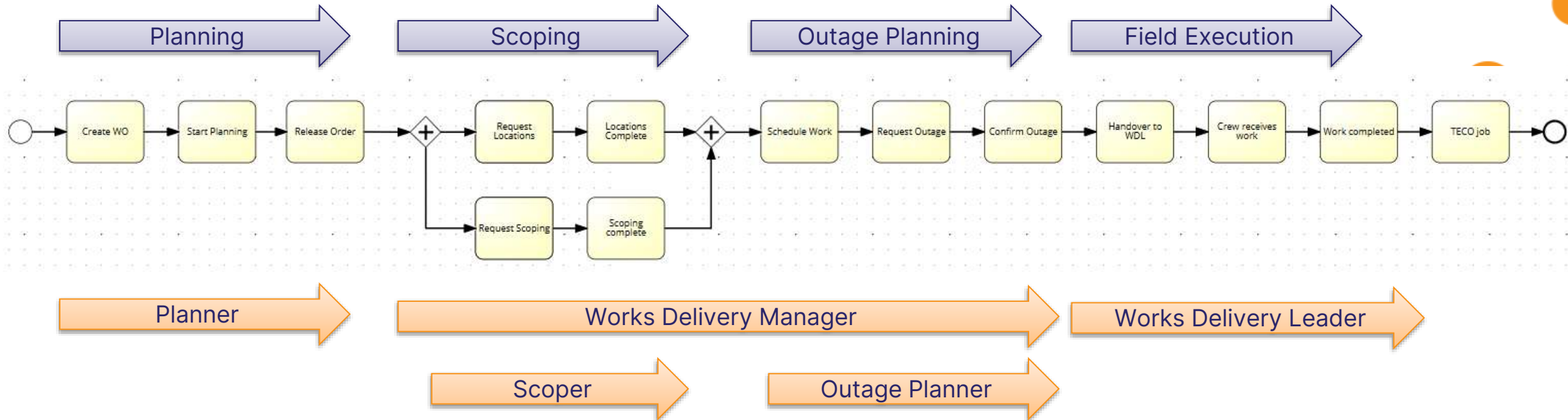
Number of Open Notis



Time to ORAS by Priority



# Measuring the new process and Order (TN05)





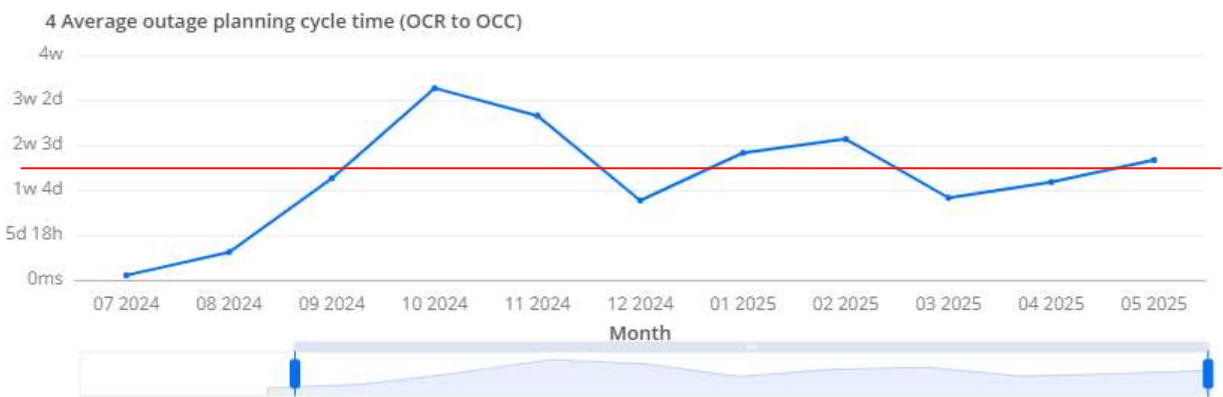
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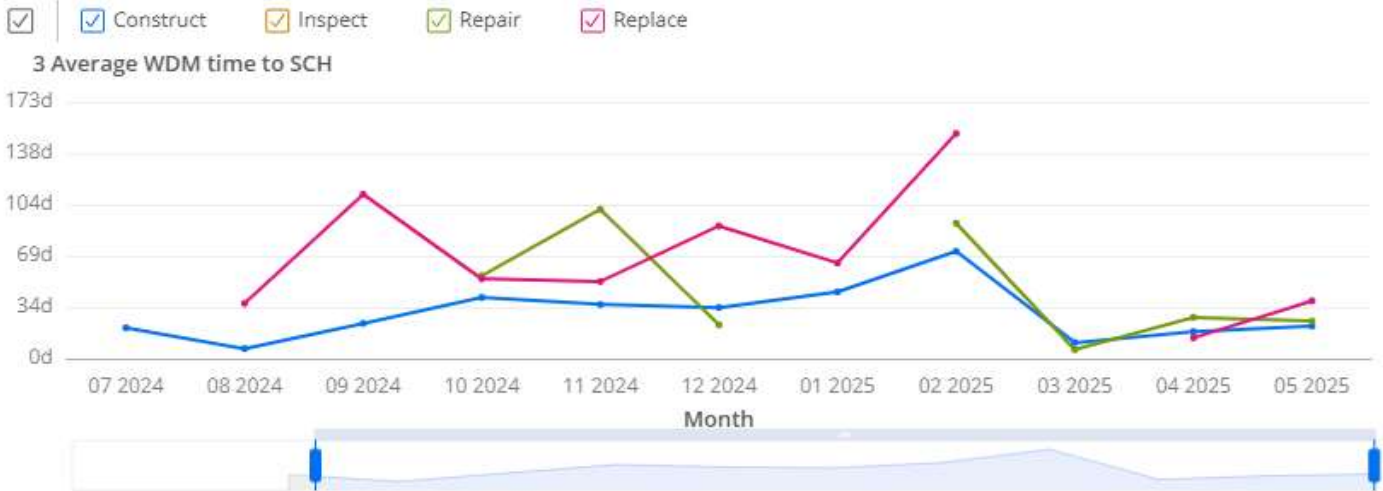
# Signavio Metrics

Dashboards	Investigations	Metrics	Actions	Custom Attributes
Process view: ⓘ Complete attribute set (default)				
<input type="checkbox"/> Name	Result			
<input type="checkbox"/> <b>1 Average time to start Planning</b>				
Work Orders created but not yet started planning	1w 3d			
<input type="checkbox"/> <b>2 Average time in Planning</b>				
How long in Planning before Release	1w 2d			
<input type="checkbox"/> <b>3 Average WDM time to SCH</b>				
Average time between REL and SCH	6w 3d			
<input type="checkbox"/> <b>4 Average outage planning cycle time (OCR to OCC)</b>				
time to complete outage coordination	2w 2d			
<input type="checkbox"/> <b>5 Average CONSTRUCTION to TECO time</b>				
i really want to test if the 2 week window from handover to completion is working	3w 6d			
<input type="checkbox"/> <b>6 Average TECO to CLSD time</b>				
Monitor the Finance closure process (Planned 90 days)	18w 5d			

TN05 outage planning



Work Type WDM Processing time



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# TN05 vs Older Orders

WO Ageing



☐ ☒ TN01 ☐ TN02 ☒ TN03 ☒ TN05

Average work order lifecycle

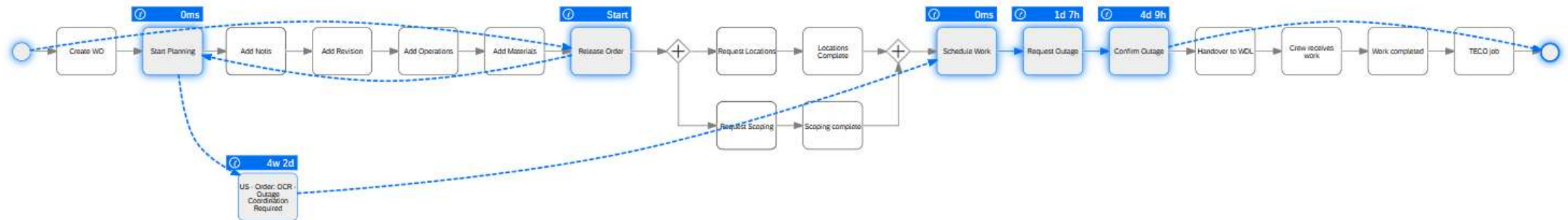


# Investigating process outcomes

Process Conformance

Variant path

Hotspots



# Investigating process outcomes

Variant Explorer

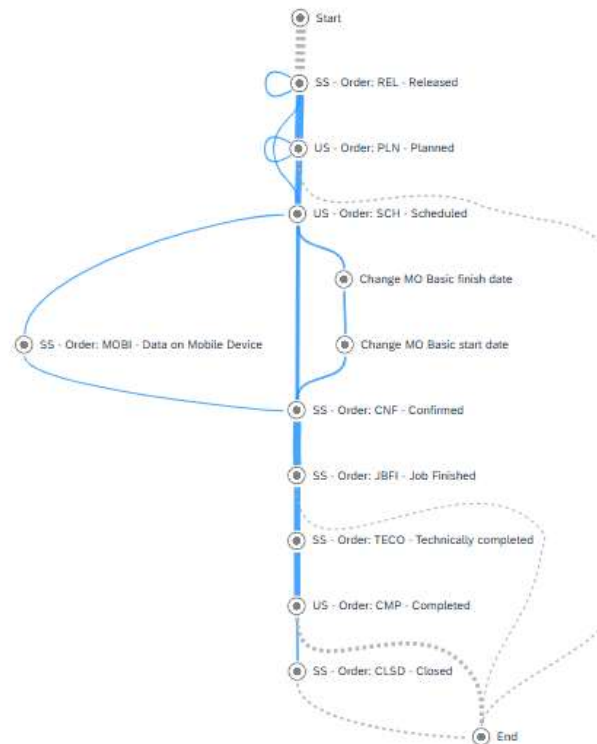


Default

Occurrences

Cycle Time

Generate BPMN





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# Some lessons

- Be clear on your metrics!
  - Does your process have definition and consistency for measurement?
  - Does your data have appropriate content to enable accurate capture?
- Mapping Signavio data to processes is a lot like building a report
  - Only include what you need, its hard to filter it out later!
  - Be aware of multiple data objects being measured (eg Notis, Orders, WBS)



# How to Connect with Me

**E:** [David.Kruijver@tasnetworks.com.au](mailto:David.Kruijver@tasnetworks.com.au)

**M:** +61 439 561

**LI:** [linkedin.com/in/myname/david-kruijver-4681562b0](https://www.linkedin.com/in/myname/david-kruijver-4681562b0)



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