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SAP's Evolution Since 1999: Has EAM Truly Transformed for End Users Over 25 Years?

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What End Users are we talking about here

- Not Power Users like Planners, Schedulers, Supervisors, etc.
- We are talking about the forgotten Users.
 - Tradespeople
 - Operators
 - Assistants
- These people are usually infrequent Users of SAP that do specific tasks for their jobs.
- They usually require continuous Training.



Let's wind the clock back to 1999

The year before the Y2K bug: Businesses were preparing for the potential disruptions caused by the Y2K bug.

SAP implementation: SAP was being adopted globally as it was an ERP system that supported 4-digit year dates, crucial for Y2K compliance.

Limited PC usage: Most businesses had limited PCs, primarily running on Windows 95 or Windows 3.1.

SAP Help: Available on CD in both English and German, as Google was only a year old.

End User familiarity: Many end users were unfamiliar with using a mouse, let alone SAP.

Complex implementation: Implementing SAP was a significant, complex task with a steep learning curve.

Training challenges: Training users on SAP was expected to be a challenging and interesting process.

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Training these End Users (My experience)

- In 1999, over 300 end users needed training.
- · As trainers, we also struggled to understand the system.
- Demonstrate each transaction to the users and guide them through the fields step-by-step.
- Additionally, users need to be trained in Windows and basic PC usage before learning SAP.
- How hard could it be then to teach them a simple thing like creating a Notification?

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Let's put this End User Training experience into prospective

Keep your Hand up if you can't drive a manual car?



Driving a Manual Car





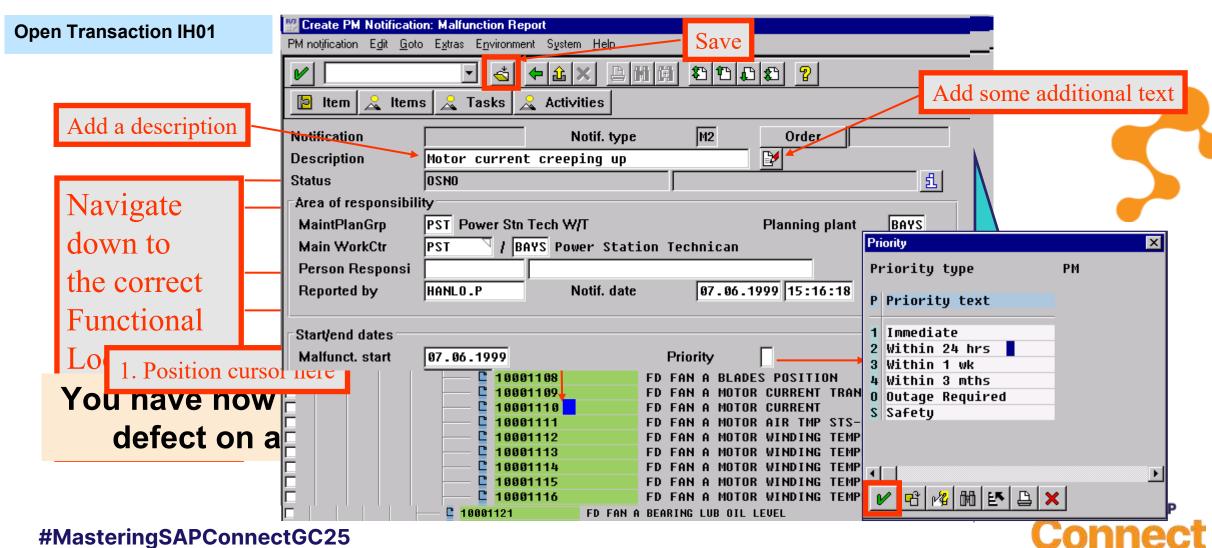
Driving a Manual Car







Training – Creating a Notification in SAP 3.1h



Let's fast forward to now. What has changed?

- PCs and mobile devices are everywhere these days.
- Everyone's tapping and swiping to get things done now.
- Most systems are cloud-based and connected to the internet.
- SAP has updated approximately 18 versions since 3.1h.
- Data analytics are a huge driver for businesses.
- The Internet of Things (IoT) is massive, with tons of connected assets.
- Planning and scheduling has moved to a 'Behind the screen' job.



In 2025 this is how our End Users interact with SAP?

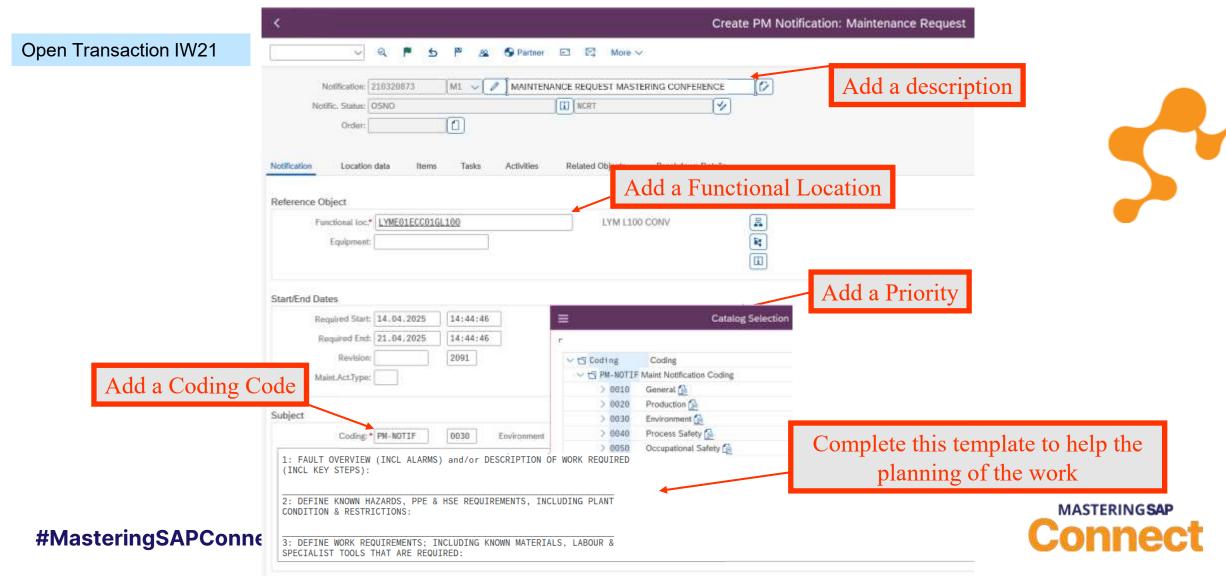
Most End Users are far from this Technology







Training a Notification in SAP S/4HANA 2021



Creating a Notification in SAP S/4HANA 2021

Other information that End Users may have to complete



End Users now in SAP

Audience participation time.

- Show of hand to who is still training their End Users in the GUI Transactions?
- What has been the experience for the End Users who use these GUI transactions?
- Do you have a continuous training strategy and if so, how does it work?



What else is expected from an End User?

- Some create Work Orders and print Shop Papers.
- Some are expected to find their own work and order their own parts.
- Add Time during and after the job is completed.
- Complete history in full including the Cause of the defect and the Activities carried out.
- Even Technically Completing their Work Orders.

And they are still expected to do a full day's work on the tools.

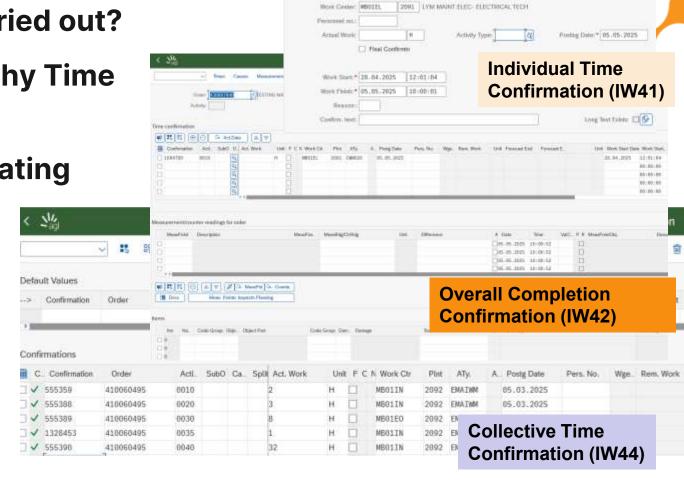


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Time Confirmations an End User's nightmare

Time confirmations are expected from End Users but often done incorrectly or not at all.

- Why are Time Confirmations carried out?
- Do your End Users understand why Time Confirmations are necessary?
- How successful are you at motivating End Users to complete Time Confirmations?
- How is the Time Confirmations data used?



Data Analytics. Is the data correct?

All this information added is now being analysed in some way.

In some cases, SAP data is now being extracted by Analytic Teams or Data Scientists and used to build reports by using



- Excel Spreadsheets analysis
- Data Lakes to combine with non-SAP data
- Power BI or SAP Analytic Cloud to present Dashboards

Who has their SAP data analysed in any of the above ways?

How do you use it, and how can you tell it's accurate?



Sometimes its not just SAP that makes it hard!

There are many factors outside of their control that make it hard for them to use SAP.

- Complex or incomplete Master Data is, in my opinion, the primary factor. Technical Objects, Fault codes, etc.
- Their work is Planned & Scheduled by others which may not be set up correctly, making it difficult to locate and execute.
- Sometimes, End Users are unintentionally set up to fail due to the factors mentioned in the above points.



We often hear that finding the right equipment in EAM/ CMMS systems can be a challenge. I'm curious—what does it look like in your org?

How well organized is your equipment in your EAM/CMMS system?

Vote below or comment if your experience isn't listed

The author can see how you vote. Learn more

X Users can't find equipment	25%
🔔 System has duplicates & junk	0%
Most equipment is findable	13%
All there, but disorganized	38%
Organized & easy to find	25%

Finding the correct Technical Object can be a chore

There are several options when creating a Technical Object structure.

- Complex (down to every nut & bolt)
- High Level (down to the main Asset)
- Functional Locations only
- Functional Locations with Equipment
- And so on.....

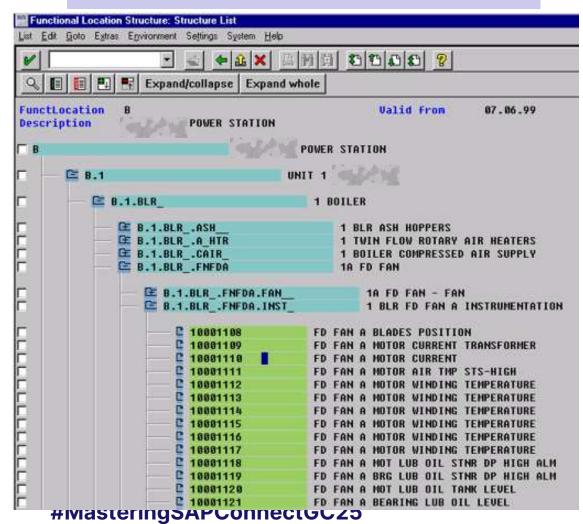
How these are constructed directly impact the majority of End Users.

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Technical Object Structure

Functional Location structure in SAP 3.1h in 1999



Functional Location structure in SAP S/4 HANA in 2025

			Descrip	tion: BAY tion: PWR STATION			9800 Promi	07,04.2025	
8	B	AY				PWR STATION			
> 8		BA	YE01		BW CHP				
> 1	11-	BA	YQ81		BW STN	PLT			
U 8		BA	YU61		BW PWR	STN UNIT 1			
>	B		BAYU01	В	BW 1	ELEC SYS			
0	Ĥ		BAYU01	c	BW 1	CTRL SYS			
v	8		BAYU01	н	BW 1	BOILER			
	>	1	BAYU	101HA	BV	N 1 PRESS & STM SYS			
	>	8	BAYU	01HB	BV	1 BLR STRUCT			
	>	8	BAYU	101HC	BV	N 1 BLR SBLWR SYS			
	×	8	BAYU	DOIND	BV	1 ASH HOPPERS			
	>		BAYU	01HF	BV	V 1 BNKR & FDR SYS			
	>	8	BAYU	161HH	BV	N 1 BLR BURNER SYS			
	>		BAYU	101HJ	By	# 1 BLR IGNITION SYS			
	v	B	BAYU	101HL	BV	1 COMBUSTION AIR SYS			
		v 1	BA	YU01HLB01		BW 1 FD FANS			
		8	1	BAYU01HLB01GQ001		BW 1 FD FAN A		1 - A FORCED DRAFT FAN	
			> 8	BAYU01HLB01GQ001-FR01		BW 1A FD FAN LUBE OIL SYS		1 - A FD FAN LUBE OIL	
			> 8	BAYU01HLB01GQ001-FR02		BW IA FD FAN MTR LUBE DIL SY	5	1 - A FD FAN MOTOR LUBE	OI
			v 1	BAYU01HLB01GQ001-GQ01		BW 1A FD FAN ASSY		1 - A FD FAN - FAN	
				BAYU01HLB01GQ001-GQ01GQ01		BW 1A FD FAN BLADES		1 - A FD FAN BLADES	
				BAYU01HLB01GQ001-GQ01MA01	į.	BW 1A FD FAN OUT DMPR ACTR			
				BAYU01HLB01GQ001-GQ01MA02		BW 1A FD FAN BLADE CTRL AC	TR		
				BAYU01HLB01GQ001-GQ01QL01	N. Committee	BW 1A FD FAN PARK BRK		1 - A FD FAN PARK BRA	KE
				BAYU01HLB01GQ001-GQ01QM01		BW 1A FD FAN OUT DMPR		1 - A FD FAN OUTLET D)AMP
				BAYU01HLB01GQ001-GQ01RP01		BW 1A FD FAN SIL		1 - A FD FAN SILENCER	t.
				BAYU01HL801GQ001-GQ01WP01		BW IA FD FAN DCT		1 - A FD FAN DUCTING	
				BAYUD1HLB01GQ001-GQ01XN01		BW 1A FD FAN CPLG		1 - A FD FAN COUPLING	i
			> 8	BAYU01HLB01GQ001-MN01		BW 1A FD FAN MTR		1 - A FORCED DRAFT FAN	MOT
			> 8	BAYU01HLB01GQ001-MM02		BW 1A FD FAN PWR OIL SYS		1 - A FD FAN POWER OIL	SYS

Technical Objects

While a complex Functional Location structure can theoretically provide excellent data for analysis, it's essential to ensure that end users understand how to use it effectively.

- Does anyone measure their Functional Location Structure effectiveness? If so, how is it measured.
- Will anyone admit they have a complex Technical Object structure? Hands up



How End User identify their work to be Executed?

- Once the work is Planned and Scheduled its back to the End User to execute the work.
- How do they get their work?
 - Printed Work Packs
 - Mobile Solution
 - Work Order or Operation List edit transactions
 - Fiori apps
 - EXCEL spreadsheet printout
 - Any others?





End User quotes about Work Execution

"We just list the Work Orders in IW38 and just do them".

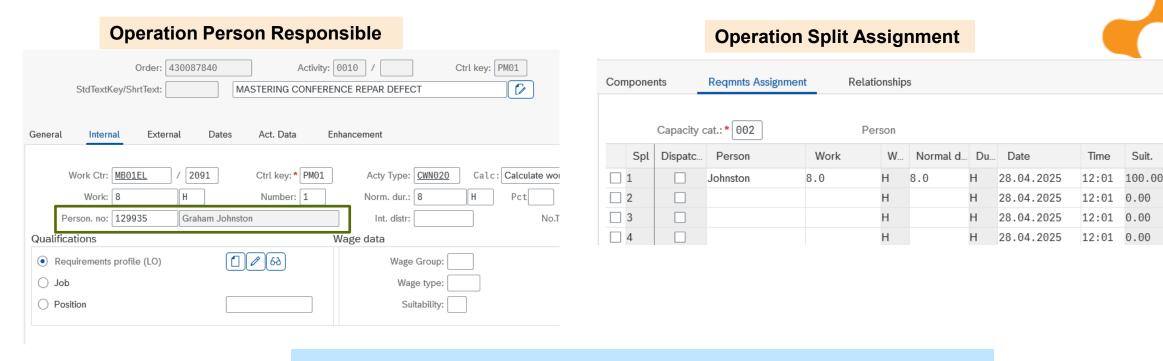
"Wouldn't even know how to find a job". "Yes, the jobs are Planned and Scheduled but if I don't get a printout, I have no idea what to do"

"I wait for the EXCEL spreadsheet printout".



How does an End User identify their work?

Who assigns Work Order Operations to the End User?



Which method do you use and why?



Fault Codes are also a challenge to End Users

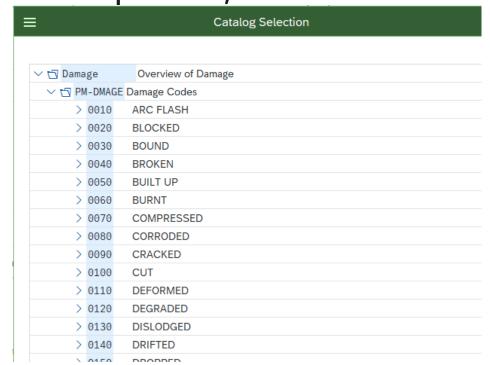
 Assigning codes for Object, Damage, and Cause is essential for data collection, yet it is challenging for some Businesses.

End Users frequently find it difficult to input these codes.

A significant issue is the extensive lists of options, which

often include irrelevant codes.

- Who here finds it difficult to get End Users to add these codes?
- Has anyone successfully had End Users enter these codes correctly?



Let's discuss some ideas and options that could help these End Users. The answer may be in Fiori?



Technical Object Structure

A few ways to help End Users find the correct Technical Object. These are my views.

- Ensure the structure relates to Production systems or Processes that they know.
- Avoid using abbreviations in the Technical Object descriptions, as these can be hard to understand.
- Ensure the lowest Technical Object in the structure is what the End User would typically select.
- Eliminate unnecessary object. Remove any Technical Objects that are not in use from the structure.
- Comments?



Time Confirmations

End Users may assume Time Confirmations are a way to track them. These are my views on what to do

- Never assume the End User knows why and what to do.
- Clearly communicate to the End Users the reason for recording time worked on the job. Be clear on the importance of the task.
- Never use Time Confirmations against an End User in a Job and Time analysis.
- Consistency is critical when conducting analyses like Planned versus Actual hours.
- Comments?



Streamlining Fault Codes to make them relevant

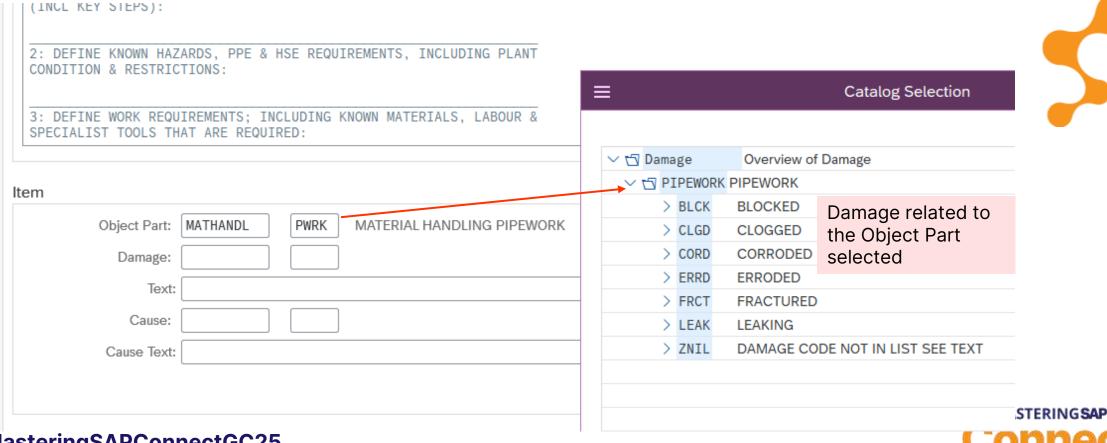
Failure codes can play a critical role in improving the Reliability of Assets.

- Avoid using General Catalogue Profiles as they can be too confusing.
- Implement an enhancement to automatically assign Catalogue Profiles to Technical Object Types.
- Adopt ISO 14224 as the standard framework for code development.
- Ensure that Object and Damage Groups are interrelated.
- Educate End Users on the importance of adding these Codes.
- Provide feedback to End Users based on the information they enter.
- Most of all 'Why' they are important.



Streamlining Codes to make them relevant

To make the relationship between Object and Damage. User-Exit QQMA0015 can be used.



How can Fiori help an End User?

MUST-KNOW SAP FIORI APPS FOR PLANT MAINTENANCE



Create Maintenance Request

App ID F1511A

Raise maintenance viquests for equipment or functional locations.



Manage Maintenance Notifications & Orders

App ID F4604

Process accepted requests into notitications and maintenance orders.



Maintenance Scheduling Board

App ID F2603

View orders and operations across timeline and work centers.



Find Maintenance Order

App ID F2175

Search and update orders, assign them to events



Mass Schedule naintenance Plans

App ID F4073

Review and manage orders assigned to operational or event-based buckets

Avnikant

LinkedIn post by **Avnikant Singh**

Fiori Isn't Optional Anymore! 🔍



Today's clients don't just want transactions – they want intuitive UX, mobility, and speed.

And in SAP EAM (Plant Maintenance), Fiori apps are becoming the default way to work.

Fiori improves efficiency on the shop floor.



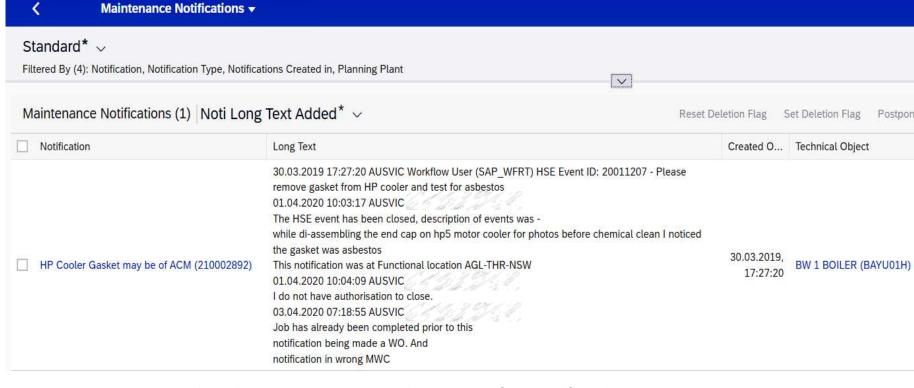
Some of these apps are included in the SAP 9 Phase Model for Maintenance Processing, but they can also be used independently, especially by well-established SAP businesses.

Find Maintenance Notification App

Fiori replacement for IW28 Notification List Edit

Notifications in my Area Last 24 hours

> Overdue Notifications In my area

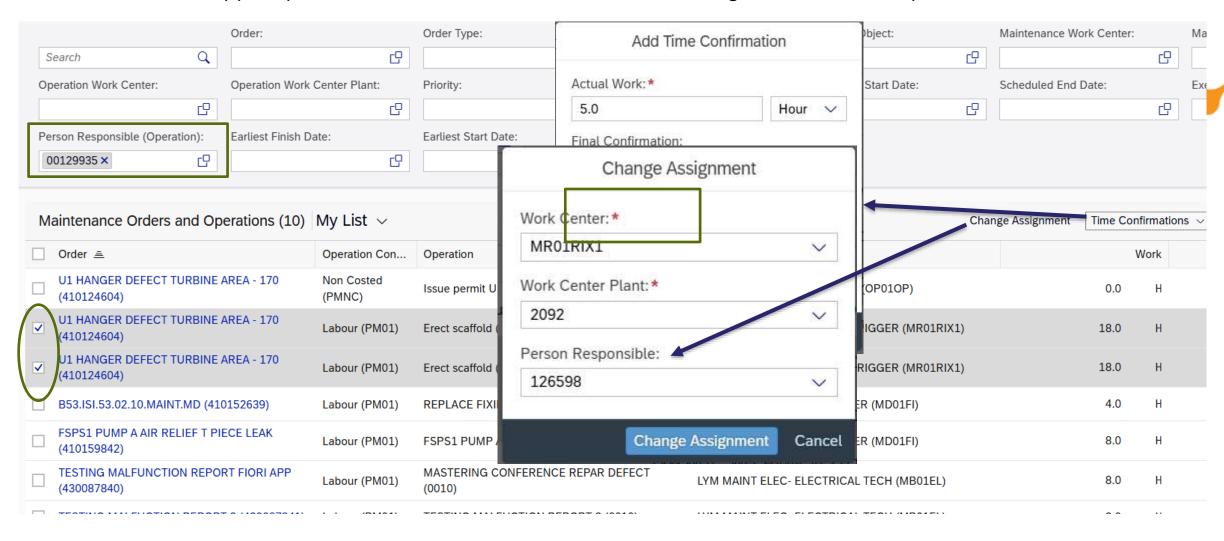


A minor improvement can display the full Notification Long Text.



Find Maintenance Orders and Operations App

This standard Fiori app helps with Time Confirmations and Person assignment (IW37N replacement)



Simplify Malfunction Work

 The Report Malfunction Fiori app serves as an intuitive process for end users. Additionally, these apps can be integrated with your existing GUI-based Work Order Process.



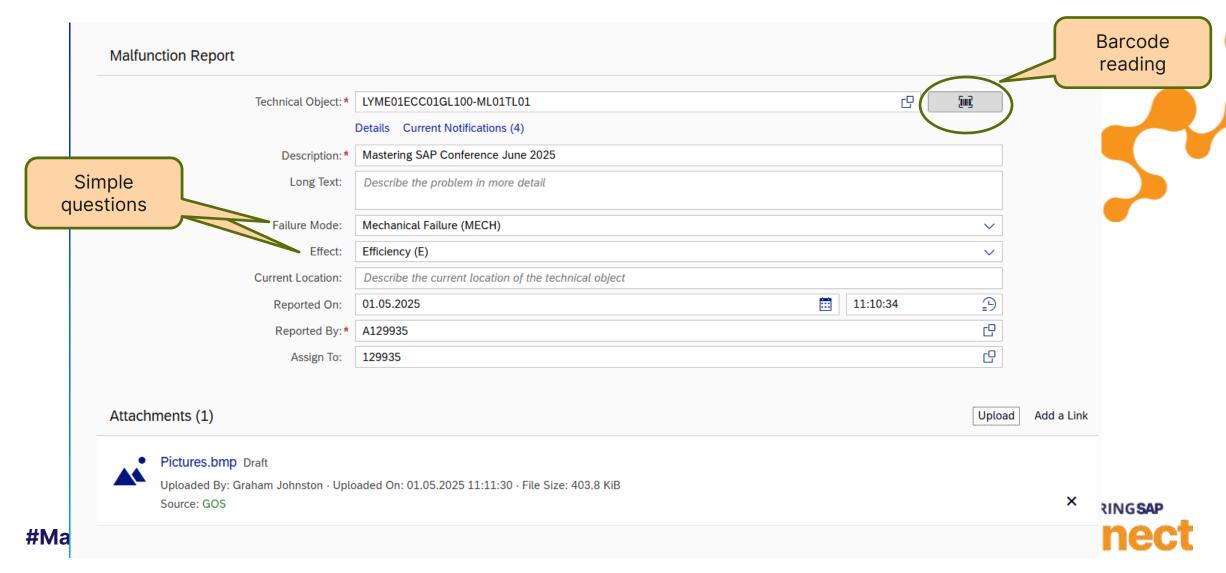
- Fully Mobile App
- Designed for Emergency/Reactive Work
- Creates a Malfunction Report
- Creates the Work Order and Operations
- Allows Components to be added

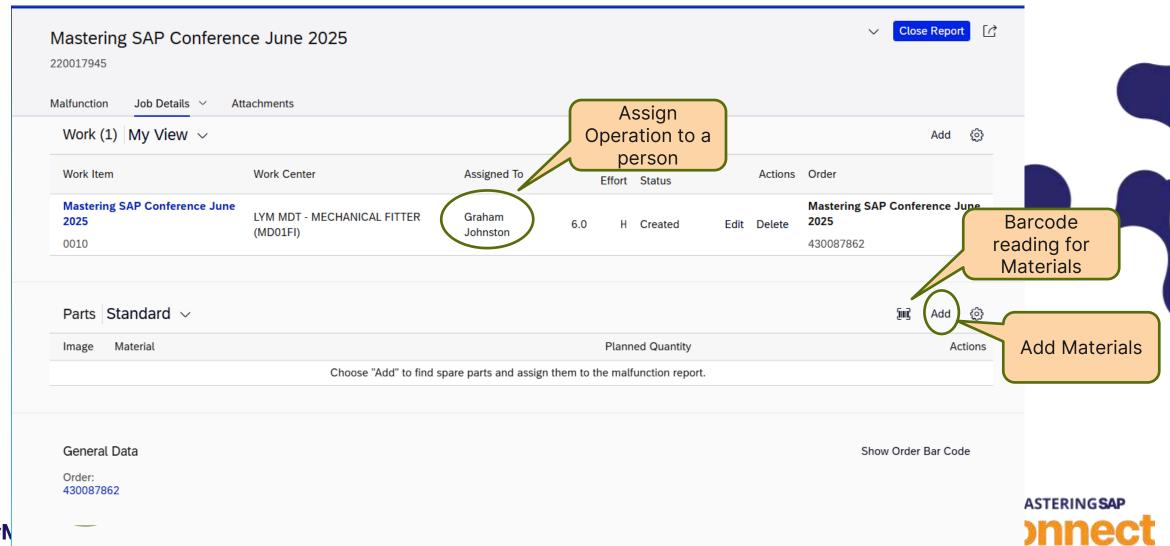


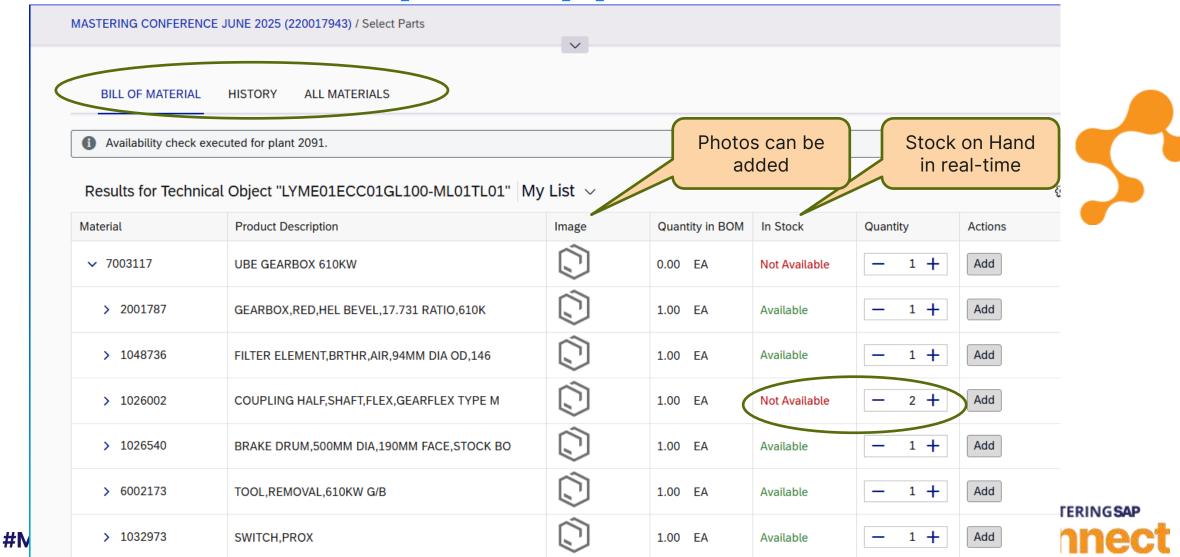
- Fully Mobile App
- Lists all Work Order Operations assigned to you

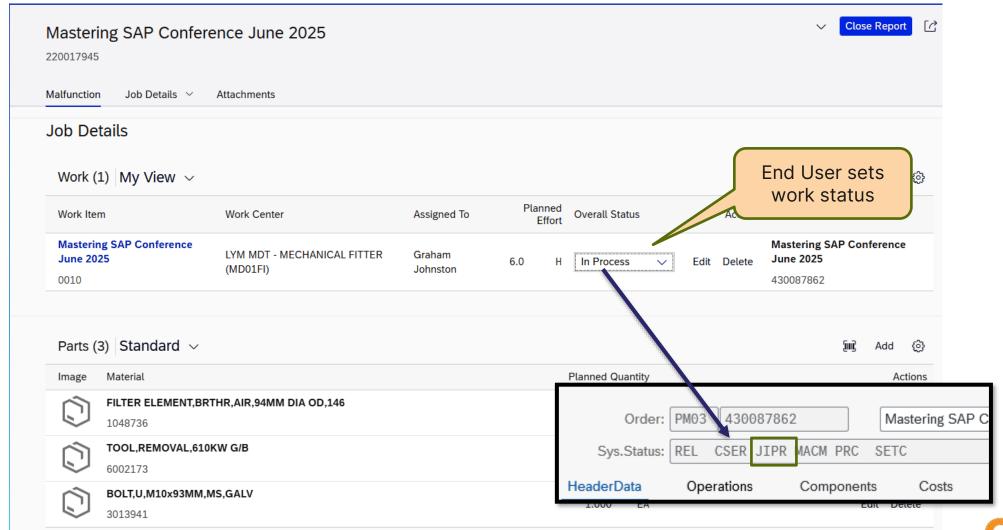






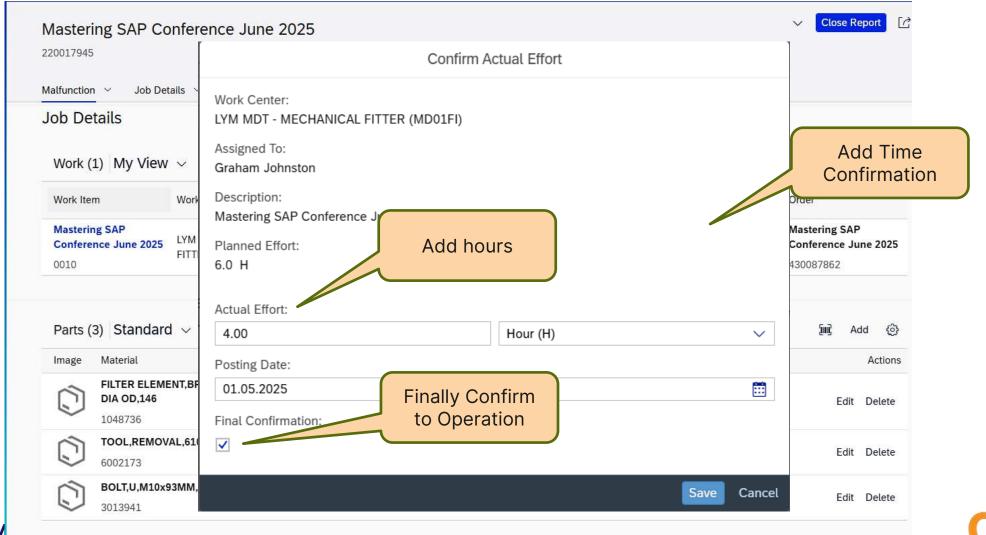






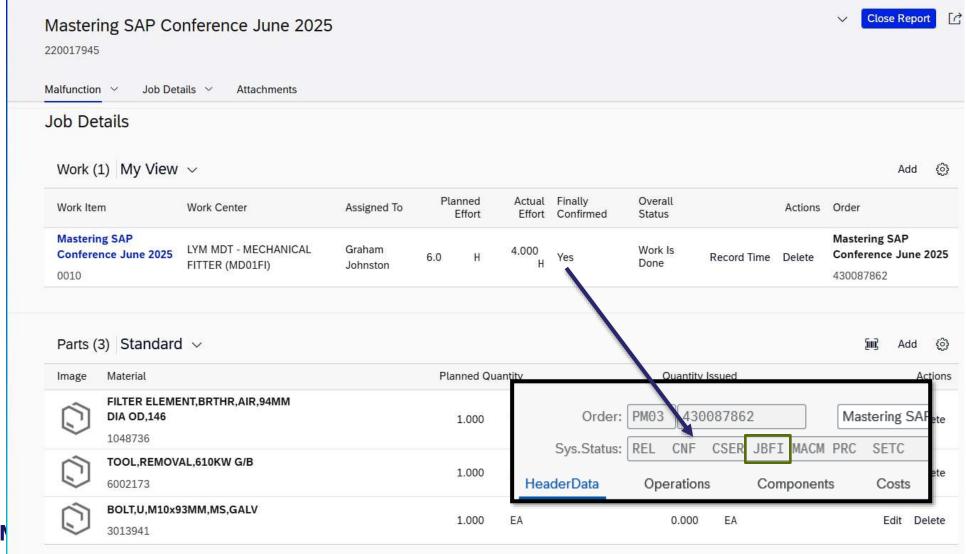


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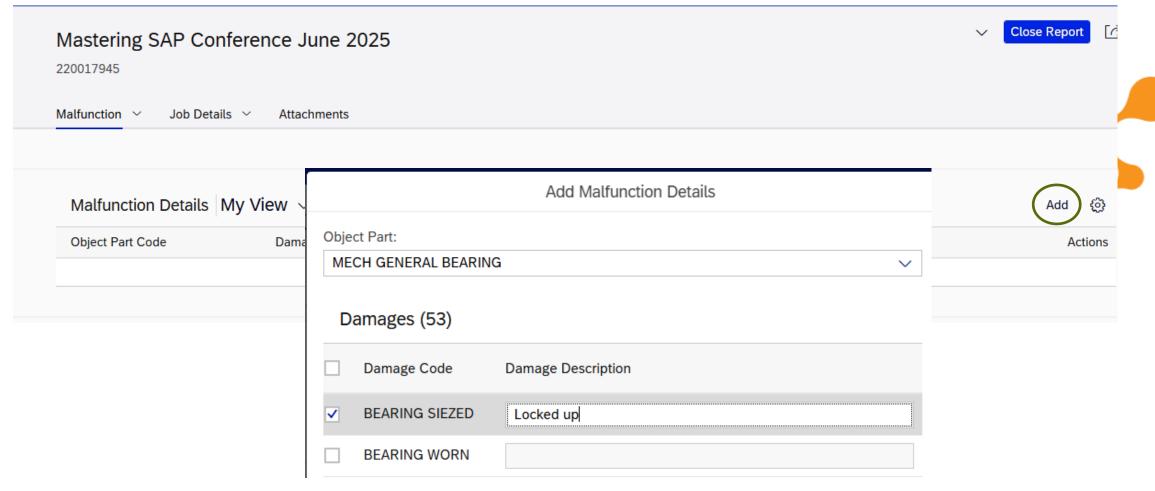


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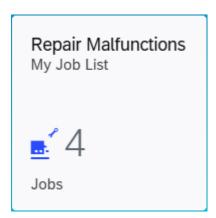




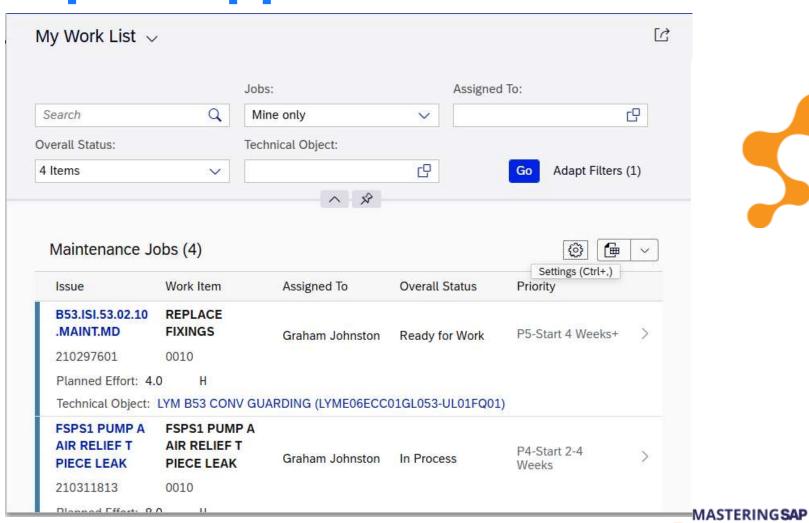








NOTE: This app shows all Work Order Operation assigned to the person





Final Thoughts

- While training end users is essential, it's even more critical that they understand the purpose behind their tasks.
- Streamlining your master data structures can significantly improve the accuracy and quality of information for those Data people.
- Implement the latest SAP technology to simplify data entry for end users.
- Always focus on the 'Why' with End Users.
- If end users are responsible for inputting data, share the resulting analysis with them so they can see the value of providing accurate information.
- Remember, the more time users spend navigating the system, the less time they can focus on their core job duties.
- Most of all don't treat them like a "Forgotten User" in SAP...



ANY FURTHER QUESTIONS?

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