

# MARS

Tomorrow starts today

## **M926 - Manufacturing Data Platform**

Solution to provide a user interface for reviewing & updating  
reference & Actual data to & from PSV files

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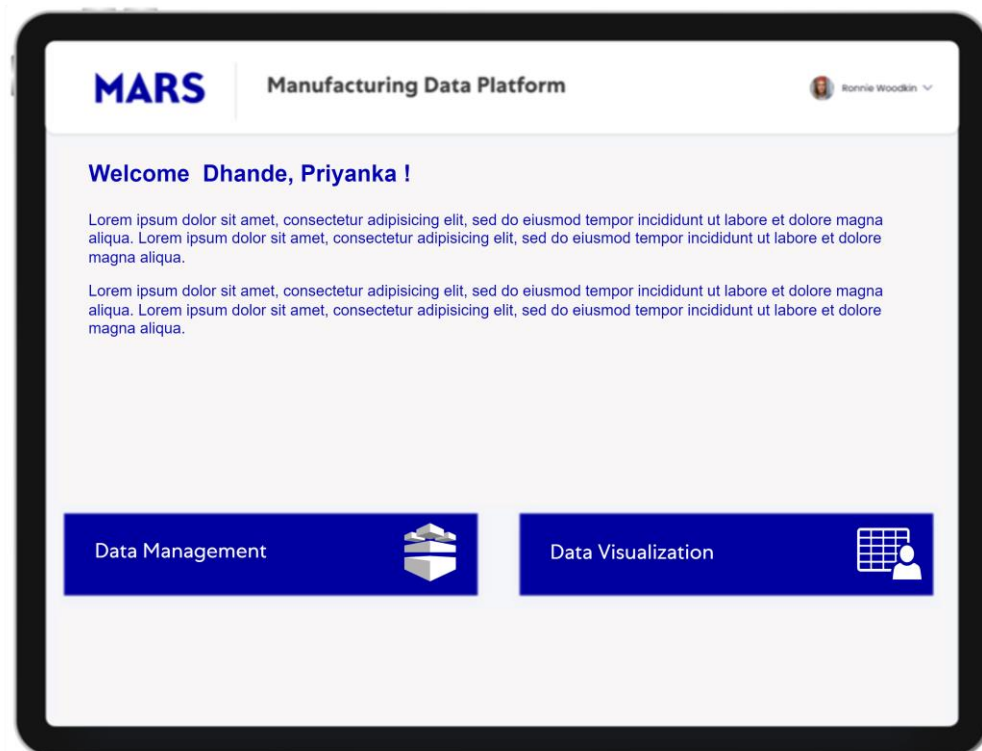
## Overall Solution Scope and Setup

- Individual Apps and solution will be created for Manufacturing Data Platform Application for all three environments – Dev, Stage, Production.
- Data will be stored and retrieved from the PSV file that is stored in Azure Blob. SharePoint will be used to store the data temporarily to use that data in interface.
- Power Automate will be used for sending approval notification and read/write PSV file.
- Security groups will be created to manage the users of Manufacturing Data Platform Application.

## Development Pre-Requisite

- The scope and wireframes mentioned in this document needs to be confirmed & approved on email from business during start of the development.
- User list needs to be provided during start of the development.
- All PSV files needs to be uploaded in Azure Blob storage by the business team.
- User , Site and Region mapping needs to provide by business team during start of the development.
- Site configuration details to show reference data and actual data entry options i.e. Site is having Silver(Classic), Gold or Platinum Package, need to provide before start of the development.
- Site configuration details to show bulk upload of actual entries and manually adding actual entries need to provide before start of the development.
- All 6 Reference Data files and fields needs to be provided before start of development.

## Landing Screen



- The Landing Screen shows welcome message with the description of the application.
- Two big button will be visible for “Data Management” and “Data Visualization”.
- If associate clicks on “Data Management”, user will navigate to Line & Data Operation Selection Screen.
- If associate clicks on “Data Visualization”, user will navigate to Power BI Report hyperlink.
- Current logged in user name will be visible on top right corner with the image of user.
- If image of user doesn't exist in the system, default image will be visible.

## Line & Data Operation Selection Screen

The screenshot shows the MARS Manufacturing Data Platform interface. At the top, the MARS logo is on the left, and the title 'Manufacturing Data Platform' is in the center. On the right, there is a user profile icon for 'Ronnie Woodkin'. Below the header, there is a breadcrumb trail 'SLO > M&M Choco'. A paragraph of placeholder text 'Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.' is displayed. Below the text, there are two selection fields: 'Site:' with a text input containing 'Mars Food - Slough (SLO)' and 'Line:' with a dropdown menu showing 'M&M Choco'. At the bottom, there are two large blue buttons: 'Reference Data' with a folder icon and 'Actual Data' with a document icon.

- The Line Selection Screen allows logged in associate to select the Line for the first time. Later they can change their line.
- Region will be auto populated based on the user mapping with the Region.
- When user go on Line Selection screen, it will automatically load the selected Line if user doesn't log in for the first time.
- Line is mandatory field to select
- The visibility of Reference Data and Actual Data is based on the Site as some plants are allowed to enter actual data, some are allowed to enter reference data and some are allowed to enter reference data as well as actual data also.
- Configuration details will be maintained in SharePoint by PowerApps team
- Associate can either go for the Reference Data Entry or Actual Data Entry based on option visibility as per the configuration.
- If associate clicks on "Reference Data", user will navigate to Reference Data Screen.
- If associate clicks on "Actual Data", user will navigate to Actual Data Screen.

- User can see the Site and selected Line at Top-Left corner with format “<Site> > <Line>”. For eg, SLO > M&M Choco
- Current logged in user name will be visible on top right corner with the image of user.
- If image of user doesn't exist in the system, default image will be visible.

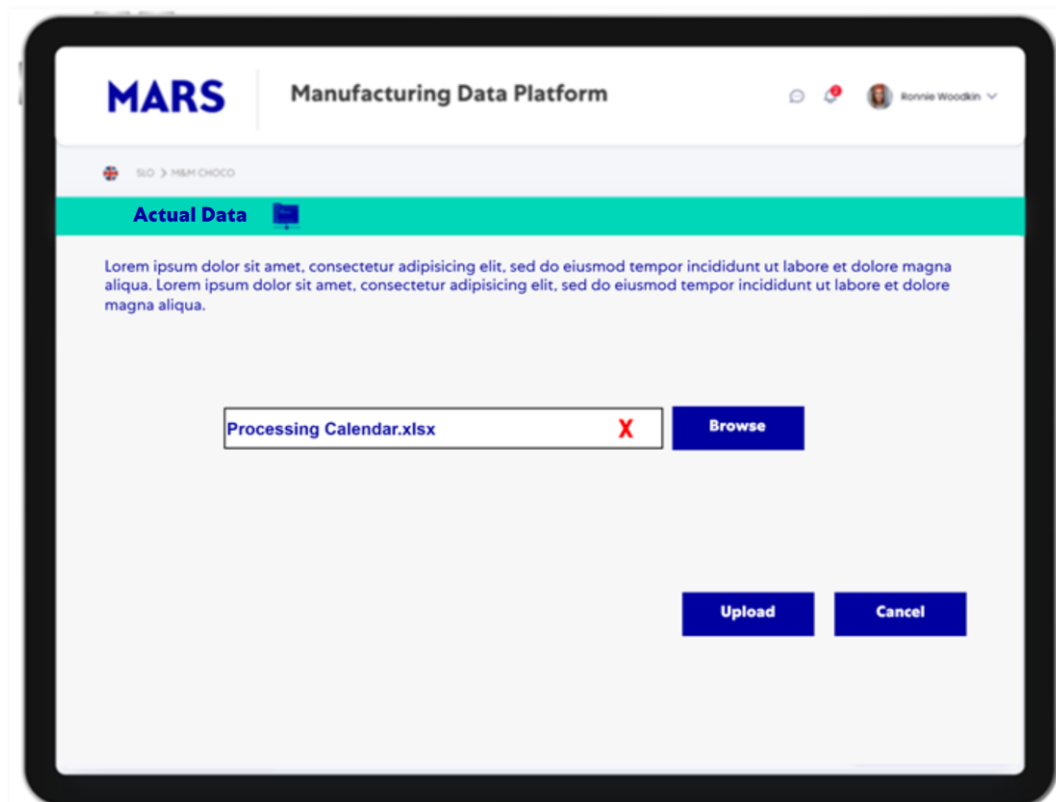
## Reference Data Screen

The screenshot displays the 'Reference Data' screen in the MARS Manufacturing Data Platform. The top header shows the MARS logo and the platform name. The breadcrumb trail indicates the user is in 'SLO > M&M CHOCO'. The left sidebar lists navigation options: 'Equipment' (selected), 'Shift structure', 'Run mode', 'TOC by run mode', and 'Planned loss standards'. The main form area contains fields for 'Equipment ID', 'Equipment Type', 'Manufacturer', 'Model Number', 'Serial Number', 'Date of Purchase', 'Purchase Cost', 'Installation Date', 'Location', 'Condition', 'Maintenance History', and 'Service Life'. There are 'Add' and 'Save' buttons at the bottom of the form. Below the form is a search bar and a table of equipment records.

Equipment ID	Equipment Type	Manufacturer	Serial Number	Purchase Cost	Location
FG	Bitesize		M&M's	M&M's Peanut	M&M's Peanut Classic
FG	Barline	Bounty			
FG	Barline	Baked	Twix	Twix Standard	
FG	Barline	Baked	Twix	Twix Salted Caramel	

- The Reference Data Screen allow user to enter the reference data for Equipments, Items, Changeover, TOC.....
- Based on selected Reference Data, the available details will be shown in table format.
- User can search the reference data based on entered value in search box.
- If user selects any record from the table, they will be able to see the details in above part as a field value and user will be allowed to edit the values.
- If user directly adds new value, they need to click on “Save” button to add new entry.
- Current logged in user name will be visible on top right corner with the image of user.
- If image of user doesn't exist in the system, default image will be visible.

## Actual Data With Bulk Upload Screen



- The Actual Data With Bulk Upload Screen allow user to upload the excel file for entering the bulk data.
- The actual Data With Bulk Upload Screen is visible if Site is allowed to add the entries in bulk.
- User cannot see any entries in the screen. So, they will not be able to edit any of the entry.
- The uploaded file gets added direct at the Azure blob storage location shared by the business.
- To select the file, user need to click on “Browse” button.
- To upload selected file, user need to click on “Upload” button.
- To cancel the uploading, user need to click on “Cancel” button.
- To cancel the selected file, user can click on **X** icon.
- Current logged in user name will be visible on top right corner with the image of user.
- If image of user doesn't exist in the system, default image will be visible.

## Actual Data Screen without bulk upload

The screenshot shows the 'Actual Data' screen in the MARS Manufacturing Data Platform. At the top, there's a header with the MARS logo and 'Manufacturing Data Platform'. Below this, a teal bar contains the 'Actual Data' title. A navigation breadcrumb shows 'SID > H&M CHOCO'. Below the breadcrumb, there are five dropdown menus for 'Date', 'Shift', 'Period', 'Week', and 'Periods / Week'. The main section is titled 'Actual Time' and contains a table with columns: Startup Time, Shutdown Time, Changeovers, Maintenance, Cleaning, CIL, Slow Running, Active?, and Run type. The table lists five entries with IDs 213, 221, 210, 678, and 321. Each entry has a pencil icon for editing. The 'Active?' column shows 'Lights Off' for all entries, and the 'Run type' column shows 'No Planned Shift' for 213, 221, and 321, and 'No Crew on Line / Holidays' for 210 and 678. At the bottom right, there are 'Add' and 'Save' buttons.


Startup Time	Shutdown Time	Changeovers	Maintenance	Cleaning, CIL	Slow Running	Active?	Run type
/ 213						Lights Off	No Planned Shift
/ 221						Lights Off	No Planned Shift
/ 210						Lights Off	No Crew on Line / Holidays
/ 678						Lights Off	Twix Standard
/ 321						Lights Off	No Crew on Line / Holidays

This screenshot shows the same 'Actual Data' screen but with additional input fields for bulk upload. The table structure is identical to the first screenshot, but the 'Startup Time' and 'Shutdown Time' columns now have text input boxes for each row. The 'Active?' column also has a dropdown menu for each row, currently showing 'Lights Off'. The 'Run type' column remains the same. The 'Add' and 'Save' buttons are still present at the bottom right.

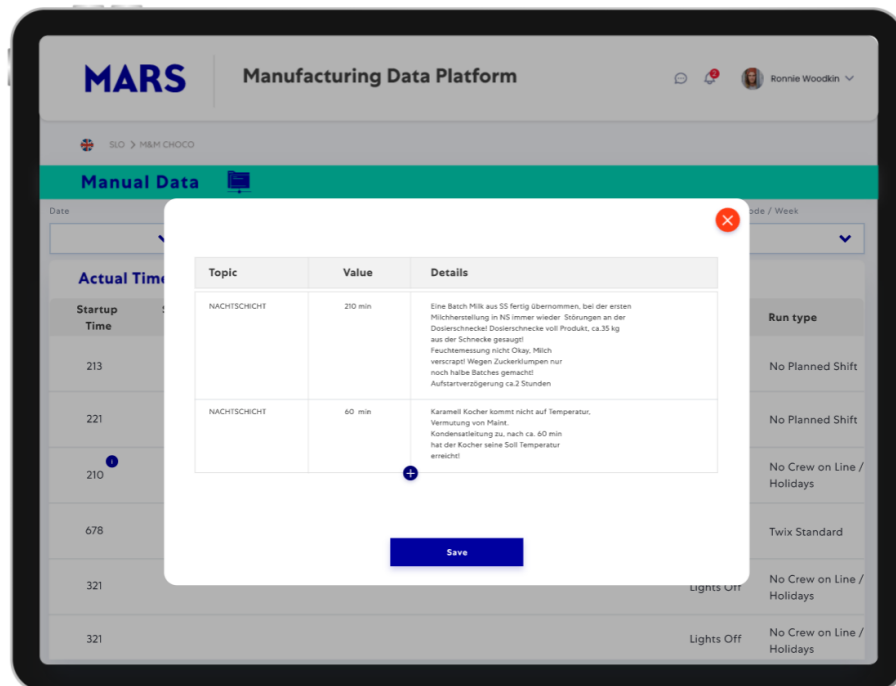
Startup Time	Shutdown Time	Changeovers	Maintenance	Cleaning, CIL	Slow Running	Active?	Run type
/ 213						Lights Off	No Planned Shift
/ 221						Lights Off	No Planned Shift
/ 210						Lights Off	No Crew on Line / Holidays
/ 678						Lights Off	Twix Standard
/ 321						Lights Off	No Crew on Line / Holidays

- The Actual Data Without Bulk Upload Screen allow user to enter the actual data for Production Calendar, Loss Categories and Deviation Logs.



- The Actual Data Without Bulk Upload Screen is visible if Site is allowed to add/edit the actual entries in bulk.
- User can see all actual entries in the dashboard.
- To add new entry, user need to click on “Add” button and it will allow to add inline.
- To edit any entry, user need to click on edit icon  and it will allow to edit inline.
- The save will be initially disabled. When user edit any entry or add new entry, “Save” button gets enable.
- Once user clicks on Save. SharePoint list is updated and later it will be updated in PSV file as well.
- Actual Data entries can be filtered based on fields added in the mock-up.
- Current logged in user name will be visible on top right corner with the image of user.
- If image of user doesn't exist in the system, default image will be visible.

## Deviation Log Popup Screen



- The Deviation Log Popup screen allow to add the deviation split based on selected actual entry.
- Topic, Value, Details will be the fields for Deviation log.
- There will be no validation against the summation of all deviation logs added.
- User needs to click on “+” icon to add new deviation log against the actual entry.
- Once user added all deviation logs, user need to click on “Save” button.

## Files with fields for Reference Data and Actual Data

- Below is the file containing all fields with all PSV files for reference & actual data



v23.3 data dictionary  
v1.0.1 for Rohan Web

## Archival Process

- Data archival will be done every month.
- It will move the old SharePoint data to archival list which we cannot show in the system.