



Can CCPM create \$1b value?

A case study

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Specialisation:

- Project/Programme/Portfolio management
- Strategic governance of organisational performance
- Operations optimisation and operational turnaround
- Organisational competitiveness

Industry experience:

Infrastructure, capital projects, water and electricity utilities, manufacturing, financial services, public sector, mining, ICT, engineering, aviation, agriculture, strategic change programmes and public sector services.



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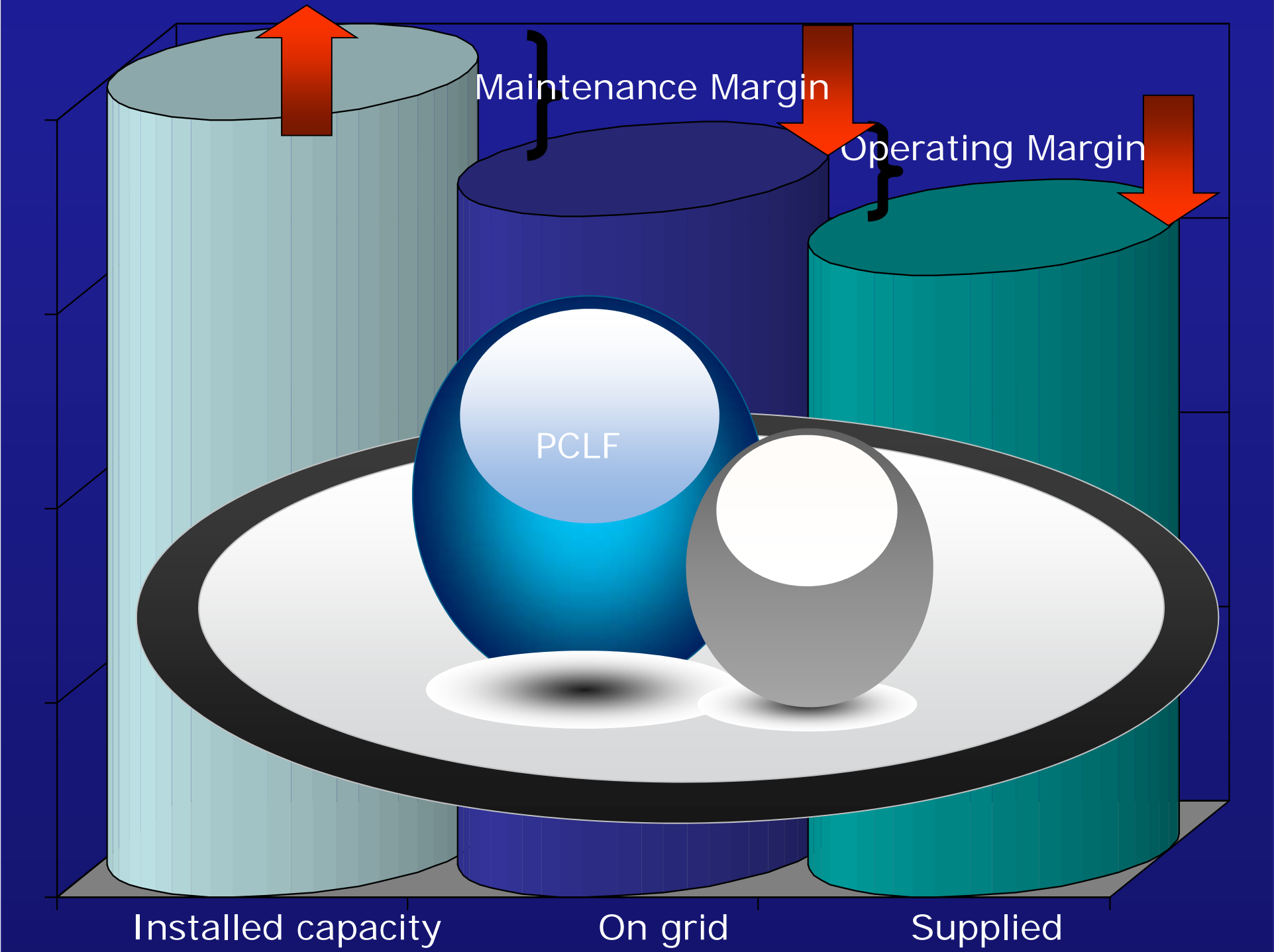




Problem statement

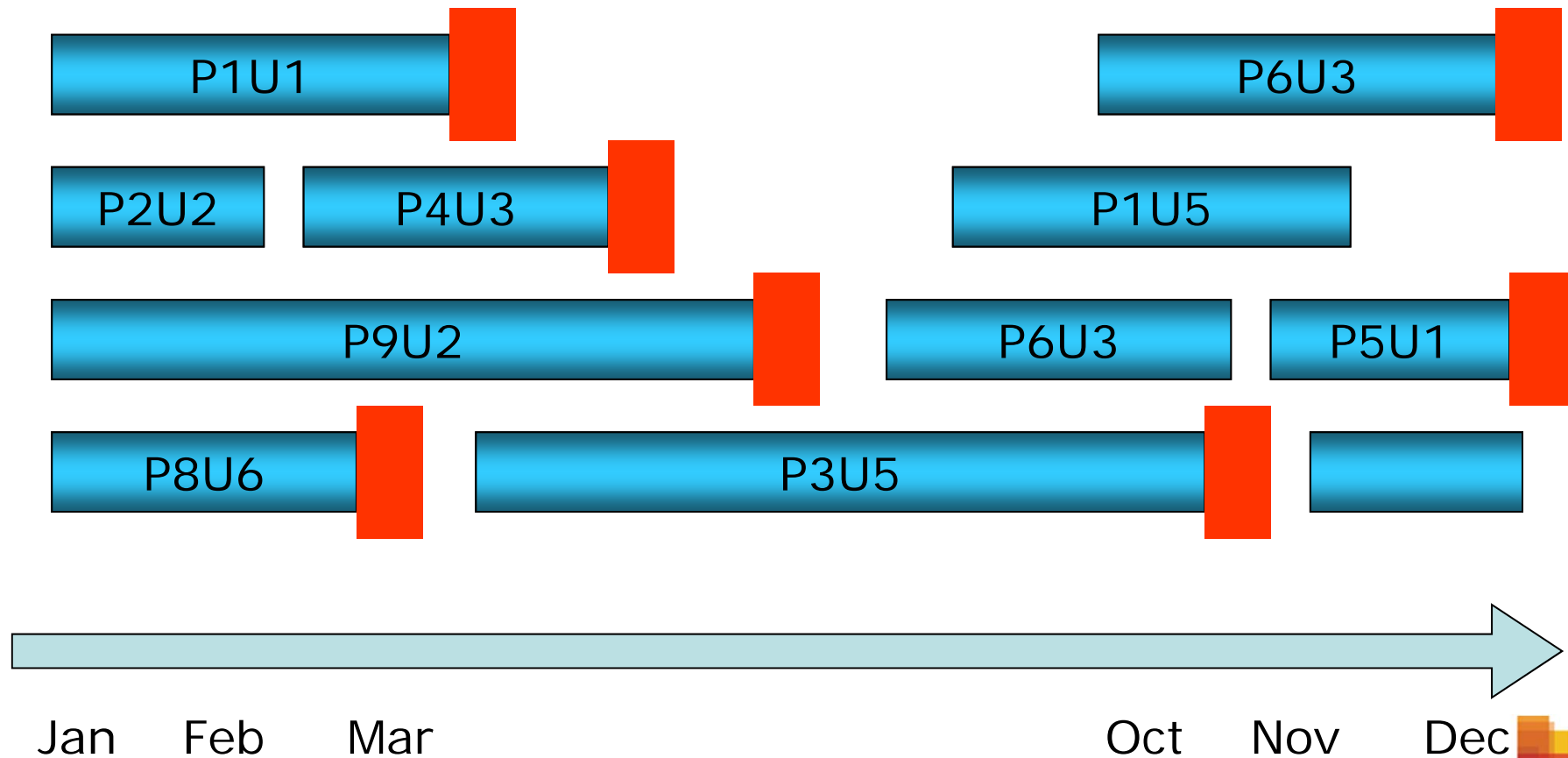
- A power utility has limited capacity
- If demand exceeds capacity, can CCPM
 - Reduce capital requirement?
 - Delay capital investment
 - Provide capacity sooner than a capital investment programme?

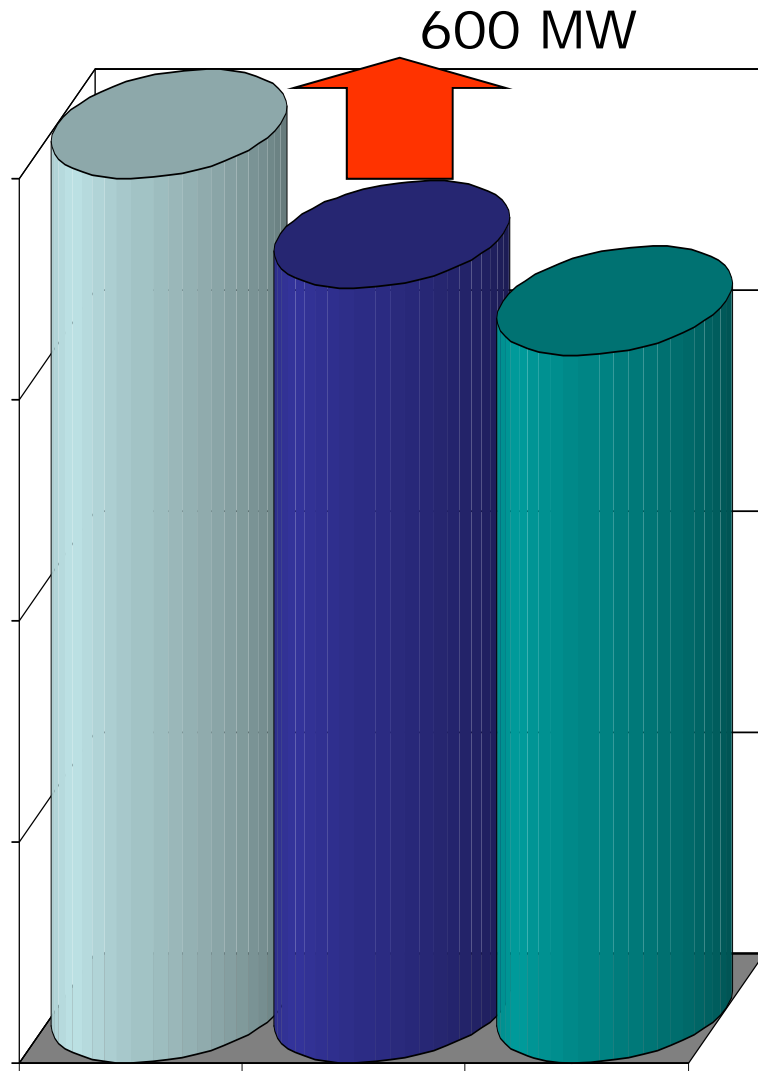






Outage Schedule





This demonstrates that

- if outage duration can reliably be reduced by 25%,
- the maintenance margin can be reduced
- and approx 1 unit (600MW) can be made available extra
- At low cost and quick (compared to investment /MWh

How much is this worth?



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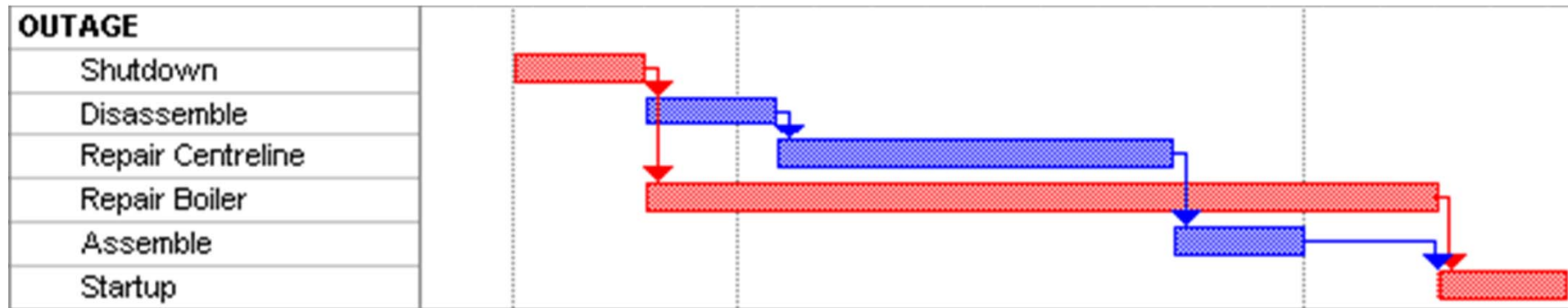
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But how?





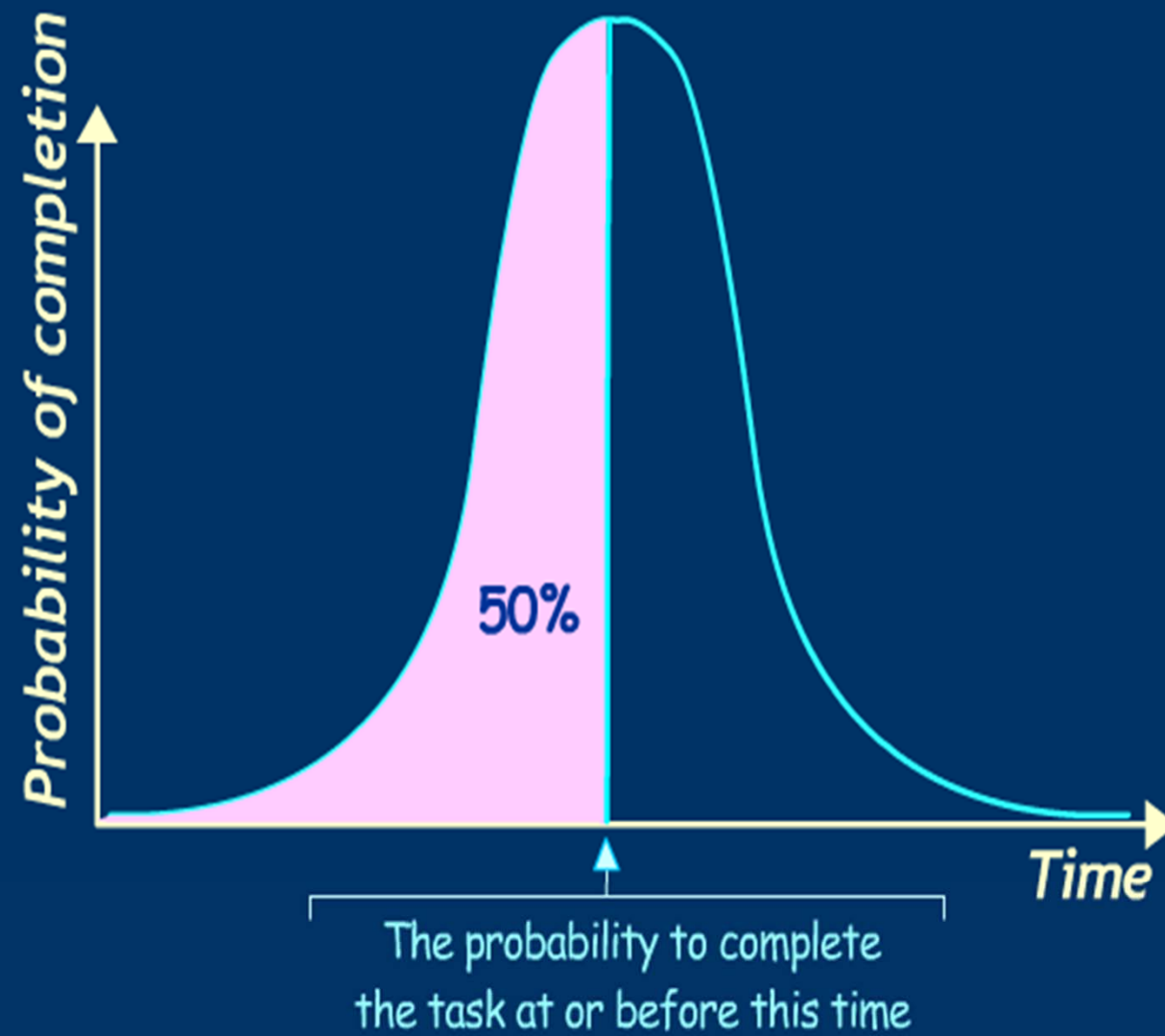
PLAN vs EXECUTE



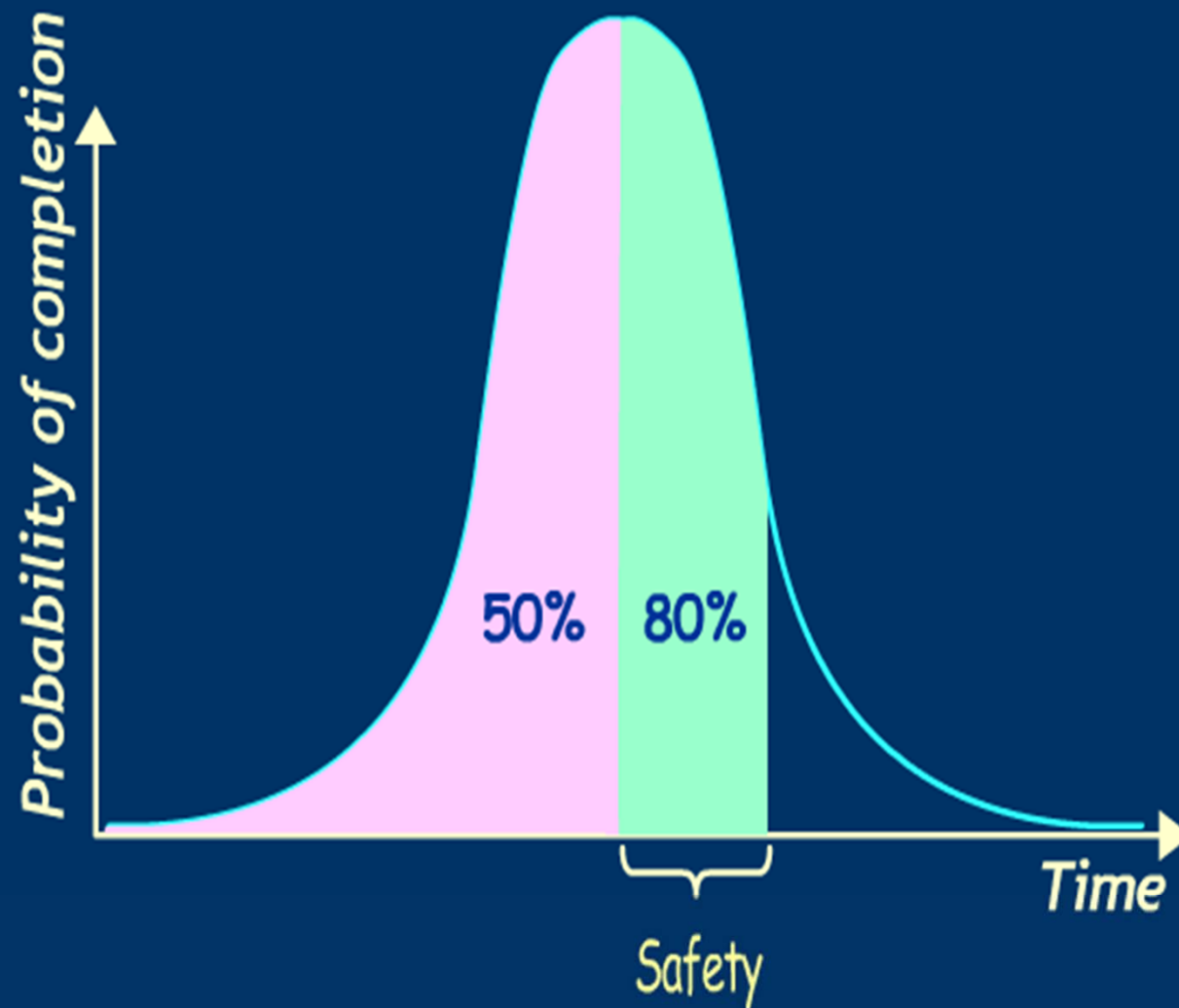
How much safety is included?



Any estimation above 50% embeds safety.

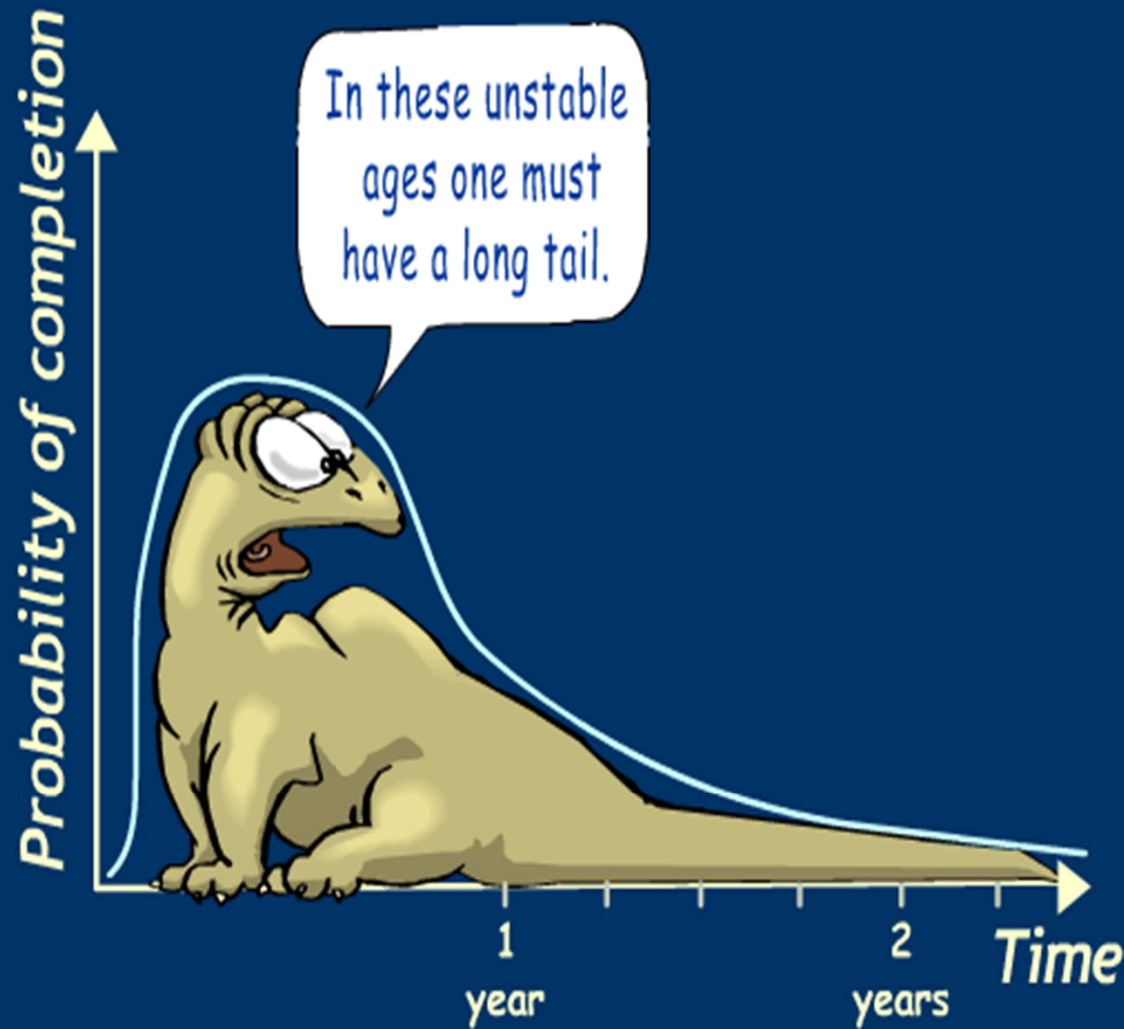


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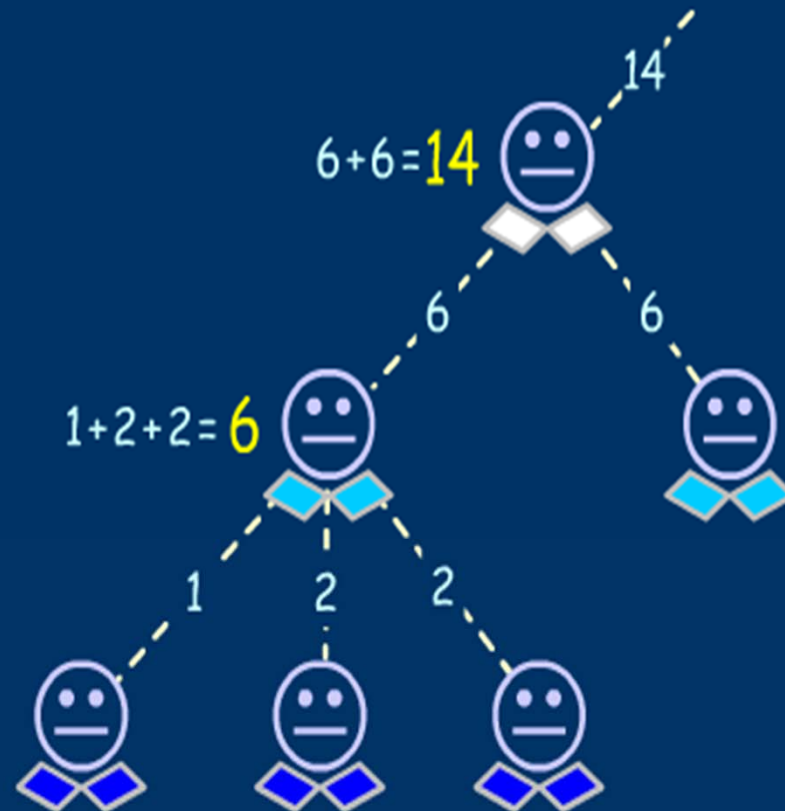


Choosing an estimation having 80% probability of completion,
adds relatively small safety.

In reality where uncertainty governs, the probability of completion is NOT symmetrical - it has a long tail. The higher the uncertainty the longer the tail.

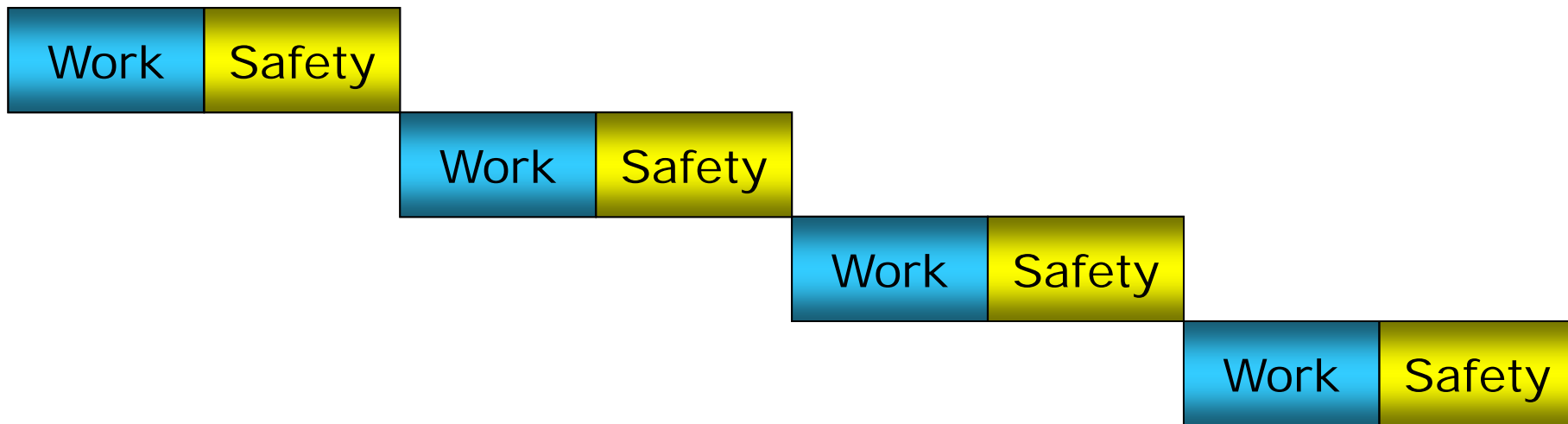


The safety added to estimations is further inflated - each level in the pyramid of hierarchy adds its own safety to the estimation.





So the plan actually is...



Then, why are we ever late?

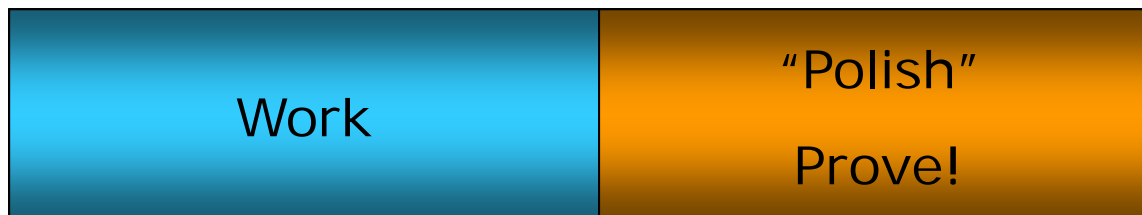




1. Student syndrome



2. Parkinson syndrome

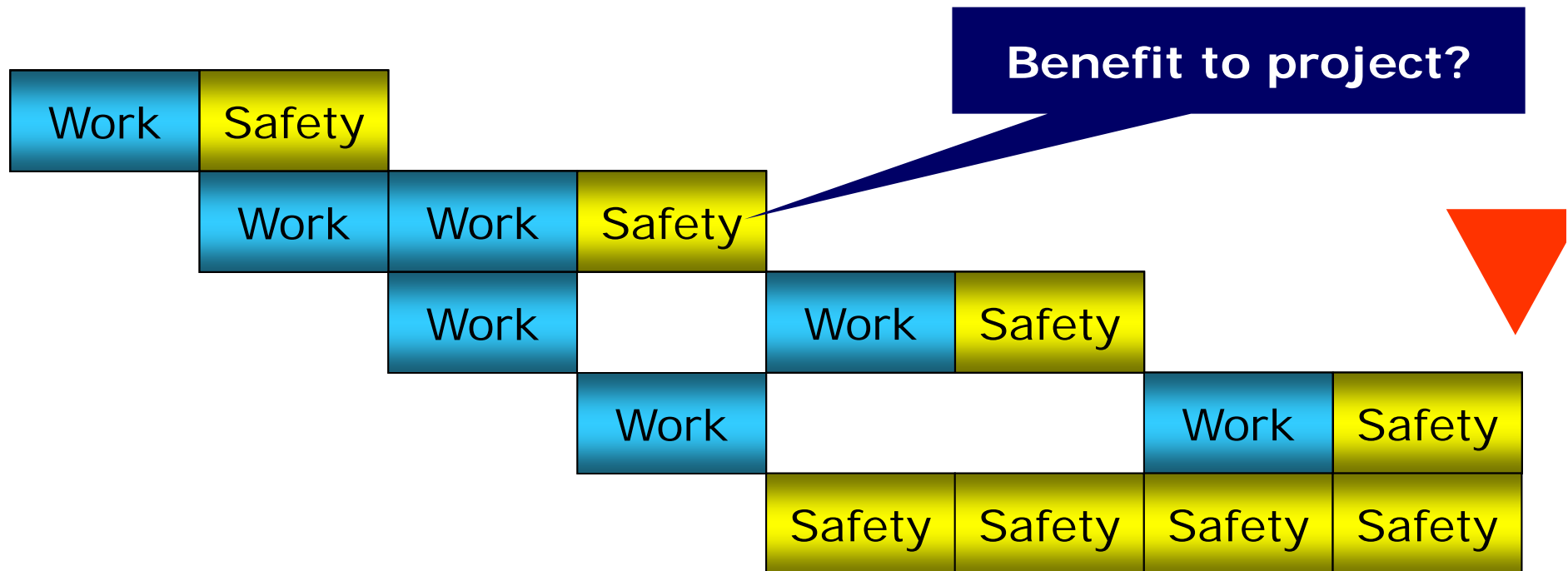


*Therefore, all delays propagate
and wins are few*





Therefore: Explicit buffers with aggressive plans





Test Case

- Methodology
 - Implement CCPM on outage projects
 - Briefing, training, executive liaison, negotiation
 - Project and buffer planning
 - Daily reporting and change management support
- Results
 - 25% duration optimisation is possible
 - Challenges and obstacles identified





Estimating Potential Benefits?

Per Outage Plan	70 days
Opportunity	20 - 30 days benefit
Benefits	>288 GWh (600MW x 24hrs)
Revenue	>R58 M (@R0.20/kWh)
Unserved Energy	>R23 B (@R80/kWh)

And

...the value of the extra unit on the grid?





Can CCPM create \$1B in value?...

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