

ENTERPRISE PROJECT MANAGEMENT (EPM) WORKSHOP

CHAPTER 2: DESIGNING YOUR EPM ENVIRONMENT

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SECTION 2

ESTABLISHING YOUR EPM

REQUIREMENTS

Problem/Solution

- ❑ All too often, consultants are called and asked to implement a project software “solution”
- ❑ A prospective client lists features, functionality, reports and even the tool to be used
- ❑ This, however, is a description of the solution, not the problem to be solved
- ❑ A remarkably small percentage of clients ever articulate what business problem implementing epm will solve

Problem/Solution

- ❑ If you can't articulate your problem, the "solution" will likely never satisfy you
- ❑ The result of not being able to identify the business problem in epm? An unacceptably high percentage of dissatisfied clients
 - ❑ Cause: Insufficient management of expectations
 - ❑ Implementation of a system with little notion of what is must accomplish
 - ❑ Insufficient management support of culture change

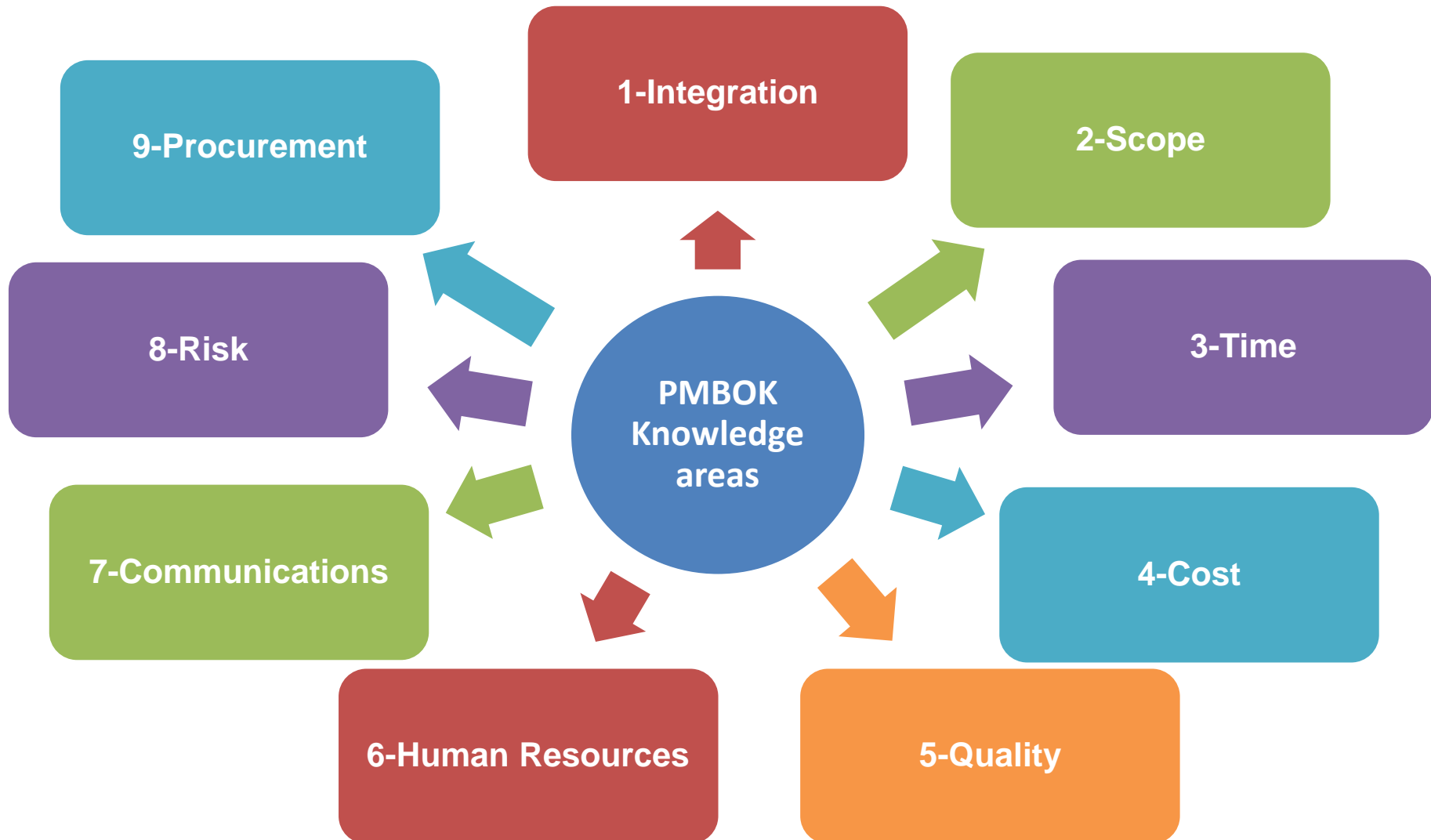
Determining system requirements

- If you are going to start generating system requirements, you have to start off with asking:
- What is the problem?
- What are the business decisions you need to make from this system?
- Who needs to make those business decisions?
- When do those business decisions need to be made?
- What other systems will this system provide data for that will result in further business decisions?

Identify Business Objectives

- Executive and Stakeholder workshops
- Identify management role impact
- Prioritize business objectives and create a Master Deployment Plan
- Establish milestones and metrics

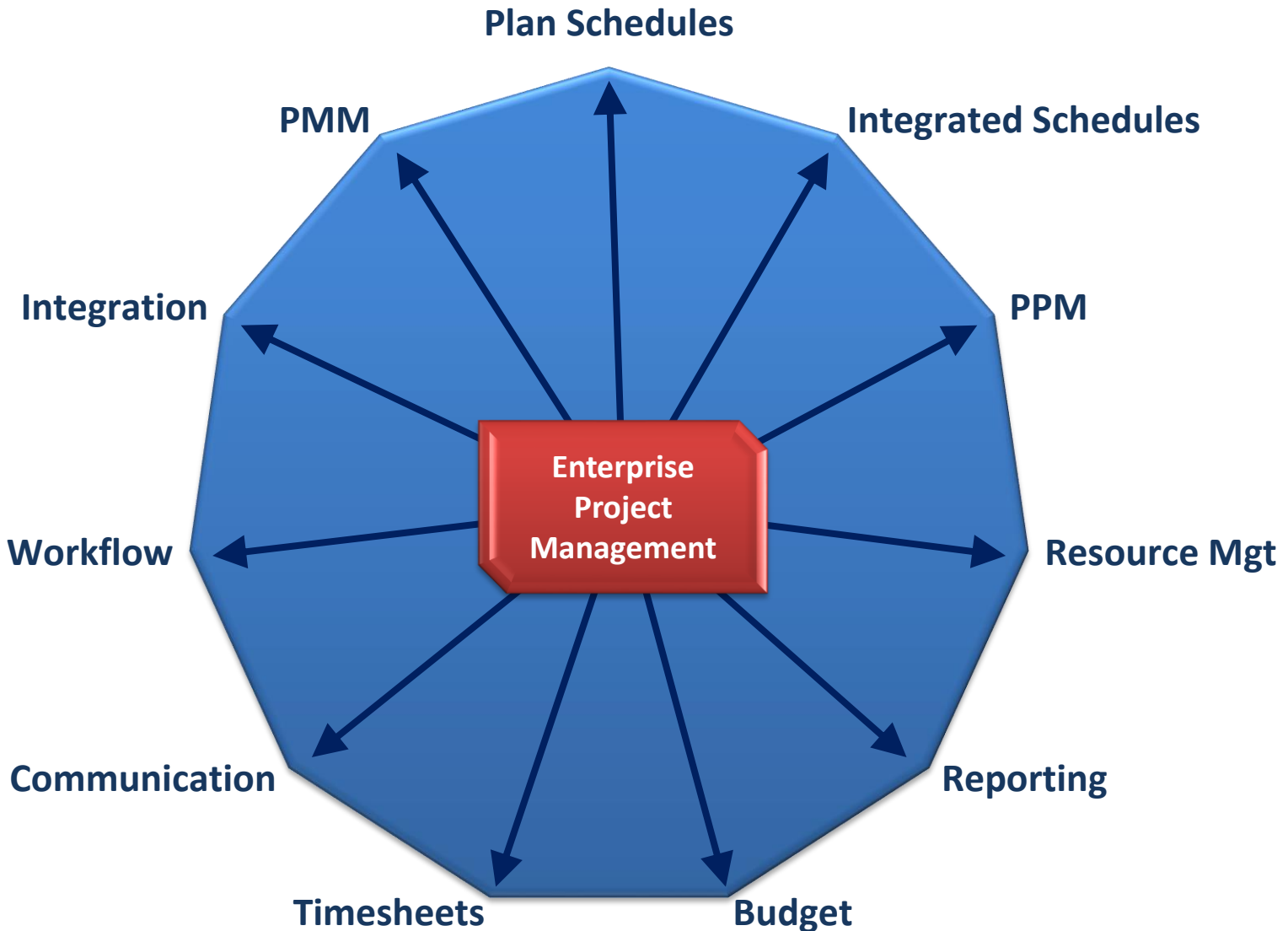
PMBOK knowledge areas



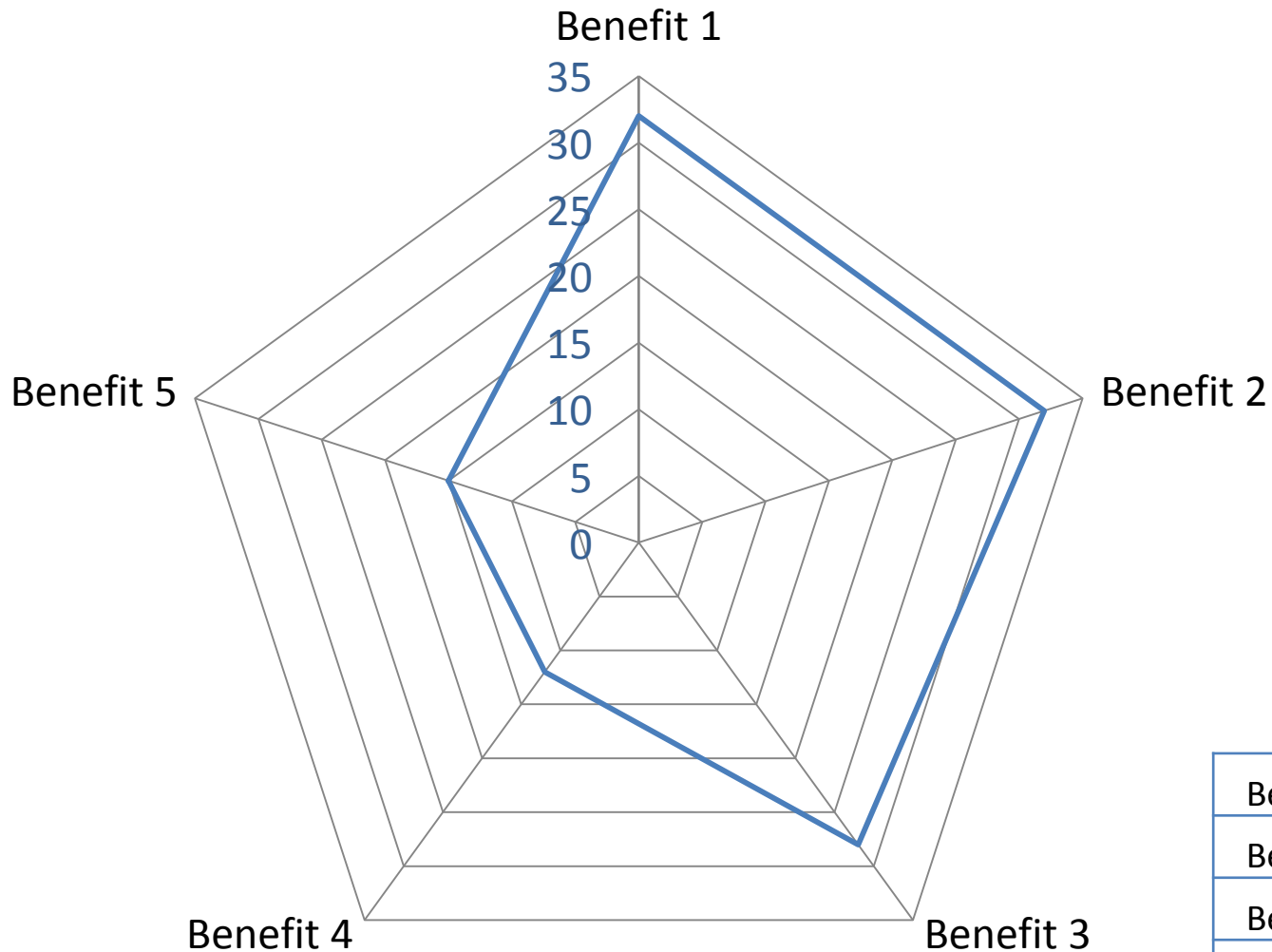
EPM Categories



The EPM Value Envelope

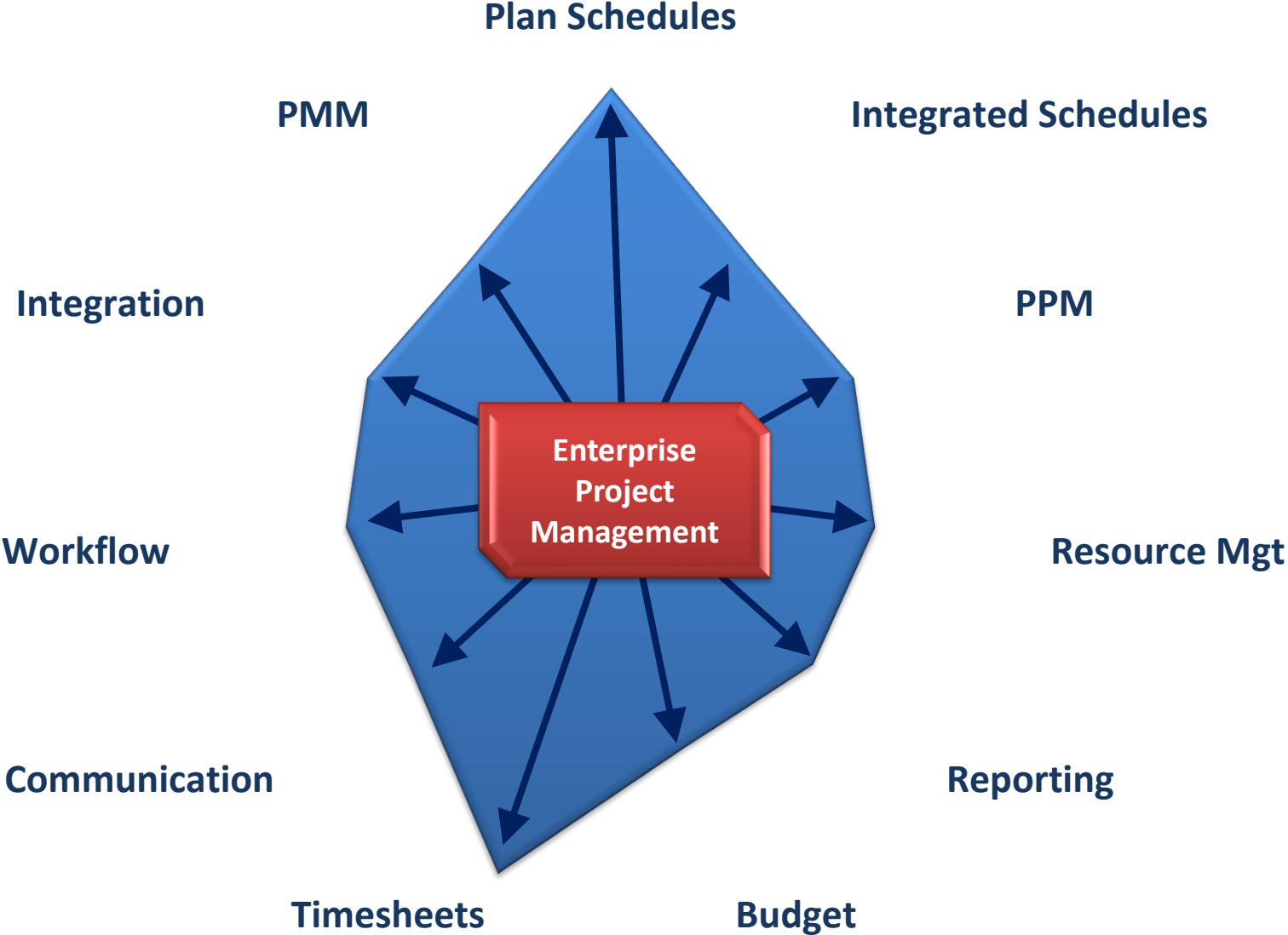


The Radar Report?



Benefit 1	32
Benefit 2	32
Benefit 3	28
Benefit 4	12
Benefit 5	15

EPM Evolving Value envelope



Return on Investment

- ❑ For each element of epm you should consider the ROI:
 - ❑ What benefit will implementing this facet of epm do we expect to receive?
 - ❑ What will be the cost in effort and resources to accomplish this facet?
 - ❑ What will be required to deliver this facet including: data elements, procedural change etc.
 - ❑ What alternatives are there to creating the same output (including manually)

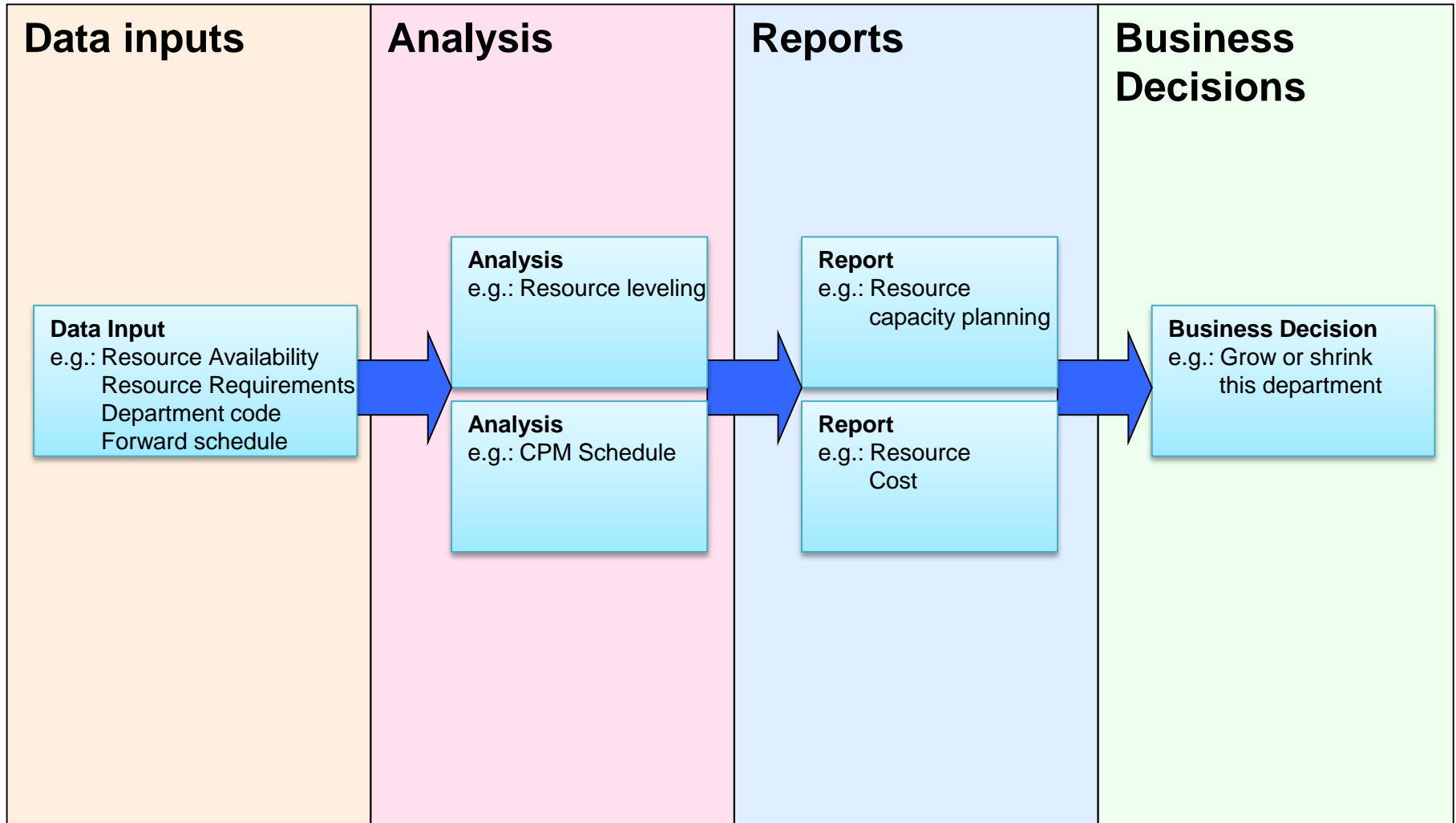
Divide and conquer

- ❑ Nothing is written in stone that says you must deploy every aspect of epm on the first day
- ❑ Divide your epm deployment into management chunks and schedule them into phases
- ❑ Your challenge will be balancing the desires for the most sought after benefits with the high effort and costs to get them (e.g. Resource Capacity Planning)

System requirements

- ❑ Once you know what you want to focus on, you can now apply Systems Analysis 101
- ❑ Using this method often identifies the efforts required to deliver a particular output
- ❑ Also, (and this happens often) numerous output items (reports, exports etc.) are often identified as having no purpose in this phase
- ❑ You may need to go back and revisit your phased priorities after some of the efforts/costs of delivering a particular phase are more clearly identified

Determining system requirements



How to scope for EPM

Ask your stakeholders:

“What business decisions can you not make now, the making of which could be improved by the implementation of this system?”

Have all data elements

- ❑ When talking about resource capacity planning for example, we have to know if we have all the data elements required:
- ❑ 100% of resource availability
- ❑ 100% of resource requirements
- ❑ Skills, departments for all resources
- ❑ A complete schedule for all work

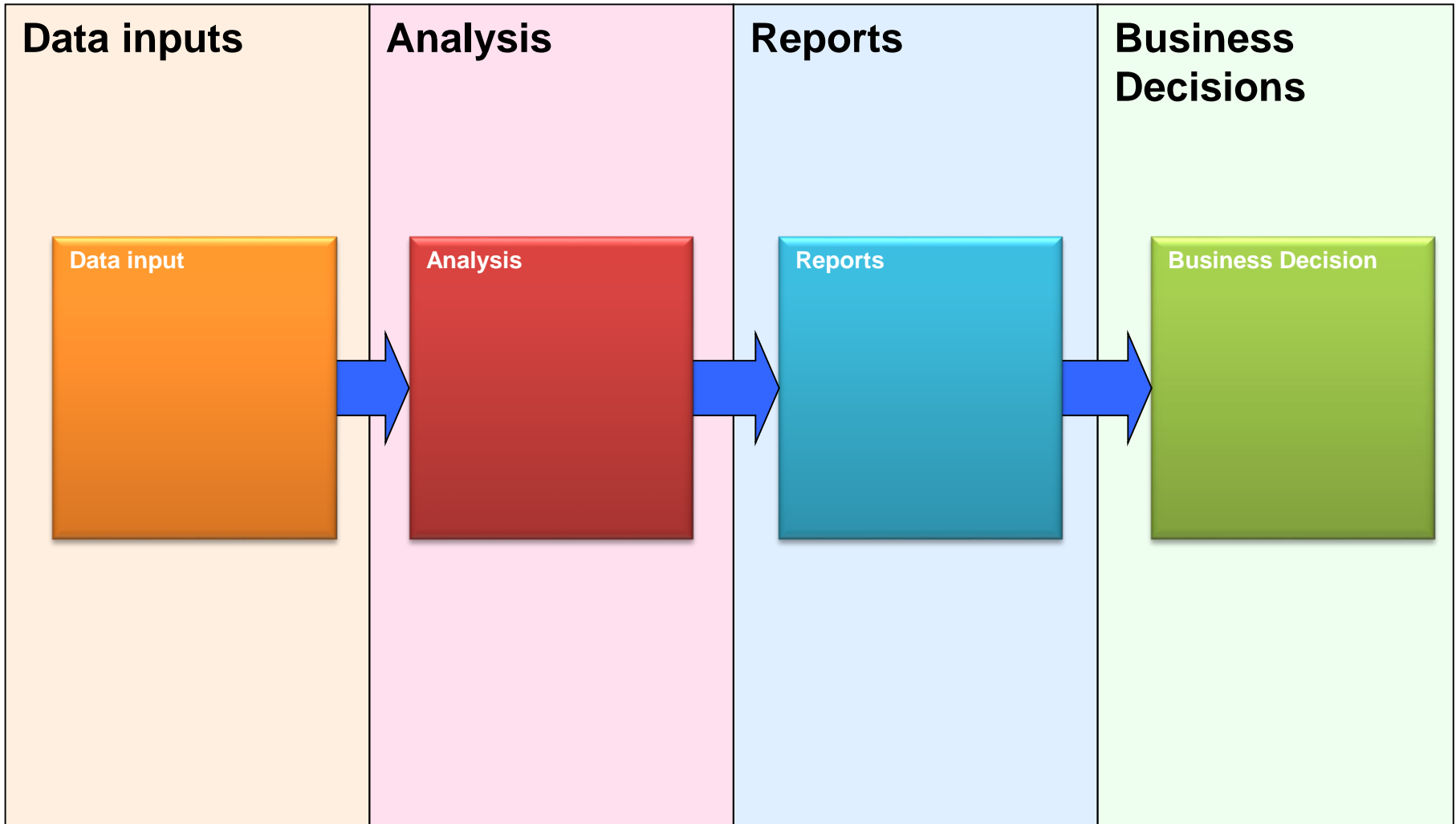
Resolve to a business decision

- EPM needs ultimately need to resolve to a business need
- If you get that dashboard indicator, what will you do with it?
- If we're making a report, who will read it? What will they do with it?
- If you get that analysis what business decisions will you be able to make?

Evaluating efforts/costs

- ❑ Some questions that are always good to ask during requirements:
 - ❑ What do we need this output for?
 - ❑ Do we do this already? How? What effort does it cost?
 - ❑ Is this information readily available?
 - ❑ Who is the client of this output?
 - ❑ What alternate methods are available of either:
 - a) generating the output or;
 - b) finding the input?

System requirement exercise





SECTION 3

CHOOSING ENTERPRISE PROJECT MANAGEMENT TOOLS

How do we choose EPM tools?

- What are the trends in EPM tools?
- Problem/Solution
- How do we determine our requirements

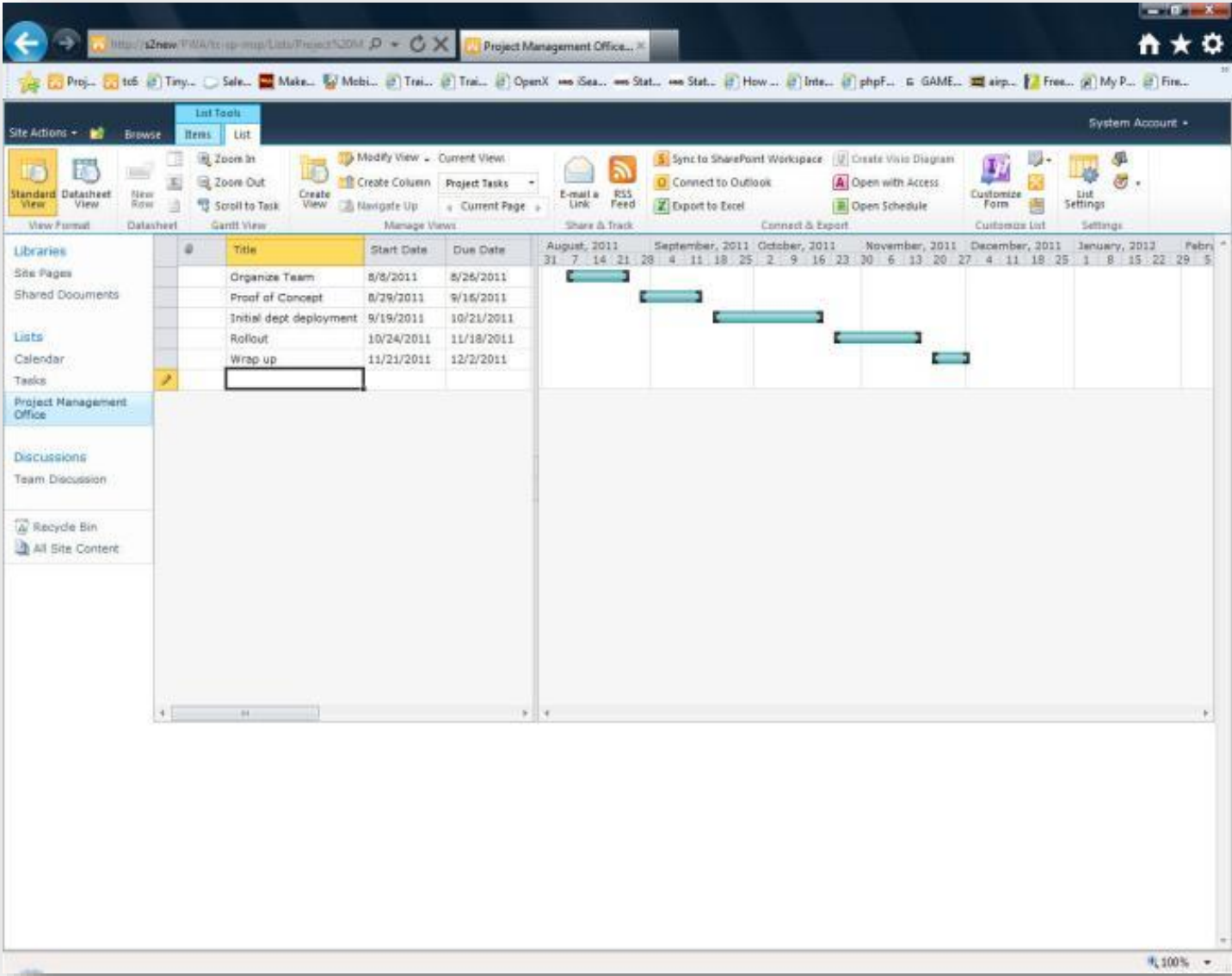
Today's Trends in PM Systems

- ❑ Collaboration
- ❑ Less algorithmic perspective
- ❑ More resource-based
- ❑ More individual resource allocation
- ❑ Dashboarding
- ❑ Integrating Finance and Project Management

Collaboration

- Once a project is underway most of the project manager's work will be spent either interacting with team members or facilitating them interacting with each other. This is what makes Collaboration tools so popular today.
- Collaboration tools can include elements of document management, online announcements, surveys, threaded conversations, and project workspaces

Microsoft: Sharepoint



Deltek: WelcomHome

The screenshot displays the WelcomHome dashboard with the following sections:

- Countdown:** Days to Product Release: 70
- Video Feeds:** Select a video feed: Test flight (view)
- Top Issues:**
 - MWE Reload time
 - Supply time of shell components
 - Compatibility between IR and shopfloor systems
 - Compliance with timesheet submissions
 - Risk of launch delay
 - Interface scope definition
 - Award fee expectations
 - Remote IR access performance
- Risk Management:** Matrix showing Consequence vs Likelihood with risk levels (e.g., 2, 1, 3, 1).
- Program Status Summary:**

Category	Baseline	Current
Schedule	●	●
Technical	●	●
Cost	●	●
Risk	●	●
Quality	●	●
Issues	●	●
Award Fee	▲	●
- Financial Status:**
 - CPI=93% 03/02
 - SPI=97% 03/02
 - Budget: WBS-CPS, PPBS Track
 - (CLASSIFIED)
 - Current Program (C)
 - Alternative (C)
- Missed Events:**
 - 10/29/02 IR interface Phase I complete
 - 10/27/02 Shopfloor maintenance started
 - 10/25/02 Testing Phase I complete
 - 10/25/02 New Facility Draft Design Complete
 - 10/24/02 Engine Parts 423B Received
- Critical Path - Level 1:**

ID	Name	Status
1	P-1	●
2	P-2	●
3	P-3	●
4	P-4	●
5	P-5	●
6	P-6	●
T01	Test Readiness Review	●
T02	First Element	●
- Key Upcoming Decisions:**

Decision	Timeline
Begin testing on Phase 1	30 (days) 0
Renew supply contract for Engine Parts	30 (days) 00

Footer: powered by WelcomHome, LOGGED IN AS: Executive, CURRENT PROJECT: Missile System, Help, Logout

Zikula, Joomla

The screenshot shows a web browser window titled "Timesheet.Org : The Science and Methodology of Management by Timesheet - Microsoft Internet Explorer". The address bar shows "http://www.timesheet.org/index.php". The website header features the "TimeSheet.Org" logo and the tagline "The Science and Methodology of Management by Timesheet". A "TimeControl 4.2" banner is visible with a "click here for more information" link. The date "Jan 03, 2004 - 11:28 AM" and navigation links for "Homepage", "Downloads", "WebLinks", and "FAQ" are present. A search bar is located below the header.

The main content area is titled "Welcome to Timesheet.org" and contains the following text:

Welcome to Timesheet.org. This site is dedicated to the science of timesheet management. You'll find here areas of interest to anyone responsible for the collection of timesheets, the selection of timesheet systems and the deployment and management of automated timesheet systems.

We've included here links to timesheet software vendors, articles about the science of timesheet collection and particularly the project management aspect of timesheets.

Whether you're an HR manager, a Project Manager, a CFO or CIO, you'll find something here at Timesheet.org.

To see a series of articles on Timesheet software or Timesheet methodology, stop by the [Article Topics area](#).

To see downloads of interest to those in the timesheet industry including presentations, software, and demonstrations, go to the [Downloads Area](#).

Remember, the site is only as good as the content contributions made to it so please let us know what's important to you in either the [Articles Area](#) or the [Download Area](#).

The left sidebar contains a "Main Menu" with links to Home, My Account, Administration, and Logout. Below it are "Modules" including Downloads, Members List, News, Recommend Us, Search, Stats, Submit News, Topics, Top List, and Web Links. Other sidebar sections include "Incoming", "Waiting Content" (Submissions: 1), "Online" (0 guests and 1 member online), and "Languages".

The right sidebar features "Other Stories", a "Poll" titled "What do you think of Timesheet.org?" with three options: "Good site for timesheet interest", "Needs more content", and "Needs more downloads". A "Vote" button is present below the poll. Below the poll are "Results | Polls" and "Votes: 0" and "Comments: 0". A "Sponsored by:" section displays the "LOGICIEL HMS SOFTWARE" logo.

The footer contains the text: "The comments are property of their posters, all the rest (c) 2004 by Heuristic Management Systems Inc. This web site was made with PostHub, a web portal system written in PHP. PostHub is Free Software released under the GNU/GPL license. You can syndicate our news using the [RSS feed](#) and [Atom](#) feeds."

Google Groups

The screenshot shows a web browser window displaying the Google Groups page for 'TimeControl Dealers'. The browser's address bar shows the URL <http://groups.google.com/group/timecontrol-dealers?lnk=iggc>. The page header includes the Google Groups logo, the group name 'TimeControl Dealers', and a search bar. A navigation bar indicates 'Home' and 'New since last time: 2 messages'. The main content area features a welcome message: 'Welcome to the TimeControl Dealer Group site. This site is designed exclusively for the use of HMS Software's TimeControl Dealers. For help with this site, please contact Julie Benard (jbenard@hmssoftware.ca) at HMS Software.' Below the welcome message is a 'Discussions' section with 9 of 20 messages. The list of discussions includes: 'What's going on with the HMS Websites?' (Aug 31), 'Primavera Steps now supported in TC 5.1.2' (Aug 6), 'Purchasing additional TimeControl license and what happens with the client's support contract' (Jul 23), 'TimeControl and Primavera' (Jul 7), 'Can't email to Julie' (Jun 14), 'talia for TimeControl' (Jun 12), 'Did you know about "Steps" and "Notes" between TimeControl and Primavera?' (Jun 10), 'Did you know about assignments in TimeControl' (May 20), and 'Did you know?' (May 20). A right-hand sidebar contains navigation links for 'HOME', 'DISCUSSIONS', 'FILES', 'MEMBERS', and 'Group info' (Members: 25, Group categories: Computers > Software).

DotProject.net

HMS Software Project site - Windows Internet Explorer

http://project.epmguidance.com/index.php?m=projects

HMS Software Project site

HMS Software Project site

dotProject.net
FREE SOFTWARE

Companies | Projects | Tasks | Calendar | Files | Contacts | Forums | Tickets | User Admin | System Admin

Welcome Chris Vandersluis

Help | My Info | **Todo** | Today | Logout

Projects

Owner: All Users Company/Division: All new project

tabbed : flat

All (2) Not Defined (0) Proposed (0) In Planning (1) In Progress (1) On Hold (0) Complete (0) Template (0) Archived (0) Gantt

sort by:

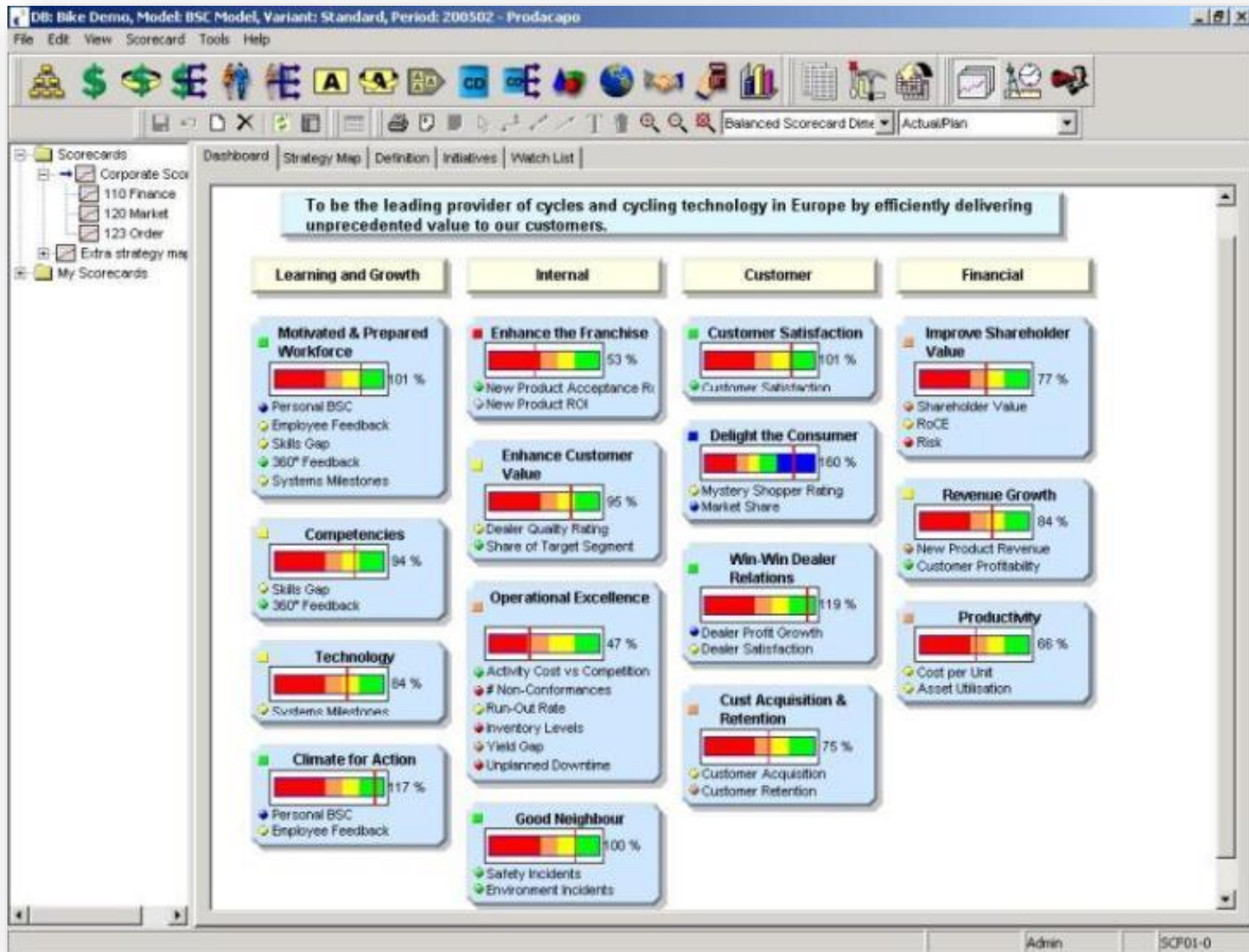
Color	Company	Project Name	Start	End	Actual	P	Owner	Tasks (My)	Selection	Status
0.0%	Conexus	TC QuikStart	02/02/2009	06/02/2009	12/01/2009	-	storm	1	<input type="checkbox"/>	In Planning (1)
0.0%	Ultra Electronics	EPM Consulting	05/01/2009	30/04/2009	-	-	storm		<input type="checkbox"/>	In Progress (1)

Update projects status In Planning

EPM Workshop

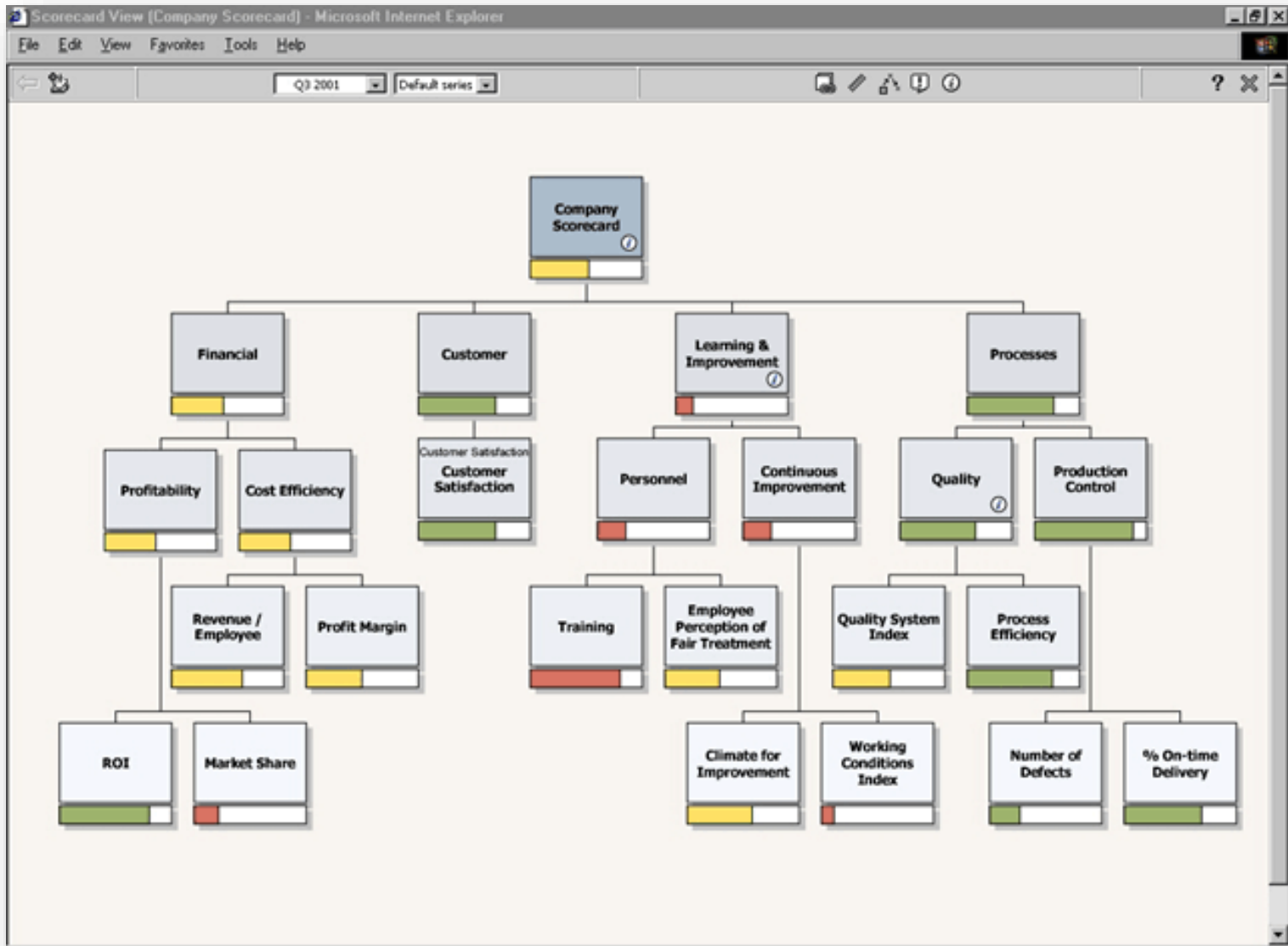
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Scorecarding



* Prodacpo

Scorecarding



* QPR

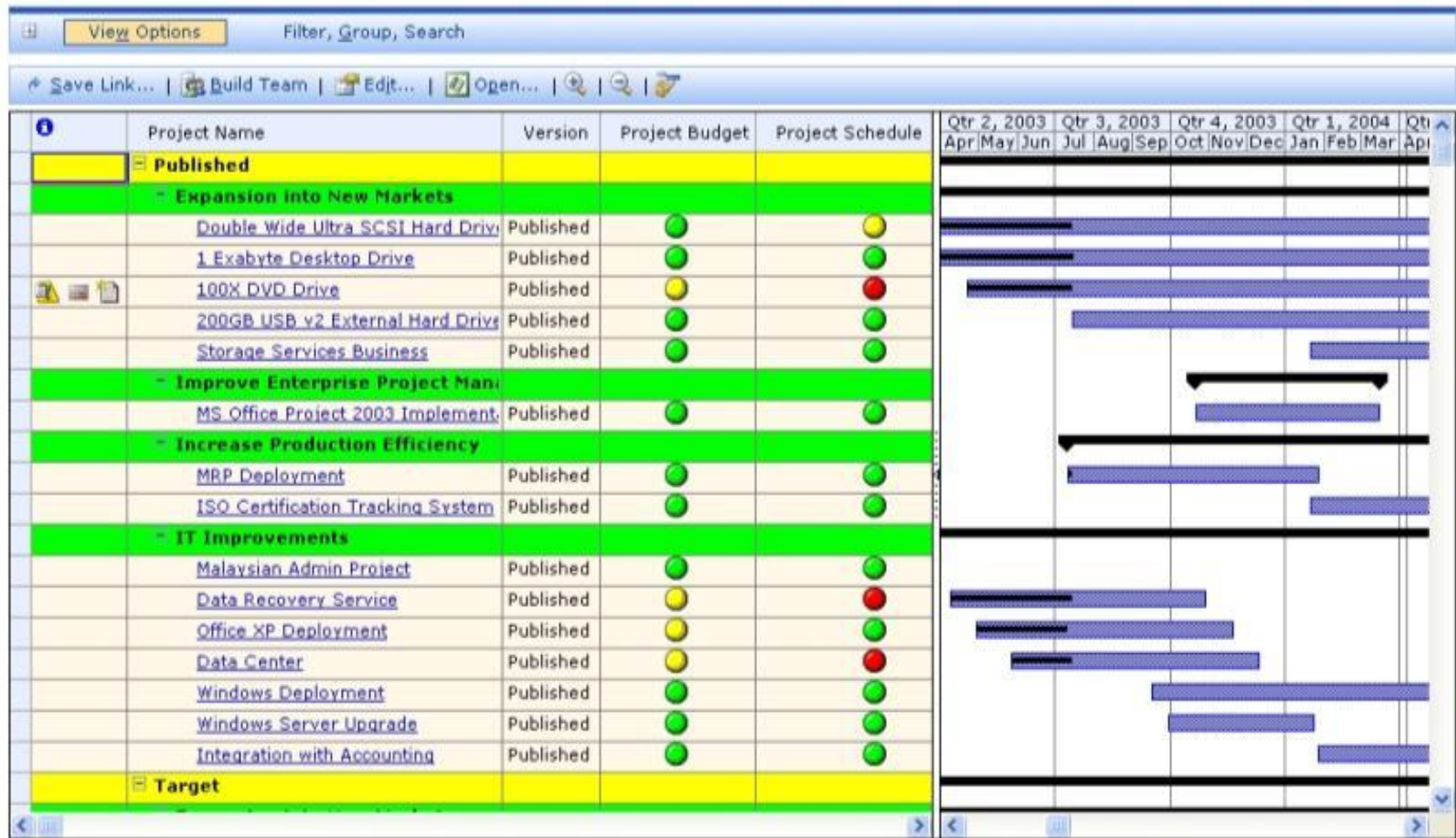
Dashboarding challenges

- Choose the right KPI's (Key Performance Indicators)
- Make sure that the dashboard shows the correct analysis.
 - Does this indicator require 100% compliance for an accurate reading?
 - Can the level of compliance be determined right on the dashboard?



EXAMPLES

EPM



Oracle-Primavera

Primavera : Auto (Automated System)

File Edit View Project Enterprise Tools Admin Help

Activities

Layout: Classic WBS Layout Filter: All Activities

Activity ID	Activity Name	Original Duration	Actual Labor Units	Remaining Duration	Schedule % Complete
AS219	Install System & Misc. Co...	19	0	19	0%
AS108	Install System Controller	13	0	13	0%
AS250	Install Bar Rails	4	0	4	0%
Software		32	0	32	0%
AS113	Install Processor/Softwar...	3	0	3	0%
AS150	Production Start	0	0	0	0%
AS-S	Software Summary	33	0	33	0%
AS115	Load System Software	1	0	1	0%
AS600	Manual Operation Ready	1	0	1	0%
AS116	Program	14	0	14	0%
AS280	Test Software	4	0	4	0%
AS285	Debug Software	6	0	6	0%
AS500	Automatic Operation Ready	1	0	1	0%
AS117	Startup Procedure Develo...	2	0	2	0%
Training		7	0	7	0%
Manuals		7	0	7	0%
AS118	Training Manuals/System ...	7	0	7	0%

General Status Resources Relationships Codes Notebook Steps Feedback WPs & Docs Expenses Summary

Activity AS108 Install System Controller Project Auto

Resource ID Name	Curve	Cost Account	Remaining Units / Time	Price / Unit	Budgeted Units	Actual This Period Units	Actual Units	Completion Units
GAIRR.Gail Robinson			8/d	\$23/h	100	0	0	100

Add Resource Add Role Assign by Role Remove

Portfolio: All Projects User: admin Data Date: 01-May-05 Access Mode: Shared Baseline: Current Project

Project Lifecycle Management (PLM)

The screenshot displays the VIP Task Manager Professional interface. The main window shows a task list for a project, with columns for ID, Name, Task Group, Department, Status, Priority, Complete, Info, Assigned, and Due Date. The tasks are organized into two paths: 'Project 1 (Planning)' and 'Project 2 (Planning)'. The 'Complete' column shows progress bars and percentages for each task.

ID	Name	Task Group	Department	Status	Priority	Complete	Info	Assigned	Due Date
51	Analyzing customer needs and business case	Planning	Technical	Completed	Normal	100%		Christopher Harris	30.04.2010
53	Feasibility study and estimating the solution	Planning	Technical	In Progress	Normal	75%		George Wilson	02.05.2010
52	Creating technical documentation	Planning	Technical	In Progress	Normal	20%		Paul Smith, George Robinson, Edward	20.05.2010
54	Equipment and materials specification	Planning	Technical	In Progress	Normal	30%		Donald Wright, Paul Smith	07.05.2010
55	Advice on building materials and costs	Planning	Technical	Created	Normal	0%		William Baker, Donald Wright	
56	Project team staffing	Planning	Technical	In Progress	Normal	100%		George Wilson	10.05.2010
57	Contract agreement and signing up	Planning	Director	Created	Normal	0%		Anthony Mitchell	
58	Finalizing the project charter	Planning	Director, Technical	Created	Normal	0%		Anthony Mitchell, George Wilson	
59	Composing the procurement plan	Planning	Technical	Created	Normal	0%		William Baker	
60	Studying Risks	Planning	Technical	Created	Normal	0%		Christopher Harris, George Wilson	
61	Creating the Project Schedule	Planning	Technical	Created	Normal	0%		George Wilson	

The interface also includes a 'Task List - Filters' section with options for 'Common' and 'By Date'. A 'Charts' section shows a pie chart for 'Complete' tasks, with a legend for various task names. The 'Resource Assignment' section shows a list of resources assigned to a specific task, including names, departments, and job titles.

* VIP Task manager

Project Portfolio Management (or is it Portfolio Project Management?)

Name	Overall	Financial	Schedule	Risk	Scope
Corporate					
Finance					
Human Resources					
Information Technology					
International					
Marketing					
Product Development					
Automated Hardware					
Focus Group Product					
Product Accessory Design					
Product Vision Team Expansion					
Value Chain Management					
Sales & Marketing					
New Media Marketing Design					
Operations					
Maintenance					
Production					
Quality Assurance					

PPM: Project Selection



Dashboarding

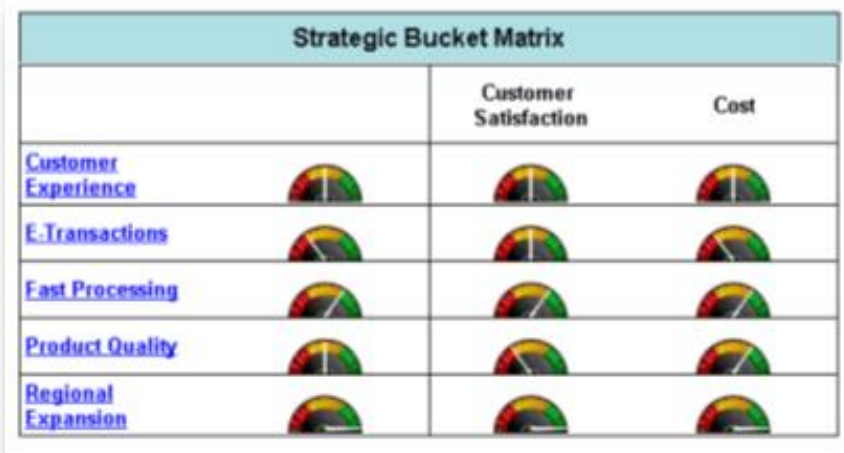
- ❑ Management has always had a taste for synthesized data.
- ❑ If it can be delivered as a one-page or one-screen summary then it will be well-received by the executive sweet
- ❑ Today's tools make creating dashboards very easy

Dashboard madness

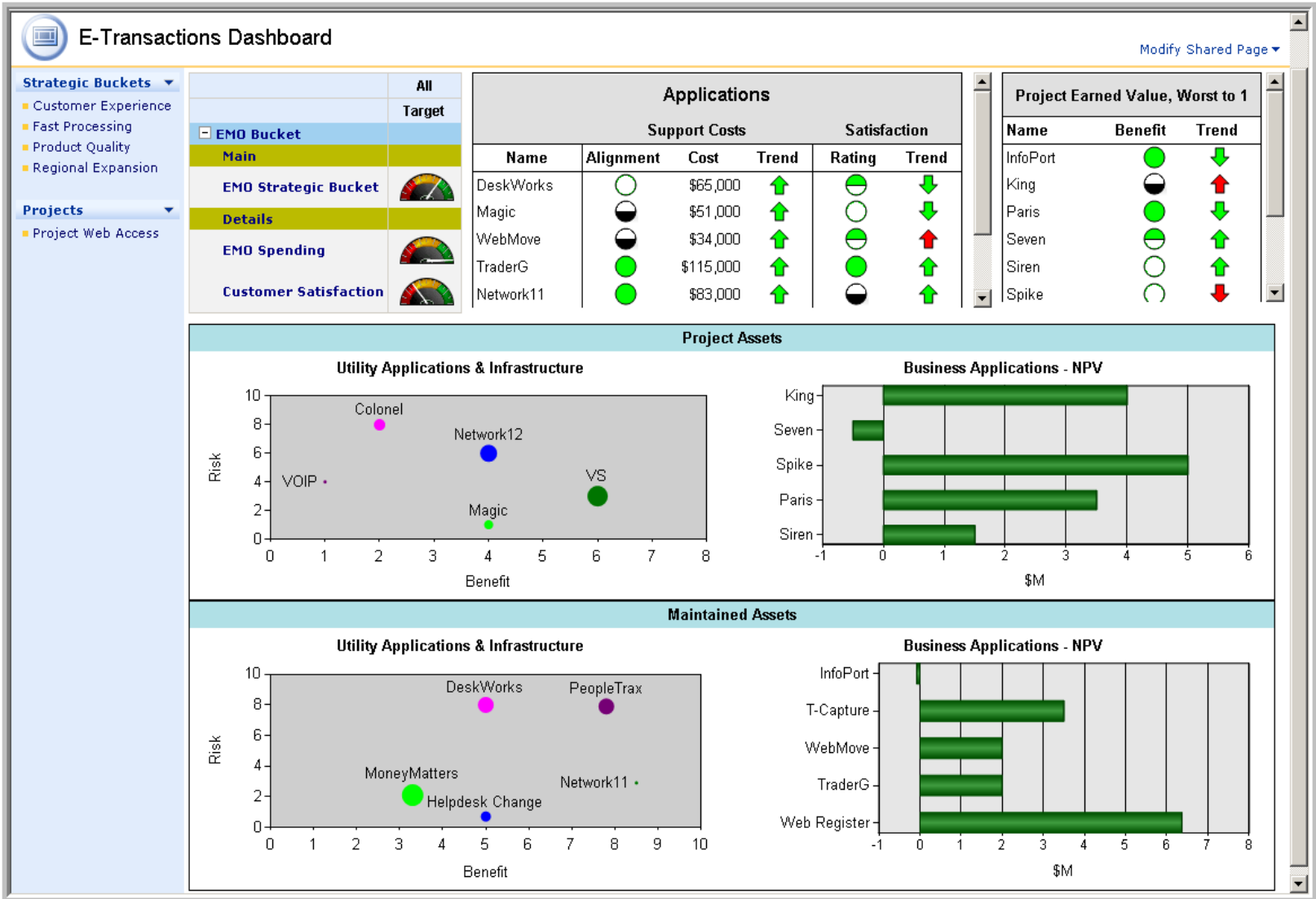


Top 5 Projects By Risk			
Name	Stage	Status	EV
Paris	Planning	●	NA
King	Design	●	↑
Spike	Design	●	↑
Siren	Planning	●	NA
Seven	Planning	●	↑

Top 5 Projects By Expense			
Name	Stage	Status	EV
Siren	Planning	●	NA
Spike	Design	●	↑
Paris	Planning	●	↓
King	Design	●	NA
Seven	Planning	●	↑



Dashboard examples 1



Dashboard examples 2

CXO Dashboard

[Modify Shared Page](#)

Links

- Business Unit 1
- Business Unit 2
- Business Unit 3
- Business Unit 4
- Business Unit 5

	All
	Target
IT Cost Scorecard	
Top Level	
IT Cost	
Budget & Revenue	
Innovation Budget	
Support Costs	
Outsource Costs	
Salary Costs	
Percent of Revenue	

	All
	Target
CIO Customer Satisfaction	
Main	
Customer Satisfaction	
Details	
Enhancement Backlog	
Application Satisfaction	
Help Desk	
System Up Time	
Equipment Satisfaction	
CEO Weekly Rating	

	All
	Target
Innovation and Enhancements	
Main	
Innovation KPI	
Details	
Resource Utilization	
On Budget	
On Time	
Expectation of Quality	

IT Time by Category

Category	Actual (%)	Target (%)
Innovation	20	20
Enhancement	30	35
Support	40	35
Infrastructure	10	10

Legend: ■ Actual, ■ Target

Top 5 Projects By Risk

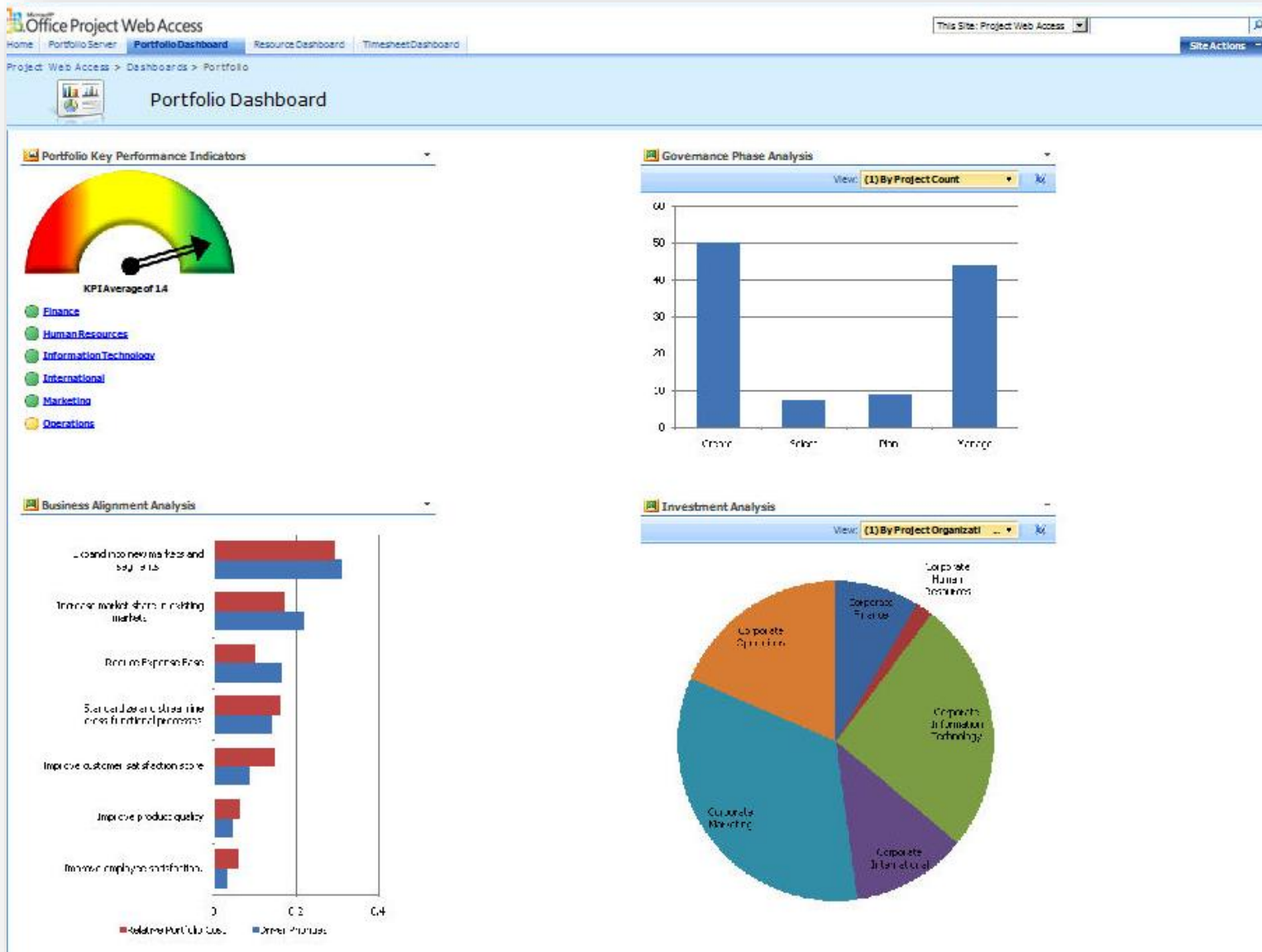
Name	Stage	Status	EV
InfoPort	Planning	●	NA
T-Capture	Design	●	↑
Seven	Design	●	↑
Paris	Planning	●	NA
WebMove	Planning	●	↑

Top 5 Projects By Expense





























Name	Stage	Status	EV
Paris	Planning	●	NA
Seven	Design	●	↑
InfoPort	Planning	●	↓
T-Capture	Design	●	NA
WebMove	Planning	●	↑

EPM Workshop
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Dashboard examples 3



Dashboard examples 4

Finance Projects								
Project	Report	Health	Sched	Cost	Risk	Issue	% Cmp	Status Comment
 Assets Database Design							3 %	
 General Ledger Enhancement							49 %	
 Ledger Tracking System Upgrade							1 %	
 Sarbanes-Oxley Compliance Tracking							32 %	Adapting to New Regulations

Dashboarding challenges

- Choose the right KPI's (Key Performance Indicators)
- Make sure that the dashboard shows the correct analysis.
 - Does this indicator require 100% compliance for an accurate reading?
 - Can the level of compliance be determined right on the dashboard?

Dashboards deployment challenges

- Is the data complete?
- Is it timely?
- Is there an action for every indicator?
- Are the Key Performance Indicators... key?
- Is it subjective or objective and can you tell the difference?

Project Lifecycle Management



**Project
Portfolio
System**

EPM Tools

Work Management

Product Lifecycle Management

- ❑ PLM is a direction for many in the EPM or PPM industries. It includes management of a product from design to EndOfLife (EOL)

PLM Example

VIP Task Manager Professional [User: Administrator] [Database: company\services]

File View Tools Help

Task List Task Tree Calendar Resource List

Task List - Groups

- Telecommunication Company
 - Projects
 - Project 1
 - Planning 11
 - Implementation 0
 - Maintenance 0
 - Project 2 0
 - Implementation 0
 - Maintenance 0
 - Project 3 0
 - Departments
 - Client accounts depat
 - Sales and Marketing
 - Technical department
 - Telephone Systr
 - Network Services

ID	Name	Task Group	Department	Status	Priority	Complete	Info	Assigned	Due Date
Path : Telecommunication Company\Projects\Project 1\Planning									
51	Analyzing customer needs and business case	Planning	Technical	Completed	Normal	100%		Christopher Harris	30.04.2010
53	Feasibility study and estimating the solution	Planning	Technical	In Progress	Normal	75%		George Wilson	02.05.2010
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59	Composing the procurement plan	Planning	Technical	Created	Normal	0%		William Baker	
60	Studying Risks	Planning	Technical	Created	Normal	0%		Christopher Harris,George Wilson	
61	Creating the Project Schedule	Planning	Technical	Created	Normal	0%		George Wilson	
Path : Telecommunication Company\Projects\Project 2\Planning									
74	Analyzing customer needs and business case	Planning	Technical	Created	Normal	0%		Christopher Harris	
75	Feasibility study and estimating the solution	Planning	Technical	Created	Normal	0%		George Wilson	
76	Creating technical documentation	Planning	Technical	Created	Normal	0%		Edward Carter,Paul Smith,George	
77	Equipment and materials specification	Planning	Technical	Created	Normal	0%		Donald Wright,Paul Smith	
78	Advice on building materials and costs	Planning	Technical	Created	Normal	0%		William Baker,Donald Wright	
79	Project team staffing	Planning	Technical	Created	Normal	0%		George Wilson	
80	Contract agreement and signing up	Planning	Director	Created	Normal	0%		Anthony Mitchell	
81	Finalizing the project charter	Planning	Director,Technical	Created	Normal	0%		Anthony Mitchell,George Wilson	

Task List - Filters

Current

Common

Name	
ID	
Status	
Priority	
Actual Time	
Estimated T	

By Date

Notifications

Date created: This Week

Title	Date Created	Creator	Task group
(No data to display)			



Resource Assignment

Task: 56 - Project team staffing

Name	Department	Job title
George Robinson	Technical department	Installation Technician
May Nelson	Client accounts	Call Center specialist
Brian Campbell	Technical department	Installation Technician
Paul Smith	Technical department	Electronic Technician
Kenneth Thompson	Technical department	Electronic Technician
Betty Scott	Client accounts	Call Center specialist
Elizabeth Philips	Client accounts	Records clerk
Barbara Scott	Client accounts	Records clerk
George Wilson	Technical department	Department Chief
Anthony Mitchell	Director	Director

Notes Comments Task history Attachments Print

* VIP Task manager

In the Cloud or On Premises?

- ❑ What the heck does that cloud thing mean anyway?
- ❑ What are the implications of subscribing to a service vs. buying a system?



In the Cloud vs. On Premises

On premises

- You own the software and control the data
- Security is your problem
- You have to own and maintain the hardware
- You have to maintain technical expertise as well as system expertise

In the Cloud

- You have temporary access to the software and they control the data
- Security is their problem but you are still responsible
- The hardware and the hardware maintenance is their problem
- You don't need to maintain technical expertise, only system expertise

Tool selection challenges

- Death by spreadsheet
 - Making your requirements by gathering a list of “wants” by anyone who can be reached and has access to a spreadsheet
- Adding non project requirements into the project requirements. Do you have a budget? Can I include my needs in it?
- Being clear about the problem you wish to solve

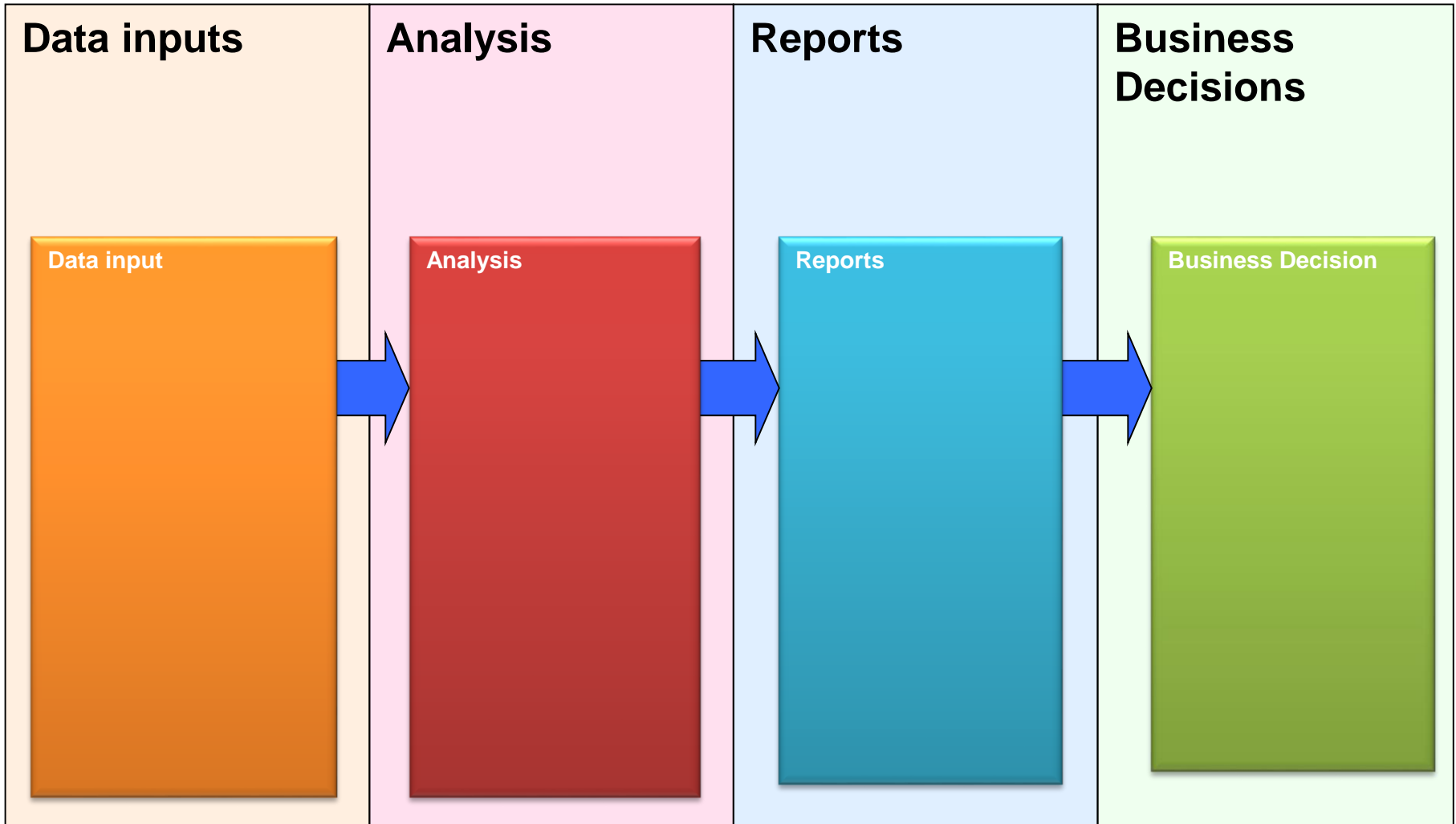
Key EPM tool selection questions

- Who will it serve?
- Centralize or Decentralize?
- All-in-one or Best-of-breed?
- Total** cost of ownership
- How will we deploy?

Tool selection questions/discussion

- Which one is best?
- I'm stuck with one, will it work?
- We're in too deep, how do I back up?




System requirement exercise








Dashboarding exercise

Dashboard Exercise

Team : _____

Indicator 1		
	Name:	
	Action (when green):	
	Action (when yellow):	
	Action (when red):	
	Any other indication:	

Indicator 2		
	Name:	
	Action (when green):	
	Action (when yellow):	
	Action (when red):	
	Any other indication:	

Indicator 3		
	Name:	
	Action (when green):	
	Action (when yellow):	
	Action (when red):	
	Any other indication:	