Dashboards for Project Management

Success

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#PLMCONX
Controlling Successful Projects

Need for a Project Monitoring Solution

As a project manager I need to know ...

- What is the status of my running projects?
- What will be my overall cost?
- When will my project end?
- How can I get an overview about the availability of resources for a certain period of time?
- How can I get an overview about all schedules?
- How can I get KPIs for running projects?
Controlling Successful Projects

Need for a Project Monitoring Solution

- Project Management Triangle

1. In Scope
2. In Budget
3. In Time

Deliverables
Milestones
Hours / Costs

Quality

Stakeholder Satisfaction

Project Success
Earned value management is a project management technique for measuring project performance and progress.\(^1\)

It has the ability to combine measurements of the project management triangle \(^1\):
- Scope
- Time
- Costs

EVM is used in Teamcenter Schedule Management.

\(^1\) [Wikipedia] https://en.wikipedia.org/wiki/Earned_value_management
Project Controlling
Earned Value Management

- Essential features of any EVM implementation include:

  - A project plan or schedule that identifies the tasks
  - A valuation of planned work for the work breakdown structure
  - Key metrics to quantify the accomplishment of work
**EVM**

**Earned Value Management**

- **Budget at Completion (BAC):** Total cost of work planned at the end of the project.

- **Planned Value (PV):** Total cost of work scheduled/planned as of a reporting date. Also referred as Budgeted Cost of Work Scheduled (BCWS).

- **Earned Value (EV):** Total cost of work completed or performed as of a reporting date. It is also referred as Budgeted Cost of Work Performed (BCWP).

- **Actual Cost (AC):** Cumulative cost as of a reporting date.
EVM
Earned Value Management

[Graphs showing Earned Value Management (EVM) charts]

[Source: Wikipedia]
https://en.wikipedia.org/wiki/Earned_value_management
**EVM**

**EVM Values**

- **Schedule Performance Indicator (SPI):** It is an index showing the efficiency of the time utilized on the project.
  - SPI = Earned Value (EV) / Planned Value (PV)

- **Cost Performance Indicator (CPI):** It is an index showing the efficiency of the utilization of the resources on the project.
  - CPI = Earned Value (EV) / Actual Cost (AC)
BCT Portfolio to Support the complete Product Lifecycle
What is BCT BI-Reports all About?

- BCT BI-Reports is an reporting software for Teamcenter Schedule Management
- It monitors Teamcenter data using charts for e.g. EVM (Earned Value Management)
- BCT BI-Reports offers data export in different formats like PDF, Excel, PS, Word, OpenDocument Formats and PPT
- Moreover BCT BI-Reports is flexible. That means specific reports can be designed for any type of data in Teamcenter
### BCT BI Reports - Resource Load Overview

#### BCT Resource Load Overview

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#### Status Legend

- **Assigned / available**
- **In Progress**
- **Partial Interest**
- **Overcommit**
- **Farther Development**
BCT BI-Reports provides different reports for Teamcenter Schedule Management:

- **BCT Cockpit**
  Consolidated display von KPIs according to Earned Value Method

- **BCT Workplace KPI**
  List of Teamcenter schedules with KPI values

- **BCT Resource Load Overview**
  Displays resource load information using matrix form

- **BCT Big Picture**
  Illustrates running projects in an interactive Gantt chart

- **BCT Gate Progress Dashboard**
  Project progress in relation to project phase
BCT Cockpit

• BCT Cockpit is a graphical illustration of schedules data in Teamcenter Schedule Management.
• BCT Cockpit uses EVM values calculation to make sure that the monitoring is precise.
BCT Cockpit
BCT BI-Reports Standard Report

Average value of Schedule Performance

Project Weight

Average value of Cost Performance

Comparison of Earned Value versus Planned Value

Cost comparison: Budget-, Forecast-, Estimated-Cost at completion

General Status of the Projects
BCT Workplace KPI

BCT BI-Reports Standard Report

- BCT Workplace KPI lists Teamcenter Schedules with key performance indicator values like CPI, SPI etc.
### BCT Workplace KPI

#### BCT BI-Reports Standard Report

**Status of the projects are illustrated by colored icons**

**Start date, Finish date**

**Budgeted at Completion**

**Cost Performance**

**Total Work**

**Remaining Work**

**Baseline Work**

**Earned Value**

**Schedule Performance**

**Work Completed**

**Overdue Work**

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BCT Resource Load Overview

BCT BI-Reports Standard Report

- BCT Resource Load Overview displays resource load information of your projects using colors.
- This is a great chance for an efficient utilization of the resources.

Weekly or monthly workload

Team members

Summary across multiple schedules

Color coding for amount of resource load
• BCT Big Picture illustrates running projects in an interactive Gantt chart.
• It is also possible to monitor details about specific projects with any desired task types.

Drill down into Schedule with Milestones and Gates.
BCT Gate Progress Dashboard

BCT BI-Reports Standard Report

- Displays the target/actual phase and milestone comparison according to the original planning and basic planning.
- Enables the comparison of different basic plans.

**Milestones**

- **Actual Finish Date**
- **Planned Finish Date**
- **Active Baseline Finish Date**

**Timeline**

- **Baseline Finish date**
- **Planned Finish date**
- **Actual Finish date**
- **Delays**
  - PFD – BFD
  - AFD – PFD
BCT BI-Reports

Overview

Reports

- BCT Work-place KPI
- BCT Cockpit
- BCT Resource Load Overview
- BCT Big Picture
- BCT Gate Progress Dashboard
- Custom Reports
- Custom Reports

Dashboards and Reports for Teamcenter Schedule Management

Teamcenter Schedule Management

Core Module

BCT BI-Reports Core
Validate Schedule Deliverables

BCT CheckIt - Rule based data validation for Teamcenter

- BCT CheckIt enables the user to check schedule deliverables on plausibility and completeness
- Interactive check report makes it easy to understand what objects have not passed and what needs to be done
- Events can be triggered automatically based on the check result
Dashboards for Project Management Success

Summary

• Monitoring dashboards are essential to control projects as a project manager

• Essential features of any EVM implementation include
  • a project plan or schedule that identifies the tasks
  • a valuation of planned work, called Planned Value (PV) or Budgeted Cost of Work Scheduled (BCWS)
  • key metrics to quantify the accomplishment of work, called Earned Value (EV) or Budgeted Cost of Work Performed (BCWP).

• BCT BI-Reports
  • provides dashboards for Teamcenter Schedule Management
  • by using Earned Value Management KPIs
  • shows availability of resources across all schedules
  • low total cost of ownership due to web based application

• BCT CheckIt
  • to validate schedule deliverables

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