PROJECT MANAGEMENT

QuickStart Guide™

AUDIOBOOK COMPANION

QuickStart Guides

WWW.QUICKSTARTGUIDES.COM

YOU HAVE THE AUDIOBOOK...

NOW SAVE 10% ON YOUR NEXT PURCHASE

BUY THIS BOOK IN ANOTHER FORMAT,
OR EXPLORE OUR ENTIRE LIBRARY OF

QuickStart Guides®

GET 10% OFF OF YOUR ENTIRE ORDER

WITH COUPON CODE:

companion10

CLICK HERE TO SHOP WITH 10% OFF →

or visit www.quickstartguides.com

TABLE OF CONTENTS

TABLE OF CONTENTS

Continued

CHAPTER 1
What Is a Project?

fig. 1

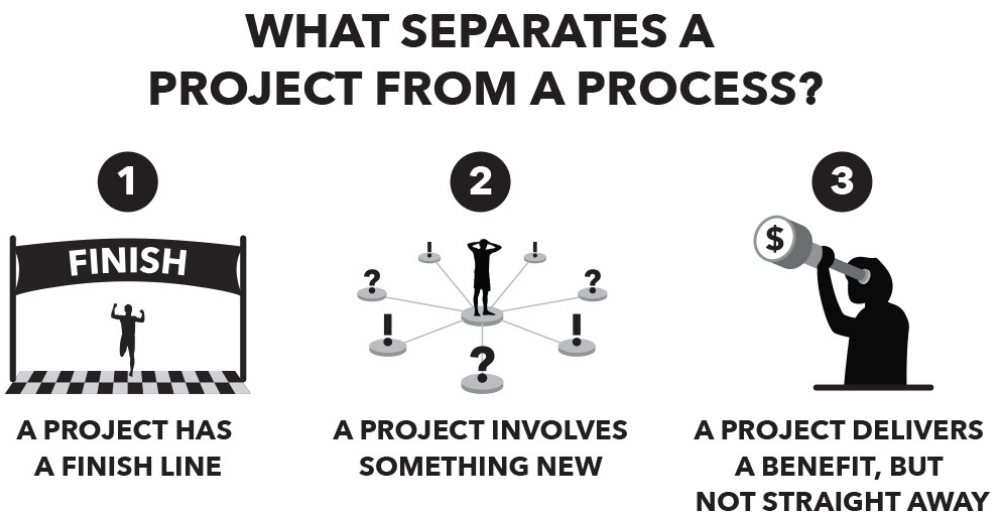


fig. 2

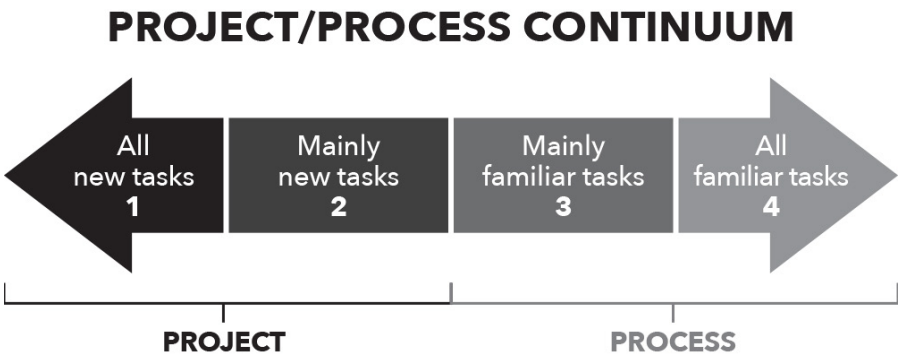
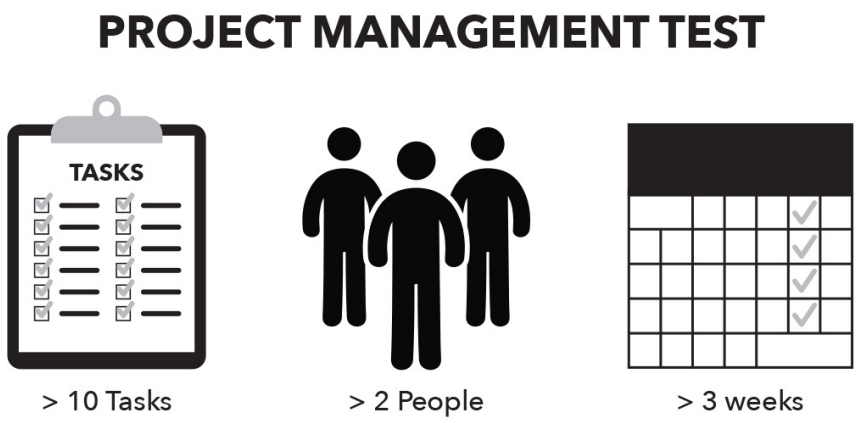


fig. 3



- Does your project have more than ten tasks?
- Does your project involve more than two people?
- Does your project need more than three weeks to complete?

CHAPTER 2
Project Management Methodologies

fig. 4

MAIN METHODOLOGIES
PMI PMBOK, PRINCE2, and Agile

Some of the tools included in PMBOK	Some of the Agile methodology terms (and there are many more than this!)
• Gantt charts • Critical Path Method (CPM) • Program Evaluation and Review Technique (PERT) • Project initiation document (PID) • Work breakdown structure (WBS) • Product breakdown structure (PBS) • Critical tasks • Floating tasks and float • End-to-start dependencies (also start-to-start, end-to-end, and start-to-end)	• Acceptance Test-Driven Development (ATDD) • Adaptive Project Framework (APF) • Anti-pattern • Backlog • Burndown chart • Cadence • Definition of Done (DoD) • Extreme Programming (XP) • Kanban • New Product Introduction (NPI) • Outcome mapping • Package Enabled Reengineering (PER) • Planning Poker • Product backlog • Product owner • Rapid Application Development (RAD) • Release train • Scaled Agile Framework (SAFe) • Scrum • Scrumban • Sprint • Story mapping • T-shirt sizing • Test-Driven Development (TDD) • Timebox • User story • Velocity • Waterfall
Methodologies related to Project Management	
• **LEAN**: Associated more with processes than projects, but very useful and important • **CRITICAL CHAIN PROJECT MANAGEMENT**: A variation of the critical path method, suggested by Eliyahu Goldratt • **SIX SIGMA**: Associated more with quality management than project management	

This table displays the daunting array of approaches.

fig. 5

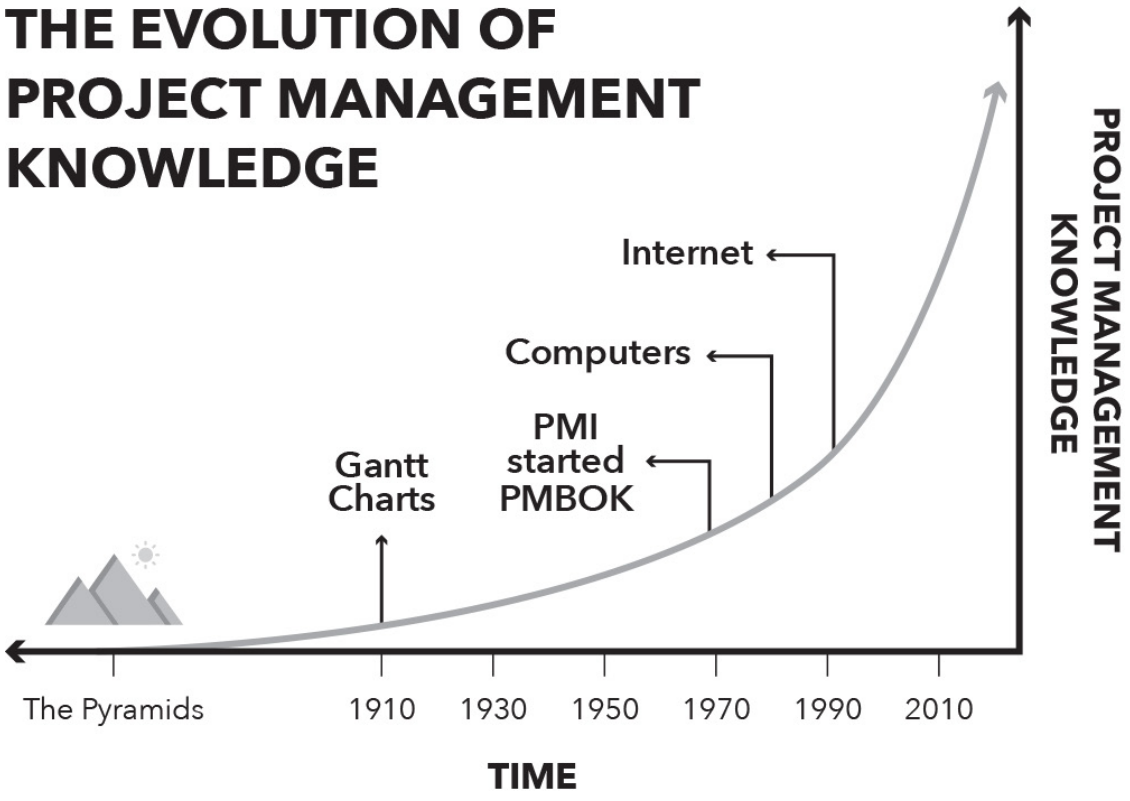

THE EVOLUTION OF PROJECT MANAGEMENT KNOWLEDGE
PROJECT MANAGEMENT KNOWLEDGE
Internet
Computers
PMI started PMBOK
Gantt Charts
The Pyramids
1910
1930
1950
1970
1990
2010
TIME

fig. 6

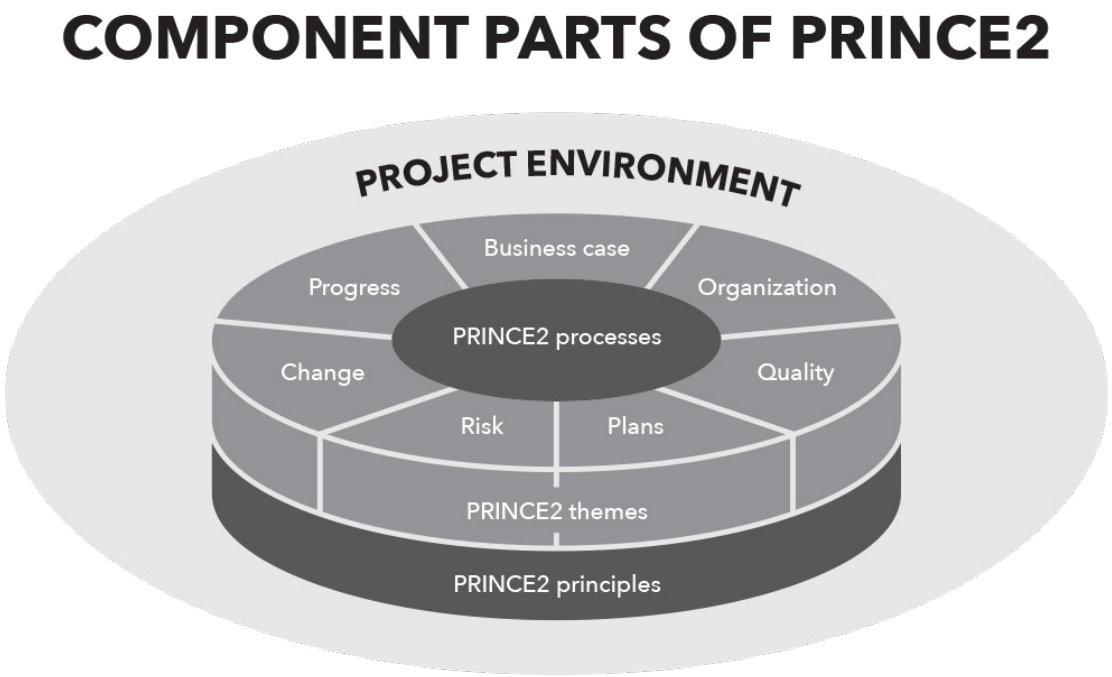

COMPONENT PARTS OF PRINCE2
PROJECT ENVIRONMENT
Business case
Progress
Organization
PRINCE2 processes
Change
Quality
Risk
Plans
PRINCE2 themes
PRINCE2 principles

fig. 7

	PMBOK	PRINCE2	AGILE
1. Define the project and agree to start	Yes	Very thorough	Not done
2. List the tasks	Yes	Yes	Yes
3. Estimate the costs and times	Yes	Not covered	A bit
4. Dependencies and critical path	Yes	Not covered	No
5. Speed up the plan	Yes	Not covered	All the time
6. Gantt Chart	Yes	Not covered	No
7. Plan resources	Yes	Not covered	All the time but only short-term
8. Plan for risks	Yes	Yes	Might do
9. Monitor progress against plan	Yes	Yes	All the time except there isn't a plan
10. Monitor costs and forecast total	Yes	Not covered	Constantly changing
11. Replan when necessary	Yes	Probably	Doing this all the time
12. Review	Yes	Very thorough	Yes

fig. 8

WHEN TO USE PMBOK LITE	WHEN TO USE AGILE
Fairly or very clear spec at the start	Spec is unclear
Spec can be agreed on at the start with only small changes, or definite separate initial scoping phase or definite second "final adjustments" phase	Customer won't know spec till after one or more phases – iterative design process
Times and costs are estimate-able within a range	Task times and costs cannot be listed or estimated
Fixed budget and/or fixed timescale which must be achieved	Budget and timescale are not strongly defined
Most parts of the project depend on others so things have to be done in the right order	Tasks / deliverables are parallel – minimal dependencies
Plan is going to change only by small amounts in a controlled way (signed for)	Plan is going to change a lot
PM is taking the risk – price is fixed, or increases will have to be negotiated	Customer accepts the risk and is prepared to pay for it
Large projects where cost forecasting is vital	Cost is low – doubling it won't be significant
Projects which have to be done correctly from the start – later changes are much more expensive, e.g. construction	Software projects where fundamental changes can be made at any time
When you don't want a poor prototype to tarnish your reputation	When you need to get a prototype out quickly
When the whole job needs to be delivered in one successful lump, fully working from day 1	When it's OK to deliver the job in parts, starting with the key parts ASAP

fig. 9

THE IRON TRIANGLE

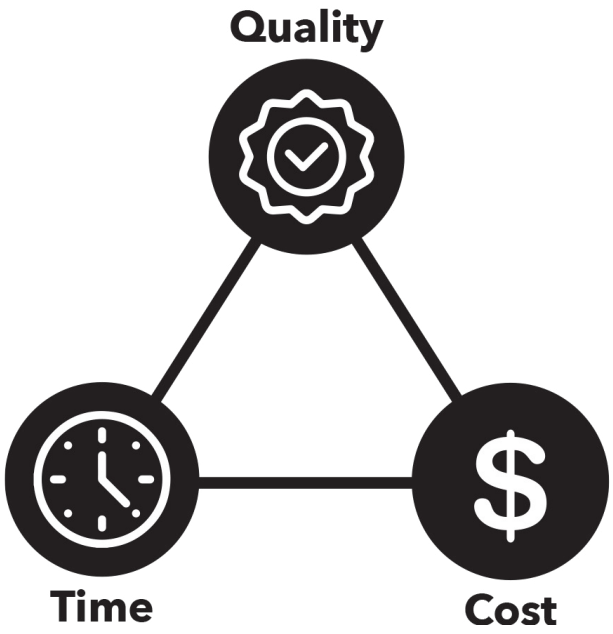
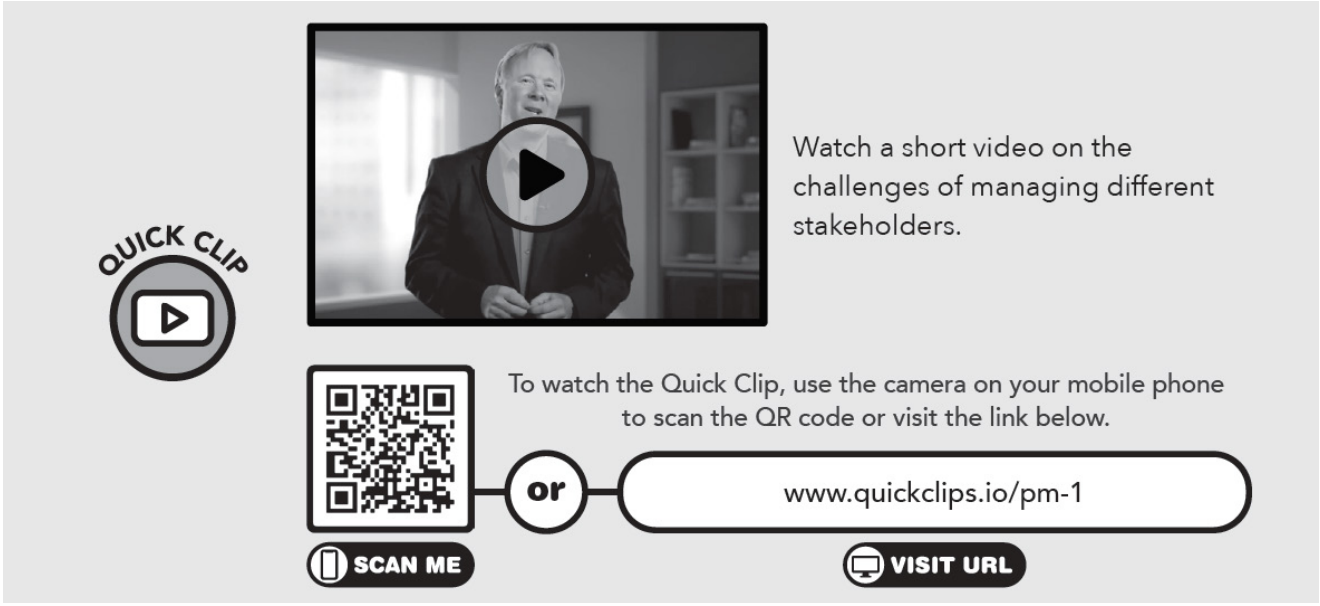


fig. 10

PROJECT TRADE-OFFS

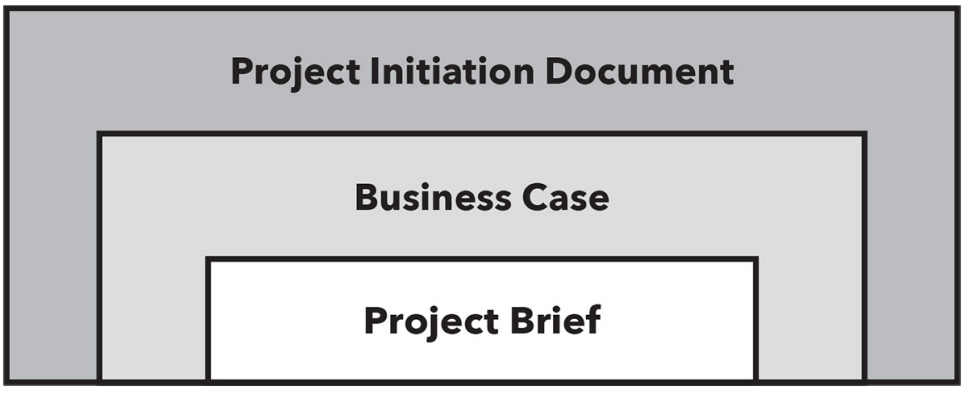
QC. 1



QC. 2

fig. 11

THREE LEVELS OF APPROVAL



CHAPTER 4

List the Tasks – Step 2

fig. 12

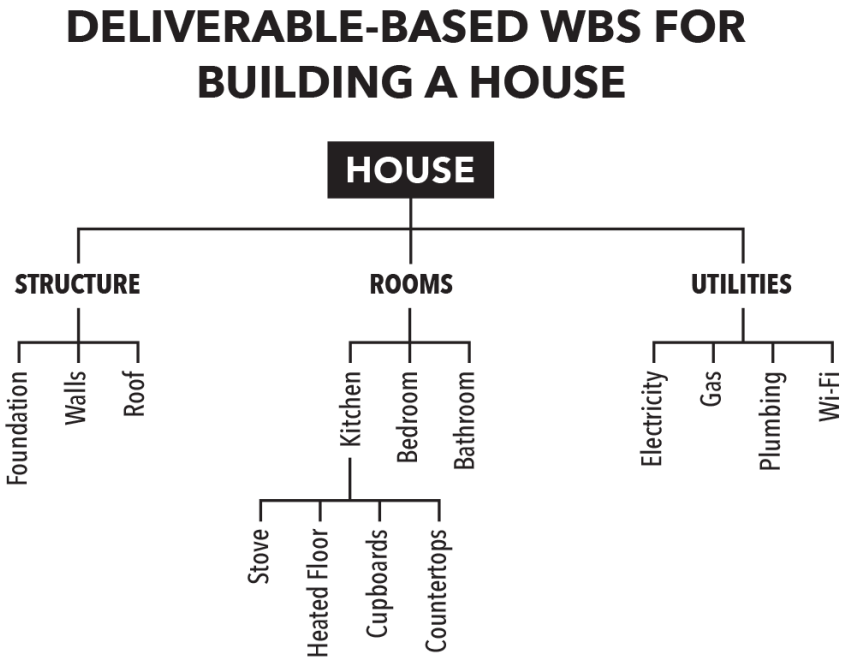


fig. 13

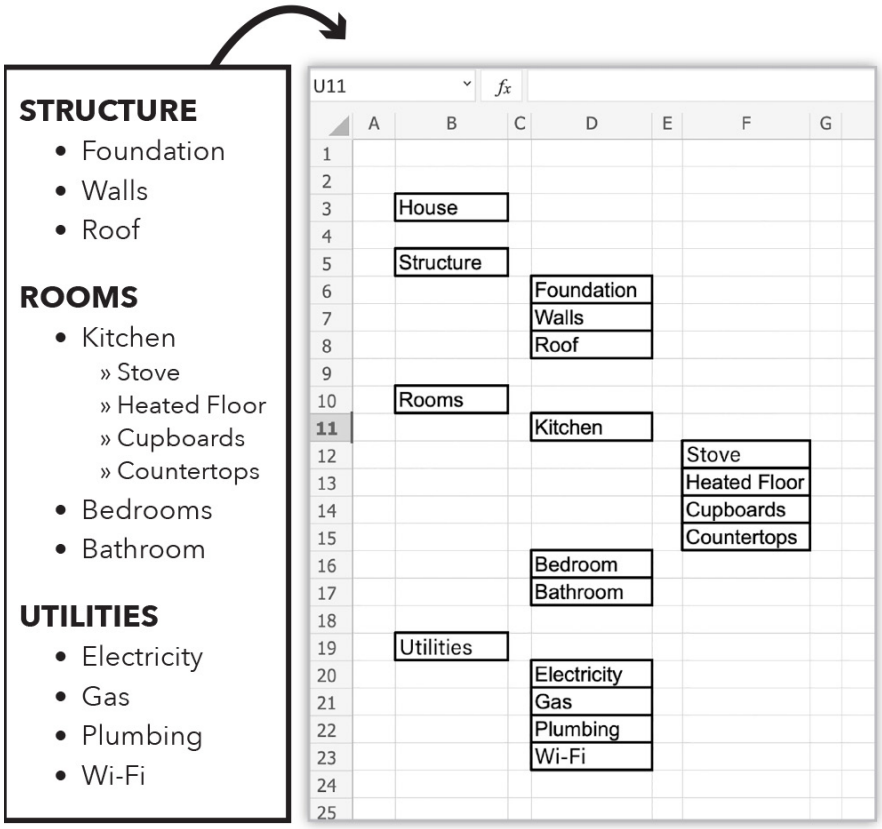


fig. 14

PHASE-BASED WBS FOR BUILDING A HOUSE

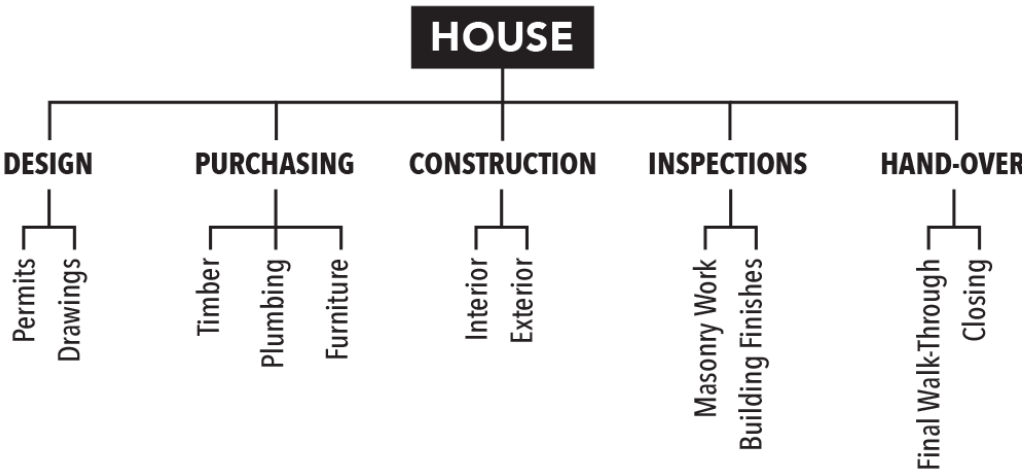


fig. 15

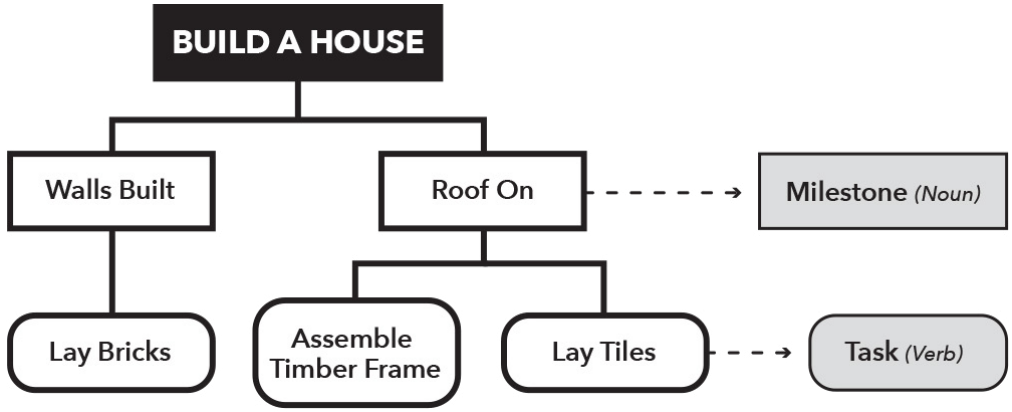


fig. 16

METHODS FOR ENSURING YOUR TASK LIST IS COMPLETE

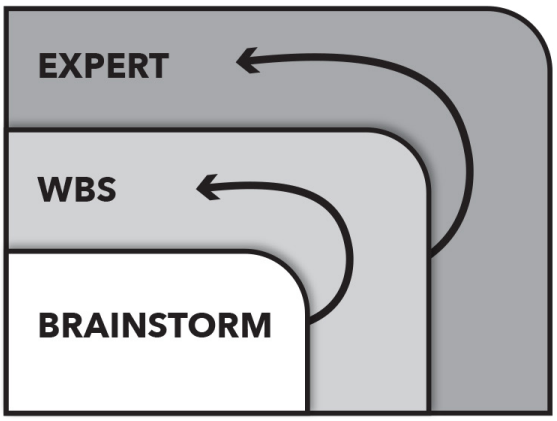


fig. 17

OPTION 1:

SPLITTING TASKS BY EXTRA GRANULARITY

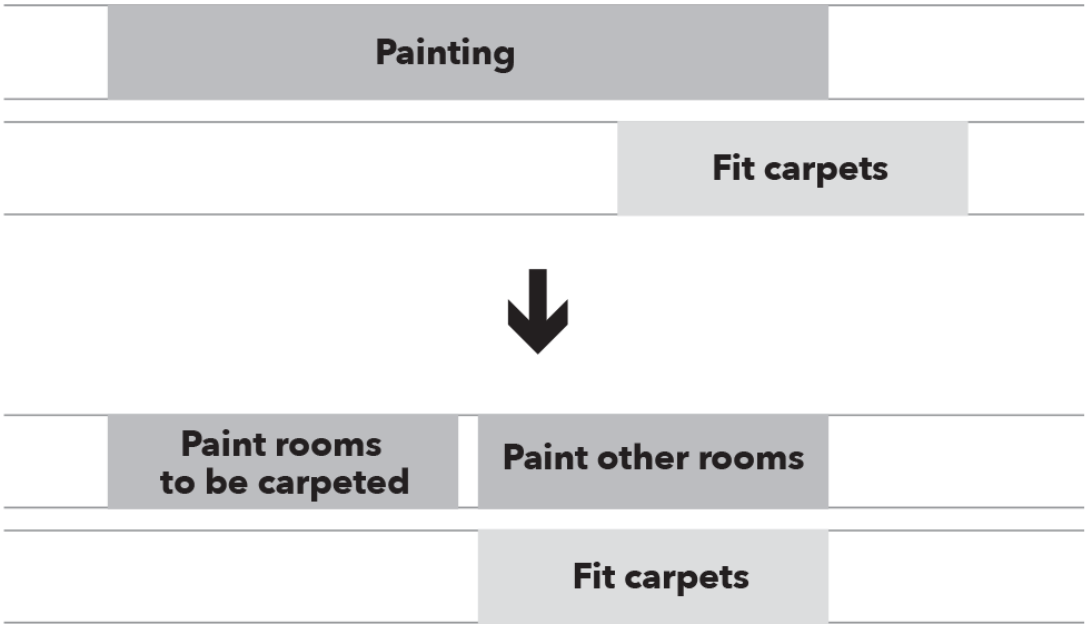
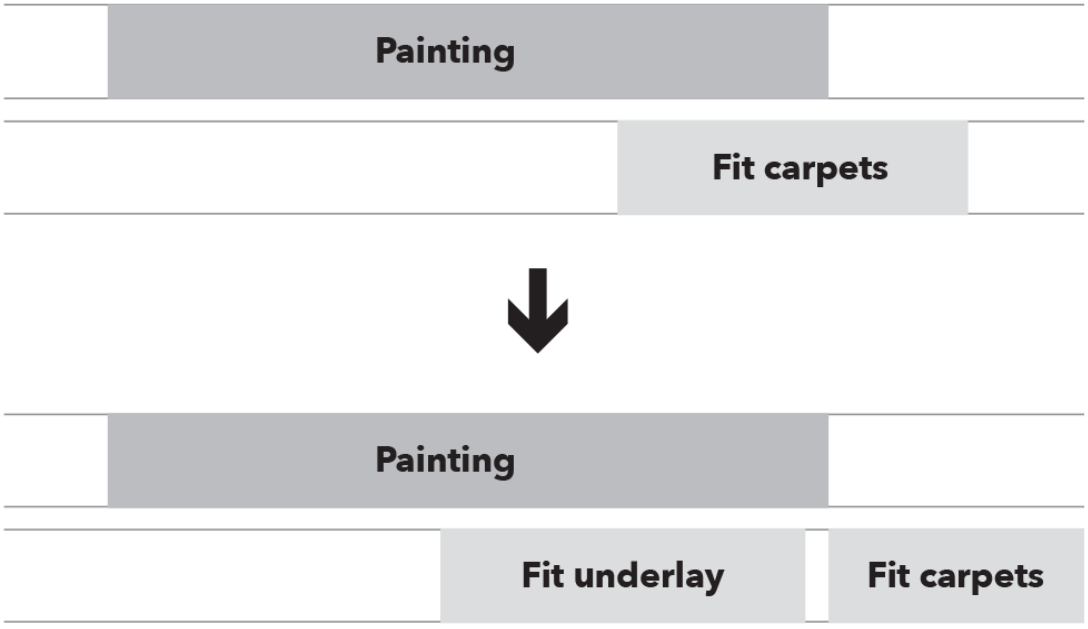


fig. 18

OPTION 2:

SPLITTING TASKS BY EXTRA GRANULARITY



QC. 3


QUICK CLIP
I've made a short video on the difference between bottom-up and top-down planning.
To watch the Quick Clip, use the camera on your mobile phone to scan the QR code or visit the link below.
or
www.quickclips.io/pm-3
SCAN ME
VISIT URL

CHAPTER 5

Set the Running Order – Step 3

QC. 4

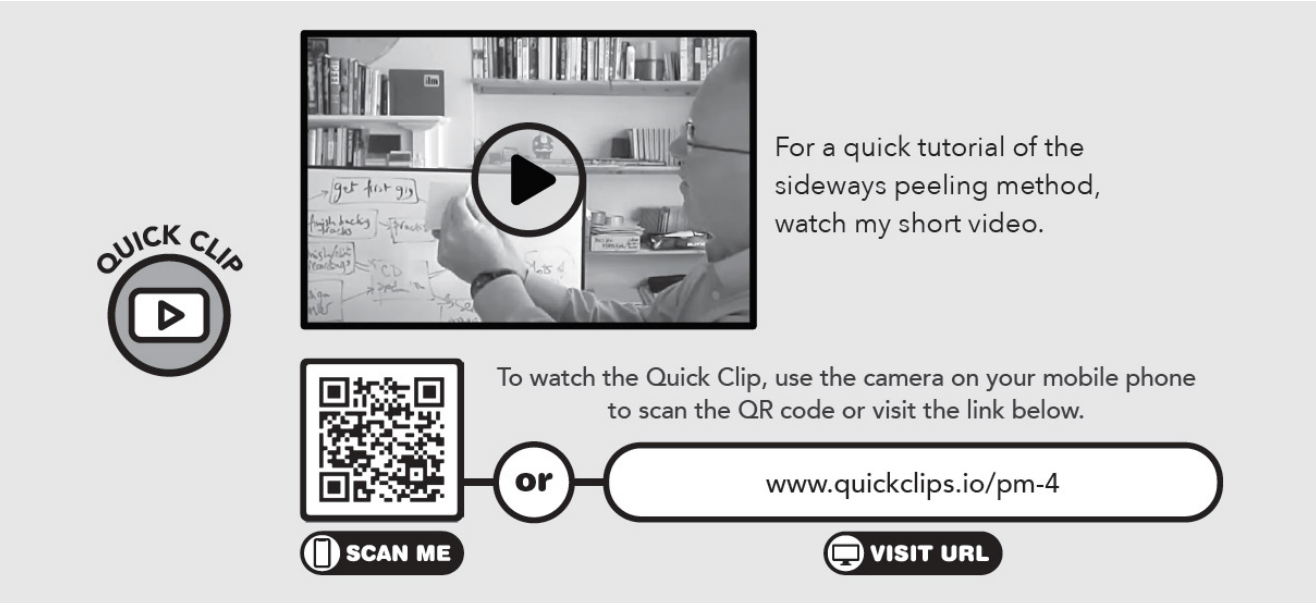


fig. 19

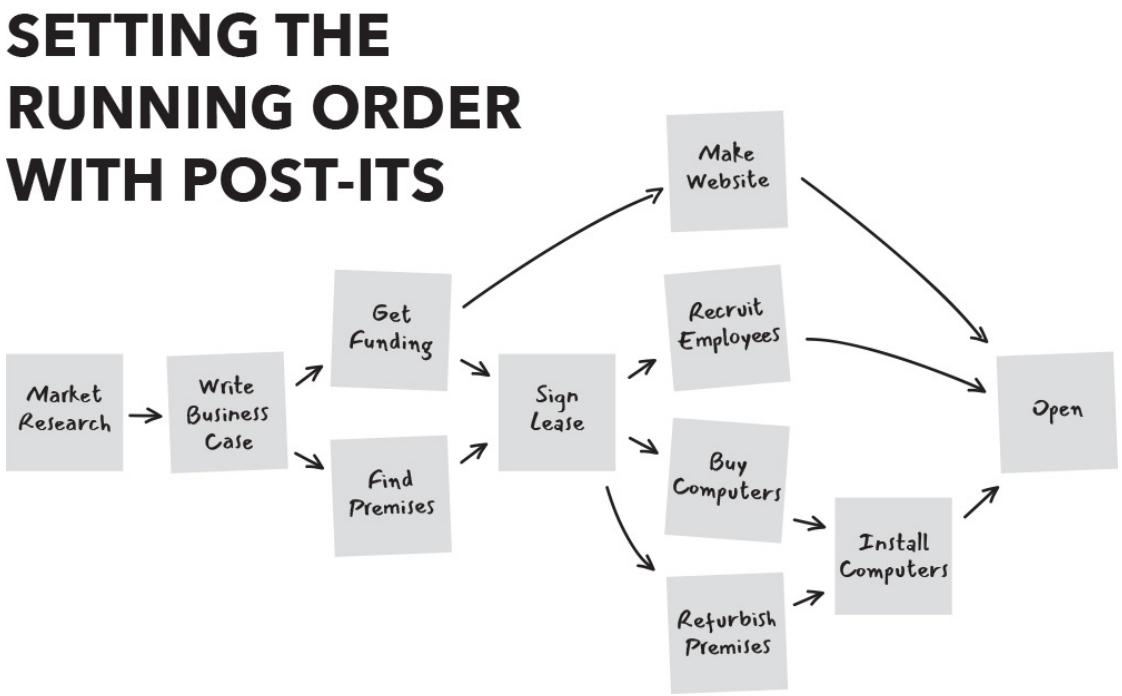


fig. 20

RUNNING ORDER THAT'S TOO LINEAR

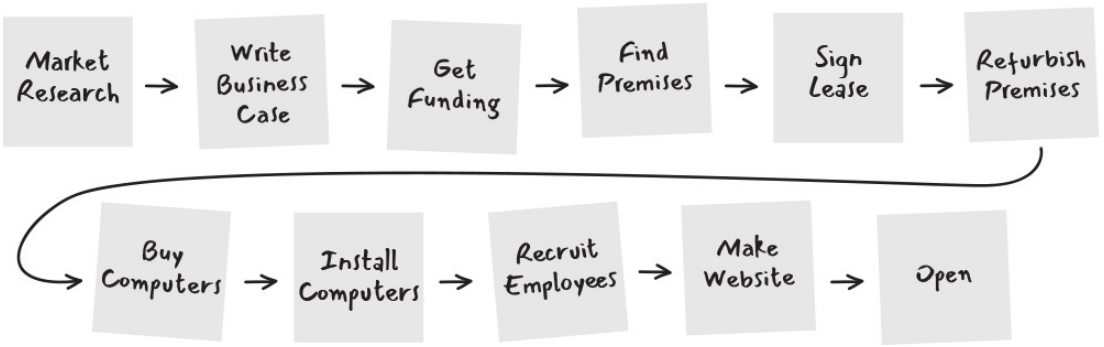


fig. 21

RUNNING ORDER THAT'S TOO PARALLEL

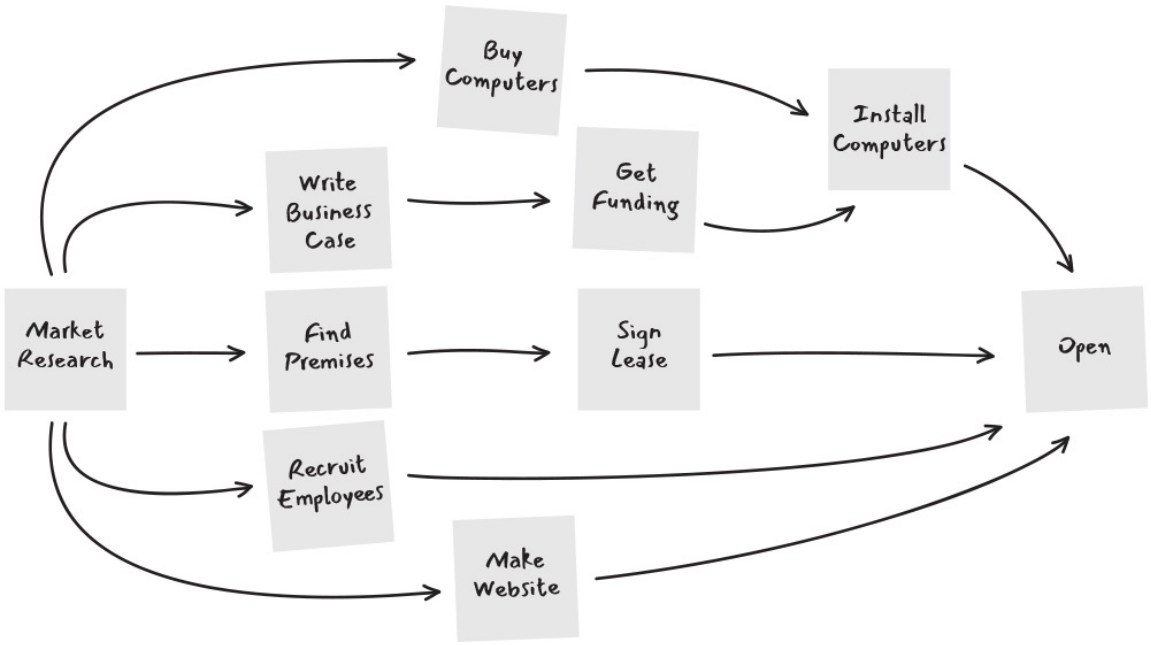


fig. 22

BRANCHING FOR A PUBLISHING PROJECT

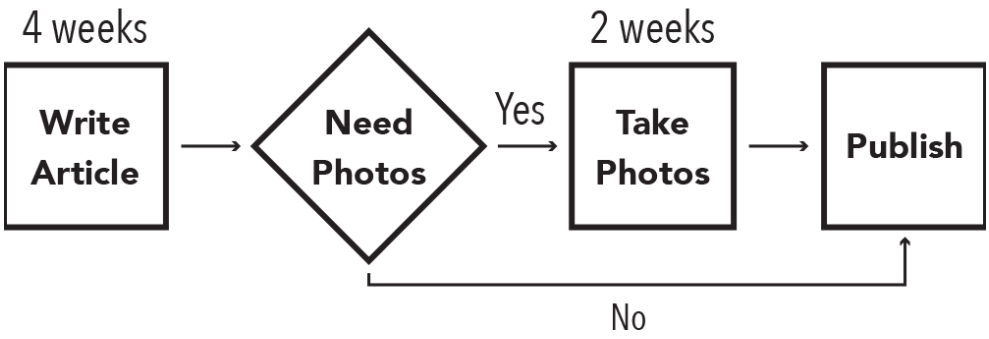


fig. 23

FLOW DIAGRAM INFINITE LOOP

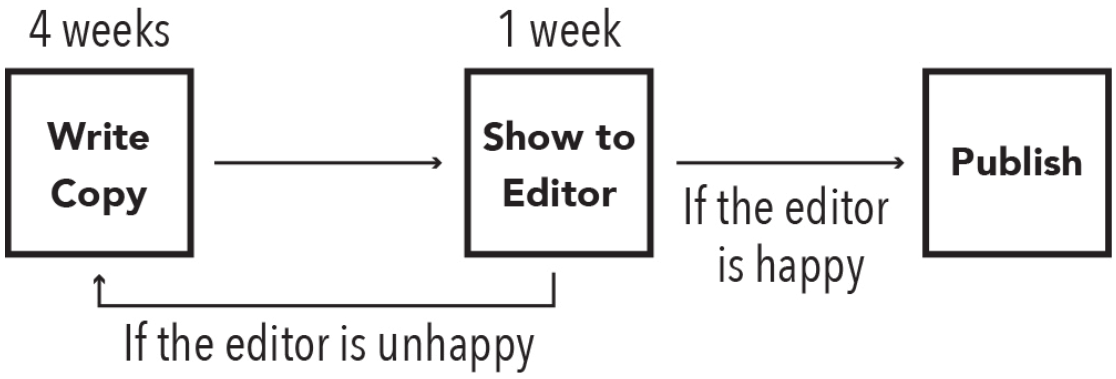
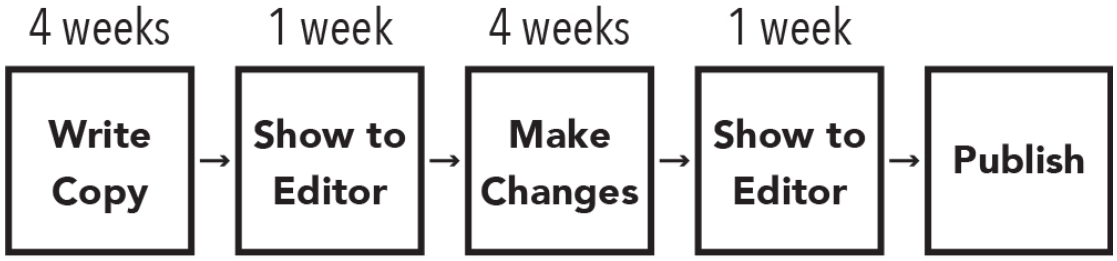


fig. 24

CUTTING THE LOOP



QC. 5

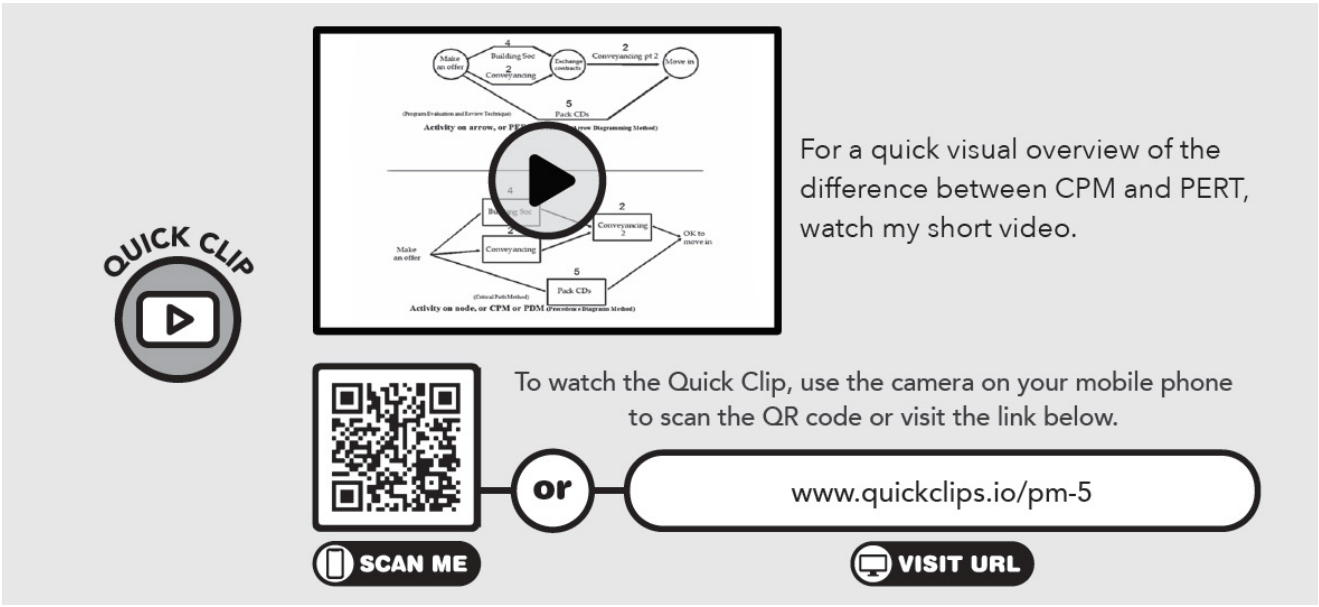


fig. 25

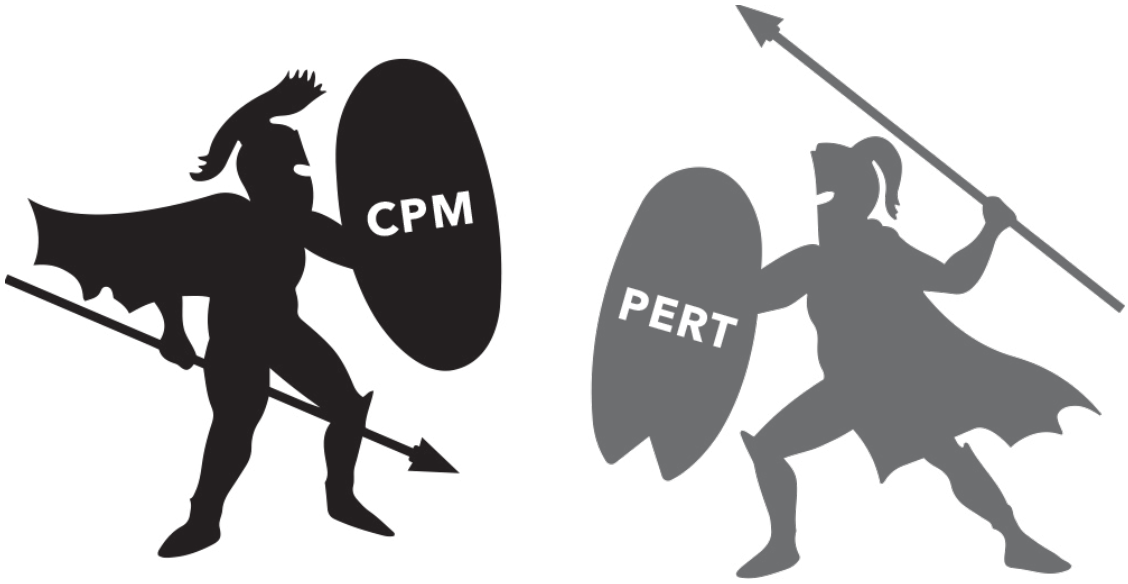


fig. 26

EXAMPLE OF TRAINING DAY AS A MIX OF EVENTS AND ACTIVITIES

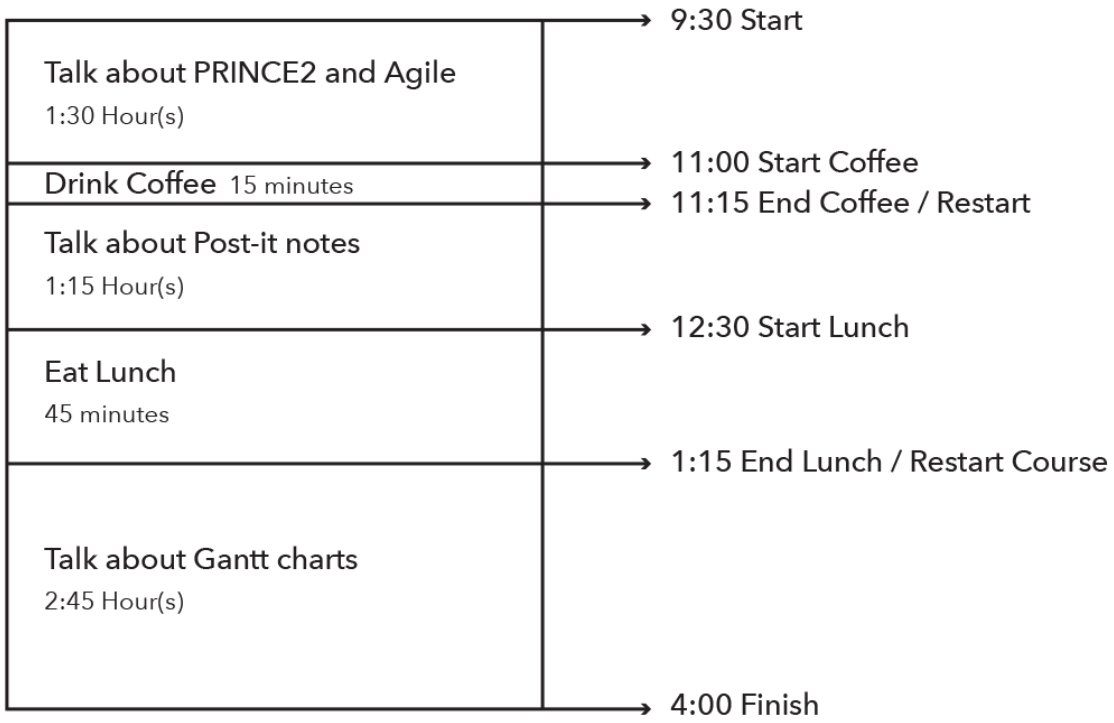
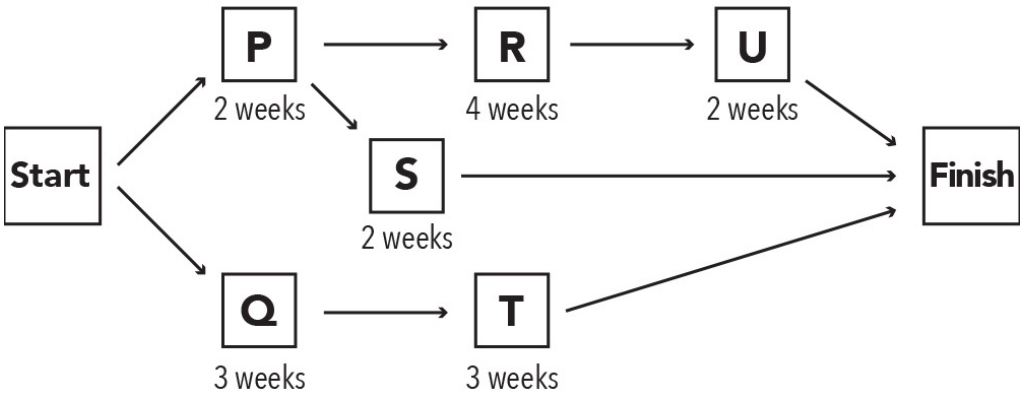


fig. 27

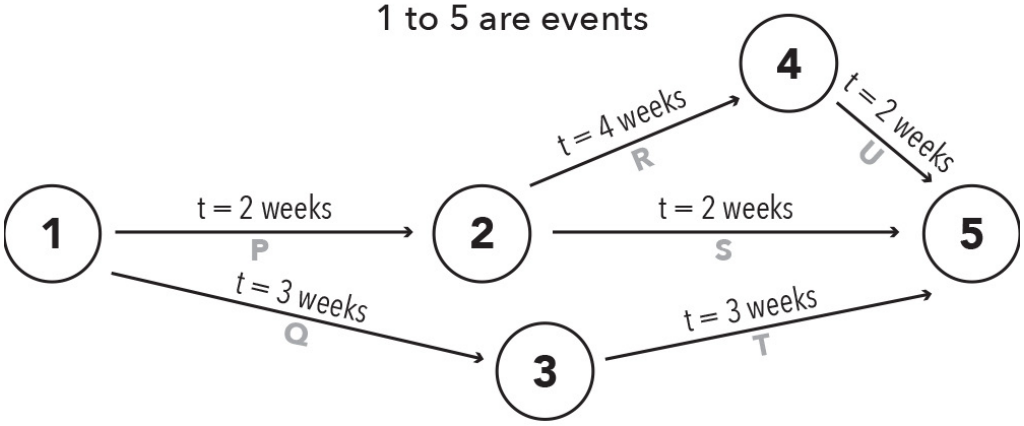
CRITICAL PATH METHOD (CPM)

P to U are activities

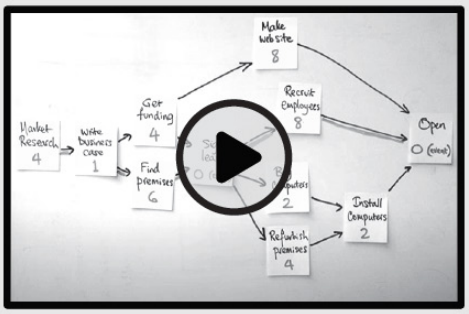


PROJECT EVALUATION AND REVIEW TECHNIQUE (PERT)

1 to 5 are events



QC. 6



QUICK CLIP

For a quick video overview of CPM made easy, watch my short clip.

To watch the Quick Clip, use the camera on your mobile phone to scan the QR code or visit the link below.

or

www.quickclips.io/pm-6

SCAN ME

VISIT URL

fig. 28

NEW BUSINESS PROJECT USING CPM

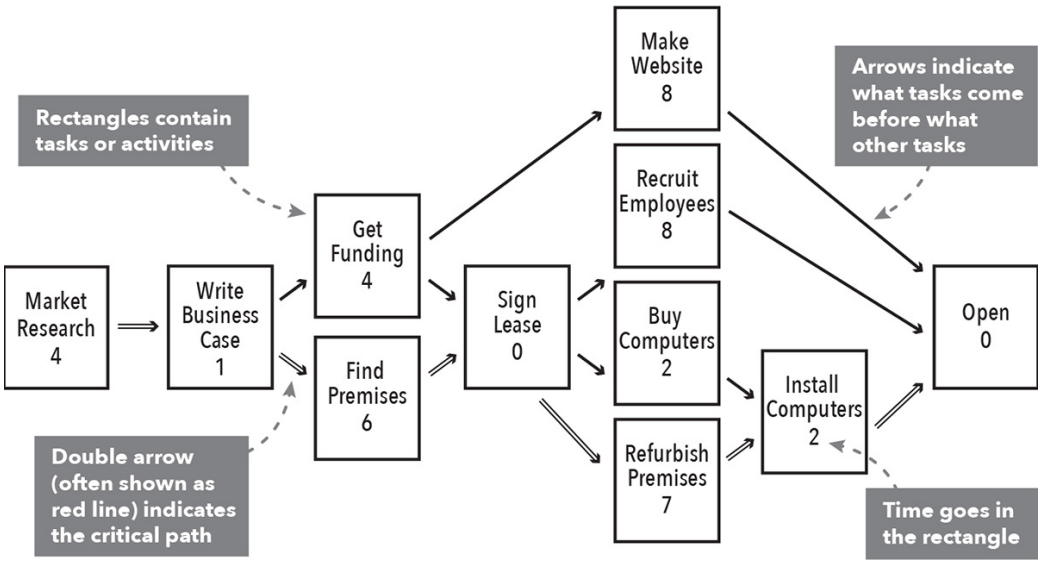


fig. 29

NEW BUSINESS PROJECT USING PERT

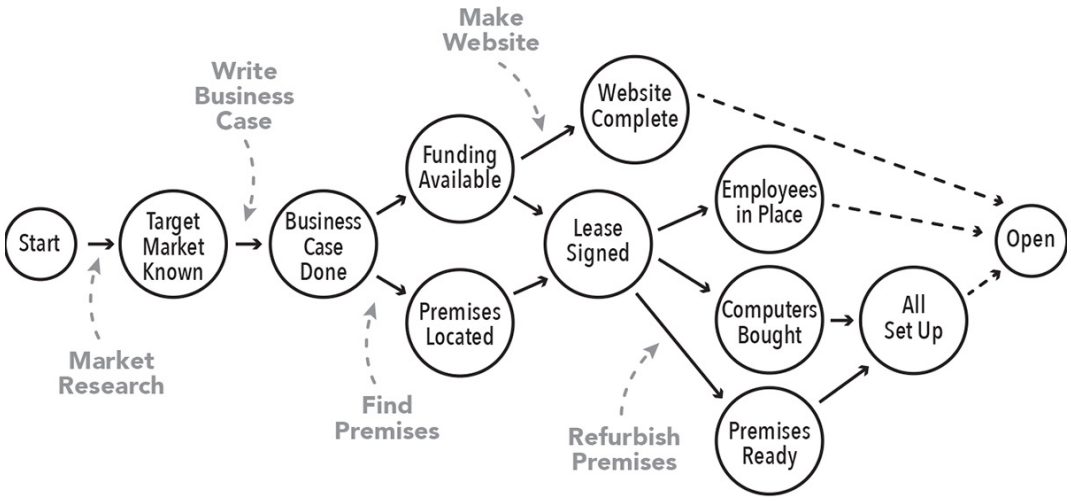


fig. 30

EVENT FOCUS CAN BE ILLOGICAL

fig. 31

PERT USING A START OR FINISH PROTOCOL

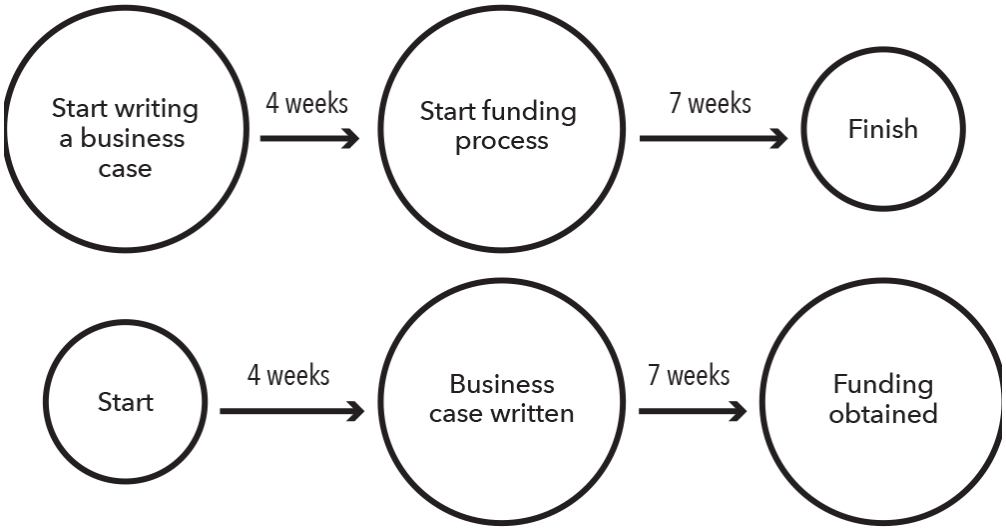


fig. 32

ACTIVITY-FOCUSED CPM IS MORE LOGICAL

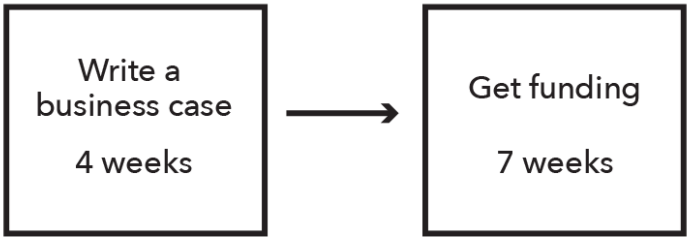


fig. 33

DEPENDENCIES SHOWN IN CPM

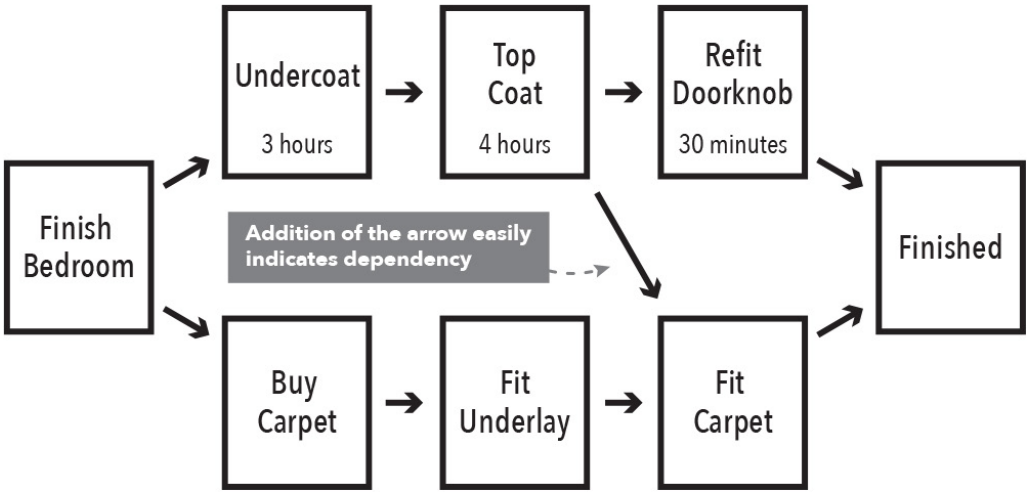


fig. 34

DEPENDENCIES SHOWN IN PERT

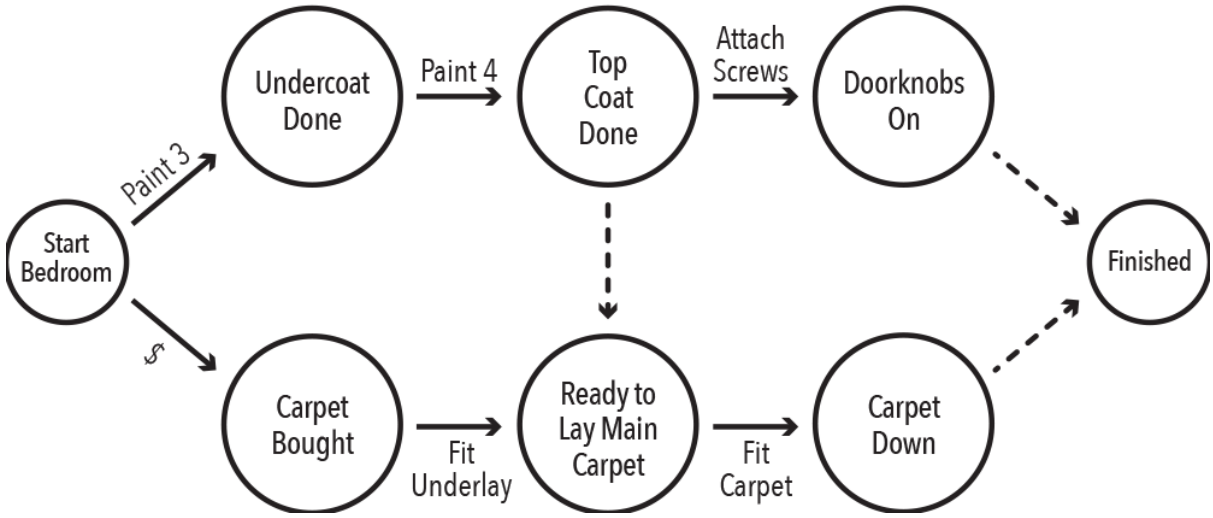


fig. 35

EASY WAY TO ADD AN EVENT TO A CPM DIAGRAM

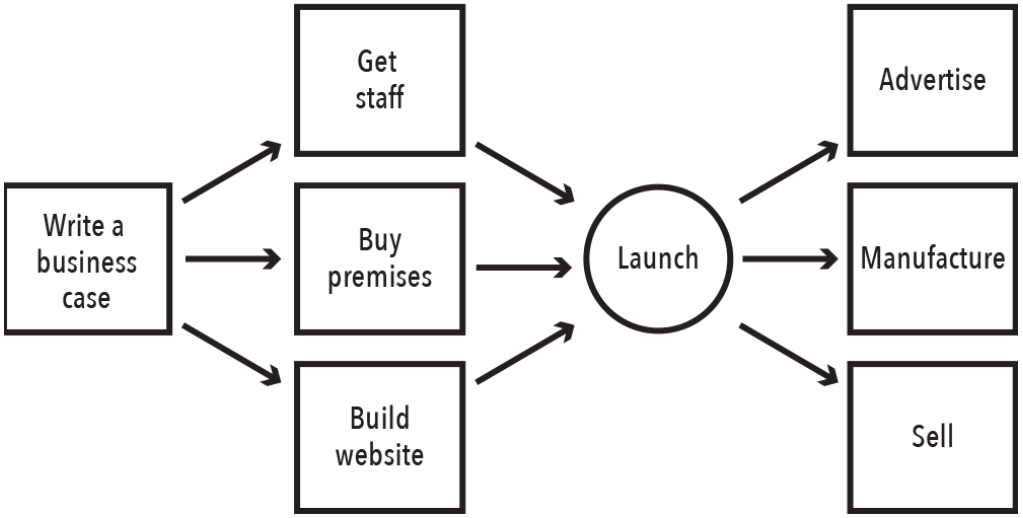


fig. 36

PERT	CPM
Circles show events	Rectangles show activities
Activities are on the arrows	Arrows show what comes before what
Time goes on the arrows	Time goes in the boxes

fig. 37

ANARCHY OF MIXED METHODOLOGIES

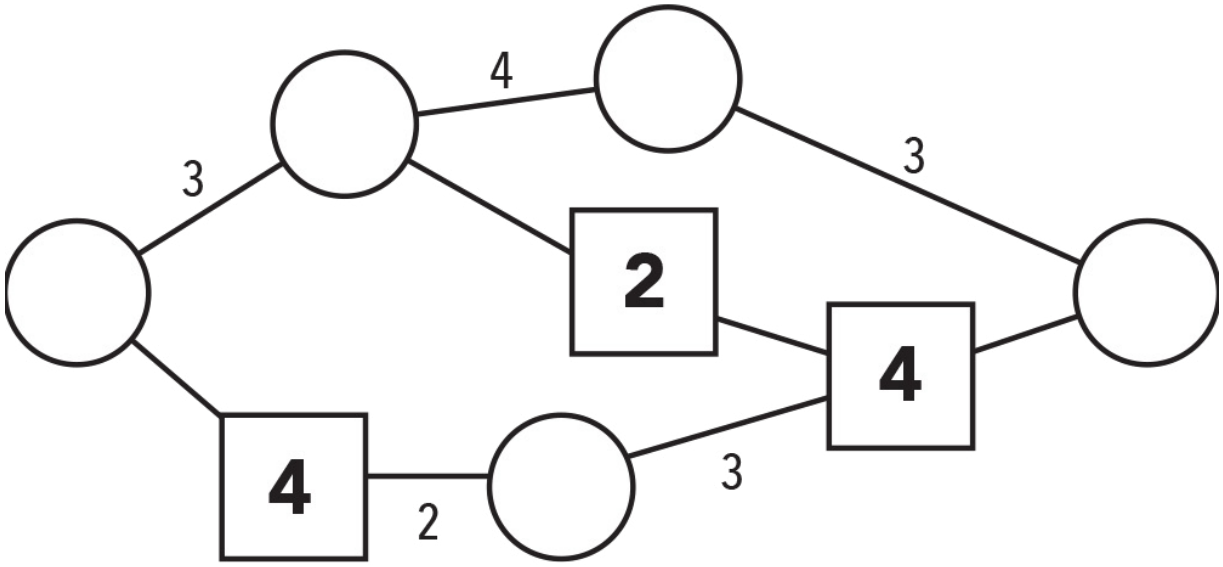


fig. 38

CPM RECTANGLE ACTIVITY BOXES GONE MAD

Earliest start week	Duration	Earliest finish week
Name of task		
Latest possible start week	Float (earliest minus latest)	Latest possible finish week

CHAPTER 6

Put Estimates on the Tasks – Step 4

fig. 39

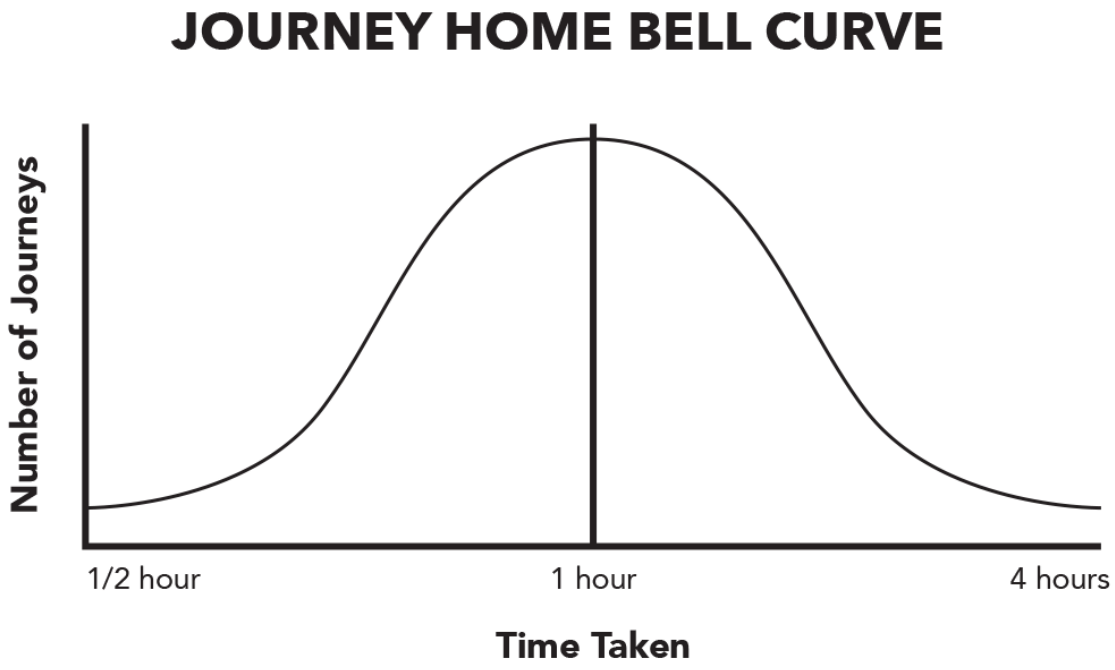


fig. 40

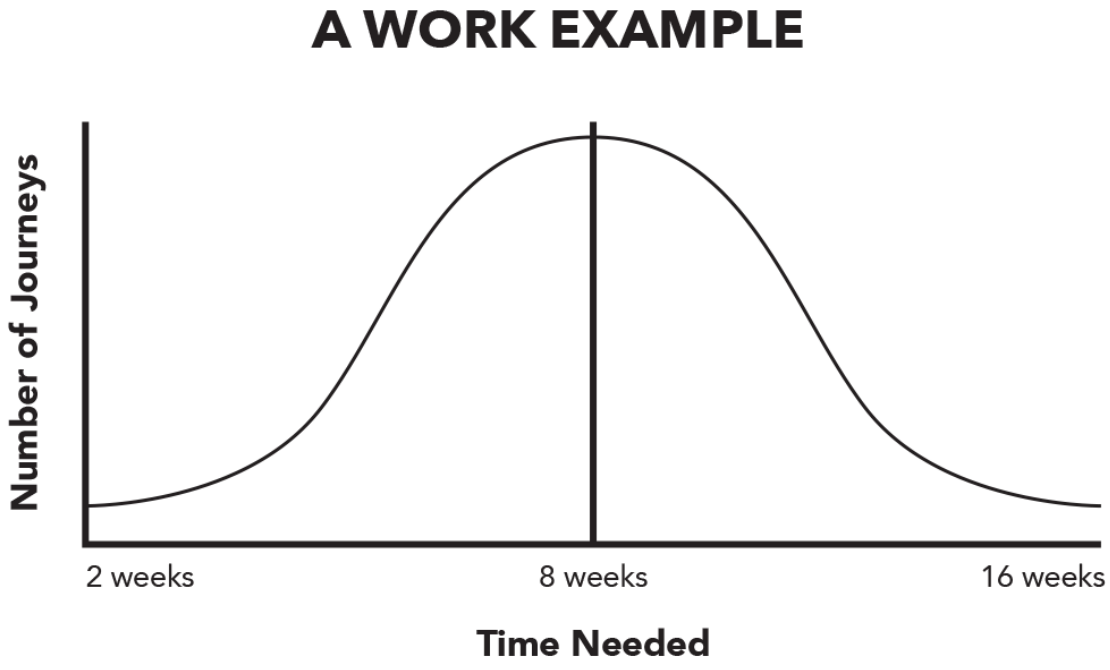


fig. 41

TWO TYPES OF TIME

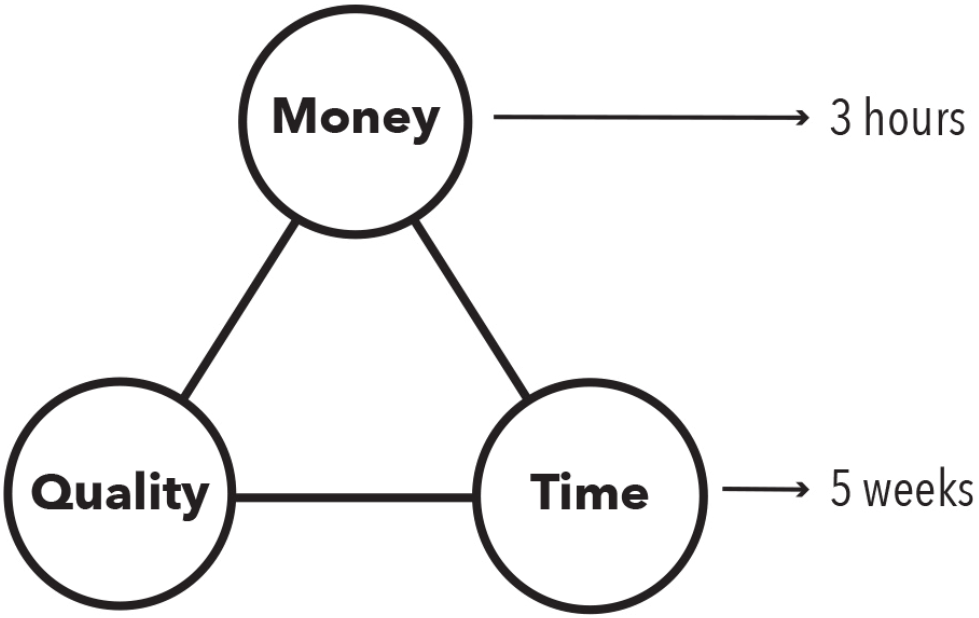


fig. 42

COMPLEX CRITICAL PATH EXAMPLE 1

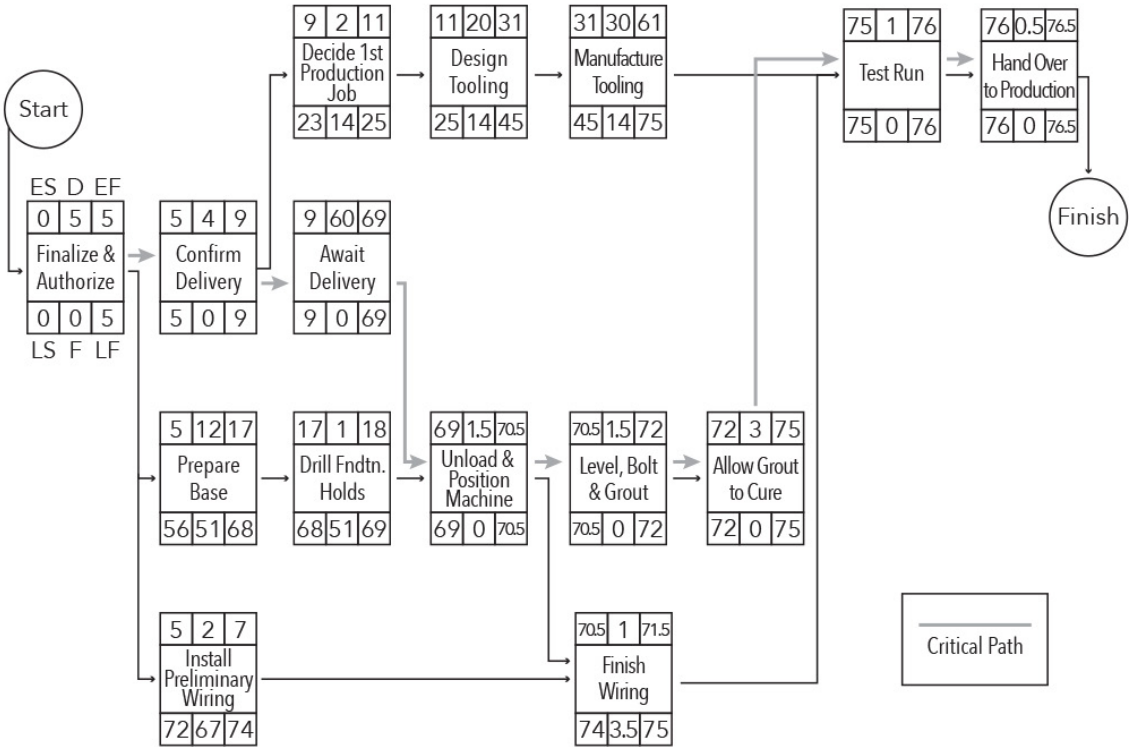


fig. 43

COMPLEX CRITICAL PATH EXAMPLE 2

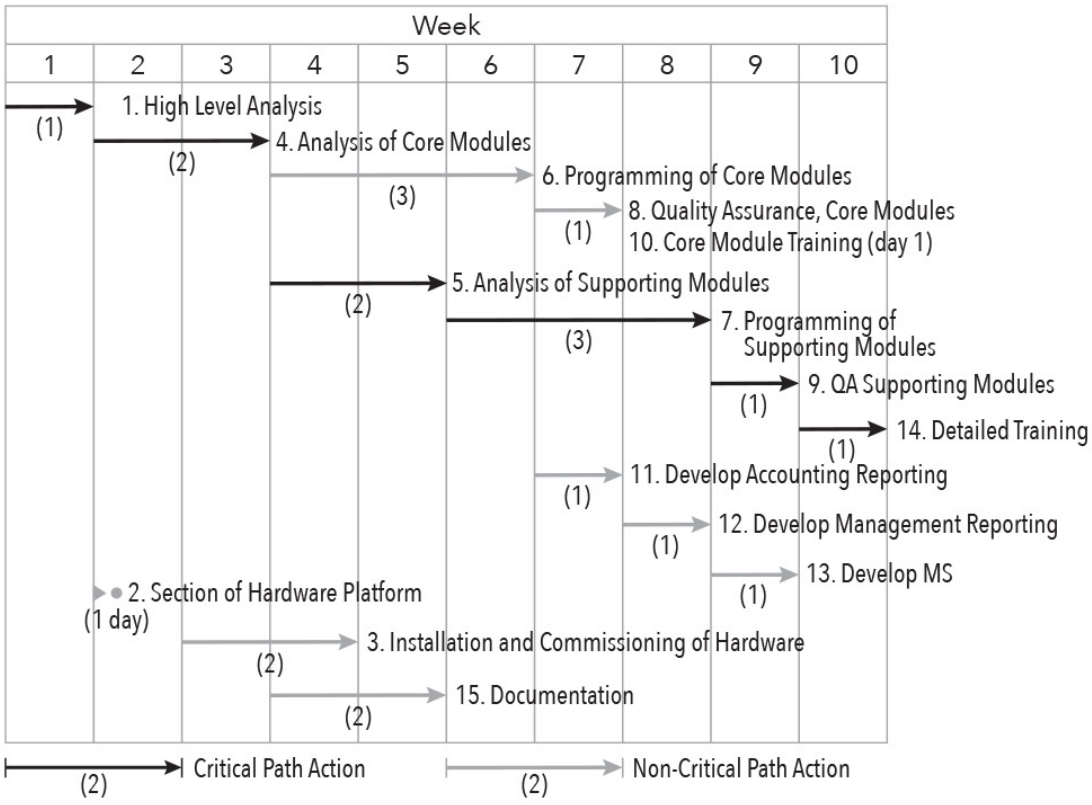


fig. 44

COMPLEX CRITICAL PATH EXAMPLE 3

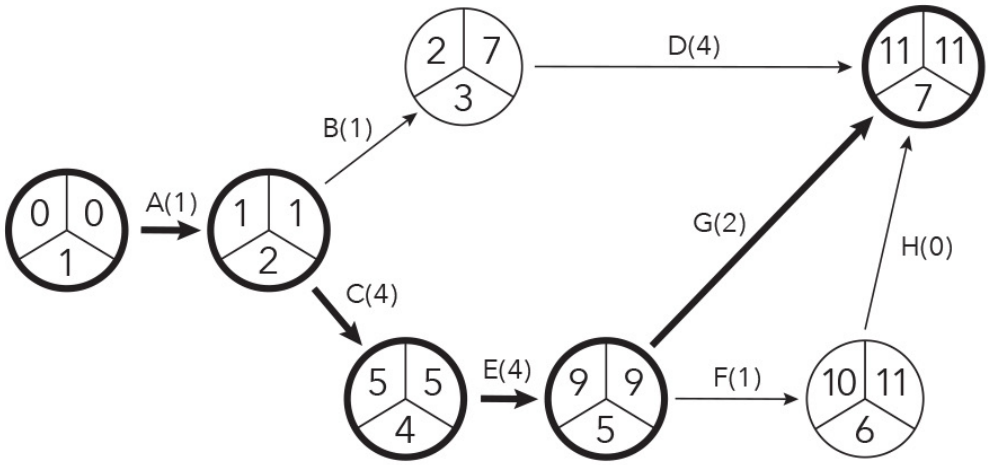


fig. 45

FIND THE CRITICAL PATH

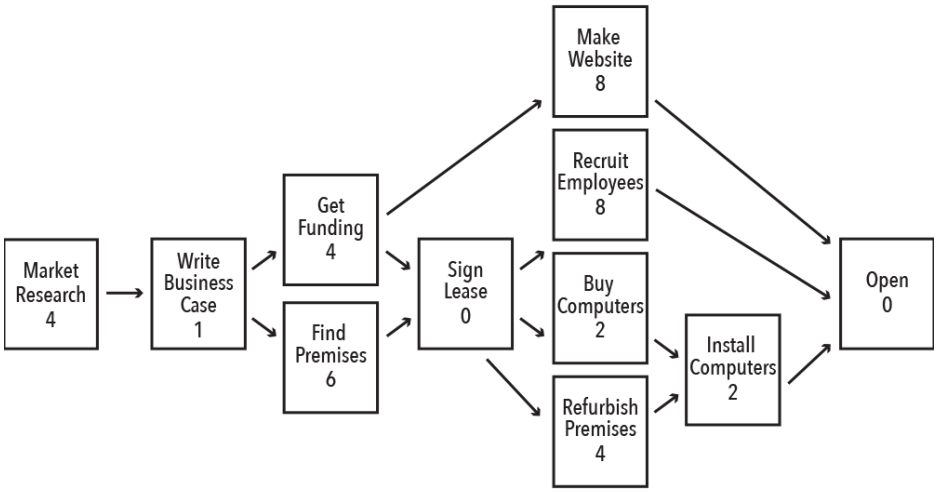


fig. 46

CORRECT CRITICAL PATH

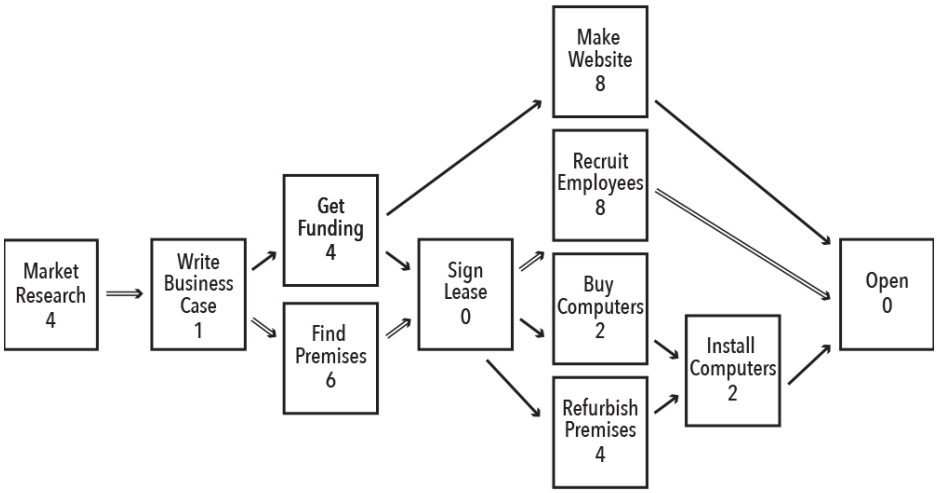


fig. 47

TWO CRITICAL PATHS

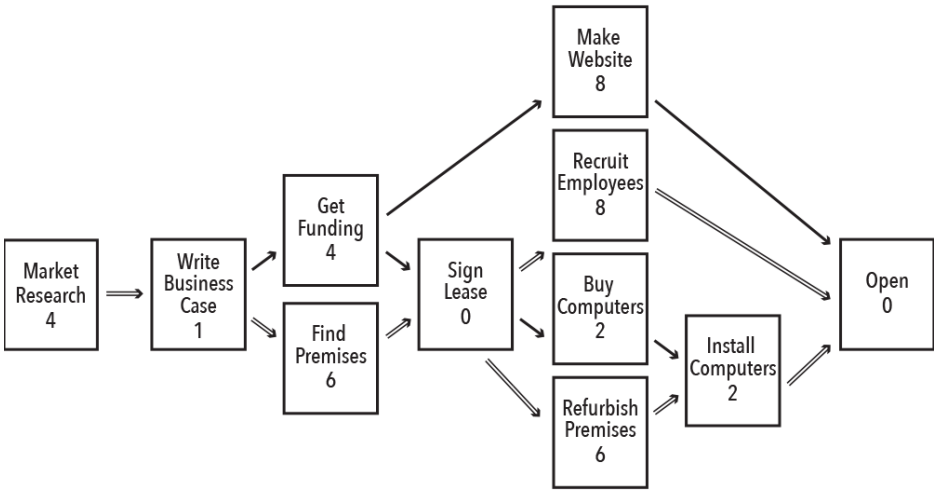


fig. 48

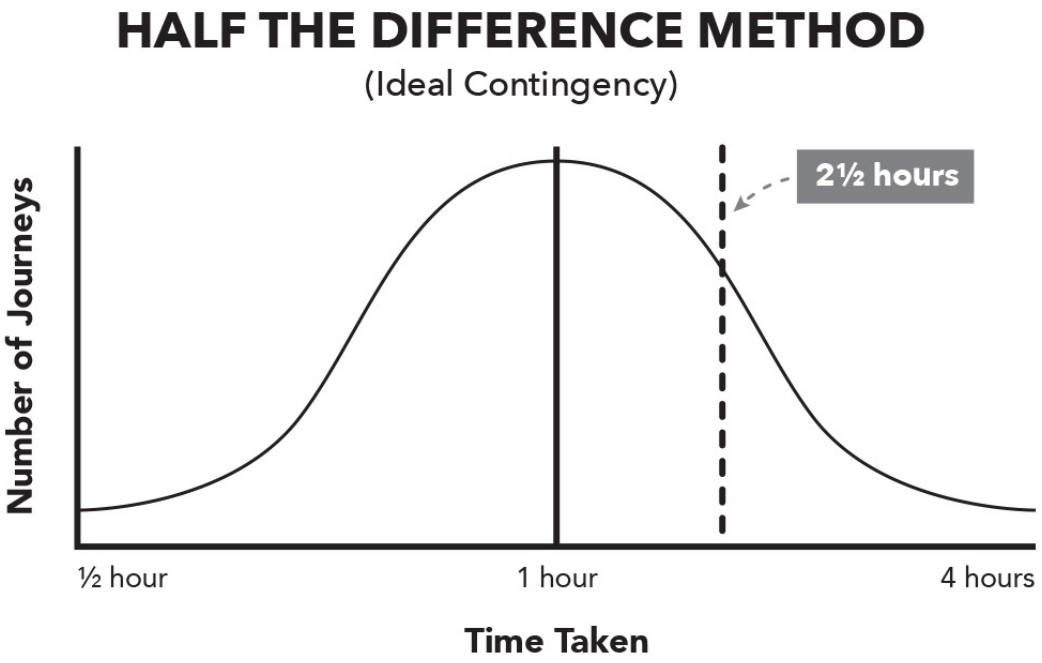

HALF THE DIFFERENCE METHOD
(Ideal Contingency)
2½ hours
Number of Journeys
½ hour
1 hour
4 hours
Time Taken

fig. 49

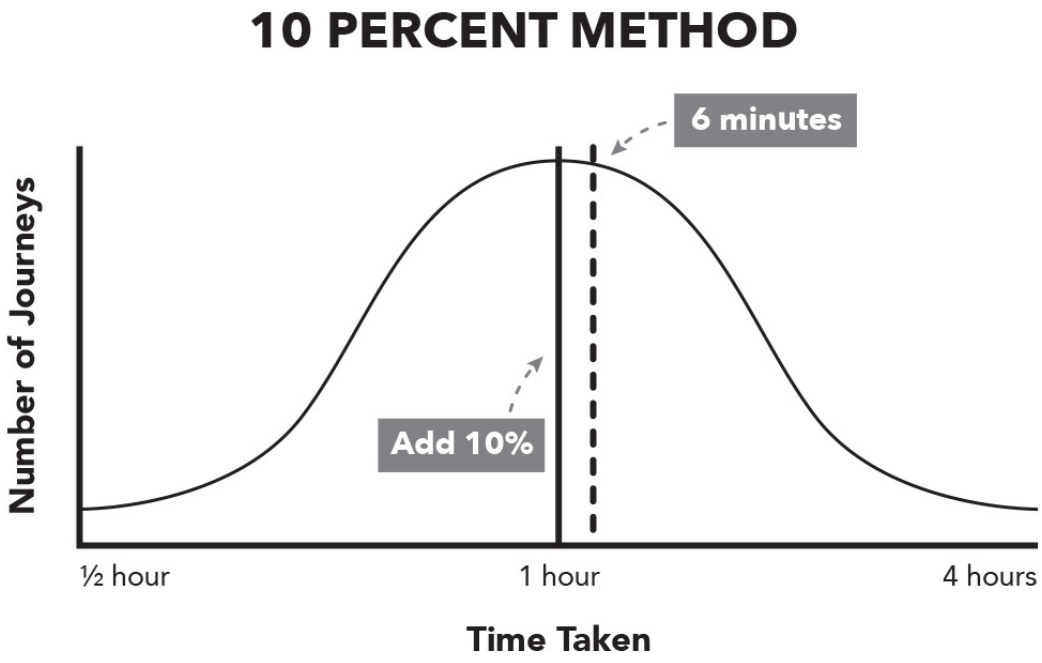
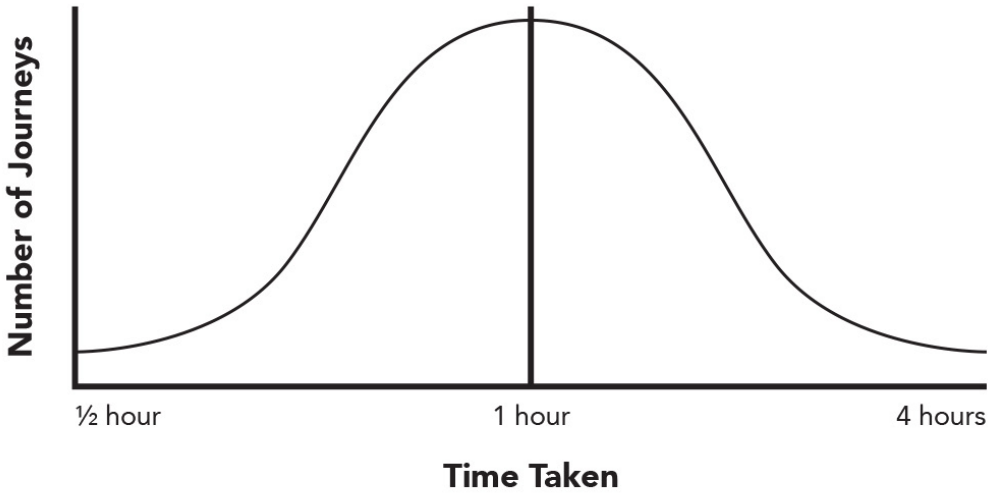

10 PERCENT METHOD
6 minutes
Add 10%
Number of Journeys
½ hour
1 hour
4 hours
Time Taken

fig. 50

1:4:1 METHOD

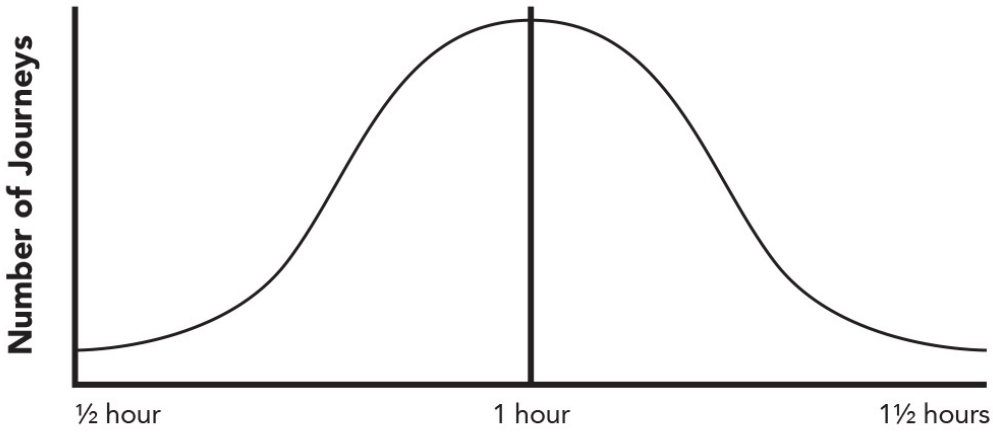


30		60		240		
x 1		x 4		x 1		
30	**+**	**240**	**+**	**240**	**= 510/6 =**	**85 minutes**

Predicted Journey Time = **1 hour and 25 minutes**

fig. 51

1:4:1 METHOD FOR SYMMETRICAL DISTRIBUTION



30		60		90		
x 1		x 4		x 1		
30	**+**	**240**	**+**	**90**	**= 360/6 =**	**60 minutes**

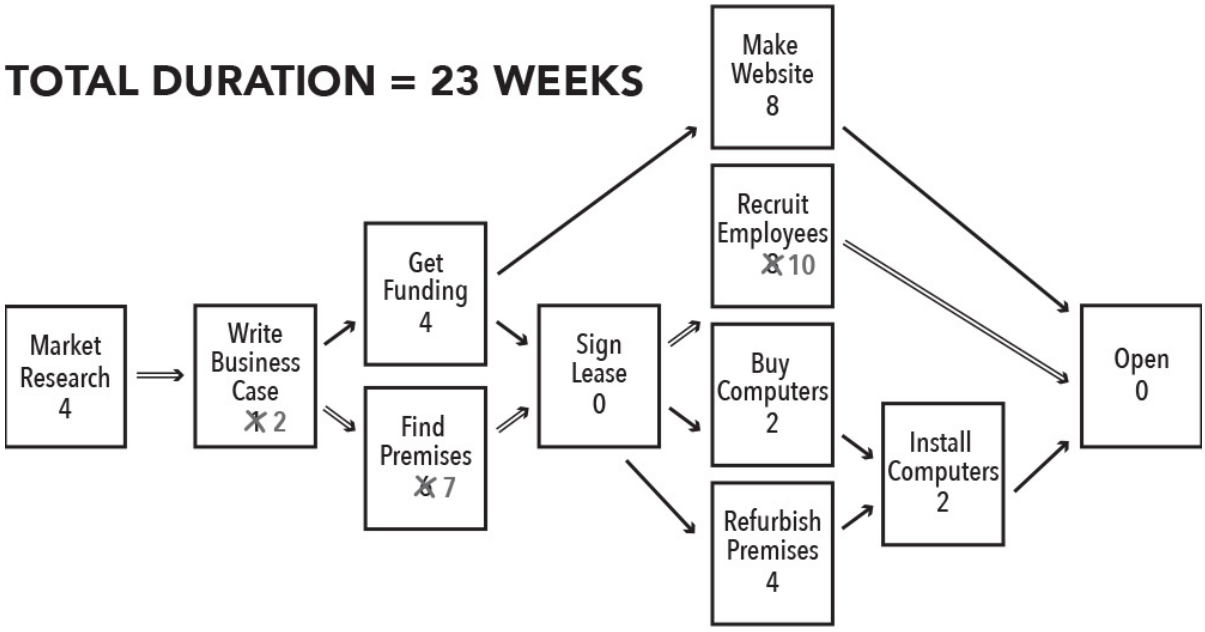
Predicted Journey Time = **1 hour**

The calculation has added no contingency!

fig. 52

CALCULATING CONTINGENCY			
TASK	**CURRENT**	**WORST CASE**	**EXTRA ADDED**
MARKET RESEARCH	4	4	0
BUSINESS CASE	1	2	1
FIND PREMISES	6	10	4
SIGN LEASE *(event)*	0	0	0
RECRUIT EMPLOYEES	8	11	3
TOTAL	**19**	**27**	**8**

fig. 53



CHAPTER 7

Crash the Plan – Step 5

fig. 54

SPREAD CONTINGENCY ALONG THE CRITICAL PATH

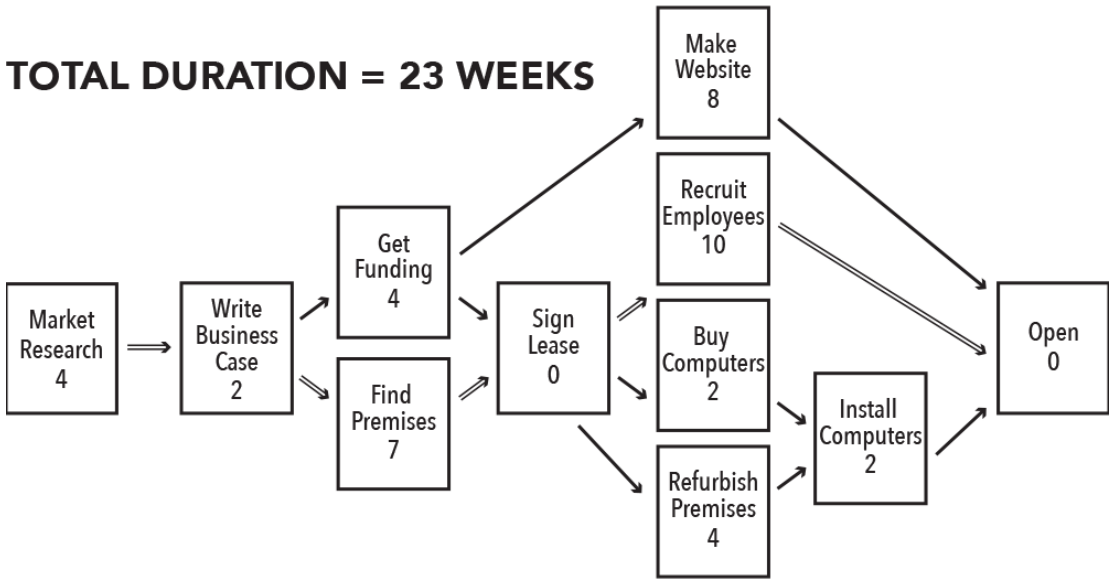


fig. 55

DOES CRASHING YOUR PLAN CREATE A NEW CRITICAL PATH?

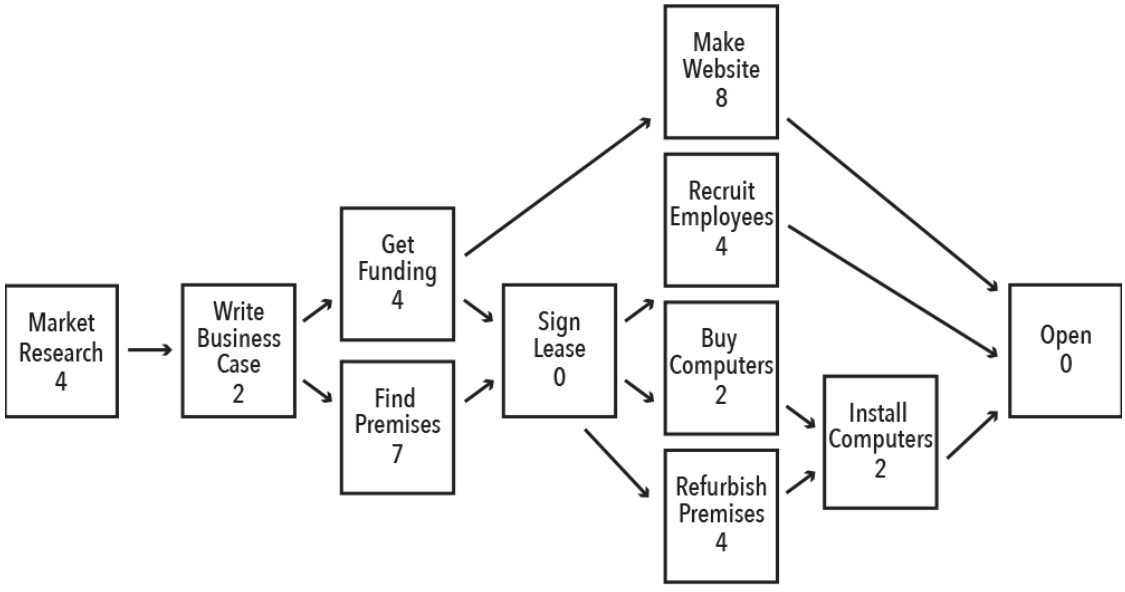
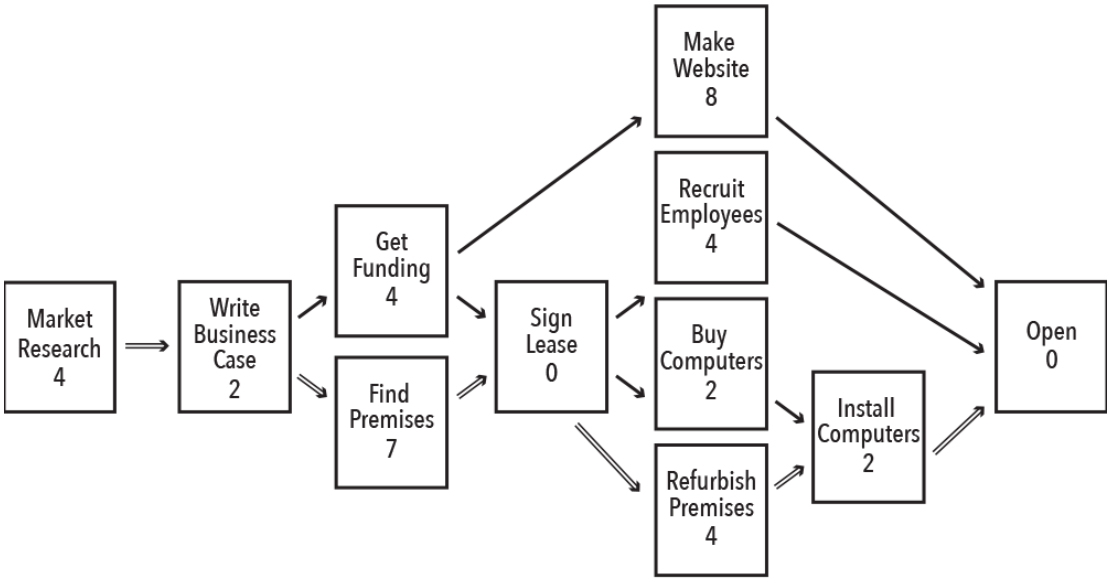


fig. 56

YES, CRASHING THE PLAN CREATES A NEW CRITICAL PATH



CHAPTER 8

Gantt Charts – Step 6

fig. 57

SIMPLE GANTT CHART

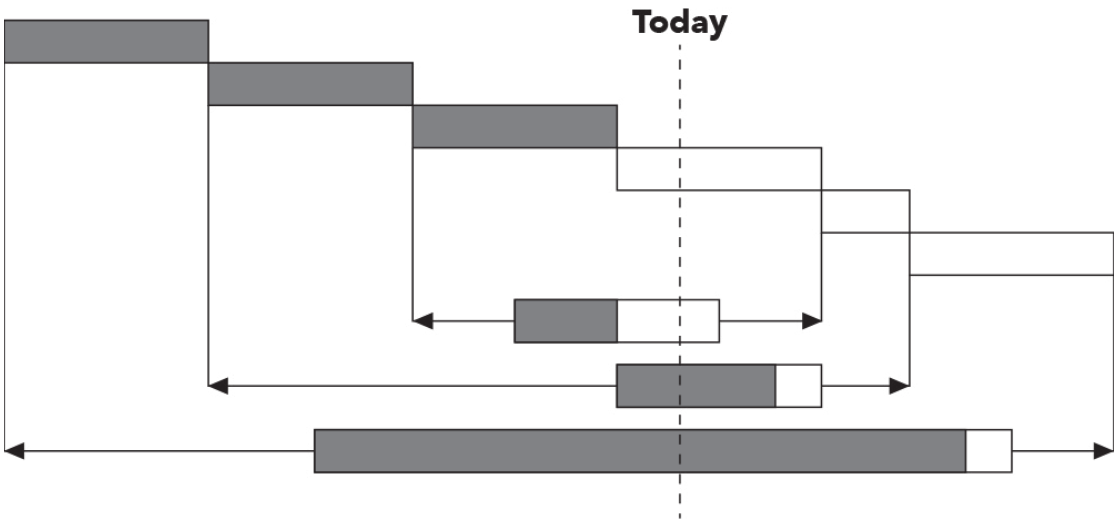
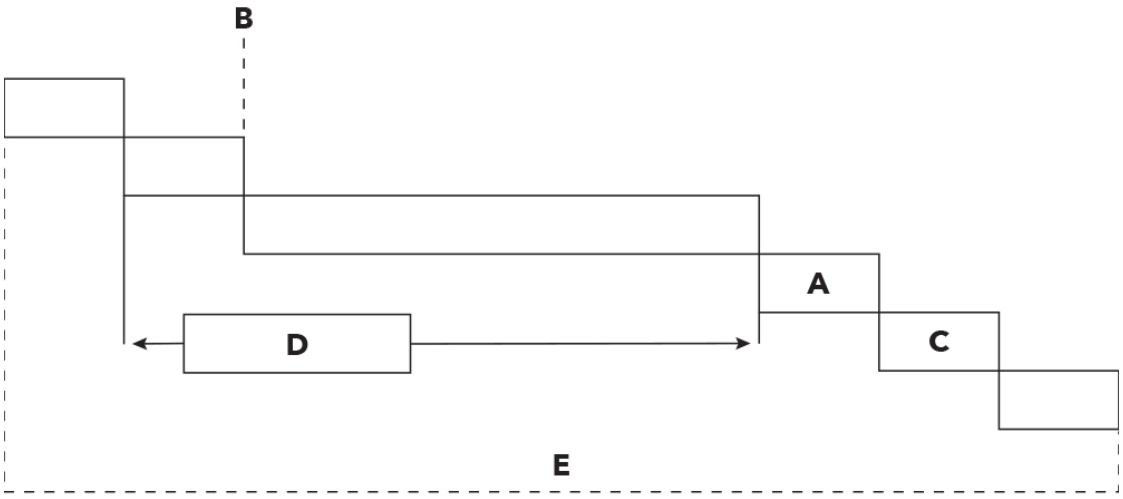


fig. 58

GANTT CHARTS IMPROVE COMMUNICATION



A = Your task

B = Key date when something has been promised, e.g. decision, access, or approval to go ahead

C = "Your task is critical, don't let it run late."

D = "There is some float on your task, so you have some choice about when you do it."

E = "This is why the project takes this long."

fig. 59

GANTT CHARTS HELP TO BETTER MANAGE RESOURCES

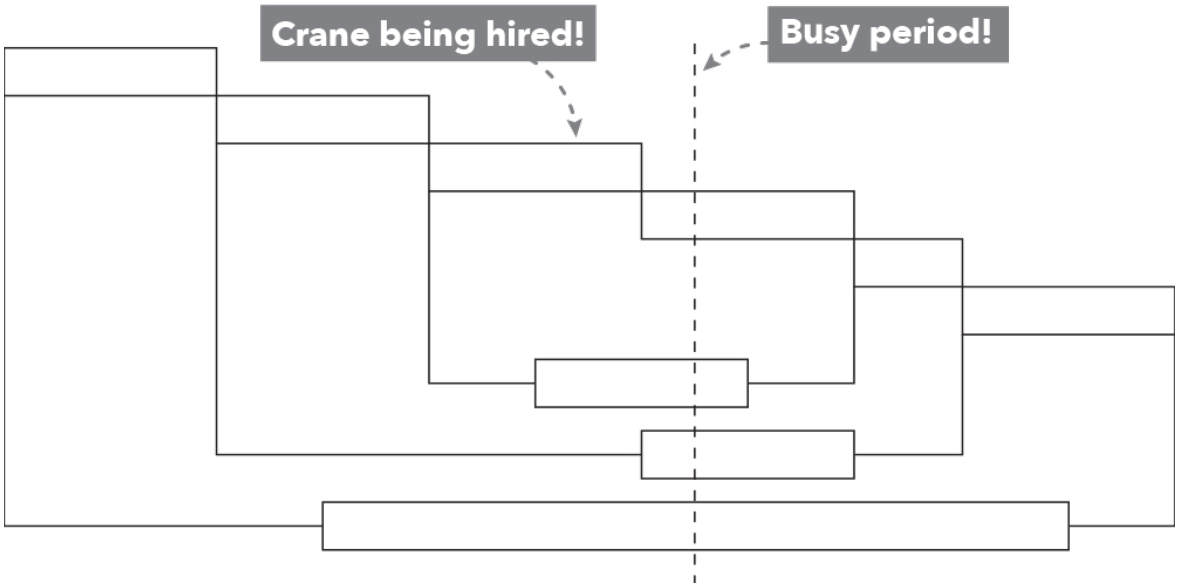
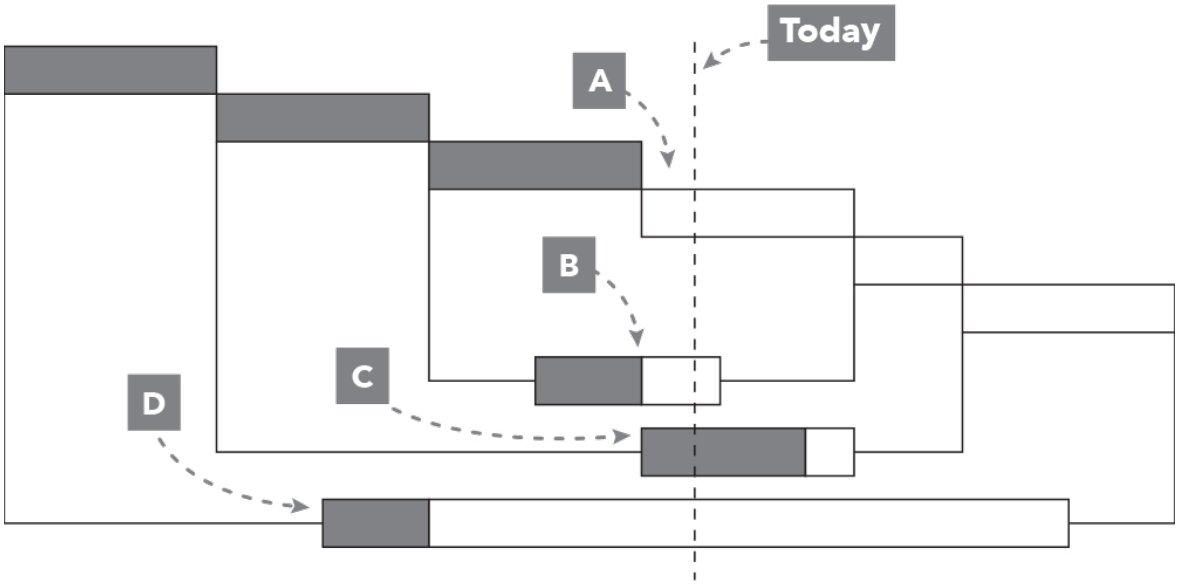


fig. 60

GANTT CHARTS HELP TO MONITOR PROGRESS



A = This task is not started yet, so we are running late on the critical path.

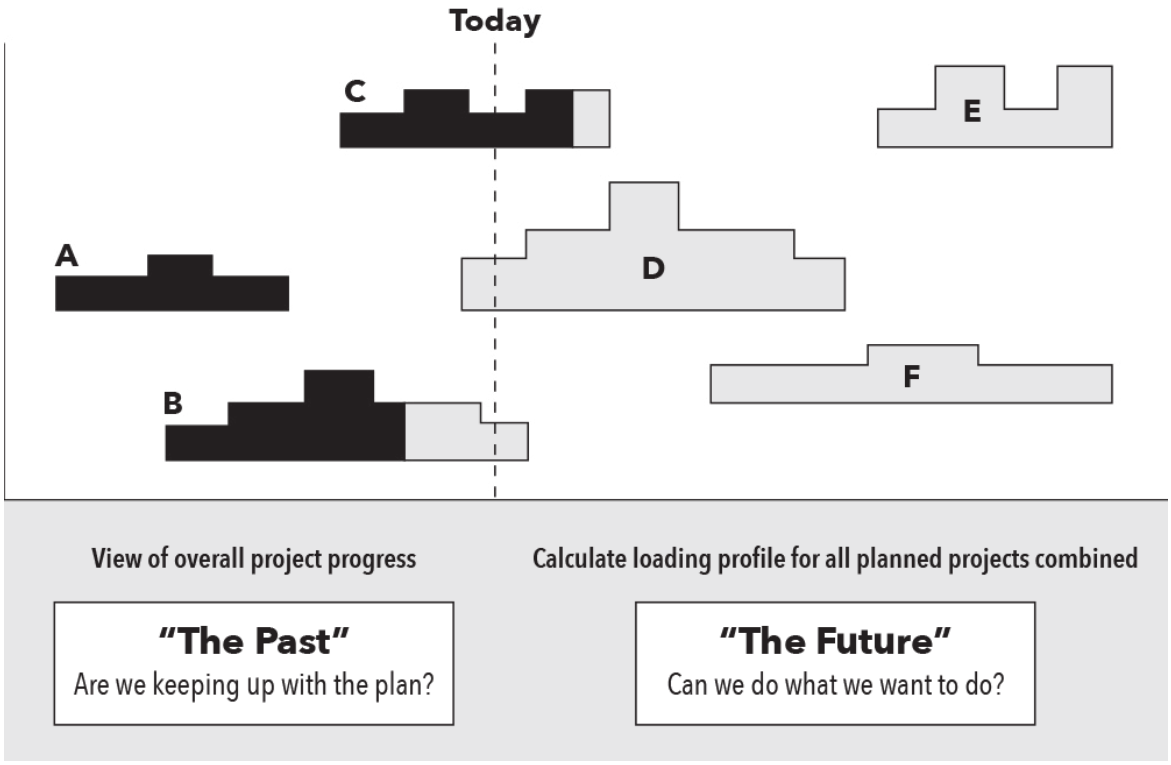
B = We're running late on a floating task, but there's just enough time to get it done before the deadline.

C = We are ahead on this task.

D = We're badly behind schedule on this floating task. It could cause the whole project to be delivered late.

fig. 61

GANTT OF GANTTS



QC. 7

fig. 62

RUNNING ORDER FOR SETTING UP NEW BUSINESS PROJECT

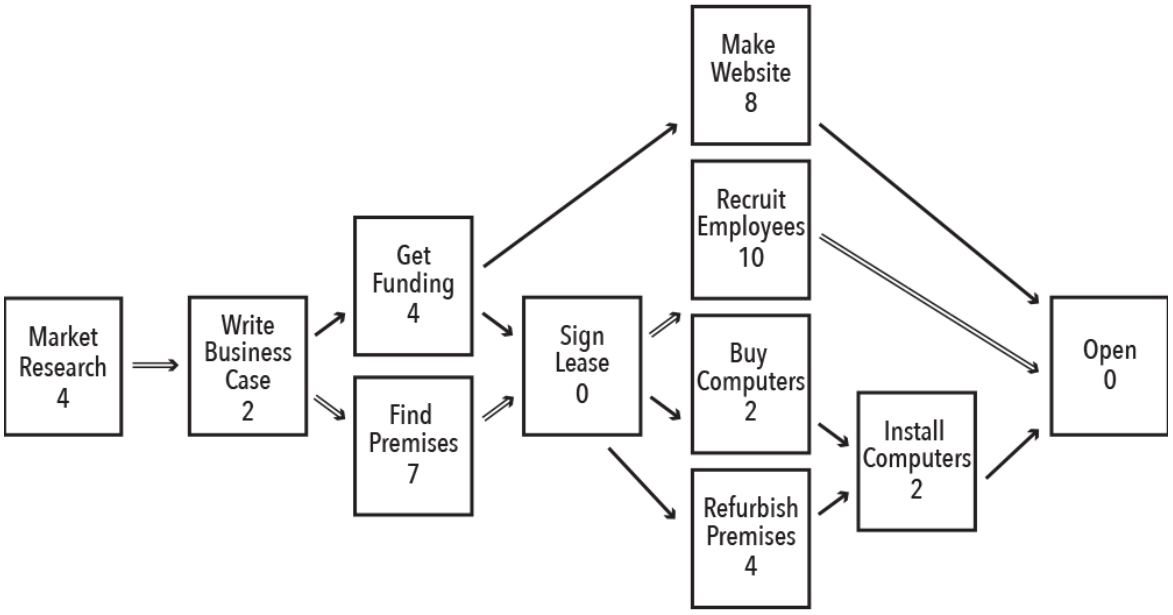


fig. 63

LIST ALL THE TASKS

	A	B	C	D	E	F	G
1							
2	Market Research						
3	Write Business Case						
4	Find Premises						
5	Sign Lease						
6	Recruit Employees						
7	Open						
8							
9	Get Funding						
10							
11	Make Website						
12	Buy Computers						
13	Refurbish Premises						
14							
15	Install Computers						
16							

Critical Path Tasks

Floating Tasks

fig. 64

ADD THE DURATION OF THE PROJECT ALONG THE TOP

	A	B	C	D	E	F	G		X
1		1	2	3	4	5	6		23
2	Market Research								
3	Write Business Case								
4	Find Premises								
5	Sign Lease								
6	Recruit Employees								
7	Open								
8									
9	Get Funding							...	
10									
11	Make Website								
12	Buy Computers								
13	Refurbish Premises								
14									
15	Install Computers								
16									

fig. 65

CONDITIONAL FORMATTING TO ADD THE COLOR

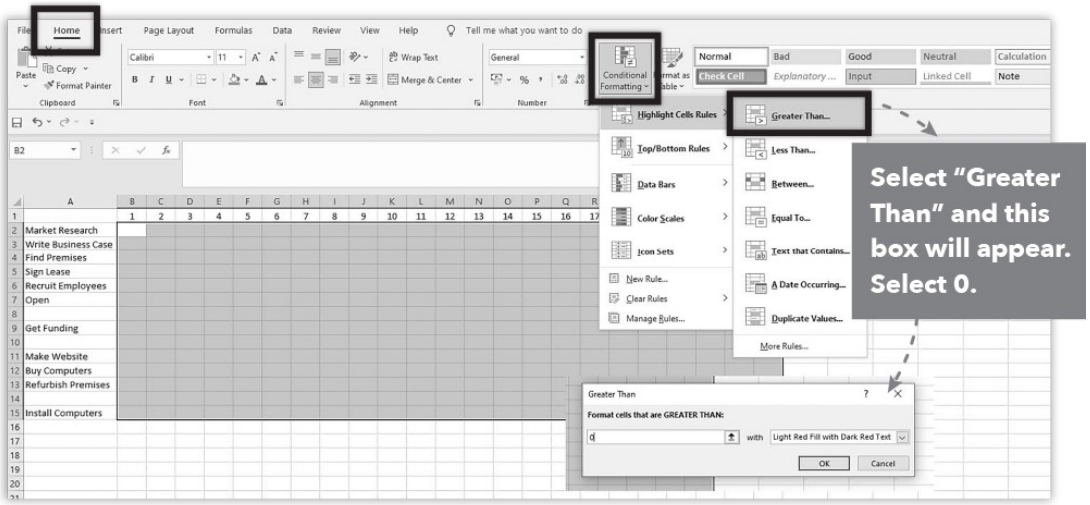


fig. 66

CHANGE COLOR FOR FLOATING TASKS

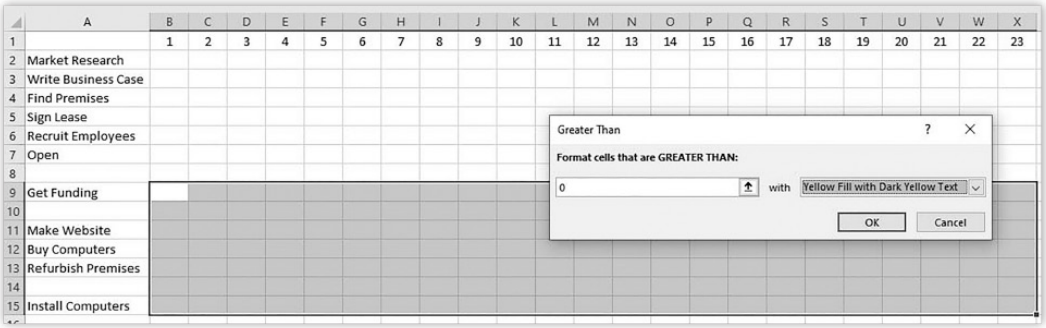
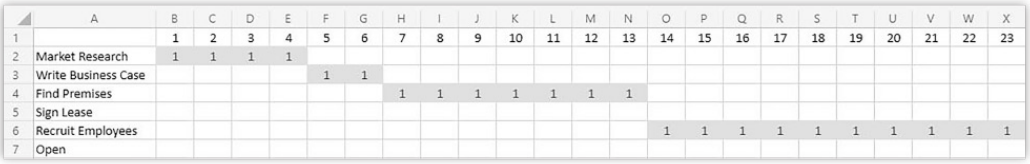


fig. 67

CRITICAL PATH TASKS COMPLETE



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
2	Market Research	1	1	1	1																			
3	Write Business Case					1	1																	
4	Find Premises							1	1	1	1	1	1	1										
5	Sign Lease																							
6	Recruit Employees														1	1	1	1	1	1	1	1	1	1
7	Open																							

fig. 68

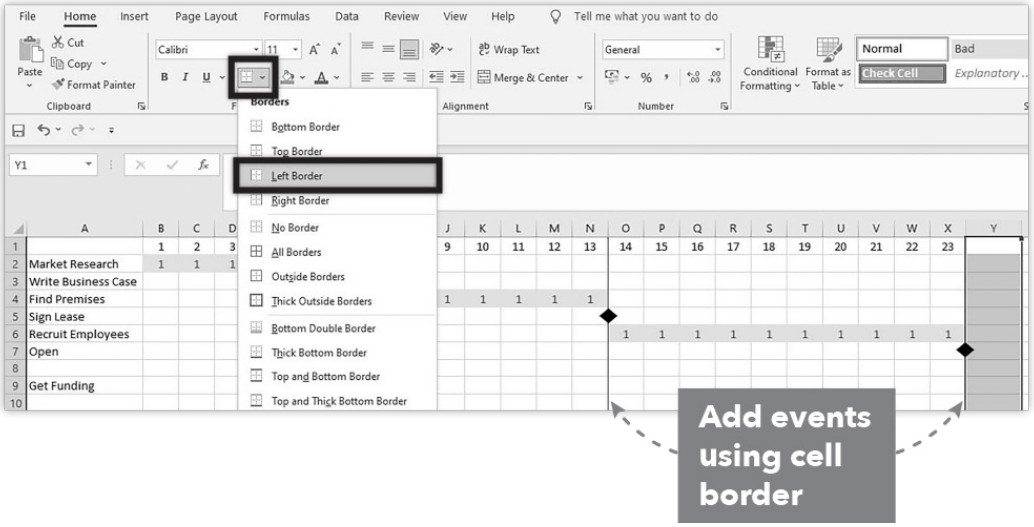


fig. 69

ADD A FLOATING TASK

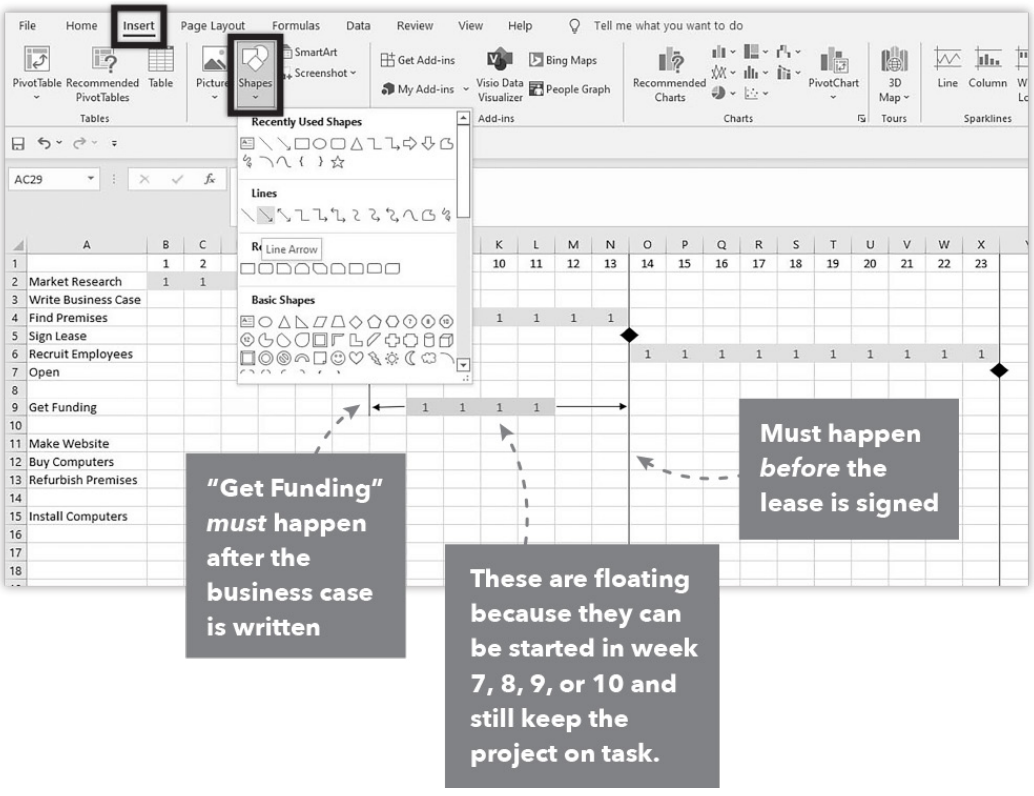
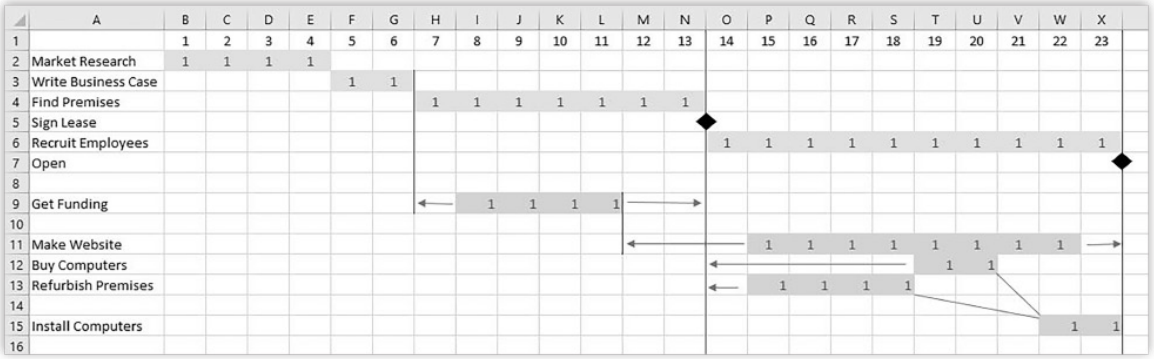


fig. 70

COMPLETE THE FLOATING TASKS



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
2	Market Research	1	1	1	1																			
3	Write Business Case					1	1																	
4	Find Premises							1	1	1	1	1	1	1										
5	Sign Lease																							
6	Recruit Employees														1	1	1	1	1	1	1	1	1	1
7	Open																							
8																								
9	Get Funding								1	1	1	1												
10																								
11	Make Website															1	1	1	1	1	1	1	1	
12	Buy Computers																			1	1			
13	Refurbish Premises															1	1	1	1					
14																								
15	Install Computers																						1	1
16																								

fig. 71

FLOATING TASKS HANGING OFF OTHER FLOATING TASKS

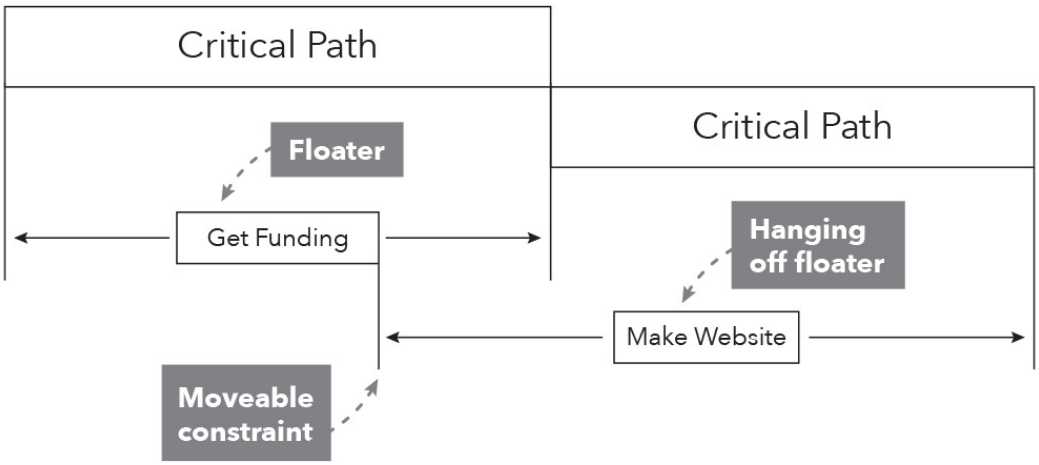


fig. 72

IT'S THE MIDDLE CONSTRAINT THAT MAKES THE DIFFERENCE

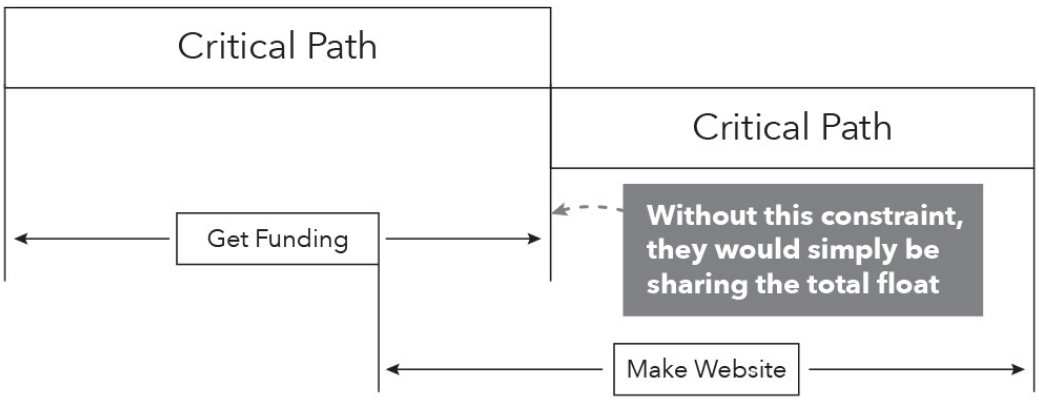


fig. 73

DATE FORMAT AND ALIGNMENT

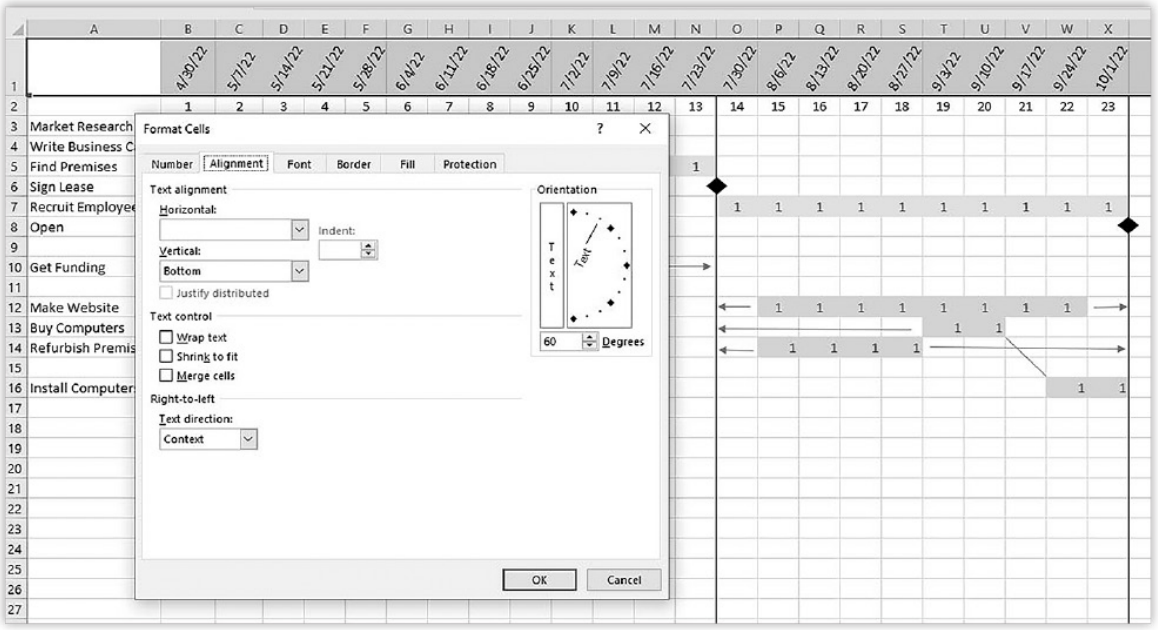


fig. 74

ASSIGN TASKS TO PEOPLE/DEPARTMENTS

	A	B	C	D	E	F	G	H	I	J
1			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/
2			1	2	3	4	5	6	7	8
3	Market Research	Marketing Dept - Steven	1	1	1	1				
4	Write Business Case	Marketing Dept - Steven					1	1		
5	Find Premises	Operations Dept - Stella							1	1
6	Sign Lease	CEO - Scott								
7	Recruit Employees	HR Dept - Lydia and John								
8	Open									
9										
10	Get Funding	Finance Dept - Azam								
11										
12	Make Website	Graphics Dept - Lulu								
13	Buy Computers	Operations Dept - Stella								
14	Refurbish Premises	Operations Dept - Will								
15										
16	Install Computers	IT Dept - Michael								
17										

fig. 75

CALCULATE BUSY TIMES

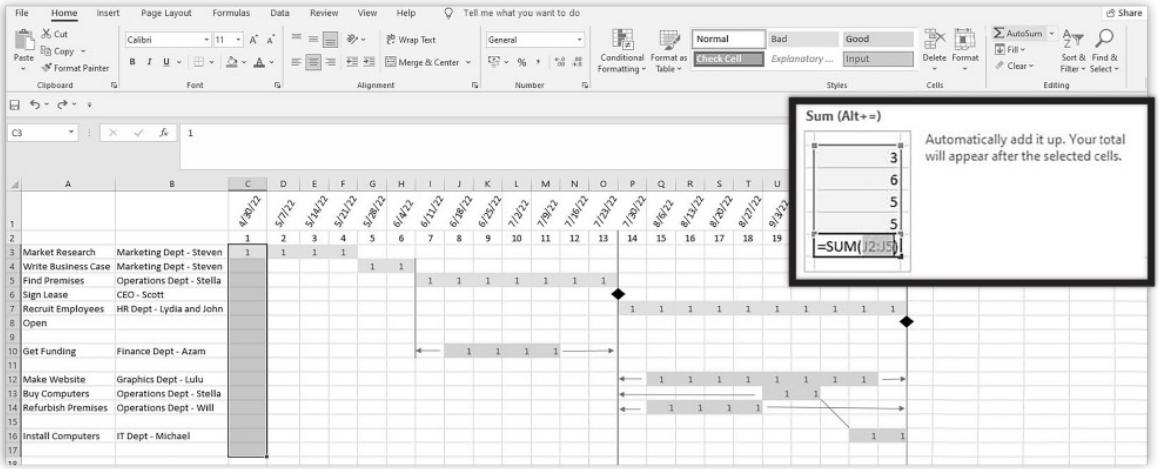
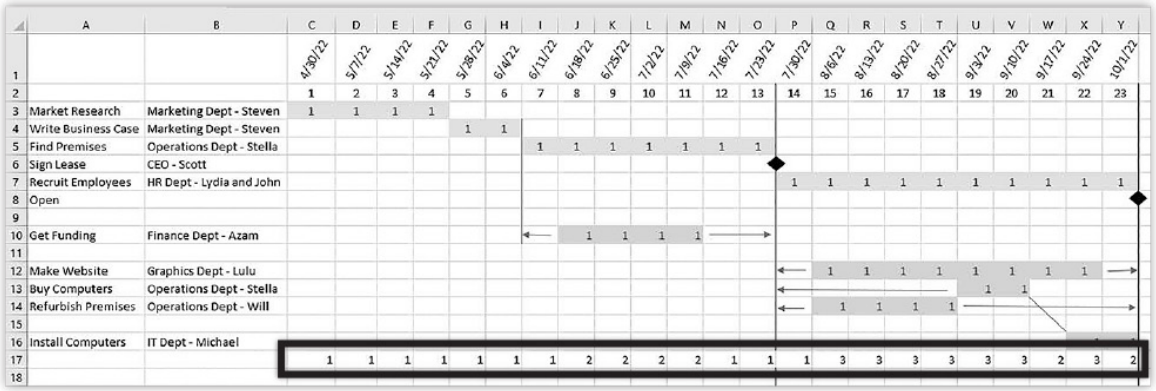


fig. 76

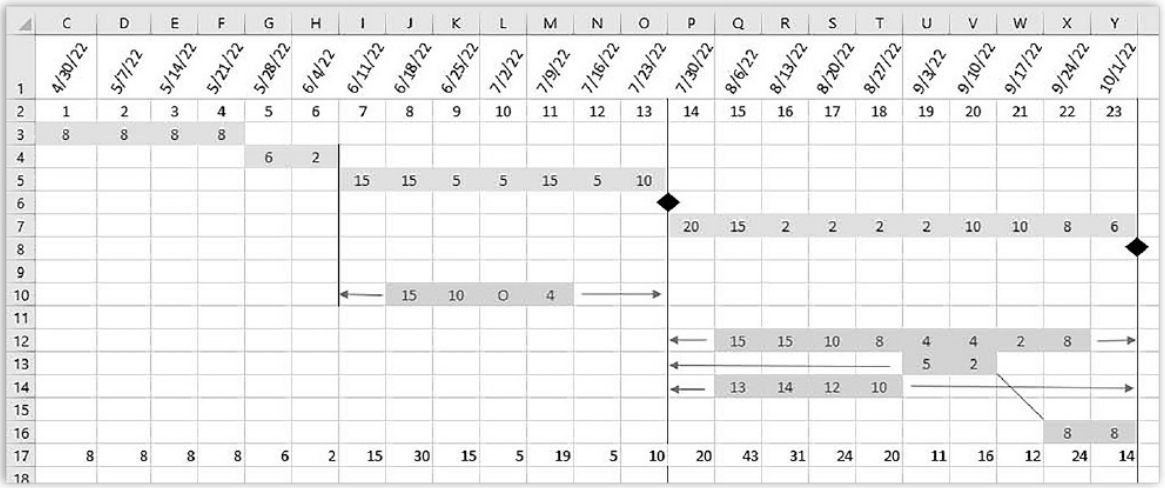
BUSY TIMES ACROSS THE WHOLE PROJECT



			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Market Research	Marketing Dept - Steven		1	1	1	1																			
Write Business Case	Marketing Dept - Steven						1	1																	
Find Premises	Operations Dept - Stella								1	1	1	1	1	1	1										
Sign Lease	CEO - Scott																								
Recruit Employees	HR Dept - Lydia and John															1	1	1	1	1	1	1	1	1	1
Open																									
Get Funding	Finance Dept - Azam									1	1	1	1												
Make Website	Graphics Dept - Lulu															1	1	1	1	1	1	1	1	1	
Buy Computers	Operations Dept - Stella																				1	1			
Refurbish Premises	Operations Dept - Will															1	1	1	1						
Install Computers	IT Dept - Michael																								
			1	1	1	1	1	1	1	2	2	2	2	1	1	1	3	3	3	3	3	3	2	3	2

fig. 77

ADD HOURS TO TASKS



	4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
8	8	8	8																				
				6	2																		
						15	15	5	5	15	5	10											
													20	15	2	2	2	2	10	10	8	6	
							15	10	0	4													
														15	15	10	8	4	4	2	8		
																		5	2				
														13	14	12	10						
																					8	8	
8	8	8	8	6	2	15	30	15	5	19	5	10	20	43	31	24	20	11	16	12	24	14	

fig. 78

CREATE A LOAD GRAPH

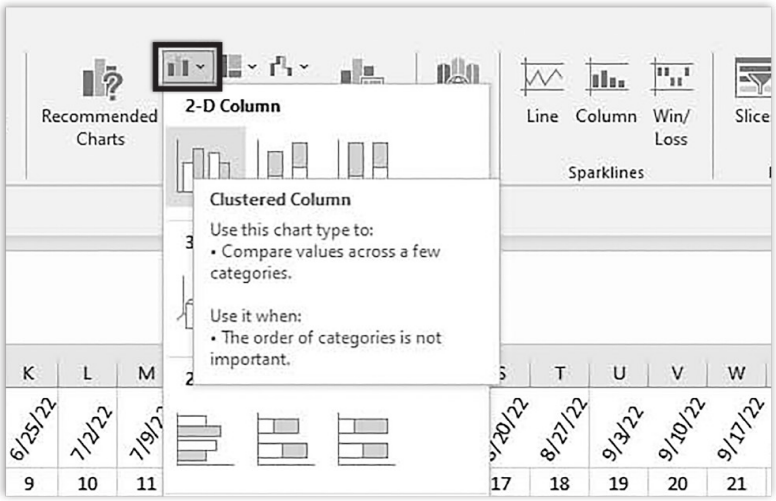


fig. 79

LOAD GRAPH IMMEDIATELY HIGHLIGHTS ISSUES

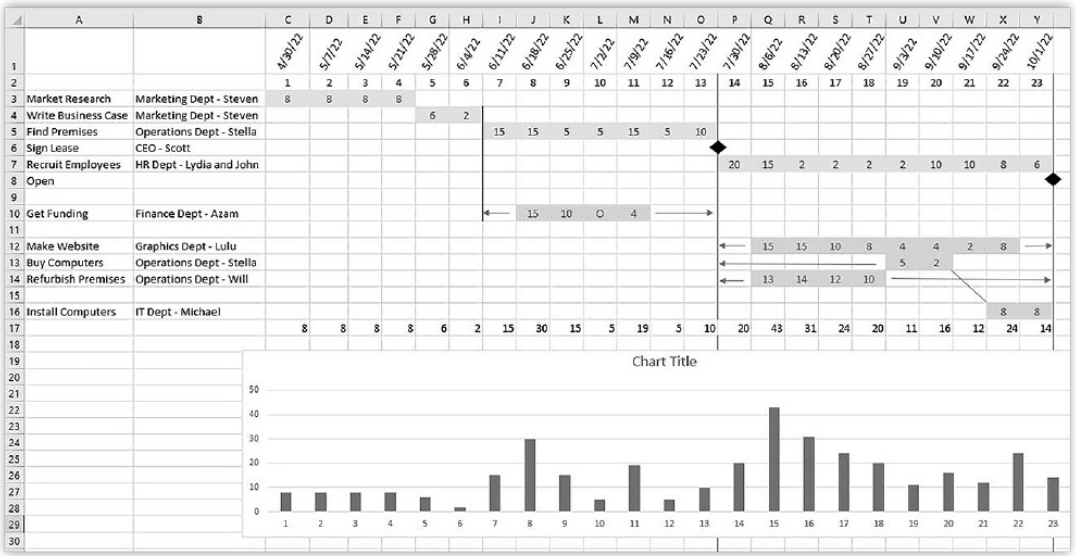


fig. 80

CALCULATE TIME FOR EACH TASK

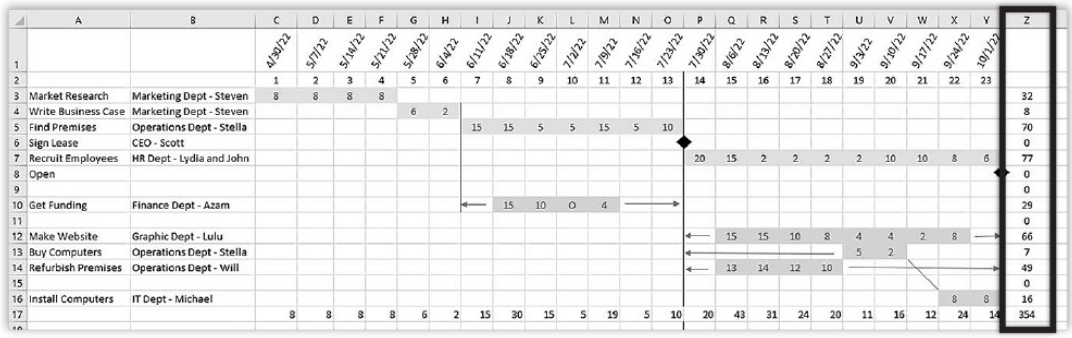
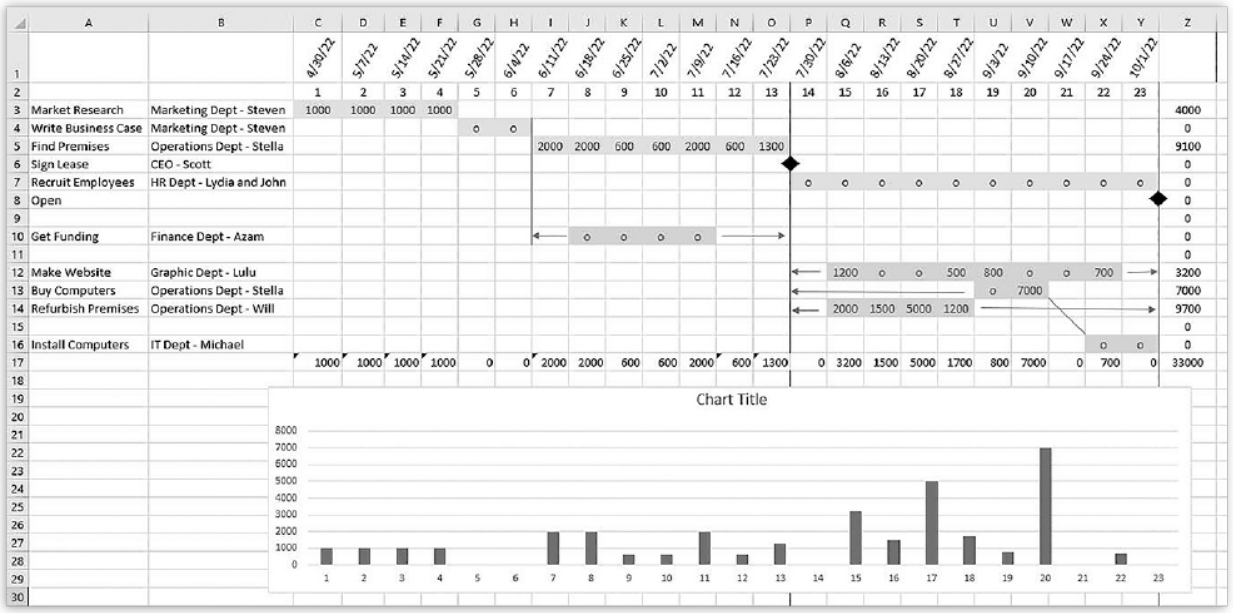
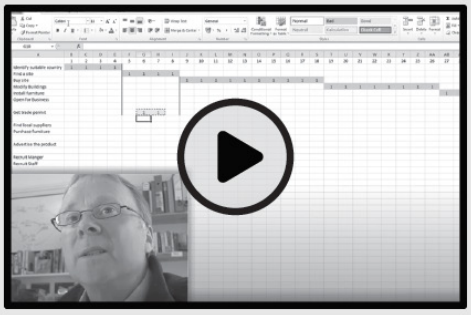


fig. 81

ADD MONEY TO THE GANTT CHART



QC. 8



If you are especially visual and would like to see me running through this whole process on video, then check out this clip on making a Gantt chart with Excel.

QUICK CLIP

To watch the Quick Clip, use the camera on your mobile phone to scan the QR code or visit the link below.

SCAN ME

or

www.quickclips.io/pm-8

VISIT URL

fig. 82

GANTT CHART WITH NO CRITICAL PATH

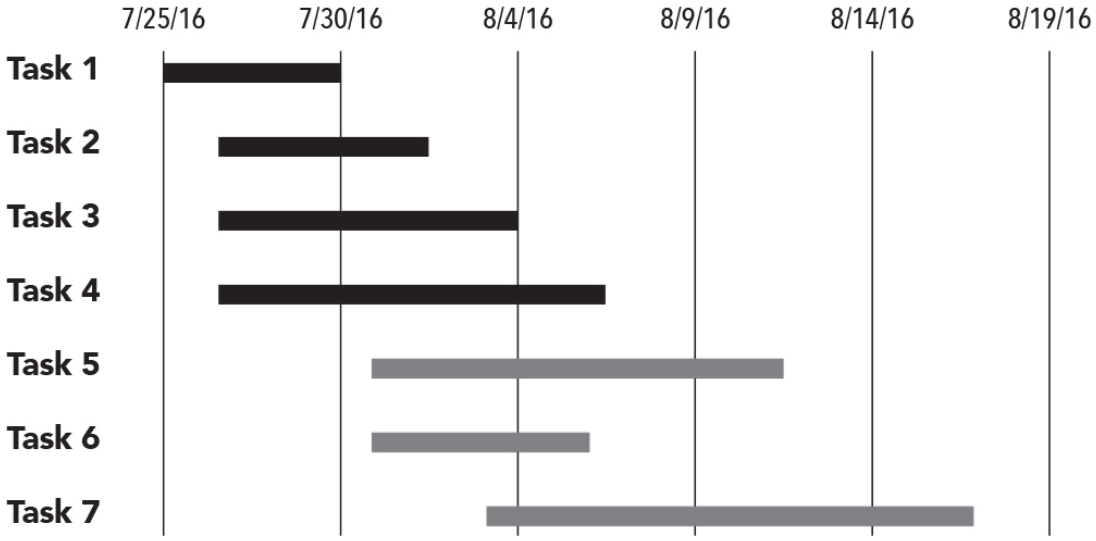


fig. 83

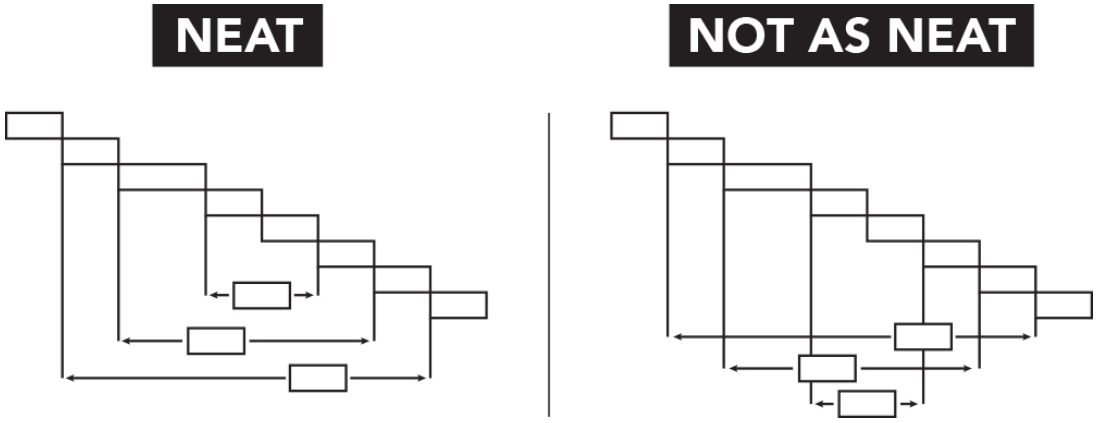


fig. 84

ONE BIG TASK

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1		4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22
2		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
3	Task 1	1	1																					
4	Task 2			1																				
5	Task 3				1	1	1	1	1	1	1	1	1	1	1	1								
6	Task 4																1							
7	Task 5																	1	1					
8	Task 6																			1	1			
9																								

fig. 85

UNSPECIFIED OVERLAP

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1		4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22
2		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3	Task 1	1	1																		
4	Task 2			1																	
5	Task 3				1	1	1	1													
6	Task 4						1	1	1	1	1	1									
7	Task 5												1	1							
8	Task 6														1	1	1				
9	Task 7																	1			
10	Task 8																		1	1	
11																					

fig. 86

TOO PARALLEL

	A	B	C	D	E	F	G	H	I
1		4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/
2		1	2	3	4	5	6	7	8
3	Task 1	1	1	1	1				
4	Task 2					1	1	1	
5	Task 3	←	1	1	→				
6	Task 4	←	1	1	1	→	→	→	
7	Task 5	←	←	1	1	1	→	→	
8	Task 6	←	←	1	1	→	→	→	
9	Task 7	←	←	1	1	→	→	→	
10	Task 8	←	←	←	1	1	1	1	
11	Task 9	←	←	←	1	1	1	→	
12									

CHAPTER 9

Resource Planning – Step 7

QC. 9

fig. 87

IDENTIFY PEAK TIMES

			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Market Research	Marketing Dept - Steven		8	8	8	8																			32
Write Business Case	Marketing Dept - Steven						6	2																	8
Find Premises	Operations Dept - Stella								15	15	5	5	15	5	10										70
Sign Lease	CEO - Scott														0										0
Recruit Employees	HR Dept - Lydia and John															20	15	2	2	2	2	10	10	8	6	77
Open																									0	0
																									0
Get Funding	Finance Dept - Azam								15	10	0	4													29
																									0
Make Website	Graphics Dept - Lulu															15	15	10	8	4	4	2	8		66
Buy Computers	Operations Dept - Stella																			5	2				7
Refurbish Premises	Operations Dept - Will															13	14	12	10						49
																									0
Install Computers	IT Dept - Michael																						8	8	16
			8	8	8	8	6	2	15	30	15	5	19	5	10	20	43	31	24	20	11	16	12	24	14	354

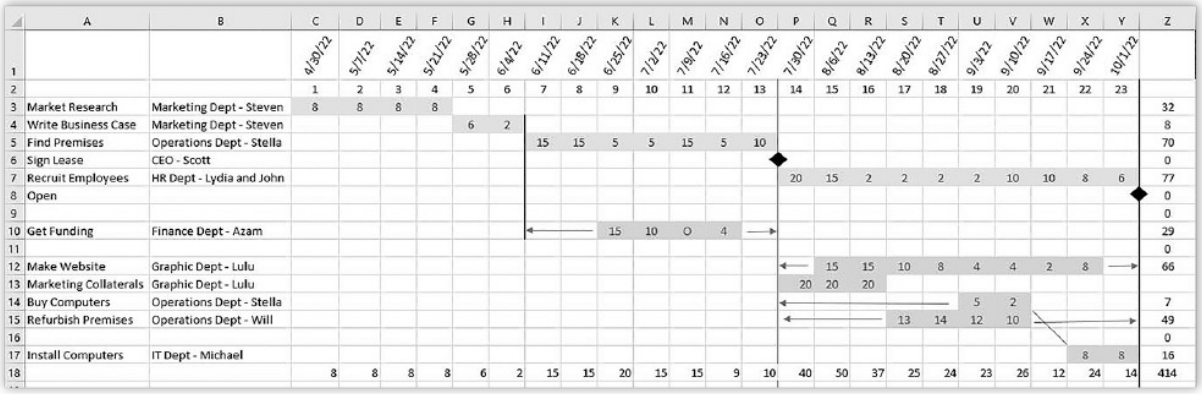
fig. 88

MOVE FLOATING TASKS

			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Market Research	Marketing Dept - Steven		8	8	8	8																			32
Write Business Case	Marketing Dept - Steven						6	2																	8
Find Premises	Operations Dept - Stella								15	15	5	5	15	5	10										70
Sign Lease	CEO - Scott														0										0
Recruit Employees	HR Dept - Lydia and John															20	15	2	2	2	2	10	10	8	6	77
Open																									0	0
																									0
Get Funding	Finance Dept - Azam								15	10	0	4													29
																									0
Make Website	Graphic Dept - Lulu															15	15	10	8	4	4	2	8		66
Buy Computers	Operations Dept - Stella																			5	2				7
Refurbish Premises	Operations Dept - Will																13	14	12	10					49
																									0
Install Computers	IT Dept - Michael																						8	8	16
			8	8	8	8	6	2	15	15	20	15	15	9	10	20	30	17	25	24	23	26	12	24	14	354

fig. 89

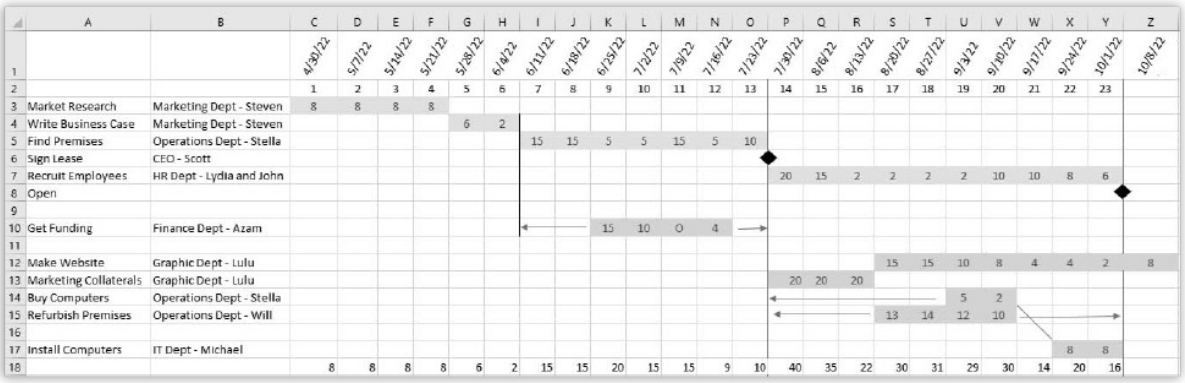
LOOK FOR BOTTLENECKS



			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Market Research	Marketing Dept - Steven		8	8	8	8																				32
Write Business Case	Marketing Dept - Steven						6	2																		8
Find Premises	Operations Dept - Stella								15	15	5	5	15	5	10											70
Sign Lease	CEO - Scott																									0
Recruit Employees	HR Dept - Lydia and John															20	15	2	2	2	2	10	10	8	6	77
Open																										0
																										0
Get Funding	Finance Dept - Azam										15	10	O	4												29
																										0
Make Website	Graphic Dept - Lulu																15	15	10	8	4	4	2	8		66
Marketing Collaterals	Graphic Dept - Lulu															20	20	20								
Buy Computers	Operations Dept - Stella																				5	2				7
Refurbish Premises	Operations Dept - Will																		13	14	12	10				49
																										0
Install Computers	IT Dept - Michael																							8	8	16
			8	8	8	8	6	2	15	15	20	15	15	9	10	40	50	37	25	24	23	26	12	24	14	414

fig. 90

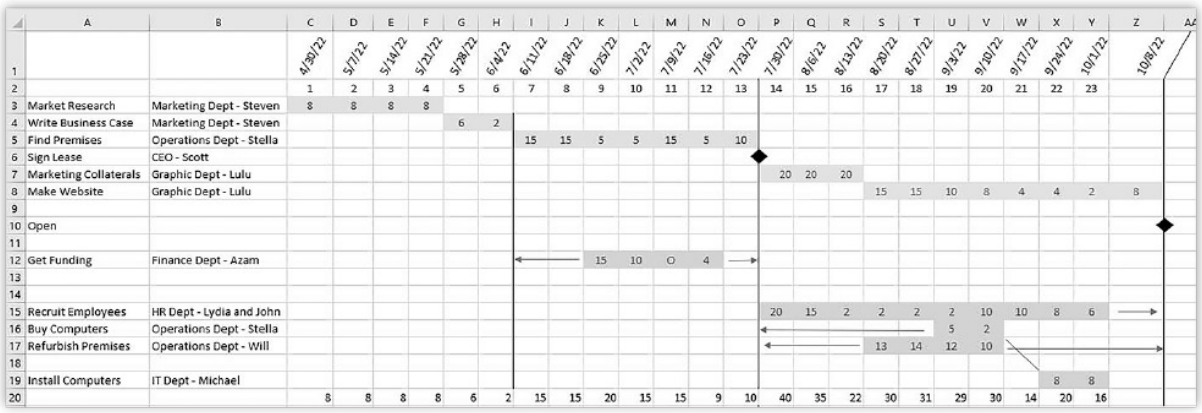
EXTEND THE DURATION OF THE PROJECT



			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22	10/8/22
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Market Research	Marketing Dept - Steven		8	8	8	8																				
Write Business Case	Marketing Dept - Steven						6	2																		
Find Premises	Operations Dept - Stella								15	15	5	5	15	5	10											
Sign Lease	CEO - Scott																									
Recruit Employees	HR Dept - Lydia and John															20	15	2	2	2	2	10	10	8	6	
Open																										
Get Funding	Finance Dept - Azam										15	10	O	4												
Make Website	Graphic Dept - Lulu																		15	15	10	8	4	4	2	8
Marketing Collaterals	Graphic Dept - Lulu															20	20	20								
Buy Computers	Operations Dept - Stella																				5	2				
Refurbish Premises	Operations Dept - Will																		13	14	12	10				
Install Computers	IT Dept - Michael																							8	8	
			8	8	8	8	6	2	15	15	20	15	15	9	10	40	35	22	30	31	29	30	14	20	16	

fig. 91

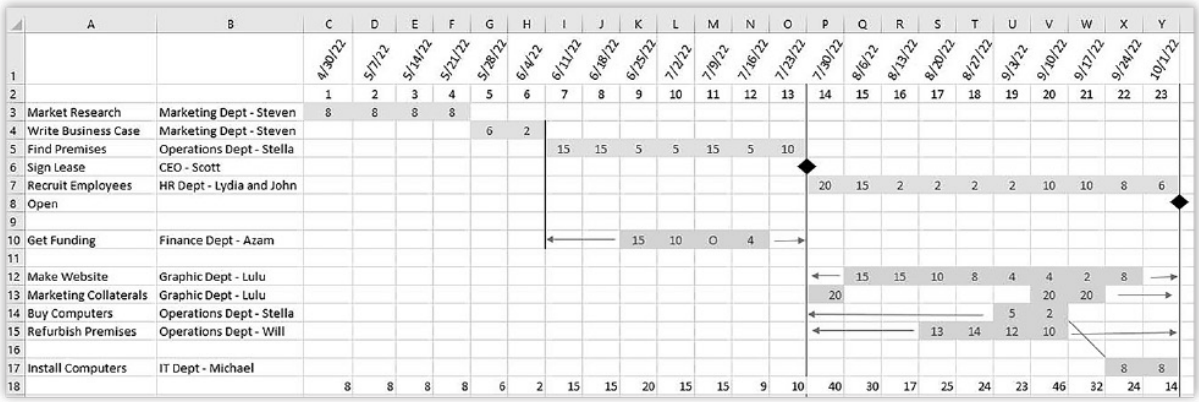
LOOK OUT FOR NEW CRITICAL PATH



			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22	10/8/22	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Market Research	Marketing Dept - Steven		8	8	8	8																				
Write Business Case	Marketing Dept - Steven						6	2																		
Find Premises	Operations Dept - Stella								15	15	5	5	15	5	10											
Sign Lease	CEO - Scott																									
Marketing Collaterals	Graphic Dept - Lulu															20	20	20								
Make Website	Graphic Dept - Lulu																		15	15	10	8	4	4	2	8
Open																										
Get Funding	Finance Dept - Azam										15	10	O	4												
Recruit Employees	HR Dept - Lydia and John															20	15	2	2	2	2	10	10	8	6	
Buy Computers	Operations Dept - Stella																				5	2				
Refurbish Premises	Operations Dept - Will																		13	14	12	10				
Install Computers	IT Dept - Michael																							8	8	
			8	8	8	8	6	2	15	15	20	15	15	9	10	40	35	22	30	31	29	30	14	20	16	

fig. 92

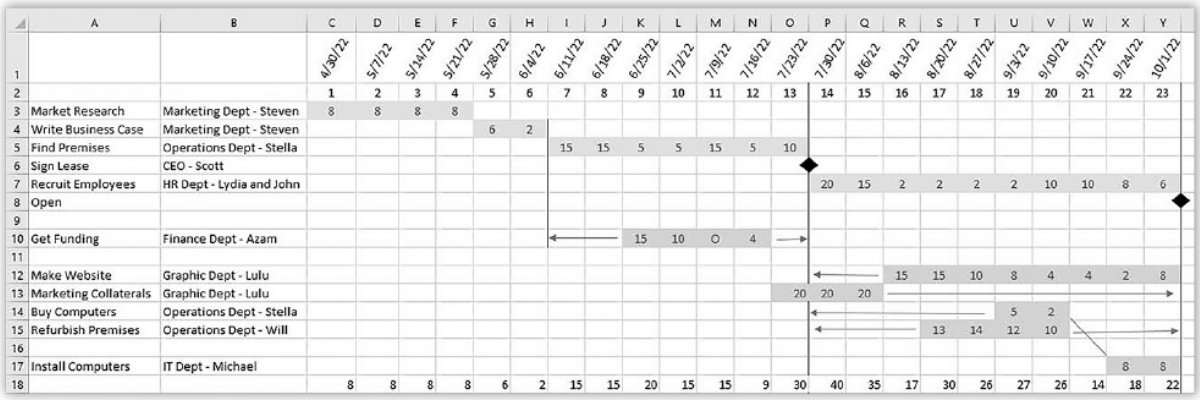
SPLIT THE TASKS



			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Market Research	Marketing Dept - Steven		8	8	8	8																			
Write Business Case	Marketing Dept - Steven						6	2																	
Find Premises	Operations Dept - Stella								15	15	5	5	15	5	10										
Sign Lease	CEO - Scott																								
Recruit Employees	HR Dept - Lydia and John															20	15	2	2	2	2	10	10	8	6
Open																									
Get Funding	Finance Dept - Azam										15	10	O	4											
Make Website	Graphic Dept - Lulu																15	15	10	8	4	4	2	8	
Marketing Collaterals	Graphic Dept - Lulu															20						20	20		
Buy Computers	Operations Dept - Stella																				5	2			
Refurbish Premises	Operations Dept - Will																		13	14	12	10			
Install Computers	IT Dept - Michael																							8	8
			8	8	8	8	6	2	15	15	20	15	15	9	10	40	30	17	25	24	23	46	32	24	14

fig. 93

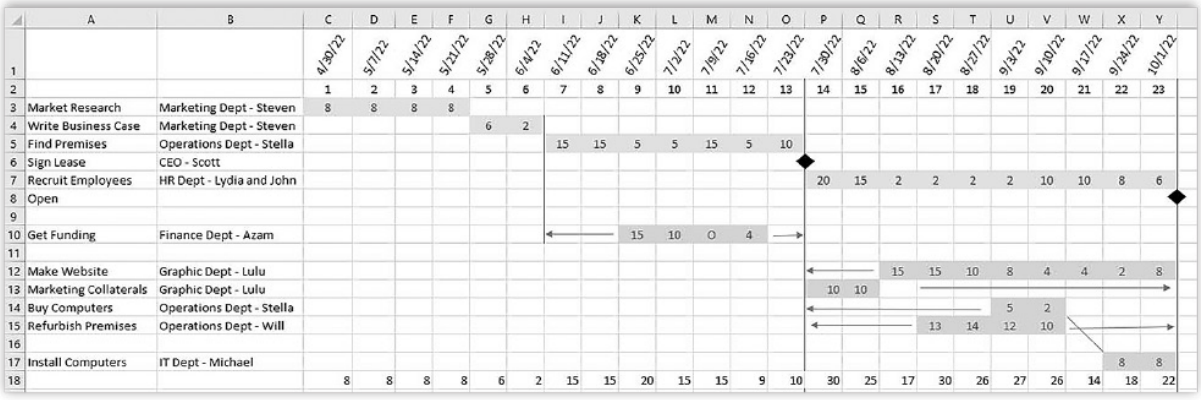
OVERLAP TASKS



			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Market Research	Marketing Dept - Steven		8	8	8	8																			
Write Business Case	Marketing Dept - Steven						6	2																	
Find Premises	Operations Dept - Stella								15	15	5	5	15	5	10										
Sign Lease	CEO - Scott																								
Recruit Employees	HR Dept - Lydia and John															20	15	2	2	2	2	10	10	8	6
Open																									
Get Funding	Finance Dept - Azam										15	10	O	4											
Make Website	Graphic Dept - Lulu																15	15	10	8	4	4	2	8	
Marketing Collaterals	Graphic Dept - Lulu														20	20	20								
Buy Computers	Operations Dept - Stella																				5	2			
Refurbish Premises	Operations Dept - Will																		13	14	12	10			
Install Computers	IT Dept - Michael																							8	8
			8	8	8	8	6	2	15	15	20	15	15	9	30	40	35	17	30	26	27	26	14	18	22

fig. 94

REDUCE QUALITY



			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Market Research	Marketing Dept - Steven		8	8	8	8																			
Write Business Case	Marketing Dept - Steven						6	2																	
Find Premises	Operations Dept - Stella								15	15	5	5	15	5	10										
Sign Lease	CEO - Scott																								
Recruit Employees	HR Dept - Lydia and John															20	15	2	2	2	2	10	10	8	6
Open																									
Get Funding	Finance Dept - Azam										15	10	O	4											
Make Website	Graphic Dept - Lulu																15	15	10	8	4	4	2	8	
Marketing Collaterals	Graphic Dept - Lulu															10	10								
Buy Computers	Operations Dept - Stella																				5	2			
Refurbish Premises	Operations Dept - Will																		13	14	12	10			
Install Computers	IT Dept - Michael																							8	8
			8	8	8	8	6	2	15	15	20	15	15	9	10	30	25	17	30	26	27	26	14	18	22

fig. 95

THE RESOURCES CUBE

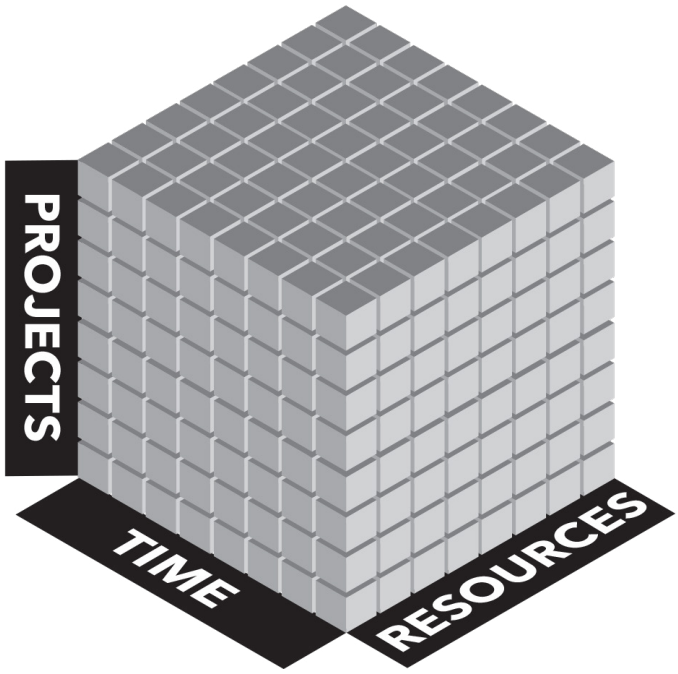
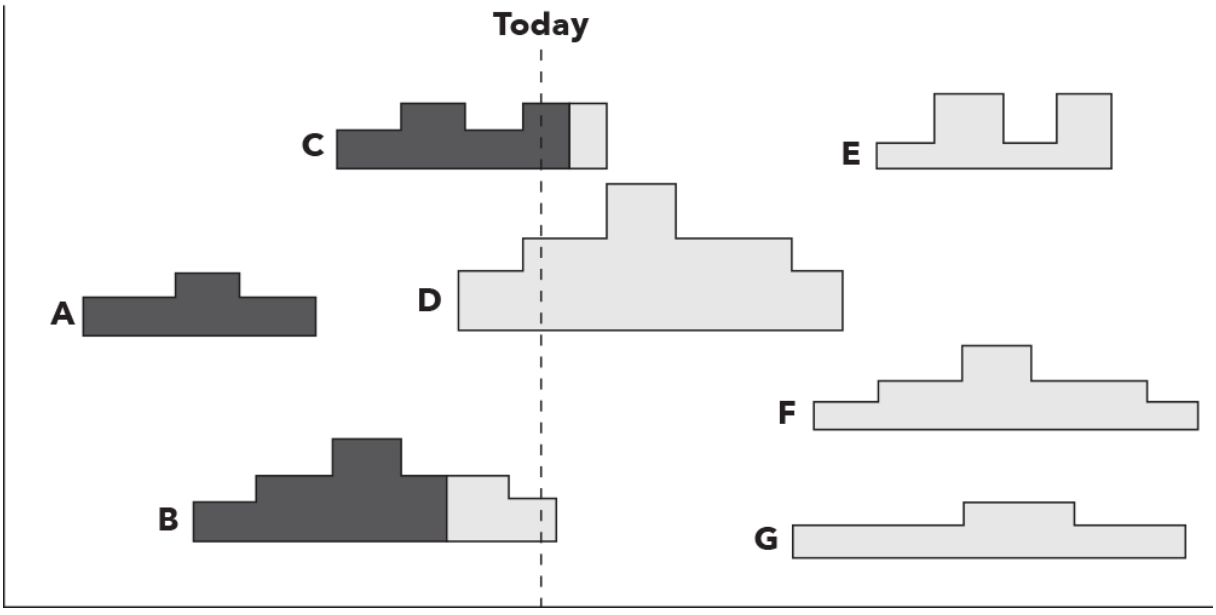


fig. 96

GANTT OF GANTTS



QC. 10


QUICK CLIP
Check out my short video on the Gantt of Gantts.
To watch the Quick Clip, use the camera on your mobile phone to scan the QR code or visit the link below.
or
www.quickclips.io/pm-10
SCAN ME
VISIT URL

fig. 97

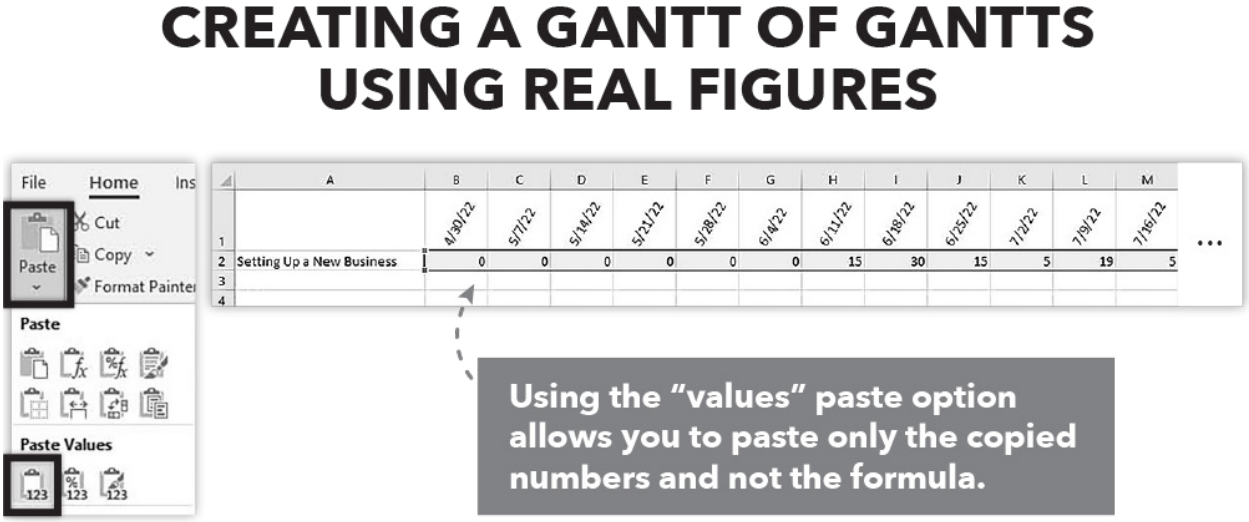
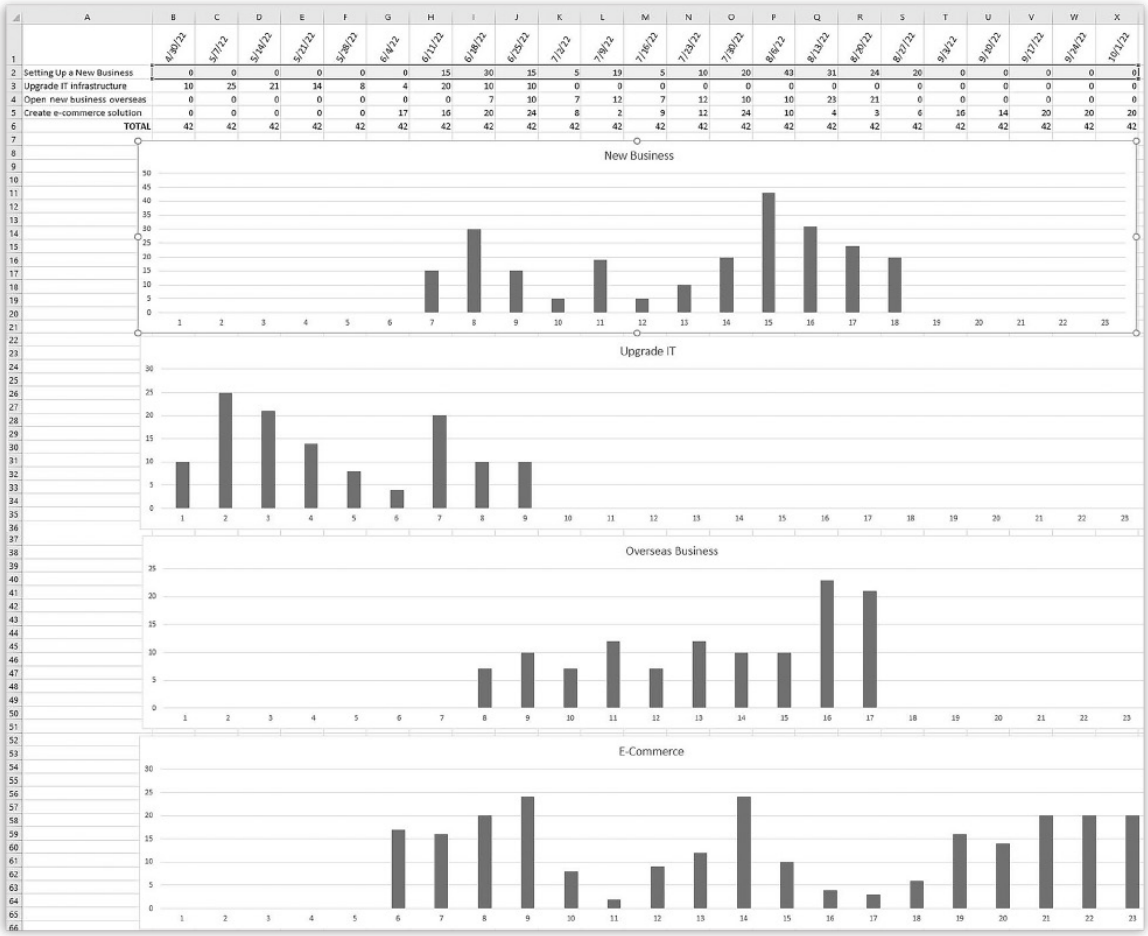

CREATING A GANTT OF GANTTS USING REAL FIGURES
File
Home
Ins
Cut
Copy
Format Painter
Paste
Paste
Paste Values
Setting Up a New Business
Using the "values" paste option allows you to paste only the copied numbers and not the formula.

fig. 98

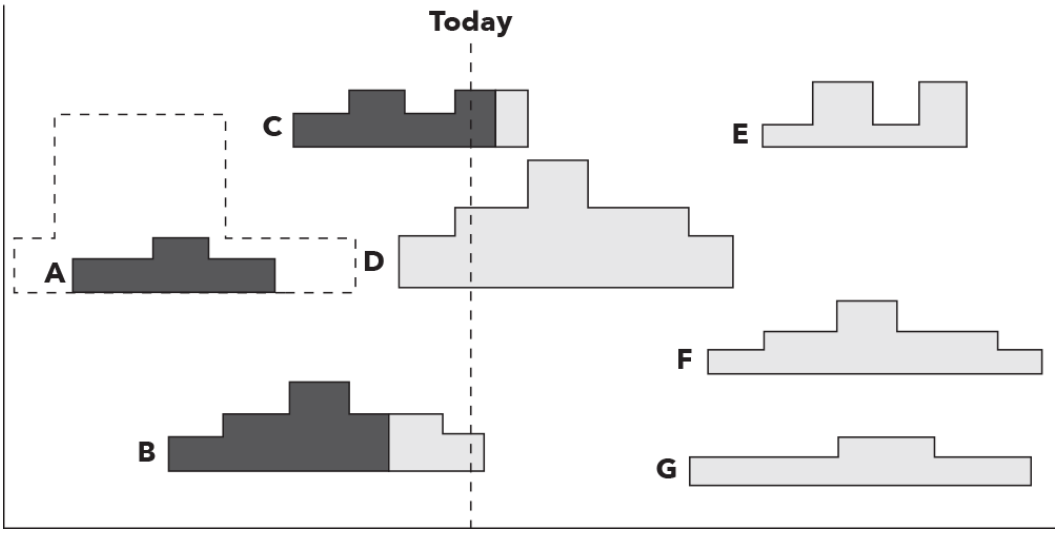
GANTT OF GANTTS EXAMPLE



	4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22
Setting Up a New Business	0	0	0	0	0	0	15	30	15	5	19	5	10	20	43	31	24	20	0	0	0	0	0
Upgrade IT infrastructure	10	25	21	14	8	4	20	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Open new business overseas	0	0	0	0	0	0	0	7	10	7	12	7	12	10	10	23	21	0	0	0	0	0	0
Create e-commerce solution	0	0	0	0	0	17	16	20	24	8	2	9	12	24	10	4	3	6	16	14	20	20	20
TOTAL	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42

fig. 99

GANTT OF GANTTS FOR SURVEYORS



CHAPTER 10

Risk Planning – Step 8

fig. 100

RISK ASSESSMENT CHART

Description of project:						
Description of possible problem	Risk factor (how likely) 1-5	Impact factor (how serious) 1-5	Weighted factor (risk x impact) 1-25	If weighted factor > 5		
				Preventative action plan (reduce likelihood)	Protective action plan (reduce impact)	Risk x impact = weighted factor after mitigation

fig. 101

RISK PLANNING FOR NEW BUSINESS

Description of project: New Business Project						
Description of possible problem	Risk factor (how likely) 1-5	Impact factor (how serious) 1-5	Weighted factor (risk x impact) 1-25	If weighted factor > 5		
				Preventative action plan (reduce likelihood)	Protective action plan (reduce impact)	Risk x impact = weighted factor after mitigation
MR throws up false insight.	2	2	4			
Can't find suitable premises.	4	5	20			
Can't find suitable staff.	3	5	15			

fig. 102

RISK PLANNING FOR NEW BUSINESS

Description of project: New Business Project						
Description of possible problem	Risk factor (how likely) 1-5	Impact factor (how serious) 1-5	Weighted factor (risk x impact) 1-25	If weighted factor > 5		
				Preventative action plan (reduce likelihood)	Protective action plan (reduce impact)	Risk x impact = weighted factor after mitigation
MR throws up false insight.	2	2	4			N/A
Can't find suitable premises.	4	5	20		Ensure home working capability.	4 x 1 = 4
Can't find suitable staff.	3	5	15	Engage recruitment consultant to pre-select.		1 x 5 = 5

fig. 103

LOOPS IN THE PLANNING STAGE

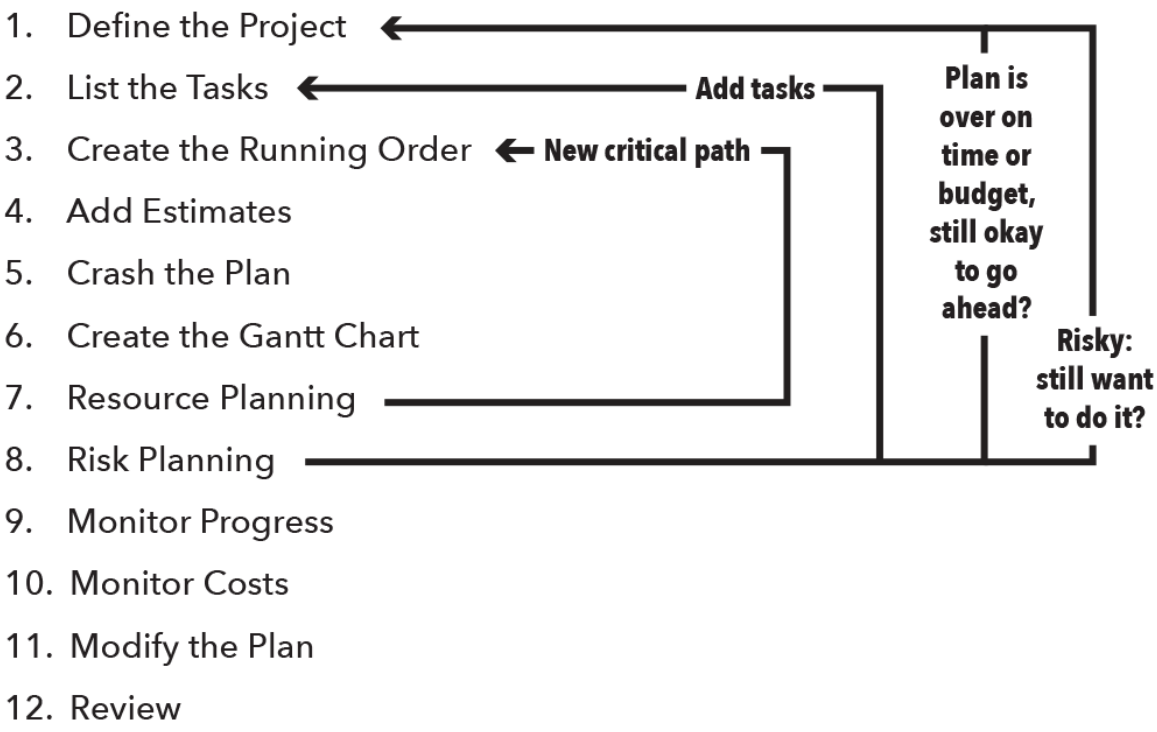
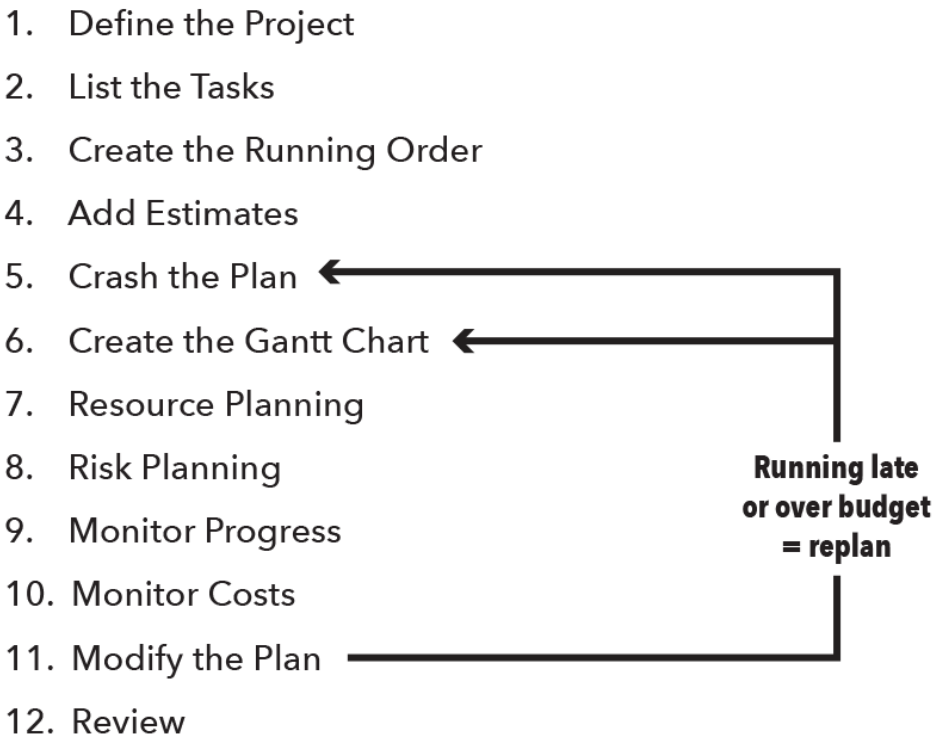


fig. 104

LOOPS IN THE IMPLEMENTATION STAGE

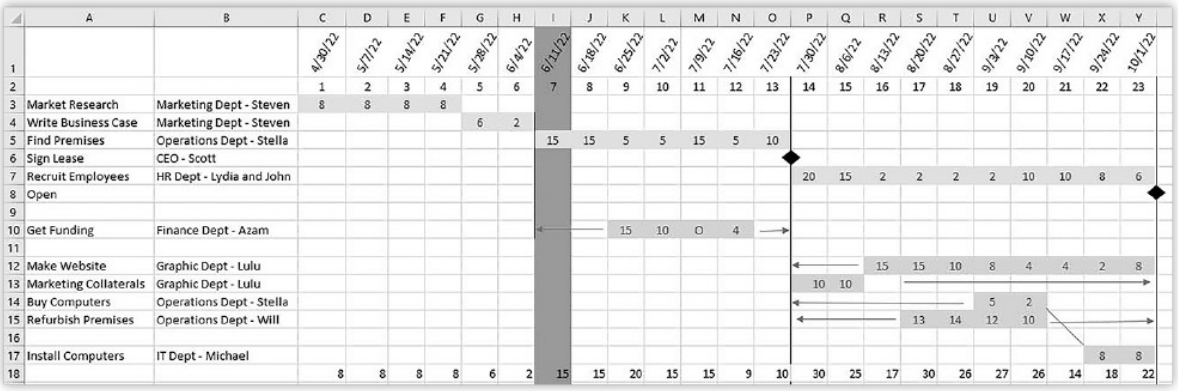


CHAPTER 11

Monitor Progress – Step 9

fig. 105

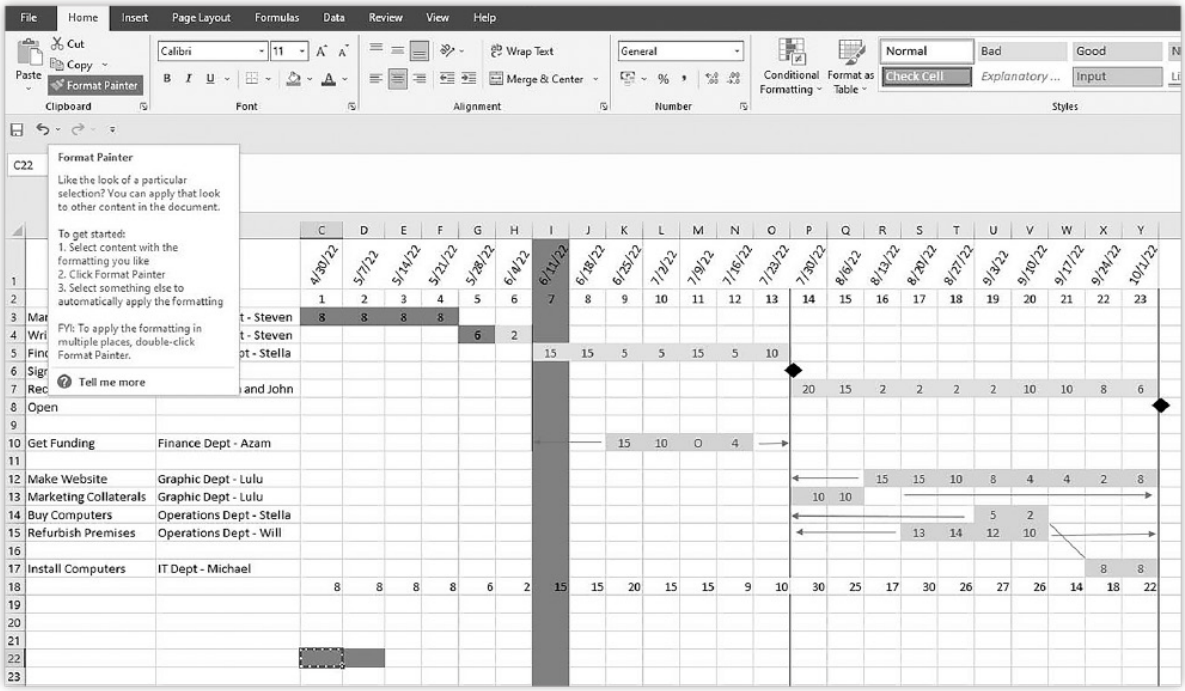
ADD "NOW" OR "TODAY" COLUMN



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1			4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	8/6/22	8/13/22	8/20/22	8/27/22	9/3/22	9/10/22	9/17/22	9/24/22	10/1/22
2			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
3	Market Research	Marketing Dept - Steven	8	8	8	8																			
4	Write Business Case	Marketing Dept - Steven					6	2																	
5	Find Premises	Operations Dept - Stella							15	15	5	5	15	5	10										
6	Sign Lease	CEO - Scott																							
7	Recruit Employees	HR Dept - Lydia and John														20	15	2	2	2	2	10	10	8	6
8	Open																								
9																									
10	Get Funding	Finance Dept - Azam									15	10	0	4											
11																									
12	Make Website	Graphic Dept - Lulu															15	15	10	8	4	4	2	8	
13	Marketing Collaterals	Graphic Dept - Lulu														10	10								
14	Buy Computers	Operations Dept - Stella																			5	2			
15	Refurbish Premises	Operations Dept - Will																	13	14	12	10			
16																									
17	Install Computers	IT Dept - Michael																						8	8
18			8	8	8	8	6	2	15	15	20	15	15	9	10	30	25	17	30	26	27	26	14	18	22

fig. 106

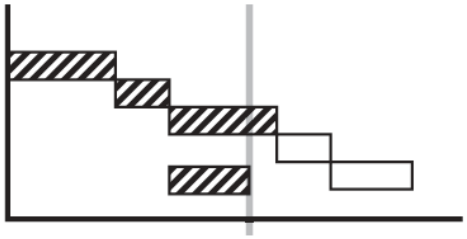
COLOR IN GANTT CHART TO INDICATE PROGRESS



CHAPTER 12

Monitor Costs – Step 10

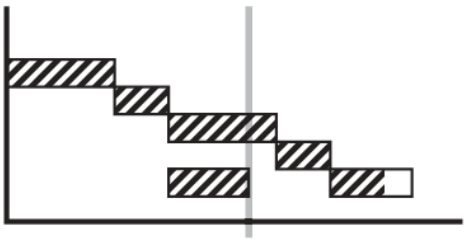
fig. 107

Plan to date	Actual to date	Accountants are saying	Gantt
$500K	$720K	"Disaster!"	

Real situation

Slightly ahead but very overspent. Looks bad, but may not be quite as bad as it looks if the overspend is due to being ahead of schedule. May be OK if time is the key driver.

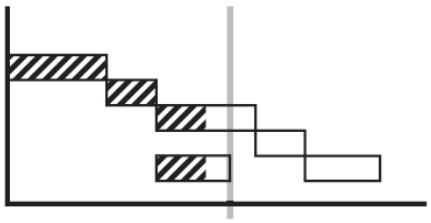
fig. 108

Plan to date	Actual to date	Accountants are saying	Gantt
$500K	$650K	"Over budget!"	

Real situation

The overspend may be because the project is nearly finished. May come in ahead of time and under budget, although this is very rare. This scenario should make you wonder if the quality is OK and if your estimates were correct.

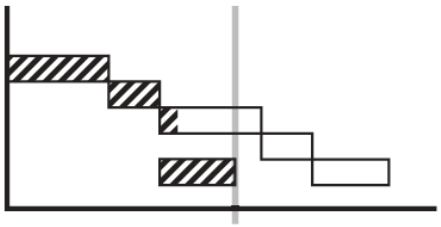
fig. 109

Plan to date	Actual to date	Accountants are saying	Gantt
$500K	$550K	"Slightly over budget"	

Real situation

Indicates "project creep," which is common. Worse than it looks because the overspend is partly hidden by lateness. The project is only a little bit late, and only a little bit overspent, but these combine and multiply!

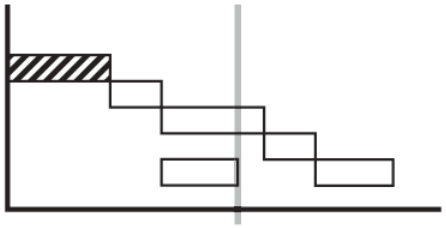
fig. 110

Plan to date	Actual to date	Accountants are saying	Gantt
$500K	$500K	"Spot on"	

Real situation

Spent to plan but done less than planned, so the project is both late and over budget. This looks better than it really is and is hard to spot. Nobody will know there's a problem until the end.

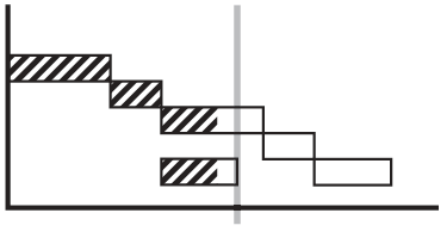
fig. 111

Plan to date	Actual to date	Accountants are saying	Gantt
$500K	$450K	"Good"	

Real situation

Time to dust off your CV! Although you've underspent, the project is significantly behind schedule, which means that it will be significantly overspent by the end. This is a total disaster although it's invisible to the accountants.

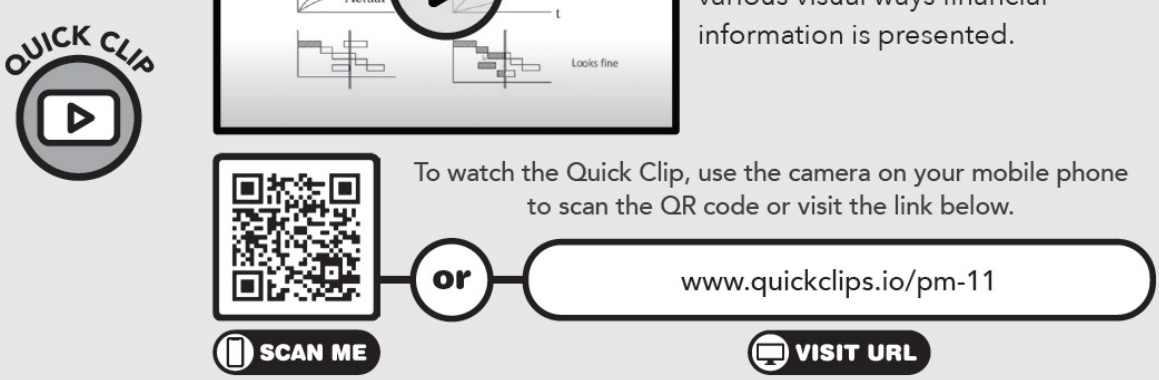
fig. 112

Plan to date	Actual to date	Accountants are saying	Gantt
$500K	$410K	"Very good!"	

Real situation

You've spent less but also done less than planned. Check that the work you haven't done is not something expensive. And you probably have the option to use some of the spare money to crash some tasks and make up some of the time, if you want.

QC. 11



QC. 12

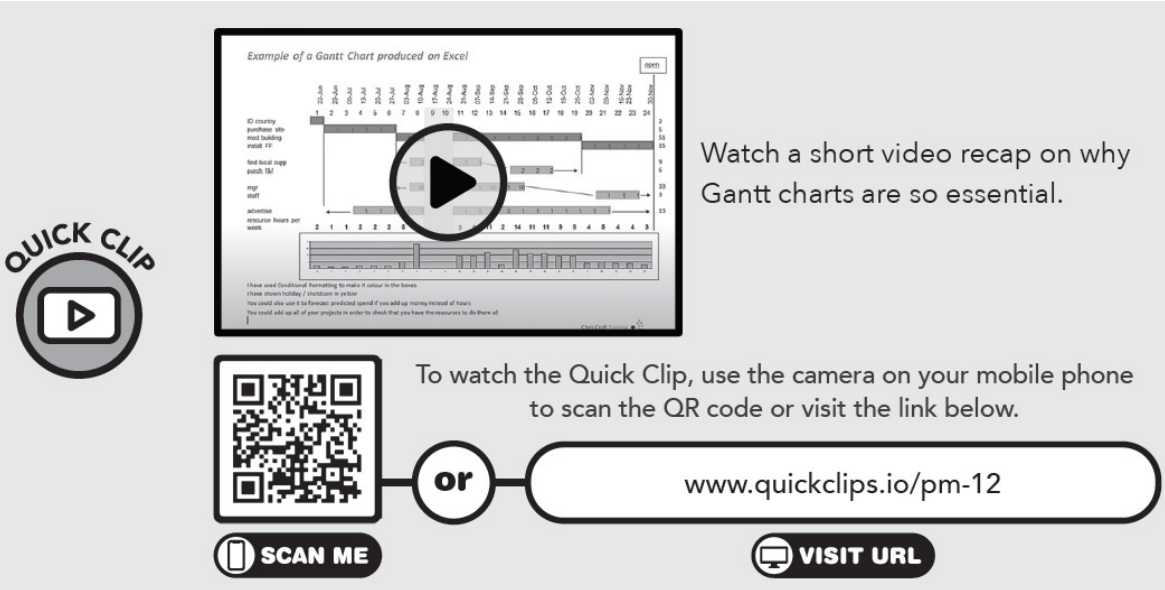


fig. 113

PLAN RECOVERY

	GET BACK TO PLAN	REPEAT THE FIRST PERFORMANCE
PROJECT *BAD* SO FAR	☺	☹
PROJECT *GOOD* SO FAR	☹	☺

fig. 114

SPI FOR LINEAR PROJECT

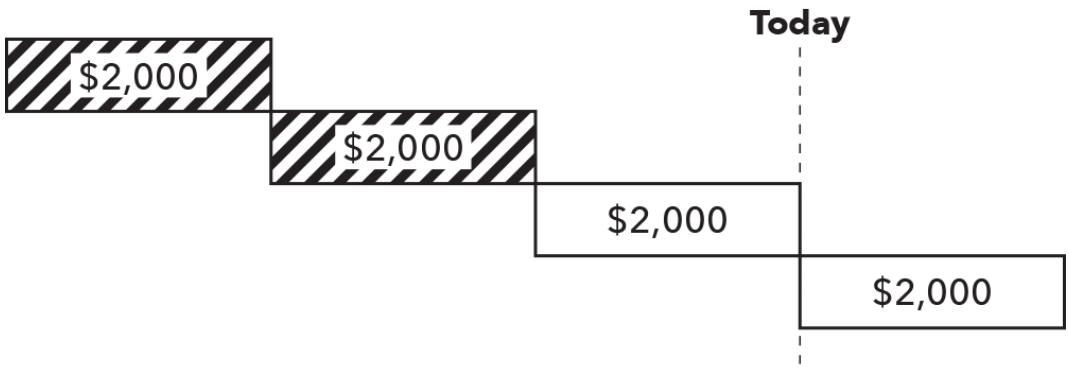
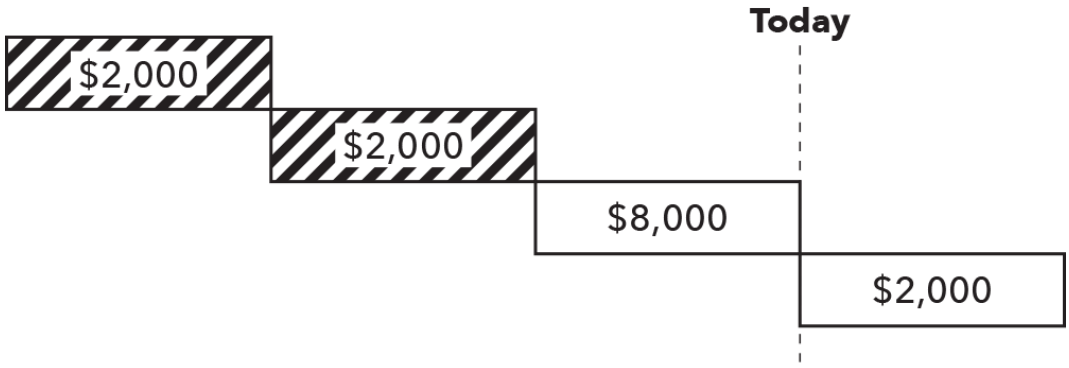


fig. 115

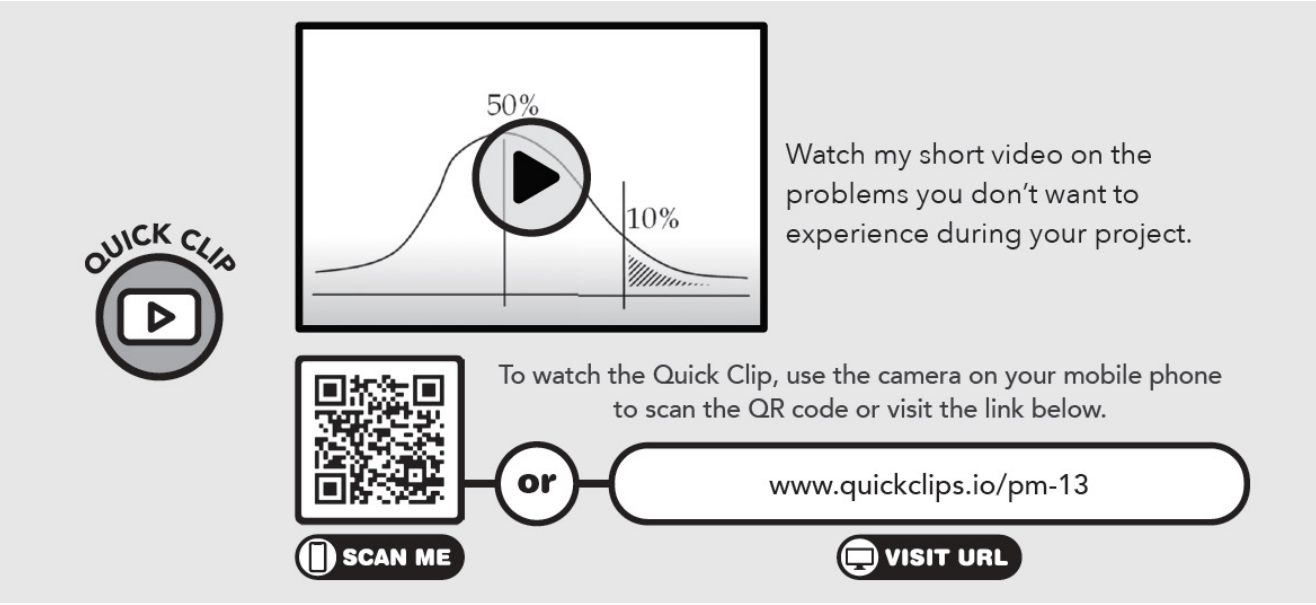
SPI FOR NONLINEAR PROJECT



CHAPTER 16

Top Ten Mistakes You'll Now Avoid

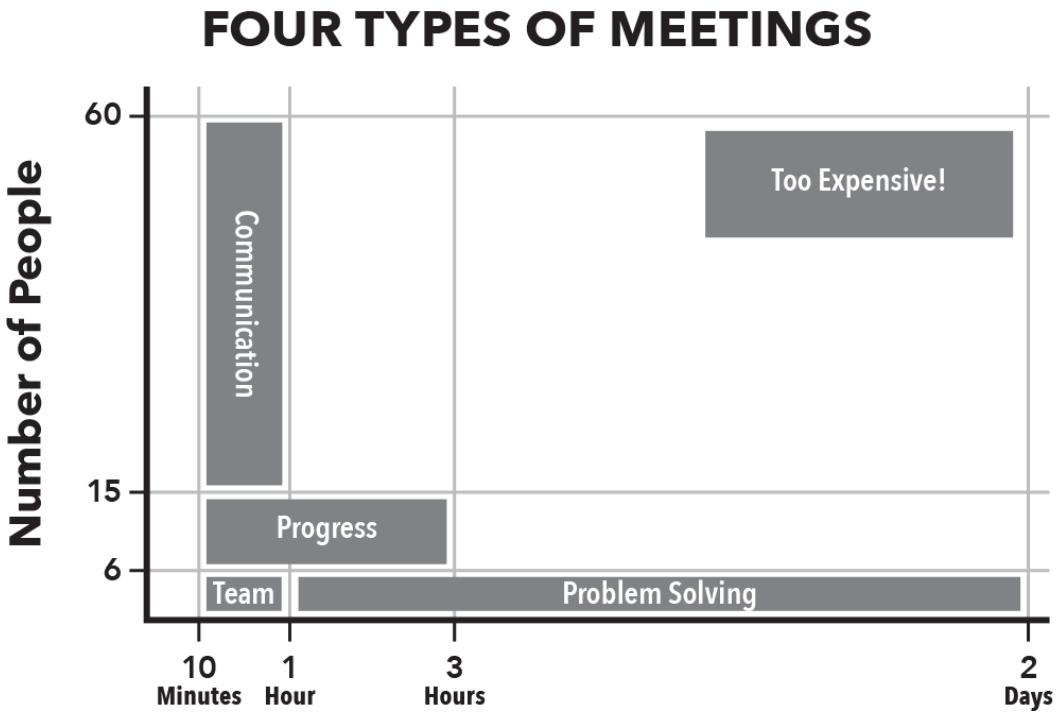
QC. 13



CHAPTER 17

Remember the People Side of Project Management

fig. 116



QC. 14

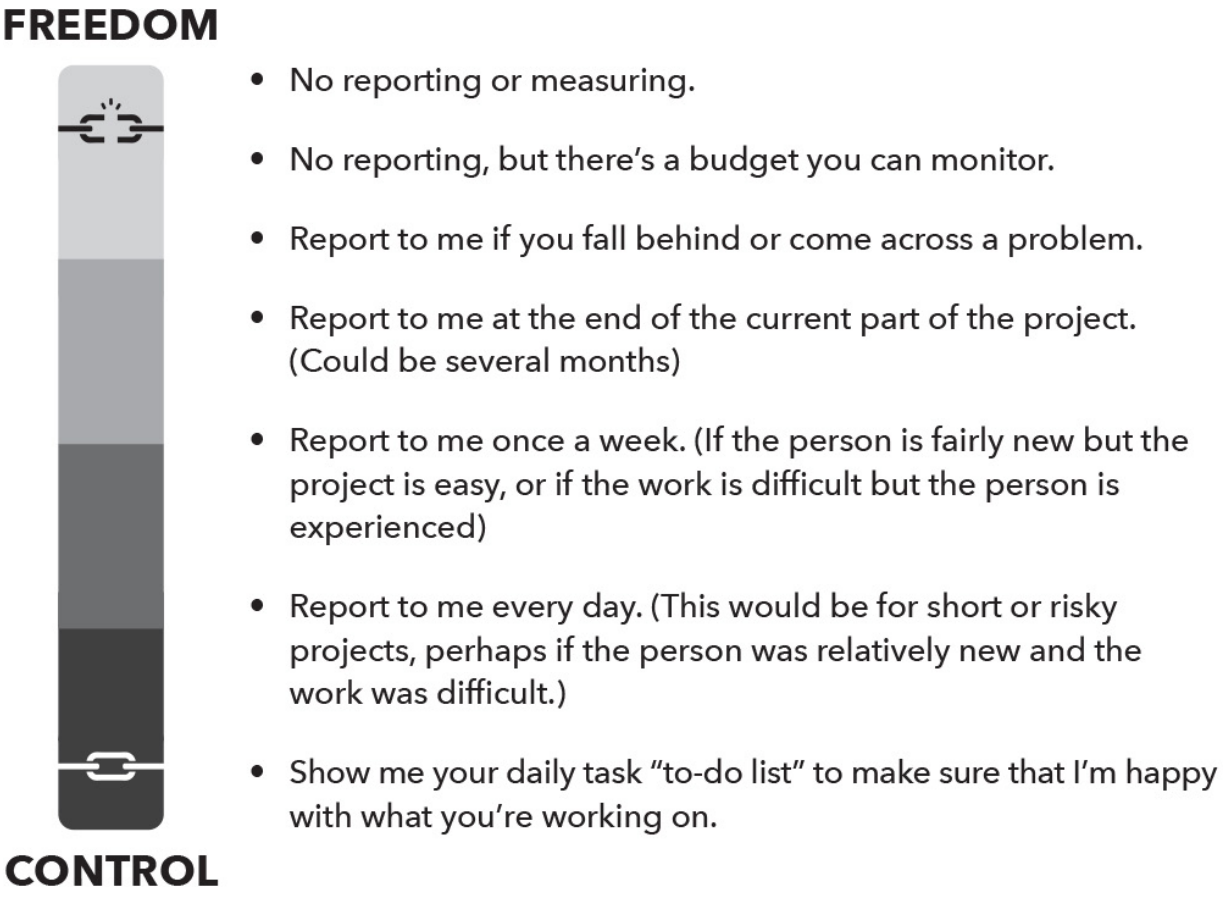
QC. 15

fig. 117

DELEGATION OPTIONS

HOW MUCH INVOLVEMENT IN THE PLANNING?		HOW MUCH FREEDOM IN THE IMPLEMENTATION?		
		"Check before" Your team has to check with you before they do anything	**"Report after"** Your team keeps you informed every time they do something, or with a weekly summary	**"Free to act"** Your team just gets on with it
	"Consult" You do the planning, but you show it to your team	**OPTION 1** Not Recommended	**OPTION 2**	**OPTION 3** Not Recommended
	"Share" You plan the project together	**OPTION 4** Not Recommended	**OPTION 5**	**OPTION 6**
	"Delegate" You let the team do the planning	**OPTION 7**	**OPTION 8**	**OPTION 9** Not Recommended

fig. 118


FREEDOM
CONTROL
• No reporting or measuring.
• No reporting, but there's a budget you can monitor.
• Report to me if you fall behind or come across a problem.
• Report to me at the end of the current part of the project. (Could be several months)
• Report to me once a week. (If the person is fairly new but the project is easy, or if the work is difficult but the person is experienced)
• Report to me every day. (This would be for short or risky projects, perhaps if the person was relatively new and the work was difficult.)
• Show me your daily task "to-do list" to make sure that I'm happy with what you're working on.

QC. 16

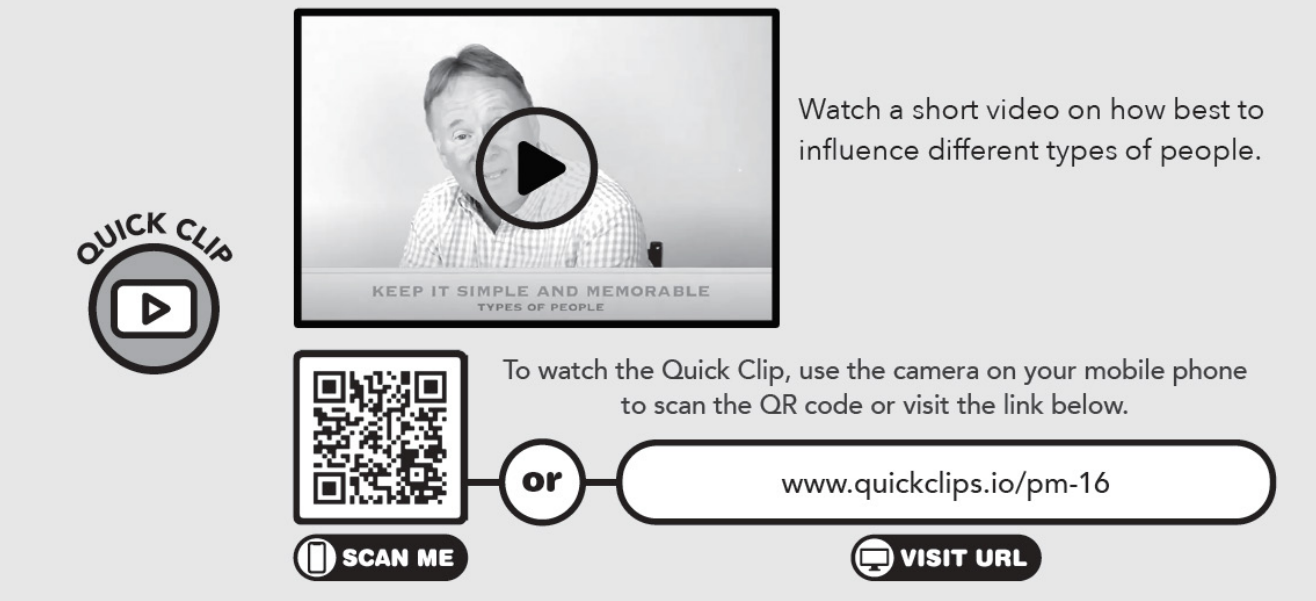

QUICK CLIP
KEEP IT SIMPLE AND MEMORABLE
TYPES OF PEOPLE
Watch a short video on how best to influence different types of people.
To watch the Quick Clip, use the camera on your mobile phone to scan the QR code or visit the link below.
or
www.quickclips.io/pm-16
SCAN ME
VISIT URL

fig. 119

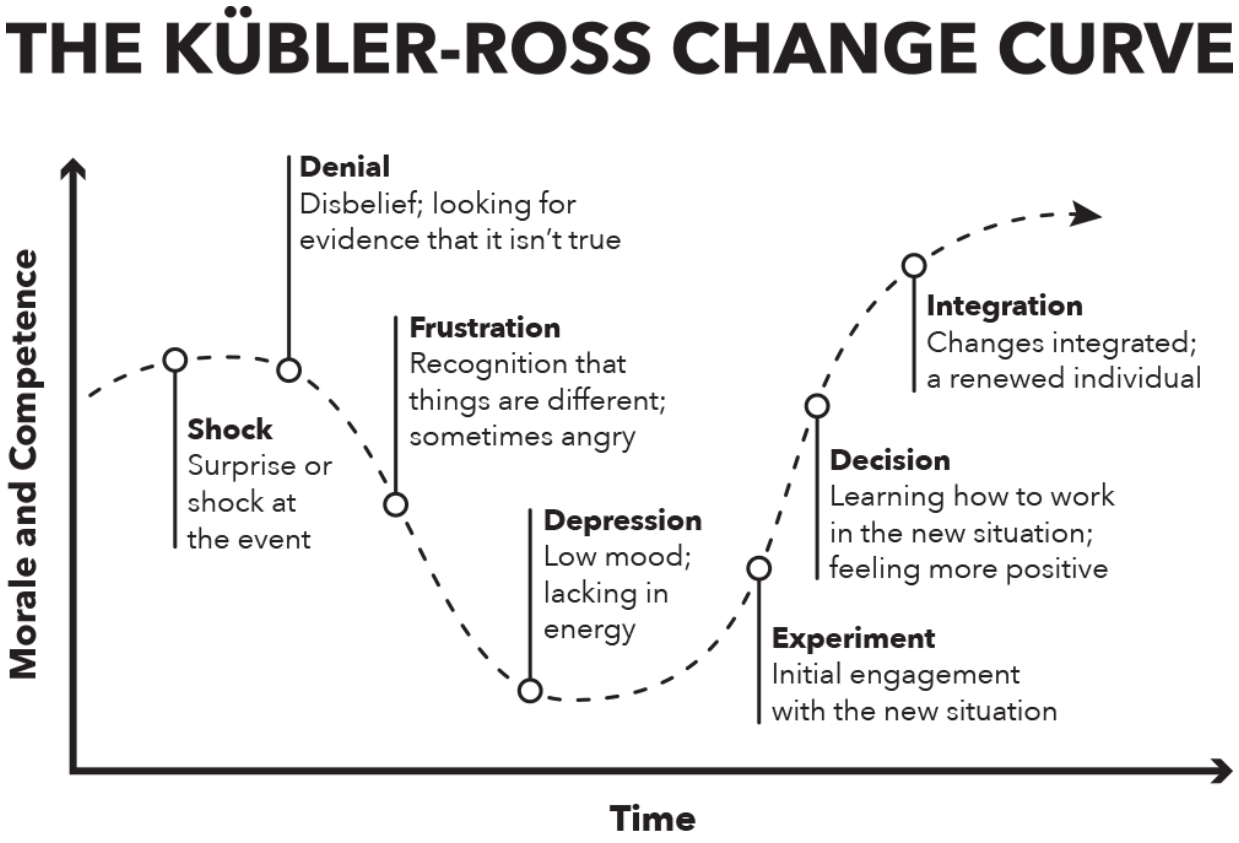
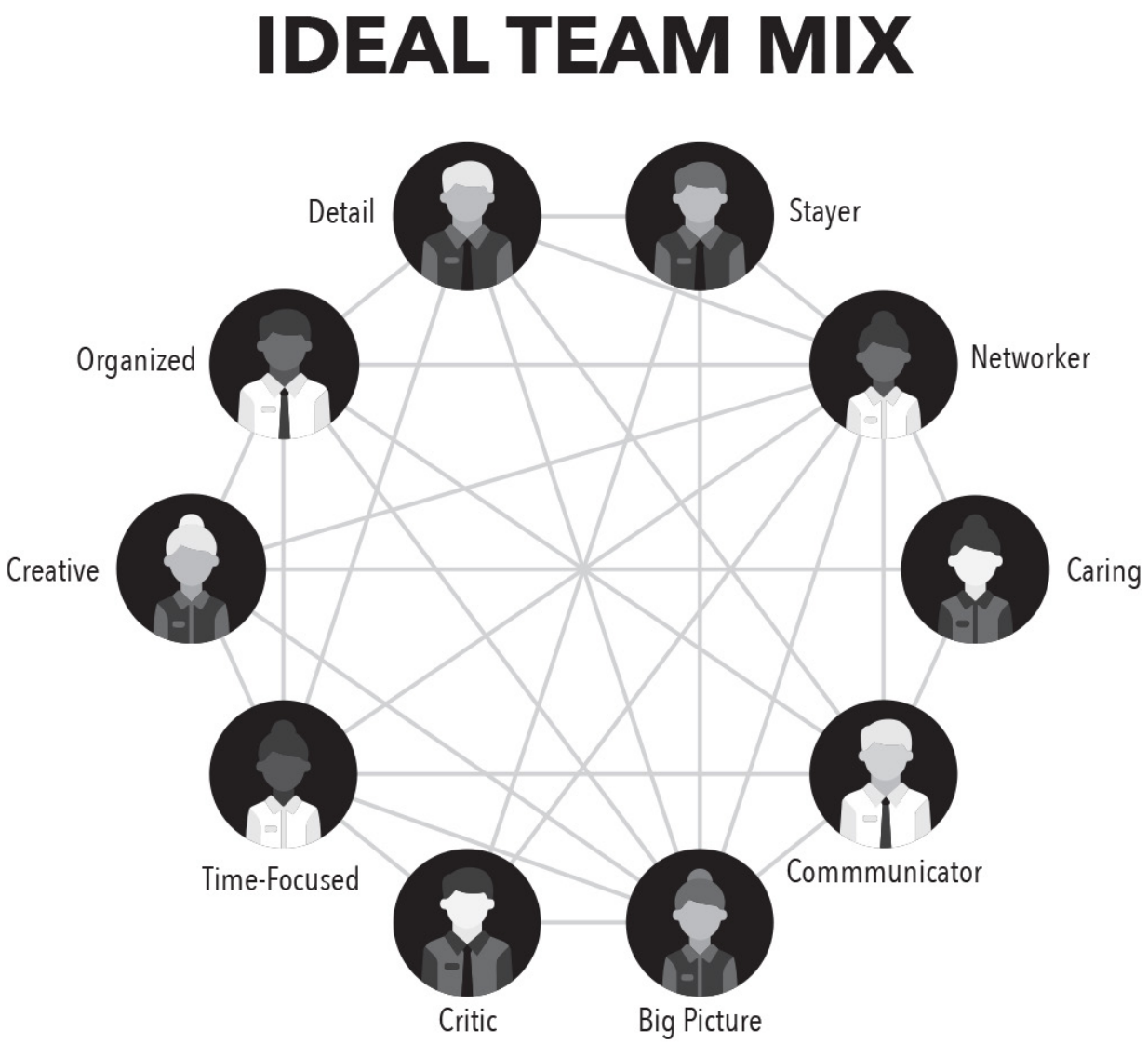

THE KÜBLER-ROSS CHANGE CURVE
Morale and Competence
Time
Shock
Surprise or shock at the event
Denial
Disbelief; looking for evidence that it isn't true
Frustration
Recognition that things are different; sometimes angry
Depression
Low mood; lacking in energy
Experiment
Initial engagement with the new situation
Decision
Learning how to work in the new situation; feeling more positive
Integration
Changes integrated; a renewed individual

fig. 120


THE FIVE WHYS
1
Why did that mistake happen?
(Don't reprimand the person who made it!)
Answer
Because the data on the system was incorrect
2
Why was the data incorrect?
(Don't just put the data right)
Answer
Because it wasn't checked when it came in from the supplier
3
Why wasn't it checked?
(Don't just put someone in charge of checking from now on)
Answer
Because it's nobody's job to check it
4
Why wasn't someone assigned to it?
(Don't just assign someone)
Answer
Incoming data wasn't regarded as part of the system
5
Why not?
(Don't just add it to the system)
Answer
We didn't really think about assigning roles to checking data, it wasn't on our list of tasks at the start – but it will be for all projects from now on!

fig. 121

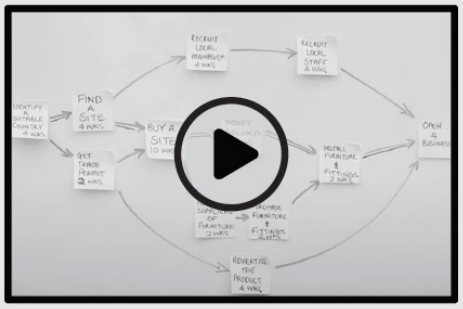

IDEAL TEAM MIX
Detail
Stayer
Organized
Networker
Creative
Caring
Time-Focused
Commmunicator
Critic
Big Picture

CHAPTER 19
Careers in Project Management

QC. 17

CONCLUSION

QC. 18



Watch this video walk-through of the 12-step process.

To watch the Quick Clip, use the camera on your mobile phone to scan the QR code or visit the link below.

SCAN ME

or

www.quickclips.io/pm-18

VISIT URL

You can also watch my 12-step project management process explained with a dash of humor in a showstopping five-minute rap song! (clydebankmedia.com/PM-19)

GLOSSARY

Accrual Accounting
A system of accounting that includes not only money that has been received and spent, but also what is due to come in and scheduled to go out. It offers a more accurate picture of the likely longer-term financial situation than does cash accounting, which does not include scheduled payments and receipts. (See also Cash Accounting.)

Agile
A collection of principles used in project management, focusing on small, workable, incremental delivery. The requirements, plans, and results are evaluated and reevaluated continuously. This helps the Agile team to respond quickly to changes either inside or outside the project.

Agile Manifesto
A set of principles and values embodying the Agile process, created in 2001 by a group of software developers.

Arrow Diagramming Method (ADM)
A schedule network diagramming technique where scheduled activities in a project are represented by the use of arrows. ADM is essentially another name for project evaluation and review technique (PERT).

Association for Project Management (APM)
The UK equivalent of the US-based Project Management Institute. It is the only chartered body for the project profession, with over 35,000 individual members and more than 500 organizations participating in its Corporate Partnership Program.

Basecamp
An online project management platform that allows for sharing of updates and progress with team members.

Business Case
The justification for a proposed project or undertaking on the basis of its expected commercial benefit.

Cash Accounting
A system of accounting that includes money that has been received or spent, giving a definite picture of an organization's finances at any given moment—but not including scheduled or committed spend, or monies due to be received at a later date. (See also Accrual Accounting.)

Certified Associate in Project Management (CAPM)
A project management qualification, one step down from Project Management Professional (PMP). Both are issued by the Project Management Institute (PMI) but achievement of CAPM does not require proven project management experience.

Change Request Form
A piece of paperwork that officially indicates a change being made to the parameters of a project. Whenever a stakeholder makes this kind of change, the project manager should insist on a signed-off change request form so that everyone knows and understands the ramifications of the change (more cost or time) before they occur.

Communications Plan
A plan that clarifies how and when stakeholders are to be kept updated on the progress or problems of a project. It is always wise to agree on a communications plan at the start of each project or once a project has been approved.

Contingency
Extra time or money that is deliberately added to tasks, especially those on the critical path, to allow for a margin of error in the estimates and therefore to help keep the project on track.

Cost Performance Index (CPI)
A method that allows one to forecast changes to cost based on the actual costs incurred in an earlier part of the project. CPI is calculated by dividing the actual cost by the planned cost.

Crash the Plan
The process of reducing time or cost in a plan to better meet stakeholder aspirations.

Critical Path Analysis (CPA)
See Critical Path Method.

Critical Path Method (CPM)
Also known as critical path analysis (CPA). A project management methodology that allows one to identify the amount of time necessary to finish each task and therefore identify the critical path through the project. The critical path is the shortest time or most realistic time in which the project can be completed.

Dependency Chart
A visual illustration of the chain of dependencies that must occur for a project to be delivered—essentially another name for a network diagram.

Dynamic Systems Development Method (DSDM)
A technique using eight principles to direct a team and create a mindset of delivering on time and within budget. Principles include focusing on the business need, delivering on time by timeboxing work, and emphasizing collaboration with end users, team members, business representatives, and other stakeholders.

Earned Value Analysis (EVA)
A calculation that reveals whether a project is within budget and on schedule at a given moment. It takes into consideration the work that has been accomplished and the costs incurred so far with respect to the original budget and schedule.

Endowment Effect
A concept from behavioral economics referring to the emotional bias that causes individuals to value an object they own more highly than its market value. Human beings like and are more engaged with things they had a hand in coming up with or creating.

Excel
An easy-to-use spreadsheet program that can make fabulous Gantt charts too. Part of the Microsoft Office suite of products.

Extreme Programming (XP)
A software development methodology whose goal is to deliver software as needed, when it is needed. It has short development cycles, focusing on the needs of today rather than those of the future, sometimes called the "You aren't gonna need it!" or YAGNI approach.

Feature-Driven Development (FDD)
An Agile methodology consisting of five activities: the development of an overall model, the building of a feature list, the planning by feature, the designing by feature, and the building by feature. FDD is scalable even to large teams due to the concept of "just enough design initially" (JEDI).

First Kick-Off Meeting
The initial meeting between the stakeholders and the project manager in which the stakeholders outline the desired outcome of the project. The project manager must then determine whether it's possible to deliver the project within the parameters that the stakeholders have asked for.

Flow Diagram
A specific type of activity diagram (also known as a flowchart) that communicates a sequence of actions or movements within a complex system. Similar to a network diagram, but network diagrams can't have branches or loops.

Gantt Chart
A horizontal bar chart showing the start, finish, and duration of each task in a project; can also show the dependencies between tasks. Popularized by American engineer Henry Gantt in 1910. Gantt charts take project visualization up a notch from the network diagram.

Gantt of Gantts
A Gantt chart that shows, on one page, the resource profile of all the projects a business or department is undertaking. It allows the boss to see at a glance where each project is against expectations.

Granularity
Fine detail. In projects, it relates to how far each task needs to be broken down in the planning process. Each identified task should be able to be broken down enough so that either one person or one team can be responsible for that task.

Iron Triangle
The combination of the three major constraints on any project: time, money, and quality. It is impossible to deliver a project quickly, well, and cheaply; there is always a trade-off. Two of the three are possible, but something has to give.

Kanban
A workflow management method for defining, managing, and improving services that deliver knowledge work. It aims to help one visualize their work, maximize efficiency, and minimize work in progress and therefore throughput times.

Key Driver
The factor in a project's iron triangle of money, time, and quality that outweighs or is considered more important than the others by the project owner. It is the criterion which, if not met, will cause the project owner to consider the project a failure.

Lean
A way of thinking about a project that is focused on creating added value with fewer resources and less waste. Also, a practice consisting of continuous experimentation to achieve perfect value with zero waste.

Managing Successful Programs (MSP)
A best-practice program management framework. When an organization undertakes a large, complex transformational change program, it uses MSP to break down the overall change into smaller, more manageable interrelated projects.

Microsoft Project
Project management software that must be purchased in addition to the usual Microsoft Office suite of Word, Excel, and PowerPoint.

Minimum Viable Product (MVP)
The minimum workable offering of a new product or service that can be tested in the market and fine-tuned. If customers buy and like the MVP, then the business knows it's onto a winner.

Monday.com
A cloud-based work operating system where teams create workflow apps to run and share their processes, projects, and everyday work.

Monthly Monitoring Form
A management tool in the form of a one-page summary of all the projects going on in a business at any one time. Outlines the name of each project, the progress, and the spend to date.

Network Diagram
The visual representation of a project showing what needs to be done in what order by when. The term originates in computing, where a network diagram would visualize a computer network, but its use has extended to other areas, including project management.

PMBOK
An acronym for Project Management Body of Knowledge, also sometimes called the PMI recommended process. First published by the Project Management Institute (PMI) in 1987. PMBOK is the collective accumulation of proven knowledge about project management over the last 100 years.

PMBOK Lite
The author's slimmed-down version of PMBOK. It is the 12-step process outlined in this book, all one really needs to know about project management to deliver any project.

Post-Project Review
A review that takes place a couple of years after the delivery of a project to assess whether or not the project delivered its expected or promised benefits. Doesn't usually involve the project manager but rather senior management and the project owner.

Precedence Diagram
An illustration where activities or tasks in a project are displayed graphically as boxes (which can also be referred to as nodes). The activities are then linked together via a line or arrow that represents the logical relationships between tasks.

PRINCE2
A highly structured project management methodology originating in IT projects in 1989. Designed to cover all types of projects, although it still has a distinct IT flavor.

PRINCE2 Foundation
An organization that assesses whether a candidate can recall and understand the PRINCE2 project management method.

PRINCE2 Practitioner
A certification that confirms one's ability to apply understanding of the PRINCE2 project management method in context.

Product Breakdown Structure (PBS)
A hierarchy like a work breakdown structure (WBS), only instead of activities it shows outcomes or deliverables. The final product is at the top, with all that's needed to make that product outlined underneath.

Project Brief
An outline of the purpose of a project; it communicates that purpose and the agreed-upon approach so that everyone on the project team is on the same page.

Project Evaluation and Review Technique (PERT)
Another way to create a network diagram, only instead of focusing on tasks and activities as CPM does, it focuses on events and deliverables. Also known as "activity on arrow" and occasionally as arrow diagramming method (ADM).

Project Initiation Document (PID)
A detailed plan for how a project will be executed. The PID outlines what, why, how, who, when, and how much, but in much greater detail than a project brief or business case.

Project Management Process
A term for project management that defines what to do when in a project. It outlines all the activities from initiation through closure of a project, in sequential order.

Project Management Professional (PMP)
The gold standard in project management qualifications, issued by the Project Management Institute (PMI). The PMI is seen as the global governing body of project management, and PMP is globally recognized.

Risk Exposure
The assessment of potential loss or damage that may be caused by a project or to a project. All efforts need to be made to identify risks in a project and to mitigate those risks, if possible.

Running Order
The assessment of all the tasks that need to be done, what must happen first and what order the rest of the tasks should be completed in, to determine how long the whole project will take.

Schedule Performance Index (SPI)
A method of forecasting any changes to the expected finish date of an entire project, based on the actual time taken to complete an earlier part of the project.

Scrum
A process framework used to manage product development and other knowledge projects. It provides a way for teams to establish a hypothesis of how they think something works, try it out, reflect on the experience, and make the appropriate adjustments.

Scrumban
A versatile approach to workflow management that combines the structure of the Scrum technique with the flexibility and visualization of the Kanban technique. Both Scrum and Kanban live under the Agile banner.

Second Kick-Off Meeting
A meeting at which the project manager comes back to the stakeholder group and explains whether what they want can be done within the parameters set out in the first kick-off meeting.

Sprint
A term used in Scrum that relates to a short period of time, often two weeks, in which the team must finish a specific task, milestone, or deliverable.

Stakeholder
Anyone who has a stake in a project, whether doing it or affected by it. This includes team members, the project manager, the project owner, the sponsor, and the end customer.

Standard Deviation
A statistical term that relates to the amount of variation or dispersion across a data set.

TeamGantt
A project management platform that gives users the ability to execute tasks without losing sight of the big picture.

Trello
A visual collaboration tool that creates a shared perspective for a team on any project in a fun, flexible, and rewarding way, using drag-and-drop within and between columns.

Wrike
A comprehensive collaboration and project management tool that helps users manage projects from start to finish, providing full visibility and control over tasks.

Work Breakdown Structure (WBS)
A systematic way to show all the work that will be needed in a project. Essentially a tree diagram that lists all the tasks and shows the relationship between those tasks, like a company organizational chart or a family tree.

XP (Extreme Programming)
A software development methodology whose goal is to deliver software as needed, when it is needed. It has short development cycles, focusing on the needs of today rather than those of the future, sometimes called the "You aren't gonna need it!" or YAGNI approach.