



As Dwight D. Eisenhower said, "Plans are nothing; planning is everything."

The Amazon Way John Rossman

Commander's Intent (CI)

Commanders Intent is a clear and concise expression of the operation's purpose and the desired end-state that supports mission command, provides focus to the staff.

Helps subordinate and supporting commanders act to achieve the commander's desired results without further orders, even when the operation does not unfold as planned



Three Essential Components of CI

1: Purpose - Why the assignment matters

2: Task - What the objective or goal entails.

3: End State - How the result should look



Sound Familiar?

"Understand the Commander's Intent and backwards plan."



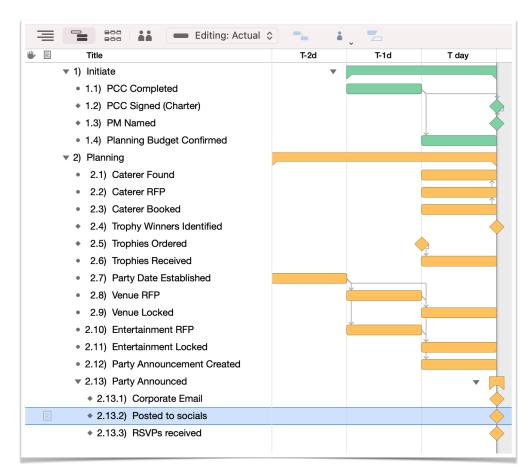


The Work Breakdown Structure (WBS)

A hierarchical decomposition of the tasks to be performed in the project viewed as a multi-level list.

Each task on the WBS is unique with a WBS Identifier to allow for proper communication via tasks / activities

The 100% Rule: Inclusion of all project work in the WBS



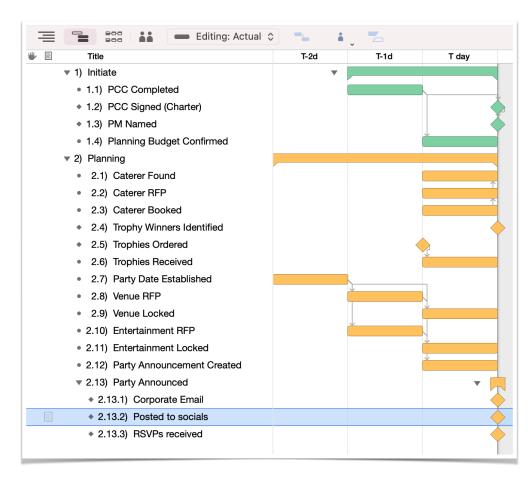
The Work Breakdown Structure (WBS)

Tips:

Use Verbs for naming tasks

Create tasks to which you can assign Effort, Duration and/or Cost

Understand and use Milestone Tasks

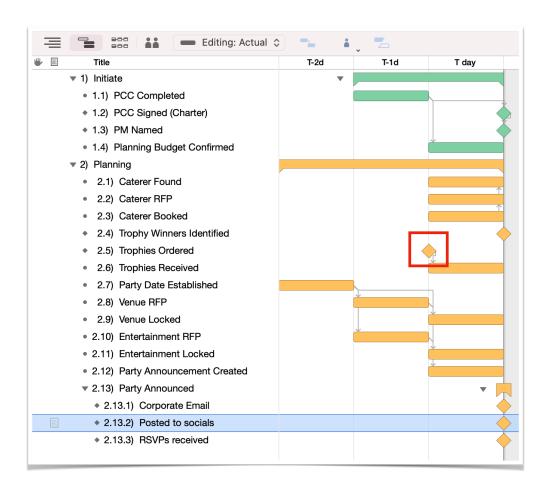


Milestone Tasks

A point on the schedule, which has one clearly defined deliverable, in which a task / activity should be completed to achieve a milestone.

Whereas tasks / activities have start and end dates, Milestones are a single date upon which a deliverable gets completed.

Milestone tasks are represented by a diamond on Gantt charts.



Commonly Forgotten WBS Tasks

Project team induction / training

Quality assurance / control

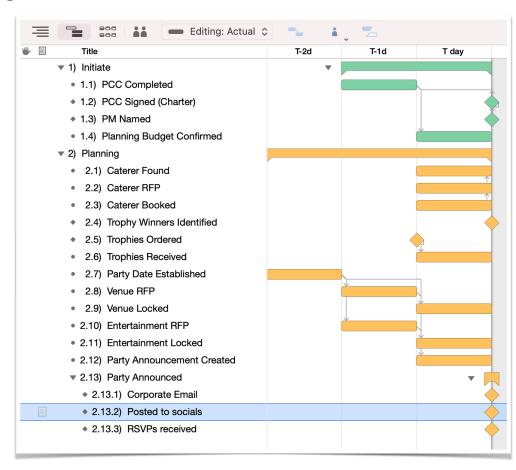
Communications / stakeholder engagement

Transfers (people and products)

Lessons learned

Project Reviews

And more...



The WBS assists with Effective Stakeholder Engagement (ESHE)



DISCUSSION

What are some things you normally have to do but forget to task / schedule?

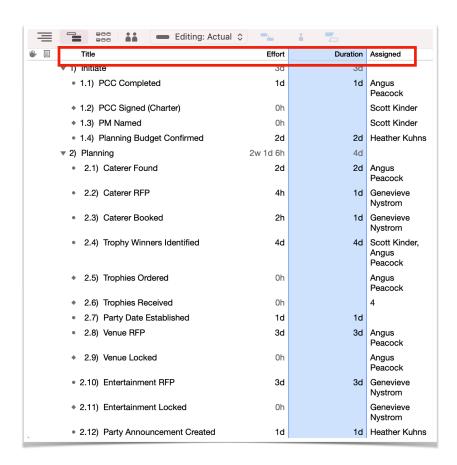
Pro Tips To Start Your WBS

As you start to organize your tasks / activities add 3 columns to the WBS

EFFORT

DURATION

ASSIGNED / RESOURCES



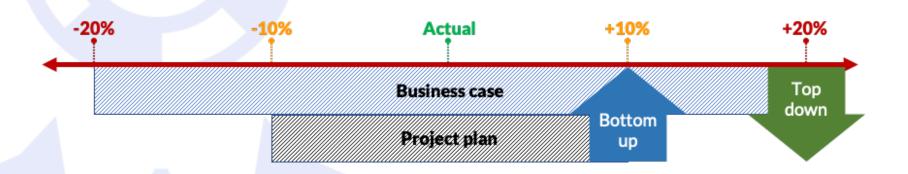
An effective WBS is a matrix between subjects and objects: A subject accounts for a trade, calling on specific knowledge, cycles, deliverables and tasks, An object is a physical part of a project.

Advanced Scheduling Handbook for Project Ma...
Jeremie Averous, Thierry Linares









The cost of resources required to complete the project tasks

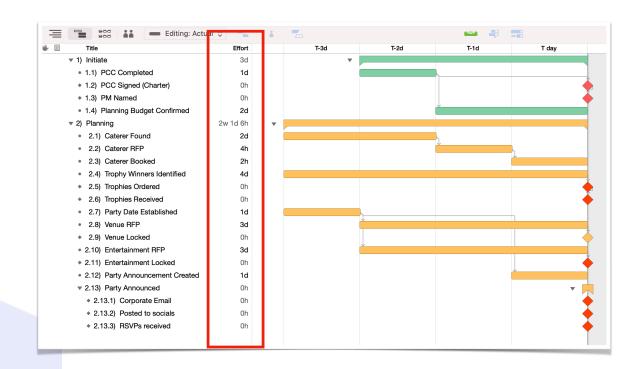
The hours of work needed to complete each task.

Used to create the labor budget for the project

Examples:

30 hours of effort @ \$50 p/h= \$1,500

Task Effort



Task Effort Drives the Labor Budget - DO NOT CONFUSE IT WITH TASK DURATION!!

Our Project Team - Two Week Project

Sarah

Responsible for coordinate the venue and finding/booking the band

Hourly Rate: \$30 p/h

Project Hours Needed: 20

Sarah's Cost: \$600

Mike

Responsible for selecting the PMs who shall receive awards and trophies

Hourly Rate: \$30 p/h

Project Hours Needed: 30

Mike's Cost: \$900

Jenny

Responsible for selecting and purchasing the awards to be given

Hourly Rate: \$25 p/h

Project Hours Needed: 15

Jenny's Cost: \$375

Paul

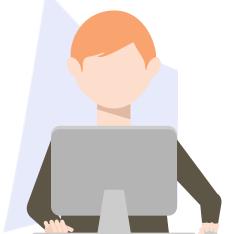
Responsible for making sure the whole thing comes together

Hourly Rate: \$49 p/h

Project Hours Needed: 80

Paul's Cost: \$3,920









Costs add up quickly.

Sarah

Responsible for coordinate the venue and finding/booking the band

Hourly Rate: \$30 p/h

Project Hours Needed: 20

Sarah's Cost: \$600

Mike

Responsible for selecting the PMs who shall receive awards and trophies

Hourly Rate: \$30 p/h

Project Hours Needed: 30

Mike's Cost: \$900

Jenny

Responsible for selecting and purchasing the awards to be given

Hourly Rate: \$25 p/h

Project Hours Needed: 15

Jenny's Cost: \$375

Our Resource Cost: \$5,795

Paul

Responsible for making sure the whole thing comes together

Hourly Rate: \$49 p/h

Project Hours Needed: 80

Paul's Cost: \$3,920









Direct Project (Output) Costs

How much will we spend to deliver each project task?

Resources

Human, Financial, Technical

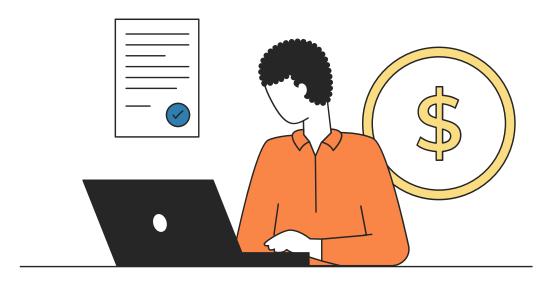
Equipment (assets)

Acquisition / depreciation**

Materials

Labor

Contractors / consultants



Operating Outcome Costs (On Going)

Costs required for the maintenance and administration of your business. Also know as operating expenses (OPEX).

A primary piece of OPEX is Cost of Good Sold (COGS) but will also consider:

- Infrastructure
 - Rent
 - Power
 - Telecoms
 - Water
- Labor and materials
- Routine maintenance
- Interfaces and licenses
- Compliance and insurance

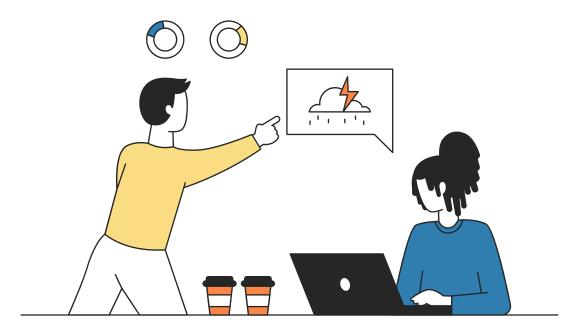
Project name:	
OPTION 1:	<title></th></tr><tr><th></th><th></th></tr></tbody></table></title>

		\$ Amount
OUTPUT COSTS	Capital	
	Materials	
	Labor	
	Contractors / Consultants	
	Transfers	
	Other	
	TOTAL	

Operating Outcome Costs (Occasional)

New hires and recruiting New user training Major repairs Upgrades Decommissioning

Remember the Total Cost of Ownership (TCO)!



Indirect Project (output) costs

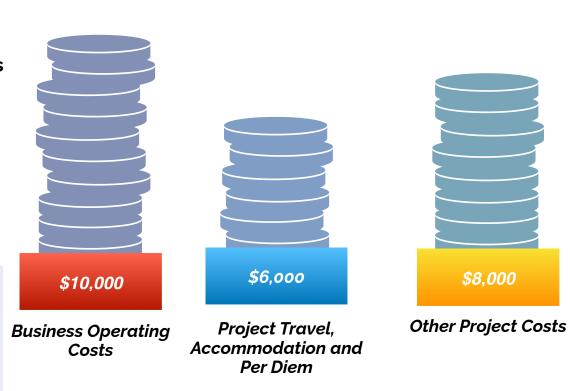
How will the business subsidize project delivery?

- Project Management Office (PMO) costs
- Management Costs
- Shared infrastructure
- Lessons Learned
- Office supplies

Communications

Travel & accommodation

Insurances / taxes



Total Cost of Ownership (TCO)

SUNK COST

Research and Development, Tooling, Equipment, Evaluation, Bid and Award, Supplier Certification

OVERHEAD COST

Working Capital, Internal Support, Quality, Incoming Inspection, Interest Expense, Prototyping, Order Processing, Accounts Receivable, Engineering Build, Process Validation, Licensing, Vendor Tracking, Storage and Distribution, Inventory Management

PURCHASE COST

Purchase Price, Shipping, Packaging, Duties, Tariffs, Taxes, Supplier Profit

UTILIZATION COST

Installation, Labor and Benefits, Training, Operating, Supplies and Consumables

Performance, Maintenance, Labor, Spoilage, Learning Curve, Regulatory, Environmental, Obsolescence, Upgrade, Efficiency

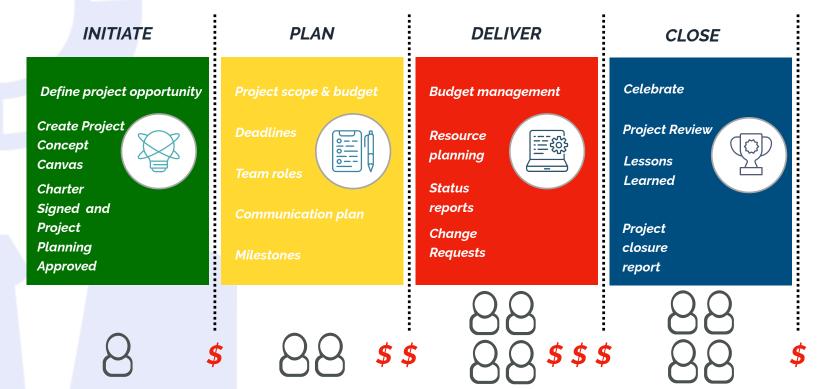
LIFE CYCLE COST

Spare Parts, Service, Disposal, Warranty

Know the numbers and how they will impact your project!

Project Phases and Costs

Each project phase
has associated
financial costs and
resource
expectations which
must be both
managed effectively
and communicated
to project
Stakeholders







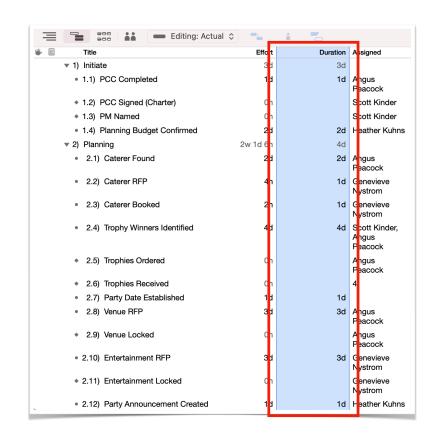
Task Duration

How long it will take to complete a task FROM START TO FINISH

Used to create the PROJECT SCHEDULE

Many project managers really mess this up as the fail to account for RESOURCE

AVAILABILITY



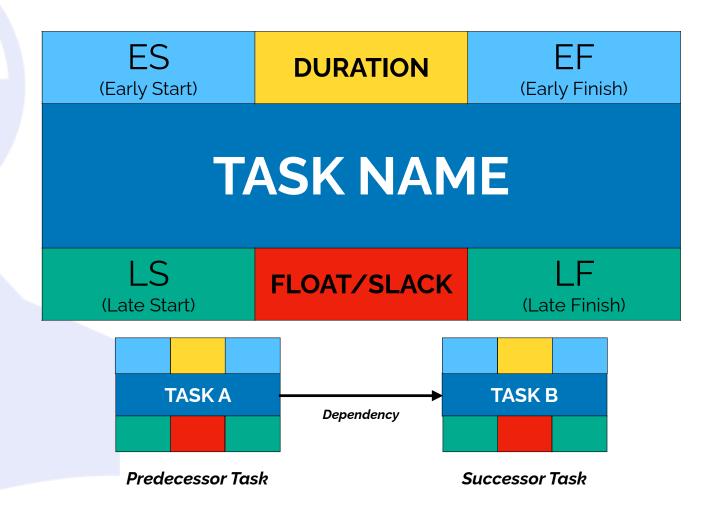
Just because a task has an effort of 8 hours - does NOT mean it will always be done in only one day...

Understanding Project Tasks

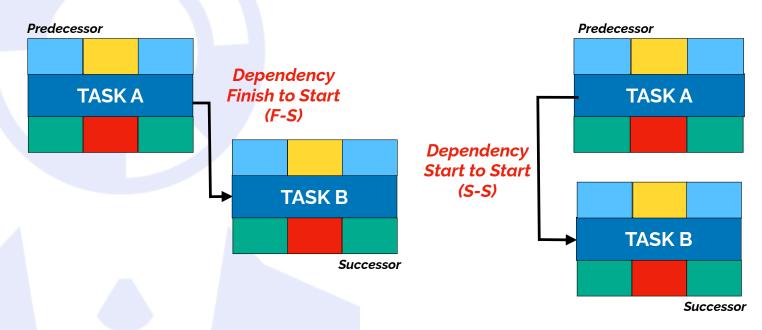
Dependencies are the relationships among project tasks which determine the order in which schedule activities need be performed.

There are four types of dependency relationships

Finish to Start (FS) Start to Start (SS) Finish to Finish (FF) Start to Finish (SF)



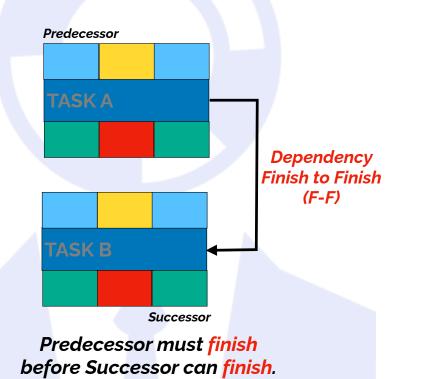
Project Task Dependencies

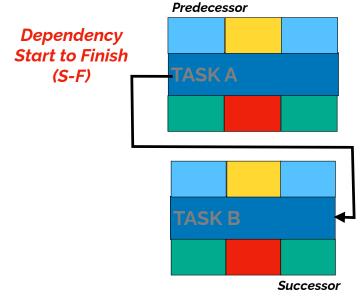


Predecessor must finish before Successor can start.

Predecessor must start before Successor can start.

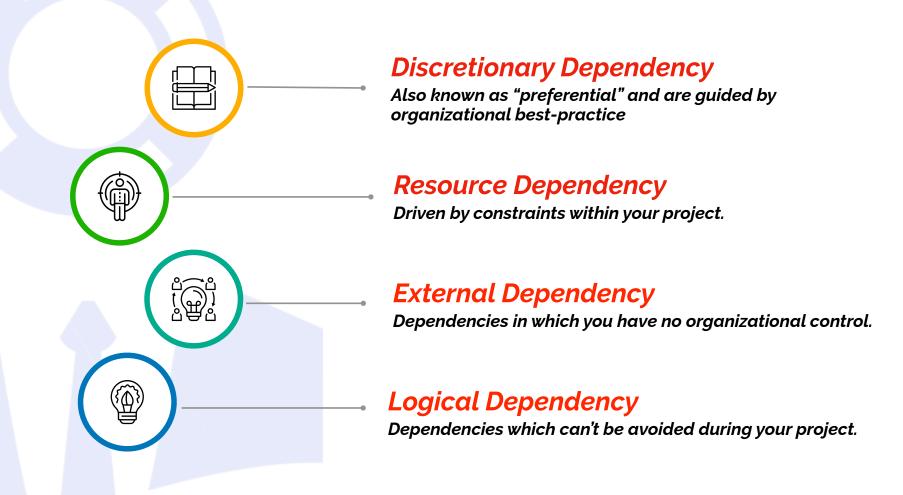
Project Task Dependencies





Predecessor must start before Successor can finish.

Dependencies and Project Constraints



Leads and Lags

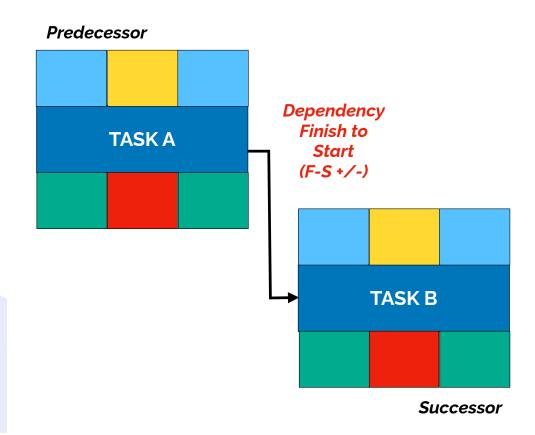
Leads are used to accelerate a successor activity.

A Lead can only be applied to tasks that have a DISCRETIONARY Finish -> Start relationship.

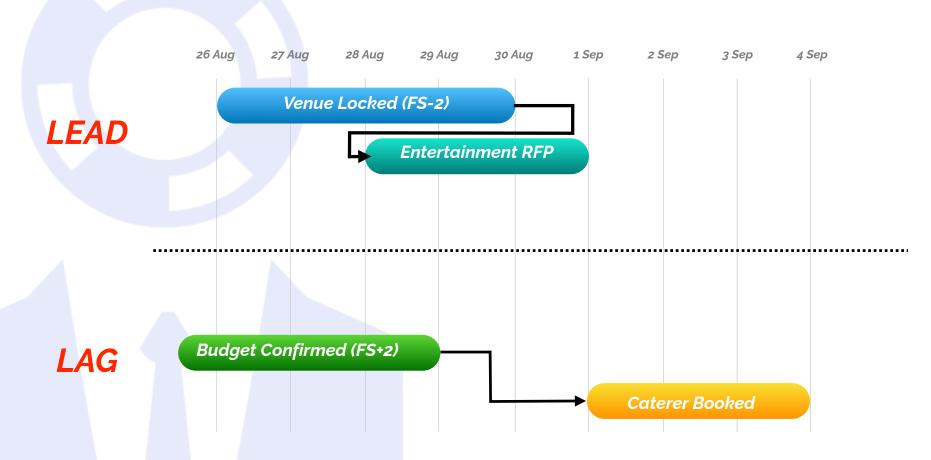
Usually demonstrated as (FS- #days)

Lags are used to delay a successor activity and is an amount of time that must pass before the second activity can begin.

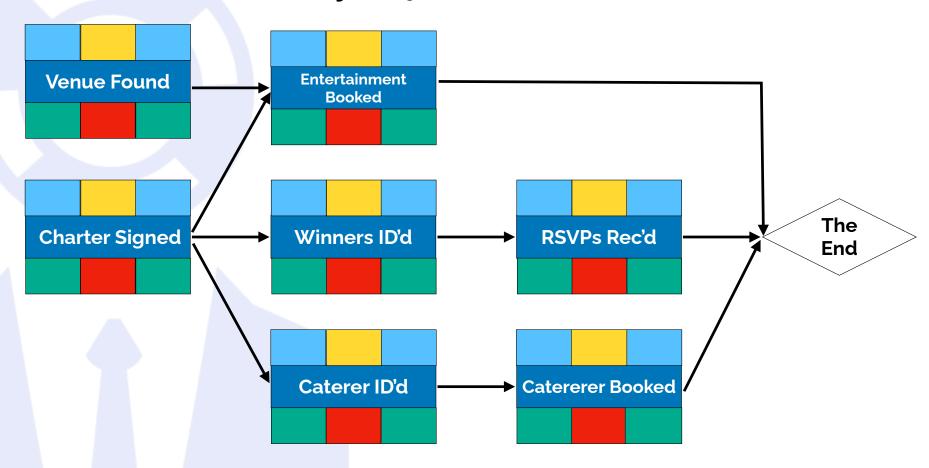
Usually demonstrated as (FS+ #days)



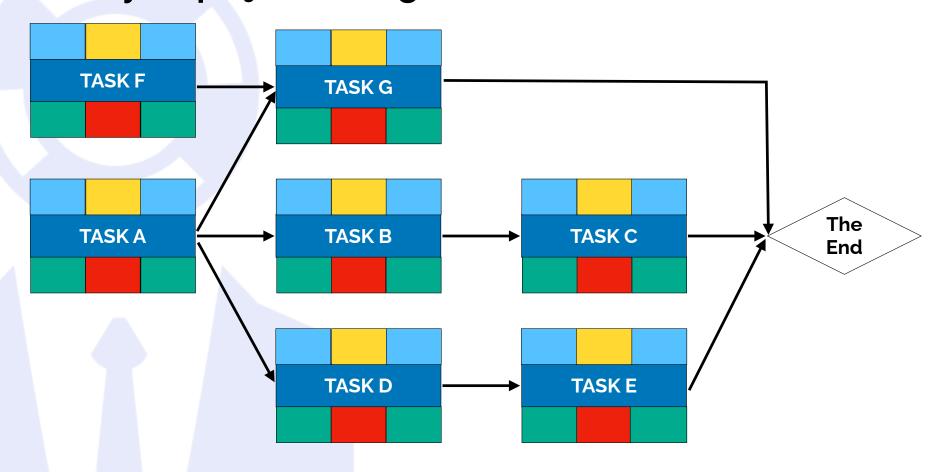
Leads and Lags

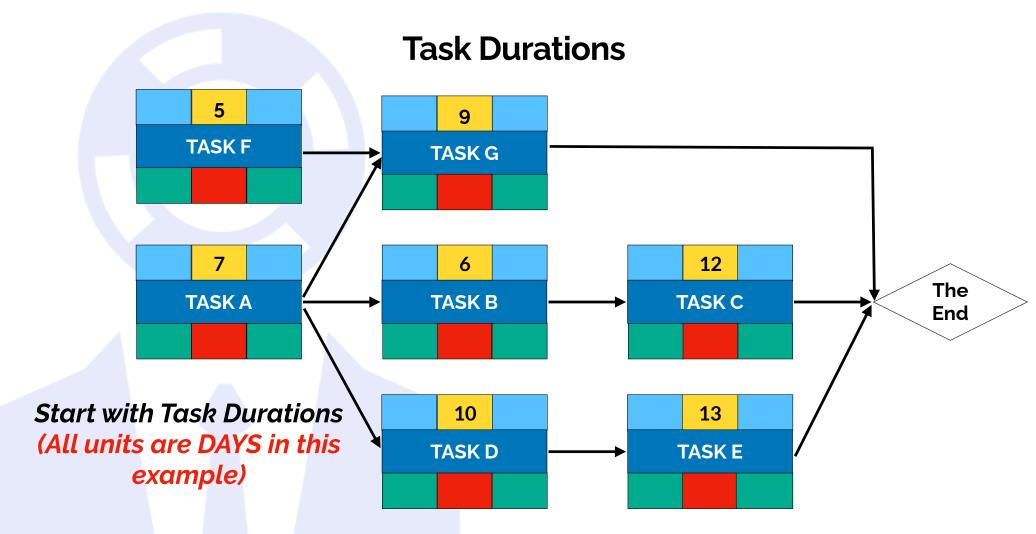


The Party Project (in brief)

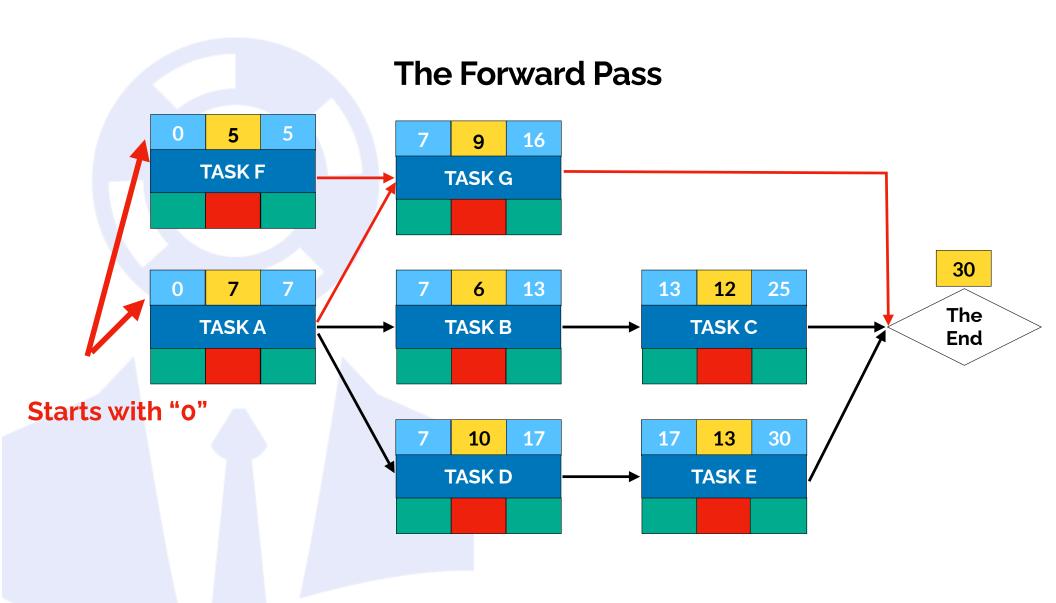


How your project management software does it

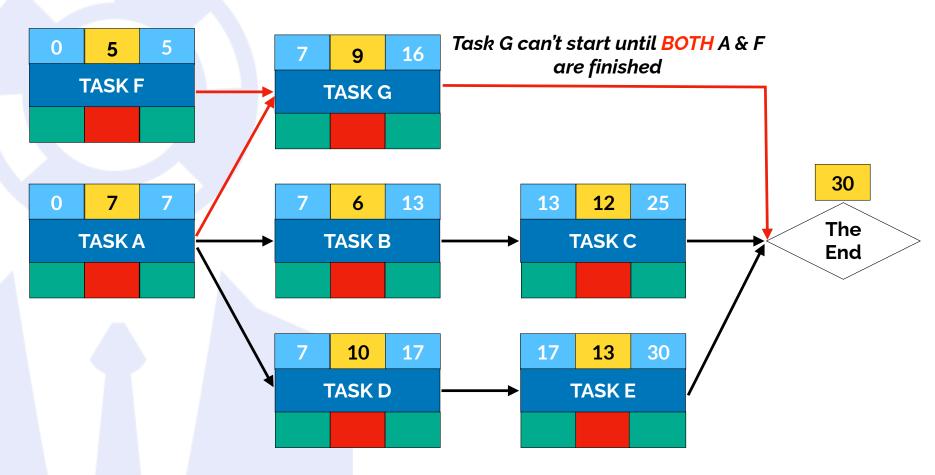




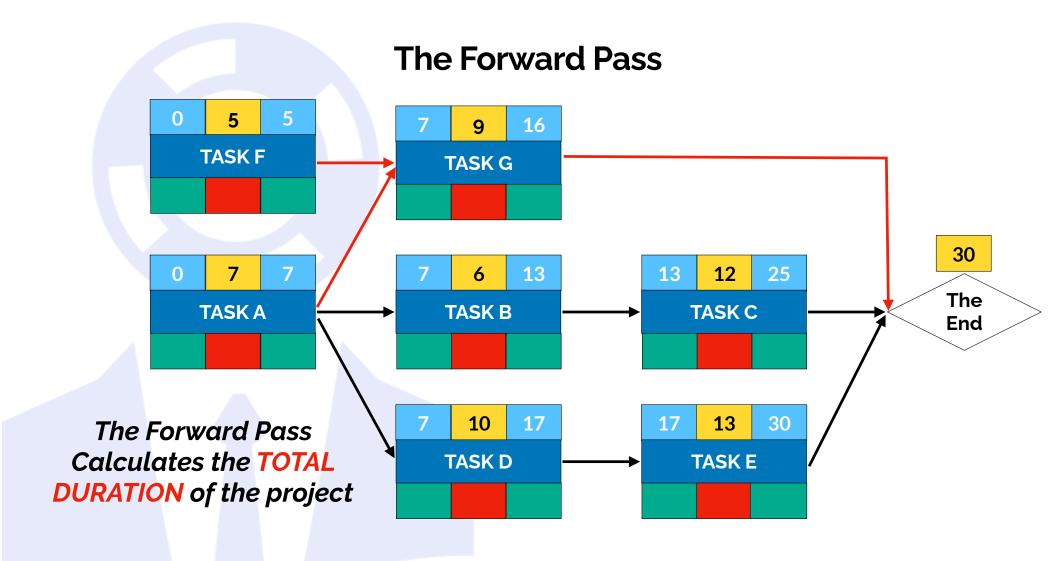
In your Project Management software, you will know how long a day is defined to be (typically 8 hours)

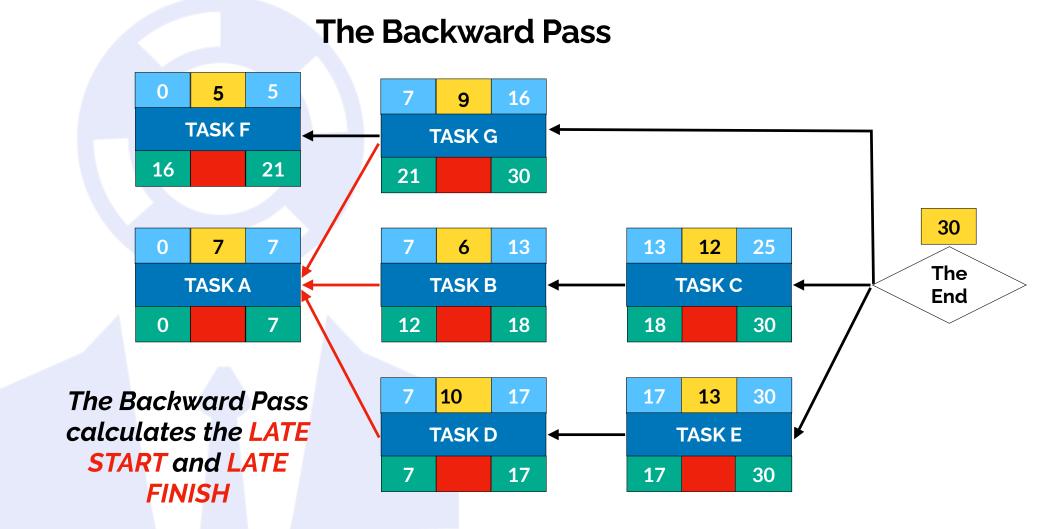


The Forward Pass

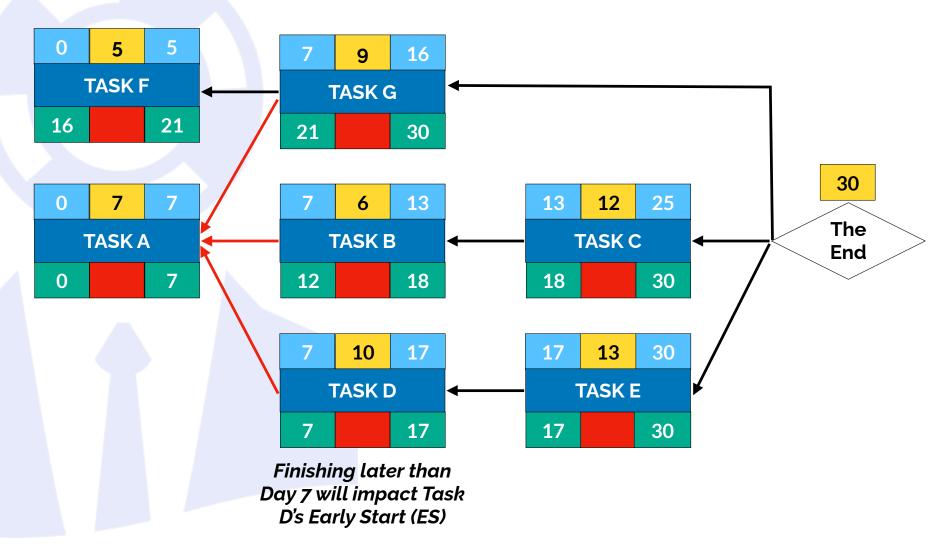


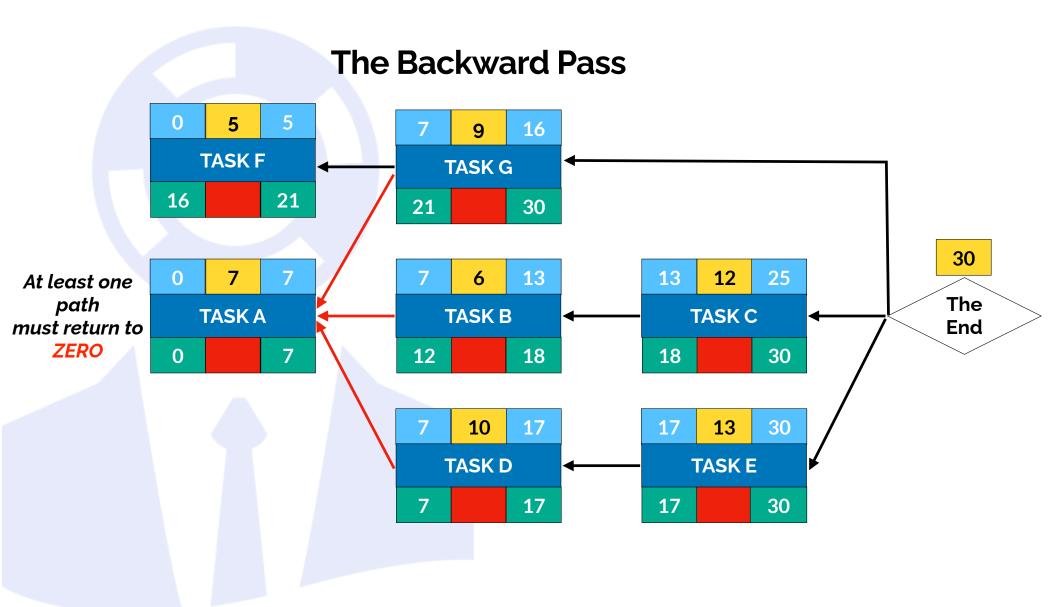
Calculates EARLY START and EARLY FINISH

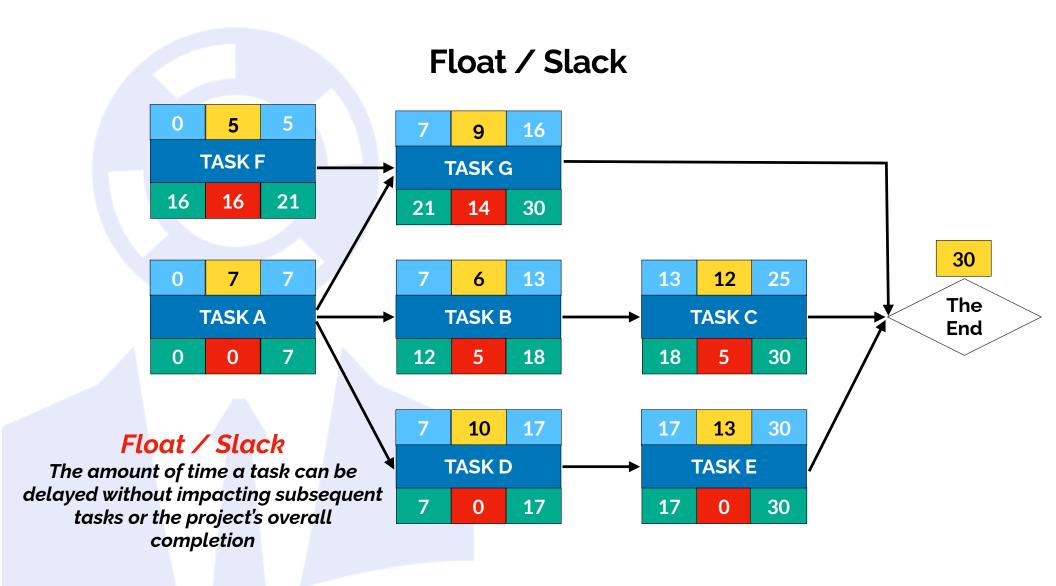


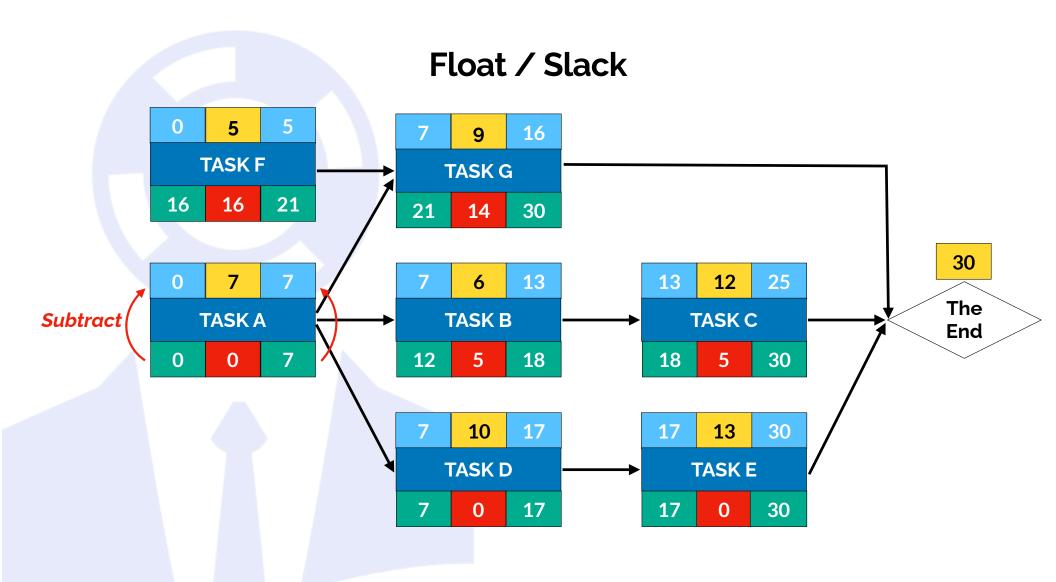


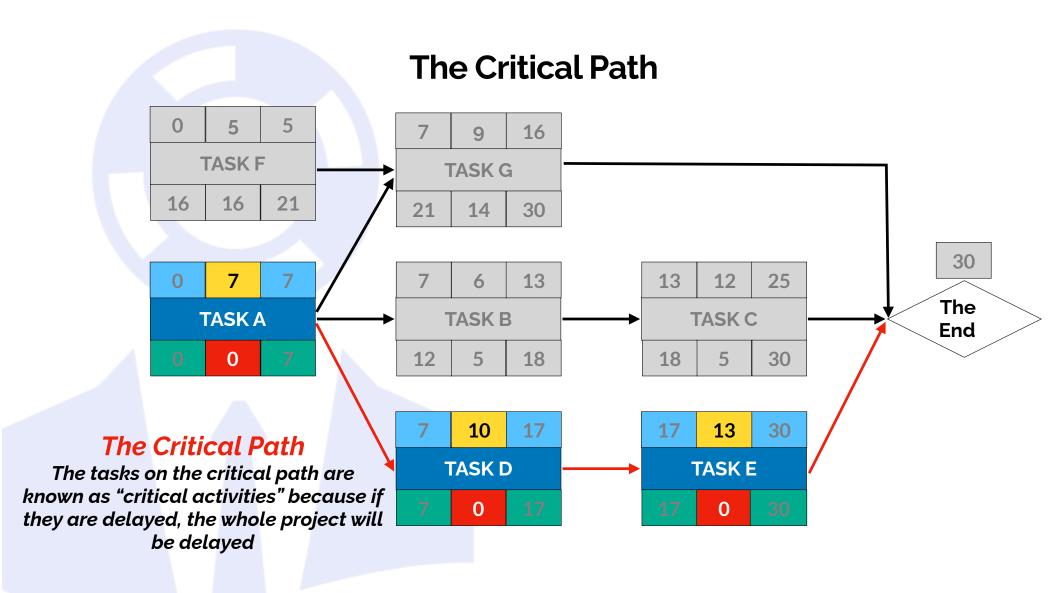
The Backward Pass

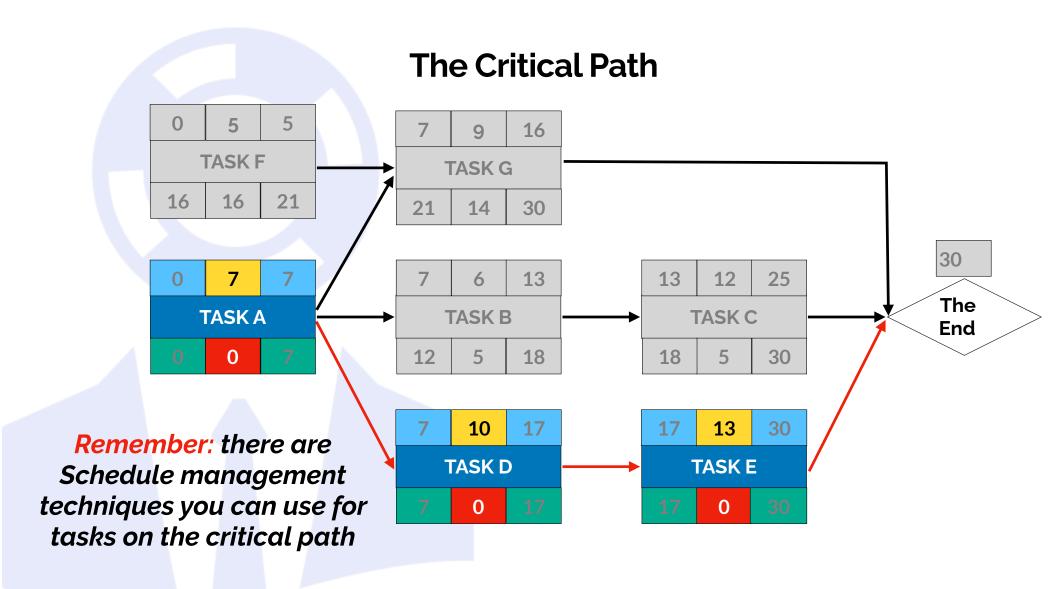












What can you accomplish with what you have?



What can you accomplish with what you have?



Resource Constraints Exist: People, Time, Money, Material...







In partnership with the:



Omission and Saying "No."

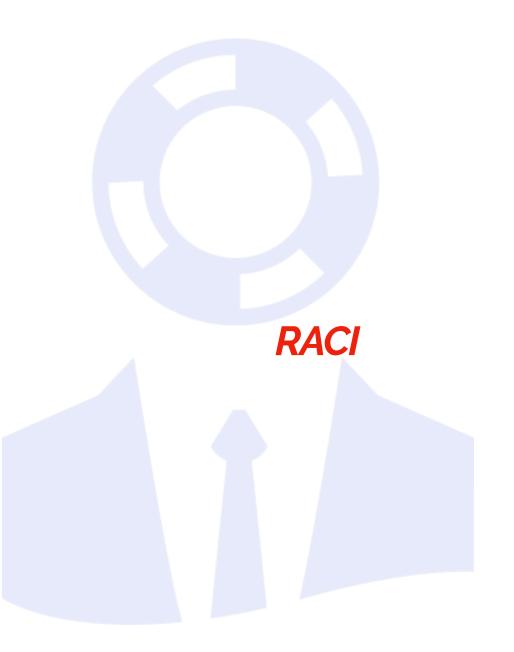
Not everyone needs to be in every meeting.

Not every project "improvement" needs implemented.

Not every idea is a good one.









Clearly delineating roles within your project environments will

- 1: Allow for greater clarity of effort
- 2: Help with Effective Stakeholder Engagement (ESHE)
- 3: Enhance cohesion amongst the team

RACI & CAIRO



Responsible. Accountable. Consulted. Informed.



Consulted. Accountable. Informed. Responsible. Omitted.

RACI DEFINITIONS



The person who carries out the task or process. Gets the job done.



Person ultimately accountable for the task or process being completed.



People not directly involved in the task or process, but are consulted. Typically a SME



People who receive output from the task or process or stakeholders who need to be informed.

Example RACI

Roles and Responsibilities Analysis

Business Processes			/	Fun	ction	al Ro	les /	/	/
	R		Α		С		1	С	
	Α	R		R	С	С	1		1
Decisions / Functions /	C		R		С	С		R	Α
Activities	С		Α			R		R	
	1	С		R	Α		С		R
		Т		С	R	Α			С

FUNCTIONS	PROJECT OWNER	BUSINESS ANALYST	PROJECT MANAGER	SOFTWARE ENGINEER	DEVELOPER	FUNCTIONAL LEAD	SPON
PROJECT PLANNING	Α	1	R	1	С	С	
PROJECT INITIATION	A	1	R	ı	ı	1	С
BUSINESS REQUIREMENTS	I	R	I	I	С	1	A
SOLUTION DESIGN	1	С	I	R	I	Α	ı
ALPHA TESTING	1	С	I	R	Α	I	C
BETA TESTING	С	С	А	R	1	С	1
SOLUTION DELIVERY	R	С	С	С	I	1	С

PROJECT DELIVERABLE	Executive Sponsor	ct	g	Advisor y Commi ttee	Role	Project Manag er	Tech Lead	Functio nal Lead	SME			C	Busine ss Analyst	0.4	Role 05	Consult ant	PMO	Role 03	Role 04	05
	PRO	OJEC	T LEA	DERSH	IIP	PRO	DJECT	TEAM	МЕМВ	ERS		PROJEC	T SUB	-TEAM	S	EX	KTERN	IAL RES	SOUR	CES
Initiate Phase																				
1. Task 01	A/C	R/A				R/A	A/C		С											
2. Task 02						R											Α			
3. Task 03	I					R/A	A/C	A/C	С				С			С				
4. Task 04	1	A/C		1		R/A	С	С	С				С			С	С			
Plan Phase																				
1. Task 01	С	С				R/A	С	С	С				С			С				
2. Task 02	I	I	I	I		R/A	С	С	С	С	С	С	С			С	I			
3. Task 03	I	I	I			R/A				I	I	1	I			С	I			
Execute Phase																				
1. Task 01	C/I	C/I	C/I	C/I			R/A	R/A	R/A	R/A	R/A					A/C				
2. Task 02	1	1	I	I		R/A	R/A	R/A	R/A							С	I			
Control Phase																				
1. Task 01		С	С	С		R	А	А	А							С	I			
Close Phase																				
1. Task 01	С	С	С	С		R/A	С	С	С	С	С	С	С			С	С			
2. Task 02	I	ı	I	1		R/A	1	I	I	I	I	1	I				I			

Improving Confidence in Estimates

Define your method(s)

Assign responsibility to the right people

Use multiple sources

Clarify assumptions

Assume normal (not best case) conditions

Use consistent units (time / cost)

Assume task independence

Allow sufficient time to estimate

murphy's — Law —

Nothing is as easy as it looks,

Everything takes longer than you expect,

And if anything can go wrong it will.

...AT THE WORST
POSSIBLE MOMENT!

Gantt charts

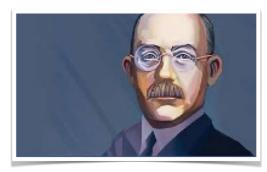
One of the first recorded uses of Gantt charts was for the scheduling of ordinance projects back in the First World War.

The use of this technique was then popularized on large construction projects in the US like the Hoover Dam, started in 1931, and the interstate highway network which started in 1956.

Now Gantt charts are ubiquitous with waterfall project management scheduling.

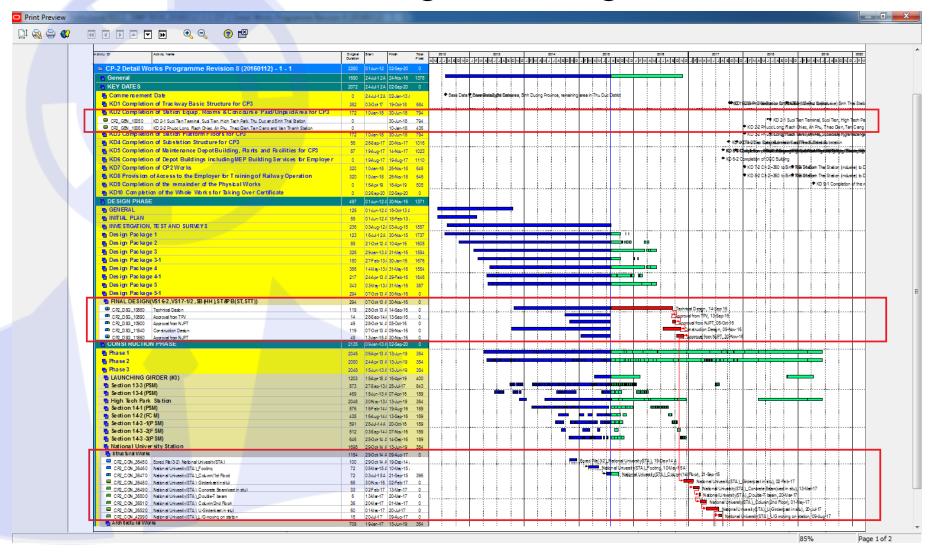


Karol Adamiecki (1866-1933)

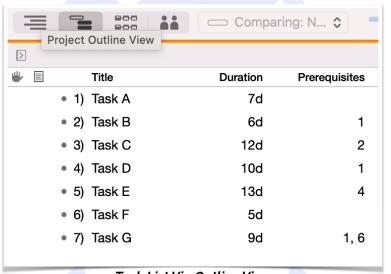


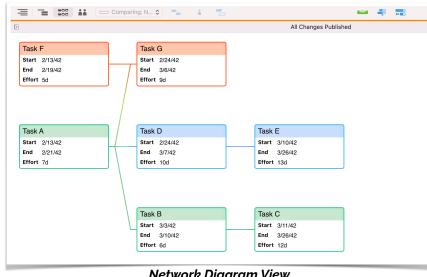
Henry Laurence Gantt (1861-1919)

GIGO: Garbage In, Garbage Out



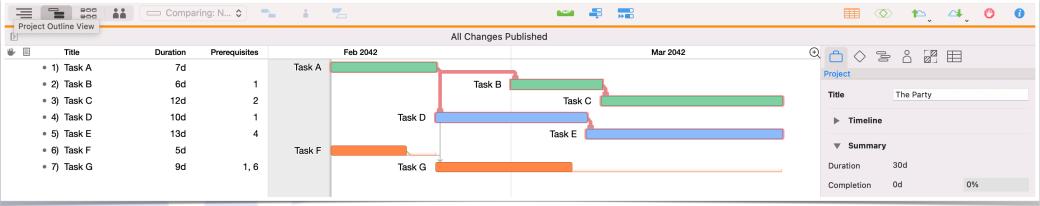
PM Software and Our Example Project





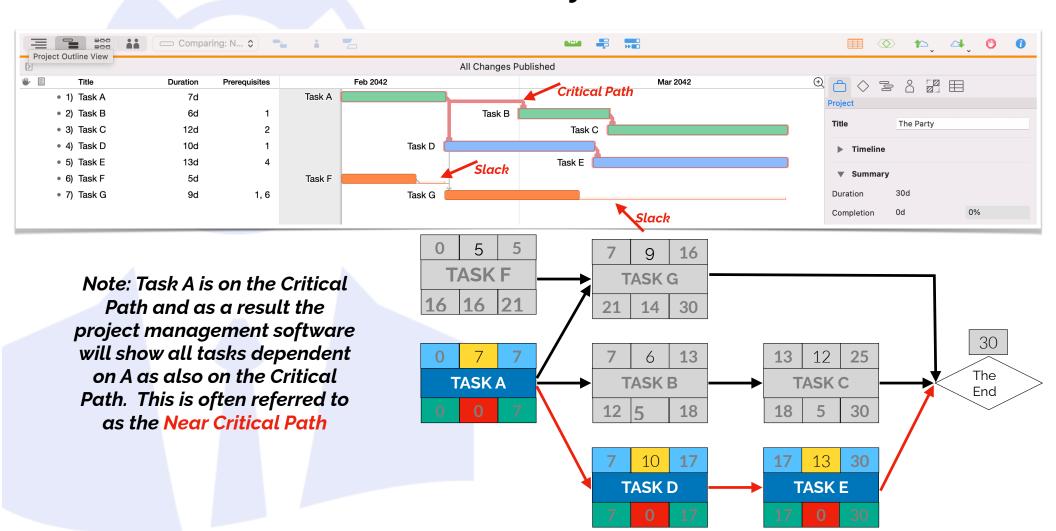
Task List Via Outline View

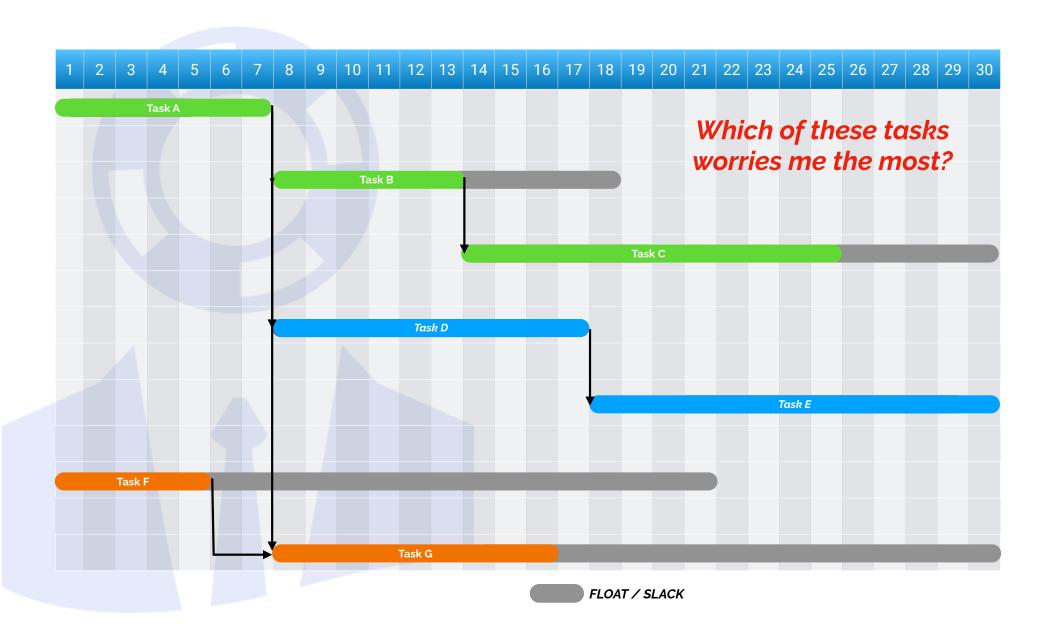
Network Diagram View



Gantt chart with critical path (red)

A Cautionary Note





Getting Things Done GTD



5 Components of GTD

01 Capture

02 Clarify

03 Organize

04 Reflect

05 Engage



Capture

Collect what has your attention into a collection tool



Clarify

Process what the things you captured mean.

Is it actionable?

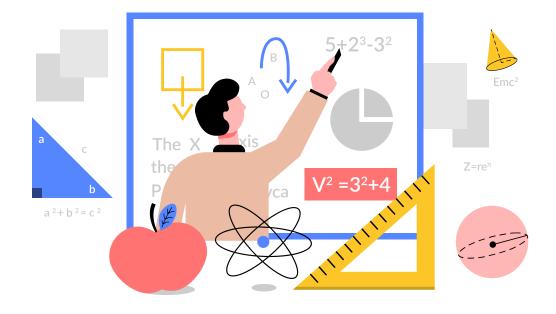
If not: DEFER, DELETE or

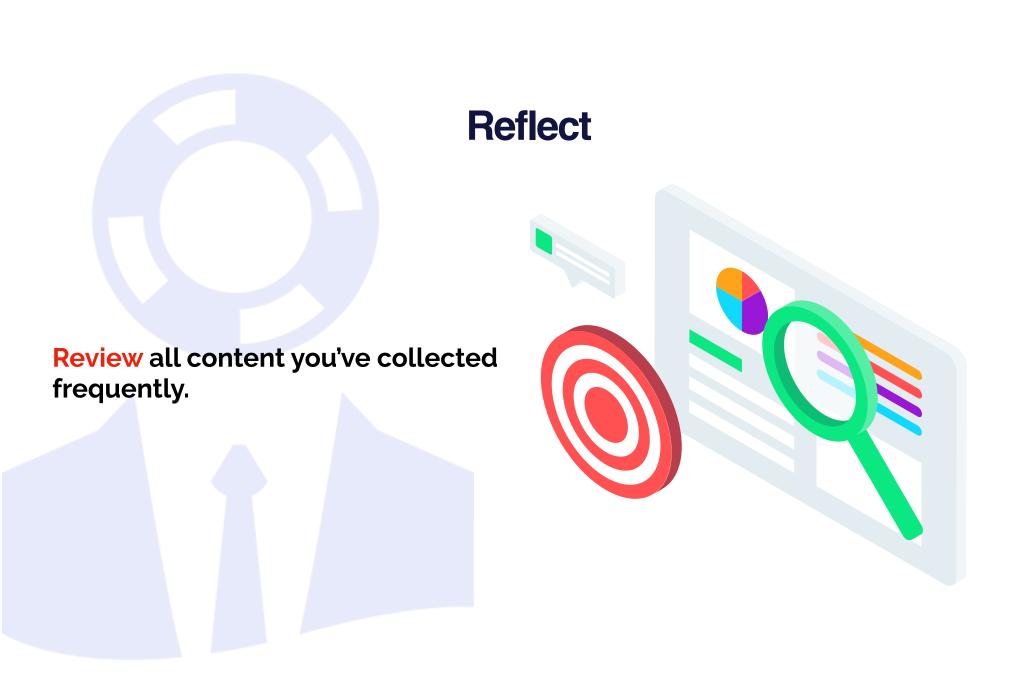
DELEGATE



Organize

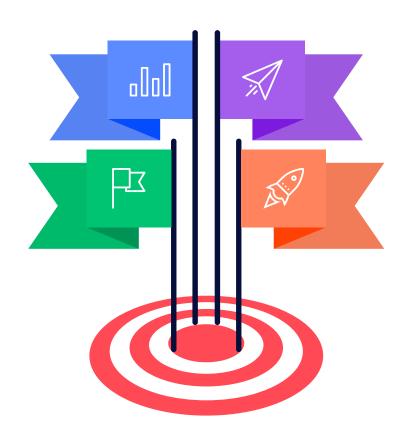
Tag and put reminders into categorized content.





Engage

Get DONE (the right things at the right time)



5 Horizon Levels of GTD

- **01** The Runway
- **02** Projects
- O3 Areas of Focus/ Responsibility
- 04 Vision
 - 05 Purpos / Core Values



Level 1: The Runway

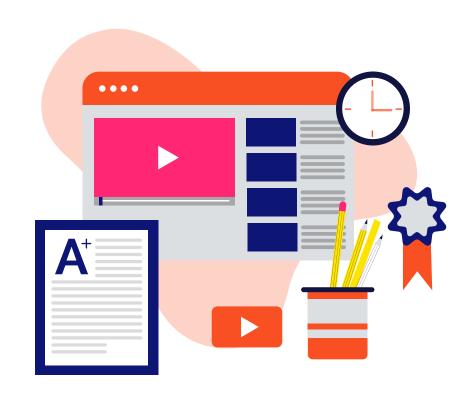
Next Actions.

The things you need to do today.



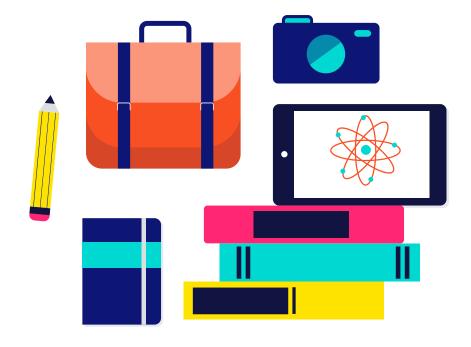
Level 2: Projects

GTD Defines a project as "a series of next actions that produce something in the real world."



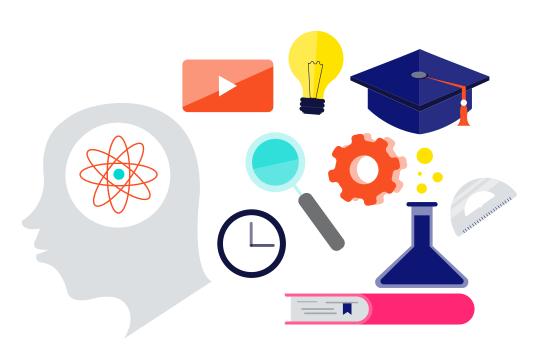
Level 3: Areas of Focus / Responsibility

The things we do out of commitments we make.



Level 4: Vision

Ideas.



Level 5: Purpose and Core Values

Dreams and big picture items.







Working Genius and Projects

Working Genius breaks projects down to three phases:

Ideation

Activation

Implementation



Ideation

Identifying needs and proposing solutions to problems.

Innovation is mostly connected with the Ideation stage of projects.





Activation

Evaluating the merits of ideas and solutions proposed and then rallying people around those which are most valid.



According to the Table Group:

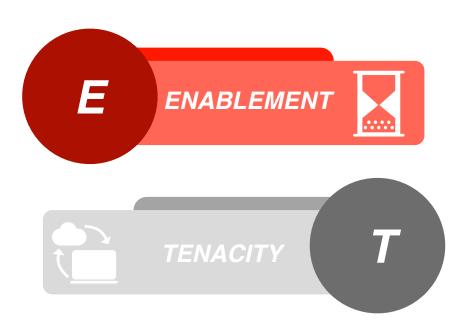
"Most organizations aren't even aware this stage exists."



Implementation

Getting things done.

Pushing projects through successful completion.



Take-aways from Planning

When creating your WBS be sure to use verbs for each task

There is a massive difference

- between task effort and duration
- Gantt charts are useful -but are not the only way to execute projects

