

Oracle
Construction Intelligence Cloud Analytics
Data Visualization Reference Guide

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Oracle Construction Intelligence Cloud Analytics Data Visualization Reference Guide

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Overview

Data visualizations can be crafted in CIC Analytics from the following data sources:

- ▶ P6 EPPM
- ▶ Unifier
- ▶ Oracle Primavera Cloud
- ▶ Unifier Essentials
- ▶ Oracle Aconex
- ▶ Using blended data

The dashboards / visualizations are broken up by data source and high level personas for each data source. The blended data includes dashboards that are pulling data from multiple sources.

The *Data Visualization Reference Guide* provides a sampling of the various types of data visualizations you can create from each of the data sources listed above.

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About Your Login Credentials

New customers receive an initial email from no-reply@oracle.com to activate their Oracle Cloud account. The link has an expiration date mentioned at the bottom of the email. Make sure to activate your account before the link expires.

You will receive a separate welcome email from no-reply@primavera.oraclecloud.com that includes the URL to access CIC Analytics.

All other email communications coming from your CIC Analytics environment will be sent from no-reply@primavera.oraclecloud.com.

Tips

- ▶ If you do not receive either email, check the spam or junk folder in your email account, or reach out to your customer success manager or application administrator.
- ▶ In case you miss the activation window to activate your CIC Analytics account, reach out to your customer success manager or application administrator.
- ▶ Add no-reply@oracle.com and no-reply@primavera.oraclecloud.com to your address book or list of approved contacts.

Reset Your Password

You can reset your password for CIC Analytics at any time.

To reset your password:

- 1) Navigate to the **Oracle Cloud Account Sign In** page.
- 2) Select the **Need help Signing in? Click here** link.
- 3) On the **Forgot your password** page, enter your username, and then select **Next**.
- 4) Review the on-screen message, and select **Submit**.
- 5) Select the **Password Reset** button in the email you receive.
- 6) On the **Reset Your Password** page, complete the **New Password** and **Confirm New Password** fields.

Note: The **Confirm New Password** field will not be active until your new password meets the specified criteria.

- 7) Select **Submit**.
- 8) Select **Click here** to continue to navigate back to the **Oracle Cloud Account Sign In** page, and log in with your new password.

Note: To allow time for system processing, it is recommended that you wait a few minutes before logging in with your new password.

Accessing the Dashboards

To access the out-of-the-box visualizations delivered with CIC Analytics:

- 1) Sign in to CIC Analytics.
- 2) In the left navigation pane, select **Catalog, Shared Folders, and CIC Analytics OOTB Samples**.
- 3) Select any of the delivered dashboards.

Note: These dashboards are refreshed with each release to include new or updated dashboards.

Leveraging the Sample Dashboards for your Organization

To customize the dashboards delivered with CIC Analytics, you will need to perform the following tasks:

- ▶ **Remapping Fields Used in Data Visualizations** (on page 7)
- ▶ **Remap Fields Used in Calculated Measures** (on page 7)

Note:

Remapping Fields Used in Data Visualizations

Prerequisite

To ensure you don't overwrite the sample dashboards delivered with CIC Analytics with your customizations:

- 1) Open the sample dashboard you plan to customize
- 2) Click **Save As** and store it in separate folder of your choice in the catalog.

Remapping Fields

To reprint or remap fields used in a data visualization:

- 1) Select a target visualization.
- 2) In the Data panel, select the field you will use to replace the current field in the selected visualization.
For example, replace **Project Cost 21** column in the pivot table with the **Non-Commitment Costs** field.
- 3) Drag and Drop the **Non-Commitment Costs** field on the **Project Cost 21**.
- 4) Save the workbook.

Remap Fields Used in Calculated Measures

Prerequisite

To ensure you don't overwrite the sample dashboards delivered with CIC Analytics with your customizations:

- 1) Open the sample dashboard you plan to customize
- 2) Click **Save As** and store it in separate folder of your choice in the catalog.

Remapping Calculated Measures

To remap fields used in a calculated measure:

- 1) In the **Data** panel, expand **My Calculations**, and then, select the calculated measure you want to update.
For example, select the **# Project Count** measure.
- 2) Right click **# Project Count** and then select **Edit Calculation**.
- 3) In the **Edit Calculation** dialog box, delete the current field, and then drag and drop the field you want to replace with.
For example, delete the **Project ID** field, and drag and drop the **Project Object ID** field to replace in the calculated measure.
- 4) Click **Save**.

Data Visualizations Using P6 EPPM Data

The following data visualizations have been created using P6 EPPM data for Executives, Project Managers, and Portfolio Managers:

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Cost Overview Dashboard

Description: The Cost Overview dashboard enables Executives to derive insights about which countries have the highest At Completion Total Cost, and track cost variance over time.

Number of Canvases: 1

Default Canvas: Canvas 1

Canvas/Dashboard Name: Cost Overview

Data Source(s): P6 EPPM

Subject Area: P6 - Activity

Datasets: Not applicable

Canvas

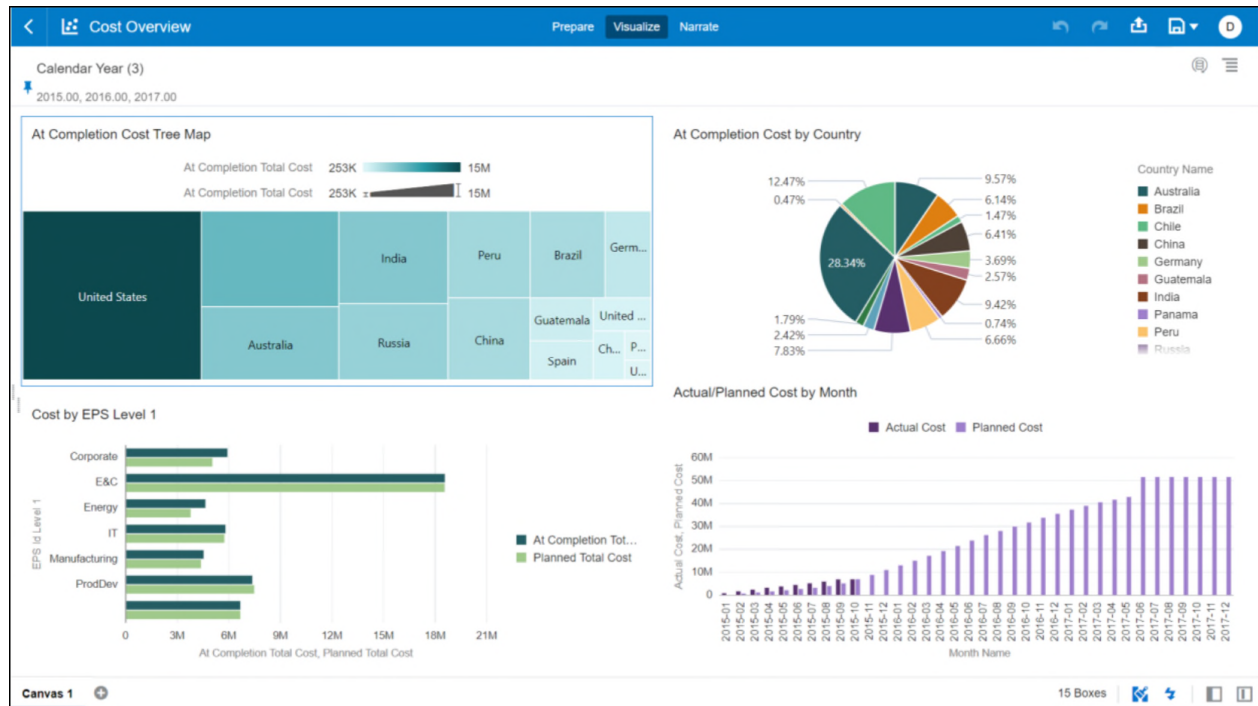


Figure 1: Cost Overview Default Canvas

Table 1: Cost Overview - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
Canvas 1	Country Name	P6 - Activity
Canvas 1	EPS ID Level 1	P6 - Activity
Canvas 1	Month Name	P6 - Activity
Canvas 1	Calendar Year	P6 - Activity

Table 2: Cost Overview - Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Canvas 1	At Completion Total Cost	Fact	P6 - Activity
Canvas 1	Planned Total Cost	Fact	P6 - Activity
Canvas 1	Actual Cost	Calculated from Fact	P6 - Activity
Canvas 1	Planned Cost	Calculated from Fact	P6 - Activity

Table 3: Cost Overview - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
Canvas 1	Dashboard	No	Calendar Year	P6 - Activity

Table 4: Cost Overview - Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Actual Cost	CASE WHEN Month Name < '2015-11' THEN RSUM(Actual Total Cost) ELSE NULL END	Derived From Fact	P6 - Activity
Planned Cost	RSUM(Planned Total Cost)	Derived From Fact	P6 - Activity

Earned Value and Risk Analysis Dashboard

Description: The Earned Value and Risks dashboard tracks costs and risks. Executives or PMs will be able to use this for getting information about EV, EAC for individual project managers across the portfolio or see how their organization performed on these parameters on a yearly or quarterly basis. Risk exposures are displayed by location and/or each project. This can help in devising better risk mitigating strategies.

Number of Canvases: 2

Default Canvas: Earned Value

Canvas/Dashboard Name: Earned Value and Risk Analytics

Data Source(s): P6 - EPPM

Subject Area: P6 - Activity

Datasets: Not applicable

Canvases

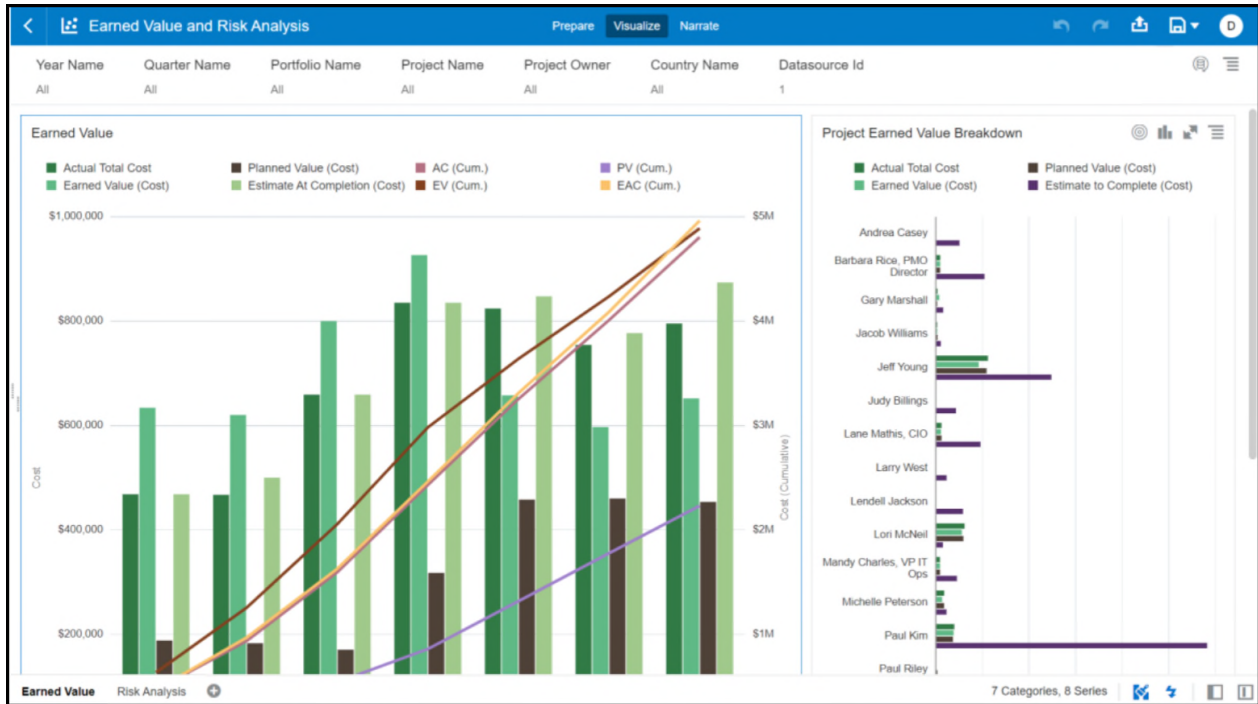


Figure 2: Earned Value

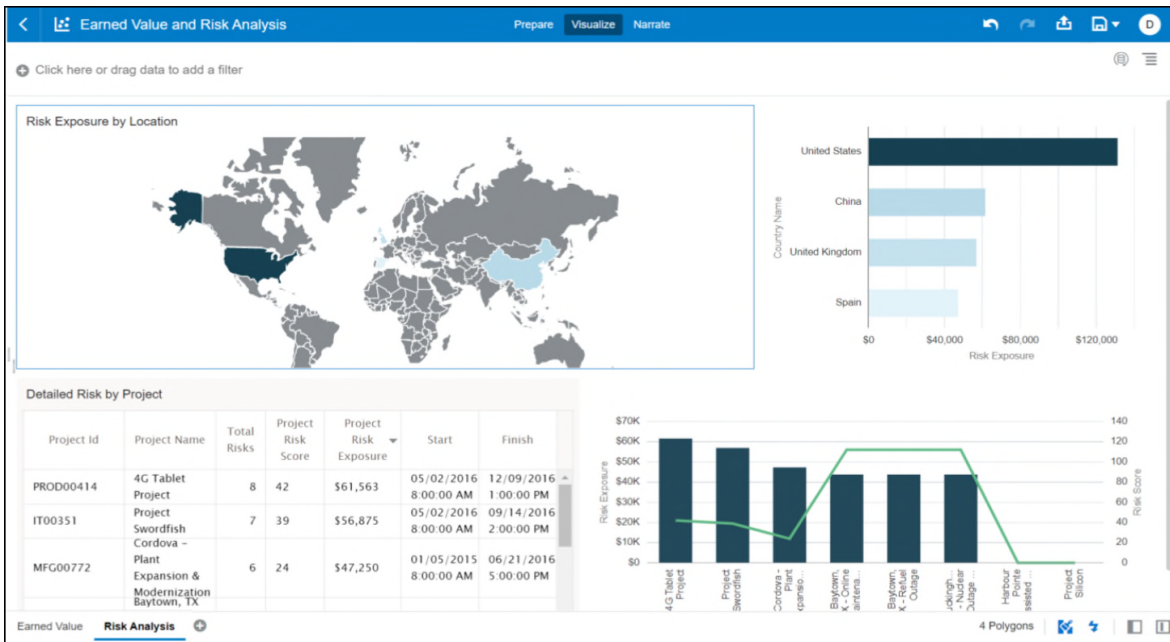


Figure 3: Risk Analytics

Table 5: Earned Value and Risk Analysis - Dimensions

Canvas	Dimension Name	Dimension / Attribute	Subject Area / Dataset
Earned Value	Calendar	Year Name	P6 - Activity
Earned Value	Calendar	Quarter Name	P6 - Activity
Earned Value	Portfolio	Portfolio Name	P6 - Activity
Earned Value	Project	Project Name	P6 - Activity
Earned Value	Project	Project Owner	P6 - Activity
Earned Value	Project	Country Name	P6 - Activity
Earned Value	Project	Datasource ID	P6 - Activity
Earned Value	Calendar	Month Name	P6 - Activity
Earned Value	Calendar	Calendar Date	P6 - Activity
Risk Analysis	Project	Country Name	P6 - Activity
Risk Analysis	Project	Project ID	P6 - Activity
Risk Analysis	Project	Project Name	P6 - Activity
Risk Analysis	Project	Project Risk Score	P6 - Activity
Risk Analysis	Project	Project Risk Exposure	P6 - Activity
Risk Analysis	Project	Start	P6 - Activity
Risk Analysis	Project	Finish	P6 - Activity

Table 6: Earned Value and Risk Analysis - Measures

Canvas	Measure	Measure Type	Subject Area / Dataset
Earned Value	Actual Total Cost	Fact	P6 - Activity
Earned Value	Earned Value (Cost)	Fact	P6 - Activity
Earned Value	Planned Value (Cost)	Fact	P6 - Activity
Earned Value	Estimate At Completion (Cost)	Fact	P6 - Activity
Earned Value	AC (Cum.)	Calculated from Fact	P6 - Activity
Earned Value	PV (Cum.)	Calculated from Fact	P6 - Activity
Earned Value	EAC (Cum.)	Calculated from Fact	P6 - Activity
Earned Value	EV (Cum.)	Calculated from Fact	P6 - Activity
Earned Value	Estimate to Complete	Fact	P6 - Activity
Risk Analysis	Risk Exposure	Calculated from Fact	P6 - Activity

Canvas	Measure	Measure Type	Subject Area / Dataset
Risk Analysis	Total Risks	Calculated from Fact	P6 - Activity
Risk Analysis	Risk Score	Calculated from Fact	P6 - Activity

Table 7: Earned Value and Risk Analysis - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Earned Value	Dashboard	No	Year Name	P6 - Activity
Earned Value	Dashboard	No	Quarter Name	P6 - Activity
Earned Value	Dashboard	No	Portfolio Name	P6 - Activity
Earned Value	Dashboard	No	Project Name	P6 - Activity
Earned Value	Dashboard	No	Project Owner	P6 - Activity
Earned Value	Dashboard	No	Country Name	P6 - Activity
Earned Value	Dashboard	No	Datasource ID	P6 - Activity
Earned Value	Visualization	No	Calendar Date	P6 - Activity
Risk Analysis	Visualization	No	Risk Exposure	P6 - Activity
Risk Analysis	Visualization	No	Total Risks	P6 - Activity

Table 8: Earned Value and Risk Analysis - Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Risk Exposure	SUM(Project Risk Exposure)	Derived From Fact	P6 - Activity
Risk Score	SUM(Project Risk Score)	Derived From Fact	P6 - Activity
AC (Cum.)	RSUM(Actual Total Cost)	Derived From Fact	P6 - Activity
EV (Cum.)	RSUM(Earned Value (Cost))	Derived From Fact	P6 - Activity
PV (Cum.)	RSUM(Planned Value (Cost))	Derived From Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
EAC (Cum.)	RSUM(Estimate At Completion (Cost))	Derived From Fact	P6 - Activity
Total Risks	COUNT(DISTINCT RiskID by Project ID)	Derived From Fact	P6 - Activity

Overview - Portfolio, Risk, EV

Description: With a single view, Portfolio Managers and Executives can view their portfolio's cost performance and clearly identify poor performing portfolios and troubled projects. This visibility allows for collaboration and communication with Project managers to pre-emptively identify and resolve possible issues.

Number of Canvases: 4

Default Canvas: Overview

Canvas/Dashboard Name: Overview-Portfolio, Risk, EV

Data Source(s): P6 - EPPM

Subject Areas: P6 – Activity, P6 – Project History, P6 – Resource Utilization, P6 – Burn Down

Datasets: Not applicable

Canvases

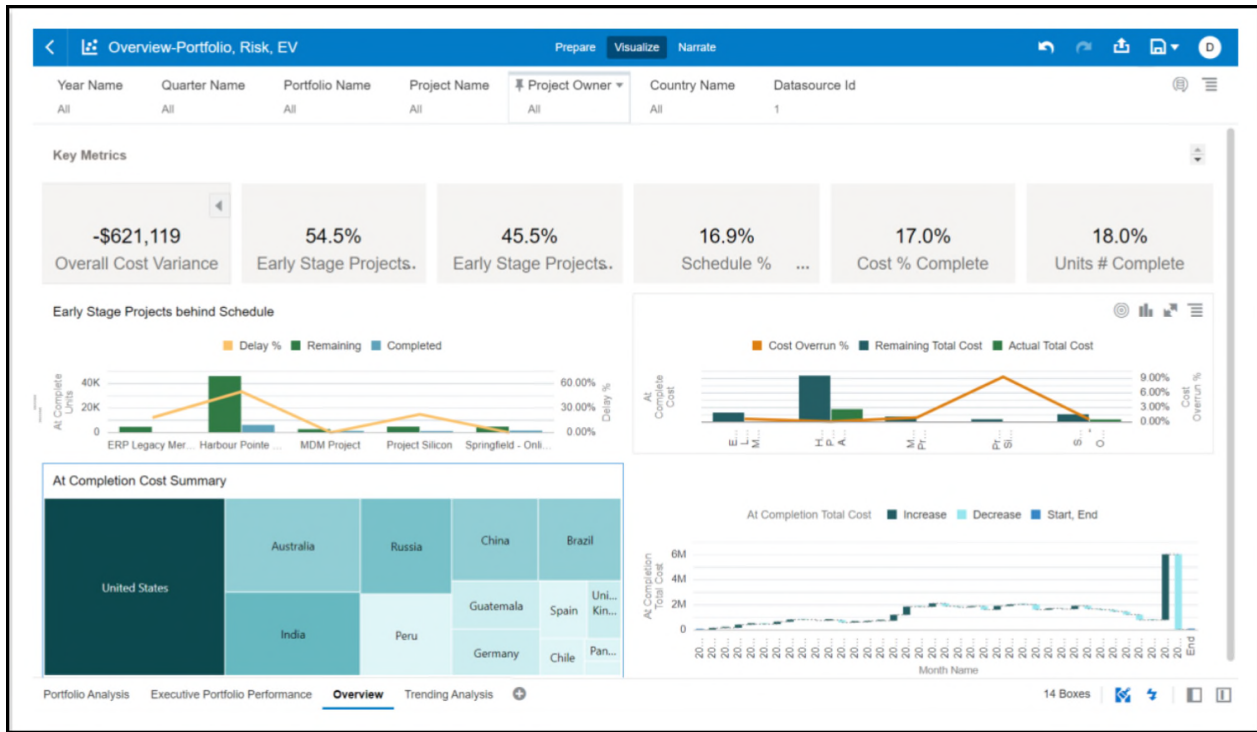


Figure 4: Overview Portfolio, Risk, EV Default Canvas

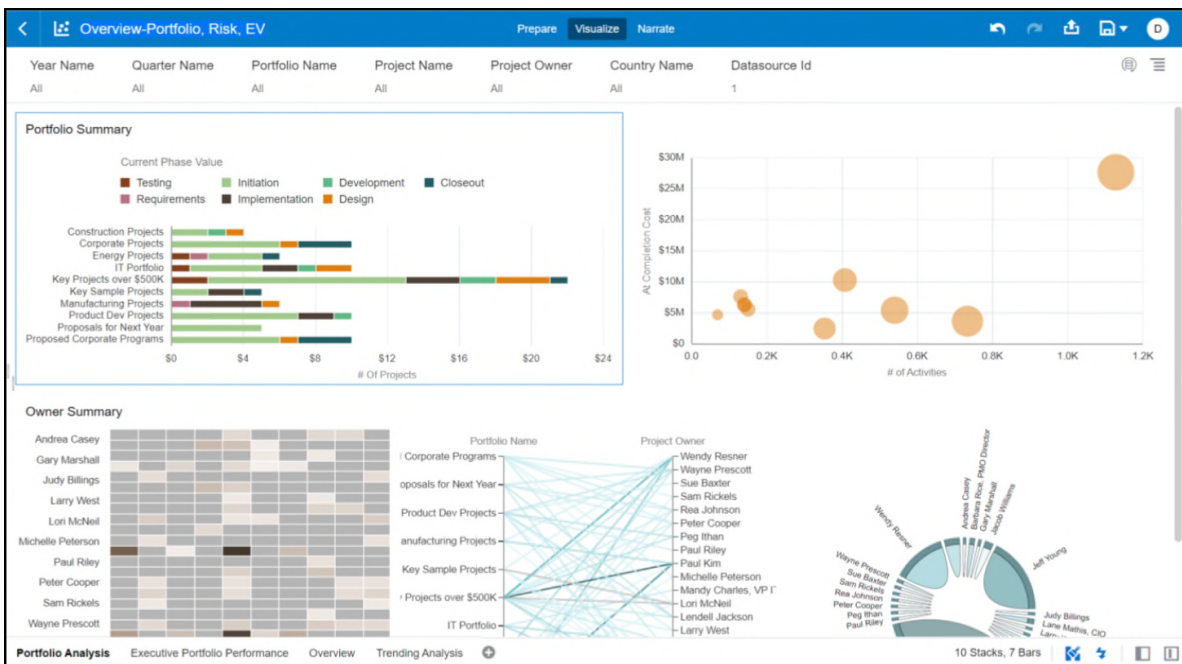


Figure 5: Portfolio Analysis

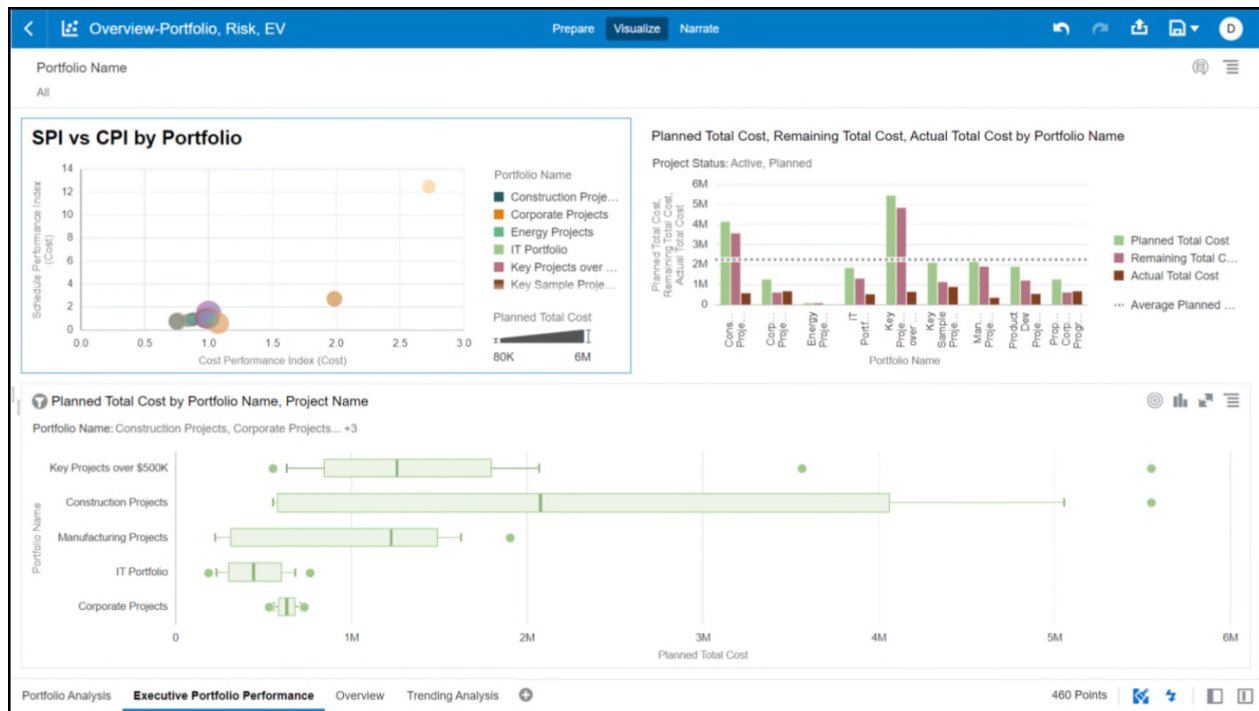


Figure 6: Executive Portfolio Performance

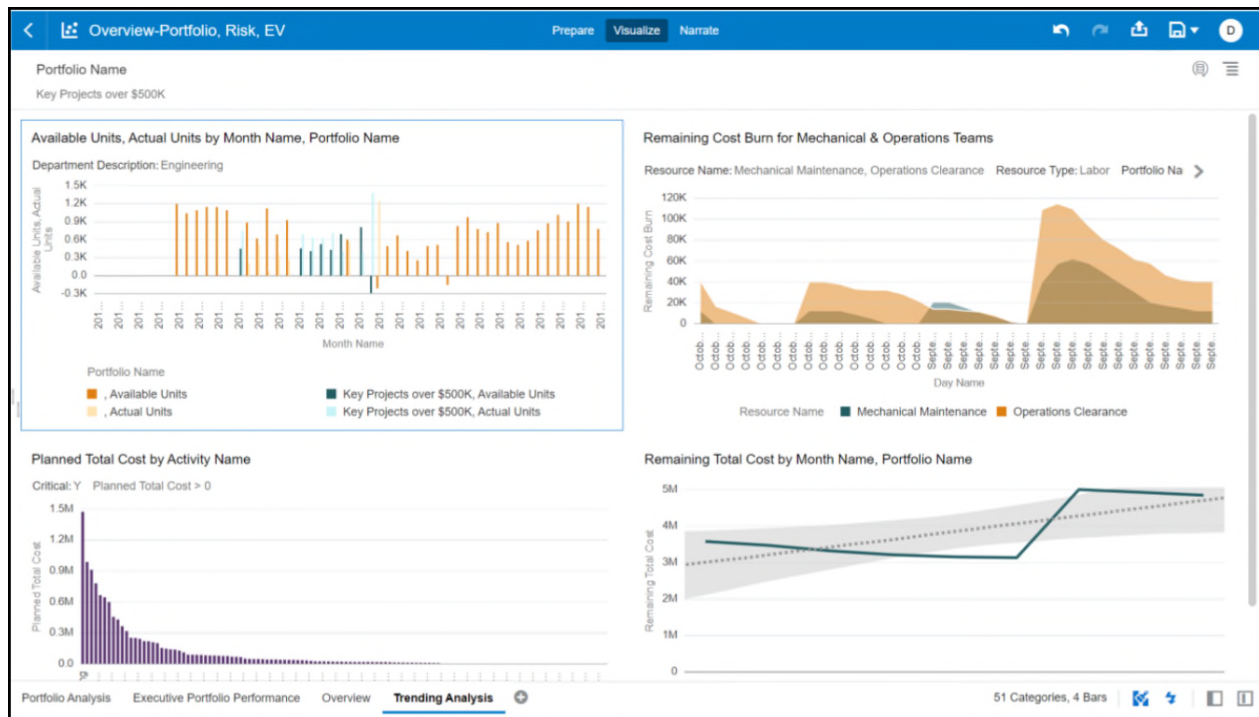


Figure 7: Trending Analysis

Table 9: Overview – Portfolio, Risk, EV - Dimensions

Canvas	Dimension Name	Dimension / Attribute	Subject Area / Dataset
Overview	Calendar	Year Name	P6 - Activity
Overview	Calendar	Quarter Name	P6 - Activity
Overview	Portfolio	Portfolio Name	P6 - Activity
Overview	Project	Project Name	P6 - Activity
Overview	Project	Project Owner	P6 - Activity
Overview	Project	Country Name	P6 - Activity
Overview	Project	Datasource ID	P6 - Activity
Overview	Project	Country Name	P6 - Activity
Overview	Calendar	Month Name	P6 - Activity
Portfolio Analysis	Project	Portfolio Name	P6 - Activity
Portfolio Analysis	Project	Current Phase Value	P6 - Activity
Executive Portfolio Performance	Portfolio	Portfolio Name	P6 – Project History
Executive Portfolio Performance	Project	Project Status	P6 - Activity
Executive Portfolio Performance	Project	Project Name	P6 - Activity
Executive Portfolio Performance	Project	Project Name	P6 – Project History
Trending Analysis	Calendar	Month Name	P6 - Project History
Trending Analysis	Project	Portfolio Name	P6 - Project History
Trending Analysis	Resource	Department Description	P6 – Resource Utilization
Trending Analysis	Resource Assignment	Resource Name	P6 – Burn Down
Trending Analysis	Calendar	Day Name	P6 – Burn Down
Trending Analysis	Resource	Resource Type	P6 – Burn Down
Trending Analysis	Activity	Activity Name	P6 - Activity
Trending Analysis	Activity	Critical	P6 - Activity

Table 10: Overview – Portfolio, Risk, EV - Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Overview	Cost Variance	Fact	P6 - Activity
Overview	Performance % Complete	Fact	P6 - Activity
Overview	Pct of Projects Over Budget	Calculated from Fact	P6 - Activity
Overview	Pct of Projects Behind Schedule	Calculated from Fact	P6 - Activity
Overview	Schedule Pct Complete	Calculated from Fact	P6 - Activity
Overview	Cost Pct Complete	Calculated from Fact	P6 - Activity
Overview	Units Pct Complete	Calculated from Fact	P6 - Activity
Overview	Delay %	Calculated from Fact	P6 - Activity
Overview	Remaining	Calculated from Fact	P6 - Activity
Overview	Completed	Calculated from Fact	P6 - Activity
Overview	Cost Overrun %	Calculated from Fact	P6 – Activity
Overview, Portfolio Analysis, Executive Portfolio Performance, Trending Analysis	Remaining Total Cost	Fact	P6 – Activity
Overview, Executive Portfolio Performance	Actual Total Cost	Fact	P6 – Activity
Overview, Portfolio Analysis	At Completion Total Cost	Fact	P6 – Activity
Overview, Portfolio Analysis	# Of Projects	Fact	P6 - Activity
Portfolio Analysis	# Of Activities	Fact	P6 - Activity
Executive Portfolio Performance	Schedule Performance Index	Fact	P6 - Activity
Executive Portfolio	Cost Performance	Fact	P6 - Activity

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Performance	Index		
Executive Portfolio Performance, Trending Analysis	Planned Total Cost	Fact	P6 - Activity
Trending Analysis	Available Units	Fact	P6 – Resource Utilization
Trending Analysis	Actual Units		
Trending Analysis	Limit		
Trending Analysis	Remaining Cost Burn	Fact	P6 – Burn Down

Table 11: Overview – Portfolio, Risk, EV - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Overview, Portfolio Analysis	Dashboard	No	Year Name	P6 - Activity
Overview, Portfolio Analysis	Dashboard	No	Quarter Name	P6 - Activity
Overview, Portfolio Analysis	Dashboard	No	Portfolio Name	P6 - Activity
Overview, Portfolio Analysis	Dashboard	No	Project Name	P6 - Activity
Overview, Portfolio Analysis	Dashboard	No	Project Owner	P6 - Activity
Overview, Portfolio Analysis	Dashboard	No	Country Name	P6 - Activity
Overview, Portfolio Analysis	Dashboard	No	Datasource ID	P6 - Activity
Executive Portfolio Performance, Trending Analysis	Dashboard	No	Portfolio Name	P6 – Project History
Overview	Visualization	No	Performance % Complete	P6 - Activity
Overview	Visualization	No	Delay %	P6 - Activity

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
	on			
Overview	Visualization	No	Cost Overrun %	P6 - Activity
Overview	Visualization	No	Country Name	P6 - Activity
Overview	Visualization	No	At Completion Total Cost	P6 - Activity
Executive Portfolio Performance	Visualization	No	Project Status	P6 - Activity
Executive Portfolio Performance	Visualization	No	Portfolio Name	P6 - Project History
Trending Analysis	Visualization	No	Department Description	P6 – Resource Utilization
Trending Analysis	Visualization	No	Resource Name	P6 - Burndown
Trending Analysis	Visualization	No	Resource Type	P6 - Burndown
Trending Analysis	Visualization	No	Portfolio Name	P6 - Project History
Trending Analysis	Visualization	No	Critical	P6 - Activity
Trending Analysis	Visualization	Yes	"Primavera - Activity"."Costs"."Planned Total Cost">0	P6 - Activity

Table 12: Overview – Portfolio, Risk, EV - Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Units Pct Complete	"Primavera - Activity"."Percent Complete"."Units % Complete" / 100.0	Derived From Fact	P6 - Activity
Cost Pct	"Primavera - Activity"."Percent	Derived	P6 – Activity

Calculated Member	Expression	Source	Subject Area / Dataset
Complete	Complete"."Cost % Complete" / 100.0	From Fact	
Schedule Pct Complete	"Primavera - Activity"."Percent Complete"."Schedule % Complete" / 100.0	Derived From Fact	P6 – Activity
Pct of Projects Behind Schedule	SUM(CASE WHEN ATTRIBUTE("Primavera - Activity"."Earned Value - (Units)"."Schedule Performance Index (Units)" by "Primavera - Activity"."General - (Project)"."Project ID") < 0.95 THEN 1 ELSE 0 END by "Primavera - Activity"."General - (Project)"."Datasource Id") / "Primavera - Activity"."Metrics"."# of Projects"	Derived From Fact	P6 – Activity
Pct of Projects Over Budget	FILTER("Primavera - Activity"."Metrics"."# of Projects" USING "Primavera - Activity"."Budget - (Project)"."Current Variance" > 0.0) / "Primavera - Activity"."Metrics"."# of Projects"	Derived From Fact	P6 – Activity
Delay %	"Primavera - Activity"."Earned Value - (Units)"."Schedule Variance Index (Units)" * -1	Derived From Fact	P6 – Activity

Calculated Member	Expression	Source	Subject Area / Dataset
Remaining	"Primavera - Activity"."Units"."Remaining Labor Units"	Derived From Fact	P6 – Activity
Completed	"Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)"	Derived From Fact	P6 - Activity
Cost Overrun %	("Primavera - Activity"."Costs"."At Completion Total Cost" - "Primavera - Activity"."Costs"."Baseline Project Total Cost") / "Primavera - Activity"."Costs"."Baseline Project Total Cost"	Derived From Fact	P6 - Activity

Key Milestones Tracking Dashboard

Description: This project gives an Executive / PMO insights to track key milestones for projects/portfolios and identify variance over time. It can be used to track milestone activities based on the variance status that is ahead, on, or behind schedule. These activities can also be traced based on their activity status.

Number of Canvases: 2

Default Canvas: Key Milestones

Canvas/Dashboard Name: Key Milestones Tracking

Data Source(s): P6 EPPM

Subject Areas: P6 – Activity

Datasets: Not applicable

Canvases

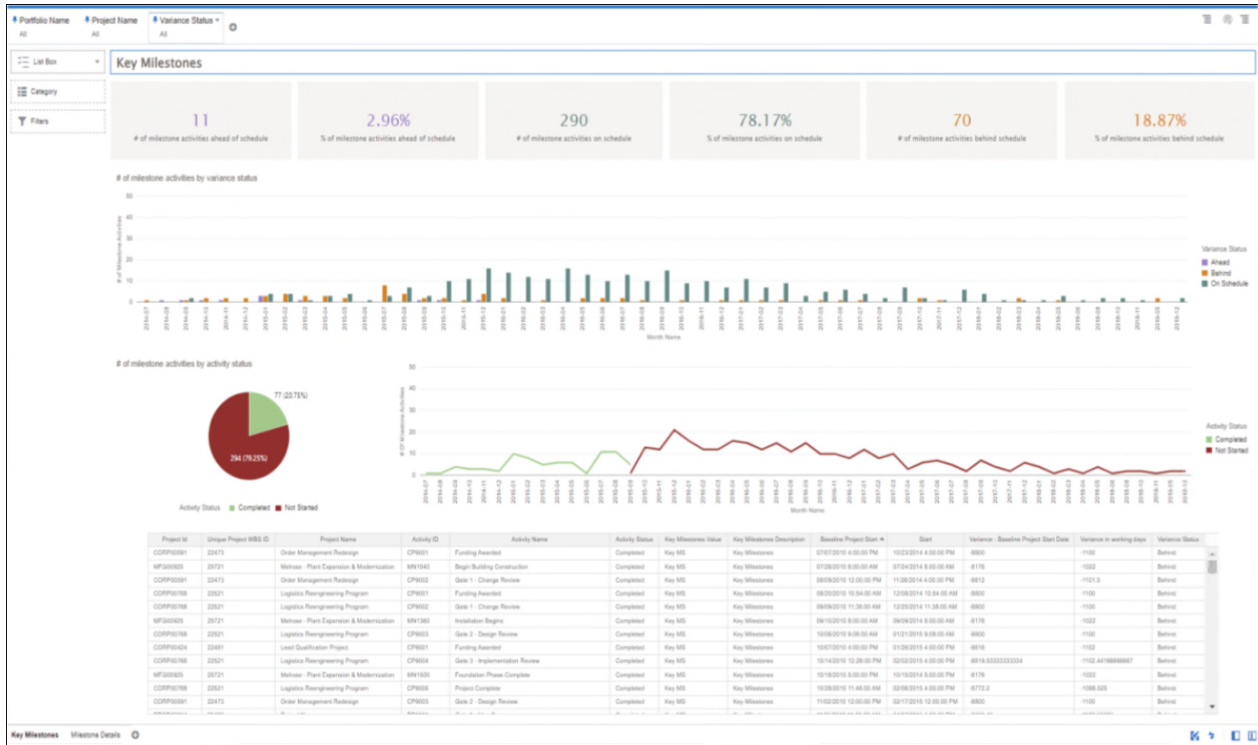


Figure 8: Key Milestones

Project ID	Unique Project WBS ID	Project Name	Activity ID	Activity Name	Activity Status	Key Milestones Value	Key Milestones Description	Month Name	Baseline Project Start	Start	Variance	Baseline Project Start Date	Variance in working days	Variance Status
CORP0081	22473	Order Management Redesign	CP9001	Funding Awarded	Completed	Key MS	Key Milestones	2014-10	07/07/2010 4:00:00 PM	10/23/2014 4:00:00 PM	8800		-1100	Behind
MFQ0005	25721	Melrose - Plant Expansion & Modernization	MN1040	Begin Building Construction	Completed	Key MS	Key Milestones	2014-07	07/26/2010 8:00:00 AM	07/24/2014 8:00:00 AM	8176		-1032	Behind
CORP0081	22473	Order Management Redesign	CP9002	Gate 1 - Change Review	Completed	Key MS	Key Milestones	2014-11	08/09/2010 12:00:00 PM	11/26/2014 4:00:00 PM	6812		-1101.5	Behind
CORP00768	22521	Logistics Reengineering Program	CP9001	Funding Awarded	Completed	Key MS	Key Milestones	2014-12	08/20/2010 10:54:00 AM	12/08/2014 10:54:00 AM	8800		-1100	Behind
CORP00768	22521	Logistics Reengineering Program	CP9002	Gate 1 - Change Review	Completed	Key MS	Key Milestones	2014-12	08/09/2010 11:38:00 AM	12/25/2014 11:38:00 AM	8800		-1100	Behind
MFQ0005	25721	Melrose - Plant Expansion & Modernization	MN1060	Installation Begins	Completed	Key MS	Key Milestones	2014-08	08/10/2010 8:00:00 AM	08/09/2014 8:00:00 AM	6176		-1022	Behind
CORP00768	22521	Logistics Reengineering Program	CP9003	Gate 2 - Design Review	Completed	Key MS	Key Milestones	2015-01	10/08/2010 9:08:00 AM	01/01/2015 9:08:00 AM	8800		-1100	Behind
CORP00424	22481	Lead Qualification Project	CP9001	Funding Awarded	Completed	Key MS	Key Milestones	2015-01	10/07/2010 4:00:00 PM	01/28/2015 4:00:00 PM	6816		-1102	Behind
CORP00768	22521	Logistics Reengineering Program	CP9004	Gate 3 - Implementation Review	Completed	Key MS	Key Milestones	2015-02	10/14/2010 12:28:00 PM	02/02/2015 4:00:00 PM	8818.533333333334		-1102.441888888889	Behind
MFQ0005	25721	Melrose - Plant Expansion & Modernization	MN1000	Foundation Phase Complete	Completed	Key MS	Key Milestones	2014-10	10/18/2010 8:00:00 PM	10/15/2014 8:00:00 PM	6176		-1022	Behind
CORP00768	22521	Logistics Reengineering Program	CP9005	Project Complete	Completed	Key MS	Key Milestones	2015-02	10/28/2010 11:48:00 PM	02/06/2015 4:00:00 PM	8772.2		-1086.525	Behind
CORP0081	22473	Order Management Redesign	CP9003	Gate 2 - Design Review	Completed	Key MS	Key Milestones	2015-02	11/02/2010 12:00:00 PM	02/17/2015 12:00:00 PM	8800		-1100	Behind
PRQ00914	22490	Project Name	PO9001	Gate 1 - Idea Screen	Completed	Key MS	Key Milestones	2015-04	11/05/2010 11:33:00 AM	04/07/2015 4:00:00 PM	9060.45		-1122.89025	Behind
CORP00424	22481	Lead Qualification Project	CP9002	Gate 1 - Change Review	Completed	Key MS	Key Milestones	2015-02	11/09/2010 12:00:00 PM	02/24/2015 12:00:00 PM	8800		-1100	Behind
MFQ0005	25721	Melrose - Plant Expansion & Modernization	MN1040	Begin Structural Phase	Completed	Key MS	Key Milestones	2014-11	11/16/2010 8:00:00 AM	11/13/2014 8:00:00 AM	6176		-1022	Behind
CORP0081	22473	Order Management Redesign	CP9004	Gate 3 - Implementation Review	Completed	Key MS	Key Milestones	2015-03	12/16/2010 12:00:00 PM	03/01/2015 4:00:00 PM	8804		-1100.5	Behind
CORP0081	22473	Order Management Redesign	CP9005	Project Complete	Completed	Key MS	Key Milestones	2015-04	01/13/2011 12:00:00 PM	04/27/2015 4:00:00 PM	8904		-1100.5	Behind
CORP00424	22481	Lead Qualification Project	CP9003	Gate 2 - Design Review	Completed	Key MS	Key Milestones	2015-06	02/03/2011 12:00:00 PM	06/18/2015 12:00:00 PM	8800		-1100	Behind
IT00763	24672	ERP Legacy Merge	IT9001	Project Start Milestone	Completed	Key MS	Key Milestones	2015-03	03/14/2011 4:00:00 PM	03/14/2015 4:00:00 PM	5216		-1027	Behind
CORP00424	22481	Lead Qualification Project	CP9004	Gate 3 - Implementation Review	Completed	Key MS	Key Milestones	2015-07	02/18/2011 12:00:00 PM	07/01/2015 4:00:00 PM	6812		-1101.5	Behind
CORP00424	22481	Lead Qualification Project	CP9005	Project Complete	Completed	Key MS	Key Milestones	2015-07	04/18/2011 12:00:00 PM	07/27/2015 4:00:00 PM	6788		-1088.5	Behind
EC00610	27324	Harbour Pointe Assisted Living Center	EC1010	Building Pod Delivered by Owner	Completed	Key MS	Key Milestones	2014-08	08/01/2014 8:00:00 AM	08/01/2014 8:00:00 AM	0		0	On Schedule
EC00610	27324	Harbour Pointe Assisted Living Center	EC1020	Start Garage	Completed	Key MS	Key Milestones	2014-08	08/01/2014 8:00:00 AM	08/01/2014 8:00:00 AM	0		0	On Schedule
MFQ00037	25676	Acacia - Automated System	MN1000	Installation Begins	Completed	Key MS	Key Milestones	2014-08	11/12/2014 8:00:00 AM	08/13/2014 8:00:00 AM	528		66	Ahead
MFQ00005	25721	Melrose - Plant Expansion & Modernization	MN1050	Rough-In Phase Begins	Completed	Key MS	Key Milestones	2015-01	01/07/2015 8:00:00 AM	01/07/2015 8:00:00 AM	0		0	On Schedule
MFQ00859	22364	Overfield - Automated System	MN1000	Installation Begins	Completed	Key MS	Key Milestones	2015-01	01/07/2015 1:00:00 PM	01/07/2015 1:00:00 PM	0		0	On Schedule
MFQ00005	25721	Melrose - Plant Expansion & Modernization	MN1080	Structure Complete	Completed	Key MS	Key Milestones	2015-01	01/09/2015 5:00:00 PM	01/09/2015 5:00:00 PM	0		0	On Schedule
IT00721	24582	Employee Onboarding Portal	IT9001	Project Start Milestone	Completed	Key MS	Key Milestones	2015-01	01/20/2015 4:00:00 PM	01/20/2015 4:00:00 PM	0		0	On Schedule
MFQ00072	24542	Carlisle - Plant Expansion &	MN1040	Begin Building Construction	Completed	Key MS	Key Milestones	2015-01	01/28/2015 8:00:00 AM	01/28/2015 1:00:00 PM	-4		-0.5	Behind

Figure 9: Milestone Details

Table 13: Key Milestones Tracking- Dimensions

Canvas	Dimension Name	Dimension / Attribute	Subject Area / Dataset
Key Milestones	Calendar	Month Name	P6 - Activity
Key Milestones	Activity	Activity Status	P6 - Activity
Key Milestones	Project	Project Id	P6 - Activity
Key Milestones	Project	Unique Project WBS ID	P6 - Activity
Key Milestones	Project	Project Name	P6 - Activity
Key Milestones	Activity	Activity ID	P6 - Activity
Key Milestones	Activity	Activity Name	P6 - Activity
Key Milestones	Activity	Key Milestones Value	P6 - Activity

Canvas	Dimension Name	Dimension / Attribute	Subject Area / Dataset
Key Milestones	Activity	Key Milestones Description	P6 - Activity
Key Milestones	Activity	Baseline Project Start	P6 - Activity
Key Milestones	Activity	Start	P6 - Activity
Key Milestones	Activity	Variance Baseline Project Start Date	P6 - Activity

Table 14: Key Milestones Tracking- Custom Dimensions

Dimension	Expression	Source	Subject Area / Dataset
Variance in working days	"Primavera - Activity"."Durations - (Activity)". "Variance - Baseline Project Start Date"/8	Derived from Dimension	P6 - Activity
Variance Status	CASE WHEN ("Primavera - Activity"."Durations - (Activity)". "Variance - Baseline Project Start Date")/8 > 0 THEN 'Ahead' WHEN ("Primavera - Activity"."Durations - (Activity)". "Variance - Baseline Project Start Date")/8 < 0 THEN 'Behind' WHEN ("Primavera - Activity"."Durations - (Activity)". "Variance - Baseline Project Start Date")/8 = 0 THEN 'On Schedule' ELSE '' END	Derived from Dimension	P6 - Activity

Table 15: Key Milestones Tracking - Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Key Milestones	# of Activities	Fact	P6 - Activity

Table 16: Key Milestones Tracking - Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
% of activities behind schedule	(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING ("Primavera - Activity"."Durations - (Activity)". "Variance - Baseline Project Start Date")/8 < 0))/"Primavera - Activity"."Metrics"."# of Activities"	Derived From Fact	P6 - Activity
% of activities on schedule	(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING ("Primavera - Activity"."Durations - (Activity)". "Variance - Baseline Project Start Date")/8 = 0))/"Primavera - Activity"."Metrics"."# of Activities"	Derived From Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
% of activities ahead of schedule	(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING ("Primavera - Activity"."Durations - (Activity)". "Variance - Baseline Project Start Date")/8 > 0))/"Primavera - Activity"."Metrics"."# of Activities"	Derived From Fact	P6 - Activity

Table 17: Key Milestones Tracking - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Key Milestones	Visualization	No	Activity Type	P6 - Activity
Key Milestones	Dashboard	No	Variance Status	P6 - Activity
Key Milestones	Dashboard	No	Project Name	P6 - Activity
Key Milestones	Dashboard	No	Portfolio Name	P6 - Activity

Table 18: Key Milestones Tracking - Data Actions

Data Action Name	Action Type	Anchor To	Target	Canvas Link	Pass Values	Multiselection
Navigate to Milestone details	Analytics Link	None	Key Milestones Tracking	Milestone Details	All	On
P6 Link to Activities	URL Navigation	Project Name	Opens P6 Links - Link to Activities	Milestone Details	All	On

Integrated Schedule Delivery KPI Dashboard

Number of Canvases: 7

Default Canvas: IB_ActivityHistoryData

Canvas/Dashboard Name: Integrated Schedule Delivery KPI

Data Source(s): P6 - EPPM

Subject Area: P6 – Activity History

Datasets: Not applicable

Dashboard

Canvases

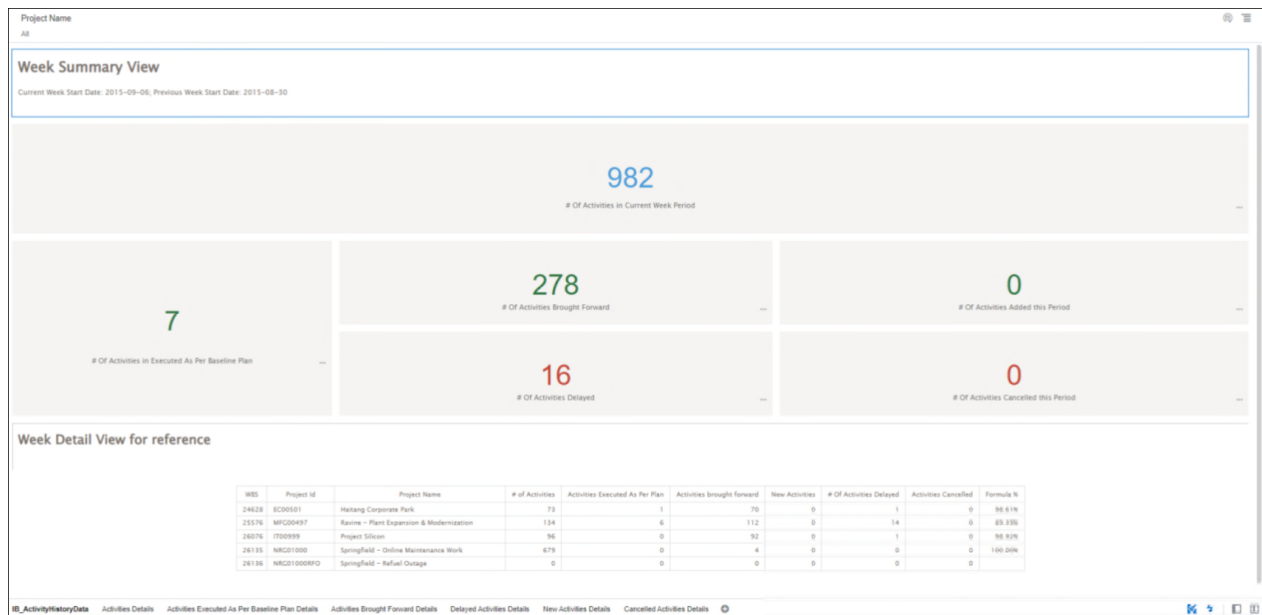


Figure 10: IB_ActivityHistoryData

Data Visualization Reference Guide

Click here or drag data to add a filter

WBS	Activity ID	Activity Name	Primary Resource	Planned Start	Planned Finish
24628	A1000	Install Underground Water Lines	Plumber	08/03/2015	08/17/2015
24628	EC1000	Design Building Addition	Paul Kim	08/03/2015	10/07/2015
24628	EC1010	Start Office Building Addition Project		08/03/2015	08/03/2015
24628	EC1030	Review and Approve Designs	Paul Kim	10/01/2015	11/03/2015
24628	EC1030	Review and Approve Designs	Paul Kim	10/02/2015	11/03/2015
24628	EC1030	Review and Approve Designs	Paul Kim	10/05/2015	11/04/2015
24628	EC1030	Review and Approve Designs	Paul Kim	10/06/2015	11/06/2015
24628	EC1040	Assemble Brick Samples		11/01/2015	11/04/2015
24628	EC1040	Assemble Brick Samples		11/04/2015	11/04/2015
24628	EC1040	Assemble Brick Samples		11/05/2015	11/05/2015
24628	EC1050	Assemble Technical Data for Heat Pump	Paul Kim	11/03/2015	11/12/2015
24628	EC1050	Assemble Technical Data for Heat Pump	Paul Kim	11/03/2015	11/13/2015
24628	EC1050	Assemble Technical Data for Heat Pump	Paul Kim	11/04/2015	11/13/2015
24628	EC1050	Assemble Technical Data for Heat Pump	Paul Kim	11/05/2015	11/16/2015
24628	EC1050	Assemble Technical Data for Heat Pump	Paul Kim	11/05/2015	11/17/2015
24628	EC1060	Assemble and Submit Flooring Samples		11/03/2015	11/03/2015
24628	EC1060	Assemble and Submit Flooring Samples		11/04/2015	11/04/2015
24628	EC1060	Assemble and Submit Flooring Samples		11/05/2015	11/05/2015
24628	EC1070	Review and Approve Brick Samples	Paul Kim	11/03/2015	12/02/2015
24628	EC1070	Review and Approve Brick Samples	Paul Kim	11/04/2015	12/02/2015
24628	EC1070	Review and Approve Brick Samples	Paul Kim	11/04/2015	12/03/2015
24628	EC1070	Review and Approve Brick Samples	Paul Kim	11/05/2015	12/04/2015
24628	EC1080	Review and Approve Flooring	Paul Kim	11/03/2015	12/01/2015
24628	EC1080	Review and Approve Flooring	Paul Kim	11/04/2015	12/01/2015
24628	EC1080	Review and Approve Flooring	Paul Kim	11/04/2015	12/02/2015
24628	EC1080	Review and Approve Flooring	Paul Kim	11/05/2015	12/03/2015
24628	EC1090	Begin Building Construction		11/03/2015	11/03/2015
24628	EC1090	Begin Building Construction		11/04/2015	11/04/2015
24628	EC1090	Begin Building Construction		11/05/2015	11/05/2015
24628	EC1100	Site Preparation	Excavator	11/03/2015	12/22/2015
24628	EC1100	Site Preparation	Excavator	11/04/2015	12/22/2015
24628	EC1100	Site Preparation	Excavator	11/04/2015	12/23/2015
24628	EC1100	Site Preparation	Excavator	11/05/2015	12/24/2015
24628	EC1140	Review Technical Data on Heat Pumps	Paul Kim	11/12/2015	12/10/2015
24628	EC1140	Review Technical Data on Heat Pumps	Paul Kim	11/13/2015	12/11/2015
24628	EC1140	Review Technical Data on Heat Pumps	Paul Kim	11/16/2015	12/11/2015

1001 Rows, 6 Columns

Figure 11: Activity Details

Click here or drag data to add a filter

WBS	Activity ID	Activity Name	Primary Resource	Planned Start	Planned Finish
24628	EC1010	Start Office Building Addition Project		08/03/2015	08/03/2015
25576	MN1000	Define System Requirements		08/03/2015	08/07/2015
25576	MN1020	Design Building Addition	Design Engineer	08/03/2015	08/28/2015
25576	MN1030	Review and Approve Designs	Design Engineer	08/31/2015	09/04/2015
25576	MN1040	Begin Building Construction		09/07/2015	09/07/2015
25576	MN1070	Assemble Technical Data for Heat Pump	Design Engineer	09/07/2015	09/11/2015
25576	MN1080	Assemble Brick Samples		09/07/2015	09/11/2015

7 Rows, 6 Columns

Figure 12: Activities Executed As Per Baseline Plan Details

Click here or drag data to add a filter

WBS	Activity ID	Activity Name	Primary Resource	Planned Start	Planned Finish
24628	EC1000	Design Building Addition	Paul Kim	08/03/2015	10/07/2015
24628	EC1030	Review and Approve Designs	Paul Kim	10/06/2015	11/03/2015
24628	EC1050	Assemble Brick Samples	Paul Kim	11/03/2015	11/03/2015
24628	EC1060	Assemble and Submit Flooring Samples		11/05/2015	11/05/2015
24628	EC1070	Review and Approve Brick Samples	Paul Kim	11/05/2015	12/04/2015
24628	EC1080	Review and Approve Flooring	Paul Kim	11/05/2015	12/03/2015
24628	EC1090	Begin Building Construction		11/05/2015	11/05/2015
24628	EC1100	Site Preparation	Excavator	11/05/2015	12/24/2015
24628	EC1170	Prepare and Solicit Bids for Flooring	Project Controls	12/03/2015	12/31/2015
24628	EC1180	Prepare and Solicit Bids for Brick Exterior	Project Controls	12/04/2015	12/23/2015
24628	EC1190	Prepare and Solicit Bids for Heat Pump	Project Controls	12/15/2015	12/31/2015
24628	EC1220	Review Bids for Brick	Project Controls	12/23/2015	01/08/2016
24628	EC1230	Excavation	Excavator	12/24/2015	01/25/2016
24628	EC1240	Review Bids for Heat Pump	Project Controls	12/31/2015	01/13/2016
24628	EC1250	Review Bids for Flooring	Project Controls	12/31/2015	01/15/2016
24628	EC1260	Award Contract for Brick	Project Controls	01/08/2016	01/15/2016
24628	EC1270	Award Contract for Heat Pump		01/13/2016	01/21/2016
24628	EC1280	Deliver Brick		01/15/2016	01/18/2016
24628	EC1300	Award Contract for Flooring	Project Controls	01/19/2016	01/27/2016
24628	EC1320	Fabricate and Deliver Flooring	Project Controls	01/27/2016	02/18/2016
24628	EC1320	Install Underground Water Lines	Plumber	01/28/2016	02/11/2016
24628	EC1330	Install Underground Electric Conduit	Electrician	01/28/2016	02/08/2016
24628	EC1340	Form/Pour Concrete Footings	Ironworker	02/11/2016	04/07/2016
24628	EC1350	Concrete Foundation Walls	Ironworker	04/07/2016	05/10/2016
24628	EC1360	Form and Pour Slab	Finish Carpenter	05/10/2016	05/24/2016
24628	EC1370	Build/Install and Connect Walls	Excavator	05/25/2016	06/01/2016
24628	EC1380	Foundation Phase Complete		06/01/2016	06/01/2016
24628	EC1390	Erect Structural Frame	Ironworker	06/02/2016	06/03/2016
24628	EC1410	Begin Structural Phase		06/04/2016	06/04/2016
24628	EC1420	Floor Decking	Ironworker	06/04/2016	09/14/2016
24628	EC1430	Concrete First Floor	Ironworker	09/15/2016	10/26/2016
24628	EC1440	Site Mechanical and Electrical Equipment	Operator	09/26/2016	11/08/2016
24628	EC1460	Erect Stairwell and Elevator Walls	Laborer-Construction	10/27/2016	11/23/2016
24628	EC1470	Concrete Basement Slab	Ironworker	10/27/2016	11/24/2016

278 Rows, 6 Columns

Figure 13: Activities Brought Forward Details

Click here or drag data to add a filter

WBS	Activity ID	Activity Name	Primary Resource	Planned Start	Planned Finish
24628	EC1290	Fabricate and Deliver Heat Pump and Controls	Project Controls	01/21/2016	04/25/2016
25176	MN1030	Review and Approve Designs	Design Engineer	08/31/2015	09/04/2015
25176	MN1040	Begin Building Construction		09/07/2015	09/07/2015
25176	MN1070	Assemble Technical Data for Heat Pump	Design Engineer	09/07/2015	09/14/2015
25176	MN1090	Review Technical Data on Heat Pumps	Design Engineer	09/14/2015	09/30/2015
25176	MN1130	Prepare Drawings for System Controller	Automation Systems Engineer	09/18/2015	09/24/2015
25176	MN1140	Prepare and Solicit Bids for Heat Pump		10/01/2015	10/05/2015
25176	MN1160	Review Bids for Heat Pump		10/06/2015	10/07/2015
25176	MN1190	Review and Approve System Controller	Automation Systems Engineer	09/24/2015	10/08/2015
25176	MN1210	Award Contract for Heat Pump		10/08/2015	10/08/2015
25176	MN1230	Fabricate and Deliver Heat Pump and Controls	Fabrication	10/09/2015	01/28/2016
25176	MN1230	Prepare and Solicit Bids for System Controller	Automation Systems Engineer	10/08/2015	10/15/2015
25176	MN1400	Review Bids for System Controller		10/15/2015	10/21/2015
25176	MN1420	Award Contract for System Controller		10/21/2015	10/22/2015
25176	MN1440	Fabricate and Deliver System Controller	Fabrication	10/22/2015	01/14/2016
26076	IT1040	Define System Requirement	Brianne Allan	08/13/2015	09/02/2015

18 Rows, 6 Columns

Figure 14: Delayed Activities Details

Table 19: Key Milestones Tracking- Dimensions

Canvas	Dimension Name	Dimension / Attribute	Subject Area / Dataset
IB_ActivityHistory Data	Project	Project Id	P6 – Activity History
IB_ActivityHistory Data	Project	Project Name	P6 – Activity History
ALL Canvas	Project	WBS	P6 – Activity History
Details Canvases	Activity	Activity ID	P6 – Activity History
Details Canvases	Activity	Activity Name	P6 – Activity History
Details Canvases	Activity	Primary Resource	P6 – Activity History
Details Canvases	Activity	Planned Start	P6 – Activity History
Details Canvases	Activity	Planned Finish	P6 – Activity History

Table 20: Integrated Schedule Delivery KPI – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
IB_ActivityHistoryData	# of Activities	Calculated from Fact	P6 – Activity History

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
IB_ActivityHistoryData	Activities Executed as per Plan	Calculated from Fact	P6 – Activity History
IB_ActivityHistoryData	Activities brought forward	Calculated from Fact	P6 – Activity History
IB_ActivityHistoryData	Activities Delayed	Calculated from Fact	P6 – Activity History
IB_ActivityHistoryData	New Activities	Calculated from Fact	P6 – Activity History
IB_ActivityHistoryData	Activities Canceled	Calculated from Fact	P6 – Activity History
IB_ActivityHistoryData	Formula %	Calculated from Fact	P6 – Activity History

Table 21: Integrated Schedule Delivery KPI – Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
IB_ActivityHistory Data	Dashboard	No	Project Name	P6 - Activity History
Activities Details	Visual	Yes	"Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015-09-06}')	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Activities Executed As Per Baseline Plan Details	Visual	Yes	"Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015-09-06}') AND CAST("Primavera - Activity History"."Dates - (Activity)". "Actual Finish" AS DATE) = CAST("Primavera - Activity History"."Dates - (Activity)". "Baseline Project Finish" AS DATE)	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Activities Brought Forward Details	Visual	Yes	<pre> MAX((CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" IN ('@{pv_previous week}{2015-08-3 0}') THEN "Primavera - Activity History"."Dates - (Activity)"."Fi nish" END) BY "Primavera - Activity History"."Gener al - (Activity)"."Ac tivity Id") < MAX((CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" IN ('@{pv_currentw eek}{2015-09-06 }') THEN "Primavera - Activity History"."Dates - (Activity)"."Fi nish" END) BY "Primavera - Activity History"."Gener al - (Activity)"."Ac tivity Id") </pre>	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Activities Brought Forward Details	Visual	Yes	"Primavera - Activity History"."Calendar"."Week Name" = ('@{pv_previous week}{2015-08-30}') OR "Primavera - Activity History"."Calendar"."Week Name" = ('@{pv_currentweek}{2015-09-06}')	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Activities Brought Forward Details	Visual	Yes	<pre> RANK (MAX (CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" = ('@{pv_previous week}{2015-08-3 0}') OR "Primavera - Activity History"."Calen dar"."Week Name" = ('@{pv_currentw eek}{2015-09-06 }') THEN "Primavera - Activity History"."Dates - (Activity)". "Fi nish" END) BY "Primavera - Activity History"."Gener al - (Activity)". "Ac tivity Id") = 1 </pre>	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Delayed Activities Details	Visual	Yes	<pre> MAX((CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" IN ('@{pv_previous week}{2015-08-3 0}') THEN "Primavera - Activity History"."Dates - (Activity)"."Fi nish" END) BY "Primavera - Activity History"."Gener al - (Activity)"."Ac tivity Id") > MAX((CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" IN ('@{pv_currentw eek}{2015-09-06 }') THEN "Primavera - Activity History"."Dates - (Activity)"."Fi nish" END) BY "Primavera - Activity History"."Gener al - (Activity)"."Ac tivity Id") </pre>	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Delayed Activities Details	Visual	Yes	"Primavera - Activity History"."Calendar"."Week Name" = ('@{pv_previous week}{2015-08-30}') OR "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015-09-06}')	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Delayed Activities Details	Visual	Yes	<pre> RANK (MAX (CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" = ('@{pv_previous week}{2015-08-3 0}') OR "Primavera - Activity History"."Calen dar"."Week Name" = ('@{pv_currentw eek}{2015-09-06 }') THEN "Primavera - Activity History"."Dates - (Activity)". "Fi nish" END) BY "Primavera - Activity History"."Gener al - (Activity)". "Ac tivity Id") = 1 </pre>	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
New Activities Details	Visual	Yes	<pre> CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" = ('@{pv_currentw eek}{2015-09-06 }') THEN "Primavera - Activity History"."Gener al - (Activity)". "Ac tivity Id" END NOT IN ((CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" IN ('@{pv_previous week}{2015-08-3 0}') THEN "Primavera - Activity History"."Gener al - (Activity)". "Ac tivity Id" END)) </pre>	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
New Activities Details	Visual	Yes	"Primavera - Activity History"."Calendar"."Week Name" = ('@{pv_previous week}{2015-08-30}') OR "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015-09-06}')	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Cancelled Activities Details	Visual	Yes	<pre> CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" = ('@{pv_previous week}{2015-08-3 0}') THEN "Primavera - Activity History"."Gener al - (Activity)". "Ac tivity Id" END NOT IN ((CASE WHEN "Primavera - Activity History"."Calen dar"."Week Name" IN ('@{pv_currentw eek}{2015-09-06 }') THEN "Primavera - Activity History"."Gener al - (Activity)". "Ac tivity Id" END)) </pre>	P6 - Activity History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Cancelled Activities Details	Visual	Yes	"Primavera - Activity History"."Calendar"."Week Name" = ('@{pv_previous week}{2015-08-30}') OR "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015-09-06}')	P6 - Activity History

Table 22: Integrated Schedule Delivery KPI – Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
# of Activities	FILTER("Primavera - Activity History"."Metrics"."# of Activities" using "Primavera - Activity History"."Calendar"."Week Name" = '@{pv_currentweek}{2015-09-06}')	Derived From Fact	P6 - Activity History

Calculated Member	Expression	Source	Subject Area / Dataset
Activities Executed as per Plan	SUM(CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('{@pv_currentweek}{2015-09-06}') THEN (CASE WHEN CAST("Primavera - Activity History"."Dates - (Activity)". "Actual Finish" AS DATE) = CAST("Primavera - Activity History"."Dates - (Activity)". "Baseline Project Finish" AS DATE) THEN 1 ELSE 0 END) END)	Derived From Fact	P6 - Activity History
Activities brought forward	SUM(CASE WHEN MAX((CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('{@pv_previousweek}{2015-08-30}') THEN "Primavera - Activity History"."Dates - (Activity)". "Finish" END) BY "Primavera - Activity History"."General - (Activity)". "Activity Id") < MAX((CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('{@pv_currentweek}{2015-09-06}') THEN "Primavera - Activity History"."Dates - (Activity)". "Finish" END) BY "Primavera - Activity History"."General - (Activity)". "Activity Id") THEN 1 ELSE 0 END)	Derived From Fact	P6 - Activity History

Calculated Member	Expression	Source	Subject Area / Dataset
Activities Delayed	<pre>SUM(CASE WHEN MAX((CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_previousweek}{2015-08-30}') THEN "Primavera - Activity History"."Dates - (Activity)"."Finish" END) BY "Primavera - Activity History"."General - (Activity)"."Activity Id") > MAX((CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015-09-06}') THEN "Primavera - Activity History"."Dates - (Activity)"."Finish" END) BY "Primavera - Activity History"."General - (Activity)"."Activity Id") THEN 1 ELSE 0 END)</pre>	Derived From Fact	P6 - Activity History

Calculated Member	Expression	Source	Subject Area / Dataset
New Activities	<pre> COUNT (CASE WHEN (CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015- 09-06}') THEN "Primavera - Activity History"."General - (Activity)". "Activity Id" END) NOT IN ((CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_previousweek}{2015- 08-30}') THEN "Primavera - Activity History"."General - (Activity)". "Activity Id" END)) THEN "Primavera - Activity History"."General - (Activity)". "Activity Id" END) </pre>	Derived From Fact	P6 - Activity History

Calculated Member	Expression	Source	Subject Area / Dataset
Activities Canceled	<pre> COUNT(CASE WHEN(CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_previousweek}{2015 -08-30}') THEN "Primavera - Activity History"."General - (Activity)". "Activity Id" END) NOT IN ((CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015- 09-06}') THEN "Primavera - Activity History"."General - (Activity)". "Activity Id" END)) THEN "Primavera - Activity History"."General - (Activity)". "Activity Id" END) </pre>	Derived From Fact	P6 - Activity History

Calculated Member	Expression	Source	Subject Area / Dataset
Formula %	<pre> ((SUM(CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015- 09-06}') THEN (CASE WHEN CAST("Primavera - Activity History"."Dates - (Activity)". "Actual Finish" AS DATE)=CAST("Primavera - Activity History"."Dates - (Activity)". "Baseline Project Finish" AS DATE) THEN 1 ELSE 0 END) END) + SUM(CASE WHEN MAX((CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_previousweek}{2015 -08-30}') THEN "Primavera - Activity History"."Dates - (Activity)". "Finish" END) BY "Primavera - Activity History"."General - (Activity)". "Activity Id") < MAX((CASE WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015- 09-06}') THEN "Primavera - Activity History"."Dates - (Activity)". "Finish" END) BY "Primavera - Activity History"."General - (Activity)". "Activity Id") THEN 1 ELSE 0 END))) / (SUM(CASE </pre>	Derived From Fact	P6 - Activity History
48	<pre> WHEN "Primavera - Activity History"."Calendar"."Week Name" IN ('@{pv_currentweek}{2015-</pre>		

Activity Look Ahead Dashboard

Description: This dashboard provides a list of upcoming activities for the next 3 days, 1 week, 2 weeks, and for the next 30, 60, and 90 days.

Number of Canvases: 7

Default Canvas: Next 3 Days

Canvas/Dashboard Name: Activity Look Ahead Dashboard

Data Source(s): P6 - EPPM

Subject Area: P6 – Activity

Datasets: Not applicable

Dashboard

Canvases

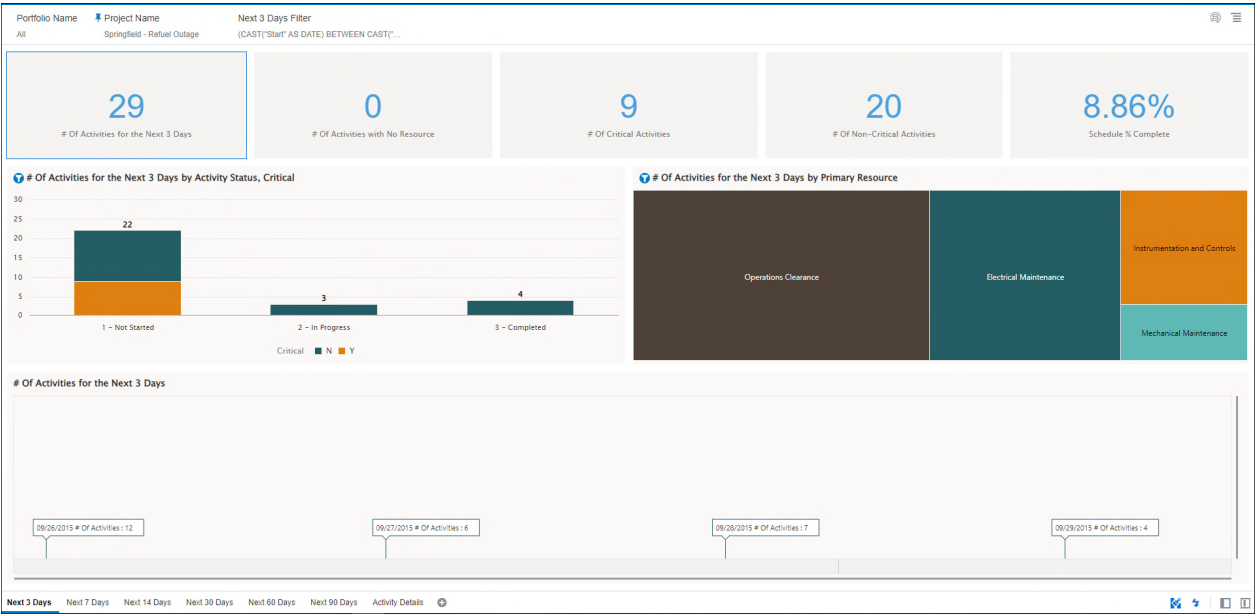


Figure 15: Activity Look Ahead Dashboard - Next 3 Days

Data Visualization Reference Guide

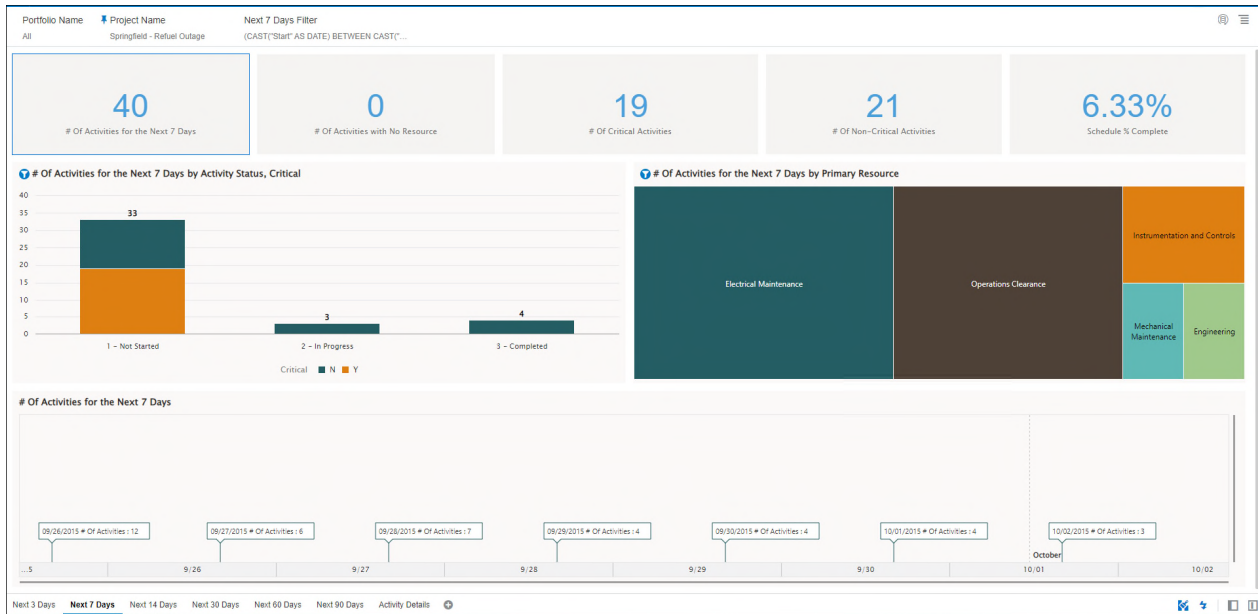


Figure 16: Activity Look Ahead Dashboard - Next 7 Days

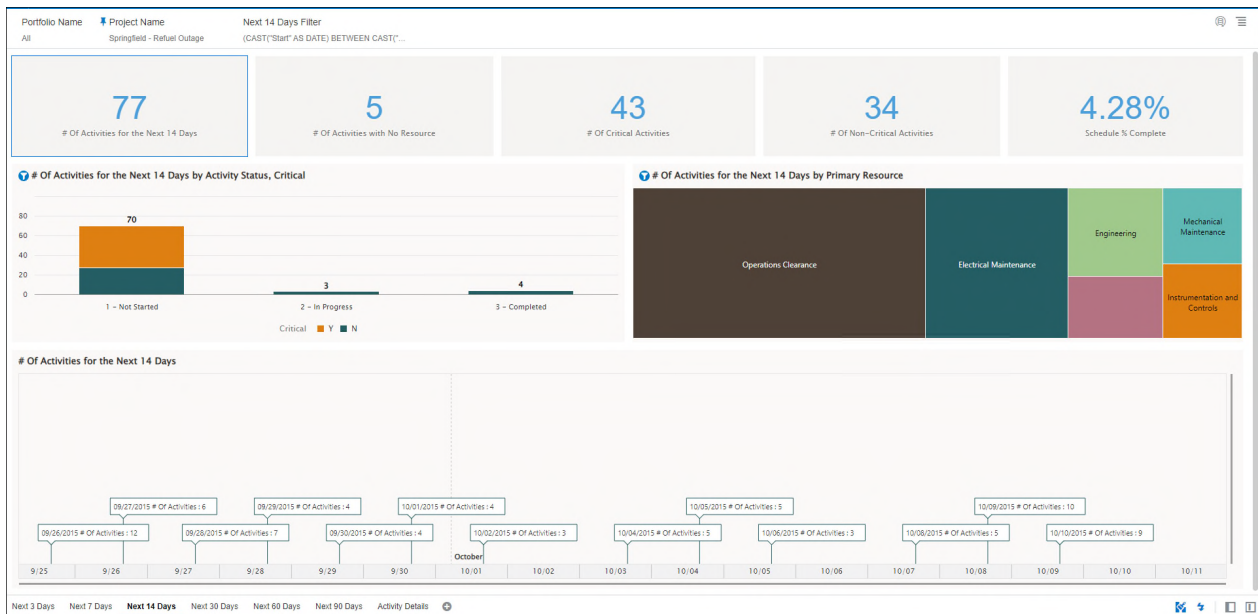


Figure 17: Activity Look Ahead Dashboard - Next 14 Days

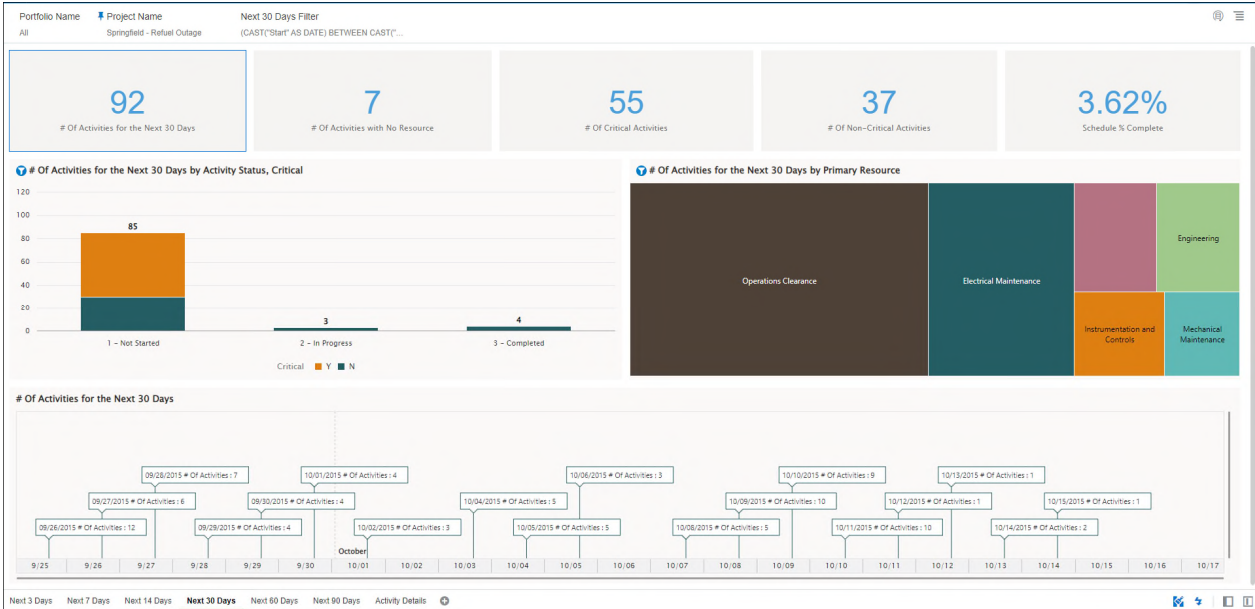


Figure 18: Activity Look Ahead Dashboard - Next 30 Days

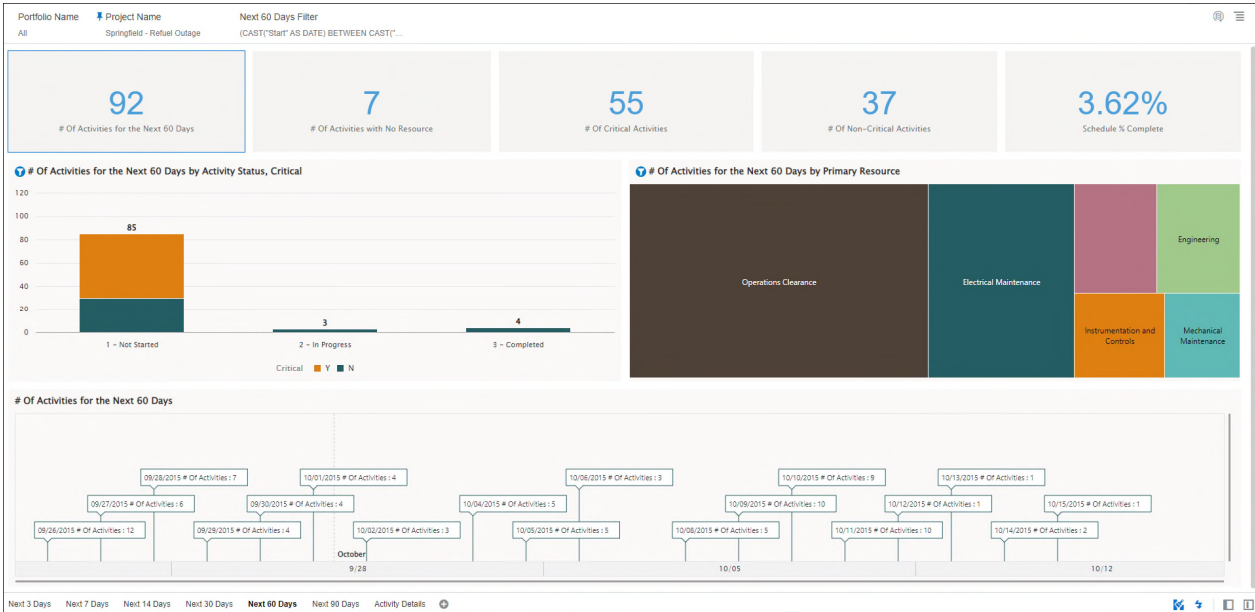


Figure 19: Activity Look Ahead Dashboard - Next 60 Days

Data Visualization Reference Guide

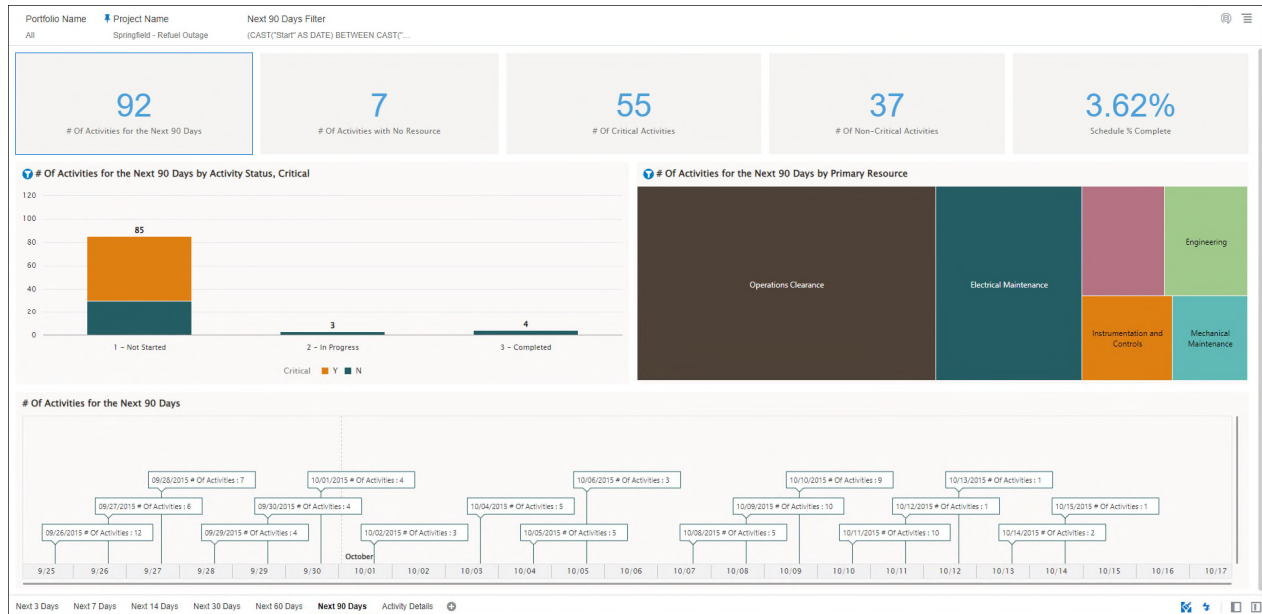


Figure 20: Activity Look Ahead Dashboard - Next 90 Days

Primary Resource	Activity Name	Activity Status	Critical	Start	Finish
Instrumentation and Controls	AT APPROX 350 MW SHUT DOWN 31 HDP	Completed	N	09/20/2015	09/20/2015
Instrumentation and Controls	POWER REDUCTION	Completed	N	09/20/2015	09/20/2015
Mechanical Maintenance	REPLACE SWN-TCV-1113 VALVE, STEAM PACKING LEAK	Completed	N	09/20/2015	09/21/2015
Operations Clearance	BREAKER OPEN, START THE OUTAGE	Completed	N	09/20/2015	09/20/2015
Operations Clearance	DECREASE GEN LOAD TO 40 MW; XFER HOUSE LOADS	Completed	N	09/20/2015	09/20/2015
Operations Clearance	ESTABLISH H2 TO MAIN TURBINE GENERATOR	Completed	N	09/20/2015	09/20/2015
Operations Clearance	HANG SAFETY TAG (PTO) FOR TCV-1113	Completed	N	09/20/2015	09/20/2015
Operations Clearance	INSERT CONTROL BANK RODS	Completed	N	09/20/2015	09/21/2015
Operations Clearance	REDUCE REACTOR POWER TO LESS THAN 4% - (MODE 2)	Completed	N	09/20/2015	09/21/2015
Operations Clearance	REMOVE TURBINE FROM TURNING GEAR	Completed	N	09/20/2015	09/21/2015
Operations Clearance	REPLACE HYDROGEN WITH AIR PER SOP-TG-1	Completed	N	09/20/2015	09/20/2015
Operations Clearance	SECURE CONDENSER AIR REMOVAL SYS, BREAK VACUUM	Completed	N	09/20/2015	09/20/2015
Operations Clearance	SECURE SECOND CONDENSATE PUMP	Completed	N	09/20/2015	09/20/2015
Operations Clearance	SIGNOFF BY MANAGERS FOR COLD SHUTDOWN AP 9.4	Completed	N	09/20/2015	09/20/2015
Operations Clearance	SNAP FEEDWATER FROM MANUAL TO AUTOMATIC	Completed	N	09/20/2015	09/21/2015
Operations Clearance	TRIP GENERATOR, OFF THE GRID	Completed	N	09/20/2015	09/20/2015
Electrical Maintenance	SECURE FEEDWTR PUMPS; PLACE AUX FEED IN SERVICE	Completed	N	09/21/2015	09/21/2015
Instrumentation and Controls	31 ACCUMULATOR CALS	Completed	N	09/21/2015	09/22/2015
Instrumentation and Controls	COOLDOWN RCS TO LESS THAN 350 DEGREES (MODE 4)	Completed	N	09/21/2015	09/22/2015
Instrumentation and Controls	SHUTDOWN MAIN FEEDWATER PUMPS PER SOP-FW-1	Completed	N	09/21/2015	09/21/2015
Operations Clearance	BORATE TO COLD SHUT DOWN CONCENTRATION	Completed	N	09/21/2015	09/21/2015
Operations Clearance	CLOSE MAIN STEAM ISOLATION VALVES (MSIVS)	Completed	N	09/21/2015	09/22/2015
Operations Clearance	HANG SAFETY TAG (PTO) FOR 31 ACCUMULATOR CALS	Completed	N	09/21/2015	09/21/2015
Operations Clearance	INSERT SHUTDOWN BANK RODS (MODE 3 ENTRY)	Completed	N	09/21/2015	09/21/2015
Operations Clearance	MANAGEMENT APPROVAL TO EXCEED COLD SHUTDOWN	Completed	N	09/21/2015	09/21/2015

Figure 21: Activity Look Ahead Dashboard - Activity Details

Table 23: Activity Look Ahead - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
All Canvas	Activity Status	P6 – Activity
All Canvas	Critical	P6 – Activity
All Canvas	Primary Resource	P6 – Activity
All Canvas	Start	P6 – Activity
Activity Details	Finish	P6 – Activity
Activity Details	Activity Name	P6 – Activity

Table 24: Activity Look Ahead – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Next N Days	# of Activities	Fact	P6 – Activity

Table 25: Activity Look Ahead – Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Next N Days	Dashboard	No	Portfolio Name	P6 - Activity
All Canvas	Dashboard	No	Project Name	P6 - Activity
Next 3 Days	Dashboard	Yes	(CAST("Primavera - Activity"."Dates - (Activity)". "Start" AS DATE) BETWEEN CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE) AND TIMESTAMPADD(SQL_TSI_DAY, 3, CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE)))	P6 - Activity

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Next 7 Days	Dashboard	Yes	(CAST("Primavera - Activity"."Dates - (Activity)". "Start" AS DATE) BETWEEN CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE) AND TIMESTAMPADD(SQL_TSI_DAY,7,CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE)))	P6 - Activity
Next 14 Days	Dashboard	Yes	(CAST("Primavera - Activity"."Dates - (Activity)". "Start" AS DATE) BETWEEN CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE) AND TIMESTAMPADD(SQL_TSI_DAY,14,CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE)))	P6 - Activity
Next 30 Days	Dashboard	Yes	(CAST("Primavera - Activity"."Dates - (Activity)". "Start" AS DATE) BETWEEN CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE) AND TIMESTAMPADD(SQL_TSI_DAY,30,CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE)))	P6 - Activity

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Next 60 Days	Dashboard	Yes	(CAST("Primavera - Activity"."Dates - (Activity)". "Start" AS DATE) BETWEEN CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE) AND TIMESTAMPADD(SQL_TSI_DAY,60,CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE)))	P6 - Activity
Next 90 Days	Dashboard	Yes	(CAST("Primavera - Activity"."Dates - (Activity)". "Start" AS DATE) BETWEEN CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE) AND TIMESTAMPADD(SQL_TSI_DAY,90,CAST("Primavera - Activity"."Dates - (Project)". "Data Date" AS DATE)))	P6 - Activity

Table 26: Activity Look Ahead – Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Schedule % Complete (PRCNT)	"Primavera - Activity"."Percent Complete"."Schedule % Complete" / 100	Derived From Fact	P6 - Activity

Shutdown / Turnaround / Outage Dashboard

Description: Asset intensive organizations (utilities) can leverage this dashboard to track activities scheduled, performed, resources assigned, etc. in a very granular format during shutdown, turnaround, outage periods.

Number of Canvases: 2

Default Canvas: By Resource (Dropdown)

Canvas/Dashboard Name: Shutdown/Turnaround/Outage

Data Source(s): P6 - EPPM

Subject Area: P6 – Activity

Datasets: Not applicable

Dashboards

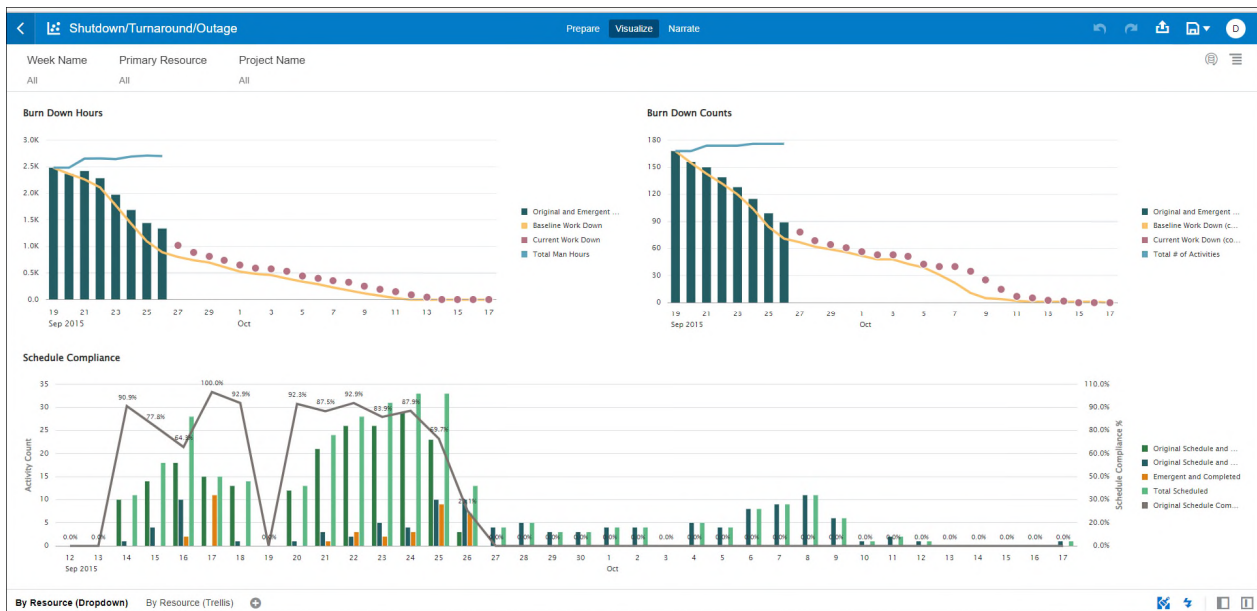


Figure 22: Shutdown / Turnaround / Outage Dashboard - By Resource (Dropdown)

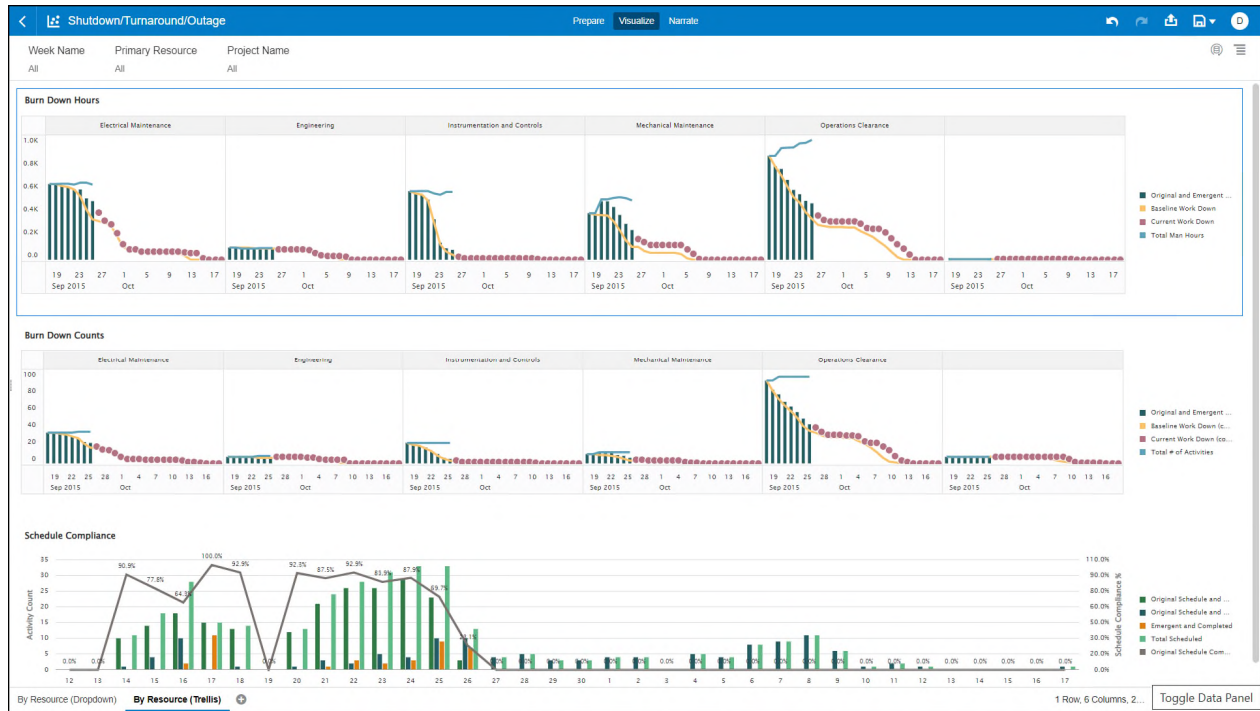


Figure 23: Shutdown / Turnaround / Outage Dashboard - By Resource (Trellis)

Table 27: Shutdown / Turnaround / Outage - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
All Canvas	Calendar Date	P6 – Burn Down
All Canvas	Activity > Finish	P6 – Burn Down
All Canvas	Primary Resource	P6 – Burn Down
All Canvas	Project > Workdown Date	P6 – Burn Down

Table 28: Shutdown / Turnaround / Outage – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
All Canvas	Emergent Remaining Units Burn	Fact	P6 – Burn down

Table 29: Shutdown / Turnaround / Outage – Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
All Canvas	Dashboard	No	Project Name	P6 – Burn down
All Canvas	Dashboard	No	Primary Resource	P6 – Burn down
All Canvas	Dashboard	No	Week Name	P6 – Burn down
All Canvas	Visual	Yes	CASE WHEN "Primavera - Burn Down"."Dates - (Activity)". "Finish" > "Primavera - Burn Down"."Dates - (Project)". "Workdown Date" THEN 1 ELSE 0 END = 1	P6 – Burn down

Table 30: Shutdown / Turnaround / Outage – Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Original Remaining (hours)	CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Burn Down"."Calendar"."Calendar Date", "Primavera - Burn Down"."Dates - (Project)". "Data Date") > 0 THEN "Primavera - Burn Down"."Units"."Non-Emergent Remaining Units Burn" + CASE WHEN TIMESTAMPDIFF(SQL_TSI_DAY, "Primavera - Burn Down"."Calendar"."Calendar Date", "Primavera - Burn Down"."Dates - (Project)". "Data Date") = 0 AND "Primavera - Burn Down"."Metrics"."New Record Count" = 0 THEN "Primavera - Burn Down"."Units"."Remaining Units" ELSE 0 END ELSE NULL END	Derived From Fact	P6 - Burn Down

Calculated Member	Expression	Source	Subject Area / Dataset
Emergent Remaining (hours)	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Burn Down"."Calendar"."Calendar Date", "Primavera - Burn Down"."Dates - (Project)". "Data Date") > 0 THEN "Primavera - Burn Down"."Units"."Emergent Remaining Units Burn" + CASE WHEN TIMESTAMPDIFF(SQL_TSI_DAY, "Primavera - Burn Down"."Calendar"."Calendar Date", "Primavera - Burn Down"."Dates - (Project)". "Data Date") = 0 AND "Primavera - Burn Down"."Metrics"."New Record Count" > 0 THEN "Primavera - Burn Down"."Units"."Remaining Units" ELSE 0 END ELSE NULL END </pre>	Derived From Fact	P6 – Burn down

Calculated Member	Expression	Source	Subject Area / Dataset
Original and Emergent Remaining (hours)	<pre>(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HO UR, "Primavera - Burn Down"."Calendar"."Calend ar Date", "Primavera - Burn Down"."Dates - (Project)"."Data Date") > 0 THEN "Primavera - Burn Down"."Units"."Non-Emerg ent Remaining Units Burn" + CASE WHEN TIMESTAMPDIFF(SQL_TSI_DA Y, "Primavera - Burn Down"."Calendar"."Calend ar Date", "Primavera - Burn Down"."Dates - (Project)"."Data Date") = 0 AND "Primavera - Burn Down"."Metrics"."New Record Count" = 0 THEN "Primavera - Burn Down"."Units"."Remaining Units" ELSE 0 END ELSE NULL END)+ (CASE WHEN TIMESTAMPDIFF(SQL_TSI_HO UR, "Primavera - Burn Down"."Calendar"."Calend ar Date", "Primavera - Burn Down"."Dates - (Project)"."Data Date") > 0 THEN "Primavera - Burn Down"."Units"."Emergent Remaining Units Burn" + CASE WHEN TIMESTAMPDIFF(SQL_TSI_DA Y, "Primavera - Burn Down"."Calendar"."Calend ar Date", "Primavera - Burn Down"."Dates - (Project)"."Data Date") = 0 AND "Primavera - Burn Down"."Metrics"."New Record Count" > 0 THEN "Primavera - Burn Down"."Units"."Remaining Units" ELSE 0 END ELSE NULL END)</pre>	Derived From Fact	P6 – Burn down

Calculated Member	Expression	Source	Subject Area / Dataset
Baseline Work Down	"Primavera - Burn Down"."Units"."Baseline Units Burn"		P6 – Burn down
Total Man Hours	CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR,"Primavera - Burn Down"."Calendar"."Calendar Date","Primavera - Burn Down"."Dates - (Project)". "Data Date") > 0 THEN "Primavera - Burn Down"."Units"."Remaining Units Burn" + "Primavera - Burn Down"."Units"."Actual Units Burn" + CASE WHEN TIMESTAMPDIFF(SQL_TSI_DAY,"Primavera - Burn Down"."Calendar"."Day Date","Primavera - Burn Down"."Dates - (Project)". "Data Date") = 0 AND HOUR("Primavera - Burn Down"."Dates - (Project)". "Data Date") <> 0 THEN "Primavera - Burn Down"."Units"."Remaining Units" ELSE ("Primavera - Burn Down"."Units"."Actual Period Units" - "Primavera - Burn Down"."Units"."Actual Units") END ELSE NULL END		P6 – Burn down
Current Work Down	CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR,"Primavera - Burn Down"."Calendar"."Calendar Date","Primavera - Burn Down"."Dates - (Project)". "Data Date") <= 0 THEN "Primavera - Burn Down"."Units"."Remaining Units Burn" ELSE NULL END	Derived From Fact	P6 – Burn down

Calculated Member	Expression	Source	Subject Area / Dataset
Original Remaining (count)	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Burn Down"."Calendar"."Day Date","Primavera - Burn Down"."Dates - (Project)"."Data Date") > 0 THEN "Primavera - Burn Down"."Metrics"."Non-Emergent Remaining Count" ELSE NULL END </pre>	Derived From Fact	P6 – Burn down
Emergent Remaining (count)	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Burn Down"."Calendar"."Day Date","Primavera - Burn Down"."Dates - (Project)"."Data Date") > 0 THEN "Primavera - Burn Down"."Metrics"."Emergent Remaining Count" ELSE NULL END </pre>	Derived From Fact	P6 – Burn down
Original and Emergent Remaining (count)	<pre> (CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Burn Down"."Calendar"."Day Date","Primavera - Burn Down"."Dates - (Project)"."Data Date") > 0 THEN "Primavera - Burn Down"."Metrics"."Non-Emergent Remaining Count" ELSE NULL END)+(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Burn Down"."Calendar"."Day Date","Primavera - Burn Down"."Dates - (Project)"."Data Date") > 0 THEN "Primavera - Burn Down"."Metrics"."Emergent Remaining Count" ELSE NULL END) </pre>	Derived From Fact	P6 – Burn down

Calculated Member	Expression	Source	Subject Area / Dataset
Baseline Work Down (count)	"Primavera - Burn Down"."Metrics"."Baseline Not Started Count" + "Primavera - Burn Down"."Metrics"."Baseline In Progress Count"	Derived From Fact	P6 – Burn down
Current Work Down (count)	SUM(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR,"Primavera - Burn Down"."Calendar"."Calendar Date","Primavera - Burn Down"."Dates - (Project)". "Data Date") <= 0 THEN CASE WHEN TIMESTAMPDIFF(SQL_TSI_MINUTE,"Primavera - Burn Down"."Calendar"."Calendar Date","Primavera - Burn Down"."Dates - (Activity)". "Planned Finish") > 1440 AND "Primavera - Burn Down"."General - (Activity)". "Activity Status" <> 'Completed' THEN 1 ELSE 0 END ELSE NULL END)	Derived From Fact	P6 – Burn down
Total # of Activities	SUM(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR,"Primavera - Burn Down"."Calendar"."Calendar Date","Primavera - Burn Down"."Dates - (Project)". "Data Date") > 0 THEN 1 ELSE NULL END)	Derived From Fact	P6 – Burn down
Original Schedule and Completed	"Primavera - Burn Down"."Metrics"."Scheduled and Completed Count"	Derived From Fact	P6 – Burn down
Original Schedule and Not Completed	"Primavera - Burn Down"."Metrics"."Scheduled and Not Completed Count"	Derived From Fact	P6 – Burn down

Calculated Member	Expression	Source	Subject Area / Dataset
Emergent and Completed	"Primavera - Burn Down"."Metrics"."Not Scheduled and Completed Count"	Derived From Fact	P6 – Burn down
Total Scheduled	"Primavera - Burn Down"."Metrics"."Scheduled and Completed Count"+"Primavera - Burn Down"."Metrics"."Scheduled and Not Completed Count"	Derived From Fact	P6 – Burn down
Original Schedule Compliance %	CASE WHEN ("Primavera - Burn Down"."Metrics"."Scheduled and Completed Count"/("Primavera - Burn Down"."Metrics"."Scheduled and Completed Count"+"Primavera - Burn Down"."Metrics"."Scheduled and Not Completed Count")) IS NULL THEN 0 ELSE ("Primavera - Burn Down"."Metrics"."Scheduled and Completed Count"/("Primavera - Burn Down"."Metrics"."Scheduled and Completed Count"+"Primavera - Burn Down"."Metrics"."Scheduled and Not Completed Count")) END	Derived From Fact	P6 – Burn down

Labor Units History Dashboard

Description: .

Number of Canvases: 1

Default Canvas: Canvas 1

Canvas/Dashboard Name: Labor Units History

Data Source(s): P6 - EPPM

Subject Area: P6 – Activity History

Datasets: Not applicable

Dashboard

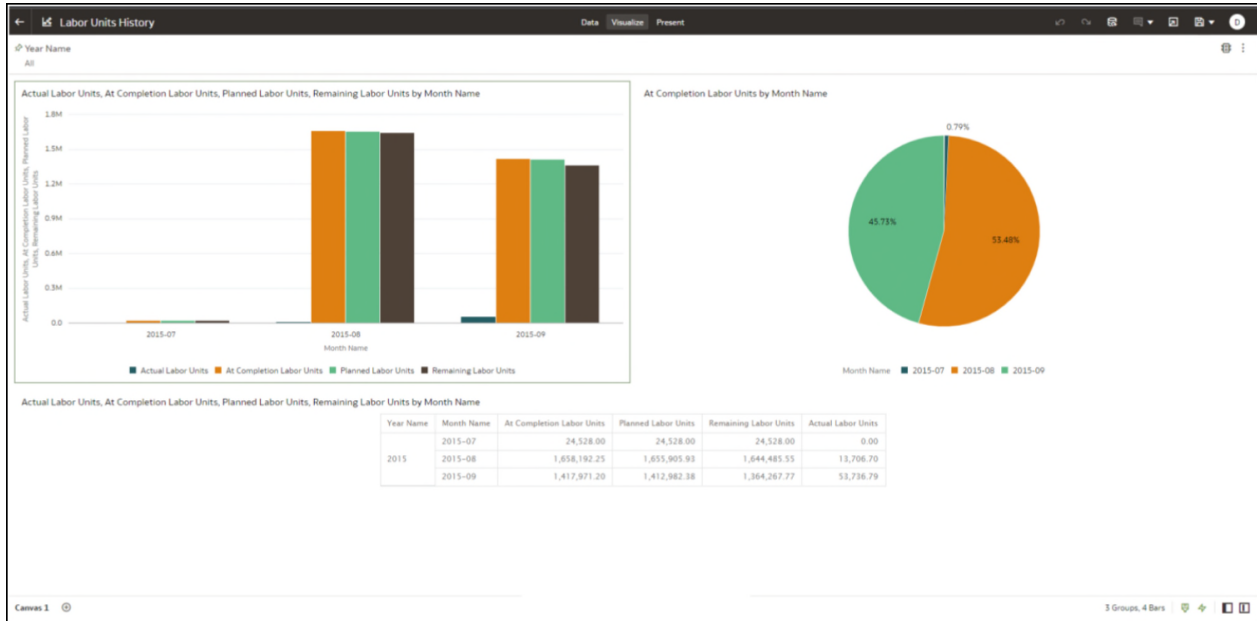


Figure 24: Labor Units History

Table 31: Shutdown / Turnaround / Outage - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
All Canvas	Year Name	P6 – Activity History
All Canvas	Month Name	P6 – Activity History

Table 32: Shutdown / Turnaround / Outage – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
All Canvas	Actual Labor Units	Fact	P6 – Activity History
	At Completion Labor Units	Fact	P6 – Activity History
	Planned Labor Units	Fact	P6 – Activity History
	Remaining Labor Units	Fact	P6 – Activity History

Table 33: Shutdown / Turnaround / Outage – Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
All Canvas	Dashboard	No	Year Name	P6 – Activity History

CPI, SPI, and Labor Units Dashboard

Description: .

Number of Canvases: 1

Default Canvas: Canvas 1

Canvas/Dashboard Name: CPI, SPI, and Labor Units

Data Source(s): P6 - EPPM

Subject Area: P6 – Activity

Datasets: Not applicable

Dashboard



Figure 25: CPI, SPI, and Labor Units

Table 34: Shutdown / Turnaround / Outage - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
All Canvas	Project Name	P6 – Activity

Table 35: Shutdown / Turnaround / Outage – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
All Canvas	Cost Performance Index (Cost)	Fact	P6 – Activity
	Schedule Performance Index (Units)	Fact	P6 – Activity
	Actual Labor Units	Fact	P6 – Activity
	Remaining Labor Units	Fact	P6 – Activity

Table 36: Shutdown / Turnaround / Outage – Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
All Canvas	Dashboard	No	Performance % Complete	P6 – Activity
All Canvas	Dashboard	No	Project Name	P6 – Activity

Project Risk - Cost Overview Dashboard

Description: .

Number of Canvases: 3

Default Canvas: Project Risk Overview

Canvas/Dashboard Name: Project Risk - Cost Overview

Data Source(s): P6 - EPPM

Subject Area: P6 – Activity, P6 - Project History

Datasets: Not applicable

Dashboards



Figure 26: Project Risk Overview

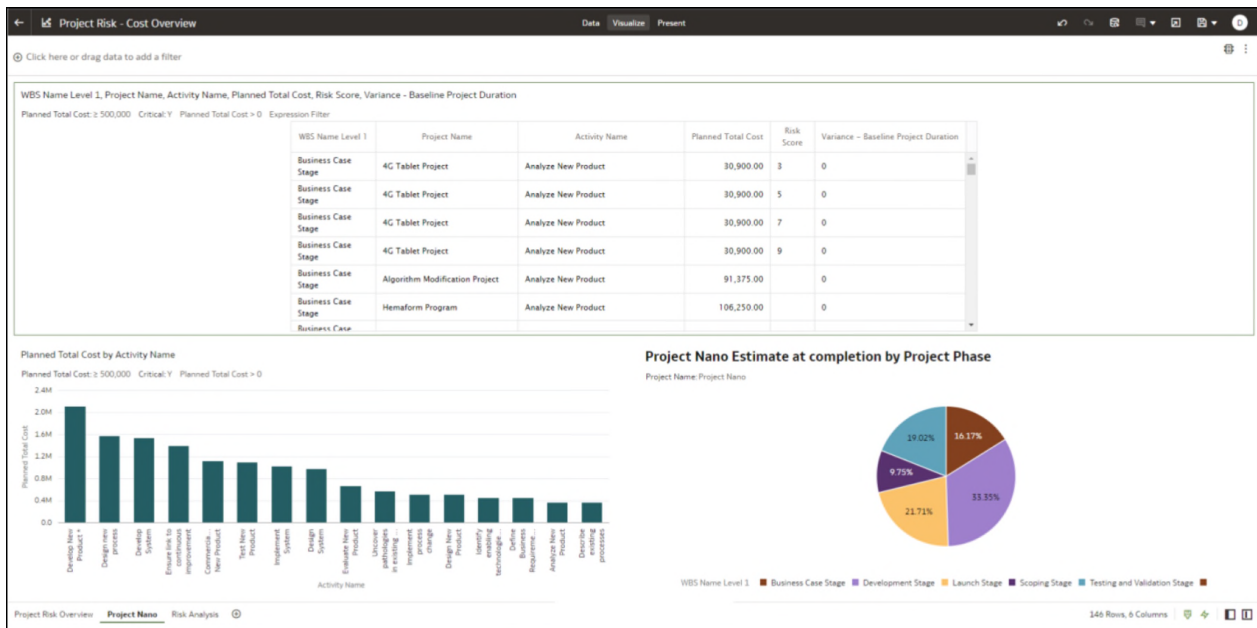


Figure 27: Project Nano

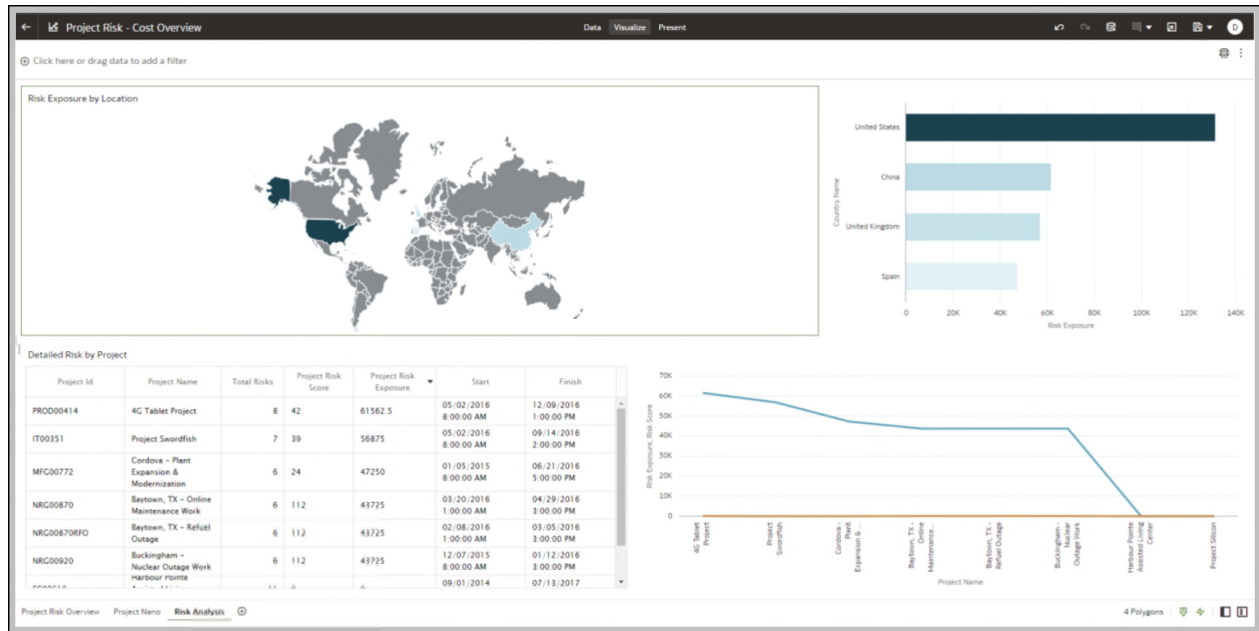


Figure 28: Risk Analysis

Table 37: Project Risk - Cost Overview - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
Project Risk Overview	Project Name	P6 – Activity
Project Nano		P6 - Project History
Risk Analysis		
Project Risk Overview	Project Status	P6 - Project History
Project Risk Overview	Project Score	P6 - Project History
Project Risk Overview	Project Owner	P6 - Project History
Project Risk Overview	Portfolio Name	P6 - Project History
Project Risk Overview	Project risk Level	P6 - Project History
Project Risk Overview	Project Risk Score	P6 – Activity
Risk Analysis		P6 - Project History
Project Risk Overview	Project Risk Exposure	P6 – Activity
Risk Analysis		P6 - Project History
Project Nano	WBS Name Level 1	P6 – Activity
Project Nano	Activity Name	P6 – Activity

Canvas	Dimension / Attribute	Subject Area / Dataset
Project Nano	Risk Score	P6 – Activity
Project Nano	Variance-Baseline Project Duration	P6 – Activity
Risk Analysis	Country Name	P6 – Activity
Risk Analysis	Project ID	P6 – Activity
Risk Analysis	Start	P6 – Activity
Risk Analysis	Finish	P6 – Activity

Table 38: Project Risk - Cost Overview - Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Project Risk Overview	Risk Score	Fact	P6 - Project History
Project Risk Overview	Risk Exposure	Fact	P6 - Project History
Project Risk Overview	Planned Total Cost	Fact	P6 - Project History
Project Risk Overview	Actual Total Cost	Fact	P6 - Project History
Project Nano	Planned Total Cost	Fact	P6 – Activity
Project Nano	Estimate At Completion (Cost)	Fact	P6 – Activity
Risk Analysis	Risk Exposure	Calculated from Fact	P6 – Activity
Risk Analysis	Total Risks	Calculated from Fact	P6 – Activity
Risk Analysis	Risk Score	Calculated from Fact	P6 – Activity

Table 39: Project Risk - Cost Overview - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Project Risk Overview	Dashboard	No	Portfolio Name	P6 - Project History

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Project Nano	Visual	No	Planned Total Cost	P6 – Activity
Project Nano	Visual	No	Critical	P6 – Activity
Project Nano	Visual	Yes	Planned Total Cost	P6 – Activity
Project Nano	Visual	No	Project Name	P6 – Activity
Risk Analysis	Visual	No	Risk Exposure	P6 – Activity
Risk Analysis	Visual	No	Total Risks	P6 – Activity

Table 40: Project Risk - Cost Overview - Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Risk Exposure	SUM("Primavera - Activity"."General - (Project)". "Project Risk Exposure")	Derived From Fact	P6 – Activity
Total Risks	COUNT(DISTINCT "Primavera - Activity"."Risk"."Risk Id" by "Primavera - Activity"."General - (Project)". "Project ID")	Derived From Fact	P6 – Activity
Risk Score	SUM("Primavera - Activity"."General - (Project)". "Project Risk Score")	Derived From Fact	P6 – Activity

Project Health Assessment Dashboard

Description: The Project Health Assessment dashboard provides an overall assessment of your projects, portfolios, and activities using project metrics to measure the project schedule

Default Canvas: Assessment

Canvas/Dashboard Name: Project Health – Assessment

Data Source(s): P6 - EPPM

Subject Area: P6 – Activity

Datasets: NA

Dashboards:

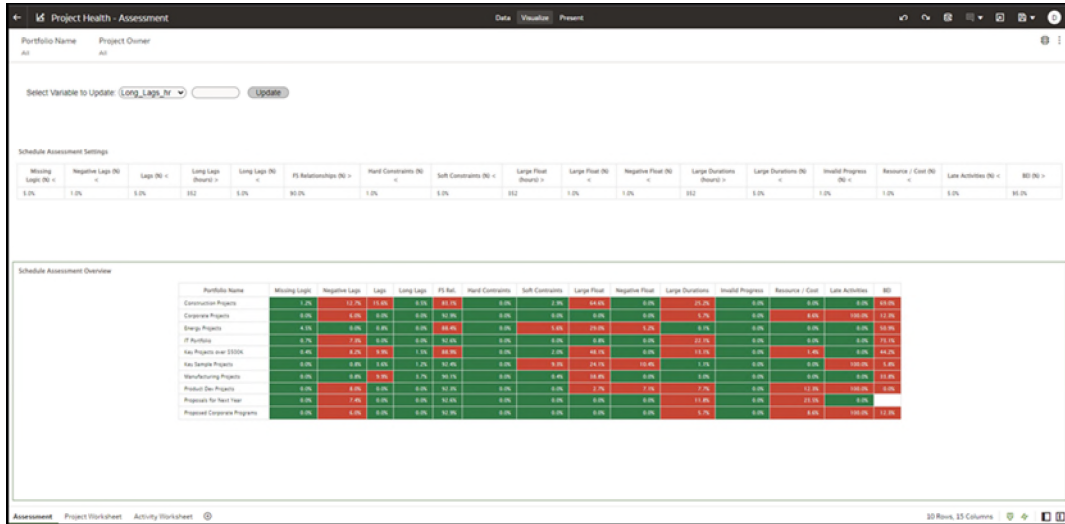


Figure 29: Project Health Dashboard - Assessment

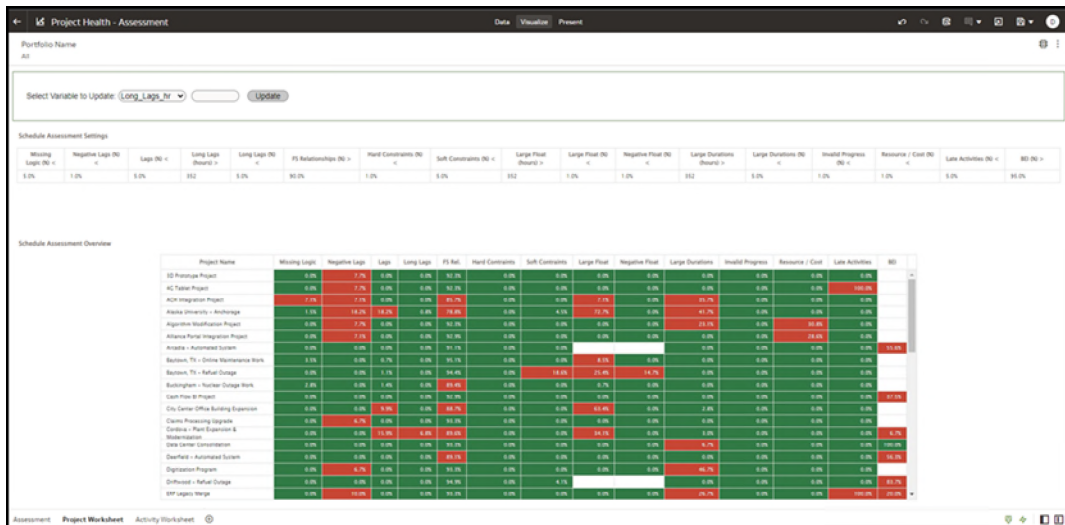


Figure 30: Project Health Assessment Dashboard -Project Worksheet

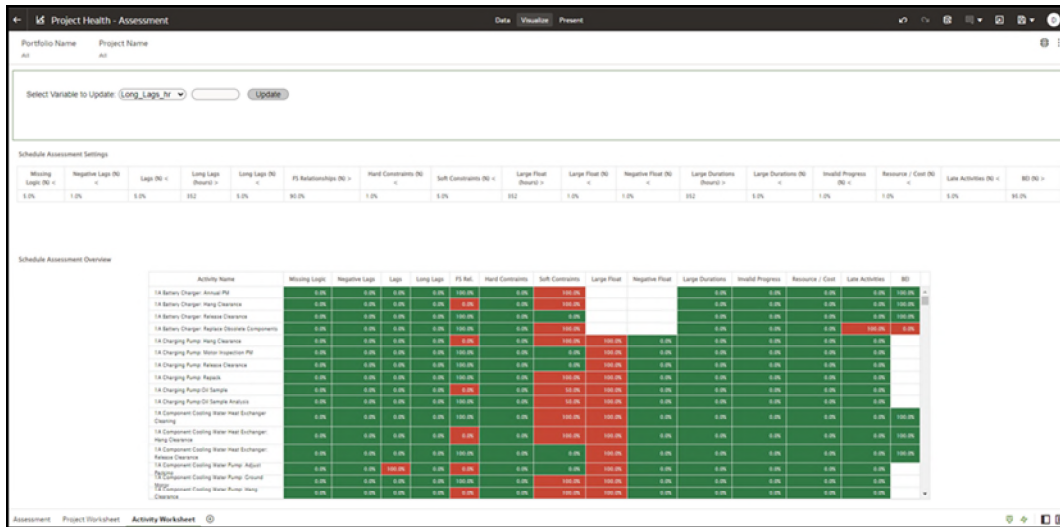


Figure 31: Project Health Assessment Dashboard -Activity Worksheet

Table 41: Project Health Assessment - Dimensions

Canvas	Dimension / Attribute	Is Calculated Field	Subject Area / Dataset
Assessment	Portfolio Name	No	P6 – Activity
Project Worksheet	Project Name	No	P6 – Activity
Activity Worksheet	Activity Name	No	P6 – Activity
All Canvas	Missing Logic (%)	Yes	P6 – Activity
All Canvas	Negative Lags (%) <	Yes	P6 – Activity
All Canvas	Lags (%) <	Yes	P6 – Activity
All Canvas	Long Lags (hours) >	Yes	P6 – Activity
All Canvas	Long Lags (%) <	Yes	P6 – Activity
All Canvas	FS Relationships (%) >	Yes	P6 – Activity
All Canvas	Hard Constraints (%) <	Yes	P6 – Activity
All Canvas	Soft Constraints (%) <	Yes	P6 – Activity
All Canvas	Large Float (hours) >	Yes	P6 – Activity

Canvas	Dimension / Attribute	Is Calculated Field	Subject Area / Dataset
All Canvas	Large Float (%) <	Yes	P6 – Activity
All Canvas	Negative Float (%) <	Yes	P6 – Activity
All Canvas	Large Durations (hours) >	Yes	P6 – Activity
All Canvas	Large Durations (%) <	Yes	P6 – Activity
All Canvas	Invalid Progress (%) <	Yes	P6 – Activity
All Canvas	Resource / Cost (%) <	Yes	P6 – Activity
All Canvas	Late Activiites (%) <	Yes	P6 – Activity
All Canvas	BEI (%) >	Yes	P6 – Activity

Table 42: Project Health Assessment – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
All Canvas	Missing Logic	Calculated from Fact	P6 – Activity
All Canvas	Negative Lags	Calculated from Fact	P6 – Activity
All Canvas	Lags	Calculated from Fact	P6 – Activity
All Canvas	Long Lags	Calculated from Fact	P6 – Activity
All Canvas	FS Rel.	Calculated from Fact	P6 – Activity
All Canvas	Hard Constraints	Calculated from Fact	P6 – Activity
All Canvas	Soft Constraints	Calculated from Fact	P6 – Activity
All Canvas	Large Float	Calculated from Fact	P6 – Activity
All Canvas	Negative Float	Calculated from Fact	P6 – Activity
All Canvas	Large Durations	Calculated from Fact	P6 – Activity
All Canvas	Invalid Progress	Calculated from Fact	P6 – Activity
All Canvas	Resource / Cost	Calculated from Fact	P6 – Activity
All Canvas	Lat Activities	Calculated from Fact	P6 – Activity
All Canvas	BEI	Calculated from Fact	P6 – Activity

Table 43: Project Health Assessment – Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
All Canvas	Dashboard	No	Portfolio Name	P6 – Activity
Assessment	Dashboard	No	Project Owner	P6 – Activity
Project Nano	Dashboard	No	Project Name	P6 – Activity

Table 44: Shutdown / Turnaround / Outage – Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Missing Logic	<pre> FILTER("Primavera - Activity"."Metrics"."# of Activities" USING "Primavera - Activity"."Relationships - (Activity)". "Type" = 'orphan')/"Primavera - Activity"."Metrics"."# of Activities" </pre>	Derived from Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
Negative Lags	<pre>IFNULL(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING (("Primavera - Activity"."Relationships - (Activity)". "Lag" < 0.0) AND ("Primavera - Activity"."Relationships - (Activity)". "Predecessor Activity Id" IS NOT NULL) AND ("Primavera - Activity"."General - (Activity)". "Activity Status" IN ('In Progress', 'Not Started')))) / FILTER("Primavera - Activity"."Metrics"."# of Activities" USING ("Primavera - Activity"."General - (Activity)". "Activity Status" IN ('In Progress', 'Not Started'))), 0.0)</pre>	Derived from Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
Lags	<pre>IFNULL(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING (("Primavera - Activity"."Relationships - (Activity)". "Lag" > 0.0) AND ("Primavera - Activity"."Relationships - (Activity)". "Predecessor Activity Id" IS NOT NULL) AND ("Primavera - Activity"."General - (Activity)". "Activity Status" <>'Completed'))) / FILTER("Primavera - Activity"."Metrics"."# of Activities" USING ("Primavera - Activity"."General - (Activity)". "Activity Status" IN ('In Progress','Not Started'))), 0.0)</pre>	Derived from Fact	

Calculated Member	Expression	Source	Subject Area / Dataset
Long Lags	<pre>IFNULL(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING (("Primavera - Activity"."Relationships - (Activity)". "Lag" > CAST('@{Long_Lags_hr}{35 2}' AS double)) AND ("Primavera - Activity"."Relationships - (Activity)". "Predecessor Activity Id" IS NOT NULL) AND ("Primavera - Activity"."General - (Activity)". "Activity Status" <>'Completed'))) / FILTER("Primavera - Activity"."Metrics"."# of Activities" USING ("Primavera - Activity"."General - (Activity)". "Activity Status" IN ('In Progress','Not Started'))), 0.0)</pre>	Derived from Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
FS Rel.	(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING (("Primavera - Activity"."Relationships - (Activity)". "Predecessor Activity Id" IS NOT NULL) AND ("Primavera - Activity"."Relationships - (Activity)". "Relationship Type" = 'Finish to Start')))/"Primavera - Activity"."Metrics"."# of Activities")	Derived from Fact	P6 - Activity
Hard Constraints	(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING "Primavera - Activity"."General - (Activity)". "Primary Constraint Type" IN ('Mandatory Start', 'Mandatory Finish', 'Must Start On', 'Must Finish On', 'Start No Later Than', 'Finish No Later Than') OR "Primavera - Activity"."General - (Activity)". "Secondary Constraint Type" IN ('Mandatory Start', 'Mandatory Finish', 'Must Start On', 'Must Finish On', 'Start No Later Than', 'Finish No Later Than')))/ "Primavera - Activity"."Metrics"."# of Activities"	Derived from Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
Soft Constraints	<pre>(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING IFNULL("Primavera - Activity"."General - (Activity)". "Primary Constraint Type", '') NOT IN ('Mandatory Start', 'Mandatory Finish', 'Must Start On', 'Must Finish On', 'Start No Later Than', 'Finish No Later Than') OR IFNULL("Primavera - Activity"."General - (Activity)". "Secondary Constraint Type", '') NOT IN ('Mandatory Start', 'Mandatory Finish', 'Must Start On', 'Must Finish On', 'Start No Later Than', 'Finish No Later Than')))/ "Primavera - Activity"."Metrics"."# of Activities"</pre>	Derived from Fact	P6 - Activity
Large Float	<pre>(IFNULL(FILTER("Primaver a - Activity"."Metrics"."# of Activities" USING "Primavera - Activity"." Durations - (Activity)". "Total Float" > CAST('@{Large_Float_Hr}{ 352}' AS double)), 0.0) / FILTER("Primavera - Activity"."Metrics"."# of Activities" USING "Primavera - Activity"."General - (Activity)". "Activity Status" <> 'Completed'))</pre>	Derived from Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
Negative Float	<pre> FILTER("Primavera - Activity"."Metrics"."# of Activities" USING "Primavera - Activity"."Durations - (Activity)". "Total Float" < 0.0) / FILTER("Primavera - Activity"."Metrics"."# of Activities" USING "Primavera - Activity"."General - (Activity)". "Activity Status" <> 'Completed') </pre>	Derived from Fact	P6 - Activity
Large Durations	<pre> FILTER("Primavera - Activity"."Metrics"."# of Activities" USING "Primavera - Activity"."Durations - (Activity)". "Remaining Duration"> CAST('@{Large_Durations_ Hr}{352}' AS double)) / "Primavera - Activity"."Metrics"."# of Activities" </pre>	Derived from Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
Invalid Progress	<pre>((CASE WHEN TIMESTAMPDIFF(SQL_TSI_DA Y, "Primavera - Activity"."Dates - (Project)"."Data Date", "Primavera - Activity"."Dates - (Activity)"."Actual Start") > 0 OR TIMESTAMPDIFF(SQL_TSI_DA Y, "Primavera - Activity"."Dates - (Project)"."Data Date", "Primavera - Activity"."Dates - (Activity)"."Actual Finish") > 0 THEN "Primavera - Activity"."Metrics"."# of Activities" ELSE 0.0 END)/ "Primavera - Activity"."Metrics"."# of Activities")</pre>	Derived from Fact	P6 - Activity
Resource / Cost	<pre>(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING (("Primavera - Activity"."Expense"."Exp ense Object Id" IS NULL) AND ("Primavera - Activity"."General - (Resource)"."Resource Id" IS NULL) AND ("Primavera - Activity"."General - (Activity)"."Activity Type" in ('Task Dependent', 'Resource Dependent'))))/"Primaver a - Activity"."Metrics"."# of Activities")</pre>	Derived from Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
Late Activities	<pre>((CASE WHEN TIMESTAMPDIFF(SQL_TSI_HO UR, "Primavera - Activity"."Dates - (Activity)". "Baseline Project Finish", "Primavera - Activity"."Dates - (Activity)". "Finish") > 0.0 THEN "Primavera - Activity"."Metrics"."# of Activities" ELSE 0.0 END)/ "Primavera - Activity"."Metrics"."# of Activities")</pre>	Derived from Fact	P6 - Activity

Calculated Member	Expression	Source	Subject Area / Dataset
BEI	<pre>(FILTER("Primavera - Activity"."Metrics"."# of Activities" USING TIMESTAMPDIFF(SQL_TSI_HO UR, "Primavera - Activity"."Dates - (Activity)"."Baseline Project Finish", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 AND TIMESTAMPDIFF(SQL_TSI_HO UR, "Primavera - Activity"."Dates - (Activity)"."Baseline Project Finish", "Primavera - Activity"."Dates - (Activity)"."Actual Finish") <= 0 AND ("Primavera - Activity"."General - (Activity)"."Activity Status" = 'Completed')) / FILTER("Primavera - Activity"."Metrics"."# of Activities" USING "Primavera - Activity"."General - (Activity)"."Activity Status" = 'Completed'))</pre>	Derived from Fact	P6 - Activity

Data Visualizations Using Unifier Data

The following data visualizations have been created using Unifier data for Executives, and PMOs:

- ▶ **Cash Flow Summary Dashboard** (on page 85)
- ▶ **Forecasted Cost Analytics Overview Dashboard** (on page 91)
- ▶ **Submittals Overview Dashboard** (on page 92)
- ▶ **Tracking Maintenance Status Dashboard** (on page 97)

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Tracking Maintenance Status Dashboard.....	97

Cash Flow Summary Dashboard

Description: The Cash Flow Summary dashboard provides users to see how the initial baseline compares to current baseline, actuals, and forecasts on a year to year basis.

Number of Canvases: 2

Default Canvas: Currency Type - Base

Canvas/Dashboard Name: Cash Flow Summary

Data Source(s): Unifier

Subject Area: not applicable

Datasets: Cash Flow Dataset – Base, Cash Flow Dataset – Project

Canvases

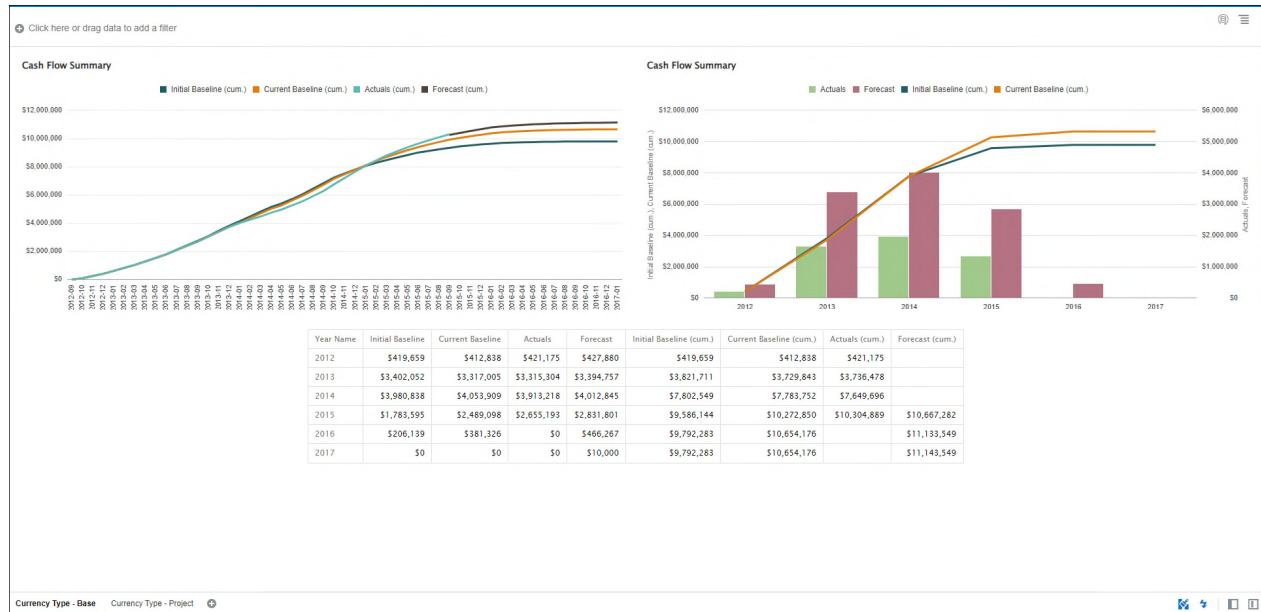


Figure 32: Cash Flow Summary - Currency Type - Base

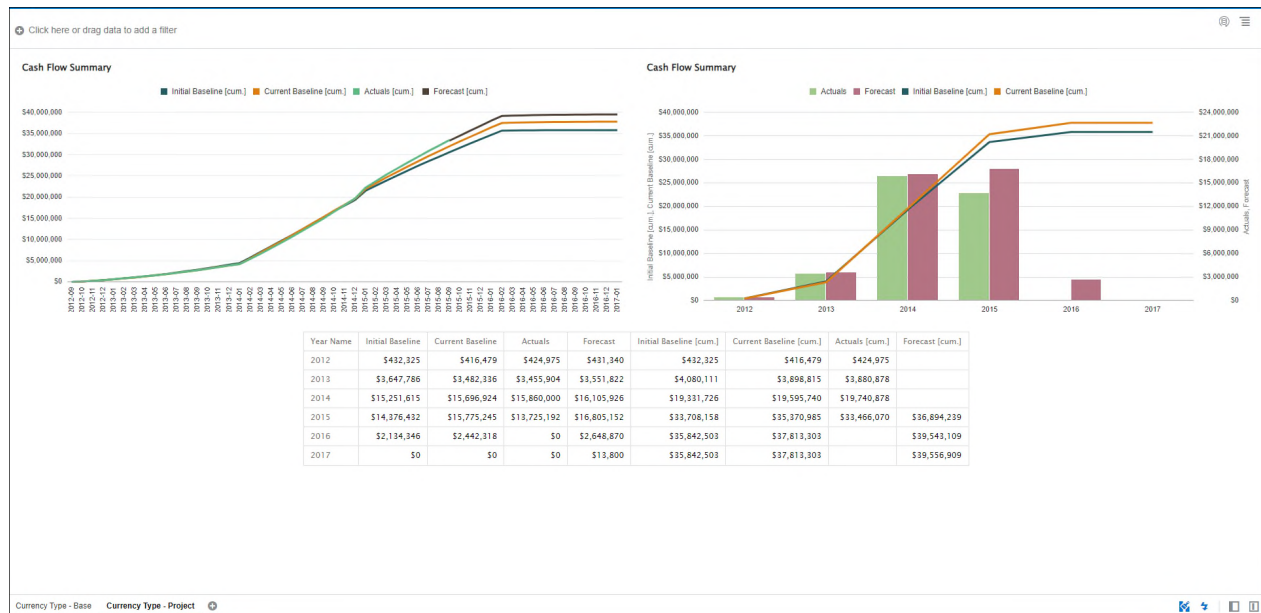


Figure 33: Cash Flow Summary - Currency Type - Project

Table 45: Cash Flow - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
Currency Type - Base	Month Name	Cash Flow Dataset – Base

Canvas	Dimension / Attribute	Subject Area / Dataset
Currency Type - Base	Year Name	Cash Flow Dataset – Base
Currency Type – Project	Month Name	Cash Flow Dataset – Project
Currency Type – Project	Year Name	Cash Flow Dataset – Project

Table 46: Cash Flow - Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Currency Type - Base	Initial Baseline (cum.)	Calculated from Fact	Cash Flow Dataset – Base
Currency Type - Base	Current Baseline (cum.)	Calculated from Fact	Cash Flow Dataset – Base
Currency Type - Base	Actuals (cum.)	Calculated from Fact	Cash Flow Dataset – Base
Currency Type - Base	Forecast (cum.)	Calculated from Fact	Cash Flow Dataset – Base
Currency Type - Base	Initial Baseline	Fact	Cash Flow Dataset – Base
Currency Type - Base	Current Baseline	Fact	Cash Flow Dataset – Base
Currency Type - Base	Actuals	Fact	Cash Flow Dataset – Base
Currency Type - Base	Forecast	Fact	Cash Flow Dataset – Base
Currency Type - Base	Initial Baseline [cum.]	Calculated from Fact	Cash Flow Dataset – Project
Currency Type - Base	Current Baseline [cum.]	Calculated from Fact	Cash Flow Dataset – Project
Currency Type - Base	Actuals [cum.]	Calculated from Fact	Cash Flow Dataset – Project
Currency Type - Base	Forecast [cum.]	Calculated from Fact	Cash Flow Dataset – Project
Currency Type - Base	Initial Baseline	Fact	Cash Flow Dataset – Project
Currency Type - Base	Current Baseline	Fact	Cash Flow Dataset – Project

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Currency Type - Base	Actuals	Fact	Cash Flow Dataset – Project
Currency Type - Base	Forecast	Fact	Cash Flow Dataset – Project

Table 47: Cash Flow - Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset (s)
Initial Baseline (cum.)	<code>RSUM(XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns". "Initial Baseline")</code>	Derived From Fact	Cash Flow Dataset – Base
Current Baseline (cum.)	<code>RSUM(XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns". "Current Baseline")</code>	Derived From Fact	Cash Flow Dataset – Base
Actuals (cum.)	<code>CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH, XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns". "Calendar Date", MAX(MAX(CASE WHEN XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns". "Actuals" > 0 THEN XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns". "Calendar Date" ELSE NULL END BY XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns". "Datasource Id") BY 1)) >= 0 THEN RSUM(XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns". "Actuals") ELSE NULL END</code>	Derived From Fact	Cash Flow Dataset – Base

Calculated Member	Expression	Source	Subject Area / Dataset (s)
Forecast (cum.)	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH,X SA('demouser'. 'Cash Flow Dataset - Base'). "Columns"."Calendar Date",MAX(MAX(CASE WHEN XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns"."Actuals" > 0 THEN XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns"."Calendar Date" ELSE NULL END BY 1) BY 1)) < 1 THEN RSUM(XSA('demouser'. 'Cash Flow Dataset - Base'). "Columns"."Forecast") ELSE NULL END </pre>	Derived From Fact	Cash Flow Dataset – Base
Initial Baseline [cum.]	<pre> RSUM(XSA('demouser'. 'Cash Flow Dataset'). "Columns"."Initial Baseline") </pre>	Derived From Fact	Cash Flow Dataset – Base
Current Baseline [cum.]	<pre> RSUM(XSA('demouser'. 'Cash Flow Dataset'). "Columns"."Current Baseline") </pre>	Derived From Fact	Cash Flow Dataset – Base

Calculated Member	Expression	Source	Subject Area / Dataset (s)
Actuals [cum.]	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH,X SA('demouser'. 'Cash Flow Dataset'). "Columns". "Calendar Date",MAX(MAX(CASE WHEN XSA('demouser'. 'Cash Flow Dataset'). "Columns". "Actuals" > 0 THEN XSA('demouser'. 'Cash Flow Dataset'). "Columns". "Calendar Date" ELSE NULL END BY XSA('demouser'. 'Cash Flow Dataset'). "Columns". "Datasour ce Id") BY 1)) >= 0 THEN RSUM(XSA('demouser'. 'Cash Flow Dataset'). "Columns". "Actuals") ELSE NULL END </pre>	Derived From Fact	Cash Flow Dataset – Base
Forecast [cum.]	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH,X SA('demouser'. 'Cash Flow Dataset'). "Columns". "Calendar Date",MAX(MAX(CASE WHEN XSA('demouser'. 'Cash Flow Dataset'). "Columns". "Actuals" > 0 THEN XSA('demouser'. 'Cash Flow Dataset'). "Columns". "Calendar Date" ELSE NULL END BY 1) BY 1)) < 1 THEN RSUM(XSA('demouser'. 'Cash Flow Dataset'). "Columns". "Forecast ") ELSE NULL END </pre>	Derived From Fact	Cash Flow Dataset – Base

Forecasted Cost Analytics Overview Dashboard

Description: The Forecasted Cost Overview dashboard enables Executives and PMOs to track cost forecasts for individual projects on a quarterly basis. They can compare costs between baseline, actuals and forecasts by project name and owner. They can then make informed decisions about which projects or owners have the highest cost variance.

Number of Canvases: 1

Default Canvas: Forecasted Cost Overview

Canvas/Dashboard Name: Cost Analytics

Data Source(s): Unifier

Subject Area: Unifier – Cash Flow

Datasets: Not Applicable

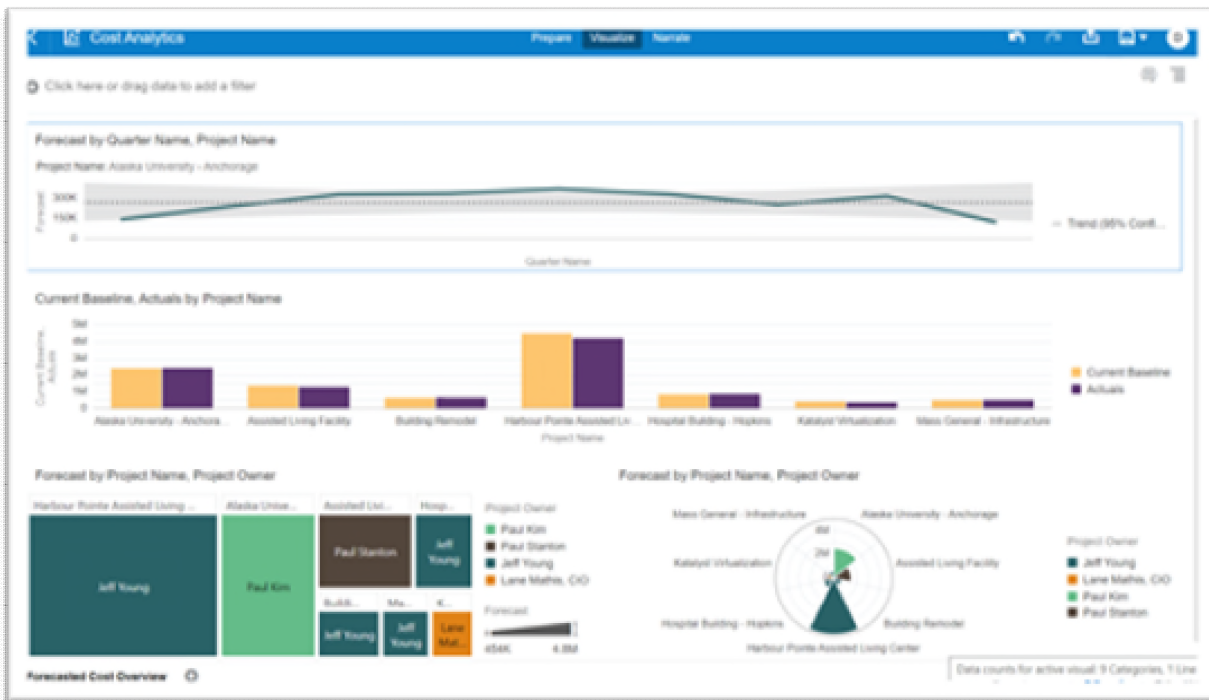


Figure 34: Cost Analytics - Forecasted Cost Overview

Table 48: Cash Flow - Dimensions

Canvas	Dimension	Dimension / Attribute	Subject Area / Dataset
Canvas 1	Calendar	Quarter Name	Unifier – Cash Flow

Canvas	Dimension	Dimension / Attribute	Subject Area / Dataset
Canvas 1	Project	Project Name	Unifier – Cash Flow
Canvas 1	Project	Project Owner	Unifier – Cash Flow

Table 49: Cash Flow - Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Canvas 1	Current Baseline	Fact	Unifier – Cash Flow
Canvas 1	Actuals	Fact	Unifier – Cash Flow
Canvas 1	Forecast	Fact	Unifier – Cash Flow

Table 50: Cost Analytics - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Canvas 1	Visualization	No	Project Name	Unifier – Cash Flow

Submittals Overview Dashboard

Number of Canvases: 1

Default Canvas: Submittals Overview

Canvas/Dashboard Name: Submittals Overview

Data Source(s): Unifier

Subject Area: Unifier – Cash Flow

Datasets: Not Applicable

Dashboard

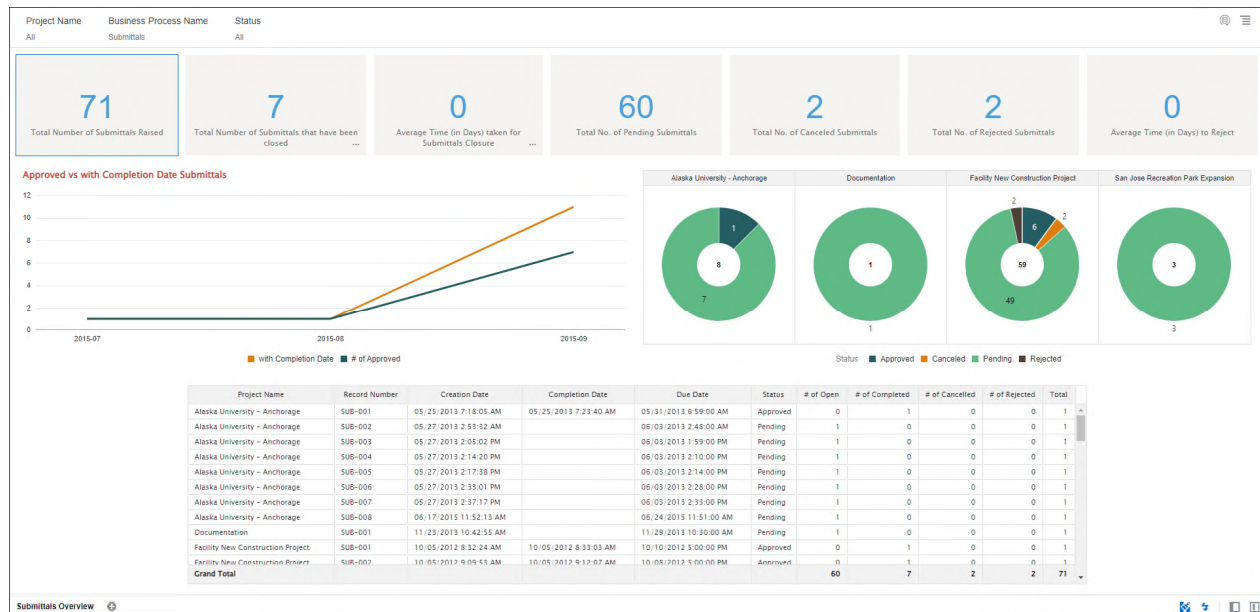


Figure 35: Submittals Overview

Table 51: Submittals Overview – Dimensions

Canvas	Dimension Name	Dimension / Attribute	Subject Area / Dataset
Submittals Overview	Calendar	Project id	Unifier – Business Process History
Submittals Overview	Project	Project Name	Unifier – Business Process History
Submittals Overview	Business Process – General (BP)	Record Number	Unifier – Business Process History
Submittals Overview	Business Process – General (BP)	Status	Unifier – Business Process History
Submittals Overview	Business Process – General (BP)	Creation Date	Unifier – Business Process History
Submittals Overview	Business Process – General (BP)	Completion Date	Unifier – Business Process History
Submittals Overview	Business Process – General (BP)	Due Date	Unifier – Business Process History

Table 52: Submittals Overview – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Submittals Overview	# of BP Records	Fact	Unifier – Business Process History
Submittals Overview	# of Open	Calculated from Fact	Unifier – Business Process History
Submittals Overview	# of Completed	Calculated from Fact	Unifier – Business Process History
Submittals Overview	# of Cancelled	Calculated from Fact	Unifier – Business Process History
Submittals Overview	# of Rejected	Calculated from Fact	Unifier – Business Process History
Submittals Overview	# of Approved	Calculated from Fact	Unifier – Business Process History
Submittals Overview	with Completion Date	Calculated from Fact	Unifier – Business Process History
Submittals Overview	Average Time (in Days) taken for Submittals Closure	Calculated from Fact	Unifier – Business Process History
Submittals Overview	Average Time (in Days) to Reject	Calculated from Fact	Unifier – Business Process History

Table 53: Submittals Overview – Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Submittals Overview	Dashboard	No	Project Name	Unifier – Business Process History
Submittals Overview	Dashboard	No	Business Process Name	Unifier – Business Process History
Submittals Overview	Dashboard & Visualization	No	Status	Unifier – Business Process History
Submittals Overview	Visualization	Yes	Creation Date	Unifier – Business Process History
Submittals Overview	Visualization	Yes	Completion Date	Unifier – Business Process History

Table 54: Submittals Overview – Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset (s)
# of Open	<code>FILTER("Primavera - Business Process History"."Metrics"."# of BP Records" Using "Primavera - Business Process History"."General - (BP)"."Status" IN ('Approved','Pending') AND "Primavera - Business Process History"."Dates - (BP)"."Completion Date" IS NULL)</code>	Derived From Fact	Unifier – Business Process History
# of Completed	<code>FILTER("Primavera - Business Process History"."Metrics"."# of BP Records" USING NOT("Primavera - Business Process History"."Dates - (BP)"."Completion Date" IS NULL) AND "Primavera - Business Process History"."General - (BP)"."Status" = 'Approved')</code>	Derived From Fact	Unifier – Business Process History
# of Cancelled	<code>FILTER("Primavera - Business Process History"."Metrics"."# of BP Records" Using "Primavera - Business Process History"."General - (BP)"."Status" IN ('Cancelled','Canceled'))</code>	Derived From Fact	Unifier – Business Process History
# of Rejected	<code>FILTER("Primavera - Business Process History"."Metrics"."# of BP Records" Using "Primavera - Business Process History"."General - (BP)"."Status" = 'Rejected')</code>	Derived From Fact	Unifier – Business Process History

Calculated Member	Expression	Source	Subject Area / Dataset (s)
# of Approved	<code>FILTER("Primavera - Business Process History"."Metrics"."# of BP Records" USING "Primavera - Business Process History"."General - (BP)". "Status" = 'Approved')</code>	Derived From Fact	Unifier – Business Process History
with Completion Date	<code>FILTER("Primavera - Business Process History"."Metrics"."# of BP Records" USING NOT("Primavera - Business Process History"."Dates - (BP)". "Completion Date" IS NULL))</code>	Derived From Fact	Unifier – Business Process History
Average Time (in Days) taken for Submittals Closure	<code>SUM(CASE WHEN "Primavera - Business Process History"."General - (BP)". "Status" = 'Approved' THEN TIMESTAMPDIFF(SQL_TSI_DAY, "Primavera - Business Process History"."Dates - (BP)". "Creation Date", "Primavera - Business Process History"."Dates - (BP)". "Completion Date") ELSE 0 END) / (FILTER("Primavera - Business Process History"."Metrics"."# of BP Records" USING NOT("Primavera - Business Process History"."Dates - (BP)". "Completion Date" IS NULL) AND "Primavera - Business Process History"."General - (BP)". "Status" = 'Approved'))</code>	Derived From Fact	Unifier – Business Process History

Calculated Member	Expression	Source	Subject Area / Dataset (s)
Average Time (in Days) to Reject	SUM(CASE WHEN "Primavera - Business Process History"."General - (BP)". "Status" = 'Rejected' THEN TIMESTAMPDIFF(SQL_TSI_DAY, "Primavera - Business Process History"."Dates - (BP)". "Creation Date", "Primavera - Business Process History"."Dates - (BP)". "Completion Date") ELSE 0 END) / (FILTER("Primavera - Business Process History"."Metrics"."# of BP Records" Using "Primavera - Business Process History"."General - (BP)". "Status" = 'Rejected'))	Derived From Fact	Unifier – Business Process History

Tracking Maintenance Status Dashboard

Description: Tracking open and closed work orders by week over time.

Number of Canvases: 4

Default Canvas: Issues

Canvas/Dashboard Name: Tracking Maintenance Status

Data Source(s): Unifier

Subject Area: N/A

Datasets: Created and Completed BP Overtime Dataset

Dashboard(s)

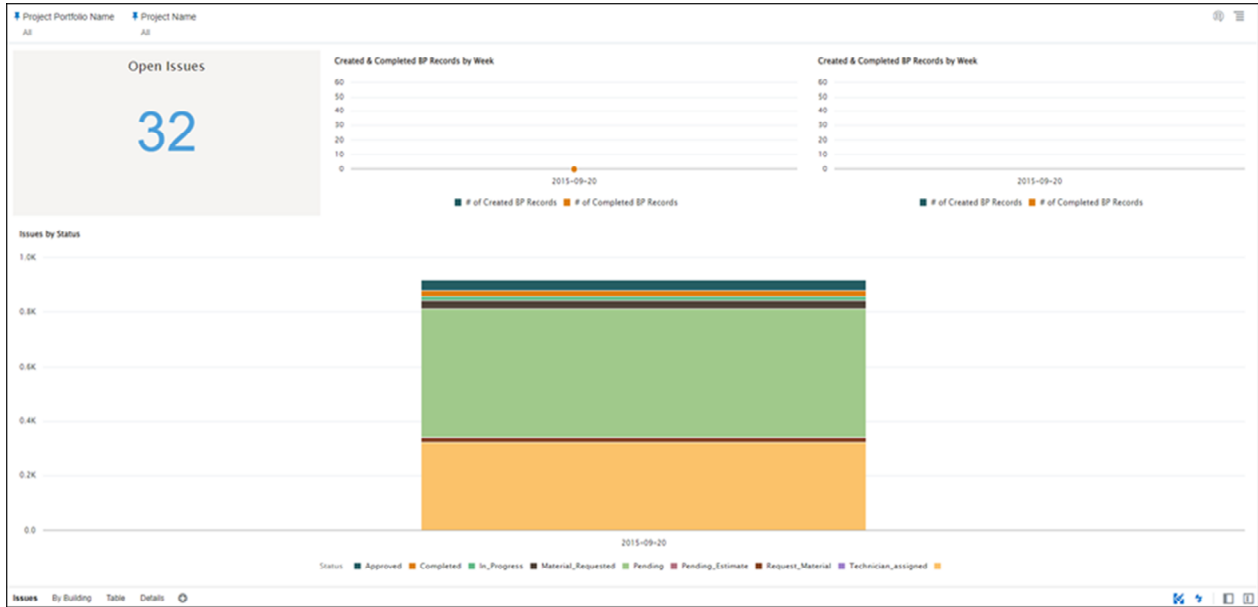


Figure 36: Tracking Maintenance Status Issues

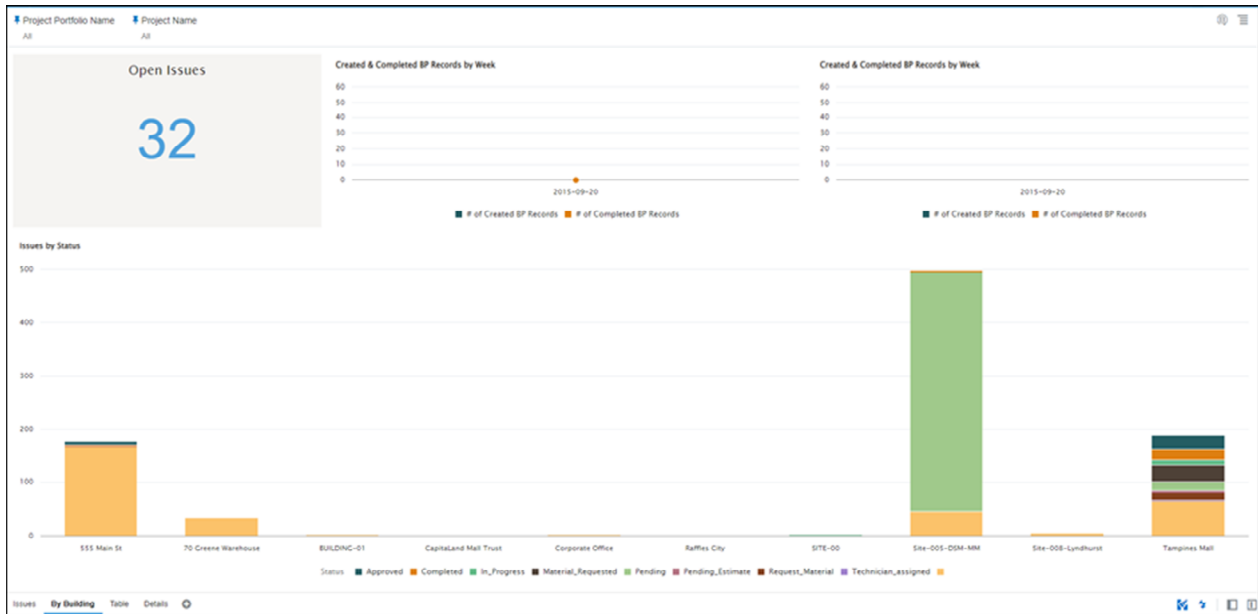


Figure 37: Tracking Maintenance Status By Building

Project Portfolio Name	Project Name	Project Name (Root Level)	Project Hierarchy Name Level 1	Status	# of BP Records
All	All	All	All	All	
	Project Name (Root Level)	Project Name	Project Hierarchy Name Level 1	Status	# of BP Records
	All Properties	555 Main St	REGION-00	Approved	7
				Completed	1
				Pending_Extense	1
					148
		70 Greene Warehouse	REGION-00	Approved	1
					59
		BUILDING-01	REGION-00	Approved	1
				Completed	1
					2
		Corporate Office	REGION-00	Approved	1
					3
		SITE-00	REGION-00	Approved	1
				In_Progress	1
				Pending	1
		Site-005-OSM-MM	REGION-00	Approved	1
				Completed	2
				Pending	450
					45
		Site-008-Lynchurst	REGION-00	Pending	1
					5
	CAPITALAND	Capitaland Mall Trust	Capitaland Malls Asia	In_Progress	1
		Raffles City	Capitaland Malls Asia	Approved	1
		Tampines Mall	Capitaland Malls Asia	Approved	26
				Completed	20
				In_Progress	11
				Material_Requested	32
				Pending	15

Figure 38: Tracking Maintenance Status Table

Project Portfolio Name	Project Name	Project Name (Root Level)	Project Hierarchy Name Level 1	Status	Record Number	Title	Status
All	All	All	All	All			
	Project Name (Root Level)	Project Name	Project Hierarchy Name Level 1	Status	Record Number	Title	Status
	All Properties	555 Main St	REGION-00		CWO-0001	Broken Dishwasher	
	All Properties	555 Main St	REGION-00		CWO-0002	Dishwasher not working	
	All Properties	555 Main St	REGION-00		CWO-0003	Heater too hot	Approved
	All Properties	555 Main St	REGION-00		CWO-0004	Heater too hot	Approved
	All Properties	555 Main St	REGION-00		CWO-0005		Approved
	All Properties	555 Main St	REGION-00		CWO-0006	Latest Dishwasher	Approved
	All Properties	555 Main St	REGION-00		CWO-0007	Fridge needs fixing	
	All Properties	555 Main St	REGION-00		CWO-0008	Fridge needs fixing	Approved
	All Properties	555 Main St	REGION-00		CWO-0009		Approved
	All Properties	555 Main St	REGION-00		CWO-0010		Approved
	All Properties	555 Main St	REGION-00		CWO-0011	Refrigerator Broken	Pending_Estimate
	All Properties	555 Main St	REGION-00		PWO-0001		Completed
	All Properties	555 Main St	REGION-00		PWO-0002		
	All Properties	555 Main St	REGION-00		PWO-0003		
	All Properties	555 Main St	REGION-00		PWO-0004		
	All Properties	555 Main St	REGION-00		PWO-0005		
	All Properties	555 Main St	REGION-00		PWO-0006		
	All Properties	555 Main St	REGION-00		PWO-0007		
	All Properties	555 Main St	REGION-00		PWO-0008		
	All Properties	555 Main St	REGION-00		PWO-0009		
	All Properties	555 Main St	REGION-00		PWO-0010		
	All Properties	555 Main St	REGION-00		PWO-0011		
	All Properties	555 Main St	REGION-00		PWO-0012		
	All Properties	555 Main St	REGION-00		PWO-0013		
	All Properties	555 Main St	REGION-00		PWO-0014		
	All Properties	555 Main St	REGION-00		PWO-0015		
	All Properties	555 Main St	REGION-00		PWO-0016		
	All Properties	555 Main St	REGION-00		PWO-0017		
	All Properties	555 Main St	REGION-00		PWO-0018		
	All Properties	555 Main St	REGION-00		PWO-0019		
	All Properties	555 Main St	REGION-00		PWO-0020		
	All Properties	555 Main St	REGION-00		PWO-0021		
	All Properties	555 Main St	REGION-00		PWO-0022		

Figure 39: Tracking Maintenance Status Details

Table 55: Tracking Maintenance Status – Dimensions

Canvas	Dimension Name	Dimension / Attribute	Subject Area / Dataset
Issues by Building		Week Name	Created and Completed BP Overtime Dataset
All Canvases		Status	Created and Completed BP Overtime Dataset
By Building Table		Project Name	Created and Completed BP Overtime Dataset
Table Details		Project Name (Root Level)	Created and Completed BP Overtime Dataset
Table Details		Project Hierarchy Name Level 1	Created and Completed BP Overtime Dataset
Details		Record Number	Created and Completed BP Overtime Dataset
Details		Title	Created and Completed BP Overtime Dataset

Table 56: Tracking Maintenance Status – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Issues By Building Table	# of BP Records	Fact	Created and Completed BP Overtime Dataset
Issues By Building	# of Created BP Records	Calculated from Fact	Created and Completed BP Overtime Dataset
Issues By Building	# of Completed BP Records	Calculated from Fact	Created and Completed BP Overtime Dataset

Table 57: Tracking Maintenance Status – Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
All Canvases	Dashboard	No	Project Portfolio Name	Created and Completed BP Overtime Dataset
All Canvases	Dashboard	No	Project Name	Created and Completed BP Overtime Dataset
All Canvases	Visualization	No	Status	Created and Completed BP Overtime Dataset
All Canvases	Dashboard & Visualization	No	Business Process Name	Created and Completed BP Overtime Dataset
Issues By Building	Dashboard & Visualization	No	Open Cases Tag	Created and Completed BP Overtime Dataset

Table 58: Tracking Maintenance Status – Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset (s)
# of Created BP Records	<pre> CASE WHEN XSA('demouser'. 'Created and Completed BP Over Time Dataset'). "Columns". "Creation Date" >= XSA('demouser'. 'Created and Completed BP Over Time Dataset'). "Columns". "Week Start Date" AND XSA('demouser'. 'Created and Completed BP Over Time Dataset'). "Columns". "Creation Date" <= XSA('demouser'. 'Created and Completed BP Over Time Dataset'). "Columns". "Week End Date" THEN 1 ELSE 0 END </pre>	Derived From Fact	Created and Completed BP Overtime Dataset

Calculated Member	Expression	Source	Subject Area / Dataset (s)
# of Completed BP Records	<pre> CASE WHEN XSA('demouser'. 'Created and Completed BP Over Time Dataset'). "Columns". "Completion Date" >= XSA('demouser'. 'Created and Completed BP Over Time Dataset'). "Columns". "Week Start Date" AND XSA('demouser'. 'Created and Completed BP Over Time Dataset'). "Columns". "Completion Date" <= XSA('demouser'. 'Created and Completed BP Over Time Dataset'). "Columns". "Week End Date" THEN 1 ELSE 0 END </pre>	Derived From Fact	Created and Completed BP Overtime Dataset

Data Visualizations Using Unifier Essentials Data

The following data visualizations have been created using Unifier Essentials data:

- ▶ **Project Status Dashboard** (on page 103)
- ▶ **Root Cause Analysis Dashboard** (on page 108)
- ▶ **Budget Insights Dashboard** (on page 114)

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Project Status Dashboard.....	103
Root Cause Analysis Dashboard.....	108
Budget Insights Dashboard	114

Project Status Dashboard

Description: .

Number of Canvases: 1

Default Canvas: Project Status

Canvas/Dashboard Name: Project Status

Data Source(s): Unifier

Subject Area: Unifier - Cost Sheet

Datasets: Not applicable

Dashboard

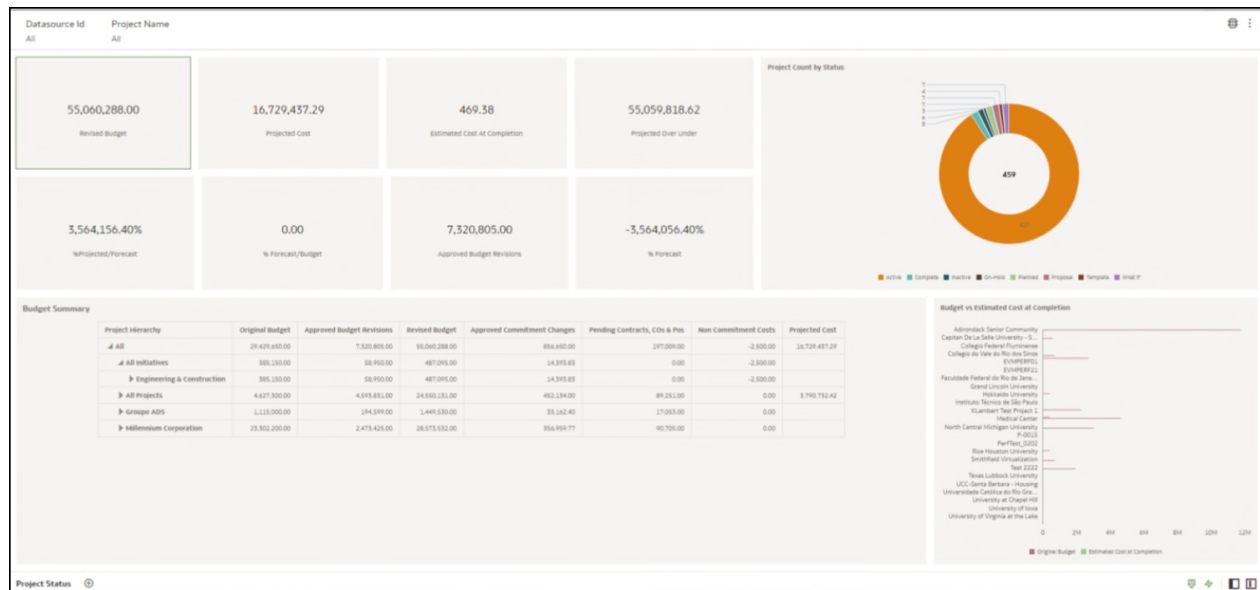


Figure 40: Project Status Dashboard

Table 59: Project Status - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
Project Status	Project Status	Unifier - Cost Sheet
Project Status	Project Hierarchy	Unifier - Cost Sheet
Project Status	Project Name	Unifier - Cost Sheet

Table 60: Project Status – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Project Status	Revised Budget	Fact	Unifier - Cost Sheet
Project Status	Projected Cost	Calculated from Fact	Unifier - Cost Sheet
Project Status	Estimated Cost At Completion	Calculated from Fact	Unifier - Cost Sheet
Project Status	Projected Over Under	Calculated from Fact	Unifier - Cost Sheet
Project Status	% Projected / Forecast	Calculated from Fact	Unifier - Cost Sheet

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Project Status	% Projected / Budget	Calculated from Fact	Unifier - Cost Sheet
Project Status	Approved Budget Revisions	Fact	Unifier - Cost Sheet
Project Status	% Forecast	Calculated from Fact	Unifier - Cost Sheet
Project Status	Project Count	Fact	Unifier - Cost Sheet
Project Status	Original Budget	Fact	Unifier - Cost Sheet
Project Status	Approved Commitment Changes	Calculated from Fact	Unifier - Cost Sheet
Project Status	Pending Contracts, cos & POs	Calculated from Fact	Unifier - Cost Sheet
Project Status	Non Commitment Cost	Calculated from Fact	Unifier - Cost Sheet
Project Status	Total Costs Incurred	Calculated from Fact	Unifier - Cost Sheet
Project Status	Estimate to Complete (ETC)	Calculated from Fact	Unifier - Cost Sheet
Project Status	% Projected Costs	Calculated from Fact	Unifier - Cost Sheet

Table 61: Project Status - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Project Status	Dashboa rd	No	Datasource ID	Unifier - Cost Sheet
Project Status	Dashboa rd	No	Project Name	Unifier - Cost Sheet
Project Status	Visualiza tion	Yes	"Primavera - Cost Sheet"."General - (Project)". "Project Status" is not null	Unifier - Cost Sheet

Table 62: Project Status - Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Projected Cost	"Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6"	Derived From Fact	Unifier - Cost Sheet
Estimated Cost At Completion	"Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13"	Derived From Fact	Unifier - Cost Sheet
Projected Over Under	"Primavera - Cost Sheet"."Costs"."Revised Budget" - ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13")	Derived From Fact	Unifier - Cost Sheet
% Projected / Forecast	((("Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6") / ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13"))	Derived From Fact	Unifier - Cost Sheet

Calculated Member	Expression	Source	Subject Area / Dataset
% Forecast / Budget	("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13") / "Primavera - Cost Sheet"."Costs"."Revised Budget"	Derived From Fact	Unifier - Cost Sheet
% Forecast	1-(("Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6") / ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13"))	Derived From Fact	Unifier - Cost Sheet
Project Count	COUNT(DISTINCT "Primavera - Cost Sheet"."General - (Project)". "Project Object Id")	Derived From Fact	Unifier - Cost Sheet
Pending Contracts, Cos & POs	"Primavera - Cost Sheet"."Costs"."Pending PO Amendments"+"Primavera - Cost Sheet"."Costs"."Pending Change Orders"	Derived From Fact	Unifier - Cost Sheet
Non Commitment Cost	"Primavera - Cost Sheet"."Costs"."User Defined Column 6"	Derived From Fact	Unifier - Cost Sheet

Calculated Member	Expression	Source	Subject Area / Dataset
Total Costs Incurred	"Primavera - Cost Sheet"."Costs"."User Defined Column 7"	Derived From Fact	Unifier - Cost Sheet
% Projected Costs	"Primavera - Cost Sheet"."Costs"."User Defined Column 7"/("Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6")* 100	Derived From Fact	Unifier - Cost Sheet
Estimate to Complete (ETC)	"Primavera - Cost Sheet"."Costs"."User Defined Column 13"	Derived From Fact	Unifier - Cost Sheet

Root Cause Analysis Dashboard

Description: .

Number of Canvases: 1

Default Canvas: Root Cause Analysis

Canvas/Dashboard Name: Root Cause Analysis

Data Source(s): Unifier

Subject Area: Unifier - Cost Sheet

Datasets: Not applicable

Dashboard

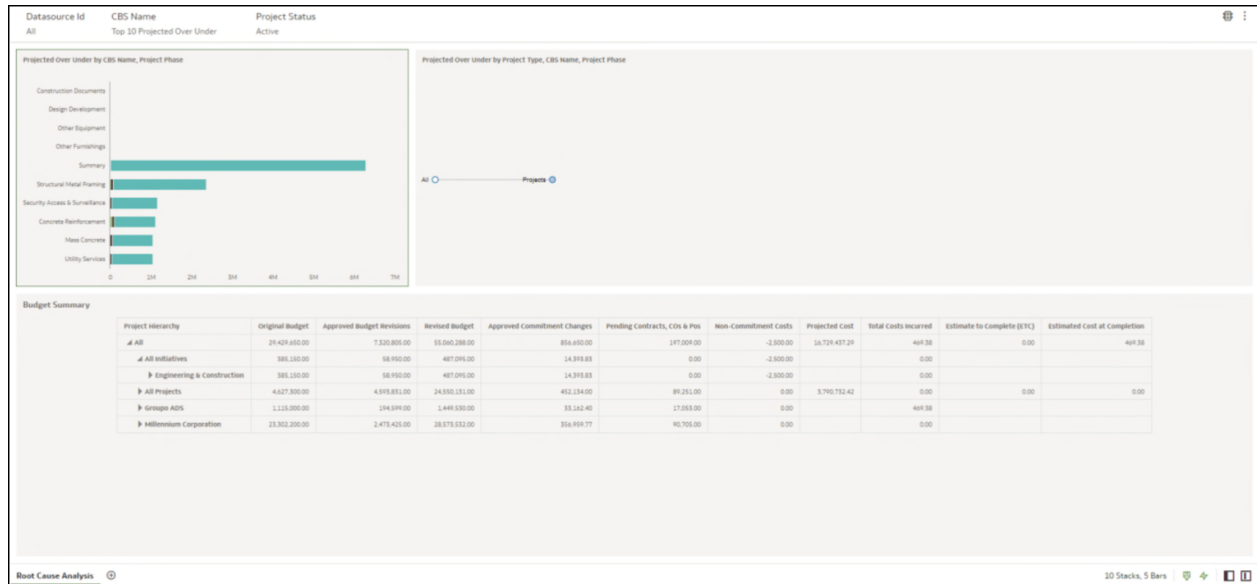


Figure 41: Root Cause Analysis Dashboard

Table 63: Root Cause Analysis - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
Root Cause Analysis	CBS Name	Unifier - Cost Sheet
Root Cause Analysis	Project Phase	Unifier - Cost Sheet
Root Cause Analysis	Project Name	Unifier - Cost Sheet
Root Cause Analysis	Project Type	Unifier - Cost Sheet
Root Cause Analysis	Project Hierarchy	Unifier - Cost Sheet

Table 64: Root Cause Analysis – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Root Cause Analysis	Revised Budget	Fact	Unifier - Cost Sheet
Root Cause Analysis	Projected Cost	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	Estimated Cost At Completion	Calculated from Fact	Unifier - Cost Sheet

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Root Cause Analysis	Projected Over Under	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	% Projected / Forecast	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	% Projected / Budget	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	Approved Budget Revisions	Fact	Unifier - Cost Sheet
Root Cause Analysis	% Forecast	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	Project Count	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	Original Budget	Fact	Unifier - Cost Sheet
Root Cause Analysis	Approved Commitment Changes	Fact	Unifier - Cost Sheet
Root Cause Analysis	Pending Contracts, COs & POs	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	Non Commitment Cost	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	Total Costs incurred	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	Estimate to Complete (ETC)	Calculated from Fact	Unifier - Cost Sheet
Root Cause Analysis	% Projected Costs	Calculated from Fact	Unifier - Cost Sheet

Table 65: Root Cause Analysis - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Root Cause Analysis	Dashboa rd	No	Datasource ID	Unifier - Cost Sheet
Root Cause Analysis	Dashboa rd	No	CBS Name	Unifier - Cost Sheet
Root Cause Analysis	Dashboa rd	No	Project Status	Unifier - Cost Sheet

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Root Cause Analysis	Visualization	Yes	("Primavera - Cost Sheet"."Costs"."Revised Budget" - ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."Revised Commitments")) is not null and ("Primavera - Cost Sheet"."Costs"."Revised Budget" - ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."Revised Commitments")) <> 0	Unifier - Cost Sheet

Table 66: Root Cause Analysis - Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Projected Cost	"Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6"	Derived From Fact	Unifier - Cost Sheet
Estimated Cost At Completion	"Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13"	Derived From Fact	Unifier - Cost Sheet

Calculated Member	Expression	Source	Subject Area / Dataset
Projected Over Under	"Primavera - Cost Sheet"."Costs"."Revised Budget" - ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13")	Derived From Fact	Unifier - Cost Sheet
% Projected / Forecast	(("Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6") / ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13"))	Derived From Fact	Unifier - Cost Sheet
% Forecast / Budget	("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13") / "Primavera - Cost Sheet"."Costs"."Revised Budget"	Derived From Fact	Unifier - Cost Sheet

Calculated Member	Expression	Source	Subject Area / Dataset
% Forecast	1-(("Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6") / ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13"))	Derived From Fact	Unifier - Cost Sheet
Project Count	COUNT(DISTINCT "Primavera - Cost Sheet"."General - (Project)". "Project Object Id")	Derived From Fact	Unifier - Cost Sheet
Pending Contracts, Cos & POs	"Primavera - Cost Sheet"."Costs"."Pending PO Amendments"+"Primavera - Cost Sheet"."Costs"."Pending Change Orders"	Derived From Fact	Unifier - Cost Sheet
Non Commitment Cost	"Primavera - Cost Sheet"."Costs"."User Defined Column 6"	Derived From Fact	Unifier - Cost Sheet
Total Costs Incurred	"Primavera - Cost Sheet"."Costs"."User Defined Column 7"	Derived From Fact	Unifier - Cost Sheet

Calculated Member	Expression	Source	Subject Area / Dataset
% Projected Costs	"Primavera - Cost Sheet"."Costs"."User Defined Column 7"/("Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6")* 100	Derived From Fact	Unifier - Cost Sheet
Estimate to Complete (ETC)	"Primavera - Cost Sheet"."Costs"."User Defined Column 13"	Derived From Fact	Unifier - Cost Sheet

Budget Insights Dashboard

Description: .

Number of Canvases: 1

Default Canvas: Budget Insights

Canvas/Dashboard Name: Budget Insights

Data Source(s): Unifier

Subject Area: Unifier - Cost Sheet

Datasets: Not applicable

Dashboard

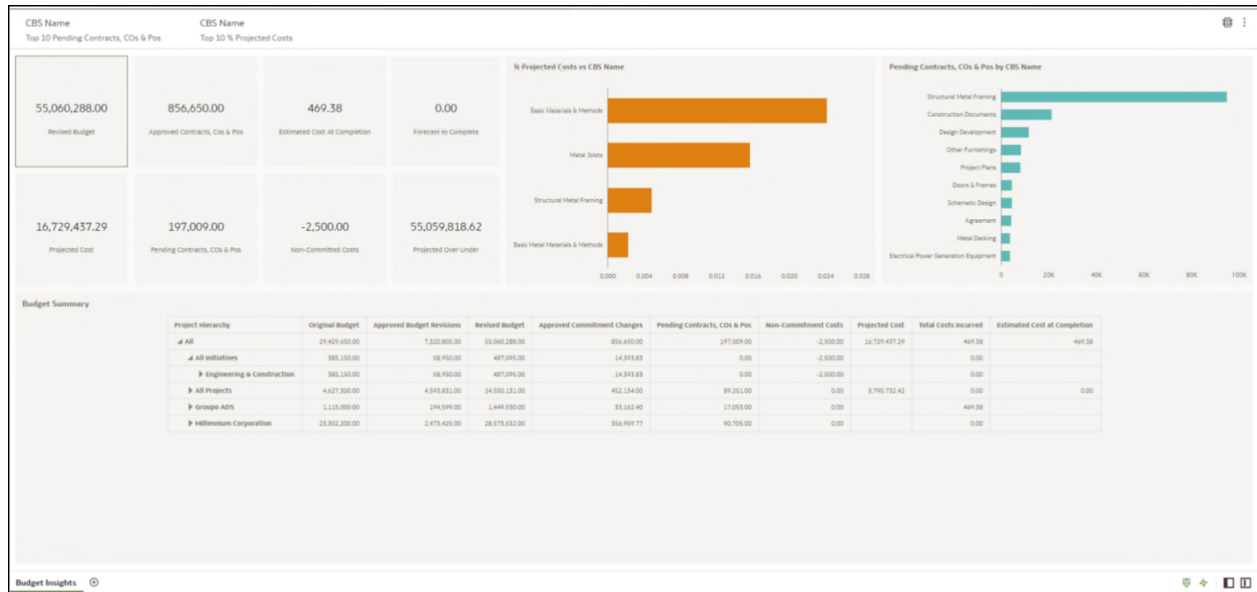


Figure 42: Budget Insights Dashboard

Table 67: Budget Insights - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
Budget Insights	Project Name	Unifier - Cost Sheet

Table 68: Budget Insights – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Budget Insights	Revised Budget	Fact	Unifier - Cost Sheet
Budget Insights	Projected Cost		Unifier - Cost Sheet
Budget Insights	Estimated Cost At Completion		Unifier - Cost Sheet
Budget Insights	Projected Over Under		Unifier - Cost Sheet
Budget Insights	Approved Budget Revisions		Unifier - Cost Sheet
Budget Insights	Project Count		Unifier - Cost Sheet
Budget Insights	Original Budget		Unifier - Cost Sheet

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Budget Insights	Approved Commitment Changes		Unifier - Cost Sheet
Budget Insights	Pending Contracts, Cos & POs		Unifier - Cost Sheet
Budget Insights	Non Commitment Cost		Unifier - Cost Sheet
Budget Insights	Total Costs Incurred		Unifier - Cost Sheet
Budget Insights	Estimate to Complete(ETC)		Unifier - Cost Sheet
Budget Insights	% Projected Costs		Unifier - Cost Sheet

Table 69: Budget Insights - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute / Measure	Subject Area / Dataset
Budget Insights	Dashboard	No	CBS Name	Unifier - Cost Sheet
Budget Insights	Visualization	Yes	"Primavera - Cost Sheet"."Costs"."User Defined Column 7" > 0 And ("Primavera - Cost Sheet"."Costs"."User Defined Column 7"/("Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6")* 100) is not null	Unifier - Cost Sheet

Table 70: Budget Insights - Calculated Members

Calculated Member	Expression	Source	Subject Area / Dataset
Projected Cost	"Primavera - Cost Sheet"."Costs"."User	Derived From Fact	Unifier - Cost Sheet

Calculated Member	Expression	Source	Subject Area / Dataset
	Defined Column 14+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6"		
Estimated Cost At Completion	"Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13"	Derived From Fact	Unifier - Cost Sheet
Projected Over Under	"Primavera - Cost Sheet"."Costs"."Revised Budget" - ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13")	Derived From Fact	Unifier - Cost Sheet
Project Count	COUNT(DISTINCT "Primavera - Cost Sheet"."General - (Project)". "Project Object Id")	Derived From Fact	Unifier - Cost Sheet
Pending Contracts, Cos & POs	"Primavera - Cost Sheet"."Costs"."Pending PO Amendments"+"Primavera - Cost Sheet"."Costs"."Pending Change Orders"	Derived From Fact	Unifier - Cost Sheet
Non Commitment Cost	"Primavera - Cost Sheet"."Costs"."User Defined Column 6"	Derived From Fact	Unifier - Cost Sheet

Calculated Member	Expression	Source	Subject Area / Dataset
Total Costs Incurred	"Primavera - Cost Sheet"."Costs"."User Defined Column 7"	Derived From Fact	Unifier - Cost Sheet
% Projected Costs	"Primavera - Cost Sheet"."Costs"."User Defined Column 7"/("Primavera - Cost Sheet"."Costs"."User Defined Column 14"+"Primavera - Cost Sheet"."Costs"."Revised Commitments"+"Primavera - Cost Sheet"."Costs"."User Defined Column 6")* 100	Derived From Fact	Unifier - Cost Sheet
Estimate to Complete (ETC)	"Primavera - Cost Sheet"."Costs"."User Defined Column 13"	Derived From Fact	Unifier - Cost Sheet

Data Visualizations Using Oracle Aconex Data

The following data visualizations have been created using Aconex data:

- ▶ **Users, Projects, and Organizations Sample Dashboard** (on page 119)
- ▶ **Mails Sample Dashboard** (on page 121)
- ▶ **Documents Sample Dashboard** (on page 126)
- ▶ **Workflow Sample Dashboard** (on page 131)

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Users, Projects, and Organizations Sample Dashboard	119
Mails Sample Dashboard	121
Documents Sample Dashboard.....	126
Workflow Sample Dashboard	131

Users, Projects, and Organizations Sample Dashboard

Description: The data displayed in the User, Project, Organization dashboard, and in any out-of-the-box or custom dashboard is based on the projects that you have access in Aconex.

Use the User, Project, Organization dashboard to discover information such as, (but not limited to):

- ▶ identify owner and partner organizations within projects
- ▶ identify the role of each organization in each project
- ▶ identify projects and their corresponding owner and partner organizations by geographical locations
- ▶ count of organizations (owner and participant orgs) involved in a given project
- ▶ count of all projects that a specific organization is involved in (as an owning organization or a participant organization)
- ▶ count of all users involved in all those projects that the logged in user is also associated with

Number of Canvases: 2

Default Canvas: Project Status

Canvas/Dashboard Name: Users, Projects, and Organizations Sample Dashboard

Data Source(s): Aconex

Subject Area: Aconex – User Project Organization

Datasets: Not applicable

Dashboard

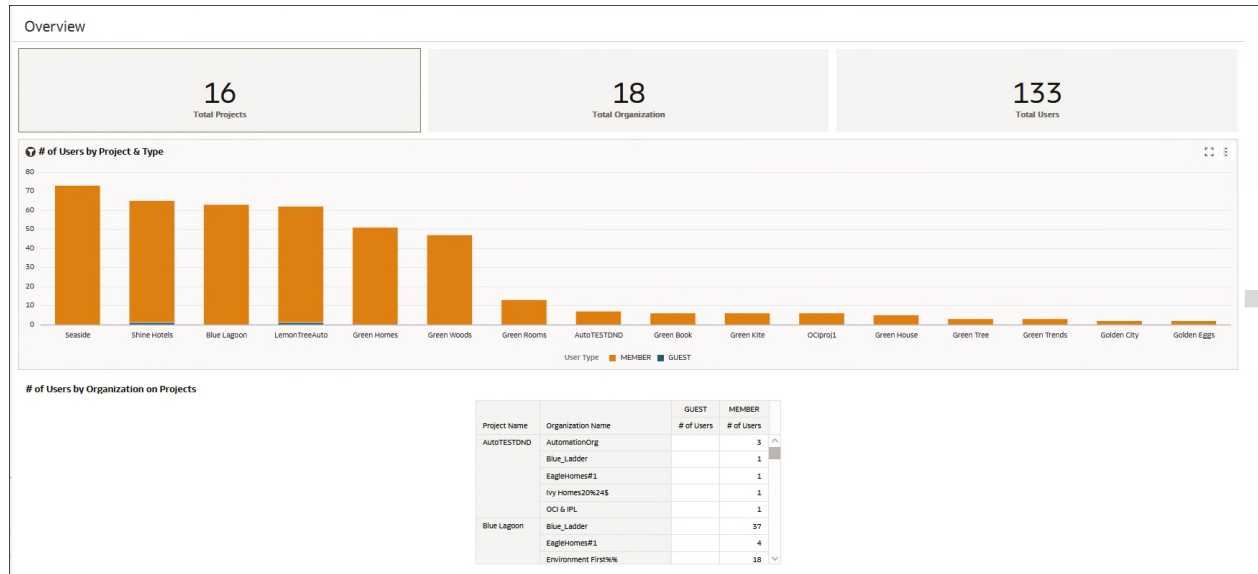


Figure 43: Users, Projects, and Organizations Sample Dashboard - Overview

Details

User Details

Project Name	Organization Name	User Title	Given Name	Middle Name	Last Name	Organization Position	Country	User Type
AutoTESTDND	AutomationOrg		auto		user1	Supervisor	India	MEMBER
AutoTESTDND	AutomationOrg		auto		user2	supervisor	India	MEMBER
AutoTESTDND	AutomationOrg		auto		user3	sue	India	MEMBER
AutoTESTDND	Blue_Ladder		Blue2		Lad2	Advisor	India	MEMBER
AutoTESTDND	EagleHomes#1		Lohith		S	doc	India	MEMBER
AutoTESTDND	Ivy Homes20%24\$		Juhi		Rawat	doc	India	MEMBER
AutoTESTDND	OCJ & IPL		Ritu		J	Supervisor	India	MEMBER
Blue Lagoon	Blue_Ladder	Mr	Alexander		Thomas	Sr. Principal Consultant	India	MEMBER
Blue Lagoon	Blue_Ladder	Mr	Blue		three	QA	India	MEMBER
Blue Lagoon	Blue_Ladder	Mr	David		Pearce	Strategy Sr Manager	India	MEMBER
Blue Lagoon	Blue_Ladder	Mr	Edward		Adams	Account Manager	India	MEMBER
Blue Lagoon	Blue_Ladder	Mr	EstebanAndres	Valdebenito	Tolza	Product Manager	India	MEMBER
Blue Lagoon	Blue_Ladder	Mr	Jeff		Marsh	Consultant	India	MEMBER
Blue Lagoon	Blue_Ladder	Mr	Matt		Robertson	Consultant	India	MEMBER
Blue Lagoon	Blue_Ladder	Mr	Hajmeddine		Jardak	Customer Success Manager	India	MEMBER
Blue Lagoon	Blue_Ladder	Mrs	Danielle		McNair	Sales Consultant	India	MEMBER
Blue Lagoon	Blue_Ladder	Ms	Simma		Singh	Senior Product Manager	India	MEMBER
Blue Lagoon	Blue_Ladder	Ms	blue		five	QA	India	MEMBER
Blue Lagoon	Blue_Ladder	Ms	blue		four	Application engineer	India	MEMBER
Blue Lagoon	Blue_Ladder		Alan		Haslop	SC	India	MEMBER
Blue Lagoon	Blue_Ladder		Alisha		Graham	SC	India	MEMBER
Blue Lagoon	Blue_Ladder		Bhavya		Jadaja	SC	India	MEMBER
Blue Lagoon	Blue_Ladder		Blue2		Lad2	Advisor	India	MEMBER
Blue Lagoon	Blue_Ladder		Chritan		chritana.mehta@oracle.com	Principal Solution Engineer, CEGBU SW - Presales	India	MEMBER
Blue Lagoon	Blue_Ladder		Chris		Cunnington	SC	India	MEMBER
Blue Lagoon	Blue_Ladder		Dale		Rimington	SC	India	MEMBER
Blue Lagoon	Blue_Ladder		Darci		Kidd	SC	India	MEMBER
Blue Lagoon	Blue_Ladder		Evan		Gamble	SC	India	MEMBER

Figure 44: Users, Projects, and Organizations Sample Dashboard - Details

Table 71: Project Status - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
All Canvas	Project Name	Aconex – User Project Organization

Canvas	Dimension / Attribute	Subject Area / Dataset
All Canvas	User Type	Aconex – User Project Organization
All Canvas	Organization Name	Aconex – User Project Organization
Details	User Title	Aconex – User Project Organization
Details	Given Name	Aconex – User Project Organization
Details	Middle Name	Aconex – User Project Organization
Details	Last Name	Aconex – User Project Organization
Details	Organization Position	Aconex – User Project Organization
Details	Country	Aconex – User Project Organization

Table 72: Project Status – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Overview	# of Projects	Fact	Aconex – User Project Organization
Overview	# of Organization	Fact	Aconex – User Project Organization
Overview	# of Users	Fact	Aconex – User Project Organization

Table 73: Budget Insights - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
Details	Canvas	No	Organization Name	Aconex – User Project Organization
Details	Canvas	No	Project Name	Aconex – User Project Organization

Mails Sample Dashboard

Description: The data displayed in the **Aconex - Mails** dashboard, and in any out-of-the-box or custom dashboard is based on the projects that you have access in Aconex.

Use the **Aconex - Mails** dashboard to discover information such as (but *not limited to*):

- ▶ Identify existing red flags on your projects like delayed correspondences
- ▶ Identify the most/least active organizations based on mail correspondences/responses
- ▶ Compare and analyze mail activity across the project portfolio
- ▶ Track KPIs, view mail details, etc.

You can also create your own data sets and/or data flows to:

- ▶ Implement custom logic to get deeper insights like Avg. RFI turnaround time, Mails overdue >N days, etc.
- ▶ Achieve custom dashboard requirements using Mail Project Fields
- ▶ Create use cases that need linking other subject areas with Mails, etc.

Number of Canvases: 4

Default Canvas: Activity

Canvas/Dashboard Name: Mails Sample Dashboard

Data Source(s): Aconex

Subject Area: not applicable

Dataset: Mail DS 1-11-23

Dashboard

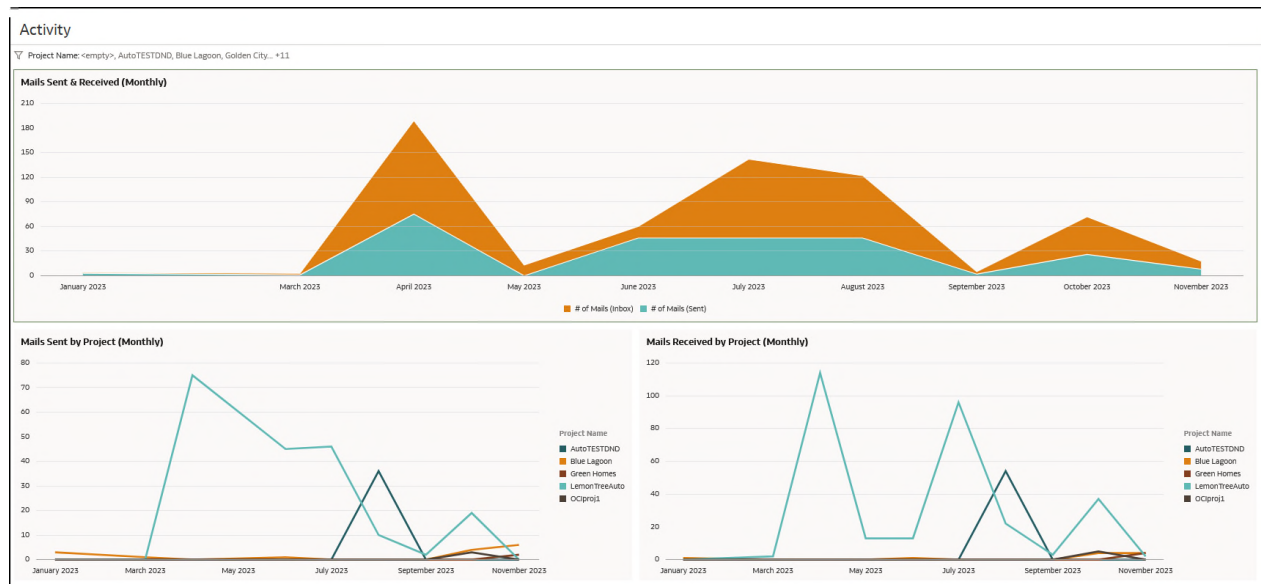


Figure 45: Aconex - Mails Sample Dashboard - Activity



Figure 46: Aconex - Mails Sample Dashboard - Overview



Figure 47: Aconex - Mails Sample Dashboard - Details

Mail Thread

Project Name: AutoTESTDND Mail Type: All Reply Type: All Recipient Type: All Mail Status: All

Mail Thread Details

Reference Number	Mail Number	Mail Type	Reply Type	Sent Date	From Organization	To Organization	Mail Status
ATO-CR-000001	ATO-CR-000001	Catering Request	ORIGINAL	08/08/2023 05:02:08.000 AM	AutomationOrg	Blue_Ladder	N/A
						Eagle Homes#1	N/A
						Ivy Homes20%24\$	N/A
ATO-RFI-000001	ATO-RFI-000001	Request For Information	ORIGINAL	08/08/2023 06:23:18.000 AM	AutomationOrg	Blue_Ladder	Responded
						Eagle Homes#1	Overdue
						Ivy Homes20%24\$	Responded
ATO-RFI-000002	ATO-RFI-000002	Request For Information	ORIGINAL	08/08/2023 06:23:24.000 AM	AutomationOrg	Blue_Ladder	Overdue
						Eagle Homes#1	Overdue
						Ivy Homes20%24\$	Responded
ATO-RFI-000003	ATO-RFI-000003	Request For Information	ORIGINAL	08/08/2023 06:23:30.000 AM	AutomationOrg	Blue_Ladder	Overdue
						Eagle Homes#1	Overdue
						Ivy Homes20%24\$	Overdue
ATO-RFI-000004	ATO-RFI-000004	Request For Information	ORIGINAL	08/08/2023 06:23:36.000 AM	AutomationOrg	Blue_Ladder	Responded
						Eagle Homes#1	Overdue
						Ivy Homes20%24\$	Responded
ATO-RFI-000005	ATO-RFI-000005	Request For Information	ORIGINAL	08/08/2023 06:23:42.000 AM	AutomationOrg	Blue_Ladder	Overdue
						Eagle Homes#1	Overdue
						Ivy Homes20%24\$	Responded
ATO-RFI-000006	ATO-RFI-000006	Request For Information	ORIGINAL	08/08/2023 06:23:48.000 AM	AutomationOrg	Blue_Ladder	Responded
						Eagle Homes#1	Overdue
						Ivy Homes20%24\$	Responded
ATO-RFI-000006	ATO-RFI-000006	Request For Information	RESPONSE	08/08/2023 06:23:52.000 AM	Blue_Ladder	AutomationOrg	Overdue
						AutomationOrg	Overdue
						Blue_Ladder	Responded

Figure 48: Aconex - Mails Sample Dashboard - Mail Thread

Table 74: Project Status - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
Activity Details Mail Thread	Sent Date	Mail DS 1-11-23
Activity Overview Details	Project Name	Mail DS 1-11-23
Overview Details Mail Thread	Mail Type	Mail DS 1-11-23
Overview Details Mail Thread	To Organization	Mail DS 1-11-23
Overview Details Mail Thread	From Organization	Mail DS 1-11-23
Details Mail Thread	Reference Number	Mail DS 1-11-23
Details Mail Thread	Mail Number	Mail DS 1-11-23
Details	From User	Mail DS 1-11-23
Details	To User	Mail DS 1-11-23
Details Mail Thread	Mail Status	Mail DS 1-11-23
Details	Reason for Issue	Mail DS 1-11-23
Mail Thread	Reply Type	Mail DS 1-11-23

Table 75: Project Status – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Activity Overview	# of Mails (Inbox)	Fact	Mail DS 1-11-23
Activity Overview	# of Mails (Sent)	Fact	Mail DS 1-11-23
Activity Overview	# of Mails (Sent + Inbox)	Fact	Mail DS 1-11-23

Table76: Budget Insights - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
All Canvas	Canvas	No	Project Name	Mail DS 1-11-23
Activity Details Mail Thread	Canvas	No	Mail Type	Mail DS 1-11-23
Overview	Dashboard	No	Mail Type	Mail DS 1-11-23
Overview	Visualization	No	Mail Status	Mail DS 1-11-23
Overview	Visualization	Yes	RANK (FILTER (XSA ('blue2'. 'Mail DS 1-11-23'). "Aconex - Mails". "# of Mails (Sent)" USING XSA ('blue2'. 'Mail DS 1-11-23'). "Aconex - Mails". "Mail Status"='Overdue') BY XSA ('blue2'. 'Mail DS 1-11-23'). "Aconex - Mails". "Project Name") <=5	Mail DS 1-11-23

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
Overview	Visualization	Yes	RANK(FILTER(XSA('blue2'. 'Mail DS 1-11-23')). "Aconex - Mails". "# of Mails (Inbox)" USING XSA('blue2'. 'Mail DS 1-11-23')). "Aconex - Mails". "Mail Status"='Overdue') BY XSA('blue2'. 'Mail DS 1-11-23')). "Aconex - Mails". "Project Name") <=5	Mail DS 1-11-23
Details Mail Thread	Canvas	Yes	Mail Status	Mail DS 1-11-23
Details	Canvas	No	From Organization	Mail DS 1-11-23
Details	Canvas	No	To Organization	Mail DS 1-11-23
Mail Thread	Canvas	No	Reply Type	Mail DS 1-11-23
Mail Thread	Canvas	No	Recipient Type	Mail DS 1-11-23

Documents Sample Dashboard

Description: The data displayed in the **Aconex - Documents** sample dashboard, and in any out-of-the-box or custom dashboard is based on the projects that you have access in Aconex.

Use the **Aconex - Documents** dashboard to discover information such as, (but *not limited to*):

- ▶ Compare statistics across the project portfolio such as documents registered by type, status, discipline, organizations, etc.
- ▶ Track activity such as organizations that modified or transmitted the most/least docs
- ▶ View document details, etc.

You can also create your own data sets and/or data flows to:

- ▶ Find if you have shared/transmitted the latest document revision/version, etc.
- ▶ Achieve custom dashboard requirements
- ▶ Create use cases that need links with Documents, etc.

Number of Canvases: 4

Default Canvas: Activity

Canvas/Dashboard Name: Documents Sample Dashboard

Data Source(s): Aconex

Subject Area: Aconex – Documents, Aconex - Workflow

Datasets:

Dashboard

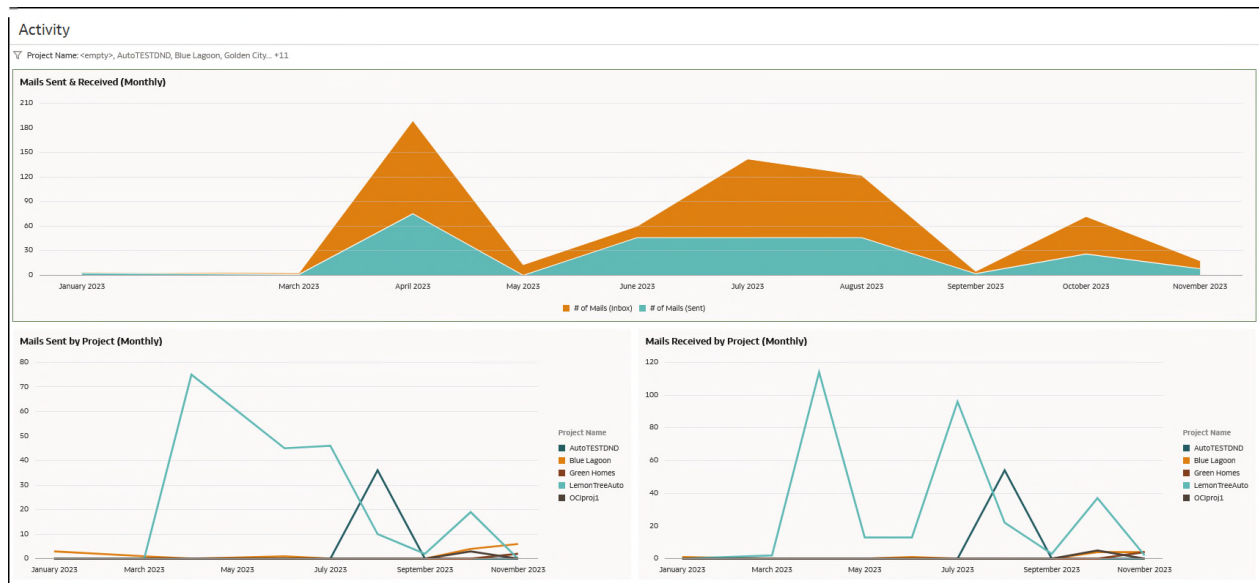


Figure 49: Aconex - Documents Sample Dashboard - Activity



Figure 50: Aconex - Documents Sample Dashboard - Details

Details

Project Name: LemonTreeAuto

Document Details

Project Name	Document Number	Title	Type	Discipline	Revision	Version	Date Modified	Modified By	Review Source	ReviewStatus
LemonTreeAuto	1234_p00	T1	Budget	Architectural	1	1	09/06/2023 3:52:18 AM	RTU J		None
LemonTreeAuto	1234_p00	T1	Budget	Architectural	1	1	09/27/2023 12:40:43 AM	Blue2 Lab2		None
LemonTreeAuto	1235	Test Comments	Commercial Document	Civil	1	2	08/15/2023 8:28:03 AM	RTU J	WF-000034	Pending
LemonTreeAuto	1235	Test Comments	Commercial Document	Civil	1	2	08/15/2023 8:32:46 AM	Uma Thiruvengadam	WF-000034	Pending
LemonTreeAuto	246_TO_244	ABC	Contract	Architectural	1	1	06/15/2023 6:26:36 AM	Blue three		None
LemonTreeAuto	246_TO_244	ABC	Contract	Architectural	1	2	08/02/2023 6:56:32 AM	Blue three	WF-000029	Pending
LemonTreeAuto	246_TO_244	ABC	Contract	Architectural	1	2	08/03/2023 3:16:07 AM	RTU J	WF-000029	Pending
LemonTreeAuto	246_TO_244	ABC	Contract	Architectural	1	2	08/03/2023 6:14:16 AM	Blue three	WF-000029	Pending
LemonTreeAuto	AUTOREG	AUTOREG	Drawing	Civil	12	1	08/03/2023 12:15:22 AM	RTU J		None
LemonTreeAuto	AUTOREG	AUTOREG	Drawing	Civil	12	1	08/03/2023 1:39:41 AM	Uma Thiruvengadam		None
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	08/28/2023 2:19:57 AM	RTU J	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	08/29/2023 1:29:21 AM	Lohith S	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	08/29/2023 2:37:47 AM	Juhi Rawat	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	08/29/2023 2:43:18 AM	RTU J	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	08/29/2023 2:45:45 AM	GCB TWO	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	08/29/2023 2:49:52 AM	blue four	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	11/06/2023 5:25:21 AM	blue four	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	11/06/2023 5:25:25 AM	blue four	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	11/06/2023 5:25:26 AM	blue four	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	11/06/2023 5:25:27 AM	blue four	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	2	11/06/2023 5:25:28 AM	blue four	WF-000035	Pending
LemonTreeAuto	CLDL1	CLDL1	Drawing	Civil	CLDL1	3	08/29/2023 2:52:40 AM	blue four	WF-000035	Approved with Comments
LemonTreeAuto	CLDL10	CLDL10	Scope of Work	Architectural	CLDL10	2	08/28/2023 2:20:11 AM	RTU J	WF-000035	Pending
LemonTreeAuto	CLDL10	CLDL10	Scope of Work	Architectural	CLDL10	2	08/29/2023 1:29:21 AM	Lohith S	WF-000035	Pending
LemonTreeAuto	CLDL10	CLDL10	Scope of Work	Architectural	CLDL10	2	08/29/2023 2:37:47 AM	Juhi Rawat	WF-000035	Pending
LemonTreeAuto	CLDL10	CLDL10	Scope of Work	Architectural	CLDL10	2	08/29/2023 2:43:18 AM	RTU J	WF-000035	Pending
LemonTreeAuto	CLDL10	CLDL10	Scope of work	Architectural	CLDL10	2	08/29/2023 2:45:45 AM	GCB TWO	WF-000035	Pending

Figure 51: Aconex - Documents Sample Dashboard - Details

Doc Transmittals

Mail Type: Transmittal

Document Transmittal Details

Project Name	Document Number	Title	Revision	Version	Mail Number	Mail Type	From Organization	To Organization	
Autoteststand	AUTODOC2	AUTODOC2	B12	1	ATO-TRN-000002	Transmittal	AutomationOrg	AutomationOrg	
Green Homes	Rrest-MethodStatement-A01	Rrest-MethodStatement-A01-Title	A01	1	GCB-TRN-000001	Transmittal	Green_Concrete-Builder(GCB) #8	Blue_Ladder	
	Ver1	Excel	1	1	GCB-TRN-000002	Transmittal	Green_Concrete-Builder(GCB) #8	Blue_Ladder	
	1234_p00	T1	1	1	OCIPL-TRN-000030	Transmittal	OCI & IPL	Blue_Ladder	
	246_TO_244	ABC	1	1	BLUE-TRN-000019	Transmittal	Blue_Ladder	Green concrete Builder(GCB) OCI & IPL	
	AUTOREG	AUTOREG	12	1	OCIPL-TRN-000022	Transmittal	OCI & IPL	Blue_Ladder OCI & IPL	
	Doc_WF_03	Doc_WF_03	FT_1	1	OCIPL-TRN-000008	Transmittal	OCI & IPL	Blue_Ladder	
	Infodoc_02	Infodoc_02	DRB1	3	OCIPL-TRN-000002	Transmittal	OCI & IPL	Blue_Ladder	
	Infodoc_04	Infodoc_04	DD99	1	OCIPL-TRN-000004	Transmittal	OCI & IPL	Blue_Ladder	
	MyDoc2	MyDoc2	B	4	IVY-TRN-000001	Transmittal	Ivy Homes20%245	Blue_Ladder	
	NAGADOC1	ABC	A	1	BLUE-TRN-000040	Transmittal	Blue_Ladder	OCI & IPL	
					IVY-TRN-000002	Transmittal	Ivy Homes20%245	Blue_Ladder	
		NTEST1		1	1	OCIPL-TRN-000010	Transmittal	OCI & IPL	Blue_Ladder
		NTEST1		1	2	BLUE-TRN-000040	Transmittal	Blue_Ladder	OCI & IPL
						OCIPL-TRN-000011	Transmittal	OCI & IPL	Blue_Ladder
						BLUE-TRN-000035	Transmittal	Blue_Ladder	OCI & IPL
PNG1	YR_1		A	1	OCIPL-TRN-000028	Transmittal	OCI & IPL	Blue_Ladder Ivy Homes20%245	
								OCI & IPL	
PNG1 copy 10	YR_3		A	1	BLUE-TRN-000031	Transmittal	Blue_Ladder	Eagle Homes#1	
								Environment First	
								Ivy Homes20%245	
PNG1 copy 15	YR_20		A	1	BLUE-TRN-000024	Transmittal	Blue_Ladder	Ivy Homes20%245 OCI & IPL	

Figure 52: Aconex - Documents Sample Dashboard - Mail Thread

Table 77: Project Status - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
Activity Doc Transmittals	Mail Type	Aconex – Documents
All Canvas	Project Name	Aconex – Documents
Overview Details	Review Status	Aconex – Documents
Overview Details	Type	Aconex – Documents
Overview Details	Discipline	Aconex – Documents
Details Doc Transmittals	Document Number	Aconex – Documents
Details Doc Transmittals	Title	Aconex – Documents
Details Doc Transmittals	Revision	Aconex – Documents
Details Doc Transmittals	Version	Aconex – Documents
Details	Date Modified	Aconex – Documents
Details	Modified By	Aconex – Documents
Details	Review Source	Aconex – Documents
Doc Transmittals	Mail Number	Aconex – Documents
Doc Transmittals	From Organization	Aconex – Documents
Doc Transmittals	To Organization	Aconex – Documents

Table 78: Project Status – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Activity Overview	# of Registered Documents	Fact	Aconex – Documents
Activity	# of Docs Attached in Workflows	Fact	Aconex - Workflow

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Activity	# of Docs (Transmittals Sent + Received)	Fact	Aconex – Documents
Activity	# of Docs (Transmittals Sent)	Fact	Aconex – Documents
Activity	# of Docs (Transmittals Received)	Fact	Aconex – Documents

Table 79: Budget Insights - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
Activity Overview Details	Canvas	No	Project Name	Aconex – Documents
Overview	Dashboard	No	Review Status	Aconex – Documents
Overview	Dashboard	No	Type	Aconex – Documents
Doc Transmittals	Canvas	No	Mail Type	Aconex – Documents

Workflow Sample Dashboard

Description: The data displayed in the **Aconex - Workflow** dashboard, and in any out-of-the-box or custom dashboard is based on the projects that you have access in Aconex.

Use the **Aconex - Workflow** dashboard to discover information such as, (but *not limited to*):

- ▶ Identify already delayed Workflow document reviews across project portfolio
- ▶ Know organizations holding on the Workflow document reviews for longer than N days
- ▶ Find the projects with max overdue workflow document review/steps
- ▶ View KPIs, track workflow document review status, etc.

You can also create your own data sets and/or data flows to:

- ▶ Classify workflows as low to extreme delay
- ▶ Create use cases that need linking other subject areas with workflows, etc.

Number of Canvases: 3

Default Canvas: Activity

Canvas/Dashboard Name: Workflow Sample Dashboard

Data Source(s): Aconex

Subject Area:

Datasets: WF DS 12-11-23

Dashboard



Figure 53: Aconex - Workflow Sample Dashboard - Activity



Figure 54: Aconex - Workflow Sample Dashboard - Overview

Details

Project Name: Shine Hotels Assigned To Organization: OCI & IPL

Workflow Details															
Project Name	Workflow Number	Workflow Status	Start Date	End Date	Initiator Organization	Step Name	Assigned To Organization	Date In	Original Due Date	Date Due	Date Completed	Step Status	Review Status	Step Outcome	Days Late
Shine hotels	SD-000004	In Progress	10/25/2023 12:05:49.000 PM	01/01/1900 12:00:00.000 AM	Blue_Leader	Supplier	OCI & IPL	10/25/2023 12:05:49.000 PM	10/25/2023 12:00:00.000 AM	10/25/2023 12:00:00.000 AM	01/01/1900 12:00:00.000 AM	Overdue	PENDING	Pending	29

Figure 55: Aconex - Workflow Sample Dashboard - Details

Table 80: Project Status - Dimensions

Canvas	Dimension / Attribute	Subject Area / Dataset
All Canvas	Project Name	WF DS 12-11-23
Overview Details	Step Status	WF DS 12-11-23
Overview Details	Assigned To Organization	WF DS 12-11-23
Details	Workflow Number	WF DS 12-11-23
Details	Workflow Status	WF DS 12-11-23
Details	Start Date	WF DS 12-11-23
Details	End Date	WF DS 12-11-23
Details	Initiator Organization	WF DS 12-11-23
Details	Step Name	WF DS 12-11-23
Details	Date In	WF DS 12-11-23
Details	Original Due Date	WF DS 12-11-23
Details	Date Due	WF DS 12-11-23
Details	Date Completed	WF DS 12-11-23
Details	Review Status	WF DS 12-11-23
Details	Step Outcome	WF DS 12-11-23
Details	Days Late	WF DS 12-11-23

Table 81: Project Status – Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Activity Overview	# of Workflows	Fact	WF DS 12-11-23
Activity	# of Docs Attached in Workflows	Fact	WF DS 12-11-23
Activity Overview	# of Workflow Document Steps	Fact	WF DS 12-11-23

Table 82: Budget Insights - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
Activity Details	Canvas	No	Project Name	WF DS 12-11-23
Activity Details	Canvas	No	Assigned To Organization	WF DS 12-11-23
Overview	Visualization	No	Step Status	WF DS 12-11-23
Overview	Visualization	Yes	XSA(' <user name>' . 'WF DS 12-11-23') . " Aconex - Workflow" . "I nitiator Organization " = XSA(' <user name>' . 'WF DS 12-11-23') . " Aconex - Workflow" . "M Y Organization "	WF DS 12-11-23

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
Overview	Visualization	Yes	<pre> RANK(FILTER(XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "# of Workflow Document Steps" USING XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "I nitiator Organization " = XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "M y Organization " AND XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "S tep Status" = 'Overdue') BY XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "P roject Name") <= 5 </pre>	WF DS 12-11-23

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
Overview	Visualization	Yes	<pre>XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "A ssigned To Organization " = XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "M y Organization "</pre>	WF DS 12-11-23

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
Details	Canvas	Yes	<pre> RANK(FILTER(XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "# of Workflow Document Steps" USING XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "I nitiator Organization " = XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "M y Organization " AND XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "S tep Status" = 'Overdue') BY XSA('<user name>'. 'WF DS 12-11-23'). " Aconex - Workflow". "P roject Name") <= 5 </pre>	WF DS 12-11-23

Data Visualizations Using Blended Data

The following data visualizations use data blended from one or more source applications.

- ▶ **Cost Overview Project** (on page 141)
- ▶ **Project Performance Measurement** (on page 143)

In This Section

Cost Overview Project.....	141
Project Performance Measurement	143

Cost Overview Project

Description: This project gives an Executive/PMO insights on how the organization is tracking its budgeted cost and where most of the cost/work is going to happen. This helps them focus on the key portfolios and gather how they are performing to cost. In case there are outliers, the users can take pre-emptive corrective actions.

Number of Canvases: 1

Default Canvas: Cost KPI's Global Outlook

Canvas/Dashboard Name: Cost KPI's Global Outlook

Data Source(s): P6 EPPM, Unifier

Subject Areas: P6-Project History, P6-Activity, P6-Resource Utilization, and Unifier-Cash Flow

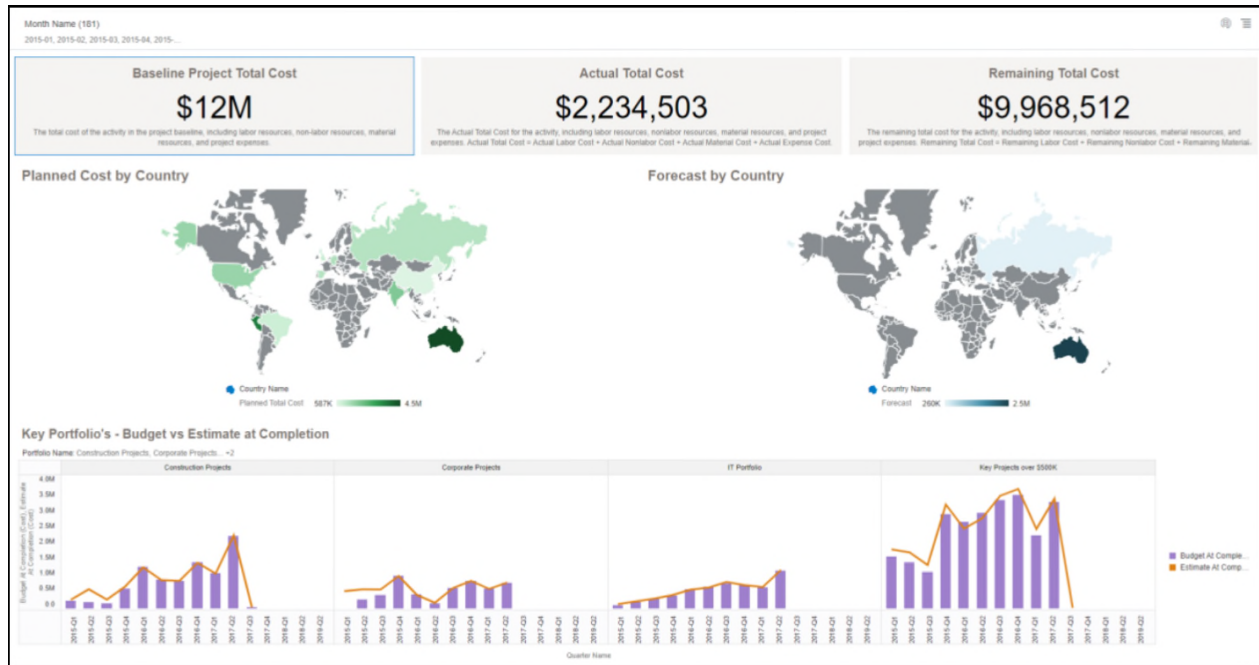


Figure 56: Cost Overview Default Canvas

Table 83: Cost KPI's Global Outlook - Dimensions

Canvas	Dimension / Attribute	Subject Canvas Area / Dataset
Cost KPI's Global Outlook	Country Name	P6 - Project History
Cost KPI's Global Outlook	Quarter Name	P6 - Activity
Cost KPI's Global Outlook	Portfolio Name	P6 - Activity

Table 84: Cost KPI's Global Outlook - Measures

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Cost KPI's Global Outlook	Baseline Project Total Cost	Fact	P6 - Project History
Cost KPI's Global Outlook	Actual Total Cost	Fact	P6 - Project History
Cost KPI's Global Outlook	Remaining Total Cost	Fact	P6 - Project History

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Cost KPI's Global Outlook	Planned Total Cost	Fact	P6 - Project History
Cost KPI's Global Outlook	Forecast	Fact	Unifier – Cash Flow
Cost KPI's Global Outlook	Budget At Completion Cost	Fact	P6 - Activity
Cost KPI's Global Outlook	Estimate At Completion Cost	Fact	P6 - Activity

Table 85: Cost KPI's Global Outlook - Filters

Canvas	Filter Type	Is Expression Filter	Dimension / Attribute	Subject Area / Dataset
Cost KPI's Global Outlook	Dashboard	No	Month Name	P6 – Resource Utilization
Cost KPI's Global Outlook	Visualization	No	Portfolio Name	P6 - Activity

Table 86: Cost KPI's Global Outlook - Data Actions

Data Action Name	Action Type	Anchor To	Target	Canvas Link	Pass Values	Multiselect
Test DA	Analytics Link	None	CEO DB Project	Canvas 1	All	On

Project Performance Measurement

Number of Canvases: 6

Default Canvas: Overview

Canvas/Dashboard Name: Project Performance Measurement

Data Sources: P6 EPPM, Unifier

Subject Areas: P6-Activity, Unifier- Cost Sheet, Unifier – Cash Flow, P6 – Project History, Unifier – Business Process

Datasets: Not applicable.

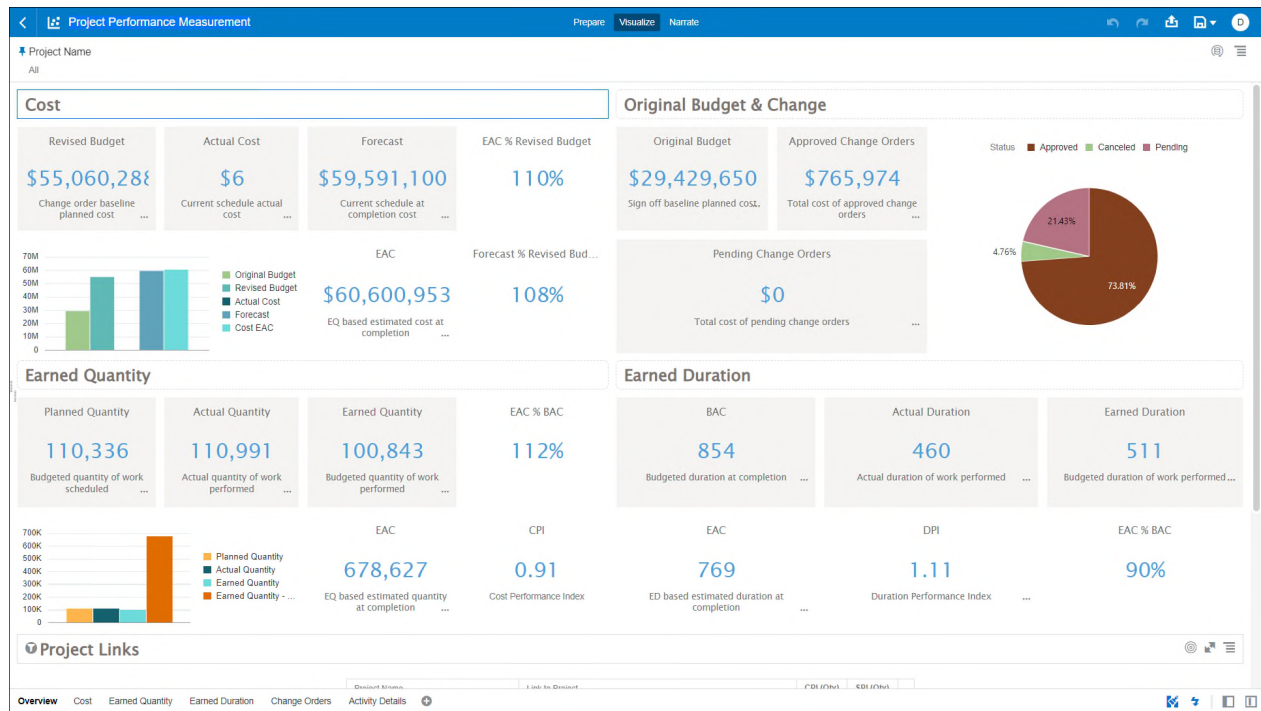


Figure 57: Project Performance Measurement - Overview Dashboard

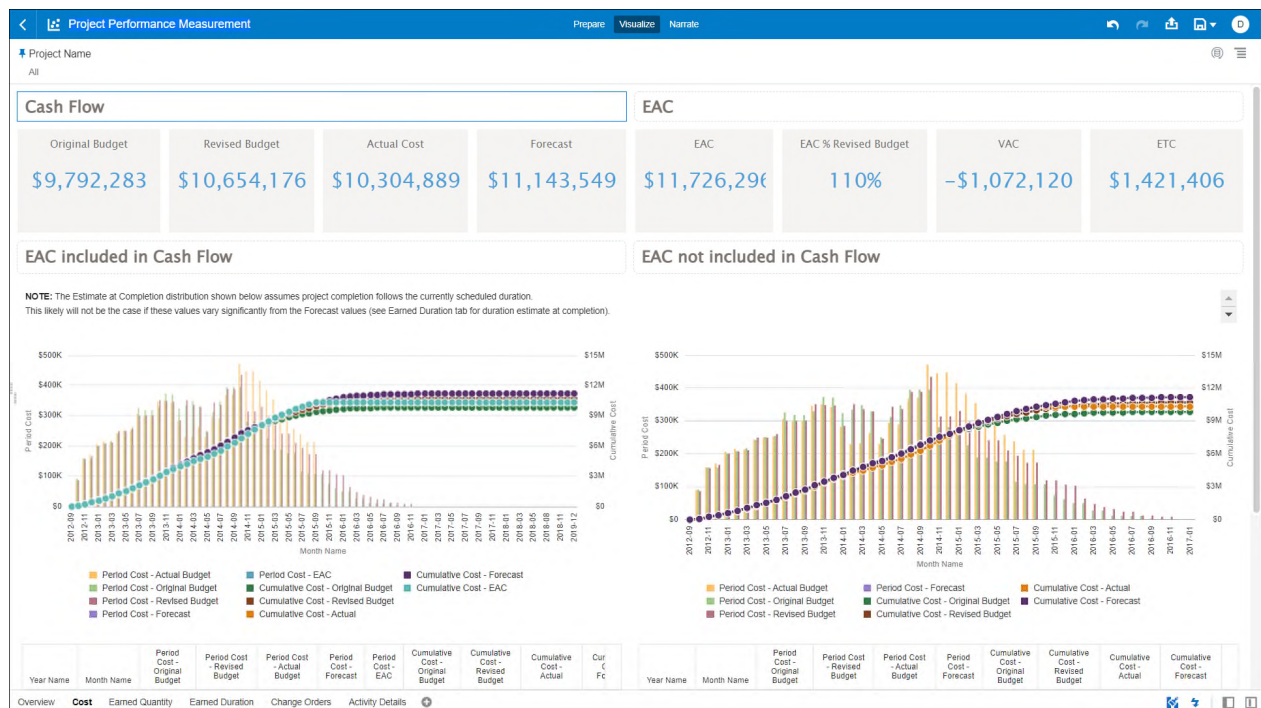


Figure 58: Project Performance Measurement - Cost

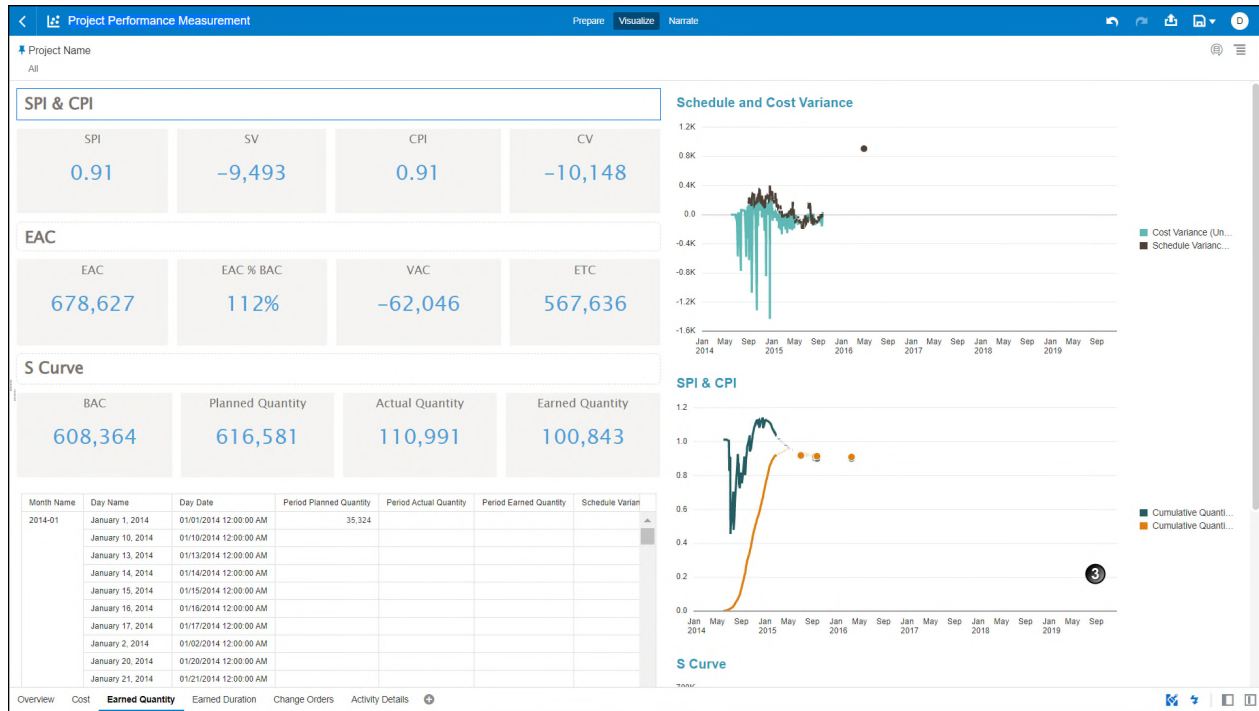


Figure 59: Project Performance Measurement - Earned Quantity

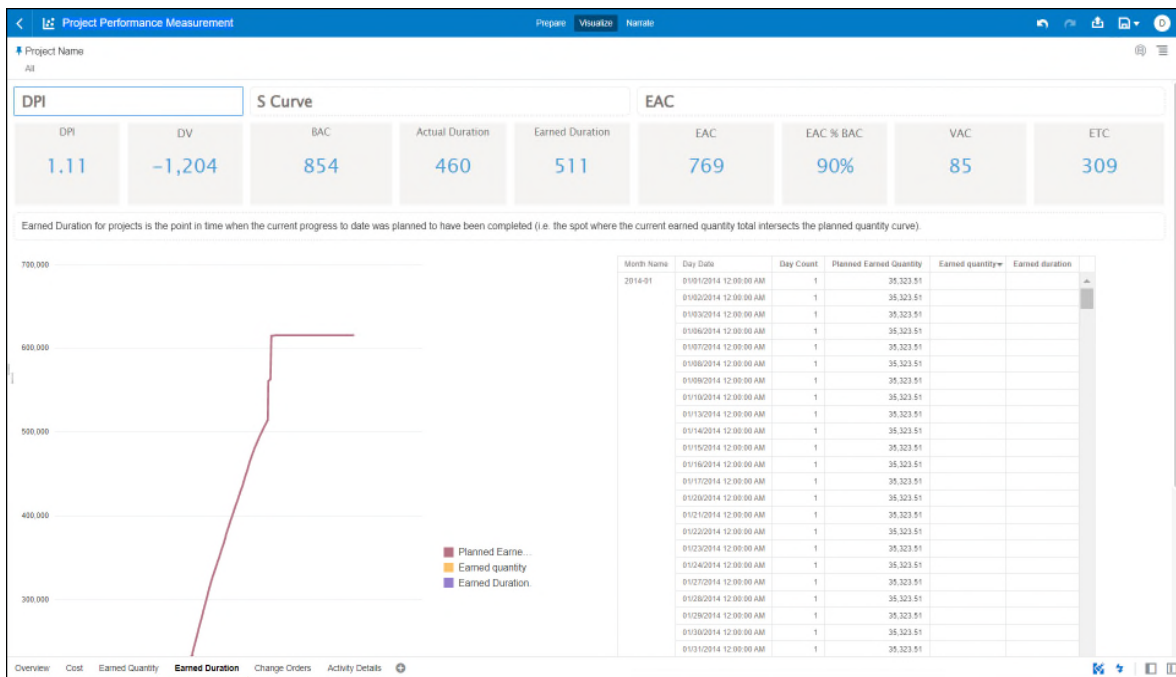


Figure 60: Project Performance Measurement - Earned Duration

Data Visualization Reference Guide

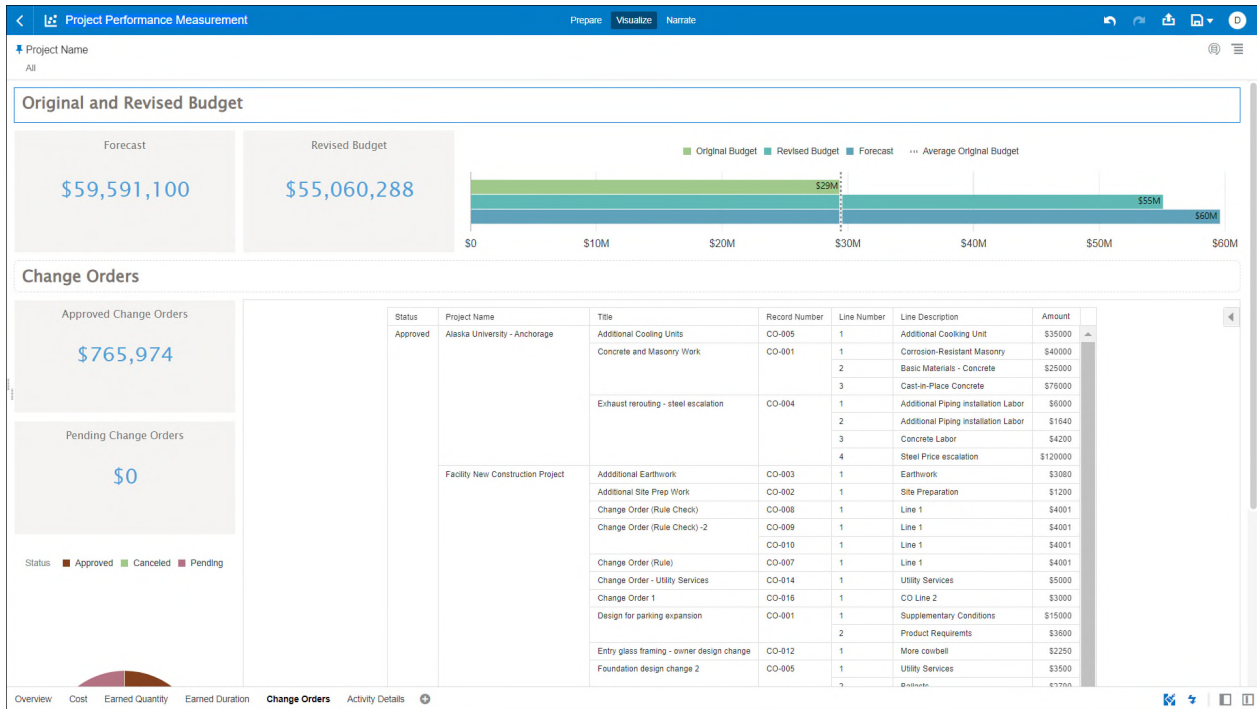


Figure 61: Project Performance Measurement - Changed Orders

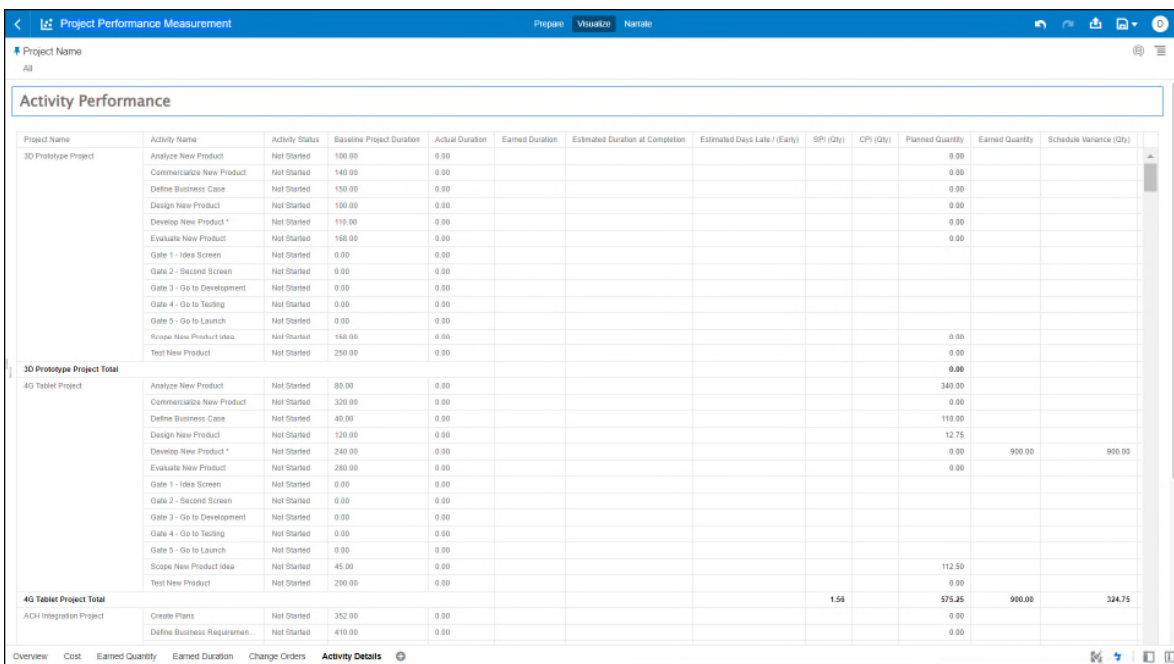


Figure 62: Project Performance Measurement - Activity Details

The following components have been used to create this data visualization.

Table 87: Project Performance Measurement - Dimensions Table

Canvas	Dimension / Attribute	Subject Area / Dataset
Overview	Status	Unifier - Business Process
Overview	Business Process Name	Unifier - Business Process
Overview	Project Name	P6 - Activity
Overview	Link to Project	P6 - Activity

Table 88: Project Performance Measurement - Measures Table

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Cost	Initial Baseline	Fact	Unifier - Cash Flow
Cost	Current Baseline	Fact	Unifier - Cash Flow
Cost	Actuals	Fact	Unifier - Cash Flow
Cost	Forecast	Fact	Unifier - Cash Flow
Cost	Period Cost - Original Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Revised Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Actual Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost – Forecast	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost – EAC	Calculated From Fact	Unifier - Cash Flow / P6 - Activity
Cost	Cumulative Cost - Original Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Revised Budget	Calculated From Fact	Unifier - Cash Flow

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Cost	Cumulative Cost - Actual Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Forecast Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost – EAC	Calculated From Fact	Unifier - Cash Flow / P6 - Activity
Cost	Period Cost - Actual Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Original Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Revised Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Forecast Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost – EAC	Calculated From Fact	Unifier - Cash Flow / P6 - Activity
Cost	Cumulative Cost - Original Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Revised Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Actual Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Forecast Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost – EAC	Calculated From Fact	Unifier - Cash Flow / P6 - Activity
Cost	Period Cost - Original Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Revised Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Actual Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost – Forecast	Calculated From Fact	Unifier - Cash Flow

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Cost	Cumulative Cost - Original Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Revised Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Actual	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Forecast	Calculated From Fact	Unifier - Cash Flow
Cost	Cost - Estimate at Completion (EAC)	Calculated From Fact	Unifier - Cash Flow
Cost	Cost - Estimate to Completion (ETC)	Calculated From Fact	Unifier - Cash Flow / P6 - Activity
Cost	Cost - EAC % Revised Budget	Calculated From Fact	Unifier - Cash Flow / P6 - Activity
Cost	Cost - Variance at Completion (VAC)	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Actual Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Original Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost - Revised Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Period Cost – Forecast	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Original Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Revised Budget	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Actual	Calculated From Fact	Unifier - Cash Flow
Cost	Cumulative Cost - Forecast	Calculated From Fact	Unifier - Cash Flow
Change Orders	Change Order count	Calculated From Fact	Unifier - Business Process

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Change Orders	Forecast	Fact	Unifier - Cash Flow
Change Orders	Revised Budget	Fact	Unifier - Cash Flow
Change Orders	Original Budget	Fact	Unifier - Cash Flow
Change Orders	Revised Budget	Fact	Unifier - Cash Flow
Change Orders	Forecast	Fact	Unifier - Cash Flow
Change Orders	Amount	Fact	Unifier - Business Process
Change Orders	Pending change order	Calculated From Fact	Unifier - Business Process
Change Orders	Amount	Fact	Unifier - Business Process
Activity Details	Earned Duration	Calculated From Fact	P6 - Activity
Activity Details	Estimated Duration at Completion	Calculated From Fact	P6 - Activity
Activity Details	Estimated Days Late / (Early)	Calculated From Fact	P6 - Activity
Activity Details	SPI (Qty)	Calculated From Fact	P6 - Activity
Activity Details	CPI (Qty)	Calculated From Fact	P6 - Activity
Activity Details	Planned Quantity	Calculated From Fact	P6 - Activity
Activity Details	Earned Quantity	Calculated From Fact	P6 - Activity
Activity Details	Schedule Variance (Qty)	Calculated From Fact	P6 - Activity
Activity Details	Actual Quantity	Calculated From Fact	P6 - Activity

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Activity Details	Cost Variance (Qty)	Calculated From Fact	P6 - Activity
Activity Details	ETC (Qty)	Calculated From Fact	P6 - Activity
Activity Details	BAC (Qty)	Calculated From Fact	P6 - Activity
Activity Details	EAC (Qty)	Calculated From Fact	P6 - Activity
Activity Details	Variance At Completion (Qty)	Calculated From Fact	P6 - Activity
Earned Duration	Planned Earned Quantity	Calculated From Fact	P6 - Activity
Earned Duration	Earned quantity	Calculated From Fact	P6 - Activity
Earned Duration	Earned Duration.	Calculated From Fact	P6 - Activity
Earned Duration	Earned Duration - Earned duration	Calculated From Fact	P6 - Activity
Earned Duration	Earned Duration - Actual Duration	Calculated From Fact	P6 - Activity
Earned Duration	Earned Duration - Budget at Completion (BAC)	Calculated From Fact	P6 - Activity
Earned Duration	Day Count	Calculated From Fact	P6 - Activity
Earned Duration	Planned Earned Quantity	Calculated From Fact	P6 - Activity
Earned Duration	Earned quantity	Calculated From Fact	P6 - Activity
Earned Duration	Earned duration	Calculated From Fact	P6 - Activity
Earned Duration	Duration Performance Index (DPI)	Calculated From Fact	P6 - Activity
Earned Duration	Duration Variance (DV)	Calculated From Fact	P6 - Activity
Earned Duration	Earned Duration - Estimate at Completion (EAC)	Calculated From Fact	P6 - Activity

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Earned Duration	Earned Duration - Variance at Completion (VAC)	Calculated From Fact	P6 - Activity
Earned Duration	Earned Duration - Estimate to Complete (ETC)	Calculated From Fact	P6 - Activity
Earned Duration	Earned Duration - EAC % BAC	Calculated From Fact	P6 - Activity
Overview	Revised Budget	Fact	Unifier - Cost Sheet
Overview	Actual Cost	Calculated From Fact	Unifier - Cost Sheet
Overview	Forecast	Fact	Unifier - Cost Sheet
Overview	Original Budget	Fact	Unifier - Cost Sheet
Overview	Revised Budget	Fact	Unifier - Cost Sheet
Overview	Actual Cost	Calculated From Fact	Unifier - Cost Sheet
Overview	Forecast	Fact	Unifier - Cost Sheet
Overview	Cost EAC	Calculated From Fact	Unifier - Cost Sheet
Overview	Cost EAC	Calculated From Fact	Unifier - Cost Sheet
Overview	EAC % Revised Budget	Calculated From Fact	P6 - Activity / P6 - Activity
Overview	Forecast % Revised Budget	Calculated From Fact	Unifier - Cost Sheet
Overview	Planned Quantity	Calculated From Fact	P6 - Activity
Overview	Actual Quantity	Calculated From Fact	P6 - Activity
Overview	Earned Quantity	Calculated From Fact	P6 - Activity
Overview	Earned Quantity - Estimate at completion (EAC)	Calculated From Fact	P6 - Activity
Overview	Cost Performance Index (Units)	Fact	P6 - Activity
Overview	Earned Quantity - EAC % BAC	Calculated From Fact	P6 - Activity

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Overview	Earned Duration - Budget at Completion (BAC)	Calculated From Fact	P6 - Activity
Overview	Earned Duration - Actual Duration	Calculated From Fact	P6 - Activity
Overview	Earned Duration - Earned duration	Calculated From Fact	P6 - Activity
Overview	Duration Performance Index (DPI)	Calculated From Fact	P6 - Activity
Overview	Earned Duration - EAC % BAC	Calculated From Fact	P6 - Activity
Overview	Earned Duration - Estimate at Completion (EAC)	Calculated From Fact	P6 - Activity
Overview	Original Budget	Fact	Unifier - Cost Sheet
Overview	Amount	Fact	Unifier - Business Process
Overview	Pending change order	Calculated From Fact	Unifier - Business Process
Overview	Change Order count	Calculated From Fact	Unifier - Business Process
Overview	Planned Quantity	Calculated From Fact	P6 - Activity
Overview	Actual Quantity	Calculated From Fact	P6 - Activity
Overview	Earned Quantity	Calculated From Fact	P6 - Activity
Overview	Earned Quantity - Estimate at completion (EAC)	Calculated From Fact	P6 - Activity
Overview	CPI (Qty)	Calculated From Fact	P6 - Activity
Overview	SPI (Qty)	Calculated From Fact	P6 - Activity
Earned Quantity	Budget At Completion (Units)	Fact	P6 - Activity
Earned Quantity	Cost Variance (Units)	Fact	P6 - Activity
Earned Quantity	Schedule Variance (Units)	Fact	P6 - Activity

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Earned Quantity	Cumulative Planned Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Cumulative Actual Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Cumulative Earned Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Cumulative Quantity – CPI	Calculated From Fact	P6 - Activity
Earned Quantity	Cumulative Quantity – SPI	Calculated From Fact	P6 - Activity
Earned Quantity	Period Planned Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Period Actual Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Period Earned Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Schedule Variance (Units)	Fact	P6 - Activity
Earned Quantity	Cost Variance (Units)	Fact	P6 - Activity
Earned Quantity	Schedule Performance Index (Units)	Fact	P6 - Activity
Earned Quantity	Cost Performance Index (Units)	Fact	P6 - Activity
Earned Quantity	Cumulative Planned Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Cumulative Actual Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Cumulative Earned Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Cumulative Quantity – SV	Calculated From Fact	P6 - Activity
Earned Quantity	Cumulative Quantity – CV	Calculated From Fact	P6 - Activity
Earned Quantity	Cumulative Quantity – SPI	Calculated From Fact	P6 - Activity

Canvas	Fact / Measure	Measure Type	Subject Area / Dataset
Earned Quantity	Cumulative Quantity – CPI	Calculated From Fact	P6 - Activity
Earned Quantity	Schedule Variance (Units)	Fact	P6 - Activity
Earned Quantity	Cost Variance (Units)	Fact	P6 - Activity
Earned Quantity	Schedule Performance Index (Units)	Fact	P6 - Activity
Earned Quantity	Cost Performance Index (Units)	Fact	P6 - Activity
Earned Quantity	Earned Quantity - Estimate at completion (EAC)	Calculated From Fact	P6 - Activity
Earned Quantity	Earned Quantity - Variance at Completion (VAC)	Calculated From Fact	P6 - Activity
Earned Quantity	Earned Quantity - Estimate to Complete (ETC)	Calculated From Fact	P6 - Activity
Earned Quantity	Earned Quantity - EAC % BAC	Calculated From Fact	P6 - Activity
Earned Quantity	Planned Earned Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Actual Quantity	Calculated From Fact	P6 - Activity
Earned Quantity	Earned Quantity	Calculated From Fact	P6 - Activity

Table 89: Project Performance Measurement - Filters Table

Canvas	Filter Type	Is Expression Filter	Filter	Subject Area / Dataset
Overview	Visualization	No	Business Process Name	Unifier - Business Process
Overview	Visualization	Yes	Cost Performance Index (Units) is not null and Schedule Performance	P6 - Activity

All Canvas	Dashboard	No	Project Name	P6 - Activity
Overview	Visualization	No	Calendar Day Date	P6 - Activity
Change Order	Visualization	No	Business Process Name	Unifier - Business Process
Change Order	Visualization	No	Business Process Name	Unifier - Business Process
Change Order	Visualization	No	Business Process Name	Unifier - Business Process

Table 90: Project Performance Measurement - Data Actions Table

Data Action Name	Action Type	Anchor To	Target	Canvas Link	Pass Values	Multiselecti on
Navigate to Change Orders	Analytics Link	Status	This Project	Change Orders	All	On
Navigate to Activity Details	Analytics link	Project Name	This Project	Activity Details	All	On

Table 91: Project Performance Measurement - Calculated Members Table

Calculated Measure	Expression	Source
Estimate at Completion (EAC)	Primavera - Cost Sheet."Costs"."Revised Budget"/ "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units) "	Derived From Fact
Actual Cost	Primavera - Cost Sheet."Costs"."User Defined Column 1 "	Derived From Fact

Calculated Measure	Expression	Source
Forecast % Revised Budget	Primavera - Cost Sheet."Costs"."Forecast"/"Primavera - Cost Sheet"."Costs"."Revised Budget"	Derived From Fact
EAC % Revised Budget	("Primavera - Cost Sheet"."Costs"."Revised Budget"/"Primavera - Activity"."Earned Value - (Units)"."Cost Performance Index (Units)")/"Primavera - Cost Sheet"."Costs"."Revised Budget"	Derived From Fact
SPI (Qty)	Primavera - Activity."Earned Value - (Units)"."Schedule Performance Index (Units)"	Derived From Fact
CPI (Qty)	Primavera - Activity."Earned Value - (Units)"."Cost Performance Index (Units)"	Derived From Fact
Planned Quantity	Primavera - Activity."Earned Value - (Units)"."Planned Value (Units)"	Derived From Fact
Earned Quantity	Primavera - Activity."Earned Value - (Units)"."Earned Value (Units)"	Derived From Fact
Actual Quantity	Primavera - Activity."Units"."Actual Labor Units"	Derived From Fact
ETC (Qty)	Primavera - Activity."Earned Value - (Units)"."Estimate To Complete (Units)"	Derived From Fact
Cost Variance (Qty)	Primavera - Activity."Earned Value - (Units)"."Cost Variance (Units)"	Derived From Fact
Schedule Variance (Qty)	Primavera - Activity."Earned Value - (Units)"."Schedule Variance (Units)"	Derived From Fact

Calculated Measure	Expression	Source
BAC (Qty)	Primavera - Activity."Units"."Planned Labor Units"	Derived From Fact
EAC (Qty)	Primavera - Activity."Earned Value - (Units)". "Estimate At Completion (Units)"	Derived From Fact
Variance At Completion (Qty)	Primavera - Activity."Earned Value - (Units)". "Variance at Completion (Units)"	Derived From Fact
Earned Duration	Primavera - Activity."Earned Value - (Units)". "Schedule Performance Index (Units)" * "Primavera - Activity"."Durations - (Activity)". "Actual Duration"	Derived From Fact

Calculated Measure	Expression	Source
Estimated Duration at Completion	<pre> Case when "Primavera - Activity"."Durations - (Activity)". "Actual Duration" > "Primavera - Activity"."Durations - (Activity)". "Baseline Duration" then "Primavera - Activity"."Durations - (Activity)". "Actual Duration" + ("Primavera - Activity"."Durations - (Activity)". "Actual Duration" - "Primavera - Activity"."Earned Value - (Units)". "Schedule Performance Index (Units)" * "Primavera - Activity"."Durations - (Activity)". "Actual Duration")/"Primavera - Activity"."Earned Value - (Units)". "Schedule Performance Index (Units)" ELSE "Primavera - Activity"."Durations - (Activity)". "Actual Duration" + ("Primavera - Activity"."Durations - (Activity)". "Baseline Duration" - "Primavera - Activity"."Earned Value - (Units)". "Schedule Performance Index (Units)"*"Primavera - Activity"."Durations - (Activity)". "Actual Duration")/"Primavera - Activity"."Earned Value - (Units)". "Schedule Performance Index (Units)" END </pre>	Derived From Fact

Calculated Measure	Expression	Source
<p>Estimated Days Late / (Early)</p>	<pre>Case when "Primavera - Activity"."Durations - (Activity)". "Actual Duration" > "Primavera - Activity"."Durations - (Activity)". "Baseline Duration" then "Primavera - Activity"."Durations - (Activity)". "Actual Duration" + ("Primavera - Activity"."Durations - (Activity)". "Actual Duration" - "Primavera - Activity"."Earned Value - (Units)". "Schedule Performance Index (Units)" * "Primavera - Activity"."Durations - (Activity)". "Actual Duration")/"Primavera - Activity"."Earned Value - (Units)". "Schedule Performance Index (Units)" ELSE "Primavera - Activity"."Durations - (Activity)". "Actual Duration" + ("Primavera - Activity"."Durations - (Activity)". "Baseline Duration" - "Primavera - Activity"."Earned Value - (Units)". "Schedule Performance Index (Units)"*"Primavera - Activity"."Durations - (Activity)". "Actual Duration")/"Primavera - Activity"."Earned Value - (Units)". "Schedule Performance Index (Units)" END - "Primavera - Activity"."Durations - (Activity)". "Baseline Duration"</pre>	<p>Derived From Fact</p>

Calculated Measure	Expression	Source
Cost Variance (Qty) - Conditional	case when "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units)" < 1 then "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units)" when "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units)" < 0.95 then "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units)" else null end	Derived From Fact
Pending change order	CASE WHEN "Primavera - Business Process"."General - (BP)". "Status" = 'In_Process' THEN "Primavera - Business Process"."Costs"."Amount" ELSE 0 END	Derived From Fact
Change Order count	Primavera - Business Process."Metrics"."# of BP Records"	Derived From Fact
Revised Budget % Original	Primavera - Cost Sheet."Costs"."Revised Budget"/"Primavera - Cost Sheet"."Costs"."Original Budget"	Derived From Fact
Day Count	RCOUNT("Primavera - Activity"."Units"."Planned Labor Units")	Derived From Fact

Calculated Measure	Expression	Source
Duration Performance Index (DPI)	<pre> CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)", 0)) - 1 AS FLOAT) ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units"."Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Units"."Planned Labor Units", 0)) - 1 AS FLOAT) ELSE NULL END) END / MAX(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RCOUNT("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") ELSE NULL END) </pre>	Derived From Fact

Calculated Measure	Expression	Source
Duration Variance (DV)	<pre> - CAST(MAX(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR,"Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)", 0)) ELSE NULL END) + CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value (Units)"."Earned Value (Units)") THEN RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)" , 0)) - 1 ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units"."Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") THEN RCOUNT(IFNULL("Primavera - Activity"."Units"."Planned Labor Units", 0)) -1 ELSE NULL END) END as INT) </pre>	Derived From Fact

Calculated Measure	Expression	Source
<p>Earned Duration - Estimate at Completion (EAC)</p>	<pre> MAX(RCOUNT("Primavera - Activity"."Units"."Planned Labor Units")) / (CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)", 0)) - 1 AS FLOAT) ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units"."Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Units"."Planned Labor Units", 0)) - 1 AS FLOAT) ELSE NULL END) END / MAX(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)". "Data Date") >= 0 THEN RCOUNT("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") ELSE NULL END)) </pre>	<p>Derived From Fact</p>

Calculated Measure	Expression	Source
Earned Duration - EAC % BAC	<pre> MAX(RCOUNT("Primavera - Activity"."Units"."Planned Labor Units")) / (CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)", 0)) - 1 AS FLOAT) ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units"."Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Units"."Planned Labor Units", 0)) - 1 AS FLOAT) ELSE NULL END) END / MAX(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)". "Data Date") >= 0 THEN RCOUNT("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") ELSE NULL END)) / MAX(RCOUNT("Primavera - Activity"."Units"."Planned Labor Units")) </pre>	Derived From Fact

Calculated Measure	Expression	Source
Planned Earned Quantity	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") ELSE RSUM("Primavera - Activity"."Units"."Planned Labor Units") END </pre>	Derived From Fact
Earned quantity	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") ELSE NULL END </pre>	Derived From Fact

Calculated Measure	Expression	Source
Earned Duration - Earned duration	<pre> CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)", 0)) - 1 ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units". "Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN RCOUNT(IFNULL("Primavera - Activity"."Units". "Planned Labor Units", 0)) - 1 ELSE NULL END) END </pre>	Derived From Fact
Earned Duration - Budget at Completion (BAC)	<pre> MAX((RCOUNT("Primavera - Activity"."Units". "Planned Labor Units"))) </pre>	Derived From Fact
Earned Duration - Actual Duration	<pre> MAX(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)". "Data Date") >= 0 THEN RCOUNT("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") ELSE NULL END) </pre>	Derived From Fact

Calculated Measure	Expression	Source
Earned Duration.	<pre> CASE WHEN CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)", 0)) - 1 ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units". "Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN RCOUNT(IFNULL("Primavera - Activity"."Units". "Planned Labor Units", 0)) -1 ELSE NULL END) END >= RCOUNT("Primavera - Activity"."Units". "Planned Labor Units") THEN SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") ELSE NULL END </pre>	Derived From Fact

Calculated Measure	Expression	Source
Earned duration	<pre> CASE WHEN CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)", 0)) - 1 ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units". "Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN RCOUNT(IFNULL("Primavera - Activity"."Units". "Planned Labor Units", 0)) -1 ELSE NULL END) END = RCOUNT("Primavera - Activity"."Units". "Planned Labor Units") THEN RCOUNT("Primavera - Activity"."Units". "Planned Labor Units") ELSE NULL END </pre>	Derived From Fact

Calculated Measure	Expression	Source
<p>Earned Duration - Variance at Completion (VAC)</p>	<pre> MAX(RCOUNT("Primavera - Activity"."Units"."Planned Labor Units")) - MAX(RCOUNT("Primavera - Activity"."Units"."Planned Labor Units")) / (CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)", 0)) - 1 AS FLOAT) ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units"."Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Units"."Planned Labor Units", 0)) - 1 AS FLOAT) ELSE NULL END) END / MAX(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)". "Data Date") >= 0 THEN RCOUNT("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") ELSE NULL END) </pre>	<p>Derived From Fact</p>

Calculated Measure	Expression	Source
Earned Duration - Estimate to Complete (ETC)	<pre> MAX(RCOUNT("Primavera - Activity"."Units"."Planned Labor Units")) / (CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)", 0)) - 1 AS FLOAT) ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units"."Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Units"."Planned Labor Units", 0)) - 1 AS FLOAT) ELSE NULL END) END / MAX(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RCOUNT("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") ELSE NULL END)) - MAX(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RCOUNT("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") ELSE NULL END) </pre>	Derived From Fact

Calculated Measure	Expression	Source
Cumulative Quantity - SPI	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") ELSE NULL END / CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") ELSE RSUM("Primavera - Activity"."Units"."Planned Labor Units") END </pre>	Derived From Fact
Cumulative Quantity - CPI	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") ELSE NULL END / CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Units"."Actual Labor Units") ELSE NULL END </pre>	Derived From Fact

Calculated Measure	Expression	Source
Period Planned Quantity	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN "Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)" ELSE "Primavera - Activity"."Units"."Planned Labor Units" END </pre>	Derived From Fact
Period Actual Quantity	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN "Primavera - Activity"."Units"."Actual Labor Units" ELSE NULL END </pre>	Derived From Fact
Period Earned Quantity	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN "Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)" ELSE NULL END </pre>	Derived From Fact
Cumulative Planned Quantity	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Planned Value (Units)") ELSE RSUM("Primavera - Activity"."Units"."Planned Labor Units") END </pre>	Derived From Fact

Calculated Measure	Expression	Source
Cumulative Actual Quantity	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Units"."Actual Labor Units") ELSE NULL END </pre>	Derived From Fact
Cumulative Earned Quantity	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") ELSE NULL END </pre>	Derived From Fact
Cumulative Quantity - SV	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Schedule Variance (Units)") ELSE NULL END </pre>	Derived From Fact
Cumulative Quantity - CV	<pre> CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)"."Data Date") >= 0 THEN RSUM("Primavera - Activity"."Earned Value - (Units)"."Cost Variance (Units)") ELSE NULL END </pre>	Derived From Fact

Calculated Measure	Expression	Source
Earned Quantity - Estimate at completion (EAC)	Primavera - Activity."Units"."Planned Labor Units" / "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units)"	Derived From Fact
Earned Quantity - Variance at Completion (VAC)	Primavera - Activity."Units"."Planned Labor Units" - ("Primavera - Activity"."Units"."Planned Labor Units" / "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units)")	Derived From Fact
Earned Quantity - Estimate to Complete (ETC)	("Primavera - Activity"."Units"."Planned Labor Units" / "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units)") - "Primavera - Activity"."Units"."Actual Labor Units"	Derived From Fact
Earned Quantity - EAC % BAC	("Primavera - Activity"."Units"."Planned Labor Units" / "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units)")/"Primavera - Activity"."Earned Value - (Units)". "Budget At Completion (Units)"	Derived From Fact
Period Cost - Original Budget	Primavera - Cash Flow."Costs"."Initial Baseline"	Derived From Fact
Period Cost - Revised Budget	Primavera - Cash Flow."Costs"."Current Baseline"	Derived From Fact

Calculated Measure	Expression	Source
Period Cost - Forecast	CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH, "Primavera - Cash Flow"."Calendar"."Calendar Date", CURRENT_DATE) < 1 THEN "Primavera - Cash Flow"."Costs"."Forecast" ELSE NULL END	Derived From Fact
Period Cost - EAC	CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH, "Primavera - Cash Flow"."Calendar"."Calendar Date", CURRENT_DATE) < 1 THEN "Primavera - Cash Flow"."Costs"."Current Baseline" ELSE NULL END / (SUM(CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH, "Primavera - Cash Flow"."Calendar"."Calendar Date", CURRENT_DATE) < 1 THEN "Primavera - Cash Flow"."Costs"."Current Baseline" ELSE NULL END) / ((SUM("Primavera - Cash Flow"."Costs"."Current Baseline") / (SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") / SUM("Primavera - Activity"."Units"."Actual Labor Units")))) - SUM("Primavera - Cash Flow"."Costs"."Actuals")))	Derived From Fact
Period Cost - Actual Budget	Primavera - Cash Flow"."Costs"."Actuals"	Derived From Fact
Cumulative Cost - Original Budget	RSUM("Primavera - Cash Flow"."Costs"."Initial Baseline")	Derived From Fact
Cumulative Cost - Revised Budget	RSUM("Primavera - Cash Flow"."Costs"."Current Baseline")	Derived From Fact

Calculated Measure	Expression	Source
Cumulative Cost - Actual	CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH, "Primavera - Cash Flow"."Calendar"."Calendar Date", CURRENT_DATE) > 0 THEN RSUM("Primavera - Cash Flow"."Costs"."Actuals") ELSE NULL END	Derived From Fact
Cumulative Cost - Forecast	RSUM("Primavera - Cash Flow"."Costs"."Forecast")	Derived From Fact
Cumulative Cost - EAC	RSUM(CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH, "Primavera - Cash Flow"."Calendar"."Calendar Date", CURRENT_DATE) < 1 THEN "Primavera - Cash Flow"."Costs"."Current Baseline" / (SUM(CASE WHEN TIMESTAMPDIFF(SQL_TSI_MONTH, "Primavera - Cash Flow"."Calendar"."Calendar Date", CURRENT_DATE) < 1 THEN "Primavera - Cash Flow"."Costs"."Current Baseline" ELSE NULL END) / ((SUM("Primavera - Cash Flow"."Costs"."Current Baseline") / (SUM("Primavera - Activity"."Earned Value - (Units)"."Earned Value (Units)") / SUM("Primavera - Activity"."Units"."Actual Labor Units")))) - SUM("Primavera - Cash Flow"."Costs"."Actuals"))) ELSE "Primavera - Cash Flow"."Costs"."Actuals" END)	Derived From Fact
Cost - Estimate at Completion (EAC)	Primavera - Cash Flow"."Costs"."Current Baseline" / "Primavera - Activity"."Earned Value - (Units)"."Cost Performance Index (Units)"	Derived From Fact

Calculated Measure	Expression	Source
Cost - Estimate to Completion (ETC)	<code>("Primavera - Cash Flow"."Costs"."Current Baseline" / "Primavera - Activity"."Earned Value - (Units)"."Cost Performance Index (Units)") - "Primavera - Cash Flow"."Costs"."Actuals"</code>	Derived From Fact
Cost - EAC % Revised Budget	<code>("Primavera - Cash Flow"."Costs"."Current Baseline" / "Primavera - Activity"."Earned Value - (Units)"."Cost Performance Index (Units)") / "Primavera - Cash Flow"."Costs"."Current Baseline"</code>	Derived From Fact
Cost - Variance at Completion (VAC)	<code>Primavera - Cash Flow"."Costs"."Current Baseline" - ("Primavera - Cash Flow"."Costs"."Current Baseline" / "Primavera - Activity"."Earned Value - (Units)"."Cost Performance Index (Units)")</code>	Derived From Fact
Approved Change Orders	<code>CASE WHEN "Primavera - Business Process"."General - (BP)"."Status" = 'Approved' THEN "Primavera - Business Process"."Costs"."Amount" WHEN "Primavera - Business Process"."General - (BP)"."Status" = 'Approved_Scheduled' THEN "Primavera - Business Process"."Costs"."Amount" ELSE 0 END</code>	Derived From Fact
Cost EAC	<code>Primavera - Cost Sheet"."Costs"."Revised Budget" / "Primavera - Activity"."Earned Value - (Units)"."Cost Performance Index (Units)"</code>	Derived From Fact
Forecast % Revised Budget Copy	<code>Primavera - Cost Sheet"."Costs"."Forecast"/"Primavera - Cost Sheet"."Costs"."Revised Budget"*100</code>	Derived From Fact

Calculated Measure	Expression	Source
EAC % Revised Budget Copy	("Primavera - Cost Sheet"."Costs"."Revised Budget"/ "Primavera - Activity"."Earned Value - (Units)". "Cost Performance Index (Units)")/"Primavera - Cost Sheet"."Costs"."Revised Budget"*100	Derived From Fact

Calculated Measure	Expression	Source
<p>Earned Duration - EAC % BAC Copy</p>	<pre> MAX(RCOUNT("Primavera - Activity"."Units"."Planned Labor Units")) / (CASE WHEN SUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") >= SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN MIN(CASE WHEN RSUM("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)", 0)) - 1 AS FLOAT) ELSE NULL END) ELSE MIN(CASE WHEN RSUM("Primavera - Activity"."Units"."Planned Labor Units") > SUM("Primavera - Activity"."Earned Value - (Units)". "Earned Value (Units)") THEN CAST(RCOUNT(IFNULL("Primavera - Activity"."Units"."Planned Labor Units", 0)) - 1 AS FLOAT) ELSE NULL END) END / MAX(CASE WHEN TIMESTAMPDIFF(SQL_TSI_HOUR, "Primavera - Activity"."Calendar"."Calendar Date", "Primavera - Activity"."Dates - (Project)". "Data Date") >= 0 THEN RCOUNT("Primavera - Activity"."Earned Value - (Units)". "Planned Value (Units)") ELSE NULL END)) / MAX(RCOUNT("Primavera - Activity"."Units"."Planned Labor Units")) </pre>	<p>Derived From Fact</p>

Appendix A: Custom Data Sets for Unifier Data

Created and Completed BP Overtime Dataset

Subject Area: Unifier – Business Process History

Table: Created and Completed BP Overtime Dataset Fields

Dimension	Dimension / Metrics	Attribute	Expression
	Calendar	Week Name	N/A
	Calendar	Calendar Date	N/A
	Dates - (BP)	Completion Date	N/A
	Dates - (BP)	Creation Date	N/A
	Dates - (BP)	Due Date	N/A
	Dates - (BP)	Send Date	N/A
	General - (BP)	Business Process Name	N/A
	General - (BP)	Status	N/A
	General - (BP)	Business Process Type	N/A
	General - (BP)	Record Number	N/A
	General - (BP)	Title	N/A
	Metrics	# of BP Records	N/A
	Metrics	# OF BP Line Items	N/A
	Metrics	Item Quantity	N/A
	Project Portfolio	Project Portfolio Name	N/A
	Project Portfolio	Project Portfolio Status	N/A
	General - (Project)	Project Object Id	N/A
	General - (Project)	Project ID	N/A
	General - (Project)	Project Name	N/A

	General - (Project)	Project Phase	N/A
	General - (Project)	Project Type	N/A
	General - (Project)	Project Status	N/A
	General - (Project)	Project Owner	N/A
	Location - (Project)	Country Name	N/A
	Project Hierarchy	Project Name (Root Level)	N/A
	Project Hierarchy	Project Hierarchy Name Level 1	N/A
	Derived from Week Name	Week Start Date	TO_DATETIME(XSA('demouser'. 'Created and Completed BP Over Time Dataset')). "Columns" . "Week Name", 'yyyy-mm-dd hh:mi:ss')
	Derived from Week Name	Week End Date	TIMESTAMPADD(SQL_TSI_DAY,6,TO_DATETIME(XSA('demouser'. 'Created and Completed BP Over Time Dataset')). "Columns" . "Week Name", 'yyyy-mm-dd hh:mi:ss'))

		<p># of Completed BP Records</p>	<pre> CASE WHEN XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Completion Date" >= XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Week Start Date" AND XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Completion Date" <= XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Week End Date" THEN 1 ELSE 0 END </pre>
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		<p># of Created BP Records</p>	<pre> CASE WHEN XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Creation Date" >= XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Week Start Date" AND XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Creation Date" <= XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Week End Date" THEN 1 ELSE 0 END </pre>
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		<p>Open Cases Tag</p>	<pre> CASE WHEN XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Business Process Name" = 'Corrective Work Orders' AND XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Status" IN ('In_Progress', 'Pen ding_Estimate', 'Tec hnician_assigned', ' Final_WO_Review') THEN 1WHEN XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Business Process Name" = 'Preventive Work Orders' AND XSA('demouser'. 'Cre ated and Completed BP Over Time Dataset'). "Columns" ."Status" IN ('In_Progress', 'Mat erial_Requested') THEN 1ELSE 0END </pre>
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Appendix B: Field Mappings Between Unifier Essentials and CIC Analytics

The following table provides field mappings between Unifier Essentials and Unifier - Cost Sheet subject area in CIC Analytics:

Unifier Essentials Field	Unifier - Cost Sheet Subject Area Fields
Project Cost 09	"Primavera - Cost Sheet"."Costs"."Revised Commitments"
Project Cost 4	"Primavera - Cost Sheet"."Costs"."Revised Budget"
Project Cost 21	"Primavera - Cost Sheet"."Costs"."User Defined Column 7"
Project Cost 22	"Primavera - Cost Sheet"."Costs"."User Defined Column 8"
Project Cost 24	"Primavera - Cost Sheet"."Costs"."User Defined Column 14"
Project Cost 16	"Primavera - Cost Sheet"."Costs"."User Defined Column 13"
Projected Costs	"Primavera - Cost Sheet"."Costs"."User Defined Column 14" +"Primavera - Cost Sheet"."Costs"."Revised Commitments" +"Primavera - Cost Sheet"."Costs"."User Defined Column 7"
%Projected/Forecast	((("Primavera - Cost Sheet"."Costs"."User Defined Column 14" +"Primavera - Cost Sheet"."Costs"."Revised Commitments" +"Primavera - Cost Sheet"."Costs"."User Defined Column 6") / ("Primavera - Cost Sheet"."Costs"."User Defined Column 7" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13"))
Estimated cost at Completion	"Primavera - Cost Sheet"."Costs"."User Defined Column 8" +"Primavera - Cost Sheet"."Costs"."User Defined Column 13"
% Forecast	1 - (% Projected / Forecast)

Projected Over Under	"Primavera - Cost Sheet"."Costs"."Revised Budget" - ("Primavera - Cost Sheet"."Costs"."User Defined Column 8" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13")
% Forecast / Budget	("Primavera - Cost Sheet"."Costs"."User Defined Column 8" + "Primavera - Cost Sheet"."Costs"."User Defined Column 13") / "Primavera - Cost Sheet"."Costs"."Revised Budget"
Project Count	COUNT(DISTINCT "Primavera - Cost Sheet"."General - (Project)"."Project Object Id")