



How to Be a Better Schedule Analyst

November 1, 2017 @ 12pm-1pm EST

Ed Killingsworth

Introduction

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Fixed Growth – our character and intelligence is static

Open Growth – continual learning and change

Strive to be a lifelong learner!

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CAROL S. DWECK, Ph.D.

mindset
THE NEW PSYCHOLOGY OF SUCCESS

HOW WE CAN
LEARN TO FULFILL
OUR POTENTIAL

*parenting
*business
*school
*relationships

1.8
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"Through clever research studies and engaging writing, Dweck illuminates how our beliefs about our capabilities exert tremendous influence on how we learn and which paths we take in life."
—BILL GATES, *GatesNotes*

https://www.ted.com/talks/carol_dweck_the_power_of_believing_that_you_can_improve

How to be a Better Analyst

Hard Skills vs. Soft Skills

Hard Skills: - something learned in classroom type environment, can be measured

Soft Skills: - less tangible, communication, making good decisions, time management



'Hard skills are important for the beginning of your career, but it is the soft skills that get you promoted'

Hard Skills

1. Checking Logic
2. Dealing with Constraints
3. Critical Path
4. How to Properly Status a Schedule
5. Macros & Filters for Proper Analysis



What is a 'good' Schedule

What makes a good schedule?

- Logically sound
- Minimal errors (F7 – spell check)
- Up to date (stated)
- Provide value to team



Checking Logic

All tasks must have a predecessor and successor

	Task Name	% Complete	Duration	Start	Finish	Predecessors	Successors
0	NYC Trip Milestones	45%	79 days	Thu 9/1/16	Wed 12/28/16		
1	1 Plan NYC Trip	100%	16 days	Thu 9/1/16	Fri 9/23/16		
2	1.1 Build timeline for trip	100%	5 days	Thu 9/1/16	Thu 9/8/16		3
3	1.2 Hold initial meeting with parents	100%	1 day	Fri 9/9/16	Fri 9/9/16	2	4
4	1.3 Build budget for trip	100%	10 days	Mon 9/12/16	Fri 9/23/16	3	5,13
5	1.4 Planning complete	100%	0 days	Fri 9/23/16	Fri 9/23/16	4	7,18SS
6	2 Funding for NYC Trip	52%	31 days	Mon 9/26/16	Tue 11/8/16		
7	2.1 First deposit due	100%	1 day	Mon 9/26/16	Mon 9/26/16	5	8
8	2.2 Hold donut sale	100%	2 days	Tue 9/27/16	Wed 9/28/16	7	9FS+20 days
9	2.3 Hold car wash fundraiser	34%	8 days	Fri 10/28/16	Tue 11/8/16	8FS+20 days	10
10	2.4 Second deposit due	0%	0 days	Tue 11/8/16	Tue 11/8/16	9	11
11	2.5 All funding submitted	0%	0 days	Tue 11/8/16	Tue 11/8/16	10	13FF,24
12	3 Air Travel for NYC Trip	43%	19 days	Tue 10/25/16	Mon 11/21/16		
13	3.1 Research Flights and Airports	100%	9 days	Tue 10/25/16	Fri 11/4/16	4,11FF	14FS-2 days
14	3.2 Monitor Ticket Prices	0%	11 days	Thu 11/3/16	Fri 11/18/16	13FS-2 days	16,15
15	3.3 Airline Tickets Purchased	0%	1 day	Mon 11/21/16	Mon 11/21/16	14	16
16	3.4 Airline tickets Completed	0%	0 days	Mon 11/21/16	Mon 11/21/16	14,15	25
17	4 Hotel for NYC Trip	58%	29 days	Mon 9/26/16	Fri 11/4/16		
18	4.1 Research Hotels/Locations for trip	73%	11 days	Mon 9/26/16	Tue 10/11/16	5SS	19
19	4.2 Monitor Hotel Prices	53%	10 days	Thu 10/6/16	Thu 10/20/16	18	20FS-3 days
20	4.3 Determine Number of Rooms Needed	100%	6 days	Thu 10/13/16	Thu 10/20/16	19FS-3 days	22,21
21	4.4 Hotel Reservations Booked	13%	8 days	Wed 10/26/16	Fri 11/4/16	20	22
22	4.5 Hotel reservation complete	0%	0 days	Fri 11/4/16	Fri 11/4/16	20,21	25SS

Count Macro

Sub Countlines()

SelectAll

Msgbox "Task Count: " &
cstr(activeselection.tasks.count)

End Sub

Filter Definition in 'Walthour Transition Schedule'

Name: Show in menu

Filter:

And/Or	Field Name	Test	Value(s)
	Summary	equals	No

Show related summary rows

Hide Summary Tasks Filter

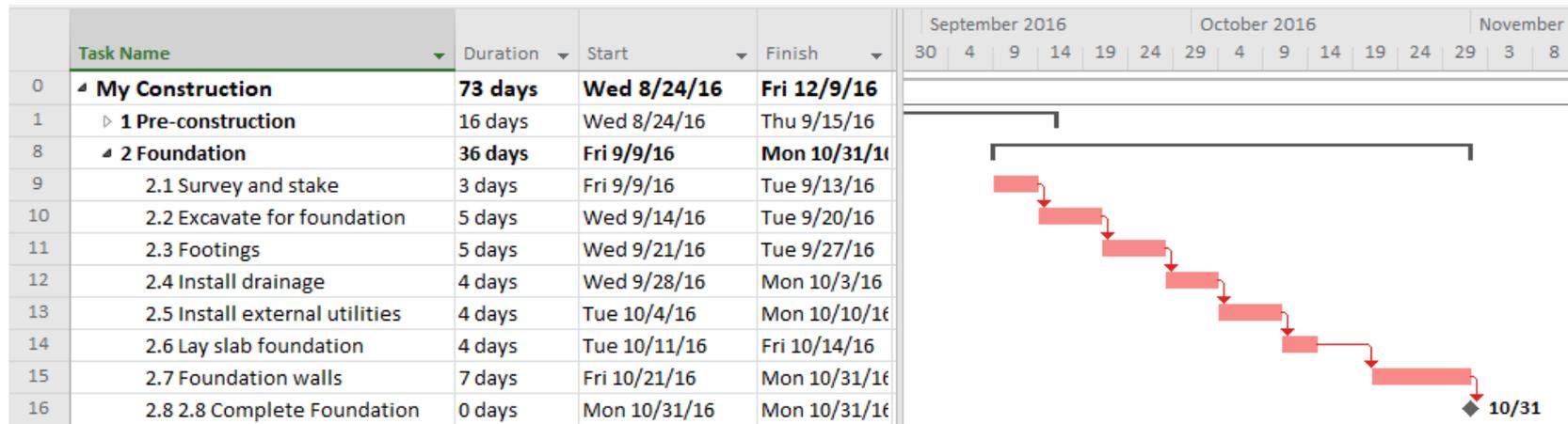
Dealing with Constraints

1. *As Soon as Possible**
2. *As Late as Possible*
3. *Must Start On*
4. *Must Finish On*
5. *Start No Earlier Than*
6. *Start No Later Than*
7. *Finish No Earlier Than*
8. *Finish No Later Than*

Task ID	Task Name	% Complete	Duration	Start	Finish	Constraint Type
0	NYC Trip Milestones	45%	79 days	Thu 9/1/16	Wed 12/28/16	As Soon as Possible
1	1 Plan NYC Trip	100%	16 days	Thu 9/1/16	Fri 9/23/16	As Soon as Possible
2	1.1 Build timeline for trip	100%	5 days	Thu 9/1/16	Thu 9/8/16	As Soon as Possible
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15	3.3 Airline Tickets Purchased	0%	1 day	Mon 11/21/16	Mon 11/21/16	As Soon as Possible
16	3.4 Airline tickets Completed	0%	0 days	Mon 11/21/16	Mon 11/21/16	As Soon as Possible

How to Analyze a Critical Path

Critical Path: is the longest sequence of activities in a schedule which must be completed for the project to finish on time



OPDEC Critical Path

<http://www.opdec.com/ms-project-tools/critical-path-tool>

Trace Macro

Schedule Status

- Determining Frequency
- Determining Method of Status
- Set Status Date

The screenshot displays the Microsoft Project Professional interface. The 'Project' tab is active in the ribbon, showing various tools for task management. The Gantt chart area shows a project named 'My Construction' with a total duration of 73 days, starting on Wednesday, 8/24/16, and ending on Friday, 12/9/16. The task list includes pre-construction tasks (1.1 to 1.6) and foundation tasks (2.1 to 2.8). A 'Status Date' dialog box is open, showing a calendar for September 2016 with the date 'Tue 10/31/17' selected. The dialog box also includes a 'Today' button.

Task Name	Duration	Start	Finish	Predecessors	Successors
0 My Construction	73 days	Wed 8/24/16	Fri 12/9/16		
1 1 Pre-construction	16 days	Wed 8/24/16	Thu 9/15/16		
2 1.1 Get approvals	2 days	Wed 8/24/16	Thu 8/25/16		3
3 1.2 Select architect	4 days	Fri 8/26/16	Wed 8/31/16	2	4,7
4 1.3 Draw plans	5 days	Thu 9/1/16	Thu 9/8/16	3	5
5 1.4 Review blueprints	4 days	Fri 9/9/16	Wed 9/14/16	4	6,5,5
6 1.5 Order materials	5 days	Fri 9/9/16	Thu 9/15/16		
7 1.6 Building permit Secured	5 days	Thu 9/1/16	Thu 9/8/16		
8 2 Foundation	36 days	Fri 9/9/16	Mon 10/3/16		
9 2.1 Survey and stake	3 days	Fri 9/9/16	Tue 9/13/16		
10 2.2 Excavate for foundation	5 days	Wed 9/14/16	Tue 9/20/16		
11 2.3 Footings	5 days	Wed 9/21/16	Tue 9/27/16		
12 2.4 Install drainage	4 days	Wed 9/28/16	Mon 10/3/16		
13 2.5 Install external utilities	4 days	Tue 10/4/16	Mon 10/10/16		
14 2.6 Lay slab foundation	4 days	Tue 10/11/16	Fri 10/14/16		
15 2.7 Foundation walls	7 days	Fri 10/21/16	Mon 10/31/16		
16 2.8 Complete Foundation	0 days	Mon 10/31/16	Mon 10/31/16		

All tasks need to be statused

Do NOT status a task in the future (Invalid Task)

Macros for Proper Analysis

Schedule Metrics Macro

Metrics | Assessment Criteria | Instructions

Project File | **Walthour Transition Schedule**

Status Date: 7/1/09 | Finish Calc On *: 6/22/09 | Task to Finish on *: | Roll-On Date: |
Project Start: 6/11/09 | Baseline Finish of Selected Task: ??/??/?? | Proj Slip frm BL (cdays): ?? | Cannot calculate Proj Slip due to missing Baseline

Incomplete Tasks: 5 | BL Count: 20 | Missing BL: 4 | 20% | This needs review

DCMA 14 Point Assessment

Assessment Area	Goal	Calc	Value	Comments to clarify/augment metric
Structure				
1 - Logic ^	<= 5%	5/5	100%	Outside guidelines - needs review
2 - Leads ^	0	Count	0	
3 - Lags ^	<=5%	0/5	0%	
4 - Relationship Types ^	FS >90%	5/5	100%	
5 - Hard Constraints ^	<=5%	0/5	0%	
6 - High Float ^	<=5%	0/5	0%	This may indicate missing links - needs review
8 - High Duration ^	<=5%	0/5	0%	
Performance				
7 - Negative Float ^	<=5%	0/5	0%	
9 - Invalid Dates ^	0	Task Count	0	
10 - Resources ^	0	5/5	100%	Needs review of resource management
11 - Missed Tasks ^	<=5%	5/5	100%	Outside guidelines - needs review
12 - CP Test	Pass	Add 600d	Pass	
13 - CPLI	>=95%	(0-0) / 0	0	
14 - BEI	>=95%	0/20	0%	Outside guidelines - needs review

Schedule Test and Assessment Tool (STAT)

<https://software.nasa.gov/software/MFS-33362-1>

Soft Skills

1. Good Communication
2. Decision Making
3. Coaching
4. Emotional Intelligence
5. Learning to Focus

Communication Tips

- Being a better writer – practice
Bullet Journaling
- Better Speaker
- <https://www.toastmasters.org/find-a-club>
- Being a better listener
 - Active Listening
 - Pay attention
 - Look in eye, or in between eyes



Decision Making/Problem Solving

Sometimes not making a decision is worse than making the wrong decision – pocket veto management

Six hats – Edward de Bono

	White Hat	<ul style="list-style-type: none">List out the factsWhat information is missing?How can you get it?
	Red Hat	<ul style="list-style-type: none">Express your gut feelingsWhat are your fears, likes and dislikes?
	Black Hat	<ul style="list-style-type: none">Be pessimisticWhat are the downsides and risks?
	Yellow Hat	<ul style="list-style-type: none">Be optimisticWhat are the benefits to be gained?
	Green Hat	<ul style="list-style-type: none">Focus on alternativesAre there any new options?
	Blue Hat	<ul style="list-style-type: none">Focus on control & progressionWhich hat do I wear?What else should I consider?



How to be a Coach

- Be a Mentor
- Find a Mentor
- Online or at Office

See one, do one, teach one

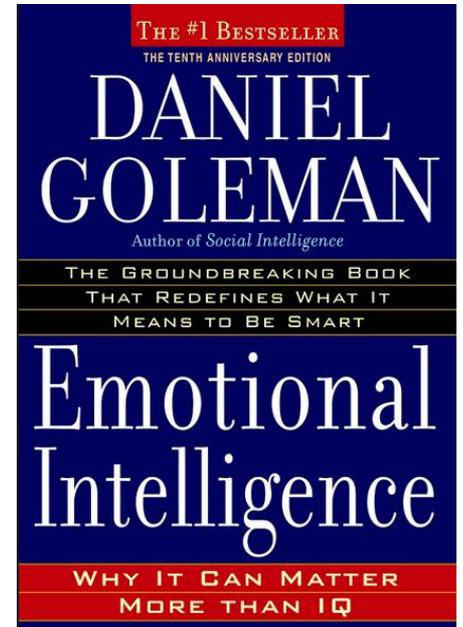


Emotional Intelligence

- Empathy
- Self-Confidence
- Self-Control

No one cares how much you know, until they know how much you care.

-Theodore Roosevelt



https://www.ted.com/talks/daniel_goleman_on_compassion

Learning How to Focus

Wait a minute – I'm too busy!

- Stop attending meetings
- Avoid interruptions – close door
- Book a conference room by yourself
- Put on headphones
- Arrive early/stay late
- Go out and take a walk



Questions?



Thank You!

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