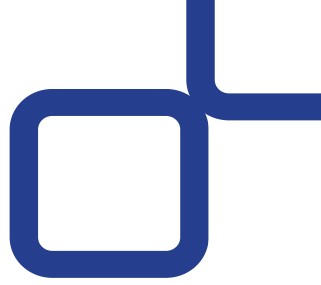


# Stop Re-Planning, Start Delivering.

Creating Flow in Complex Projects.



# There is a problem...



90% of projects fail to meet all 3.



40% of projects overrun.



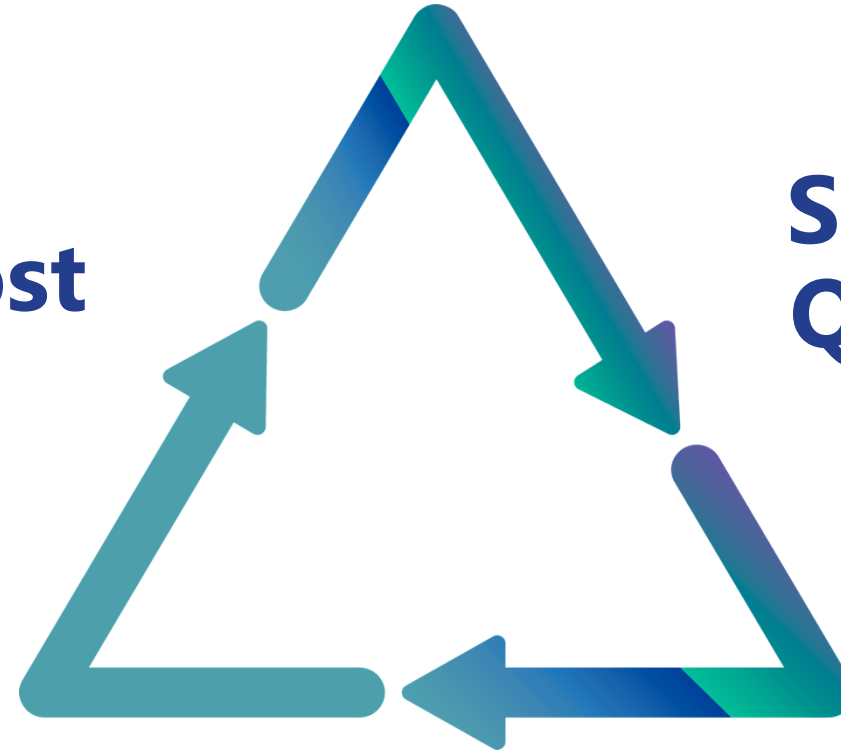
30% of projects finish over budget.



50% of projects deliver the full scope.

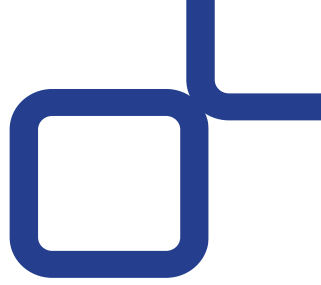
**Cost**

**Scope /  
Quality**



**Time**

# Improvements in Project Delivery Performance



If we would have asked a project manager 80 years ago to speak about their problems, would we have heard different complaints?

Would the magnitude of the complaints be any different?

If the answer is 'NOT REALLY' it indicates that Project Management has not significantly progressed in the last 80 years.

## HOW COME?

Schedules are tight



Changes to scope



Budget cuts



Don't have the required skills



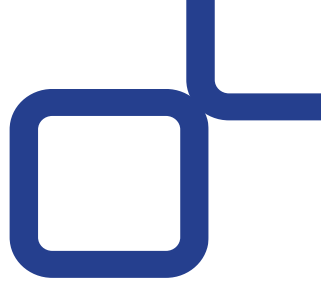
Changes without additional £ or time



People get pulled from the project or enter late.



# Classic Project Cause-Effect Loop

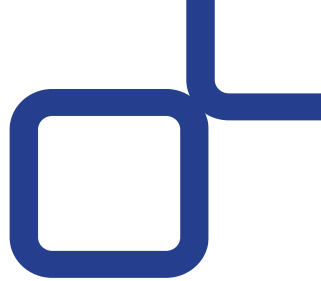


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# The Sooner You Start, The Sooner You Finish... Or do you?



# Letters, Numbers, Shapes

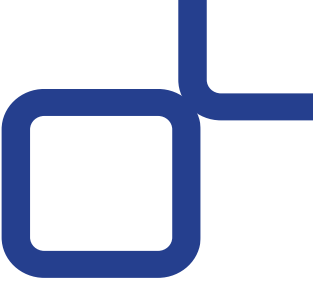


Run 1

Letters	Numbers	Shapes
A	1	○
B	2	△
C	3	□
D	4	○
E	5	△
F	6	□
G	7	○
H	8	△
I	9	□
J	10	○

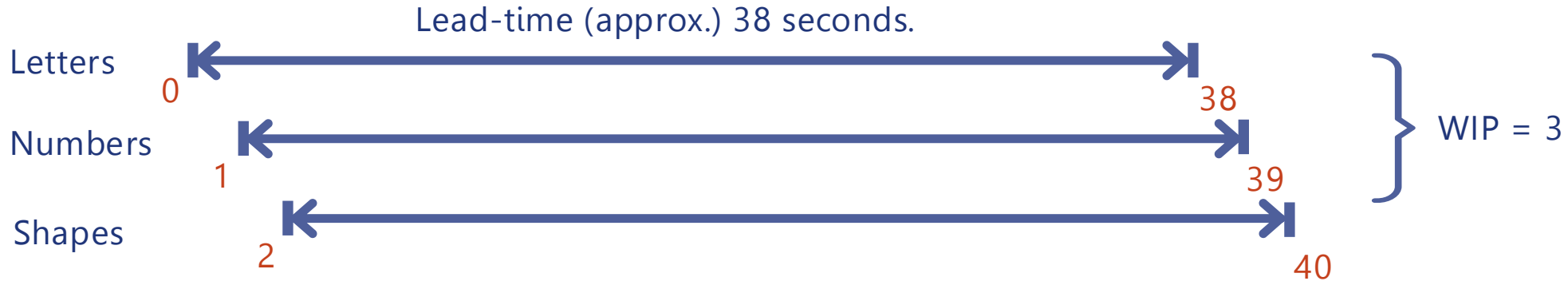
Run 2

Letters	Numbers	Shapes
A	1	○
B	2	△
C	3	□
D	4	○
E	5	△
F	6	□
G	7	○
H	8	△
I	9	□
J	10	○

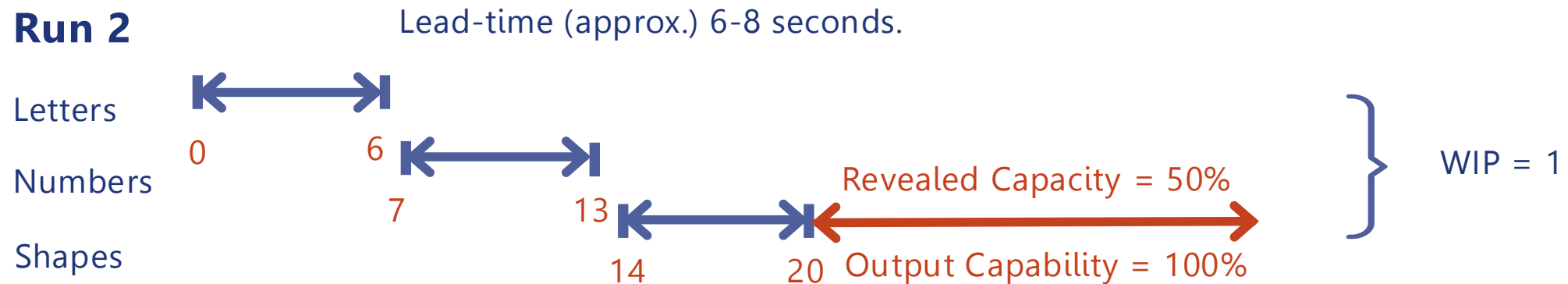


# Focus and Finish

## Run 1



## Run 2



# New Operating Paradigm



Shoving more work in, does not make it come out faster.



Pushing everyone to be busy slows delivery – optimise flow, not utilisation.



Measure wisely to reward the behaviours you want.



Only start what you can finish, and finish what you start.



Focusing on costs loses the schedule and the cost. Focus on schedule flow and you get both.



Stop re-planning & expecting the plan to execute itself.

# Dramatic Results – Quick.



## PROJECT MANAGEMENT

On-time delivery of projects and milestones - every time.  
Reduce project lead-times up to 30%.  
Early delivery of milestones  
Credible, robust and manageable project plans.  
ROI of up to 50:1.



## MANUFACTURING

Increase output by 50-215%.  
Reduce lead-times by 30-50%.  
Clear backlog.  
Capacity to maintain plant reliability - preventative maintenance.  
ROI of up to 20:1.



LAND



AIR



MARITIME



## MAINTENANCE, REPAIR, AND OVERHAUL

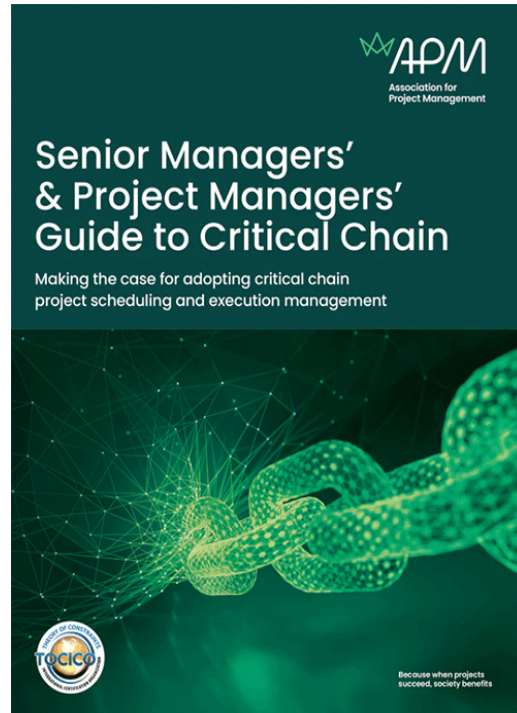
Reduce turnaround times (TAT) by 20-55%.  
Early delivery of spares  
Reduce overtime by up to 50%.  
Increase operating profit by up to 250%.  
ROI up to 8:1.

# Endorsement & Credibility

*Critical Chain Project Management Gaining Momentum...*

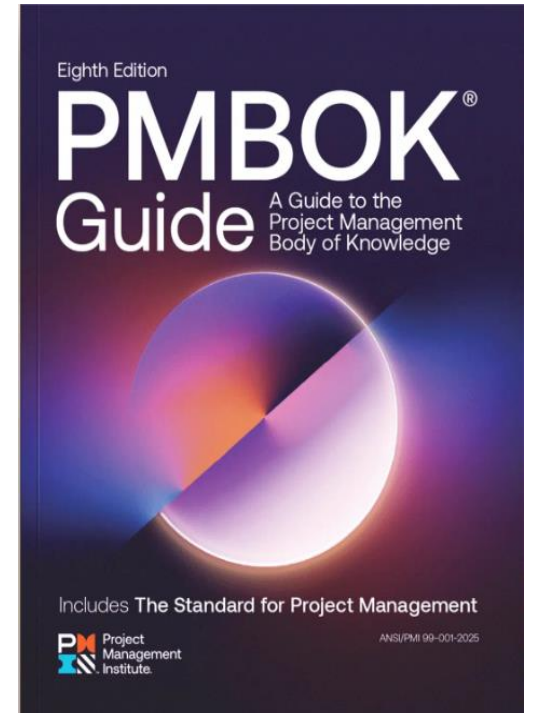
*"...there is empirical evidence that extraordinary results can be achieved with critical chain."*

APM Body of Knowledge 7<sup>th</sup> edition (Association for Project Management, 2019, p.176).



The inclusion of CCPM in the PMBOK® Guide - 8th Edition reflects PMI's ongoing adaptation to modern project complexities. CCPM has long appeared in PMBOK as a schedule network analysis technique.

The 8th Edition has re-introduced it as a distinct scheduling method, reflecting CCPM's growing relevance in modern project environments.



# The 5 Focusing Steps

*To Synchronise Flow in a System*



Warning: Do not allow inertia to become the Constraint!

This is a process of on-going improvement.

# Rules of Flow

## *for Projects and Programmes*



### 1. Maintain a Lower Level of Work in Progress (WIP)

Reduce the number of live projects and tasks that are allowed to be worked on (and reassign the resources).



### 2. Complete Full Kits

Only release tasks to resources when they have everything they require to complete the task. Focus on enabling 'Full Kit' well ahead of time.



### 3. Use Release Gates

Release tasks in the correct sequence and priority to maintain the level of Work In Progress.



### 4. Focus and Finish Tasks

Minimise interruptions for resources to allow them to 'focus on' and 'finish' each task as quickly as possible.



### 5. Create Protective Capacity

Ensure management and expert resources have the availability, visibility and are actively supporting daily recovery actions.



### 6. Ensure Clear Communication & Handovers

Ensure the project scope is clearly documented and communicated, with all the tasks in the plan having a clearly defined criteria for handover and completion.



### 7. Adjust Measures to Drive the Right Behaviours

Replace local operating measures that do not support flow with different measures aligned to deliver the project on time.



### 8. Plan for Uncertainty

Build rolling wave plans with logically linked tasks of the right size. Position visible buffers to protect the plan from the uncertainty and changes likely to be experienced in execution.



### 9. Focus On the Constraint

Apply the 5 Focusing Steps to the Constraint. (Exploitation and Subordination).



### 10. Concentrate On the Future (Not the Past)

Report the remaining duration of all (open) project tasks every day. Identify where and when to actively manage with fast recovery actions.

# RBSL

## Challenger 3 Tank

- ✓ On-time delivery.
- ✓ Training and communications.
- ✓ Winner of multiple project management awards.



Image © RBSL

### Rheinmetall BAE Systems Land (RBSL) – Challenger 3 tank – Design and development

**Case for change:** Customer request to accelerate the programme due to changes in the geopolitical environment.

**What was achieved:** On-time delivery of a complex design and development phase with a new joint venture, post-Covid-19 disruption, and a decade since the company did a similar programme.

**How it is sustained:** Training and communication was given to all functions to confirm the 10 simple rules of flow, to achieve buy-in to the principles beyond the planning/project management community. Daily 15-minute full-project schedule reviews and weekly leadership escalation sessions drove timely schedule recovery.

Project Control Expo UK – Innovation Award 2023

Finalist APM – Programme of the Year Award 2023

TOCICO Outstanding TOC Implementation Award 2023

# Embraer

## Commercial Jets

*"Our experience with Goldratt UK has been nothing short of transformative."* – Anthony Hendricks, Lean Specialist at Embraer, Nashville.



**Case for change:** Customer request to increase the Throughput at each site (more revenue with proportionally fewer people). Plus, reduction of on-time delivery of all aircraft in the portfolio.

### What was achieved?

- ✓ Turnaround time (TAT) sustained with less resources.
- ✓ Delivering more output with less.
- ✓ Significant increase in profitability.
- ✓ Rolling out across 3 sites.

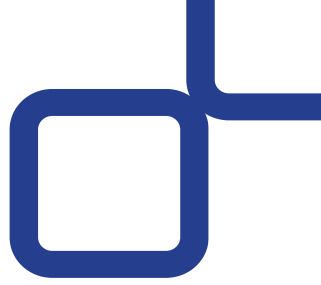
Benefits to people:

- ✓ Less fire-fighting.
- ✓ Empowered decision-making.
- ✓ Internal alignment.
- ✓ Happier customers.

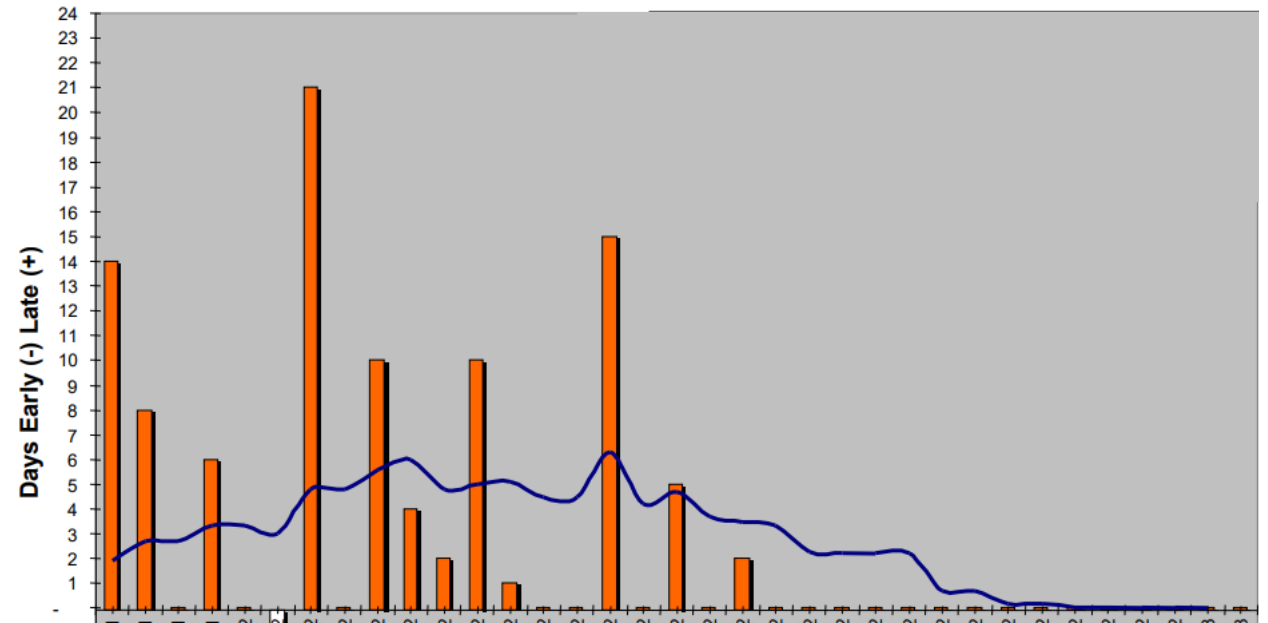


Outcomes...	2024	2025	Var	% Improvement	Notes
Output (2025 Actual + Projection)	129	202	73	56.59%	
TAT OTIF	53%	83%	30%	55.72%	15 Staff Absence
Safety - Accidents	14	12	-2	-14.29%	
Quality - Rework	322	202	-120	-37.27%	
Revenue				6.67%	
Operating Profit				259.09%	

# Pearl Harbor Naval Shipyard & Intermediate Maintenance Facility



- ✓ 11% increase in work accomplished per refit.
- ✓ On-time delivery rose from <60% to >95%.
- ✓ Overtime reduced by 49%.
- ✓ Work deferred dropped by >25% for more work.



# In Summary

A proven approach to breakthrough performance

- Transformative results.
- Materialised quickly.
- Build internal capability.
- Return on investment up to 50:1

**Faster delivery is achievable without more people or more funding.** It requires changing how flow is managed in execution.

