



High performance. Delivered.

# Project Monitoring & Project Controlling

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Dresden, July 23<sup>rd</sup> 2015



Strategy | Digital | Technology | Operations

# Agenda

- **Accenture Profile**
- General Overview Project Management @ Accenture
- Project Calculation & Project Planning
- Project Monitoring & Controlling

# 305,000 employees at Accenture serve more than 4,000 clients around the world

## About Accenture

**305,000+**

More than 305,000 people serving clients in more than 120 countries<sup>1</sup>

**200+**

Offices and operations in more than 200 cities in 54 countries

**\$30.4B**

Net revenues for fiscal year 2013



Accenture Strategy

Accenture Digital

Accenture Technology

Accenture Operations

## Facts<sup>1</sup>

- Leadership: ~5,600 Managing Directors
- 30.4 billion USD revenues in FY14
- Geographic Regions:
  - Americas
  - Asia Pacific
  - Europe / Middle East / Africa

## Clients

- 4,000 clients in more than 120 countries
- 89 of the Fortune Global 100
- 3/4 of the Fortune Global 500
- 28 of the DAX-30 companies
- 99 of our top 100 clients have been clients for at least 5 years, 92 have been clients for at least 10 years

<sup>1</sup> As of Aug 31, 2014

Did you know?

About Accenture

# Agenda

- Accenture Profile
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# YOUR PLAN



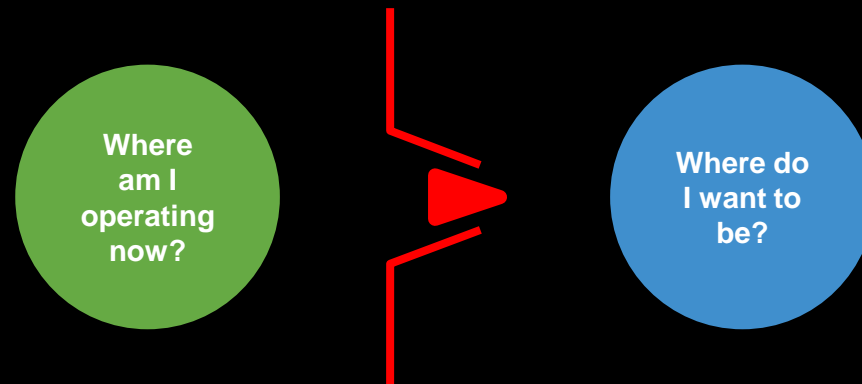
# REALITY



# Project Management focuses on measurement-driven results, repeatable processes and clear communication.

## Project Management – Introduction

- “A **project** is a temporary endeavor undertaken to create and deliver a unique product, service or result.”
- “**Project Management** is the application of knowledge, skills, tools, techniques and processes to help clients make better decisions and to complete deliverables that meet a project’s requirements.”

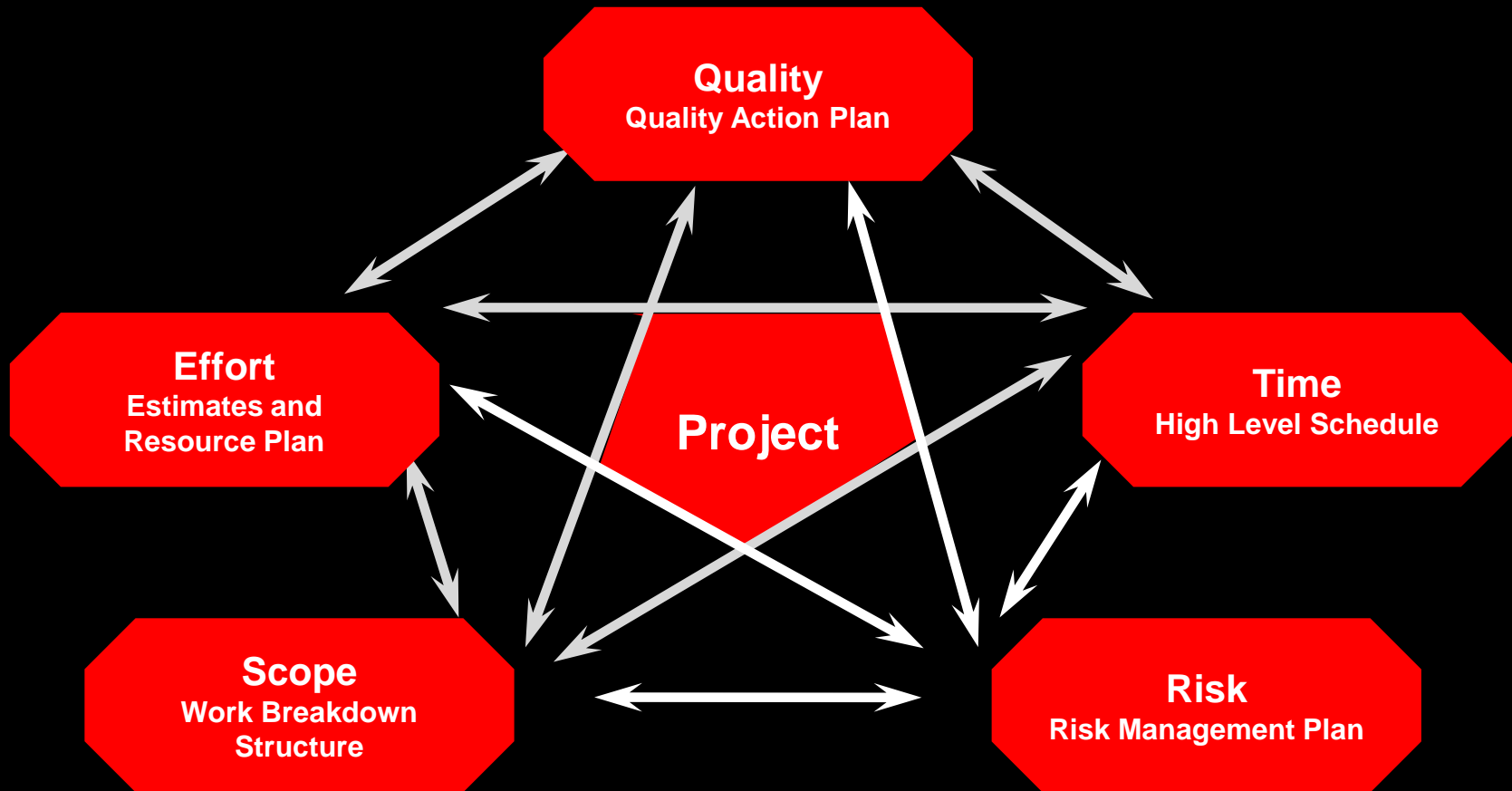


### Principles:

1. Be clear on where you're going
2. Plan carefully on how you will get there
3. Deliver on promises made in your project plan

It is helpful to use the SQERT model when thinking about Project dimensions

## SQERT Model





# Our comprehensive methodology provides tools to help manage projects effectively on schedule and on budget

## Accenture Project Management Approach

Real Life

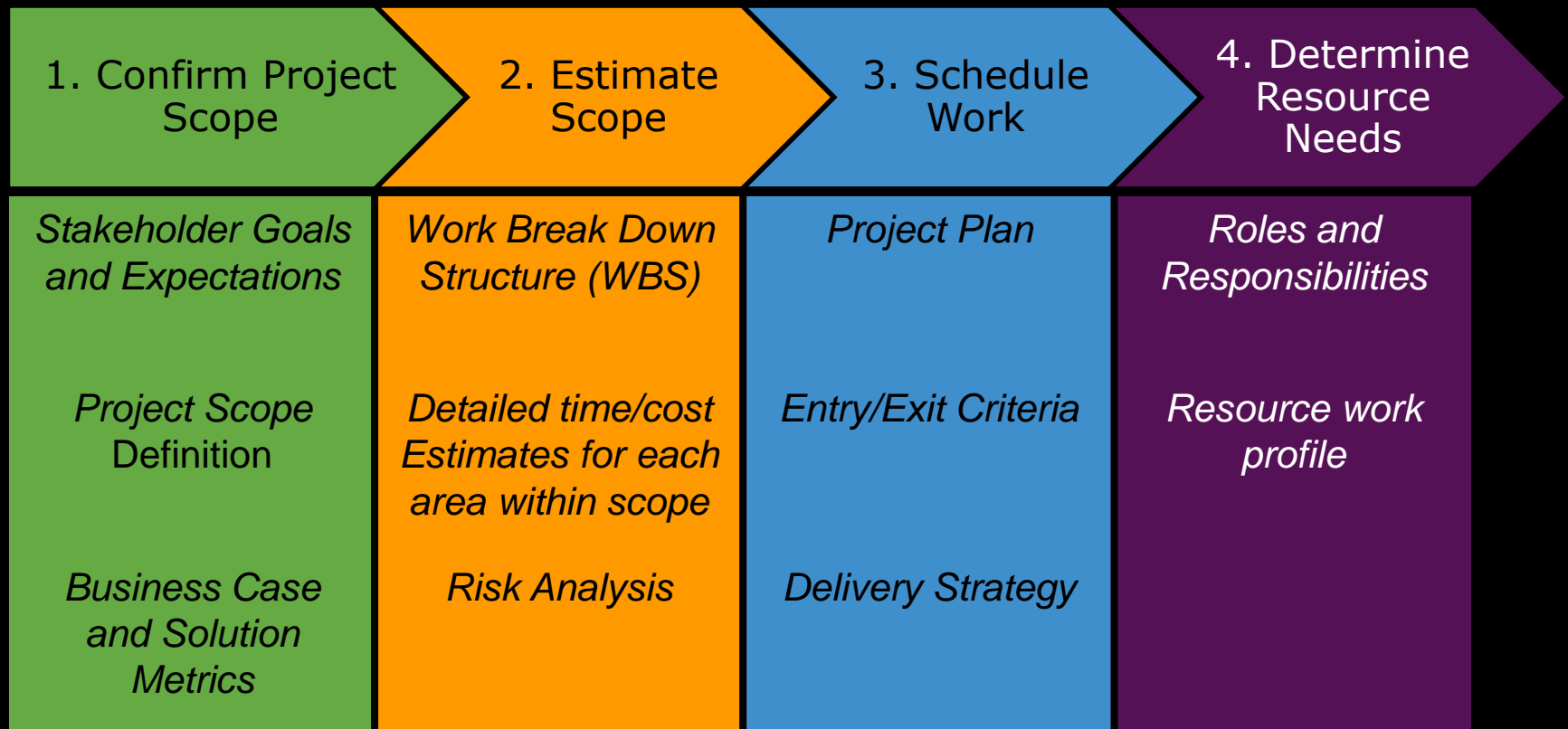


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The general planning process includes four process steps – we focus on the estimation of a project's scope

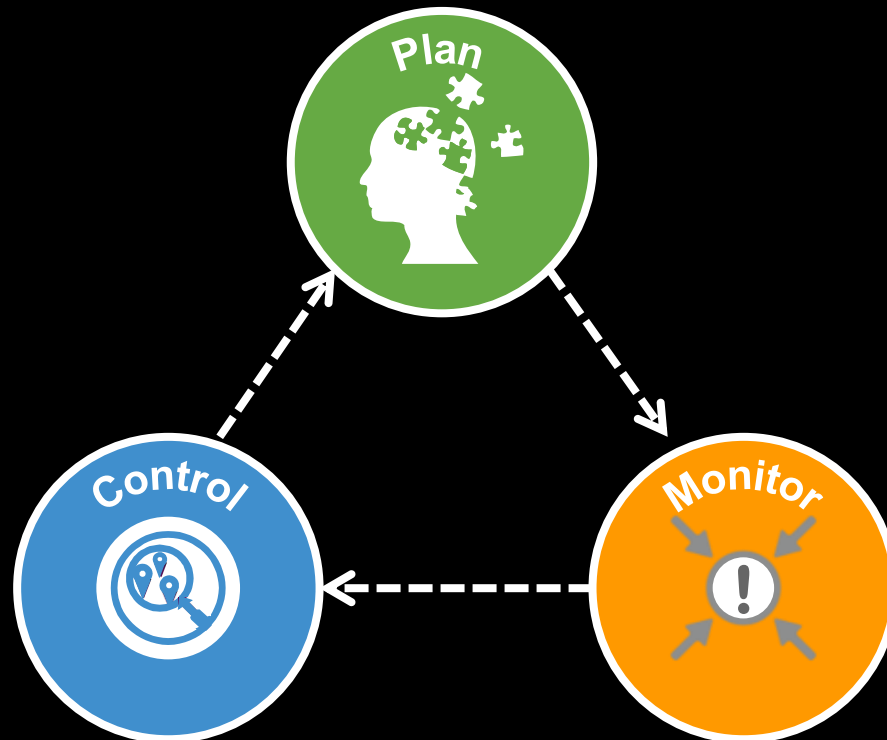
## Project Planning– Scope Management



There are three key project management processes supporting a project's life cycle.

## Project Management Process

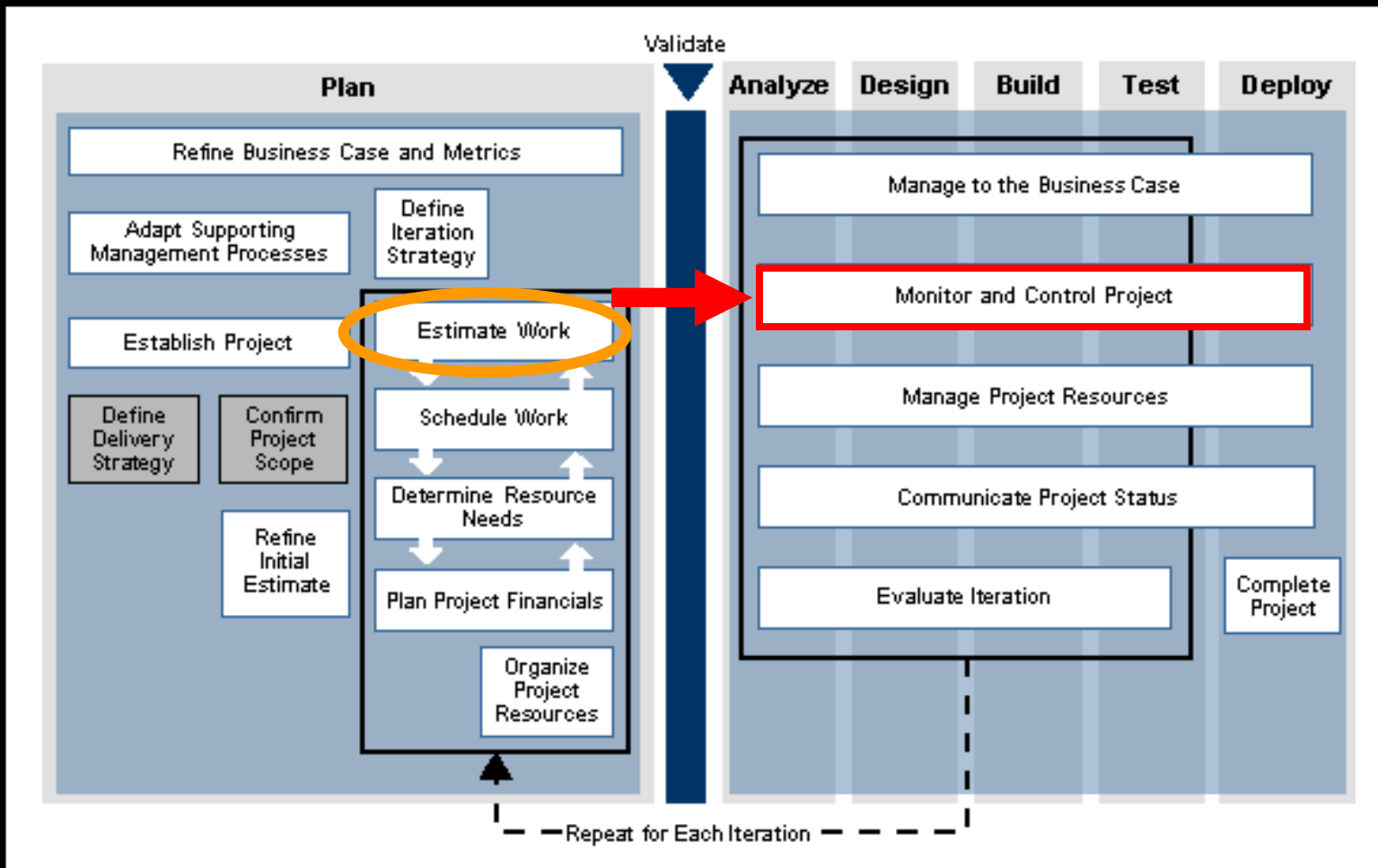
The three key processes **Plan**, **Monitor** and **Control** are **co-dependent** and **continuously cycle** throughout **all of the stages** of the project.



# The project management method is part of Accenture Delivery Methods (ADM), our master project approach

## Accenture Delivery Methods (ADM)

Real Life



# Planning and calculation are the initial steps in setting up a project – adaptations are possible within the lifecycle

## Project Calculation & Project Planning

Real Life

### Project Calculation

- Project calculation is used for the estimation of efforts for the completion of tasks which builds the baseline for solid project controlling.
- Without a precise estimation of efforts a project can...
  - ...exceed the time and budget planning
  - ...radically reduce the profit margin
  - ...decrease the team morale

The screenshot shows the ADM Estimator interface. At the top, there are summary statistics: Total Overall Total (Hours) at 11,023, Project Subtotal (Hours) at 9,273, Project Contingency (Hours) at 1,844, and Approved Pjt Contingency (Hours) at 0. Below this is a detailed task list with columns for ID, Name, Status, Estimating Factors, # of Links, Factor, Subtask, Task, Pjt, Estimate, and Key Deliverables. The task list includes various sub-tasks like 'Project Management', 'Analysis', 'Design', 'Build', and 'Test'.

Example ADM Estimator

### Project Planning

- Project planning is an essential part to ensure that the adequate team members execute the right tasks at the right time.
- Project planning includes:
  - Project Plan
  - Milestones
  - Planning of resources

The screenshot shows the MS Project task structure. The table lists tasks with their IDs, names, methodology links, key deliverables, methodology outline IDs, effort estimates in hours, work, and durations. Tasks include '4025 Evaluate Iteration', '6091 Complete Project', '4100 Build Application', '4143 Create Production O', '4145 Develop Page Temp', '4155 Customize Application', '4163 Security Application', '4163 Perform Physical Da', '4163 Plan Component Test', '4168 Build and Test Appl', '74199 Transition Applcat', '4500 Build Training and Pe', '4535 Develop Training Ma', '4555 Develop Communicat', '74599 Transition Change', '5100 Test Application', '5120 Prepare and Execut', '5130 Prepare and Execut', '5150 Prepare and Execut', '75168 Transition Product', and '5170 Prepare and Execut'.

MS Project task structure

# There are two different examples of how a WBS could be structured for a project

## Project Planning – Define WBS

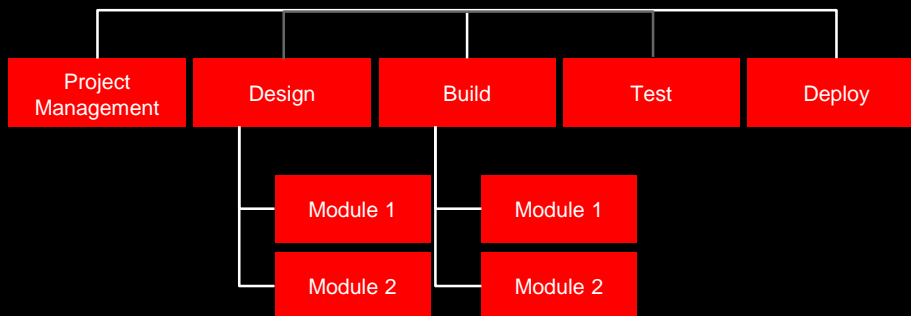
“ **WBS** (Work Breakdown Structure) ...

- is a **description** of the **project's scope** as defined by the program management.
- is used for **defining the scope** of a project in terms of its outcomes and deliverables.
- becomes the **structure of your work plan** within **MS Project**.

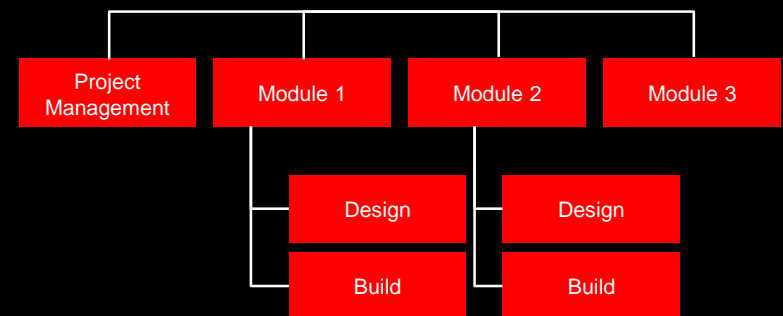
”

VS.

Facilitates Project Reporting by Phase

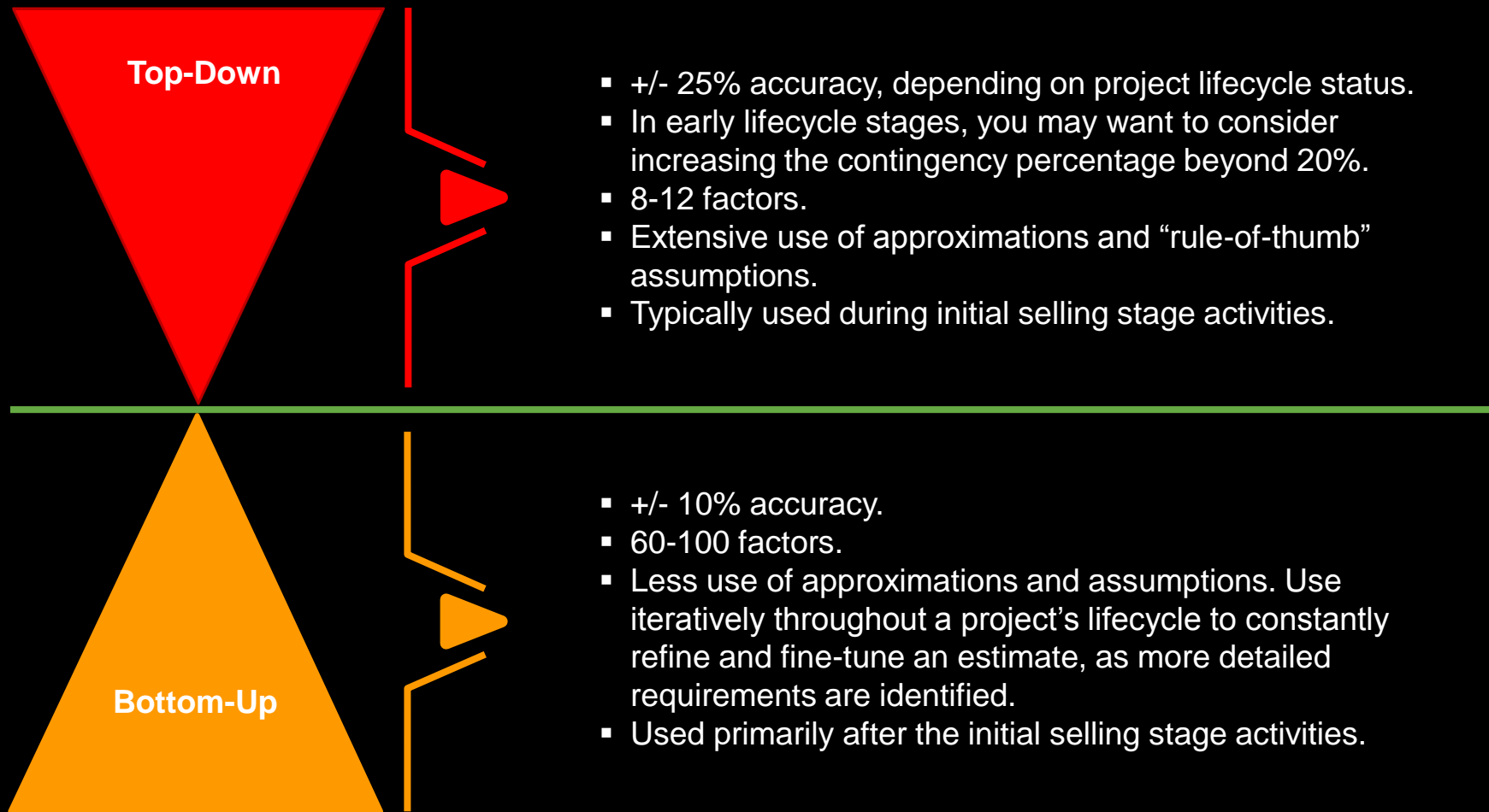


Facilitates Project Reporting by Module



# A combination of top-down and bottom-up estimating models are used to approximate the amount of work

## Top-Down and Bottom-Up Estimating



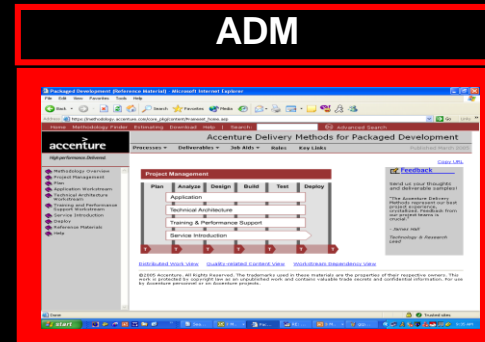


# ADM Estimators provide Input for Workplan and Cost / Pricing Models

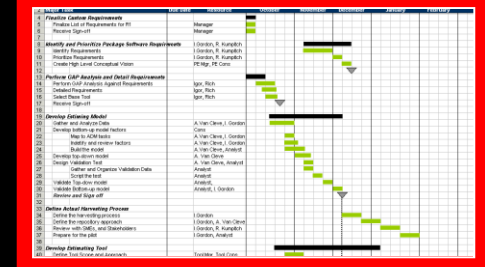
## ADM Estimators – Benefits

Real Life

Tasks, Activity & Role Navigation

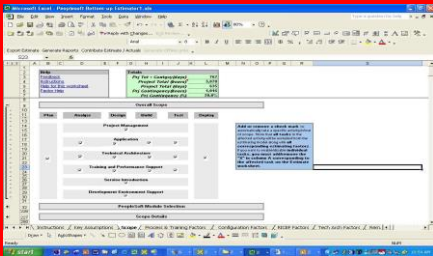


### Microsoft Project



### GPS

### ADM Estimator Top Down / Bottom Up



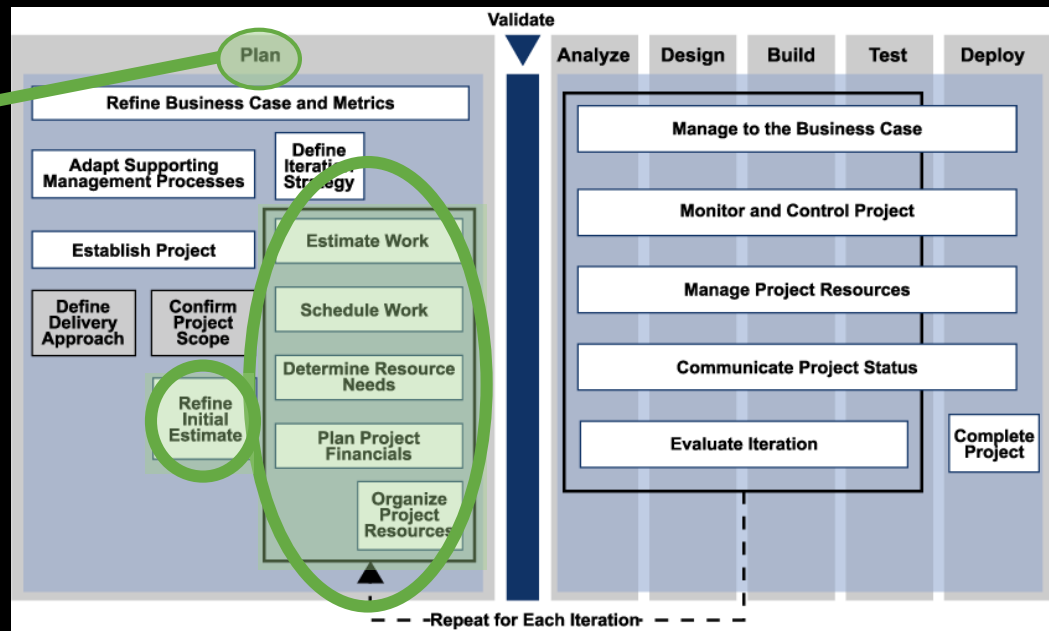
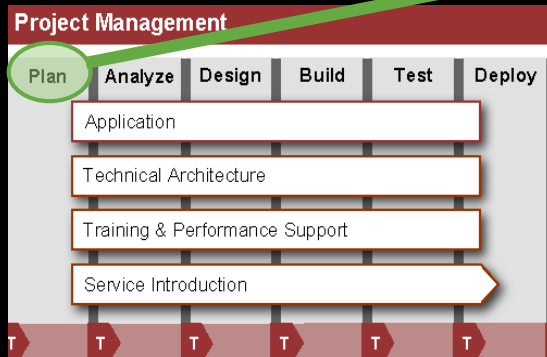
Tasks & Hours

Levels, Bill Codes, Duration

# ADM Estimators are tightly Integrated with Accenture Delivery Methods

## ADM Project Management – Plan Example

Real Life



ADM Estimators support project managers at different stages of a project by helping:

- Define scope of work and factors
- Document detailed assumptions
- Generate task-level estimates
- Complete budget, schedule and resource estimates

### Inputs

- Project Scope Definition
- Iteration Strategy
- Strawman Estimate / Assumptions
- Project Road Map
- Sponsor Goals & Expectations

### Outputs

- Detailed Project Assumptions
- Bottom-up Estimate
- Work Plan (via export to MS Project)

# Agenda

- Accenture Profile
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- Project Calculation & Project Planning
- **Project Monitoring & Controlling**

# Monitoring and controlling are necessary to initiate measures at the right time of the project lifecycle

## Project Monitoring & Controlling

Definition: „...the monitoring a project’s proceedings along an as-is vs. to-be comparison. In case of any occurring problems adequate corrective measures have to be initiated.“

### Project Monitoring

- The **Monitor process** involves the following activities and deliverables:

ACTIVITIES	DELIVERABLES
Daily ‘Touch-Points’ with Team	N/A
Weekly Status Meetings	<ul style="list-style-type: none"><li>• Meeting Minutes</li><li>• Status Report</li><li>• Issue Log</li><li>• Risk Register</li></ul>
Reviews and QA of deliverables	<ul style="list-style-type: none"><li>• Quality Assurance Report</li></ul>
Tracking against Project Work Schedule	<ul style="list-style-type: none"><li>• Milestone Report</li><li>• Risk Register</li></ul>
Identifying Risks and Issues	<ul style="list-style-type: none"><li>• Risk Register</li><li>• Issue Log</li></ul>

### Project Controlling

- The **Control process** involves the following activities and deliverables:

ACTIVITIES	DELIVERABLES
Management of changes to project scope	<ul style="list-style-type: none"><li>• Change Request Form</li></ul>
Escalation of issues and risks that require intervention from roles higher in the project structure	The following is in <b>dashboard format</b> : <ul style="list-style-type: none"><li>• Status Report</li><li>• Issue Log</li><li>• Risk Register</li><li>• Minutes from ad hoc Meetings</li></ul>

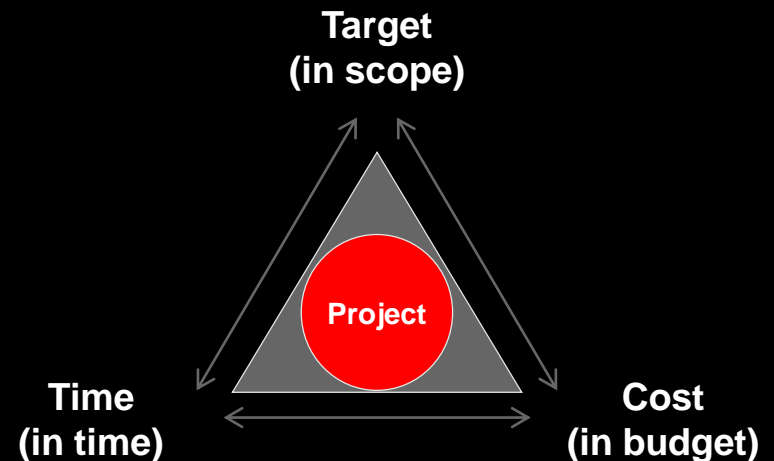
During the project lifecycle adaptations in the project triangle (SQERT) can be necessary

## Three Dimensions of Project Controlling

### 3 Dimensions



“ **PLANNING** and **MONITORING** are **iterative activities** ”



“ **PLANNING** has to be **adapted as precisely as** it was **created** ”

# In order to monitor a project's progress it is recommended to define and evaluate SMART goals

## Target Control – SMART Goals

<b>S</b>	<b>SPECIFIC</b>
<b>M</b>	<b>MEASURABLE</b>
<b>A</b>	<b>ACHIEVABLE</b>
<b>R</b>	<b>RELEVANT</b>
<b>T</b>	<b>TIME-BOUND</b>

### Accenture Additions:

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#### Quality

What is the required quality?

#### Unambiguous

Are all addressees on the same page?

#### Prioritized

Prioritization possible for planning / releases?

#### Traceable

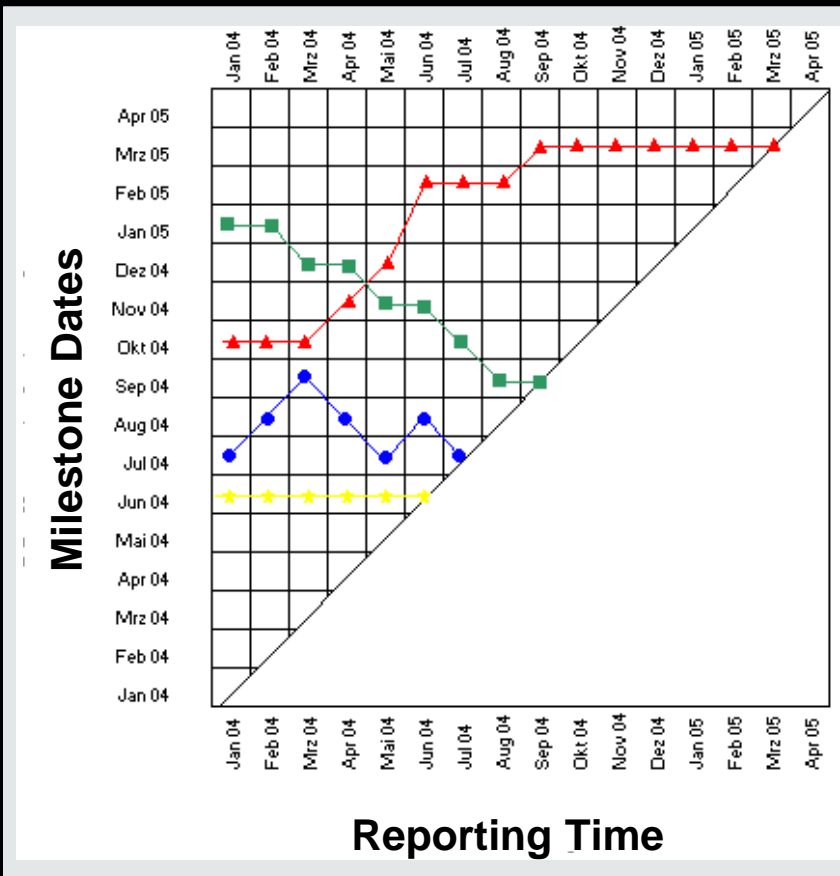
Where does the objective/ request come from?

# Examples: Milestone Trend Analysis / Gantt-Chart

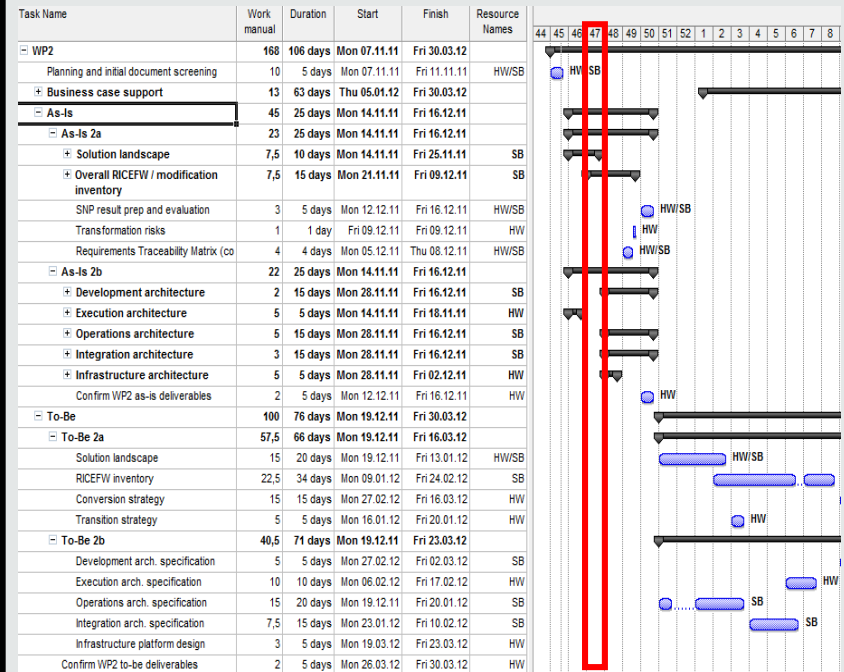
## Time Control

Real Life

### Example 1: Milestone Trend Analysis



### Example 2: Progress Control via Gantt-Chart

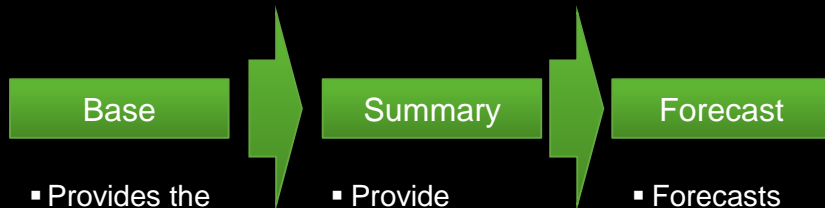


# There are three types of earned value metrics: base, summary, and forecast metrics

## Cost Control

### Basics

- Industry standard to measure the project progress:
  - Forecasting of the date of completion and final costs.
  - Shows time and budget deviations.
- Three different types of earned value metrics exist:



- Provides the basis to calculate all other metrics.
- Used in conjunction with summary and forecast metrics.
- Derived from a combination of base and summary metrics.
- Forecasts project status at completion.
- Based on the Earned Value (EV) base metric.

### Example

#### Measurement Workbook

Month	BCAC	BCWP	BCWS	ACWP	Cost Variance	CPI	Schedule Variance	SEI
17	12,182	2,408	0.0	0.0	0.0	0.000	0.0	0.000
18	12,182	2,408	0.0	0.0	-56.0	0.003	228.0	0.000
19	81,702	2,408	1,360.0	2,384.0	-194.3	0.675	-1,024.0	0.570

#### Cost & Schedule Macro Results



# There are different types of base metrics in place – the 0/100 formula is recommended for EV calculation

## Base Metrics

Metric	Definition and Formula
Budget at Completion (BAC)	<ul style="list-style-type: none"> <li>Budget for the task, summary task, phase or other WBS component</li> <li><b>BAC = Baseline budget expressed in days or hours, not dollars</b></li> </ul>
Actual Cost (AC)	<ul style="list-style-type: none"> <li>Actual cost of any work that has been performed</li> <li><b>AC = Amount of effort already spent or “burned” expressed in terms of days or hours not dollars</b></li> </ul>
Earned Value (EV)	<ul style="list-style-type: none"> <li>Total amount of effort, in hours or days, for tasks that are 100% complete</li> <li><b>EV = 0 if task is NOT complete, EV = BAC, if task is complete</b></li> </ul>
Planned Value (PV)	<ul style="list-style-type: none"> <li>Budgeted amount of effort, measured in hours for tasks scheduled to be 100% complete</li> <li><b>PV = BAC if task is due prior to status date</b> <b>PV = 0 if task is due after status date</b></li> </ul>

### Earned Value Calculation Methods:

- 0/100 formula**
  - Tasks must be 100% complete, then earned value equals Budget at Completion (BAC)
- Other methods for calculating Earned Value include:
  - 50/50 formula
  - Ratio to earned standards
  - Milestones
  - Percent complete
  - Milestones / Percent complete

Accenture Recommendation

# There are different types of summary metrics – therefore variances and indices are calculated

## Summary Metrics

Metric	Definition and Formula
Cost Variance (CV)	<ul style="list-style-type: none"><li>The difference between the actual costs and the budgeted (baseline) costs</li><li><b>CV = Earned Value – Actual Cost (EV-AC)</b></li></ul>
Schedule Variance (SV)	<ul style="list-style-type: none"><li>Determines whether the project is on, ahead, or behind schedule</li><li><b>SV = Earned Value – Planned Value (EV-PV)</b></li></ul>
Cost Performance Index (CPI)	<ul style="list-style-type: none"><li>The ratio of budgeted cost to actual cost used to predict the magnitude of a possible cost overrun or under-run at a given point in time</li><li><b>CPI = Earned Value/Actual Cost (EV/AC)</b></li></ul>
Schedule Performance Index (SPI)	<ul style="list-style-type: none"><li>The ratio of budgeted cost to planned cost used to predict the magnitude of a possible cost overrun or under-run at a given point in time</li><li><b>SPI = Earned Value/Planned Value (EV/PV)</b></li></ul>

# Different types of forecasting metrics can be used for project performance and completion estimations

## Forecast Metrics

Metric	Definition and Formula
To-Complete Performance Index (TCPI)	$(BAC - EV) / (BAC - AC)$ <b>(Budget at Complete – Total Earned Value) / (Total Budget at Complete – Actual Cost)</b>
Statistical Estimate to Complete (STAT ETC)	$(BAC - EV) / CPI$ <b>(Budget at Complete – Earned Value) / Cost Performance Index</b>
Statistical Estimate at Completion (STAT EAC)	$AC + STAT ETC$ <b>Actual Cost + Statistical Estimate to Complete</b>
Statistical Variance at Completion (STAT VAC)	$BAC - STAT EAC$ <b>Budget at Complete – Statistical Estimate at Completion</b>

# There are various further tools and methods that can be used for the monitoring and controlling of a project

## Further Project Monitoring & Controlling Dimensions

Extract

<b>FINANCIALS</b>	<ul style="list-style-type: none"><li>▪ Supplier / Consultantancy Margin Targets</li><li>▪ Control of Contingency</li><li>▪ Control of Travel Expenses</li><li>▪ Business Case Monitoring</li></ul>
<b>RISKS</b>	<ul style="list-style-type: none"><li>▪ Qualitative Risk Assessment</li><li>▪ Quantitative Risk Assessment</li><li>▪ Includes Opportunities and Threats</li></ul>
<b>COMMUNICATION</b>	<ul style="list-style-type: none"><li>▪ Communication Plan</li><li>▪ Stakeholder Management (Key Stakeholder Matrix)</li><li>▪ Change Management Instruments (Workshop)</li><li>▪ Target Group Refinement</li></ul>
<b>QUALITY</b>	<ul style="list-style-type: none"><li>▪ Quality Assurance (Interviews, Surveys,...)</li><li>▪ Quality Management and Configuration</li><li>▪ Management as a Planning Function</li><li>▪ Test Statistics</li></ul>
<b>HR</b>	<ul style="list-style-type: none"><li>▪ Employee / Project Survey</li><li>▪ Control of Overtime</li><li>▪ Individual Development / Motivation and Performance Evaluation</li></ul>
<b>SOURCING</b>	<ul style="list-style-type: none"><li>▪ Monitoring of Supplier Contracts</li><li>▪ Cost Control</li><li>▪ Regular Check of Conditions</li><li>▪ Spend Management</li></ul>

# Special tools are used for the calculation of cost and revenues

## Financials Monitoring & Controlling – Examples

Real Life

accenture Manage myEngagements

User Preferences Create Page Link Print

Master Active

Dashboard Forecast Approve/Submit Roster Set Up Reports

Summary Resource Plan Costs Billings Revenue & Working Capital Cost Rates

Currency: WMU (EUR) Global Include Profit Center and Cost Center Activity Time Frame: Month Quarter Fiscal Year Mai 2014

Category	May 14 Actual	Jun 14 Actual	Jul 14 Forecast	Aug 14 Forecast	Sep 14 Forecast	Oct 14 Forecast	Nov 14 Forecast	Dec 14 Forecast	Jan 15 Forecast	Feb 15 Forecast	Mar 15 Forecast	Apr 15 Forecast	May 15 Forecast	Jun 15 Forecast	Contract EAC
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- Total Billings
- Total - Expenses
- Total - Fees
- Consulting Expenses Incurred
- Accommodation - Consulting
- Meals & Per Diems - Consulting
- Other Expenses - Consulting
- Travel - Air - Consulting
- Travel - Ground - Consulting
- Total Revenue
- Total Services Revenue
- Payroll Costs
- Net Loan/Borrow Payroll
- Non Payroll Costs
- Other Usage Charges
- Technology Services Charges

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Summary Resource Plan Costs Billings Revenue & Working Capital Cost Rates

Currency: EUR Search by cost... Find Category Filter: All Hide no recent activities: Yes No Mai 2014 Filter Clear View

Cost	Category	CostCollectorNm	May 14 Actual	Jun 14 Actual	Jul 14 Forecast	Aug 14 Forecast	Sep 14 Forecast	Oct 14 Forecast	Nov 14 Forecast	Dec 14 Forecast	Jan 15 Forecast	Feb 15 Forecast	Mar 15 Forecast	Apr 15 Forecast	May 15 Forecast	Jun 15 Forecast	Contract EAC
	Other Expenses - Cons		599,00	49,03	9.000,00	8.000,00	10.000,00	9.200,00	9.200,00	7.500,00	0,00	0,00	0,00	0,00	0,00	0,00	53.548,03
	Accommodation - Cons		822,52	639,75	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	2.100,88
	Meals & Per Diems - Co		266,60	260,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	736,40
	Travel - Ground - Cons		325,39	601,60	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1.221,78
	Net Loan/Borrow Payr		6.445,52	6.223,30	10.224,14	9.335,09	10.073,00	5.952,23	9.157,28	6.867,96	0,00	0,00	0,00	0,00	0,00	0,00	68.279,43
	Accommodation - Cons		1.096,72	548,37	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1.830,14
	Meals & Per Diems - Co		297,80	154,80	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	593,40
	Travel - Ground - Cons		520,02	281,84	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1.022,64
	Net Loan/Borrow Payr		8.112,46	6.001,03	4.000,75	8.890,56	10.073,00	10.530,87	9.157,28	6.867,96	0,00	0,00	0,00	0,00	0,00	0,00	67.190,27
	Net Loan/Borrow Payr		158,55	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	158,55
	Net Loan/Borrow Payr		0,00	0,00	0,00	899,94	0,00	899,94	899,94	899,94	0,00	0,00	0,00	0,00	0,00	0,00	33.102,85
	Accommodation - Cons		548,34	350,07	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	6.735,01
	Meals & Per Diems - Co		141,00	57,40	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	2.390,95
	Other Expenses - Cons		503,36	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1.491,05
	Travel - Ground - Cons		579,63	459,54	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	5.792,60
	Net Loan/Borrow Payr		8.902,05	6.030,48	12.635,09	5.743,22	10.337,80	13.783,74	11.486,45	9.189,16	0,00	0,00	0,00	0,00	0,00	0,00	164.619,51
	Total																

1 of 1 Go Save Add standard Update forecast Delete

# Additional examples exist for the monitoring and controlling of risks

## Risk Monitoring & Controlling – Example

Real Life

### Risk Register

- = High Risk after Mitigation
- = Medium Risk after Mitigation
- = Low Risk after Mitigation

Nr.	Risk	Risk name	Project	Date	Source	Damage entry	before				Mitigation strategy, Remarks
							Probability	Consequence	Risk Classification	Dependency to stream	
	Risk Description	Short name of risk	Project name	Evaluation Date		Damage will occur approximately on date (mmm. yy)	1: 25% 2: 50% 3: 75% 4: 100%	1: < 10 T€ 2: 10 - 50 T€ 3: 50 - 100 T€ 4: 100 - 300 T€ 5: > 300 T€	Risk Classification value RCV1		
1	asdf	Parallelise IT concept (R2) and template (R1)	IT	19.11.08	rad	Mrz. 09	3	3	9		Detailed resource planning of both project phases
2	asdf	Less resources for run SAP in futur	IT	19.11.08	rad	Jun. 10	2	5	10		Wait of detailed IT architecture information
3	asdf	Scope of divisional planning	BM	14.08.08	Unknown business requirements	Sep. 08	2	3	6		Scope has to be roughly defined in early stage of concept phase. Implementation is included in 2009.

# When planning and controlling resources it is important to keep some facts in mind

## Resource Monitoring – Recommendations

### Loading Resources

- Assign & monitor experienced resources to critical path tasks to mitigate the risk of schedule slippage.
- If resource availability permits, assign the same resource to work on inter-related tasks in the work plan.
- Take advantage of the context the resource has specific to the work and increase efficiency.
- Avoid assigning multiple resources to a task.



**Select and monitor the resource with the right experience and skills for the task.**

### Monitoring Resources

- Examples of over-utilization – during planning:
  - Fulltime assignment on >1 task during the same time.
  - Assignment to a summary task and 1+ of the subtasks.
- Examples of over-utilization – after project start:
  - Increased duration of tasks.
  - Increased assignment units for resources.
  - Decreased unit availability for resources.



**A flexible project structure is required as from time to time there are likely to be resources that are over or under-utilized.**

### Levelling Resources

- Do not plan for an absolute 100% utilization of all resources.
- At Accenture it is important for resources to have time for non-project activities important to our organization and to the morale of the resources (such as PTO, training, community meetings, etc.).
- Consider the morale of individuals.



**Maximize resource utilization without exceeding their availability.**

Keeping a few rules in mind can help you to manage your daily project work in a successful manner

## 11 Golden Rules in Practice

- #1 – Only completion is final**
- #2 – Climb the wall. Problems are your business**
- #3 – Escalate problems quickly**
- #4 – Give managers a chance to manage**
- #5 – Problems need owners**
- #6 – Ask (the right) questions**
- #7 – Issues and risks are different**
- #8 – Always have a work plan**
- #9 – Know your status – KPIs (CV, SV, CPI, SPI)**
- #10 – Stay clear on scope**
- #11 – Write it down**



Q&A

**Sascha Kolbuch**

>  
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