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FOR THE ONES WHO GET IT DONE

Work Breakdown Structure
Program Evaluation and Review Technique
(WBS & PERT)
From
Critical Tools

Agenda

- Why?
- Definitions
- Critical Tools Live Demo (w/backup slides)
- Q & A

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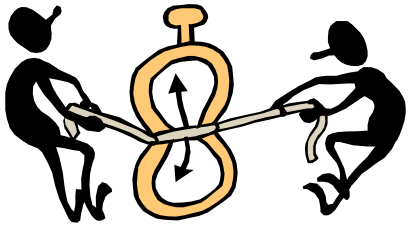
Why?

- How many PMs produce WBS in a formal or consistent manner for each project?
- How many project plans are different than what the Stakeholders expect it was?
- How many team resources thought they were working on the right deliverables?
- What is the single most important element in a project plan?



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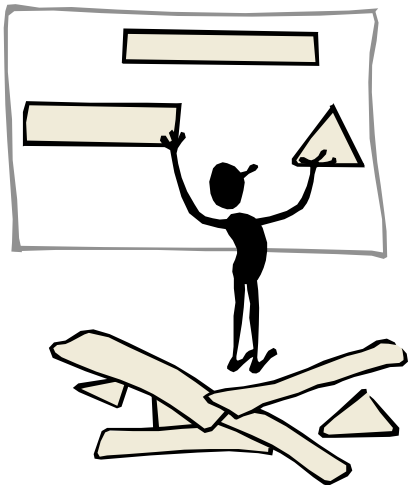
Why are we interested in better planning?

- PMOs has gotten to the point where forecasting needs to be more comprehensive and defensible
- Higher quality plans are necessary to improve our confidence in:
  - Resource assignments
  - Resource forecasts
  - Dependencies within plans and between plans
- Better information is necessary to leverage automation, particularly as it relates to scheduling and tracking progress



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Why focus on WBS and PERT?

- WBS = The Scope (or All of the Work)
- PERT = Graphical visualization of Sequence and Dependencies
- A high quality WBS and PERT chart is the foundation of every project
- For integrated planning, information residing in different WBS and PERT charts needs to be related. As such, consistency and quality is critical
- So, anything that improves the consistency and/or quality of WBS and PERT charts is worth considering

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What is a WBS?

- Official PMBOK Definition
  - WBS is a deliverable-oriented hierarchical decomposition of the work to be executed by the project team, to accomplish the project objectives and create the required deliverables
  - WBS represents the work specified in the current approved project scope/charter statement
  - Components comprising the WBS assist the stakeholders in viewing the deliverables of the project

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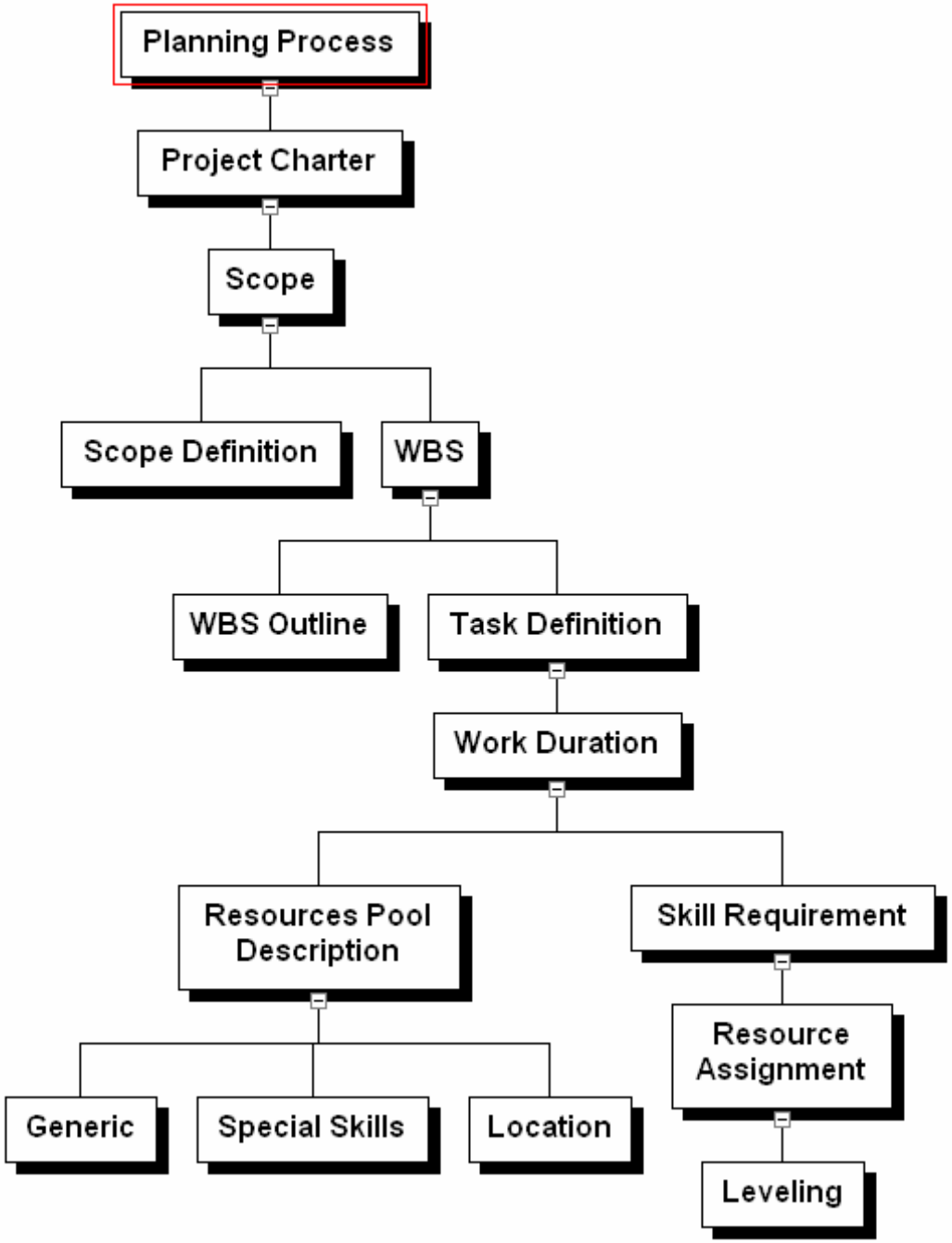
WBS?



With detailed outputs

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Sample View of a WBS in MS Project

WBS	Name	Duration	Start	Finish
1.3	**Execute/Deploy**	**48 days**	**Mon 8/6/07**	**Wed 10/10/07**
1.3.1	**Compliance Data Collection Tool**	**41 days**	**Mon 8/6/07**	**Mon 10/1/07**
1.3.1.1	Submit request for contract	3 days	Mon 8/6/07	Wed 8/8/07
1.3.1.2	Review initial contract and provide changes	3 days	Thu 8/9/07	Mon 8/13/07
1.3.1.3	Obtain finalized contract	3 days	Tue 8/14/07	Thu 8/16/07
1.3.1.4	Confirm data logistics	7 days	Fri 8/17/07	Mon 8/27/07
1.3.1.5	Conduct status updates (bi-weekly)	25 days	Tue 8/28/07	Mon 10/1/07
1.3.2	**HRIS Reports & Organizational Data (GIS & LSS)**	**21 days**	**Tue 8/21/07**	**Tue 9/18/07**
1.3.2.1	Hierarchy Report	2 days	Wed 8/22/07	Thu 8/23/07
1.3.2.2	DC Employee Report	1 day	Wed 8/22/07	Wed 8/22/07
1.3.2.3	Open Position Report	1 day	Tue 8/21/07	Tue 8/21/07
1.3.2.4	Second Level Manager of Open Chief Positions Report	1 day	Tue 8/21/07	Tue 8/21/07
1.3.2.5	Leave of Absense (LOA) & Termination Report	20 days	Wed 8/22/07	Tue 9/18/07

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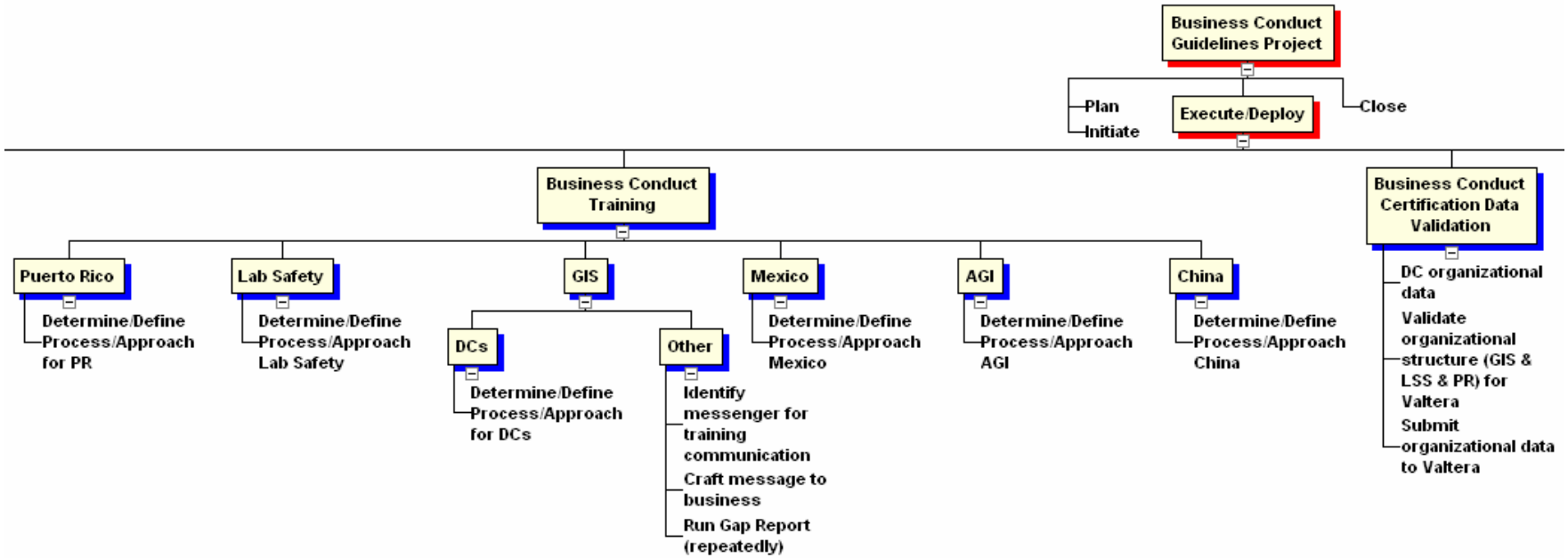
Sample Graphical View of a WBS



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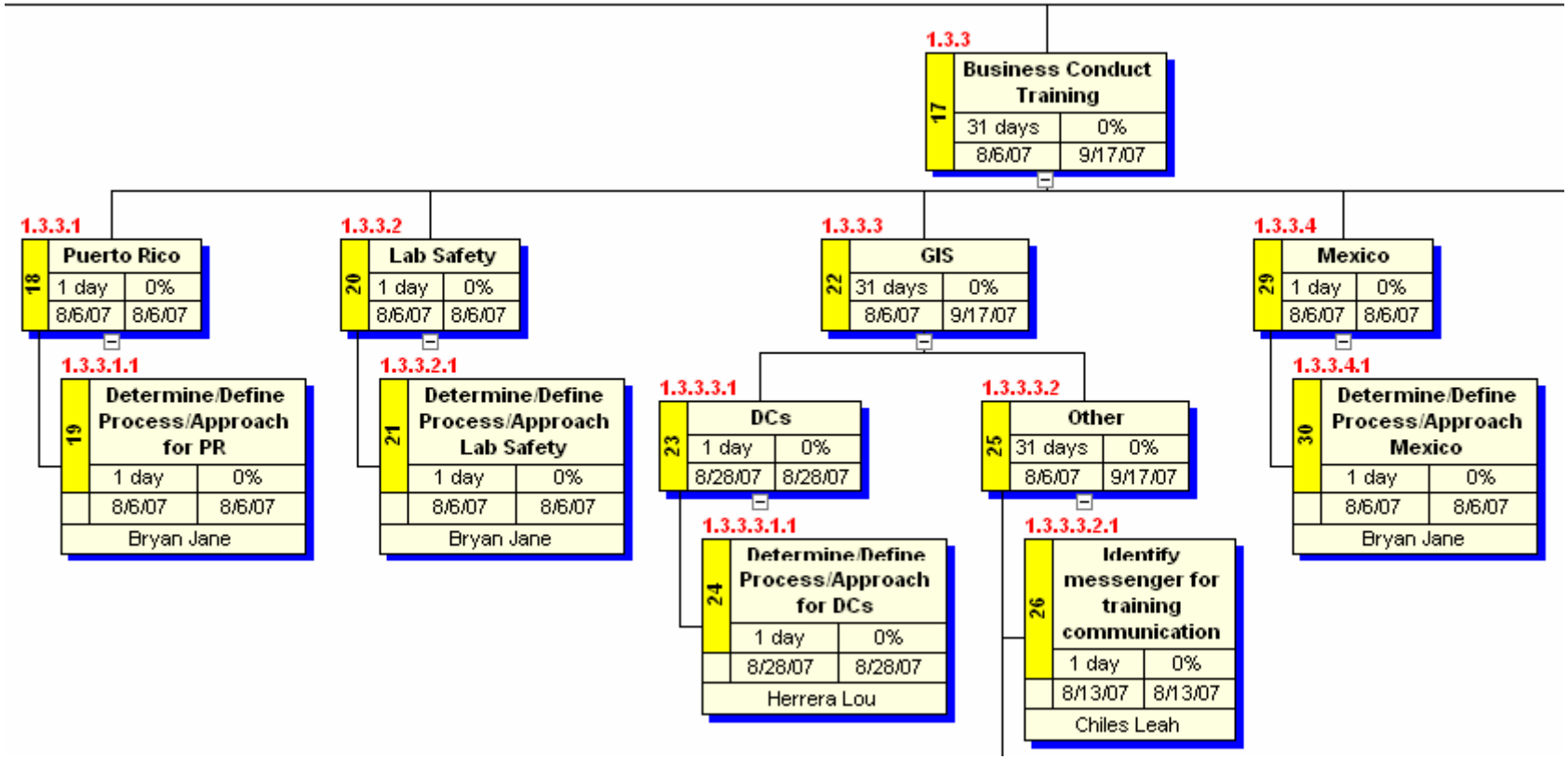
WBS Close Up View



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What is a PERT?

- Definition Varies
  - PERT stands for Program Evaluation and Review Technique
  - Invented by the US DoD
  - A PERT chart is a project management tool used to schedule, organize, and coordinate tasks within a project
  - PERTs become very complex very quickly, so the key to usage is to plan and manage small chunks of work

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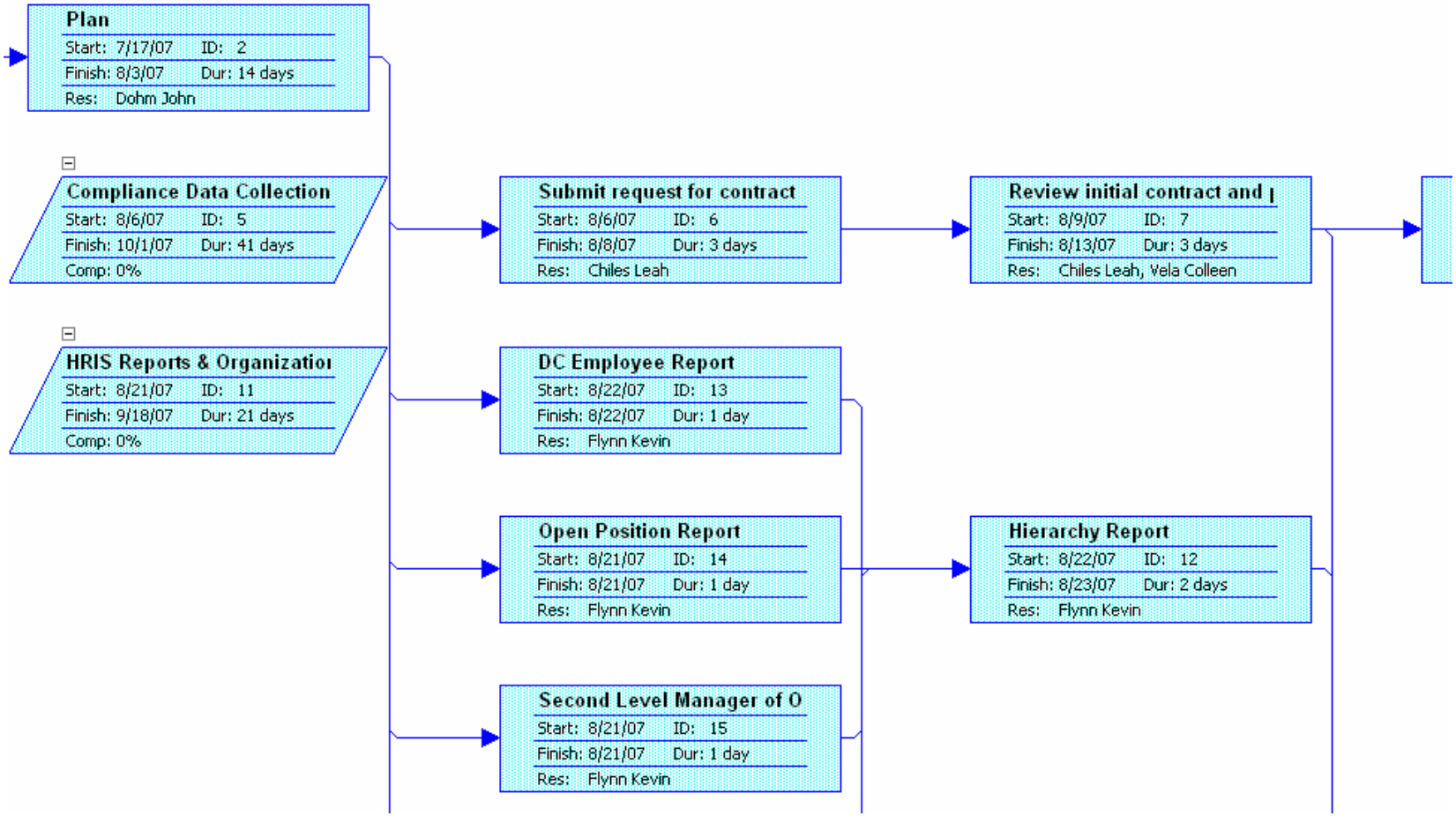
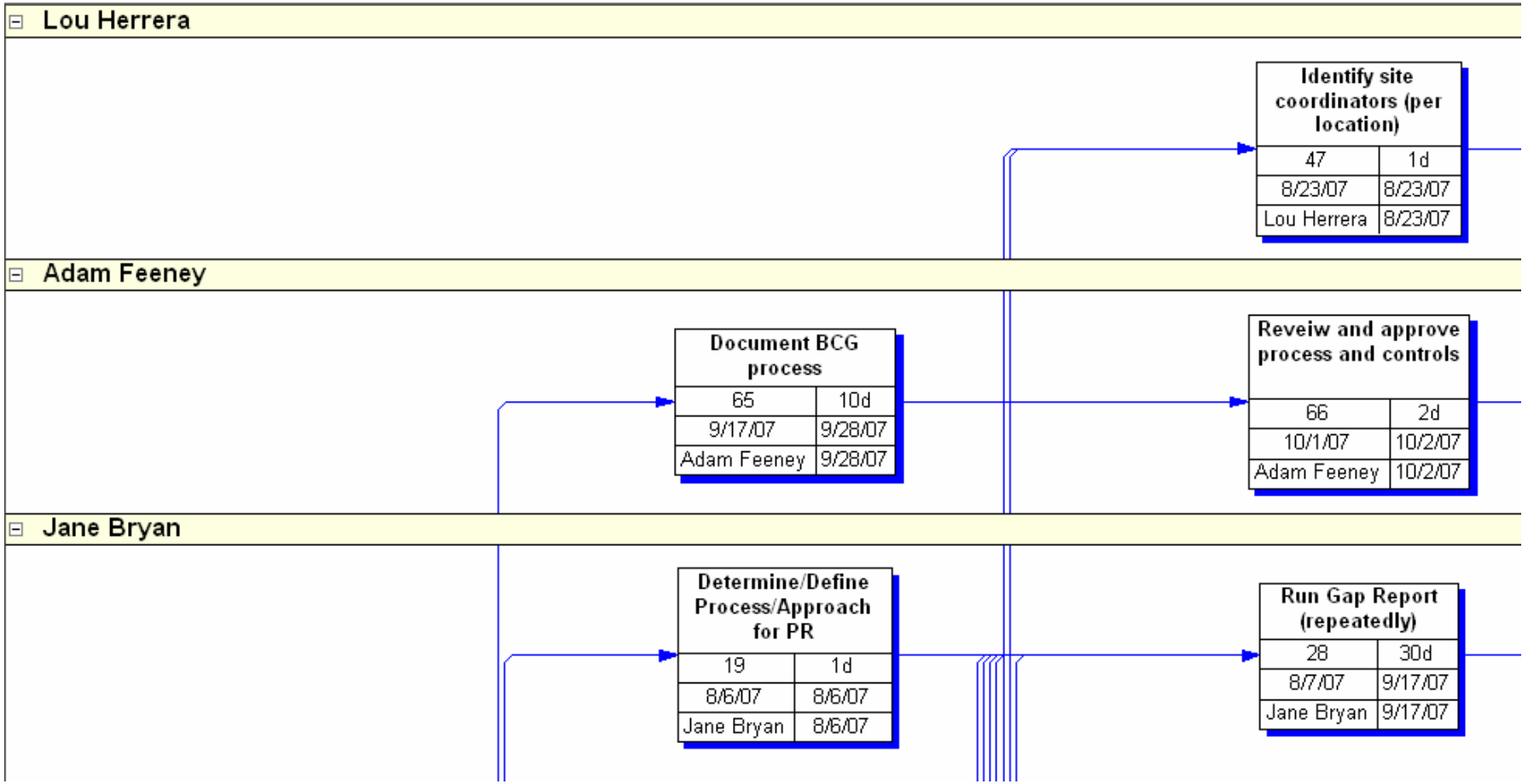
Sample Network Diagram in MS Project



PERT View by Owner



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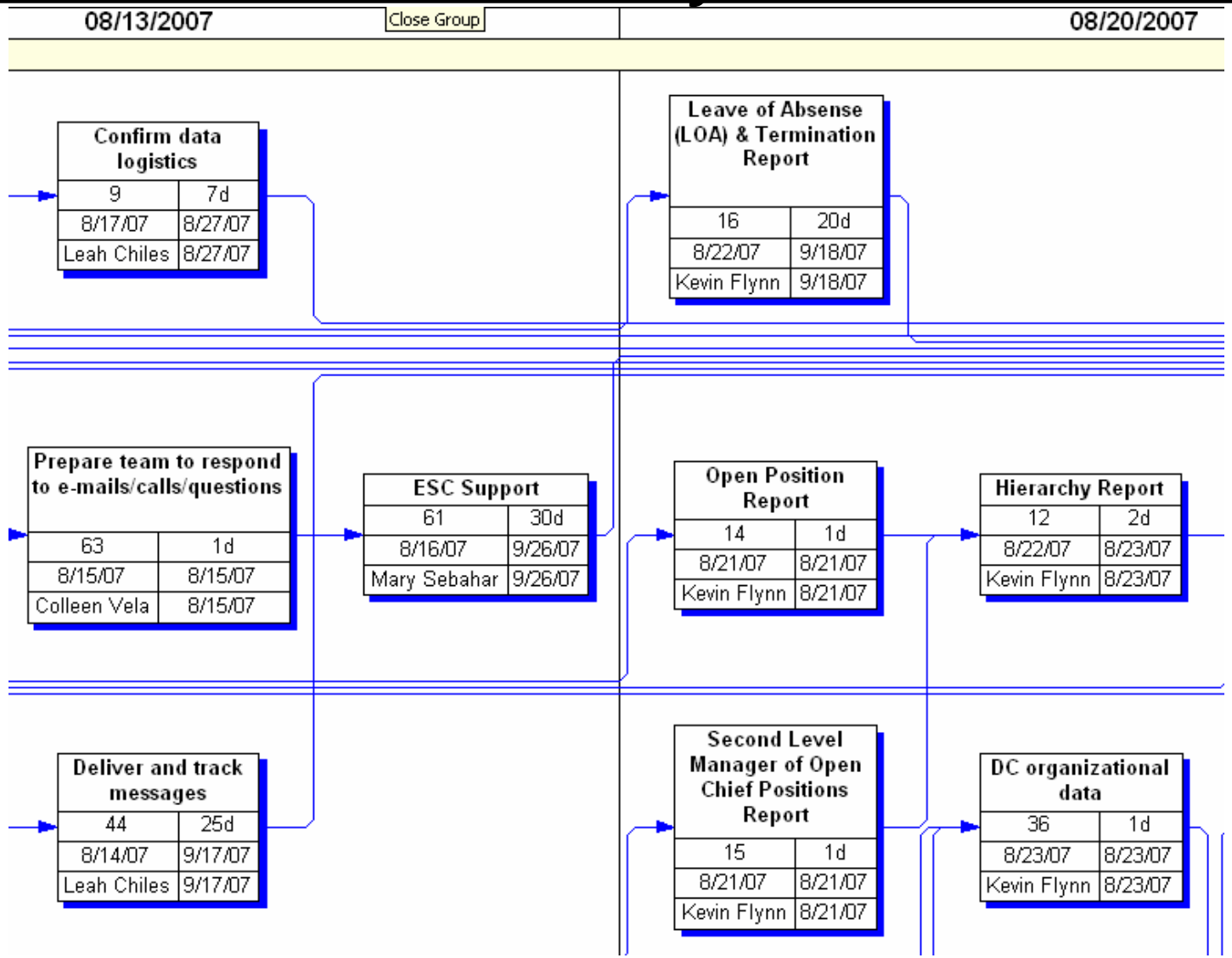
PERT View by Date



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Pre-Demo Question

- How easy is it for PMs to iterate and collaborate to develop comprehensive and up-to-date WBS and PERT charts?

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Insert DEMO

Contact Information:
Edward W. Rosenthal, MPM, PMP
rosenthal3@aol.com

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Government Standards

NOT MEASUREMENT SENSITIVE

MIL-HDBK-881A
30 JULY 2005

SUPERSEDING
MIL-HDBK-881
2 JANUARY 1998

DEPARTMENT OF DEFENSE HANDBOOK

WORK BREAKDOWN STRUCTURES FOR DEFENSE MATERIEL ITEMS

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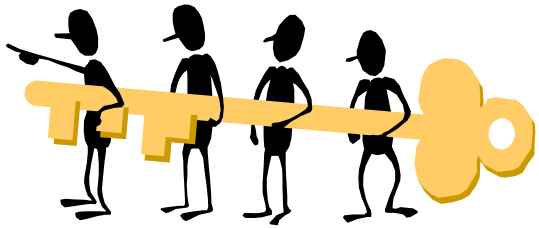
Lessons Learned

- WBS Charts aids the team to visualize the plan
- Reduces inconsistencies in the project plan
- Reduces duplicated tasks
- Intuitive

- PERT Charts reinforce sequencing (bi-directional)
- Locates orphan tasks
- Promotes fixing obvious missing predecessors and successors
- Identifies wrong owners & process groups
- Opportunities to shorten timelines



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