



SAP xApp Resource and Portfolio Management (SAP xRPM)

Version 2.0

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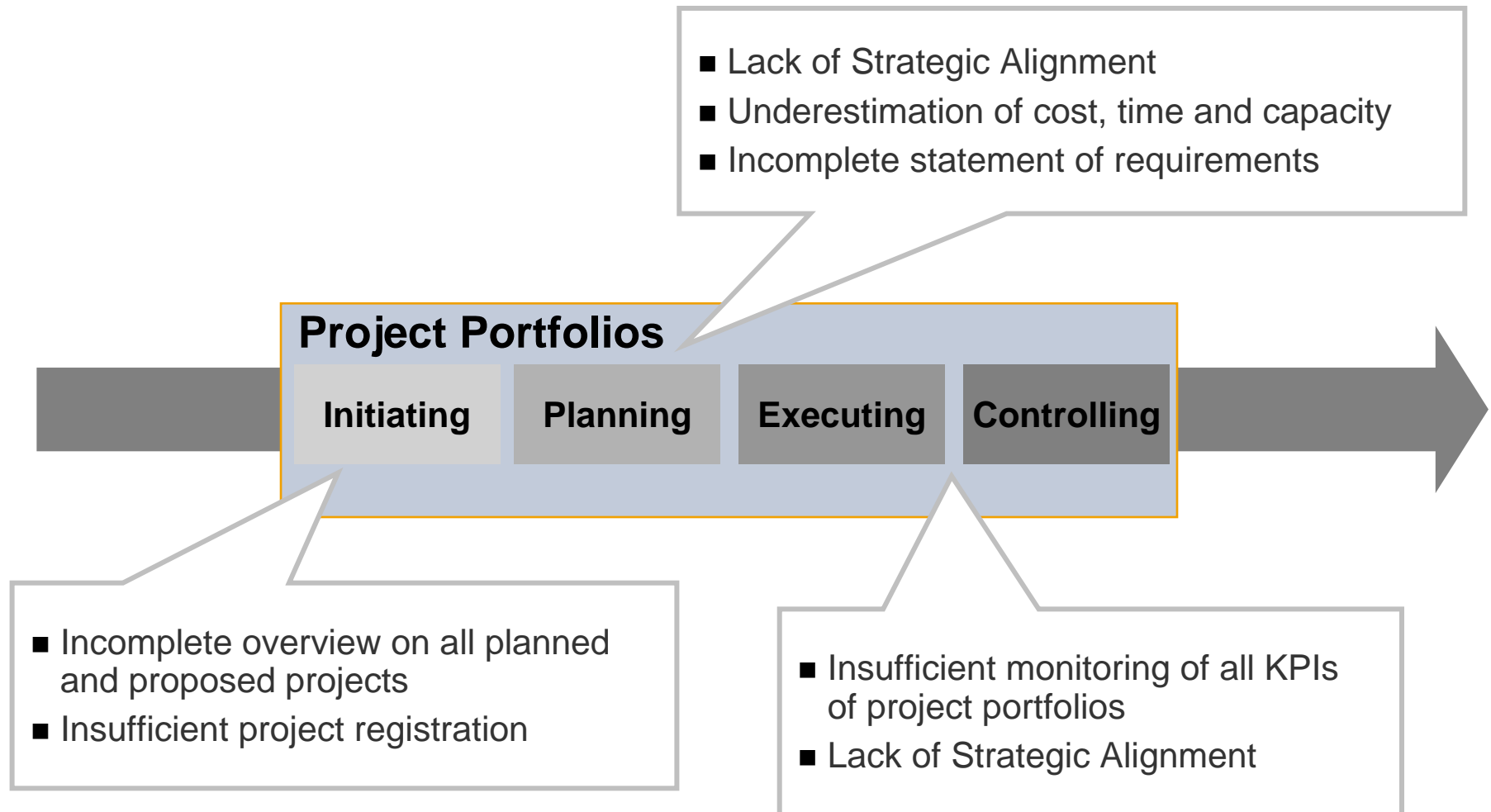
THE BEST-RUN BUSINESSES RUN SAP



Outline

- **Challenges Facing Project Organizations**
- SAP xRPM – Product Overview
- SAP xRPM – Architecture
- SAP xRPM – Customer Successes
- Information and Contacts

Pain Points in Project-based Organizations

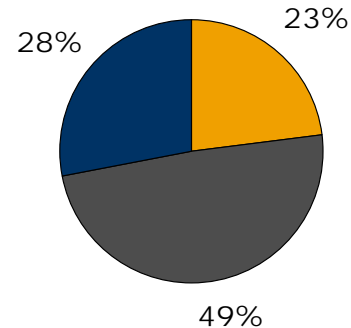


Example: How Billions are Lost Annually in IT

23% Successful projects

49% Challenged projects

28% Impaired/Cancelled projects



Successful Projects (23%):

- Project is completed on-time and on-budget
- With all the features and functions as initially specified

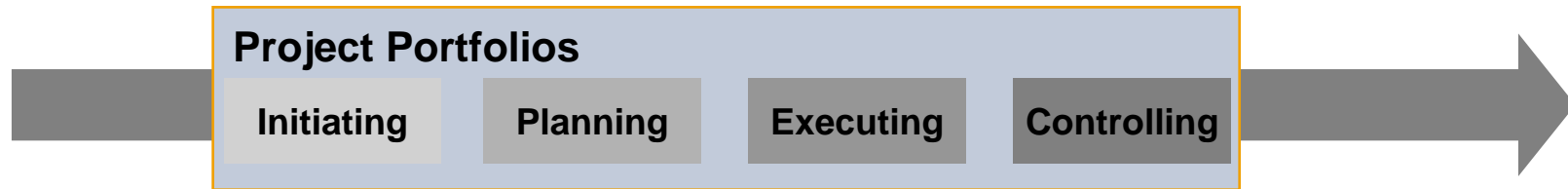
Challenged Projects (49%):

- Project is completed and operational
- Over-budget (~180%, resulting in \$55 billion in losses)
- Over the time estimate
- Offers fewer features and functions than originally specified

Impaired/Cancelled Projects (28%):

- Project is canceled at some point during the development lifecycle
- Resulting in about \$80 billion in losses

Why implement a Project Portfolio Management System?



Manage the Complete Project Portfolio

- Aligned with strategy?
- Will meet business performance targets?
- What is the future demand for resources and what is the capacity?

Increase Visibility

- Aggregate information for Management
- Drill down to individual projects

Enable Communication

- Top to bottom (strategy)
- Bottom up (escalation)

Enforce Governance

- Project registration and enforcing an enterprise decision-making process for approving projects

Outline

- Challenges Facing Project Organizations
- **SAP xRPM – Product Overview**
- SAP xRPM – Architecture
- SAP xRPM – Customer Successes
- Information and Contacts



SAP xRPM delivers the foundation for strategic project portfolio management by combining financial, strategic and operative aspects across your entire project portfolio.

SAP xRPM enables you to:

- **Align your entire project portfolio with corporate objectives through simulation and prioritization**
- **Monitor the performance of your portfolio through increased visibility into projects across the entire enterprise**
- **Forecast resource demand**
- **Identify and deploy the right resources**
- **Make fact-based decisions**
- **Maximize return on existing assets**

Project Portfolio Management: Key Capabilities

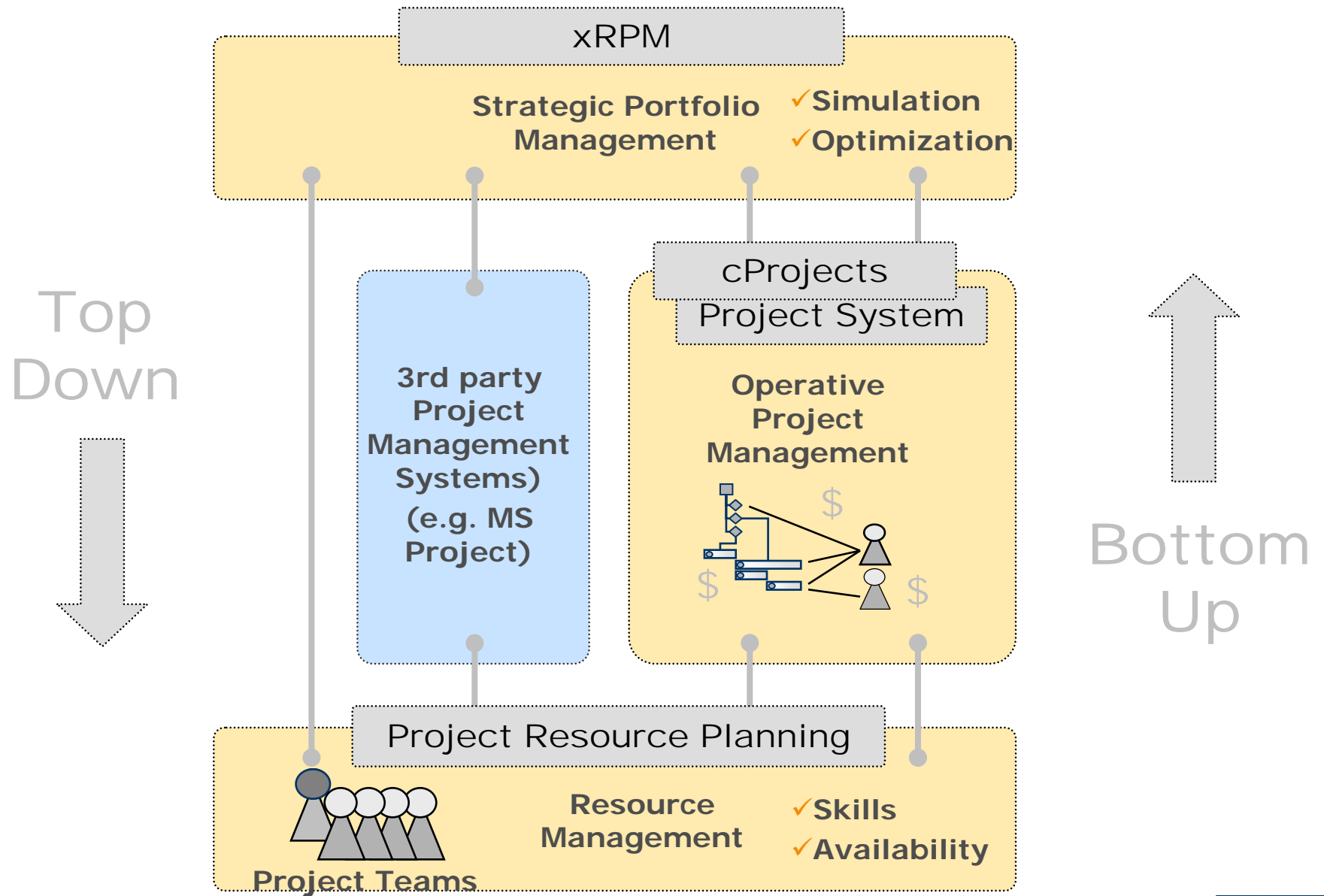
SAP offers a complete suite of components that allows to manage all aspects of project- and portfolio management

Key Capabilities

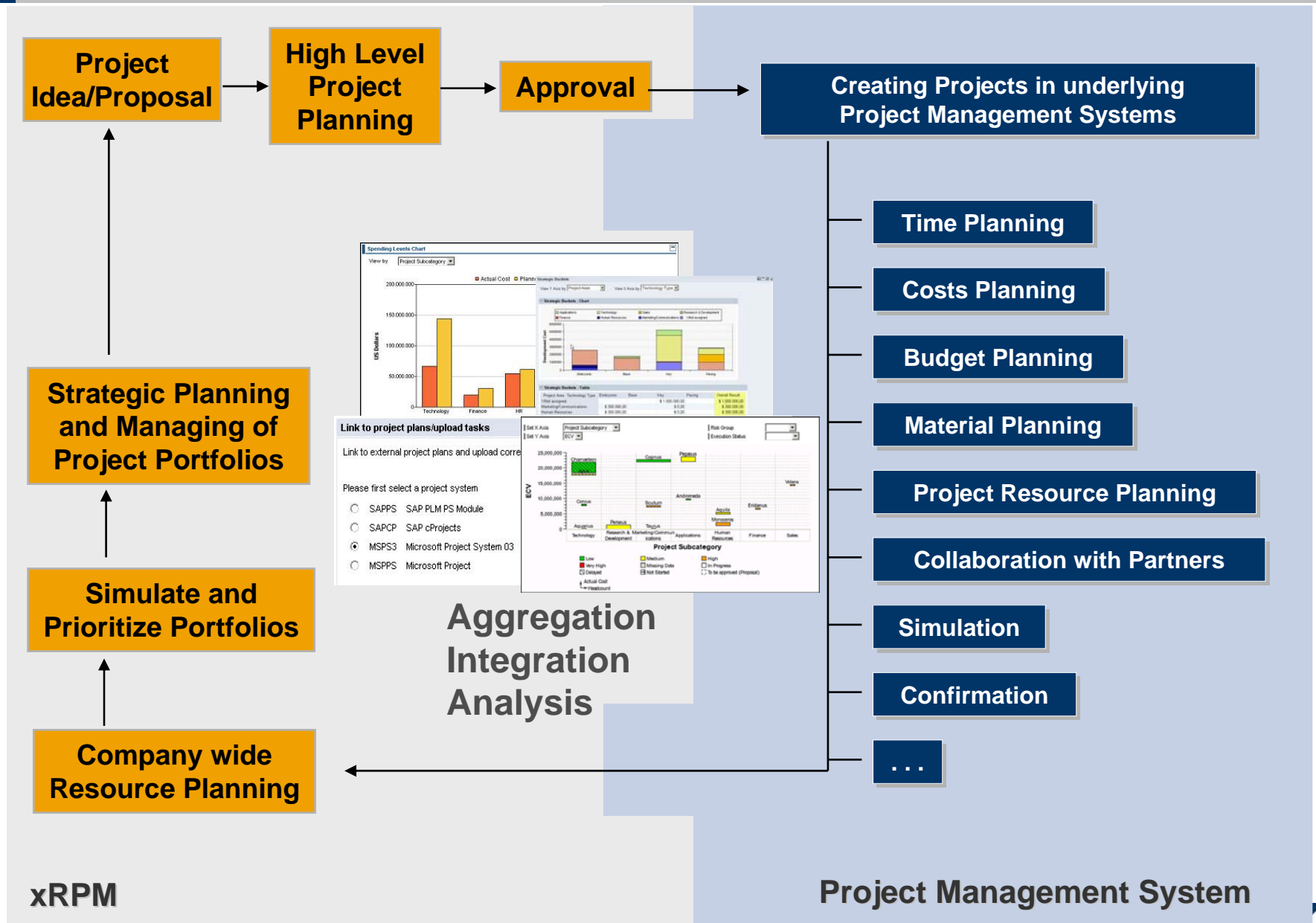
- Portfolio Management
- Project Planning and Scoping
- Resource and Time Management
- Project Collaboration
- Project Accounting
- Project Procurement



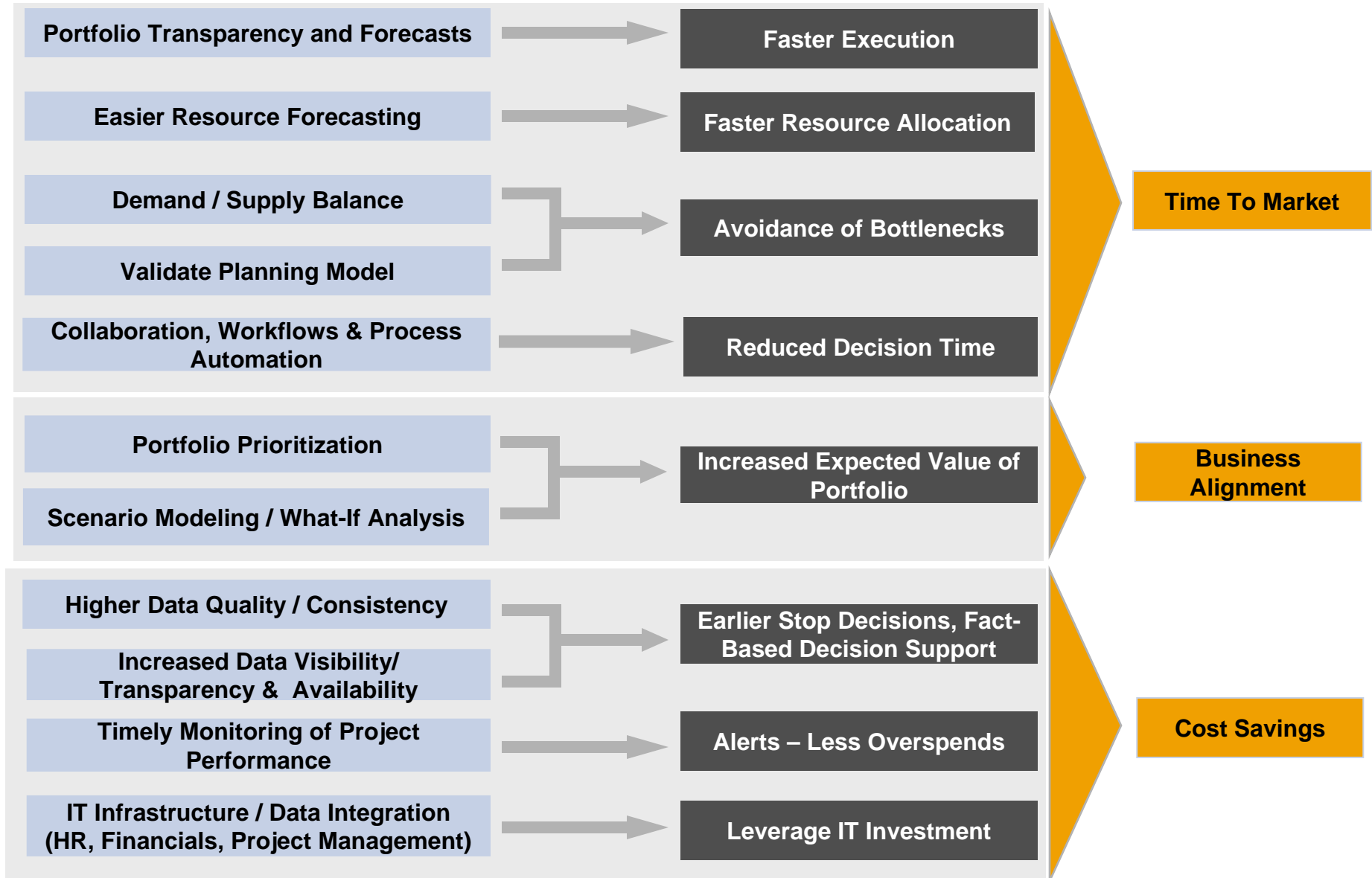
Project Portfolio Management with SAP



Project Portfolio Management with SAP xRPM



SAP xRPM - Benefits



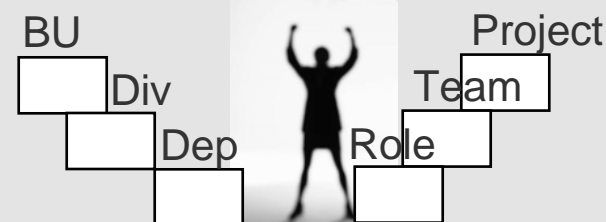
SAP xRPM -- Key Capabilities

Projects

Portfolio Management



Resource Management

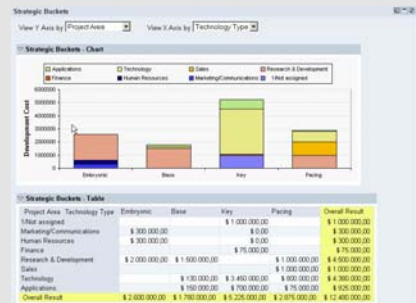


Financials

SAP xRPM

Skills

Program Monitoring



Expertise Management

Category: IT
 Subcategory: All
 Start Date: Earliest 07/15/04
 End Date: Earliest 12/31/05

Search Results

No	Project Role	Project Name
<input type="checkbox"/> 1	Consult xRPM	Cygnus
<input type="checkbox"/> 2	RPM MST	Andromeda

- Skill-based
- Project Opportunities

Collaboration

Key Capability: Portfolio Management

Portfolio Management

Portfolio
Inventory

Scenario
Modeling

Portfolio
Monitoring

Portfolio
Review

Align your entire project portfolio with corporate objectives through simulation and prioritization.

Monitor the performance of your portfolio through increased visibility into projects across entire enterprise.

Portfolio Management



Projects and Proposals Dashboards

View information about projects and proposals:

- Budget
- Schedule
- Cost
- Expected benefits
- Risk
- Priority
- Dependencies
- Resource demand
- Available and qualified resources

... Project Dashboard > Project Details > Project Dashboard > Proposals > Project Dashboard

Project Dashboard

Category: IT

Projects Master Projects Inactive Projects

Subcategory	Project	Project Type	Technology Type	Budget	Project Net Present Value	ECV	Dependencies	Project Phase
▼ Marketing/Communications		3	Infrastructure	3,768,150.00	150,000,000.00	29,700,000.00		
	Cycnus	Concept	Base	267,500.00	35,000,000.00	22,220,000.00	2	Design
	Scutum	Funded Project	Key	3,500,650.00	115,000,000.00	7,480,000.00	0	Not Started
	Taurus	Concept	Base	0	0	0	0	Specification
▼ Human Resources		2	Infrastructure	779,300.00	18,048,000.00	6,705,636.00		
	Aquila	Cooperation	Embryonic	70,000.00	9,000,000.00	5,150,000.00	0	Planning
	Monoceros	Outlicensing	Embryonic	709,300.00	9,048,000.00	1,555,636.00	1	Implementation
▼ Finance		1	Infrastructure	0	45,000,000.00	6,667,500.00		
	Eridanus	Development	Key	0	45,000,000.00	6,667,500.00	0	Development Request
▼ Research & Development		1	Infrastructure	1,465,000.00	800,000.00	216,000.00		
	Perseus	Research	Embryonic	1,465,000.00	800,000.00	216,000.00	0	Specification
▶ Technology		3	Infrastructure	26,600,500.00	48,500,000.00	25,740,000.00		

Portfolio Management

Portfolio
Inventory

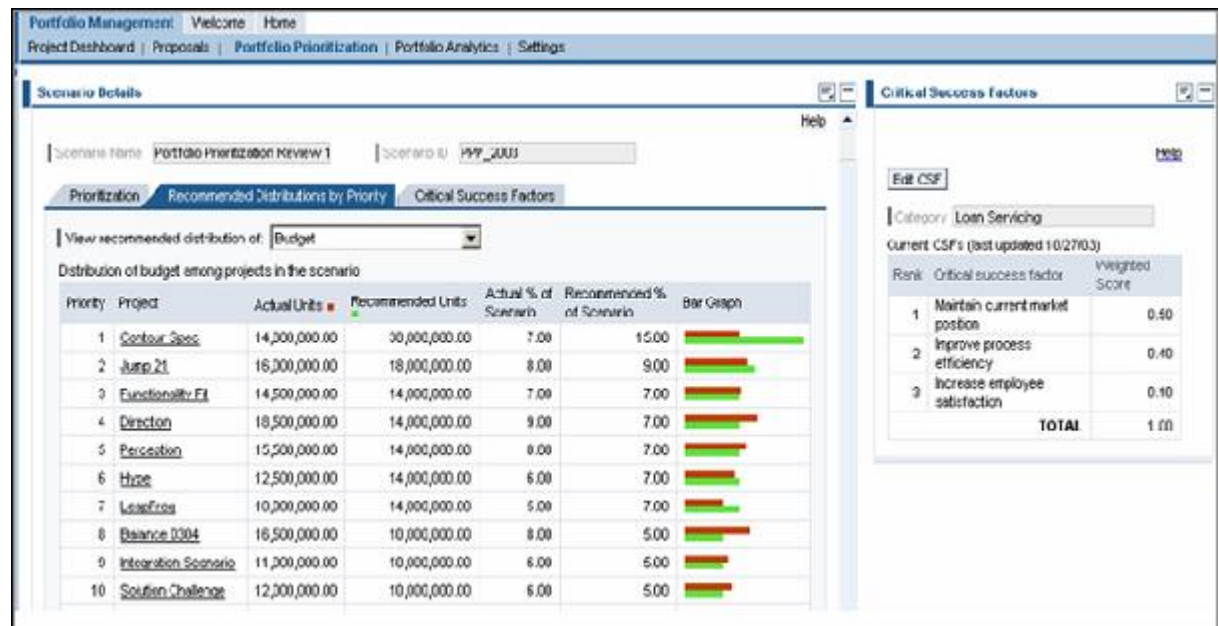
Scenario
Modeling

Portfolio
Monitoring

Portfolio
Review

Portfolio Prioritization

- Define critical success factors (objectives) for your business.
- Determine the potential impact of each proposed and active project on achieving the objectives.
- Receive a ranked list of proposed and active projects and proposed distribution of scarce financial and human resources.



Portfolio Management

Portfolio
Inventory

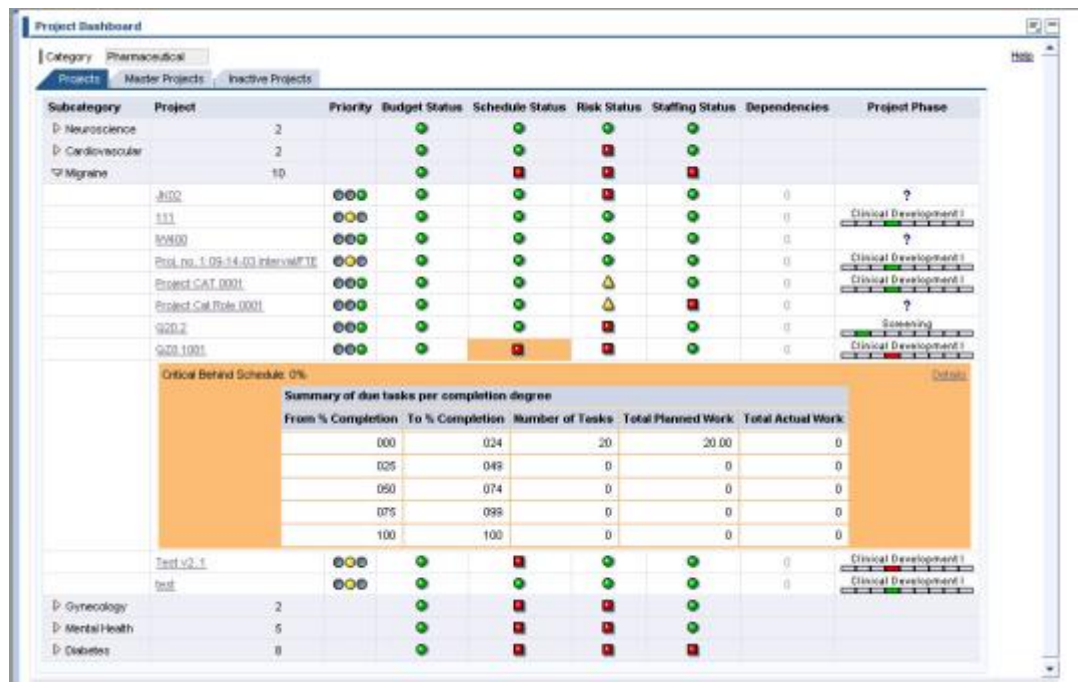
Scenario
Modeling

Portfolio
Monitoring

Portfolio
Review

Project Dashboard

- Centrally view all relevant project data including key performance metrics on budgets, schedules and staffing.
- Personalization allows to easily add customer specific KPIs.



Portfolio Management

Portfolio
Inventory

Scenario
Modeling

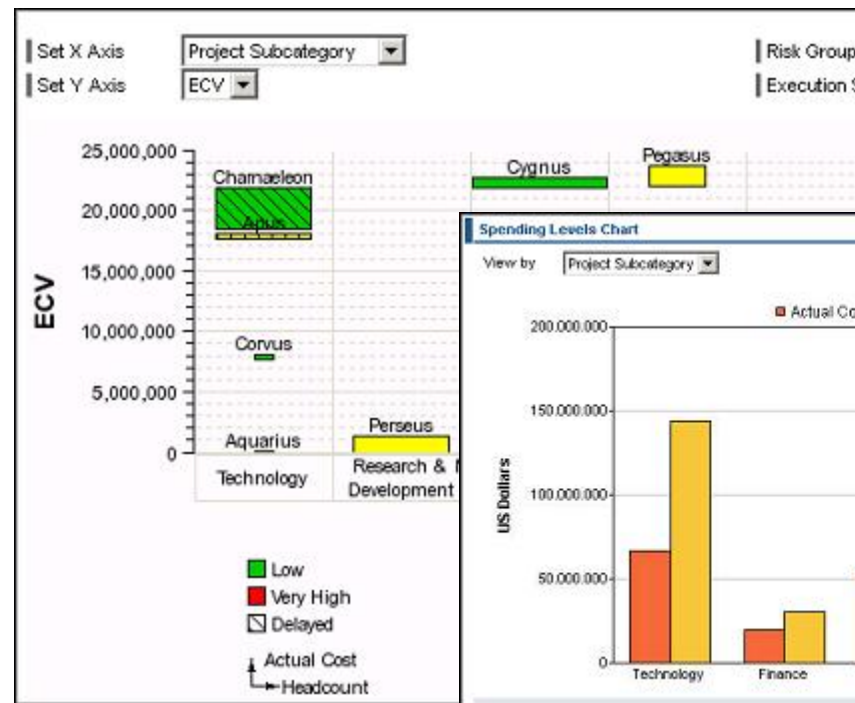
Portfolio
Monitoring

Portfolio
Review

Portfolio Reports

Evaluate the entire portfolio or individual projects using various key performance indicators, such as:

- Expected Commercial Value
- Risk
- Project Costs
- Spending Levels



- ▼ ☐ Maximize Value
 - Expected Commercial Value - Table
 - Expected Commercial Value - Chart
 - Expected Commercial Value - Master Projects - Chart
 - Expected Commercial Value - Master Projects - Table
 - Portfolio Performance Overview
- ▼ ☐ Balance Portfolio
 - Risk-Reward Diagram
- ▼ ☐ Strategic Alignment
 - Strategic Buckets
 - Spending Levels
 - Financial Performance
- ▼ ☐ Capacity Management
 - Availability/Allocation of Business Partners
 - Hard-booked/Soft-booked Allocation vs. Demand
 - Project Headcount and Work Status
- ▼ ☐ Project Execution
 - Project Overview
 - Budget vs. Schedule
 - Project Schedule and Work Status
- ▼ ☐ Cost Analysis
 - Details of Actual Cost by Project
 - Actual vs. Planned Cost by Project
- ▼ ☐ Time Analysis
 - Actual vs. Planned Time by Project

Portfolio Management

Portfolio
Inventory

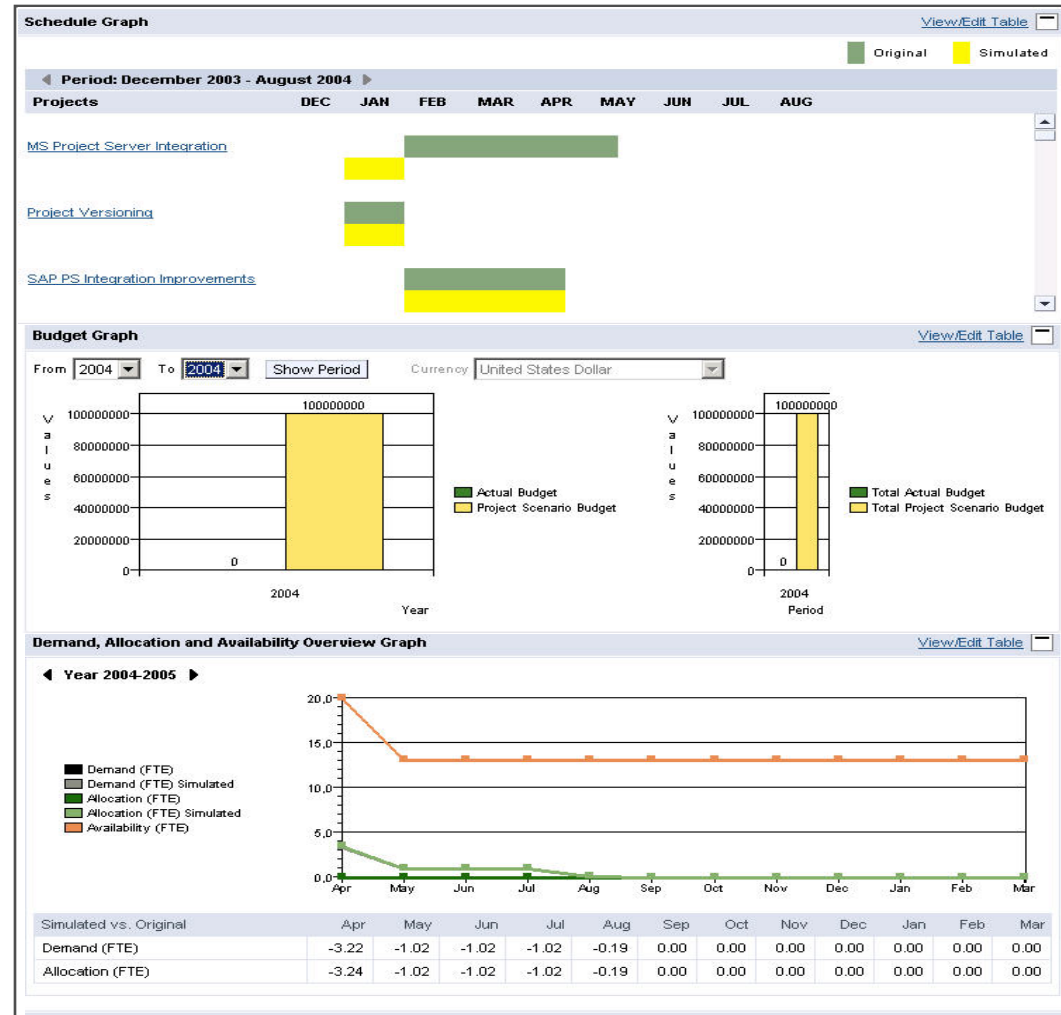
Scenario
Modeling

Portfolio
Monitoring

Portfolio
Review

What-If Analysis

- Define unique business case scenarios.
- Perform simulation by varying resource demand and allocation, budget allocations and time frames.
- Make educated decisions regarding which projects to fund more or less, which ones to cancel, continue or to postpone.



Key Capability: Resource Management

Resource Management

**Demand
Definition**

**Project
Staffing**

**Capacity
Management**

Forecast resource demand

**Identify and deploy the right resources at
the right time.**

Resource Management

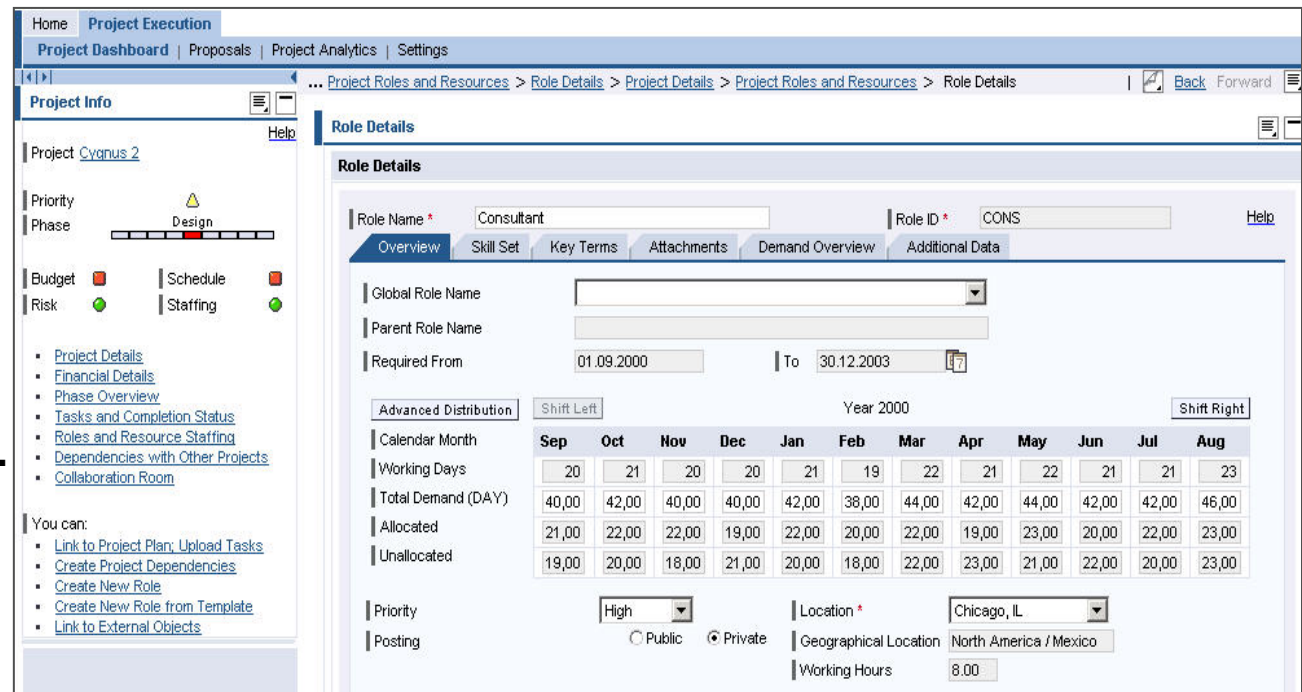
Demand
Definition

Project
Staffing

Capacity
Management

Demand Definition

- Define high level resource demand on project level before approval of resource assignments.
- Planned resource demand is considered in What-If Simulations.



The screenshot displays the SAP Project Roles and Resources Role Details screen. The left sidebar shows the project 'Cygnus 2' with a 'Design' phase and a 'Demand Overview' link. The main area shows the 'Role Details' for a 'Consultant' role (Role ID: CONS). The 'Demand Overview' tab is active, showing a calendar for the year 2000. The calendar displays working days and total demand (DAY) for each month, with a breakdown of allocated and unallocated resources. The role is set to 'High' priority, 'Private' posting, and 'Chicago, IL' location.

Calendar Month	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Working Days	20	21	20	20	21	19	22	21	22	21	21	23
Total Demand (DAY)	40,00	42,00	40,00	40,00	42,00	38,00	44,00	42,00	44,00	42,00	42,00	46,00
Allocated	21,00	22,00	22,00	19,00	22,00	20,00	22,00	19,00	23,00	20,00	22,00	23,00
Unallocated	19,00	20,00	18,00	21,00	20,00	18,00	22,00	23,00	21,00	22,00	20,00	23,00

Resource Management

Demand
Definition

Project
Staffing

Capacity
Management

Project Staffing

- Automated workflows for staffing projects.
- Project Managers define project roles based on time demand and qualifications profile.
- Resource Managers assign resources to roles according to their availability and qualifications.

The screenshot displays the SAP xApp Resource and Portfolio Management 2.0 interface. The top navigation bar includes tabs for Portfolio Management, Project Execution, Project Overview, Resource Management, xRPM Admin, Welcome, Collaboration Administration, Home, and Collaborat. The main content area is divided into two panes: Project Info and Project Roles and Resources.

Project Info: Shows details for Project xRPM 2.0 SP1 Maintenance, including Priority, Phase (Requirement Analysis), Budget, Schedule, Risk, and Starting status. It also lists links for Project Details, Tasks and Completion Status, Roles and Resource Staffing, and Dependencies to Other Projects.

Project Roles and Resources: This pane is further divided into Roles and Resources. The Roles section shows a table with columns: Roles, Resources/Teams, Staffing/looking Status, and Start-End Dates. The Resources section shows a list of resources assigned to the project, including names like xRPM JAVA Minsk, xRPM JAVA Palo Alto, David GBUx Hu, Peter GBUx Vignot, Veronica GBUx Yill, Joe GBUx Holquin, Krishnaveni GBUx Nadella, xRPM Walldorf, and Juergen GBUx Kremer.

Candidate Search Results: A pop-up window titled "19 candidates found who match the role" displays a table with columns: Candidate Name, Match, Skill Set, Availability, Location, Terms, and Terms Details. The table lists 19 candidates with their respective qualifications and availability.

Candidate Name	Match	Skill Set	Availability	Location	Terms	Terms Details
<input type="checkbox"/> Mills, John	25%	75%	0%	0%	0%	consultant, good ABAP knowledge
<input type="checkbox"/> Locke, Larry	25%	50%	0%	0%	0%	user interface design, javascript, illustrator
<input type="checkbox"/> Anderson, Greg	25%	50%	0%	0%	0%	
<input type="checkbox"/> King, William	25%	50%	0%	0%	0%	
<input type="checkbox"/> Smith, Jane	25%	50%	0%	0%	0%	
<input type="checkbox"/> Brown, Terri	25%	50%	0%	0%	0%	Java specialist
<input type="checkbox"/> Laursen, Peter	25%	50%	0%	0%	0%	software architect, software engineer
<input type="checkbox"/> Stephens, Matthew	25%	50%	0%	0%	0%	user interface design, javascript
<input type="checkbox"/> Young, Warren	25%	25%	0%	0%	0%	database, internet
<input type="checkbox"/> Pfeiffer, Richard	25%	25%	0%	0%	0%	communication, html
<input type="checkbox"/> Johnson, David	25%	25%	0%	0%	0%	product development
<input type="checkbox"/> McBride, Steven	25%	25%	0%	0%	0%	user interface designer, XML, javascript, cascaded style sheets (CSS)
<input type="checkbox"/> Whyte, Julia	25%	25%	0%	0%	0%	XML, Project Management
<input type="checkbox"/> Best, Donald	25%	25%	0%	0%	0%	quality management
<input type="checkbox"/> Whyte, Jeff	25%	25%	0%	0%	0%	
<input type="checkbox"/> Morales, Frank	25%	25%	0%	0%	0%	consulting, sql programming
<input type="checkbox"/> Lau, Luke	25%	25%	0%	0%	0%	
<input type="checkbox"/> Williams, Lloyd	25%	25%	0%	0%	0%	
<input type="checkbox"/> Johnson, Karen	25%	25%	0%	0%	0%	DATABASE, SAP, XML

At the bottom of the candidate search window, there are buttons for Allocate Candidates, Find Candidates, Clear, and Close.

Resource Management

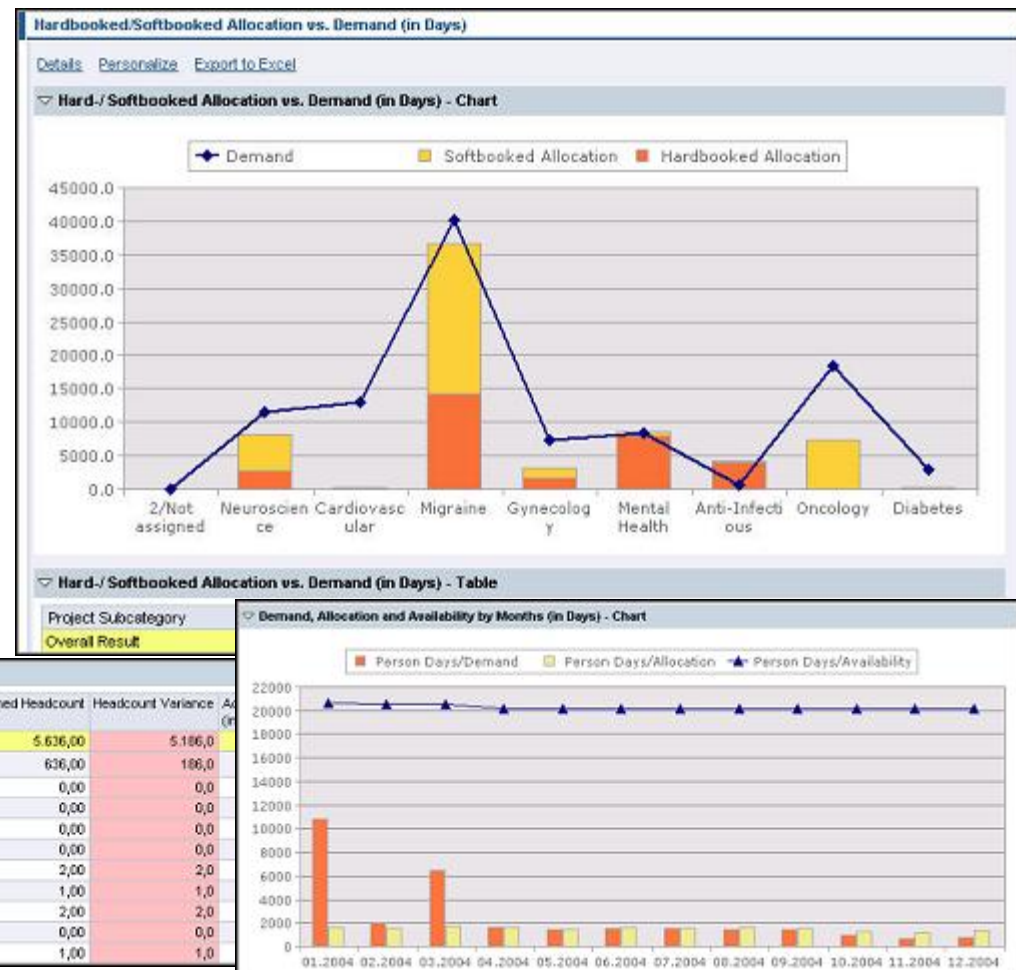
Demand
Definition

Project
Staffing

Capacity
Management

Capacity Management

- Create role-based resource forecasting.
- Report and consolidate demand for resources across multiple projects via global roles.
- Provide complete picture of:
 - Resource demand and allocation
 - Booked and available resources
 - Total workload
 - Capacity



Key Capability: Expertise Management

Expertise Management

**Skills
Management**

**Project
Opportunities**

Discover organizational expertise

Expertise Management

**Skills
Management**

**Project
Opportunities**

Skills Management

- Managers locate skills and knowledge across the organization.
- Employees maintain up-to-date information on skills and expertise*.

The screenshot displays the SAP xRPM Project Execution Role Details page. The left sidebar contains project information for 'Project Cygnus', including priority, phase, budget, risk, schedule, and staffing status. The main content area shows the 'Role Details' for a 'Consultant' role with ID 'CONS'. A 'Skill Set' tab is active, displaying a table of skills and proficiency levels.

Skill	Proficiency
Knowledge of PC CPU Technology	Above average
M.Sc.	Yes
HTML	Adequate
XML	Rudimentary
Web Server Management	High
Client Server Architecture	Average

At the bottom of the table, there is an 'Edit Skills' button and a 'Page 1 / 1' indicator.

* Available through usage of standard SAP Employee Self-Service (ESS) within SAP Enterprise Portal

Expertise Management

Skills
Management

Project
Opportunities

Project Opportunities

- Team members can apply for new projects.
- They can search for projects by category, subcategory, location, and through profile matching.
- They can view a list of roles and apply for open project opportunities.

The screenshot shows the 'Project Opportunities' search interface in SAP. At the top, there are tabs for 'Project Overview', 'xRPM Admin', and 'Collaboration'. Below these are links for 'My Projects', 'Project Opportunities', and 'Timesheet'. The main section is titled 'Project Opportunities' and contains several search filters: 'Category' (set to 'All'), 'Subcategory' (set to 'All'), 'Location' (set to 'All'), 'Start Date' (Earliest: 10/15/03, Latest: 12/31/04), 'End Date' (Earliest: 10/15/03, Latest: 12/31/04), and 'Terms'. There is also a 'Skills' section with a table for 'Skill' and 'Proficiency'. Below the filters are 'Clear' and 'Search' buttons. The 'Search Results' section shows a table with columns: 'No', 'Project Role', 'Project Name', 'Start', 'End', 'Location', and 'Subcategory'. The table contains two rows: 1. Consult xRPM, Cygnus, 10/15/2003, 10/15/2003; 2. RPM MST, Andromeda, 09/27/2003, 09/27/2003. At the bottom are 'Select All', 'Clear Selection', and 'Submit Application' buttons.

No	Project Role	Project Name	Start	End	Location	Subcategory
1	Consult xRPM	Cygnus	10/15/2003	10/15/2003		
2	RPM MST	Andromeda	09/27/2003	09/27/2003		

Key Capability: Program Monitoring



Attain visibility into all projects of your portfolio

Make informed decisions

Program Monitoring

Project
Definition

Project
Planning

Project
Management

Project Definition

- Create proposal
- Review project
- Approve project

Project Proposal

Project Name * DNA Development | Project ID * DNADev

Overview | **KPI** | Stakeholders | Attachments | Comments

Probability of Technical Success 75 %

Probability of Commercial Success 85 %

Currency USD

Expected Commercial Value 1,922,500.00 USD

Planned

Budget 5,000,000 USD

Start 12/01/2003

End 06/30/2004

Full Time Equivalent 25

Save

Program Monitoring

Project
Definition

Project
Planning

Project
Management

Project Planning

■ Upload project plans from heterogeneous project management systems.

■ Consolidate planned cost and budget information from financial systems.

The screenshot displays the SAP Project Adapter web interface. The breadcrumb navigation at the top reads: "... Project Dashboard > Settings > Project Dashboard > Project Details > Project Adapter". The left sidebar, titled "Project Info", contains fields for "Project" (MS Project Server Integration), "Priority", "Phase" (Development), "Budget", "Risk", "Schedule", and "Staffing". Below these are links for "Project Details", "Financial Details", "Phase Overview", "Tasks and Completion Status", "Roles and Resource Staffing", "Dependencies to Other Projects", and "Collaboration Room". A "You can:" section lists actions like "Link to project plan/upload tasks", "Open linked project", "Create project dependencies", "Create new role", "Create new role from template", and "Link to external objects". The main content area, titled "Project Link", has a sub-header "Link to project plans/upload tasks" and a description: "Link to external project plans and upload corresponding tasks; only one project plan is allowed per project/proposal". It prompts the user to "Please first select a project system" and provides radio button options for "SAPPS SAP PLM PS Application", "SAPCP SAP cProjects", "MSPS3 Microsoft Project Server 2003", and "MSPPS Microsoft Project". A "Next >" button is at the bottom.

Program Monitoring

Project
Definition

Project
Planning

Project
Management

Task Dashboard

- Complete overview of all project tasks.
- Manage task status and % complete.

Project Dependencies

- Create and manage project dependencies (project/milestone/task level).
- Example: Starting a task in one project depends on the outcome of a task in a different one.

The screenshot displays the SAP Project Dashboard interface. The top navigation bar includes 'Welcome', 'Project Execution', and 'Home'. Below this, the 'Project Dashboard' tab is active, showing a 'Project Info' sidebar and a 'Phase Overview' main area. The 'Project Info' sidebar lists project details like 'HR Project', 'Priority', 'Phase', 'Budget', 'Risk', 'Schedule', and 'Staffing'. The 'Phase Overview' area shows a progress bar and completion percentages for various phases: Unassigned (0 out of 1), Research (0 out of 0), Specification (0 out of 5), Development (0 out of 8), and Test (0 out of 2). Below this, the 'Task Dashboard' section is visible, showing a table of tasks with columns for Task Name, Phase, Assigned to, Status, % Completed, Planned Start-End Dates, and Actual Start-End Dates. The table lists tasks such as Task 1, Task 1.1, Task 1.2, Task 1.2.1, and Task 2, all with a status of 'Upcoming' and 0% completion. A 'Find task' search bar and a 'Go' button are also present.

Task Name	Phase	Assigned to	Status	% Completed	Planned Start-End Dates	Actual Start-End Dates
Task 1	Research		Upcoming	000	2/3/2003-2/21/2003	-
Task 1.1	Specification		Upcoming	000	2/3/2003-2/21/2003	-
Task 1.2	Development		Upcoming	000	2/3/2003-2/14/2003	-
Task 1.2.1	Maintenance		Upcoming	000	2/3/2003-2/14/2003	-
Task 2	Specification		Upcoming	000	2/3/2003-3/7/2003	-

Program Monitoring

Project
Definition

Project
Planning

Project
Management

Project Collaboration

- Create a shared workspace for each project.
- Project team members can share documents and project information and have threaded discussions.

Time Reporting

Project members record their time they have been working on projects*.

The screenshot displays the SAP Collaboration web interface. At the top, a navigation bar includes links for Welcome, Content Administration, System Administration, User Administration, Collaboration Administration, and Collaboration. Below this, a 'Room Directory' section shows a table of rooms with columns for Name, Locked, Owner, Created, Last Visit, and Hidden. The table lists three rooms: CV Room, CV2, and Palo Alto. Below the table, a 'Room Tasks' section shows a table of tasks with columns for Name, Due, Tracked By, Assigned To, Priority, and Progress. The table lists one task: test. The interface also includes a 'Room News' section on the right and a 'Room Member List' on the left.

Name	Locked	Owner	Created	Last Visit	Hidden
CV Room		Christoph_Vorgerd	7/23/03	8/4/03	
CV2		Botschek, Martin	7/23/03	8/5/03	
Palo Alto for testing		Christoph_Vorgerd	8/4/03	8/5/03	

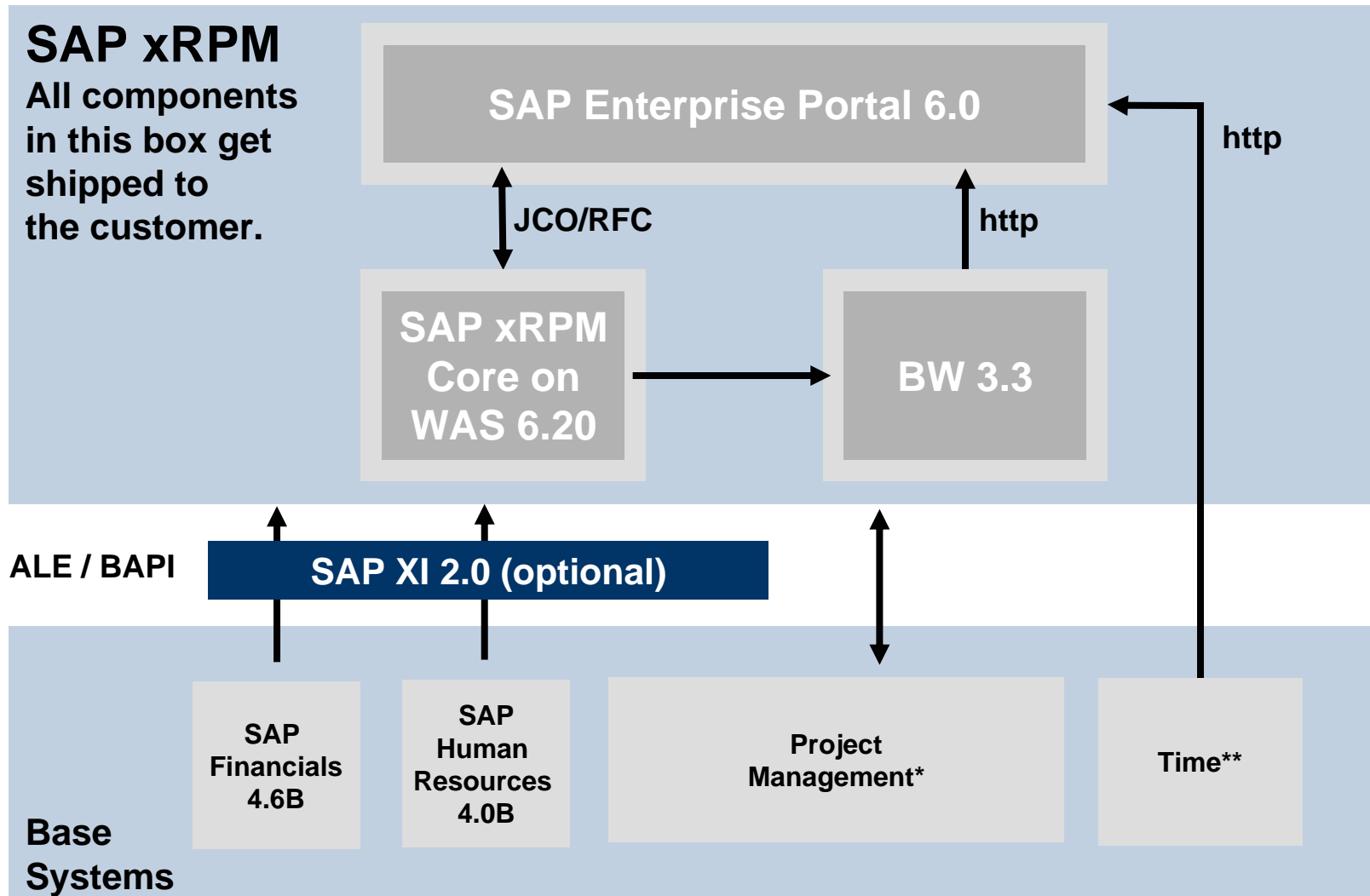
Name	Due	Tracked By	Assigned To	Priority	Progress
test	04.08.2003	Christoph_Vorgerd	Christoph_Vorgerd	Medium	0 %

* Available through usage of standard SAP Employee Self-Service (ESS) within SAP Enterprise Portal

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- Challenges Facing Project Organizations
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- **SAP xRPM – Architecture**
- SAP xRPM – Customer Successes
- Information and Contacts

SAP xRPM -- Architecture



*SAP Project System 4.6B; SAP cProjects 3.1; Microsoft Project '98, '00, '02; Microsoft Project Server 2002/2003

** SAP LO CATS 4.6B

Outline

- Challenges Facing Project Organizations
- SAP xRPM – Product Overview
- SAP xRPM – Architecture
- **SAP xRPM – Customer Successes**
- Information and Contacts



SAP xRPM Customer Successes

To learn more about how your organization and take advantage of SAP xApp Resource and Portfolio Management (SAP xRPM), read these success stories at:

<http://www.sap.com/solutions/xapps/xrpm/>

Outline

- Challenges Facing Project Organizations
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- SAP xRPM – Customer Successes
- **Information and Contacts**

Information and Contacts



Information

Public Web:

<http://www.sap.com/solutions/xapps/xrpm>

SAP Service Marketplace:

<http://service.sap.com/xrpm>



Contacts at SAP Finland

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