**Practice Manager content pack for Power BI**

This topic describes what's included in the Practice Manager BI Report Dynamics 365 for Operations content pack for Microsoft Power BI. It explains how to access the reports included in the content pack and provides information about the data model and entities that are used to build the content pack.

**Overview**

This content pack was created for practice managers and project managers to provide them with key metrics related to the projects the organization is working on. The dashboard will provide an overview of the projects and related customers. A report level filter can be used to report for specific legal entities. It pulls data from the project accounting cubes for Dynamics 365 for Operations.

The content pack contains 5 report pages consisting of one overview page and 4 details pages providing details of project costs, revenues, earned value management and hours metrics sliced and diced across different dimensions.

All the amounts in the content pack are shown in the system currency. You can set the system currency on the Systems parameters form.

**Accessing the content pack**

You can find the Practice Manager BI Report Dynamics 365 for Operations content pack in the Shared assets library in Microsoft Dynamics Lifecycle Services (LCS). For more information about how to download the content pack and connect it to your Microsoft Dynamics 365 for Operations data, see Power BI content from Microsoft and your partners.

**Reports included in the content pack**

The content pack includes a report that consists of a set of metrics visualized as charts, tiles, and tables.

The following table provides an overview of the visualizations in the content pack.

|  |  |
| --- | --- |
| **Report page** | **Visualization** |
| Dashboard (rename this for 7.2 to Projects overview) | Created projects  Estimated projects  In process projects  Number of projects by stage  Number of projects by city  Actual revenue by customer  Budget gross margin by project  Earned value management overview |
| Cost | Actual vs budget cost by month  Actual vs budget cost by year  Actual vs budget cost by category  Actual cost by transaction type |
| Revenue | Actual revenue by month  Actual revenue by postal code  Actual vs budget revenue by category  Actual revenue by customer industry |
| EVM | Cost and schedule performance index by project |
| Hours | Actual billable utilized hours vs actual billable burden hours vs budget hours  Actual billable utilized hours vs actual billable burden hours by project  Actual billable utilized hours vs actual billable burden hours by resource  Actual billable hours ratio by project  Actual billable hours ratio by resource |

The charts and tiles on all these reports can be filtered and pinned to the dashboard. For more information about how to filter and pin in Power BI, see Create and Configure a Dashboard. You can also use the export underlying data functionality to export underlying data that is summarized on a visualization.

**Understanding the data model and entities**

Dynamics 365 for Operations data is used to populate the report in the Practice Manager BI Report content pack. This is represented as aggregate measurements that are staged in the Entity store, which is a Microsoft SQL database optimized for analytics. Read more about it in the blog [Power BI integration with Entity Store in Dynamics](https://blogs.msdn.microsoft.com/dynamicsaxbi/2016/06/09/power-bi-integration-with-entity-store-in-dynamics-ax-7-may-update/).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Entity** | **Key aggregate measurements** | **Data source for Dynamics 365 for Operations** | **Field** | **Description** |
| ProjectAccountingCube\_ActualHourUtilization | ActualBillableUtilizedHours,  ActualBillableBurdenHours, | ProjEmplTrans | Sum(ActualUtilizationBillableRate),  Sum(ActualBurdenBillableRate) | Total of actual billable utilized hours,  Total of actual burden rate |
| ProjectAccountingCube\_Actuals | ActualRevenue,  ActualCost, | ProjTransPosting | Sum(ActualRevenue),  Sum(ActualCost) | Total of posted revenue for all transaction types,  Total of posted cost for all transaction types |
| ProjectAccountingCube\_Customer | Number of projects | CustTable | COUNTA(ProjectAccountingCube\_Projects[PROJECTS]) | Count of available Projects |
| ProjectAccountingCube\_Forecasts | BudgetCost,  BudgetRevenue,  BudgetGrossMargin | ProjTransBudget | Sum(BudgetCost),  Sum(BudgetRevenue),  Sum(BudgetGrossMargin) | Total of forecasted cost for all transaction types,  Total of forecast accrued/invoiced revenue,  Difference between sum of total forecast revenue and sum of total forecast cost |
| ProjectAccountingCube\_ProjectPlanCostsView | PlannedCost | Project | Sum(SumOfTotalCostPrice) | Total cost price in estimates for all project transaction types with planned tasks |
| ProjectAccountingCube\_Projects | Cost performance index,  Schedule performance index,  Percentage of work completed,  Project actual billable Hours ratio  Earned value | Project | ProjectAccountingCube\_Projects[Earned value] / ProjectAccountingCube\_Projects[Total actual cost of completed tasks],  ProjectAccountingCube\_Projects[Earned value] / ProjectAccountingCube\_Projects[Total planned cost of completed tasks],  Percentage of work completed = ProjectAccountingCube\_Projects[Total actual cost of completed tasks] / (ProjectAccountingCube\_Projects[Total actual cost of completed tasks] + ProjectAccountingCube\_Projects[Total planned cost of project] - ProjectAccountingCube\_Projects[Total planned cost of completed tasks]),  ProjectAccountingCube\_Projects[Project total actual billable utilized hours] / (ProjectAccountingCube\_Projects[Project total actual billable utilized hours] + ProjectAccountingCube\_Projects[Project total actual billable burden hours]),  ProjectAccountingCube\_Projects[Total planned cost of project] \* ProjectAccountingCube\_Projects[Percentage of work completed] | Calculation of total earned value divided by total actual cost,  Calculation of total earned value divided by total planned cost  Total percentage of completed work based off total actual cost of completed task and planned cost of the project  Total actual billable hours based on utilized + burden,  Total planned cost multiply by percentage of completed work |
| ProjectAccountingCube\_TotalEstimatedCosts | CompletedActivityPlannedCost | ProjTable | Sum(TotalCostPrice) | Total cost price in estimates for all project transaction types with completed tasks |

Additional resources

Here are some helpful links that are related to entities and building Power BI content:

* [Data entities](https://ax.help.dynamics.com/en/wiki/data-entities/)
* [Creating organizational content packs](https://powerbi.microsoft.com/en-us/documentation/powerbi-service-organizational-content-packs-introduction/)
* [Data modeling using Power BI](https://powerbi.microsoft.com/en-us/guided-learning/powerbi-learning-2-1-intro-modeling-data)
* [Adding Power BI tiles to workspaces](http://ax.help.dynamics.com/en/wiki/configuring-powerbi-integration/)