Synergi Plant Training

Dashboard
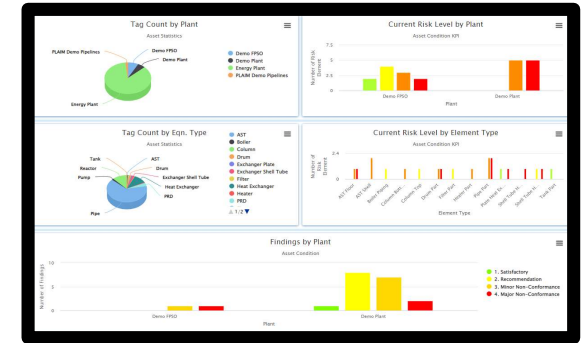
彰顯全定量 RBI 及 AIMS 的導入效益
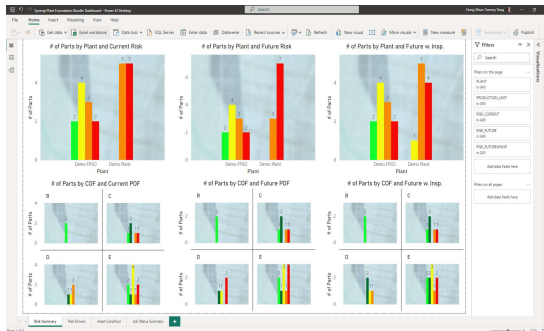

全範圍資產設備風險警示

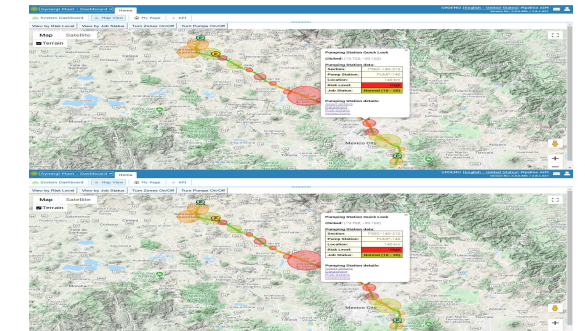標準的方法流程與結果共享平台

明確定義的關鍵問題與解決方案

開放式 BI 與 AI 系統整合

3D 視覺化的結果呈現

融入現實世界資訊的數位資產

DNV

Dashboard Screen

- Go to Dashboard -> System Dashboard
- Dashboard Widget
- Widget Functions
- Widget Pool
- Page Management
- Pool Panel Control
- Dashboard Pages
- Widget Download Functions
- Page Panel Control
- Drilldown on Data
- Row Spitter

Risk Status and Overview (1)

- Current Risk
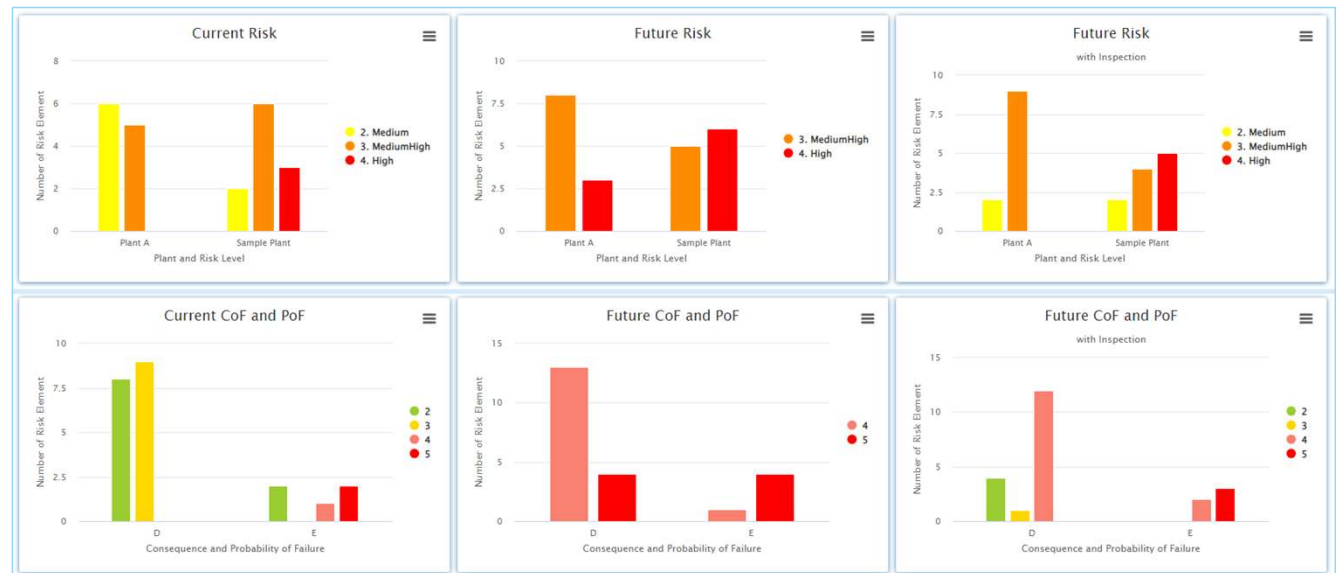Number of risk parts in current risk levels

- Future Risk
Number of risk parts in future risk levels

- Future Risk with Inspection
Number of risk parts in future risk levels if RBI recommended inspections are executed

- Current CoF and PoF
Number of risk parts in current PoF levels separated by current CoF levels

- Future CoF and PoF
Number of risk parts in future PoF levels separated by future CoF levels

- Future CoF and PoF
Number of risk parts in future PoF levels separated by future CoF levels if RBI recommended inspections are executed

Risk Status and Overview (2)

- Current Consequence
Number of risk parts in current CoF levels
separated by each consequence driver

- Current Probability
Number of risk parts in current PoF levels
separated by each probability driver

Current Consequence
RBI Category Summary

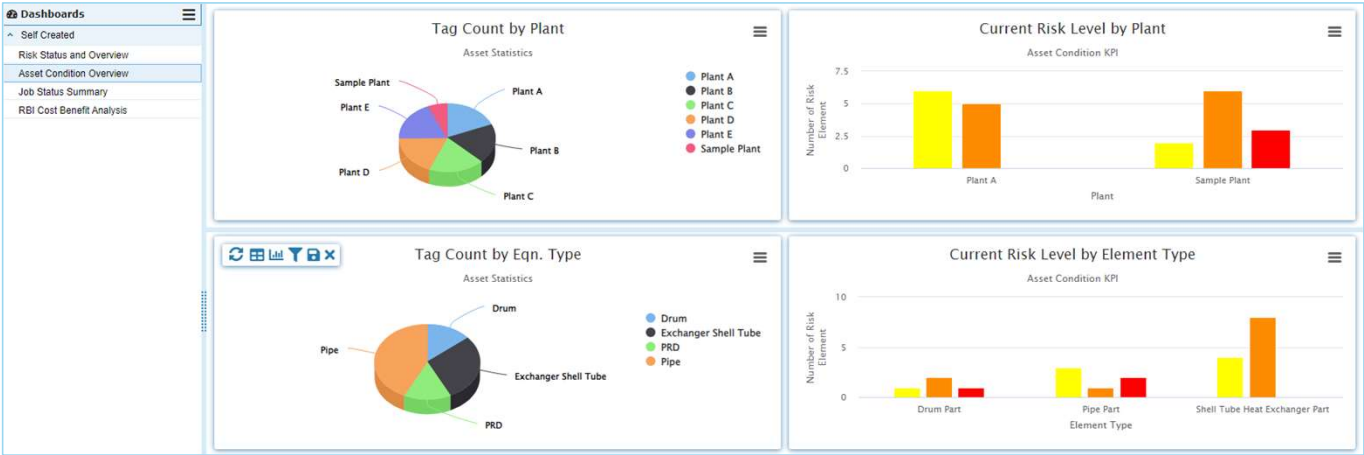**Current Probability**
RBI Category Summary
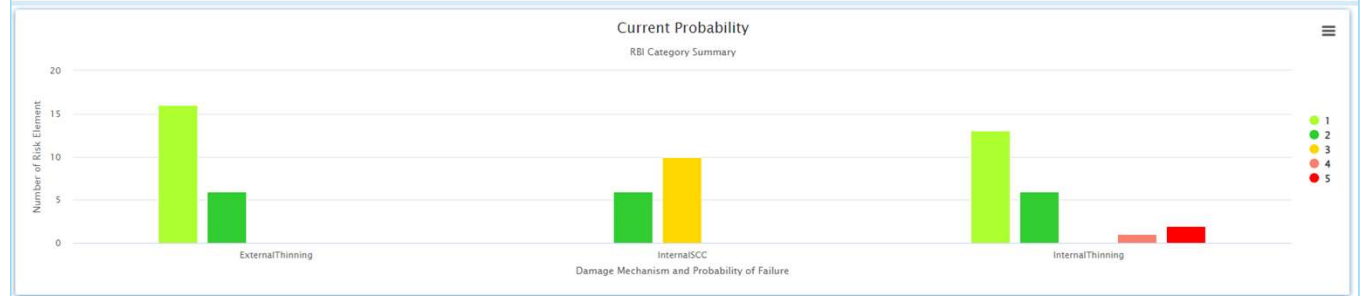
Asset Condition Overview (1)

- Tag Count by Plant
Number of Tags in different plants

- Current Risk Level by Plant
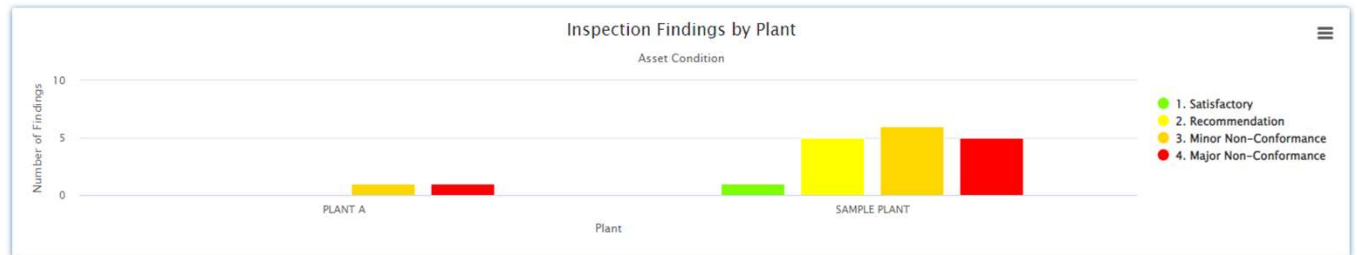Number of risk parts in current risk levels

- Tag Count by Eqn. Type
Number of Tags in different equipment types

- Current Risk Level by Element Type
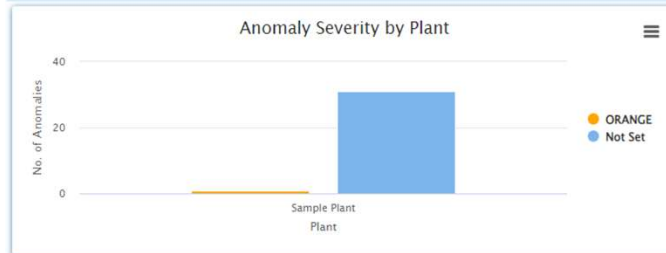Number of risk parts in current risk levels
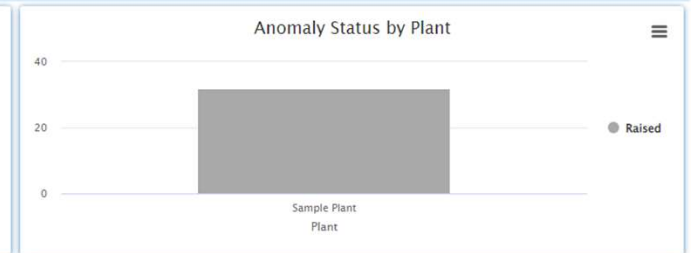
Asset Condition Overview (2)

- Inspection Findings by Plant
Number of findings in different categories separated by plants

- Anomaly Severity by Plant
Number of anomaly in different severities separated by plants

- Anomaly Status by Plant
Number of anomaly in different status separated by plants

Job Status Summary

- Job Status by Eqn. Type
Number of inspections in different job status separated by equipment types

- Yearly Job Status Summary
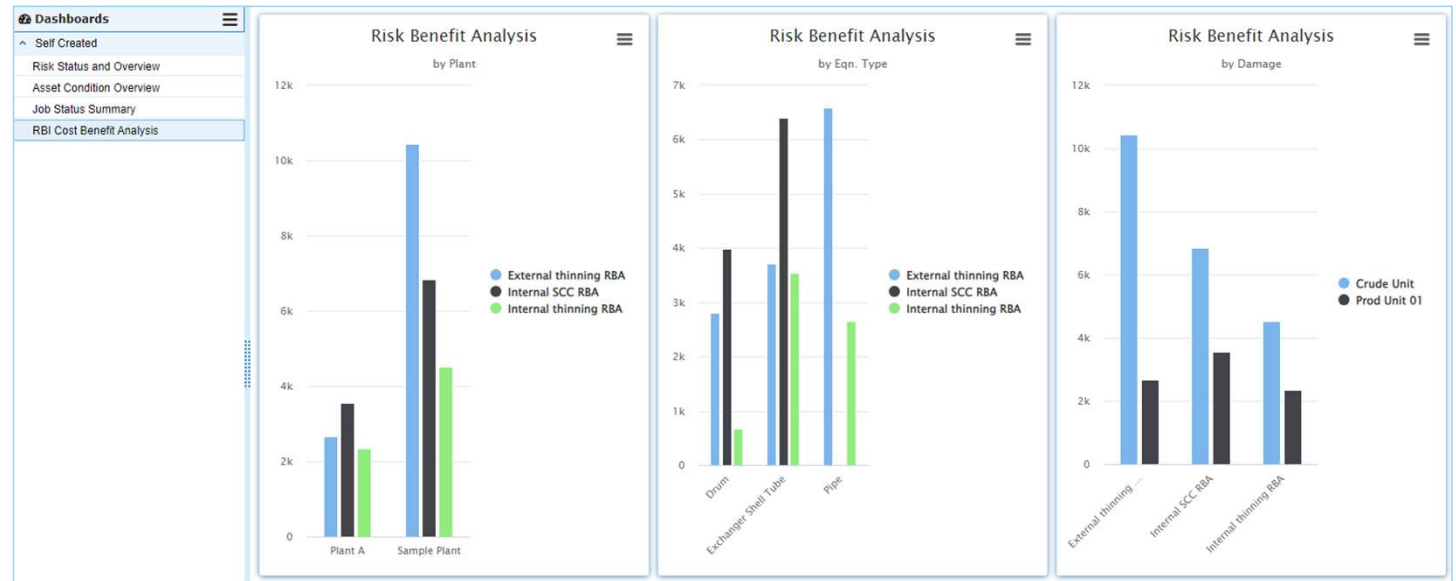Number of inspections in different job status separated by years

RBI Cost Benefit Analysis

- Risk Benefit Analysis by Plant
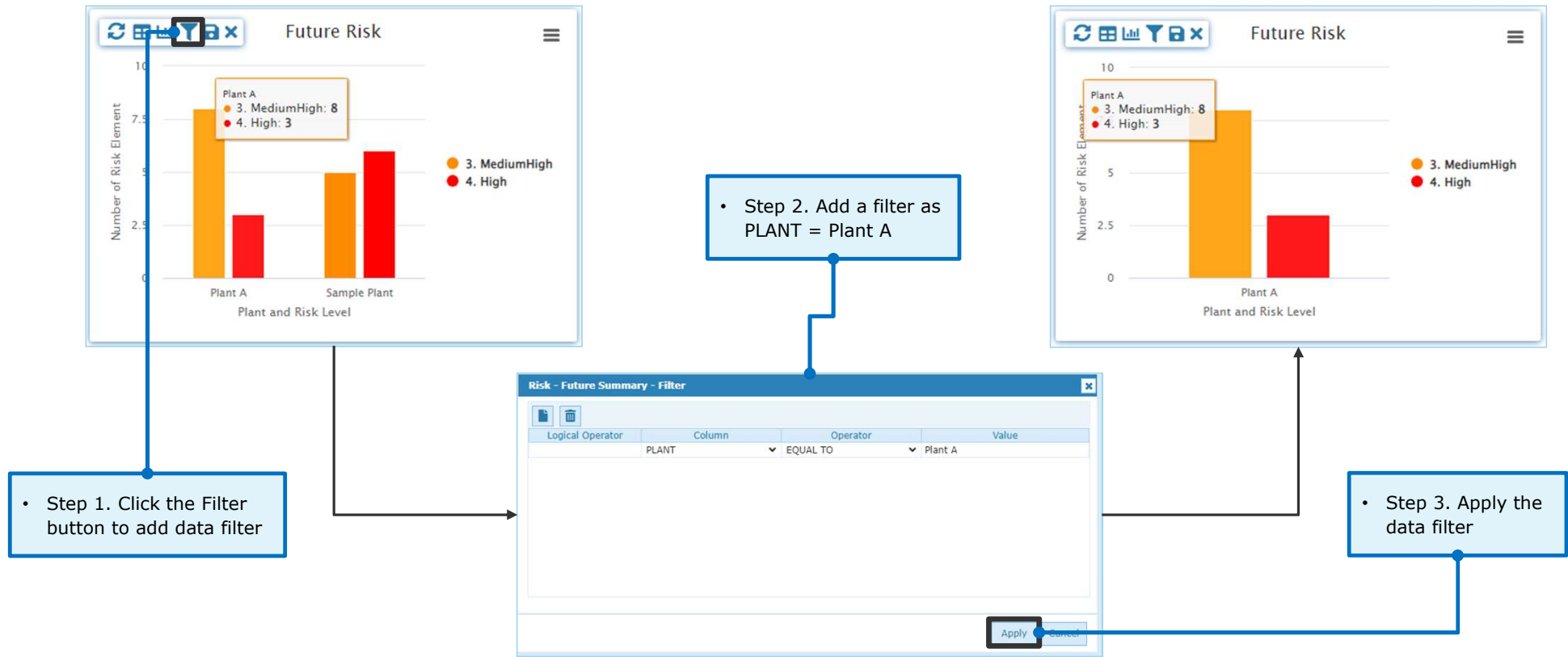RBA values in different damage mechanisms separated by plants

- Risk Benefit Analysis by Eqn. Type
RBA values in different damage mechanisms separated by equipment types

- Risk Benefit Analysis by Damage
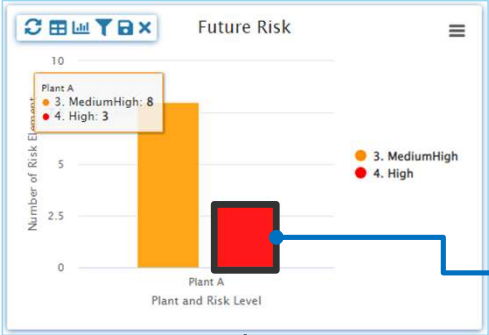RBA values in different production units separated by damage mechanisms

- RBA value:
For every dollar invested in RBI assessment, how much risk in dollars can be reduced

Set Filter on Widget

• Step 2. Add a filter as PLANT = Plant A

• Step 1. Click the Filter button to add data filter

• Step 3. Apply the data filter

Risk - Future Summary - Filter

Logical Operator	Column	Operator	Value
	PLANT	EQUAL TO	Plant A

Apply   Cancel

Drilldown to data list

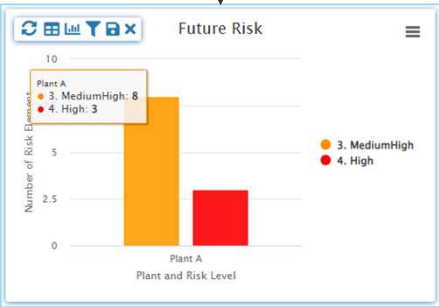- Double-click the data bar to drilldown to data list

PLANT	PRODUCTION_UNIT	PROCESS_UNIT	TAG	ELEMENT_ID	ELEMENT_KEY	ELEMENT_DESC	ELEMENT_TYPE	ACTIVITY_ID	ACTIVITY_DESC	POF_FACTOR_CURRENT	POF_FACTOR_FUTURE	POF_FACTOR_FUTUREWINSP
Plant A	Prod Unit 01	Unit X01	2-WW-13-0140-S-A2-1	26196840	2-WW-13-0140-S-A2-1-EL	2-WW-13-0140-S-A2-1-EL	Pipe Part	658471	Unit X01 RBI	2.585552718835098	1650.7560897197995	139.5588049993362
Plant A	Prod Unit 01	Unit X01	8-HM-13-0179-N-A2-1	26196846	8-HM-13-0179-N-A2-1-EL	8-HM-13-0179-N-A2-1-EL	Pipe Part	658471	Unit X01 RBI	5.70413819178045	1180.2838231351554	131.44757393212956
Plant A	Prod Unit 01	Unit X01	X-27	26196863	X-27 Tube Bundle	X-27 Tube Bundle	Shell Tube Heat Exchanger Part	658471	Unit X01 RBI	9.192106260617024	1405.0047413213997	147.94261112681488

Navigate to the detail screen and back to dashboard page

- Click the Back button to go back to dashboard page
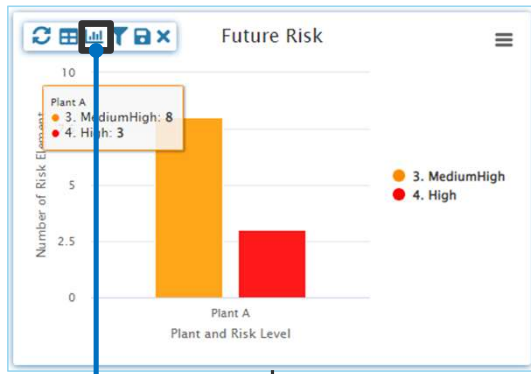
- Click the Navigate button to go to the detail screen

- Select the data row which you want to navigate to the detail screen

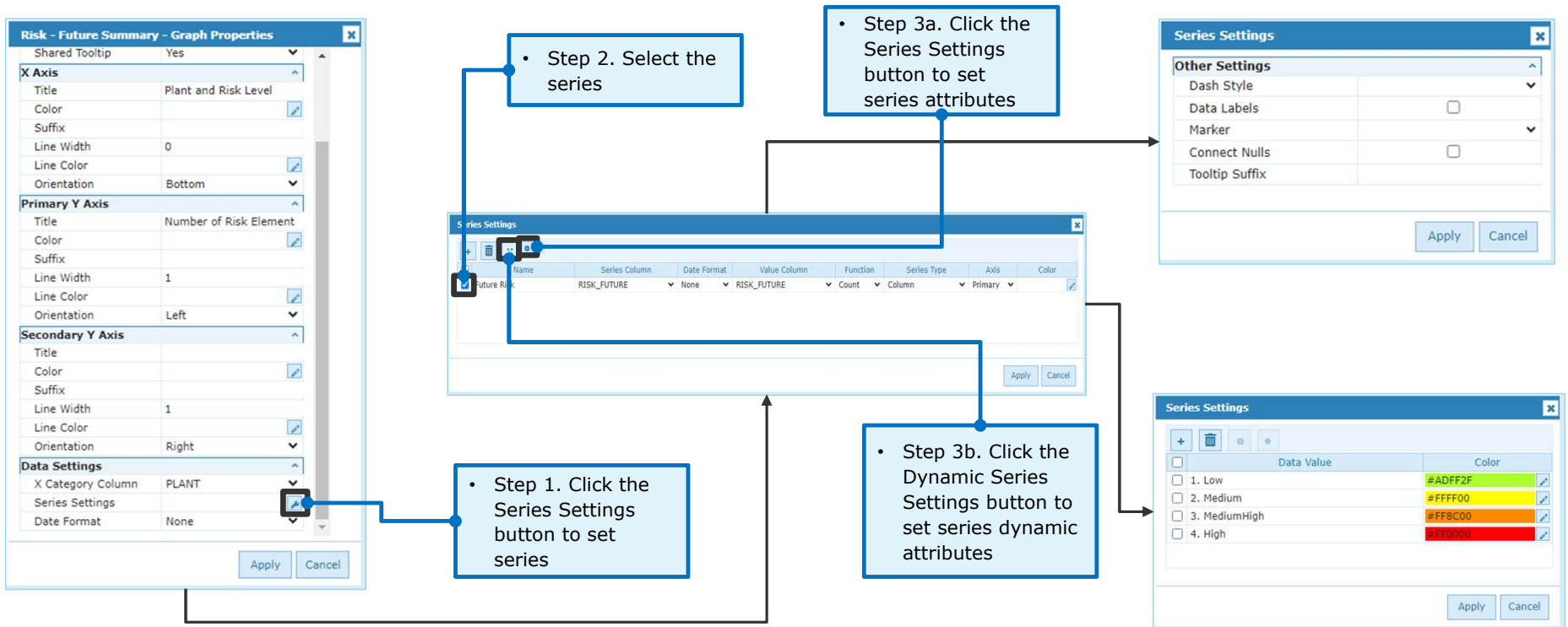# Change Widget Graph Attributes

- Click the Graph button to change widget graph attributes

- Change the graph title, subtitle, graph type, legend visibility, and other attributes

Data Series Settings

Risk - Future Summary - Graph Properties

Shared Tooltip	Yes
X Axis	
Title	Plant and Risk Level
Color	
Suffix	
Line Width	0
Line Color	
Orientation	Bottom
Primary Y Axis	
Title	Number of Risk Element
Color	
Suffix	
Line Width	1
Line Color	
Orientation	Left
Secondary Y Axis	
Title	
Color	
Suffix	
Line Width	1
Line Color	
Orientation	Right
Data Settings	
X Category Column	PLANT
Series Settings	
Date Format	None

Apply   Cancel

- Step 1. Click the Series Settings button to set series

- Step 2. Select the series

Series Settings

Name	Series Column	Date Format	Value Column	Function	Series Type	Axis	Color
Future Risk	RISK_FUTURE	None	RISK_FUTURE	Count	Column	Primary	

Apply   Cancel

- Step 3a. Click the Series Settings button to set series attributes

Series Settings

Other Settings

Dash Style	
Data Labels	☐
Marker	
Connect Nulls	☐
Tooltip Suffix	

Apply   Cancel

- Step 3b. Click the Dynamic Series Settings button to set series dynamic attributes

Series Settings

	Data Value	Color
☐	1. Low	#ADFF2F
☐	2. Medium	#FFFF00
☐	3. MediumHigh	#FF8C00
☐	4. High	#FF0000

Apply   Cancel

Page and Layout Management
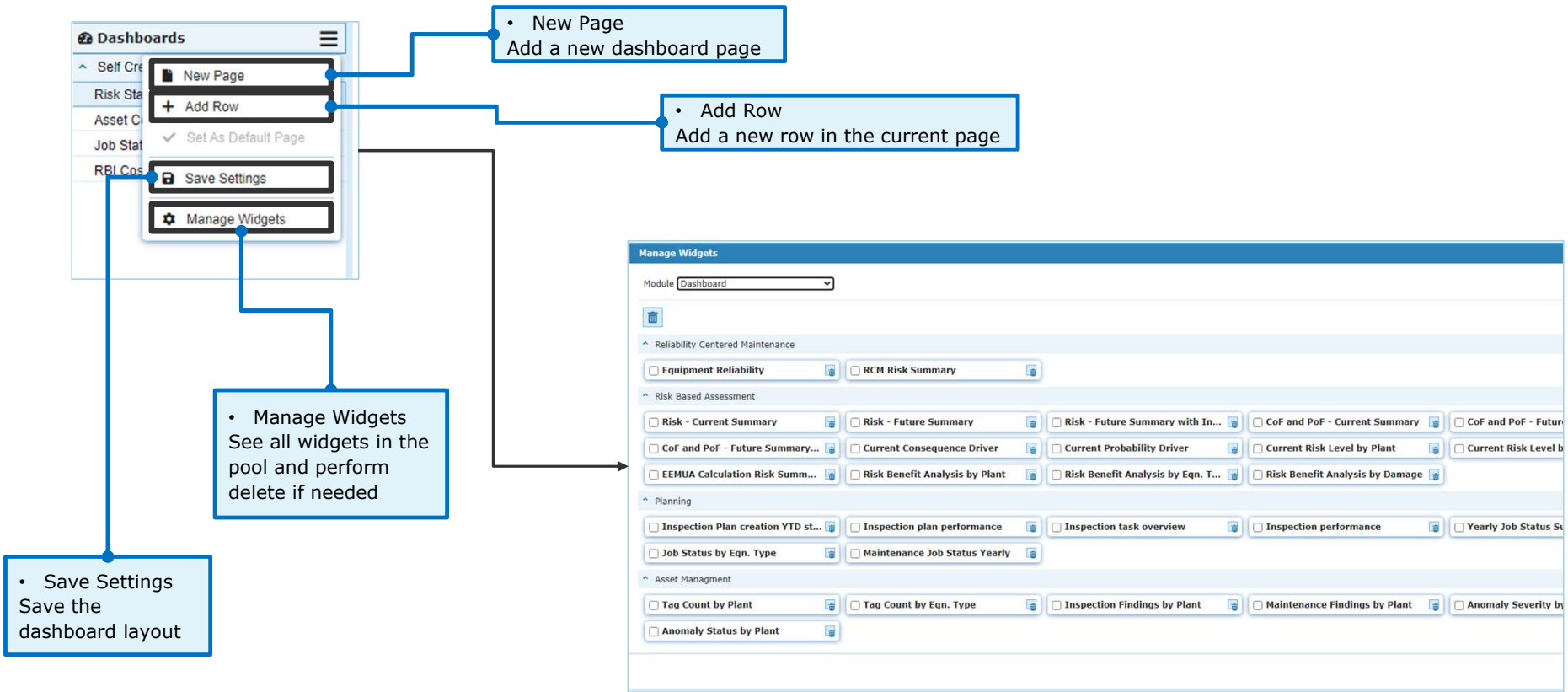
Dashboards ☰

- Self Cre...
  - New Page
  - Add Row
  - Set As Default Page
  - Save Settings
  - Manage Widgets
- Risk Sta...
- Asset C...
- Job Stat...
- RBI Cos...

- New Page
  Add a new dashboard page

- Add Row
  Add a new row in the current page

- Manage Widgets
  See all widgets in the pool and perform delete if needed

- Save Settings
  Save the dashboard layout

Manage Widgets

Module [Dashboard ▾]

🗑

^ Reliability Centered Maintenance
- ☐ Equipment Reliability
- ☐ RCM Risk Summary

^ Risk Based Assessment
- ☐ Risk - Current Summary
- ☐ Risk - Future Summary
- ☐ Risk - Future Summary with In...
- ☐ CoF and PoF - Current Summary
- ☐ CoF and PoF - Futur...
- ☐ CoF and PoF - Future Summary...
- ☐ Current Consequence Driver
- ☐ Current Probability Driver
- ☐ Current Risk Level by Plant
- ☐ Current Risk Level b...
- ☐ EEMUA Calculation Risk Summ...
- ☐ Risk Benefit Analysis by Plant
- ☐ Risk Benefit Analysis by Eqn. T...
- ☐ Risk Benefit Analysis by Damage

^ Planning
- ☐ Inspection Plan creation YTD st...
- ☐ Inspection plan performance
- ☐ Inspection task overview
- ☐ Inspection performance
- ☐ Yearly Job Status Su...
- ☐ Job Status by Eqn. Type
- ☐ Maintenance Job Status Yearly

^ Asset Managment
- ☐ Tag Count by Plant
- ☐ Tag Count by Eqn. Type
- ☐ Inspection Findings by Plant
- ☐ Maintenance Findings by Plant
- ☐ Anomaly Severity by...
- ☐ Anomaly Status by Plant

Drag and Drop Widgets

- Drag the widget name from the widget pool and drop it on the dashboard page to add the widget into the page

Remove Widget from Page
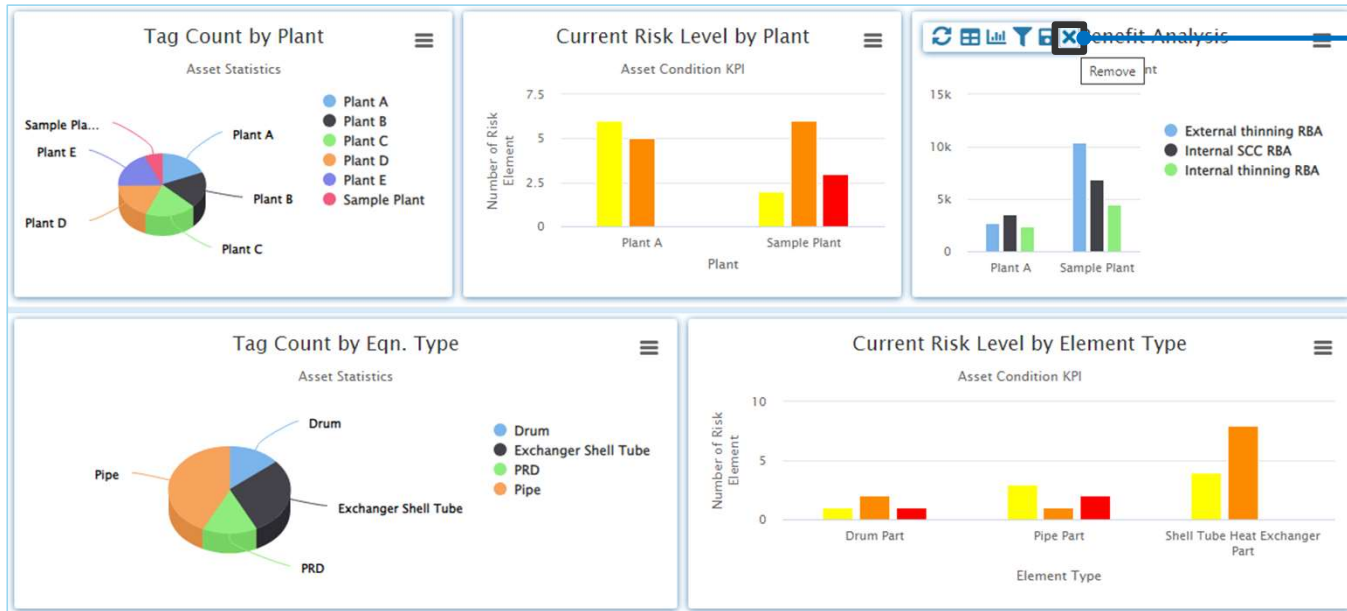
- Click the Remove button to remove a widget from the dashboard page

Dashboard Data Lists

- Dashboard Data Lists

- Export the data list into Excel spreadsheet

- A dashboard data list is the result of a custom query SQL

- For each column in the data list a color code column can be configured

Dashboard Data Configuration

- The full list of dashboard widget data lists can be found in the AIRMS Admin module

- Each data list has a source SQL, a list of column properties, and graphical settings to create a dashboard widget

- In the Column Properties list, each data column can be set as visible, a custom label, and if the result value can be filtered

Data Views, Materialized Views, and Power BI Dashboard
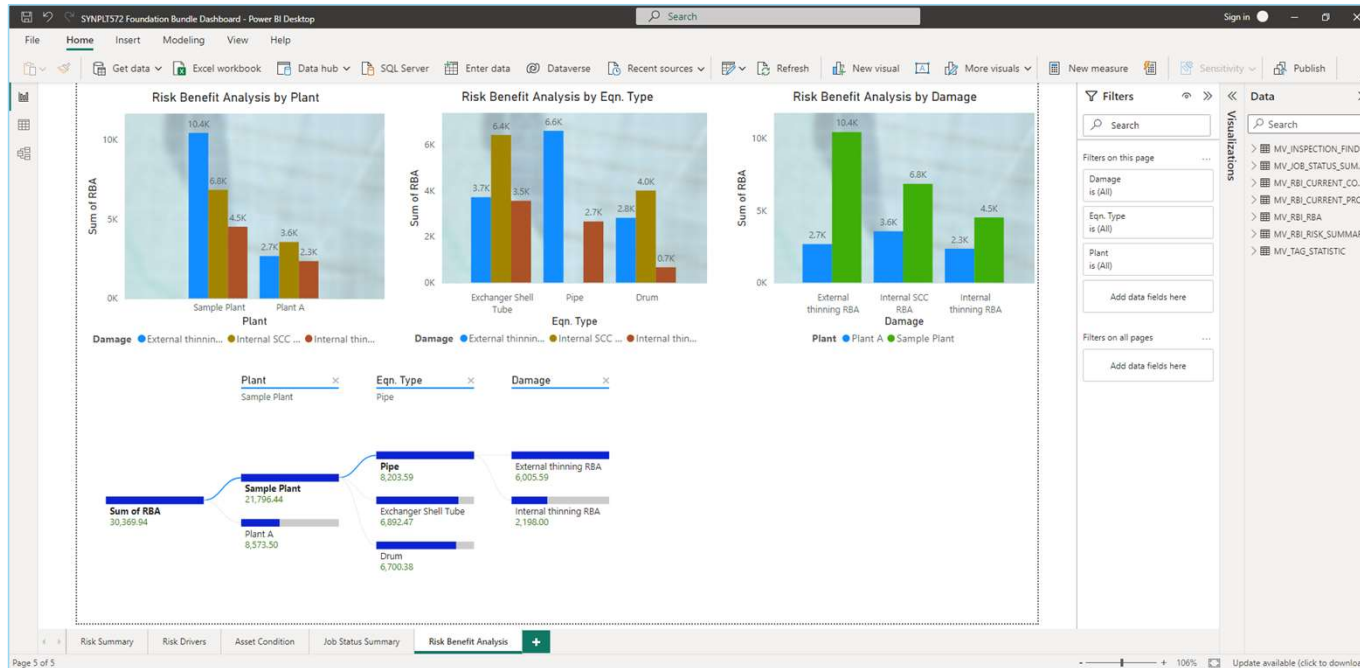
- Synergi Plant has a set of database views and materialized views, which can be used for external dashboard, for example, in Power BI

- The database views are for retrieving data in real time, and the materialized views are for retrieving the stored data which can be synchronized periodically with the live data

Synergi Plant Training

Tommy Tang

Tommy.Tang@dnv.com

+65-8699-5620, +886-983-007388

www.dnv.com

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