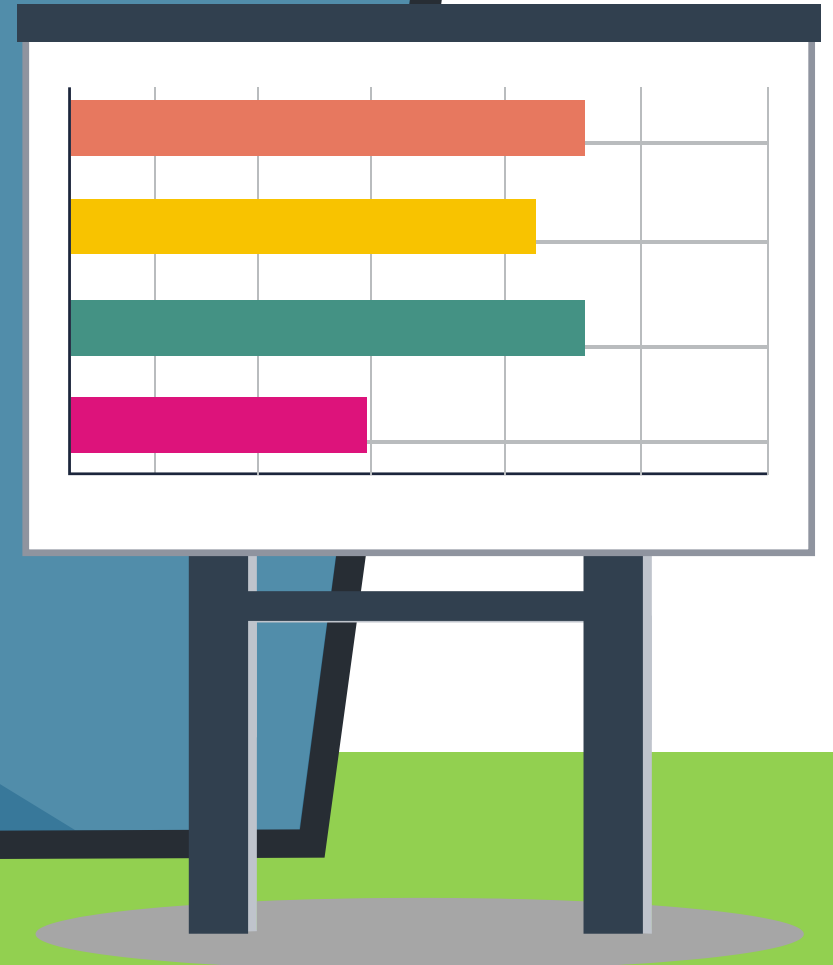


# 10 Knowledge and Skills Every Project Manager Should Have



Project managers in different organizations, across different sectors often deal with some of the same challenges. These challenges often include managing the project budget, communications+, the team, stakeholders, risk, scope and more.

Identifying the total number of active projects and their status within the company portfolio is difficult or cumbersome. Most of the time, resource allocation is either performed ad hoc or in an inefficient and imprecise manner.

Companies sometimes do not even attempt to capture and accurately allocate project costs, especially internal labor, due to difficulties in user adoption. For many project managers and organizations, project, program and portfolio reporting is manually intensive, time consuming and highly subject to error.



**Project and Portfolio Management (PPM)** is a formal approach that an organization can use to orchestrate, prioritize and benefit from projects. This approach examines the risk/reward of each project, the available funds, the likelihood of a project's duration, and the expected outcomes.

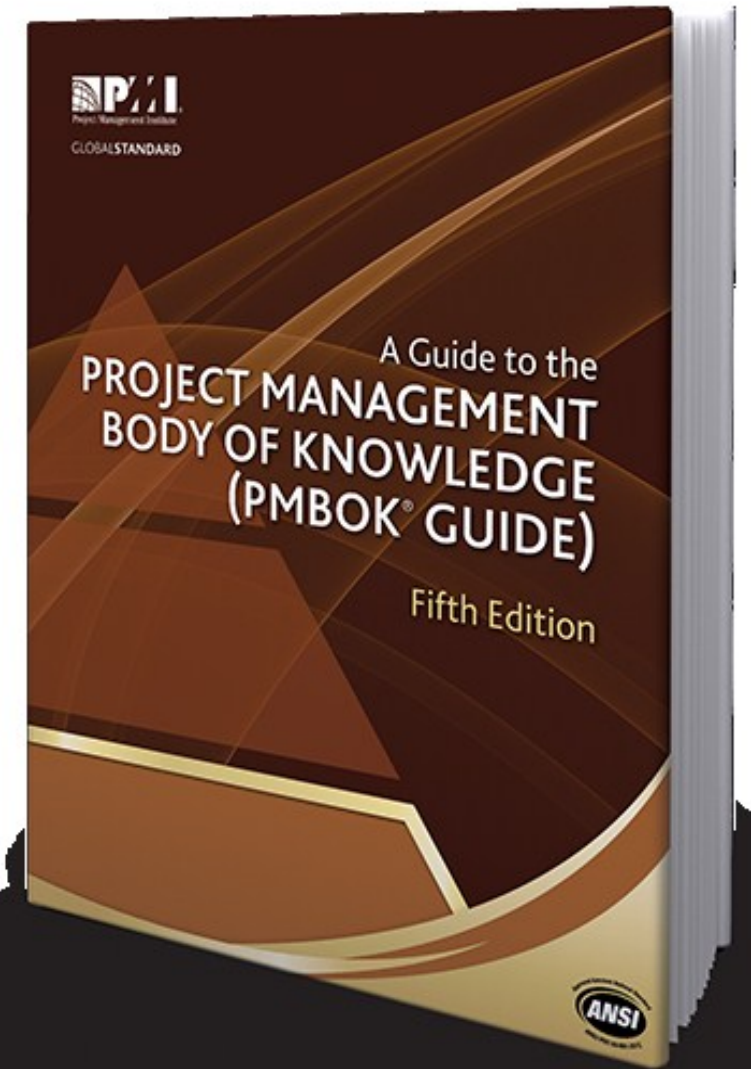
A group of decision-makers within an organization, led by a Project Management Office director, evaluates the returns, benefits and prioritization of each project to determine the best way to invest the organization's capital and human resources.

Along with the appropriate tools to efficiently manage projects, **project managers must be able to skillfully manage the company's project portfolio, manage various areas of the project's scope and efficiently manage time, budgets, people, and more.**

Furthermore, project managers also need to use the ten knowledge areas in the PMBOK Guide that are essential for the project's success. Each of the ten knowledge areas are comprised of a set of processes with inputs, techniques as well as outputs. Each one of these processes work together and are critical in driving project success.

In order to achieve the project's objectives, the 10 Knowledge Areas must adopt specific abilities and expertise. Its goal is to put processes with similar characteristics in the same classification category while also improving project organization.

## So, what are these knowledge and skills?



# Knowledge and skills:





## 01 | Project Integration Management

After identifying, prioritizing, balancing, and managing the company's Projects Portfolio, project managers are able to move forward and start planning and organizing their activities to turn initiatives into a well-defined and organized project.

The Project Integration Management knowledge area is devoted to actions that are crucial to the project's completion, such as interaction, consolidation, unification and articulation.

Integration is mainly concerned with the effective integration of the processes within the groups of project management processes.

The six different processes that make up this knowledge area are:

1. Develop Project Charter
2. Develop Project Management Plan
3. Direct and Manage Project Work
4. Monitor and Control Project Work
5. Perform Integrated Change Control
6. Close Project or Phase



## 02 | Project Scope Management

The Project Scope Management knowledge area addresses the definition of the scope of the project, project scope management and project scope requirements, creating the work breakdown structure (WBS) and creating scope baselines and project work.

At this stage, you can plan ways to keep the project within the established limits by creating a scope and work breakdown structure and by collecting requirements.

The six processes in this knowledge area aim to ensure that the project includes all of the work required to successfully complete the project.

These processes are:

1. Plan Scope Management
2. Collect Requirements
3. Define Scope
4. Create WBS
5. Validate Scope
6. Control Scope



## 03 | Project Time Management

This is the knowledge area where project managers (PM) will estimate the duration of tasks. At this stage, the PM will establish the sequence of the project's tasks in addition to choosing the resources that are needed to achieve the project's goal.

In this area, time management processes and their related tools and techniques are documented so project managers can monitor and manage the project in order to keep it on schedule through the definition and sequencing activities, estimating resources and more.

The goal of this knowledge area - as suggested by the name - is to create outputs and processes for the project to assist the project team in completing the project in a timely manner.

**This knowledge area is made up of the following processes:**

1. Plan Schedule Management
2. Define Activities
3. Sequence Activities
4. Estimate Activity Resources
5. Estimate Activity Durations
6. Develop Schedule
7. Control Schedule



## 04 | Project Cost Management

In this knowledge area, costs are estimated and a budget baseline is established along with a cost management plan.

This area also contains the processes that are involved with controlling, planning, budgeting, funding and estimating the project's costs in an effort to complete the project within the approved budget.

The goal of this knowledge area is to complete a project within an established budget and maintain costs under control.

The four processes that make up the Project Cost Management knowledge area are:

1. Plan Cost Management
2. Estimate Costs
3. Determine Budget
4. Control Costs





## 05 | Project Quality Management

The knowledge area that deals with Project Quality Management is made up of three processes as well as activities to determine responsibilities, quality policy, and the quality objectives of the project.

Quality management systems are implemented here through policies and procedures along with continuous process improvement activities so that issues regarding the project's quality can be monitored and corrected.

The main purpose of this area is to identify, audit and monitor quality requirements and/or standards to assess performance and recommend necessary changes.

The three processes of the Project Quality Management knowledge area are:

1. Plan Quality Management
2. Perform Quality Assurance
3. Control Quality



## 06 | Project Human Resource Management

The Human Resource knowledge area is the very core process that will define how the project's human resources will be obtained, developed, utilized and managed.

The project human resource management area also includes processes that organize and lead the project team.

The objectives of this knowledge area include identifying and documenting project roles, responsibilities and required skills as well as confirming availability of human resources, improving competencies and tracking performance of team members during the project.

In this knowledge area, we have the following processes:

1. Plan Human Resource Management
2. Acquire Project Team
3. Develop Project Team
4. Manage Project Team



## 07 | Project Communications Management

This is the knowledge area where processes dedicated to ensuring the project's communications are adequately planned, and all information pertaining to the project is properly collected, distributed, stored and managed. In other words, this is the knowledge area where the communication plan is established.

It is the PM's job to ensure that the plan is followed and that the right information regarding the project is delivered to the project's team, stakeholders and all parties involved at the appropriate time and in the right format.

Objectives in this knowledge area include developing the appropriate approach and communication plan, creating, collecting, distributing and storing project information and monitoring and controlling project communications throughout the entire duration of the project.

The Communications Management knowledge area has three processes:

1. Plan Communications Management
2. Manage Communications
3. Control Communications



## 08 | Project Risk Management

The Risk Management knowledge area is where we find processes that are responsible for every aspect of the project's risks, including identifying risks, planning risk management, risk assessments and risk controls.

The goal of Project Risk Management is to avoid or decrease the probability and impacts of negative risks, threats and events, and increase the impact and probability of opportunity risks (positive risks).

There are six processes in this knowledge area. They are:

1. Plan Risk Management
2. Identify Risks
3. Perform Qualitative Risk Analysis
4. Perform Quantitative Risk Analysis
5. Plan Risk Responses
6. Control Risks



## 09 | Project Procurement Management

The Procurement knowledge area involves the processes that PMs follow in order to obtain and control resources from outside of the project team, in order to successfully reach the project's goal.

These resources or materials that the project manager may feel are necessary for the completion of the project can be assets, products, or outside services.

In this knowledge area, the goal is to document project purchasing decisions, evaluate suppliers and manage procurement relationships, contracts and performance, making the necessary corrections and changes as required.

The four procurement processes in this knowledge area are

1. Plan Procurement Management
2. Conduct Procurements
3. Control Procurements
4. Close Procurements

## 10 | Project Stakeholder Management

As the newest knowledge area, the Project Stakeholder Management area includes processes used by the PM that are required to identify the organizations, people or groups that share a stake in or are affected by the project.

The affected stakeholder can be an internal or external part of an organization and they can have either a positive or negative impact on a project.

The PM is responsible for managing the stakeholder's expectations and analyzing their impacts on the project, as well as engaging them in project execution and decisions.

These four processes make up the Project Stakeholder Management knowledge area:

1. Identify Stakeholders
2. Plan Stakeholder Management
3. Manage Stakeholder Engagement
4. Control Stakeholder Engagement

Now that you know about the **10 Knowledge and Skills Every Project Manager Should Have**, find out more about the most complete and innovative solution in the market for project and portfolio management, regulatory compliance and business excellence.



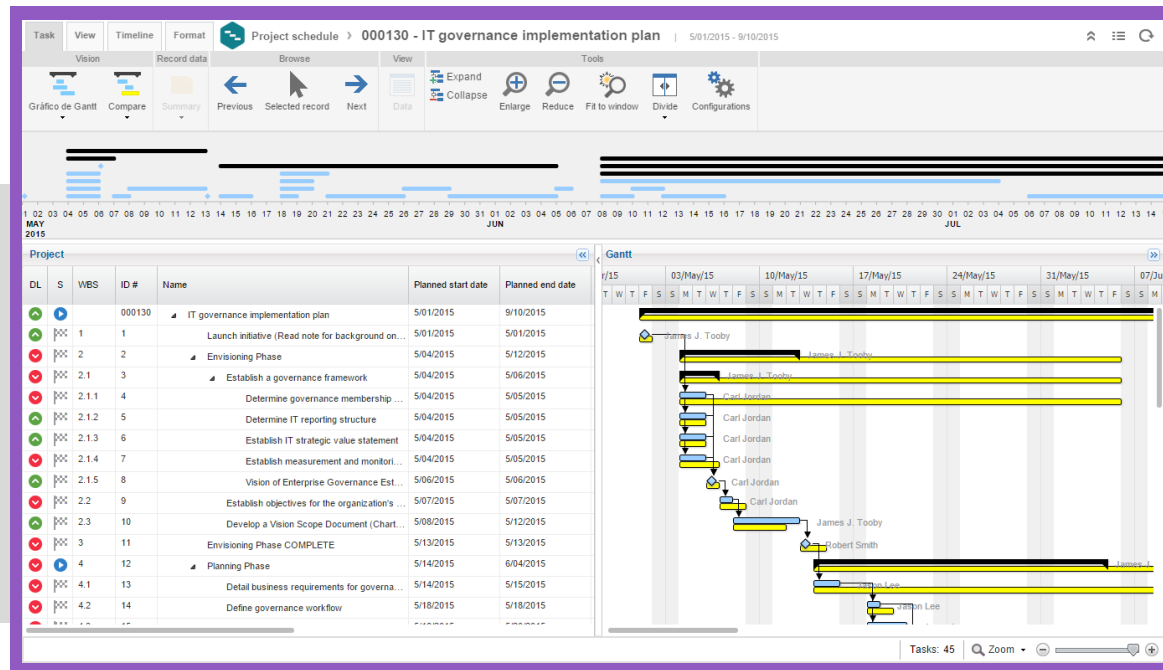
## SoftExpert PPM

**SoftExpert Project and Portfolio Management (PPM)** software is the most comprehensive solution for prioritizing, planning, managing and executing projects, portfolios and business initiatives. This software helps organizations complete projects on time and within budget by enabling project managers and team members to optimize time and deadline scheduling, resource utilization, milestone and deliverable completion, cost and revenue accounting, etc.





## Project Integration Management



The screenshot shows the 'Project (PR020)' interface with a list of tasks. The table includes columns for task status, ID, name, revision, and dates. The tasks listed are:

F	DL	M	D	A	RI	S	RS	L	CPI	SPI	HPI	Actual %	Project type	ID #	Name	Revision	Planned	Rescheduled	Actual	Planned
●	★	●							0.39	0.11		12	4.1	000006	Implement the Consultancy PMO	01	1/09/2008	1/09/2008	1/01/2008	10/14/2008
●	★	●							2.14	2.13	2.14	99	5	000009	Projects in controlled environments methodology	00	8/25/2008	8/25/2008	8/25/2008	9/11/2008
●	★	●							1.02	1.00	1.02	100	3	000010	ISO 9001 management review	00	9/01/2008	9/01/2008	12/11/2008	9/24/2008
●	★	●							1.15	1.00		100	1	000011	IT governance deployment plan	01	8/04/2008	8/04/2008	9/16/2009	9/10/2008
●	★	●							4.17	1.00		100	2	000013	New product plan	00	7/14/2008	7/14/2008	7/16/2008	8/29/2008
●	★	●							0.00	0.00		99	2.2	000018	Electrical engine firing pulse converter	00	4/02/2007	4/02/2007	4/01/2007	9/10/2007
●	★	●							1.36	2.33		97	2.2	000019	4 Cylinder Water Cooled Engine Block	00	9/26/2008	9/26/2008	7/27/2009	4/13/2010
●	★	●							1.23	1.01	1.23	100	2	000020	Plant Construction Louisville, CO	03	2/15/2010	2/15/2010	2/13/2010	11/05/2010
●	★	●							2.33	1.11		54	5	000023	Customer Satisfaction Survey	00	11/09/2010	11/09/2010	11/09/2010	1/26/2011
●	★	●							3.30	1.00		84	5	000024	Cost Control - Process Improvement	00	11/30/2010	11/30/2010	11/30/2010	3/24/2011
●	★	●							1.11	1.00		100	2	000027	Dual voltage motor vehicle electrical system	00	6/17/2009	6/17/2009	6/17/2009	7/10/2009
●	★	●							1.15	3.30		100	2.2	000029	Hydrogen combustion engine	04	8/03/2009	8/03/2009	8/03/2009	5/27/2010
●	★	●							0.11	0.39				000029.002	Hydrogen combustion engine (2015 Model)	00	7/14/2015			5/05/2016
●	★	●							1.00	1.30		100	2.1	000032	Service Report Program Development	01	7/27/2009	7/27/2009	7/30/2008	10/02/2009
●	★	●							0.11	0.39		100	2.2	000035	Mini projector for coupling to camera or MP4 player	00	9/25/2009	9/25/2009	9/25/2009	10/08/2009
●	★	●							1.30	1.00		100	3	000037	Quality, Environment, Health and Safety Management System Review	00	2/18/2010	2/15/2010	2/15/2010	6/23/2010



## Project Scope Management





## Project Time Management

James.tooby - James J. Tooby | Purchase / Manager

Record Actions Edit Browse View Tools

Save Execute Send for approval Request Add Edit Delete Previous Date: 26/05/2015 Next Data My calendar Import Export Expand Collapse Show/Hide details

Quick search

SE	OT	Task	Object	Mon [22/06]	Tues [23/06]	Wed [24/06]	Thur [25/06]	Fri [26/06]	Sat [27/06]	Sun [28/06]	Total
		45 - Deployment of IT Governance Operational	IT governance deployment plan	N	O	N	O	N	O	N	O
		(27 Tasks)			02:00	01:00					03:00
		New product benchmarking	New product benchmarking			04:30	03:45				08:15
		(1 Task)			04:30	03:45					08:15
		New product development - Production tests	New product development - Production tests		00:30	00:45					01:15
		15 - Sample submission to the lab	New product development - Production tests		00:30	00:50					01:20
		16 - Laboratory analysis	New product development - Production tests		01:00	01:35					02:35
		(2 Tasks)			01:00	01:35					02:35
		Project Plan Document Common Project Lifecycle (PLC) Project	Project Plan Document Common Project Lifecycle...								
		1 - Design PLC updates and Create Quick Reference Document	Project Plan Document Common Project Lifecycle...								
		(95 Tasks)			03:00	07:05					10:05

Object: New product benchmarking | Nonproject task: 000052 - New product benchmarking

Start time	End time	Overtime	Total	M	S
08:00	09:00		01:00		
10:00	10:45		00:45		
13:00	15:00		02:00		

Attribute name Description Explanation Comments Request

Delivery date

Product Name

SLA

New view

Record Type Styles Display Data Tools

Save Open Details Pivot table Conditional format Title Total Group values 12 Cache Export

Fields Rows Columns

Dimensions

- Department - ID #
- Department - Name
- Priority
- Project type - ID #
- Project type - Name
- Responsible - Name
- Responsible - User ID
- Status

Measures

- # of projects
- %Gross margin - Actual
- %Gross margin - Planned
- %Gross margin - Rescheduled
- Cost (US\$) - Actual
- Cost (US\$) - Planned
- Cost (US\$) - Rescheduled

Filters

- Priority

Projects - Cost

Project type - Name	Cost (US\$) - Actual	Cost (US\$) - Planned	Cost (US\$) - Rescheduled
Engineering	US\$1,081,965.00	US\$1,664,365.00	US\$1,139,845.00
Product Development	US\$590,720.00	US\$633,318.00	US\$883,318.00
Quality	US\$101,980.00	US\$387,146.00	US\$164,046.00
Strategic	US\$101,660.00	US\$105,650.00	US\$121,150.00
Viability analysis	US\$90,000.00	US\$116,250.00	US\$116,250.00
Application Development	US\$16,650.00	US\$5,000.00	US\$17,600.00
APQP projects	US\$3,000.00		US\$0.00
Application update	US\$0.00		US\$0.00
Marketing	US\$0.00	US\$0.00	US\$0.00
Information Technology	US\$0.00	US\$0.00	US\$0.00
Staff	US\$0.00		US\$0.00
Dicle EDAS Projeleri		US\$0.00	US\$0.00



## Project Cost Management



## Project Quality Management

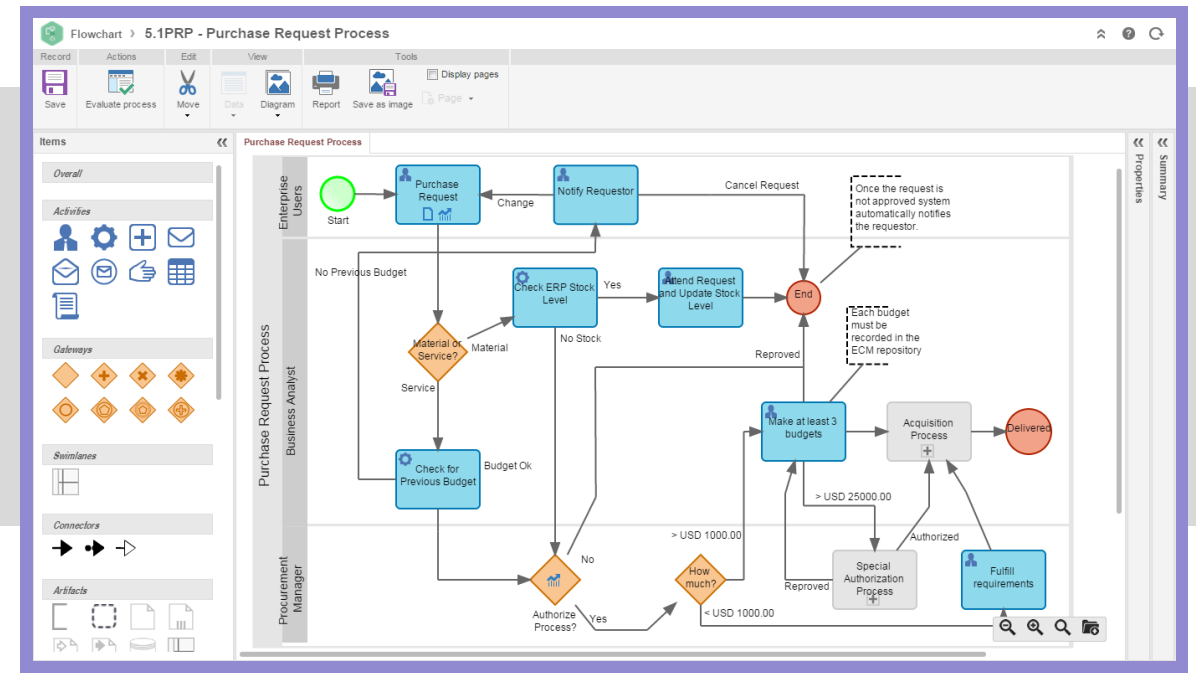
SoftExpert

Home Portals My tasks Components Shortcuts

View Qualification status (CO014)

S	R	MT	I	Seq.	Competence type	ID #	Name	Demanded level	Evaluated level	Score	Evaluation date	Weight
Employee: Project Engineer - Project Engineer (ENG - Engineering/Engineer I - Engineer I)												
1	EB	EC			English Course	Completed - Completed	High - High	10,00/10,00	10,00	26/05/2015		1
Employee: danielmayer - Daniel Mayer (PRD - Production/Coordinator - Coordinator)												
5	QS	QT			Quality Tools Knowledge	Good - Good	Good - Good	8,00/10,00	8,00	15/06/2015		3
6	BS	DM			Decision Making	Excellent - Excellent	Excellent - Excellent	10,00/10,00	10,00	15/06/2015		1
7	FS	NE			Negotiation	< 08 - From 05 years to 08 years	< 08 - From 05 years to 08 years	8,00/10,00	8,00	15/06/2015		1
8	MS	FM			Financial Management	Good - Good	Good - Good	8,00/10,00	8,00	15/06/2015		1
Employee: rortiz - rortiz (PMO - PMO/Project Manager - Project Manager)												
1	MS	PM			Project Management	Regular - Regular	Good - Good	8,00/10,00	8,00	12/06/2015		1
2	QS	BB			Black Belt	Regular - Regular	Good - Good	8,00/10,00	8,00	12/06/2015		1
Employee: villares - villares (PMO - PMO/Project Manager - Project Manager)												
1	MS	PM			Project Management	Regular - Regular	Good - Good	8,00/10,00	8,00	12/06/2015		1
2	QS	BB			Black Belt	Regular - Regular	Good - Good	8,00/10,00	8,00	12/06/2015		1

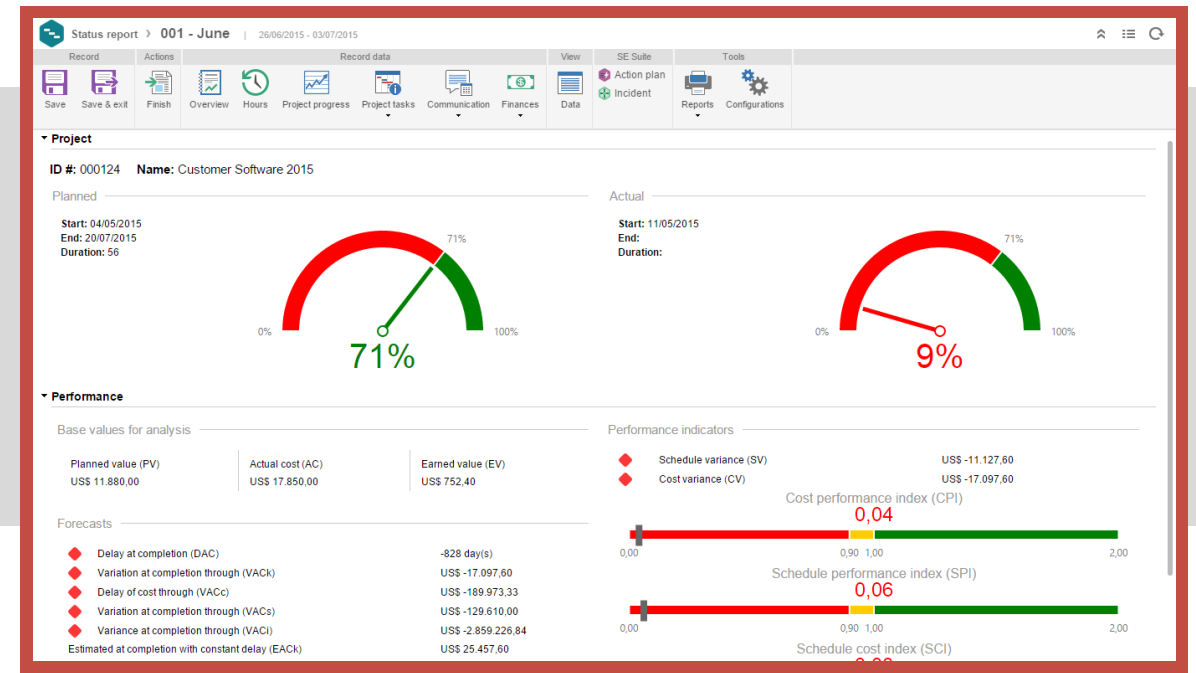
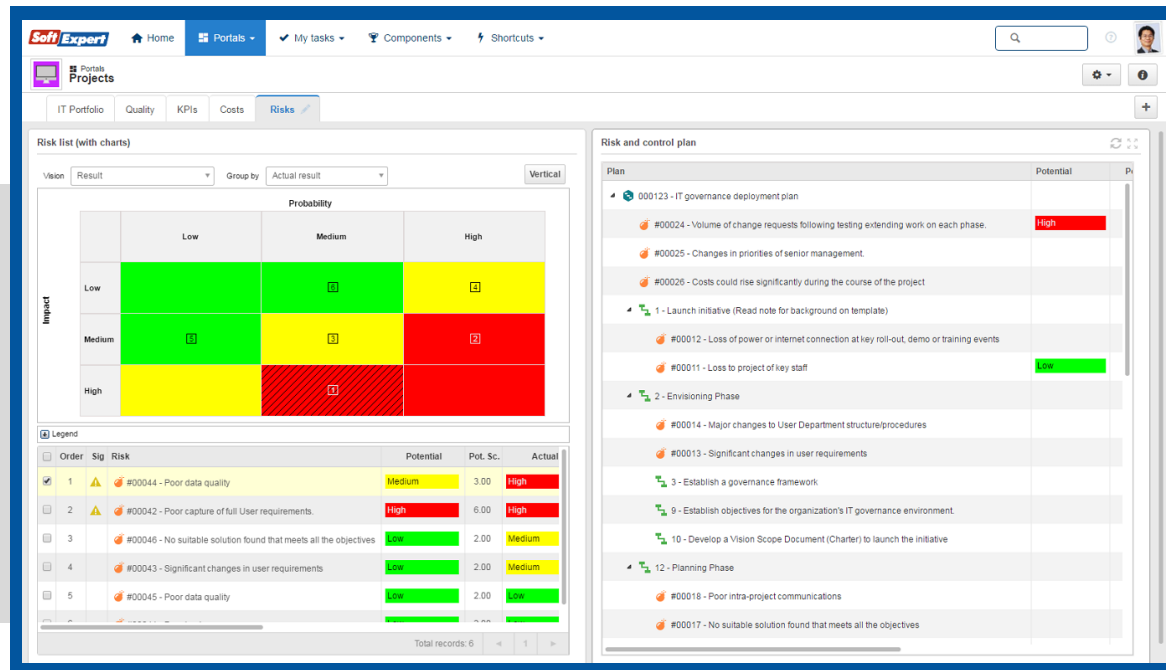
Total records: 115 4 1 2 3



## Project Human Resource Management



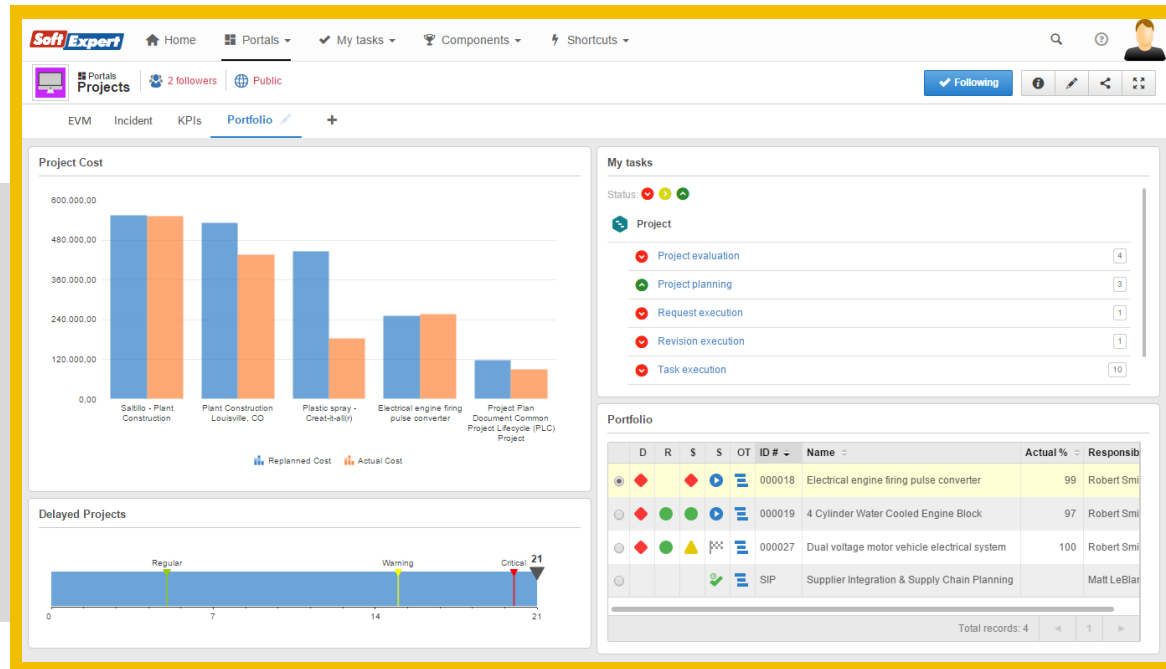
# Project Communications Management



# Project Risk Management



## Project Procurement Management



The screenshot displays the SoftExpert Request Management interface. The top navigation bar includes Home, Portals, My tasks, Components, and Shortcuts. The main content area shows a list of requests with columns for ID, Name, Issue date, Request responsibility, Closure date, Satisfaction, and Object.

ID	Name	Issue date	Request responsibility	Closure date	Satisfaction	Object
CM-00259	Corrective maintenance	2/16/2012	Default activity Team			Multiple
CM-00260	Corrective maintenance	2/16/2012	Default activity Team			Multiple
MR-0026	Oil purchase	2/13/2012	Andrew Brady			Multiple
MR-0025	Oil purchase	2/13/2012				
0012051	Request for training -	1/26/2012	Multiple responsible users			Course: 0001 / E
0012052	SE Training	1/26/2012	Multiple responsible users			Course: 0001 / E
0012050	time	1/20/2012				Multiple
0012049	Flexible adhesive for air mattress	12/14/2011	Robert Smith			
0012047	Smartphone request	12/06/2011	Robert Smith			
0012045	Prepare quotation for Customer A	11/10/2011	Matt LeBlanc			
DC-001	Request of Quotation creation	11/09/2011	Matt LeBlanc			QU003/2011
0012044	Credit Card Validation	11/08/2011	Robert Smith			
0012043	overtime request due to bad weather	10/27/2011				Multiple



## Project Stakeholder Management

## SoftExpert Excellence Suite



SoftExpert Excellence Suite is the most comprehensive framework of independent yet united solutions to achieve business performance excellence, streamline corporate governance, risk and compliance programs, and ensure continuous business process improvement.

Companies may not need all applications at once, or may want to deploy one application module at a time, growing gradually as the need arises. Whatever the strategy chosen, only a fully shared environment allows its applications to fit together like puzzle pieces and work seamlessly.

## About SoftExpert

SoftExpert is a market leader in software and services for enterprise-wide business process improvement and compliance management, providing the most comprehensive application suite to empower organizations to increase business performance at all levels and to maximize industry-mandated compliance and corporate governance programs.

Founded in 1995 and currently with more than 2,000 customers and 300,000 users worldwide, SoftExpert solutions are used by leading corporations in all kinds of industries, including manufacturing, automotive, life sciences, food and beverage, mining and metals, oil and gas, high-tech and IT, energy and utilities, government and public sector, financial services, transportation and logistics, healthcare, and many others.

SoftExpert, along with its extensive network of international partners, provides hosting, implementation, post-sales support and validation services for all solutions to ensure that customers get the maximum value from their investments.



Take your business to the next level

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