

# KISS – Keeping It Simple - Scheduling



4 Basic Steps to Project Planning

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PMI PPD 2016



Presented by  
Angelo Arcoleo, PMP

4 Basic Steps to Project Planning

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# PMI PPD 2016 - Keeping It Simple – Scheduling

## 4 Basic Steps to Project Planning

All too often Projects get complicated and confusing very quickly. In this presentation we'll look at a simple 4-step approach to Planning a Project.

- Breakdown your Work
- Organize your Workforce
- Plan your Tasks, and
- Manage your Budget

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4 Basic Steps to Project Planning

...or NOT!

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## 4 Basic Steps to Project Planning

This simple 4-step approach to Planning a Project translates to 4 Project Management **topics**:

1. Work Plan – Work Breakdown Structure
2. Resource Plan – Organizational Breakdown Structure
3. Task Plan – Task Management
4. Budget Plan – Budget Management

# PMI PPD 2016 - Keeping It Simple – Scheduling 4 Basic Steps to Project Planning

This simple 4-step approach to Planning a Project translates to 4 Project Management **tools**:

1. Work Plan – WBS – **Critical Tools WBS Chart Pro**
2. Resource Plan – OBS – **Microsoft Project Resource Sheet**
3. Task Plan – **Microsoft Project Task Sheet / Gantt Chart**
4. Budget Plan – **Microsoft Project – Report Tools**



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## 4 Basic Steps to Project Planning

### 1. WBS – Work Breakdown Structure

- A work breakdown structure (WBS), in project management and systems engineering, is a deliverable-oriented decomposition of a project into smaller components.
- A work breakdown structure element may be a product, data, service, or any combination thereof.
- A WBS also provides the necessary framework for detailed cost estimating and control along with providing guidance for schedule development and control.<sup>[1]</sup>

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## 4 Basic Steps to Project Planning

### 2. OBS - Organizational Breakdown Structure

- Organization Breakdown Structure (also known as OBS) is a hierarchical model describing the established organizational framework for project planning, resource management, time and expense tracking, cost allocation, revenue/profit reporting, and work management.

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## 4 Basic Steps to Project Planning

### 2. OBS - Organizational Breakdown Structure

- Preparation of an OBS uses a process similar to that of a WBS but for an organizational structure instead of work. Project management breaks down the project team into organizational units that will take on specific responsibilities. The key is to have an organizational unit ready to carry out each task of a WBS. When the WBS includes a task such as purchase of accounting software, the OBS must have an organizational unit for purchasing.

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### 3. Task Planning - Task management

- Task management is the process of managing a task through its life cycle. It involves planning, testing, tracking and reporting. Task management can help either
  - individuals achieve goals, or
  - groups of individuals collaborate and share knowledge for the accomplishment of collective goals.<sup>[1]</sup>
- Tasks are also differentiated by complexity, from low to high.<sup>[1]</sup>

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### 3. Task Planning - Task management

- Effective task management requires managing all aspects of a task, including its status, priority, time, human and financial resources assignments, recurrence, notifications and so on. These can be lumped together broadly into the basic activities of task management.

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### 3. Task Planning - Task Management (cont.)

- Managing multiple individual or team tasks may require specialized software, for example workflow or project management software. In fact, many people believe that task management should serve as a foundation for project management activities.<sup>[2]</sup>

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### 3. Task Planning - Task Management (cont.)

- Task management may form part of project management and process management and can serve as the foundation for efficient workflow in an organization. Project managers adhering to task-oriented management have a detailed and up-to-date project schedule, and are usually good at directing team members and moving the project forward.<sup>[3]</sup>

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### 4. Budget Management

- A budget is a quantitative expression of a plan for a defined period of time. It may include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows. It expresses strategic plans of business units, organizations, activities or events in measurable terms.[\[1\]](#)



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## 4 Basic Steps to Project Planning

### Microsoft Project - Bringing it all together...

- Microsoft Project is a project management software program developed by Microsoft, designed to assist project managers in developing a WBS plan, assigning OBS resources to plan tasks, track progress, manage the budget, and analyze workloads.



# 1. WBS – Schedule Pro Overview

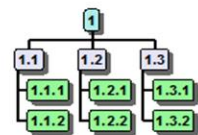
The screenshot shows the Critical Tools website interface. At the top, there is a navigation bar with links for HOME, PRODUCTS, PURCHASE, SUPPORT, and COMPANY. The main content area features a large box titled "Visual Project Planning" containing a hierarchical Work Breakdown Structure (WBS) chart for a "Software Project".

The WBS chart is structured as follows:

- 1 Software Project (\$15,500.00, 710 hours)
  - 1.1 Planning Summary (\$3,000.00, 240 hours)
    - 1.1.1 Task 1 (\$1,000.00, 60 hours)
    - 1.1.2 Task 2 (\$2,000.00, 180 hours)
  - 1.2 Coding Summary (\$4,000.00, 95 hours)
    - 1.2.1 Task 3 (\$2,500.00, 75 hours)
    - 1.2.2 Task 4 (\$1,500.00, 20 hours)
  - 1.3 Testing Summary (\$8,500.00, 375 hours)
    - 1.3.1 Task 5 (\$3,500.00, 150 hours)
    - 1.3.2 Task 6 (\$5,000.00, 225 hours)

Below the chart, the text "WBS Schedule Pro" is displayed in red, followed by a green "Download" button with a downward arrow icon.

The simplicity of **WBS Charts** combined with the scheduling power of **Network Charts**



## WBS Chart Planning

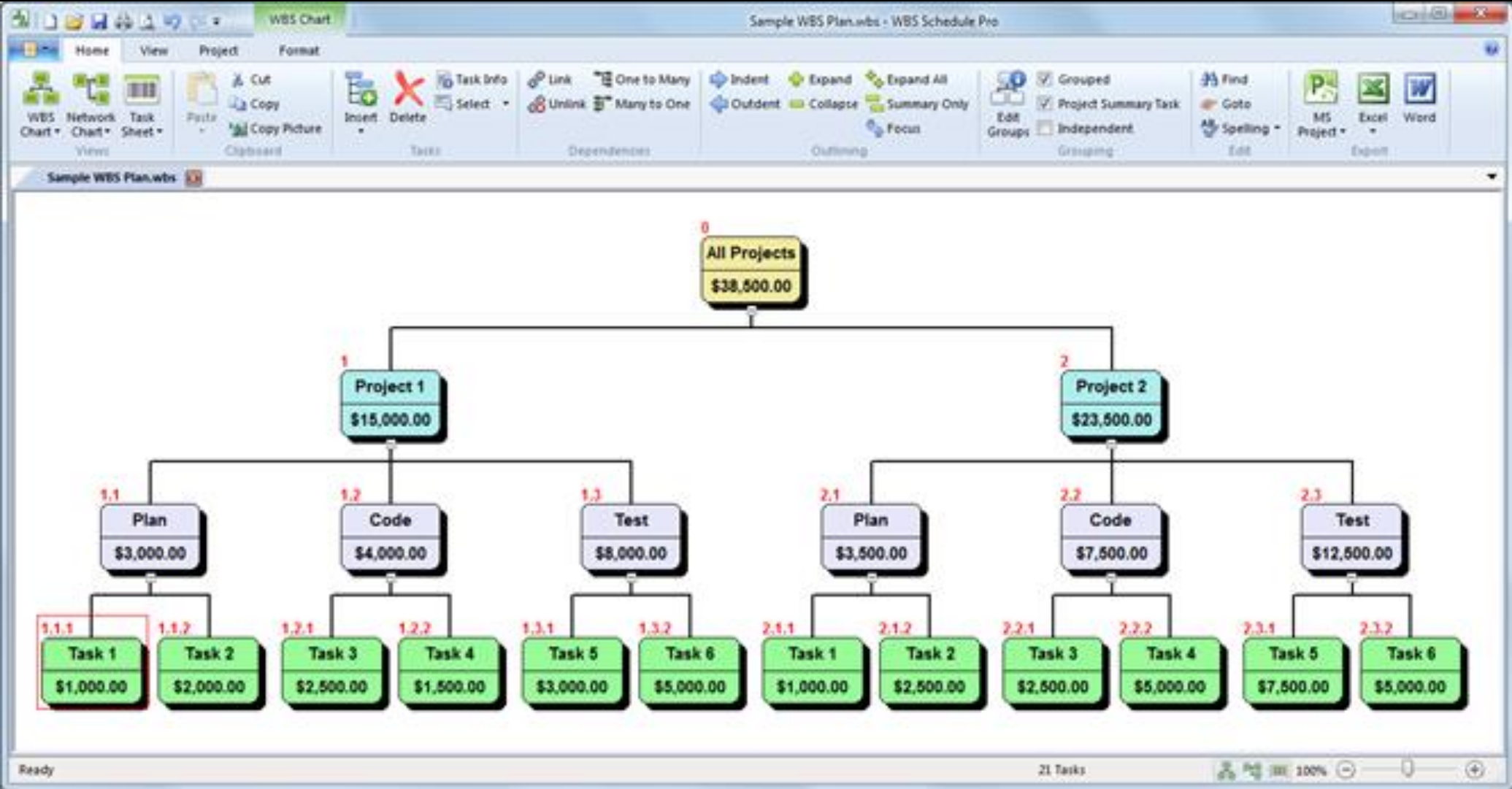
Use the WBS Chart in **WBS Schedule Pro** to brainstorm projects by breaking them down into manageable pieces. This visual way of creating projects using a Top-Down approach makes for more comprehensive project plans. Great for team planning sessions. WBS Charts are perfect for presenting your project to your team, management, clients and/or key stakeholders.



## Network Chart Scheduling

You need a schedule, you need to see the Critical Path, you need to create the workflow for the tasks in your project. Use the Network Chart in **WBS Schedule Pro** to easily define the dependencies in your project. Click and drag to create links. Define the logic between tasks and create the Critical Path. Only then can you know the tasks that are vital to finishing your project on time!

# 1. WBS – Work Breakdown Structure



1.1  
General Conditions

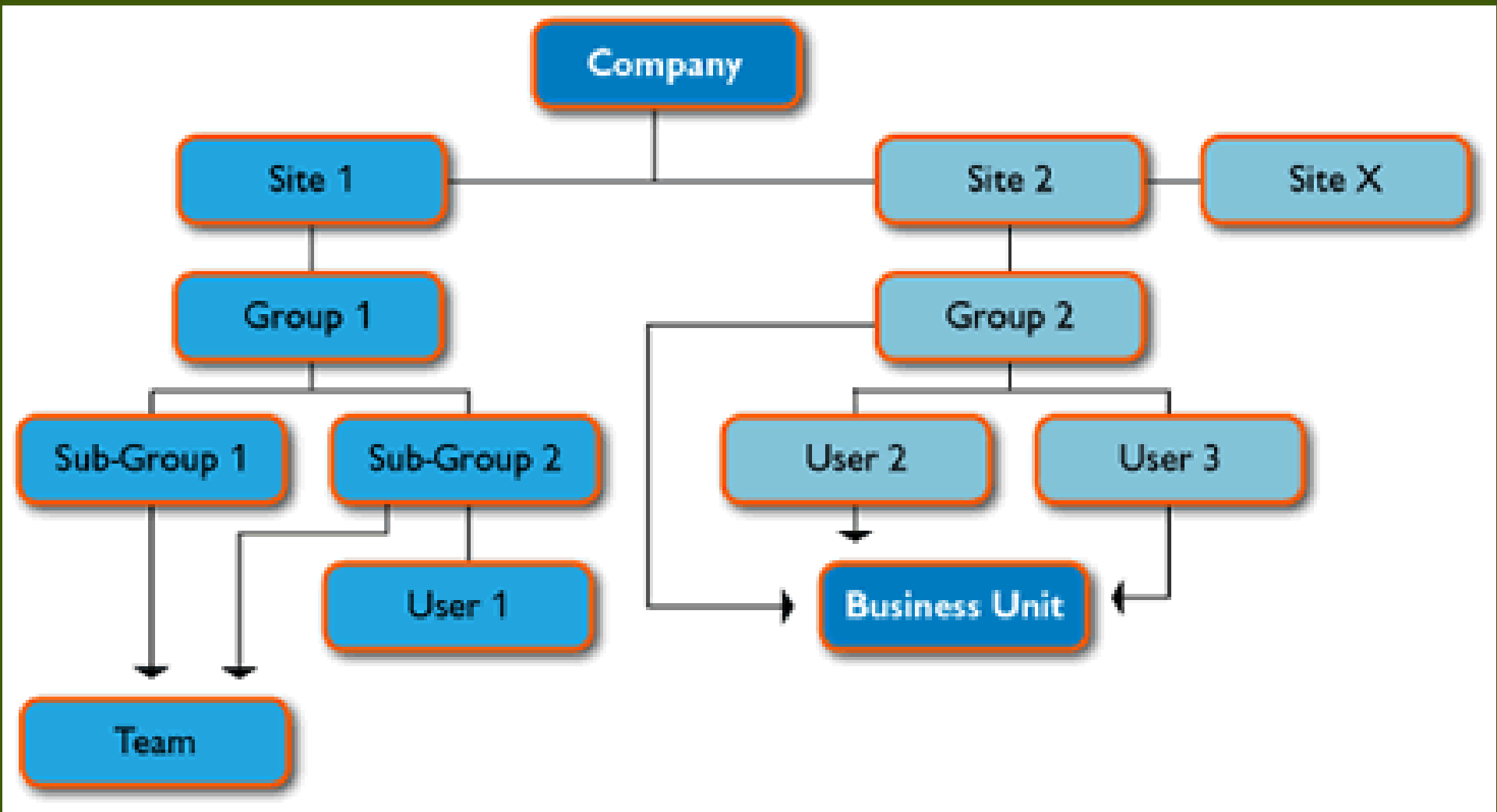
1.18  
Complete Final Inspections

# 1. WBS – Work Breakdown Structure

Commercial construction project plan  
Gantt Chart All Tasks

ID	WBS	Task Name	Duration	Start	Finish	2015												2016											
						May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan			
0	0	Commercial construction project plan	370 days	5/25/15	10/21/16	[Gantt bar spanning from May 2015 to Oct 2016]																							
1	1	Three-story Office Building (76,000 square feet)	370 days	5/25/15	10/21/16	[Gantt bar spanning from May 2015 to Oct 2016]																							
2	1.1	General Conditions	17 days	5/25/15	6/16/15	[Gantt bar from May 25 to June 16, 2015]																							
18	1.3	Mobilize on Site	10 days	5/28/15	6/10/15	[Gantt bar from May 28 to June 10, 2015]																							
24	1.4	Site Grading and Utilities	35 days	6/11/15	7/29/15	[Gantt bar from June 11 to July 29, 2015]																							
10	1.2	Long Lead Procurement	80 days	6/17/15	10/6/15	[Gantt bar from June 17 to October 6, 2015]																							
32	1.5	Foundations	33 days	7/30/15	9/14/15	[Gantt bar from July 30 to September 14, 2015]																							
47	1.6	Steel Erection	45 days	10/7/15	12/8/15	[Gantt bar from October 7 to December 8, 2015]																							
54	1.7	Form and Pour Concrete - Floors and Roof	85 days	10/21/15	2/16/16	[Gantt bar from October 21 to February 16, 2016]																							
79	1.9	Masonry Work	110 days	11/18/15	4/19/16	[Gantt bar from November 18, 2015 to April 19, 2016]																							
110	1.13	Elevators	40 days	12/16/15	2/9/16	[Gantt bar from December 16, 2015 to February 9, 2016]																							
126	1.16	Heating and Ventilating - AC	190 days	12/16/15	9/6/16	[Gantt bar from December 16, 2015 to September 6, 2016]																							
119	1.15	Electrical	149 days	1/28/16	8/23/16	[Gantt bar from January 28, 2016 to August 23, 2016]																							
77	1.8	Carpentry Work	15 days	2/17/16	3/8/16	[Gantt bar from February 17 to March 8, 2016]																							
87	1.10	Roofing	28 days	4/13/16	5/20/16	[Gantt bar from April 13 to May 20, 2016]																							
93	1.11	Window wall and store front closures	70 days	4/13/16	7/19/16	[Gantt bar from April 13 to July 19, 2016]																							
114	1.14	Plumbing	100 days	4/20/16	9/6/16	[Gantt bar from April 20 to September 6, 2016]																							
98	1.12	Building Finishes	90 days	5/18/16	9/20/16	[Gantt bar from May 18 to September 20, 2016]																							
132	1.17	Final Clean-up and Occupancy	60 days	7/6/16	9/27/16	[Gantt bar from July 6 to September 27, 2016]																							
137	1.18	Complete Final Inspections	19 days	9/27/16	10/21/16	[Gantt bar from September 27 to October 21, 2016]																							

## 2. OBS - Organizational Breakdown Structure



# 2. OBS – Resource Sheet in Microsoft Project

Commercial construction project plan.mpp - Project Professional

RESOURCE SHEET TOOLS

FILE TASK RESOURCE REPORT PROJECT Agile Views and Reports VIEW ADD-INS Widgets and Driving Path Tools WBS Schedule Pro Run!23 FORMAT

Network Diagram Resource Usage Resource Sheet Highlight: [No Highlight] Timescale: Months Zoom Entire Project Selected Tasks

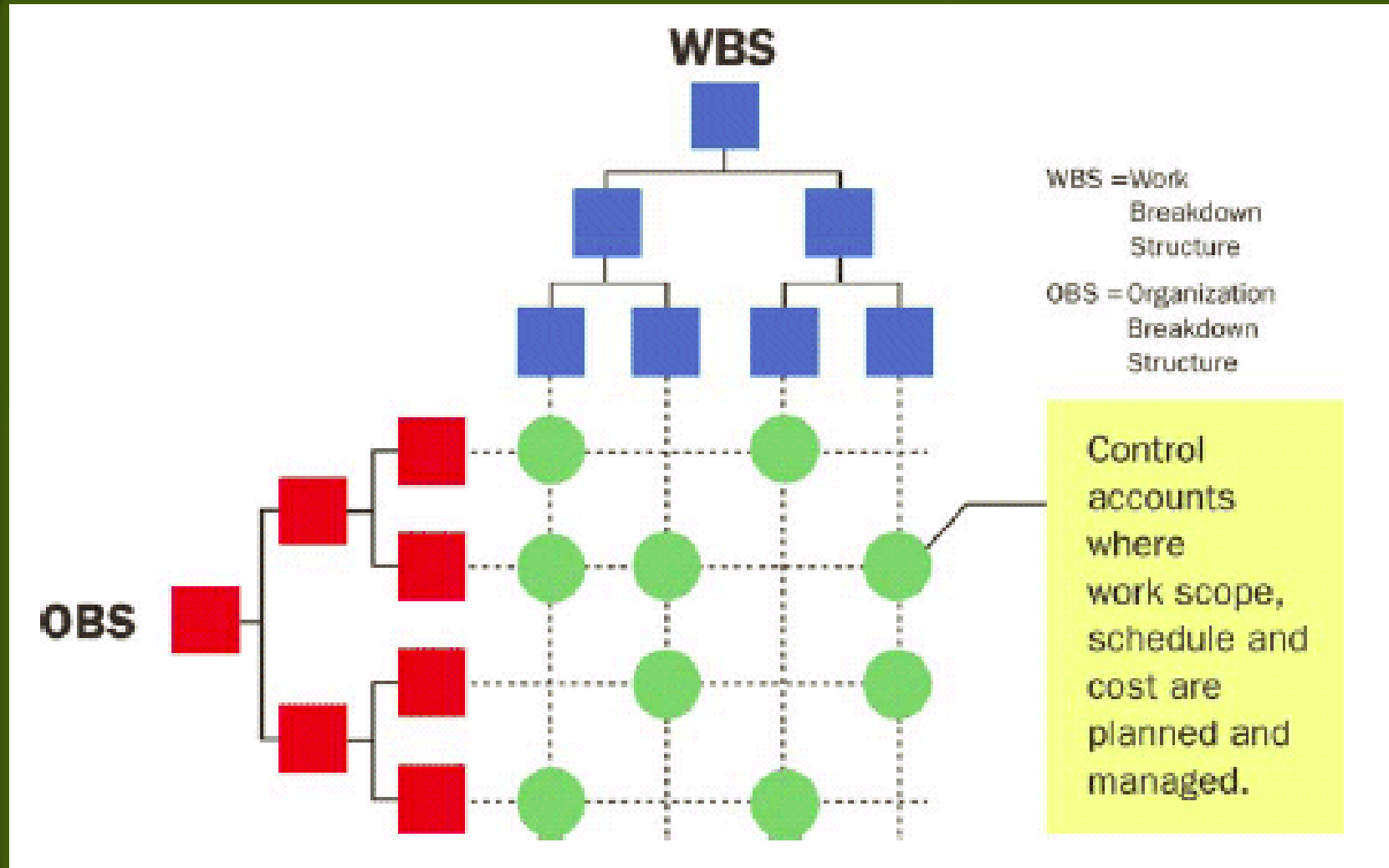
Task Views Resource Views Data

Summary Tasks Details Indent Name Display Add New Column

	Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt.	Cost/Use	Accrue At	Base	Code
1	G.C. General Management	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
2	G.C. Project Management	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
3	G.C. Procurement	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
4	G.C. Scheduler	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
5	G.C. Accounting	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
6	G.C. Superintendent	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
7	G.C. Survey Crew	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
8	G.C. Rough Carpenter Crew	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
9	G.C. Labor Crew	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
10	G.C. Concrete Crew	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
11	G.C. Finish Carpenter Crew	Work		G		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
12	Site Grading Contractor	Work		S		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
13	Plumbing Contractor	Work		P		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
14	Plumbing Contractor Management	Work		P		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
15	Electric Contractor	Work		E		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
16	Electric Contractor Management	Work		E		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
17	HVAC Contractor	Work		H		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
18	HVAC Contractor Management	Work		H		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
19	Elevator Contractor	Work		E		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
20	Elevator Contractor Management	Work		E		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
21	Steel Erection Contractor	Work		S		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
22	Steel Erection Contractor Management	Work		S		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
23	Drywall Contractor	Work		D		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
24	Masonry Contractor	Work		M		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
25	Tile Contractor	Work		T		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
26	Roofing Contractor	Work		R		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
27	Roofing Contractor Management	Work		R		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
28	Window Contractor	Work		W		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
29	Carpet Contractor	Work		C		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
30	Landscape Contractor	Work		L		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
31	Paving Contractor	Work		P		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	
32	Painting Contractor	Work		P		1	\$0.00/hr	\$0.00/hr	\$0.00	Prorated	Standard	

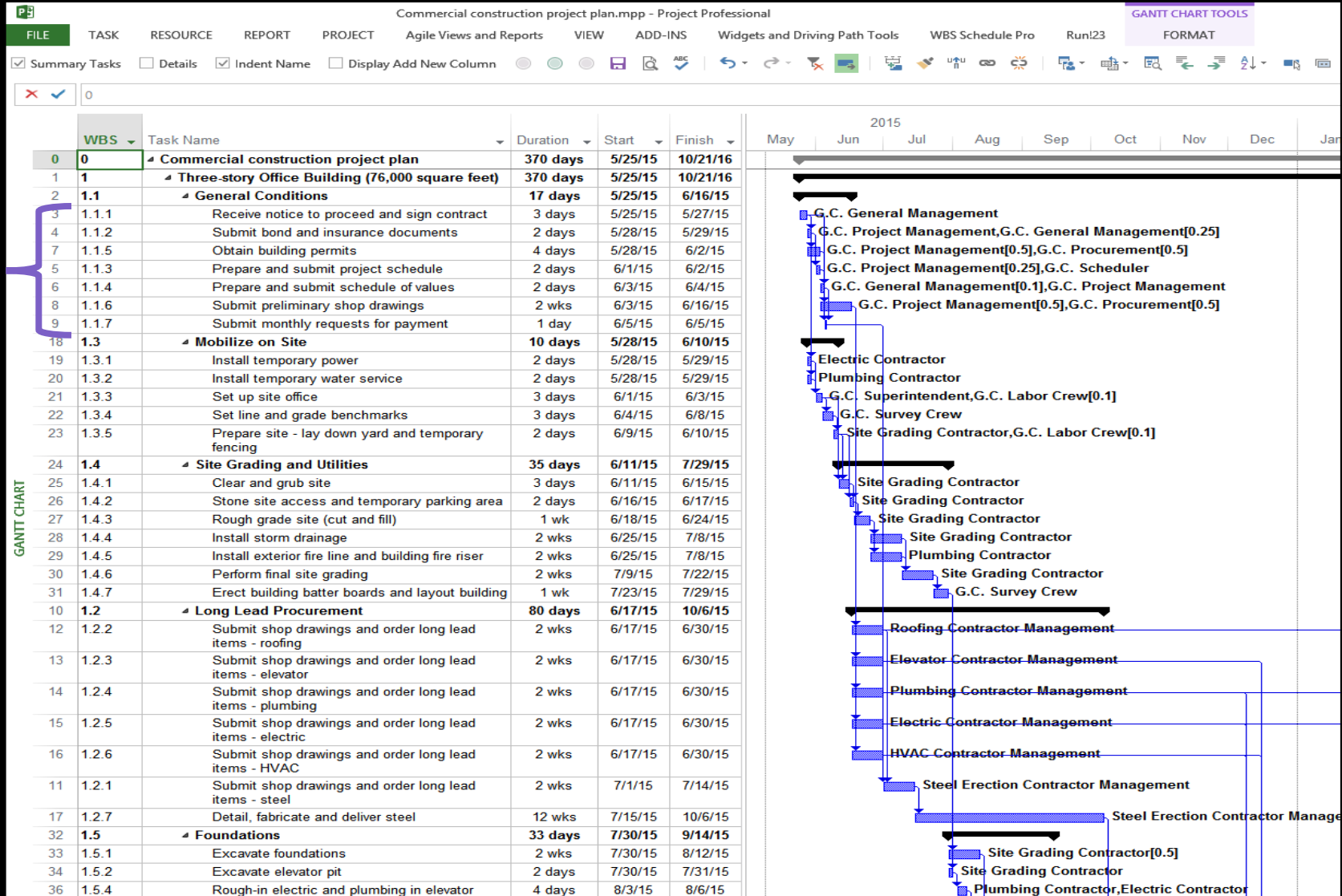
RESOURCE SHEET

# 1. (WBS) + 2. (OBS) = Control Accounts



# 3. Task Planning - Task management

ID	WBS	Task Name
0	0	Commercial construction p
1	1	Three-story Office Buildi
2	1.1	General Conditions
18	1.3	Mobilize on Site
24	1.4	Site Grading and Utilit
10	1.2	Long Lead Procureme
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126	1.16	Heating and Ventilatin
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87	1.10	Roofing
93	1.11	Window wall and store
114	1.14	Plumbing
98	1.12	Building Finishes
132	1.17	Final Clean-up and Oc
137	1.18	Complete Final Inspec





# 4. Budget Plan – Budget Management

## CREATE A BUDGET

5 simple steps to track your project's budget.

1. [Create Budget Resources](#)

2. [Assign them to the Project summary task](#)

3. [Add Budget Work and Cost to your plan](#)

4. [Specify the Budget](#)

5. [GroupBy Budget Type custom field](#)

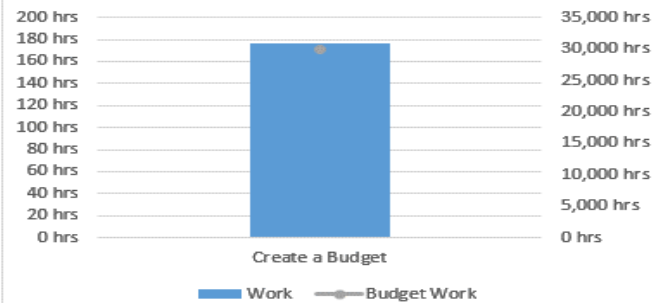
Watch this demo  
to learn more



CREATE A BUDGET

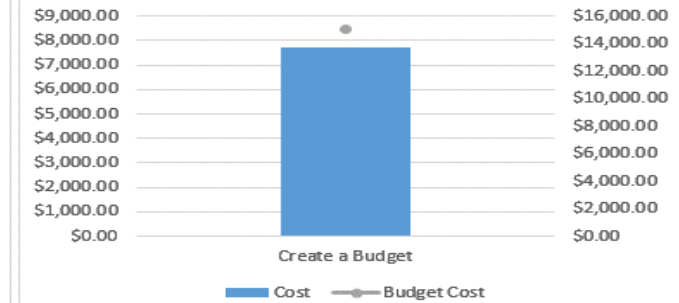
### BUDGET WORK

Shows the current work planned and the budget work defined for the project. The budget work is plotted on the secondary axis.



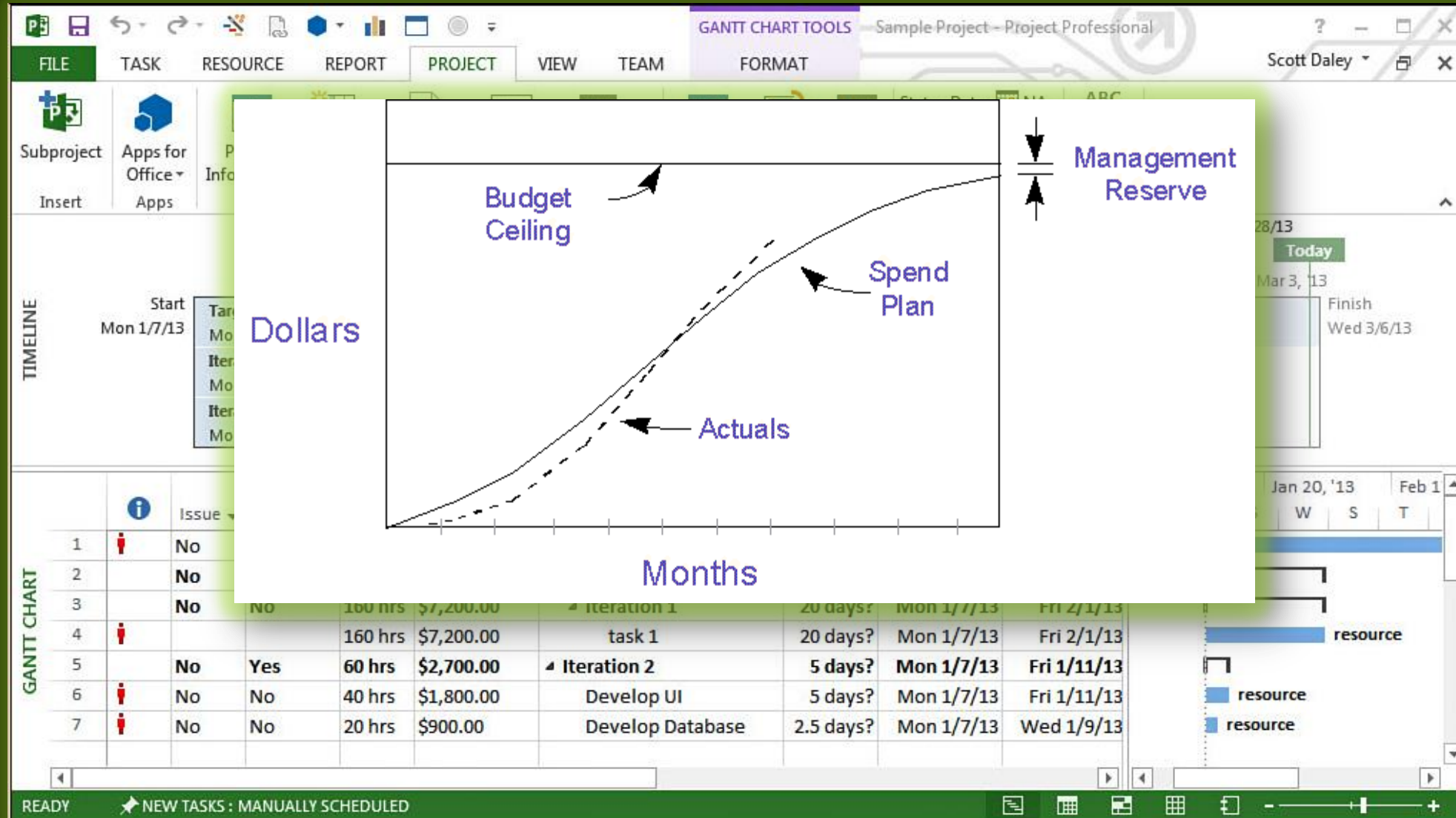
### BUDGET COST

Shows the current spending and the budget cost defined for the project. The budget cost is plotted on the secondary axis.



Name	Budget Work	Work	Budget Cost	Cost
<b>Budget Type: Labor</b>	<b>30,000 hrs</b>	<b>176 hrs</b>		<b>\$7,720.00</b>
Jon		72 hrs		\$2,880.00
Sonia		72 hrs		\$3,240.00
Brian		32 hrs		\$1,600.00
Budget - Labor	30,000 hrs			
<b>Budget Type: Travel</b>			<b>\$15,000.00</b>	<b>\$0.00</b>
Airfare				\$0.00
Lodging				\$0.00
Budget - Travel			\$15,000.00	

# 4. Budget Plan – Budget Management



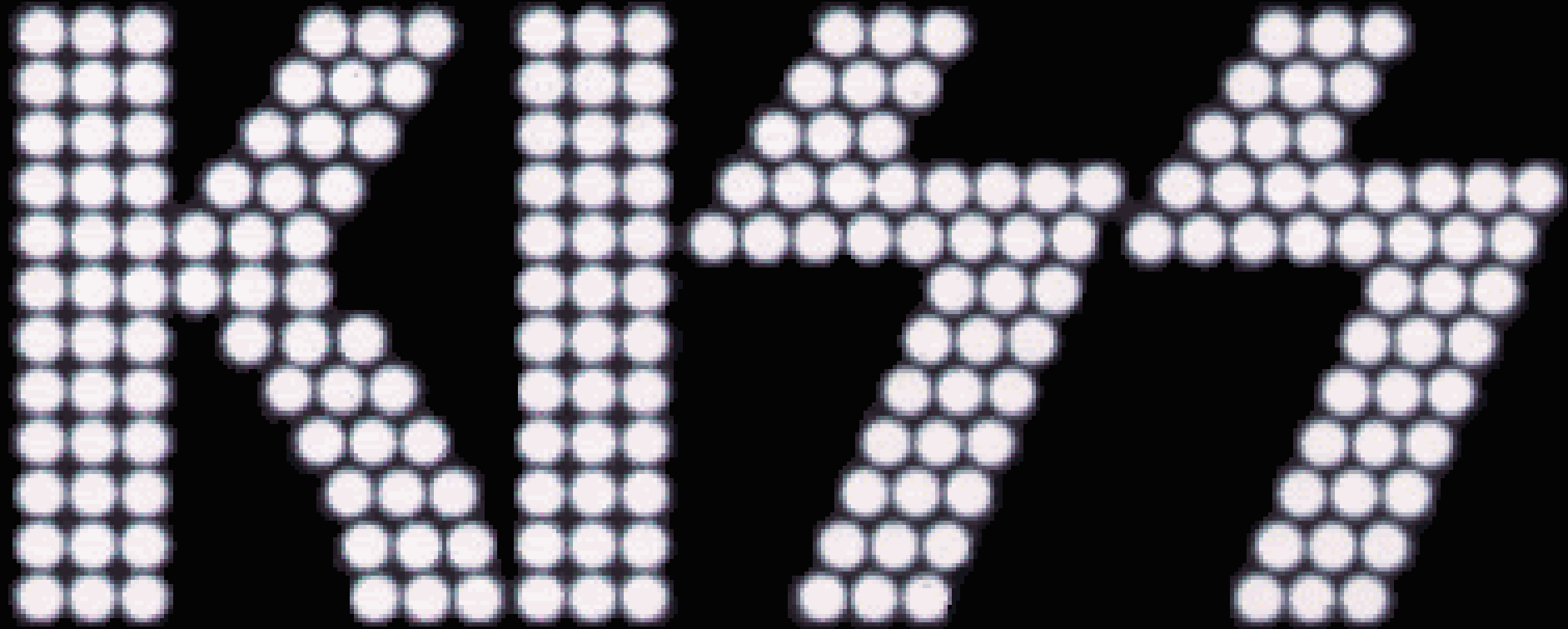
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4 Basic Steps to Project Planning

You have now seen how this simple 4-step approach  
to Planning a Project translates to  
4 Project Management topics:

1. Work Plan – Work Breakdown Structure
2. Resource Plan – Organizational Breakdown Structure
3. Task Plan – Task Management, and
4. Budget Plan – Budget Management

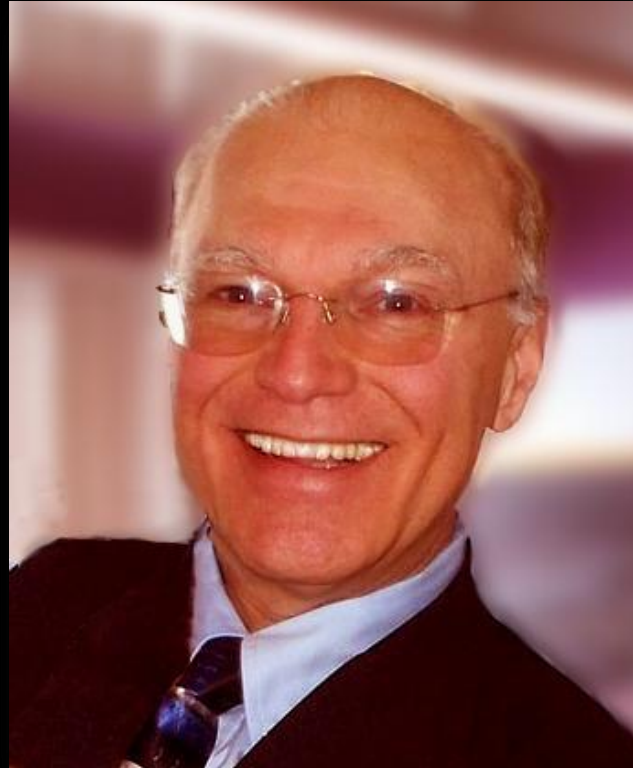
# Questions

## KISS - Keeping It Simple - Scheduling



4 Basic Steps to Project Planning

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# Products discussed in this presentation



[http://www.microsoftstore.com/store/msusa/en\\_US/pdp/Project-Professional-2013/productID.259322800](http://www.microsoftstore.com/store/msusa/en_US/pdp/Project-Professional-2013/productID.259322800)

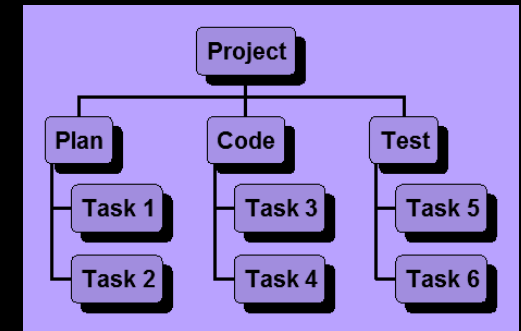


<http://www.projectprocorp.com/freeDownloads.php>



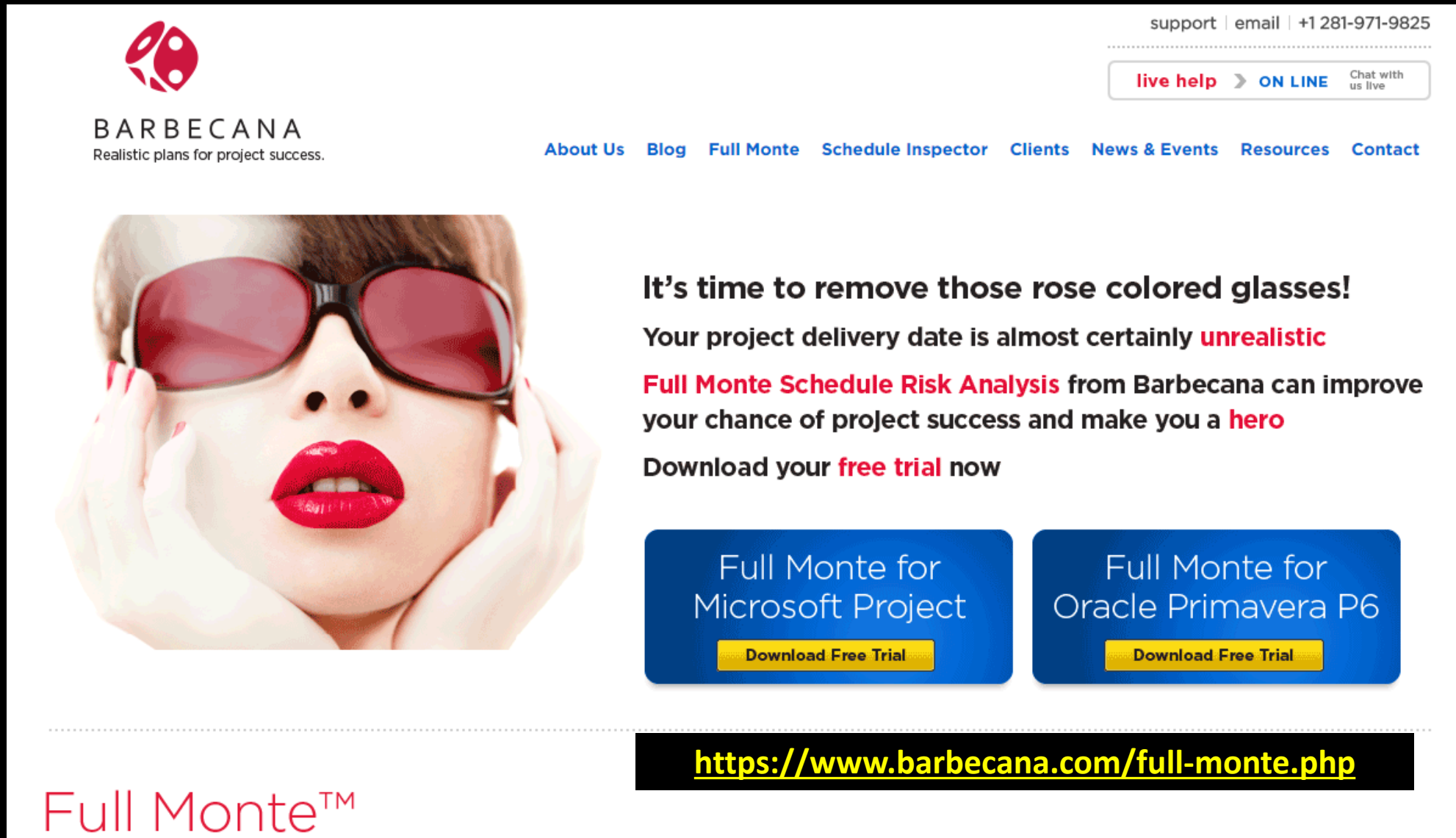
## CRITICAL TOOLS

### WBS Schedule Pro



<http://www.criticaltools.com/download.html>

# Products **not previously** discussed in this presentation




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