

# Project Management Metrics and Business Key Performance Indicators (KPIs)

## Project Management Metrics

**Actual Cost (AC) or Actual Cost of Work Performed (ACWP):** Monetary value. Amount spent on the project as of a reporting date.

**Cost of Managing Processes:** Monetary value. Provides an overview of time and resources used for project management and supervision. A high value can indicate excessive or inefficient project management.

**Cost Performance Index (CPI):** Ratio. Shows time behind or ahead of an approved project schedule.

**Cost Variance (CV):** Monetary value. Indicates if the estimated project cost is below or above the baseline as planned. Often noted as Planned Budget vs. Actual Budget.

**Earned Value (EV) or Budgeted Cost of Work Performed (BCWP):** Monetary value. The approved budget for all performed work as of a reporting date.

**Missed Milestones:** Count or percentage. Shows how many milestones miss their scheduled date. Often used as an additional input for status stoplight dashboards (**green, yellow or red**).

**Overdue Project Tasks:** Count or percentage. Shows how many tasks are overdue. Often used to set status colors (**green, yellow or red**) based on predetermined levels. Sometimes referred to as “Crossed Deadlines.”

**Planned Hours of Work vs Actual Situation:** Count or percentage. Shows how many tasks are overdue. Often used to set status colors (green, yellow, or red) based on predetermined levels. Sometimes referred to as “Crossed Deadlines.”

**Planned Value (PV) or Budgeted Cost of Work Scheduled (BCWS):** Monetary value. The estimated planned project costs as of a reporting date that shows if spend is on or off budget. Typically calculated as  $PV = (\text{percent tasks remaining}) \times (\text{project budget})$ .

**Projects Cancelled:** Percentage. Compares aggregate cancelled project activity. Useful for planning project activity over a multiyear period to determine capacity and resource planning.

**Projects Completed on Time:** Percentage. Compares aggregate completed project activity. A benchmark for many companies is to keep this value above 80 percent.

**Resource Utilization:** Percentage. Indicates actual use of human resources compared to potential capacity. Often connected to billable hours vs. nonbillable (bench or administrative) time.

**Return on Investment (ROI):** Ratio. Calculates project profitability and if benefits exceed cost.

**Schedule Performance Index (SPI):** Ratio. Determines if a project is behind or ahead of schedule.  $SPI = (\text{Earned Value}) / (\text{Planned Value})$ .

**Schedule Variance (SV):** Monetary value. Determines variation (negative or positive) from the planned budget for a project.

**Tasks Complete:** Percentage. Simple calculation of number of tasks finished as a percentage of planned tasks. May or may not be weighted to task complexity.

## Business Keys Performance Indicators (KPIs)

### Finance

Accounts payable current  
 Accounts payable process cost  
 Accounts payable turnover  
 Accounts receivable current  
 Accounts receivable turnover  
 Accounts receivable turnover  
 Budget creation cycle time  
 Budget iterations [number]  
 Budget line items [number]  
 Budget variance  
 Burn rate  
 Cost of managing business  
 Current ratio  
 Debt to equity ratio  
 Finance error report  
 Finance function total cost  
 Internal audit cycle time  
 Inventory turnover  
 Net profit margin  
 Net profit margin  
 Operating cash flow  
 Payment error rate  
 Payroll headcount ratio  
 Quick ratio—acid test  
 Resource utilization  
 Return on equity  
 Vendor expenses  
 Working capital

### Manufacturing

Capacity utilization rate  
 Capital equipment expense per plant revenue [percent]  
 Labor expense per COGS [percent]  
 Machine time per order lead time [percent]  
 Machine uptime  
 Materials and components per plant revenue [percent]  
 Overall equipment effectiveness  
 Part sales per plant revenue [percent]  
 Product sales per plant revenue [percent]  
 Production run setup time  
 Recordable incident rate  
 Scrap expense per plant revenue [percent]  
 Scrap rate  
 Service sales per plant revenue [percent]  
 Utilities expense per plant revenue [percent]

### Sales

Asset turnover ratio—sales to assets  
 Calls handled per representative—inbound  
 Calls handled per representative—outbound  
 Customer engagement level  
 Customer lifetime value per customer profitability  
 Customer turnover rate  
 Lead cost per channel  
 Leads or prospects new [monthly]  
 Leads qualified [number]  
 Lead-to-close rate across all channels  
 Lead-to-sale conversion rate  
 New client acquisition cost per channel  
 Order value [average]  
 Product or service usage [daily]  
 Purchase value [average]  
 Quotes per orders [number per month]  
 Relative market share  
 Resources spent per client—paying or nonpaying  
 Sales [hourly, daily, weekly, monthly, quarterly, annual]  
 Sales by lead source  
 Sales conversion time [average]  
 Sales demos [monthly number]  
 Sales growth [monthly]  
 Sales per new customers [monthly]  
 Sales per representative  
 Sales reps per \$X revenue  
 Sales total from existing customers [percent]  
 Sales volume per customer [annual average]  
 Sales volume per customer [monthly average]  
 Shopping cart abandonment rate [percent]  
 Shopping carts abandoned [number]

### Supply Chain

Asset utilization rate  
 Back order rate  
 Carrying cost of inventory  
 Days on hand: finished goods  
 Days on hand: raw materials  
 Defect rate  
 Inventory accuracy  
 Inventory on hand  
 Inventory shrinkage  
 Inventory to sales ratio  
 Inventory turns  
 Material acceptance rate  
 Order accuracy  
 Order fulfillment lead time  
 Perfect order rate  
 Raw materials expense per COGS [percent]  
 Safety stock levels  
 Stocking levels  
 Supply queues and wait times