Project management 101 *by Zavanak*

15. PLANNING

© Eric Woodcock 2024

15.2 Elements of the plan

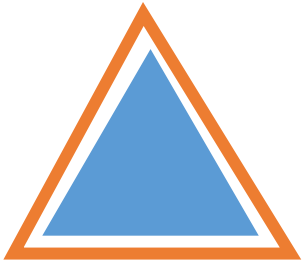
© Eric Woodcock 2024

Project design for easier control

Have chunks and check-points – well-defined tasks, milestones and gateways

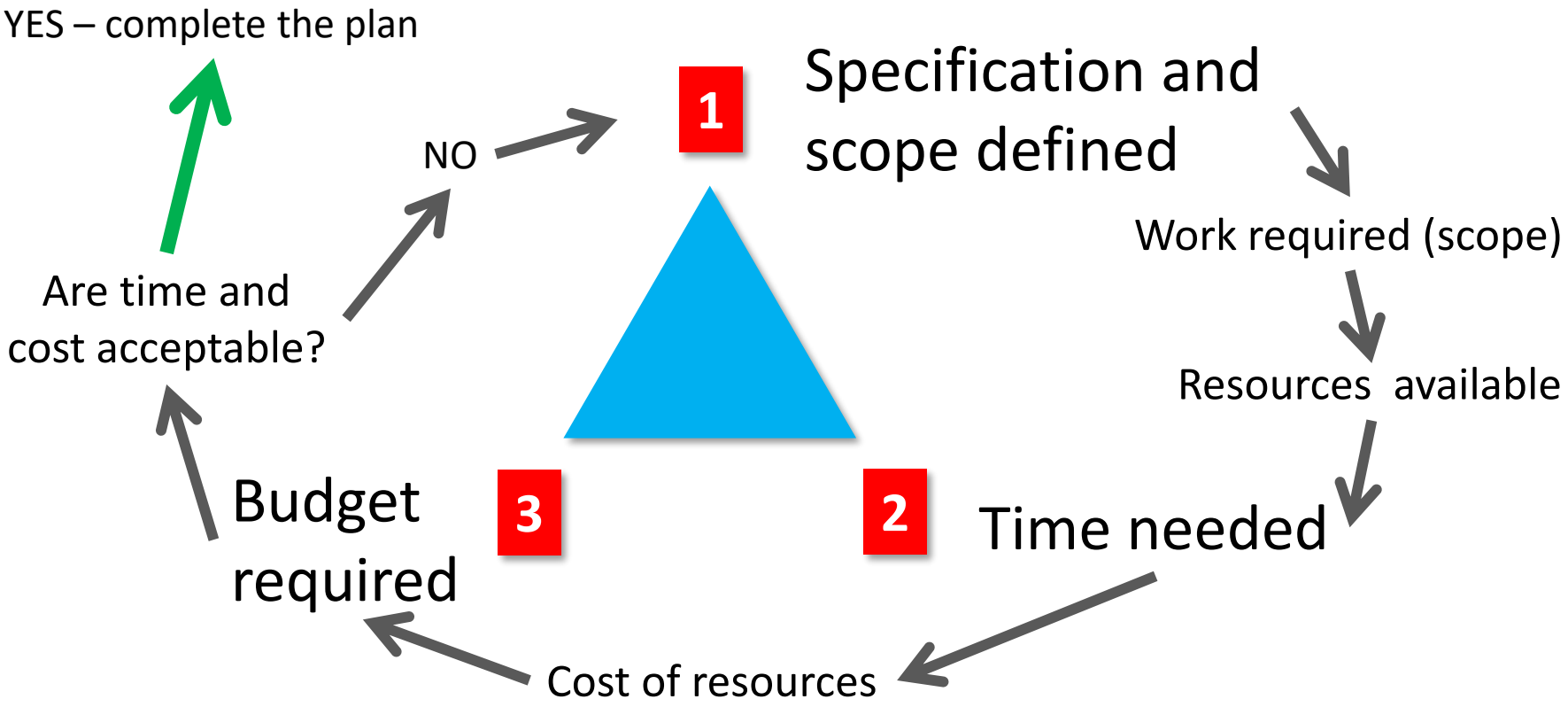
Define what will be measured – make it measurable

Set tolerances – how far variables can stray off baseline



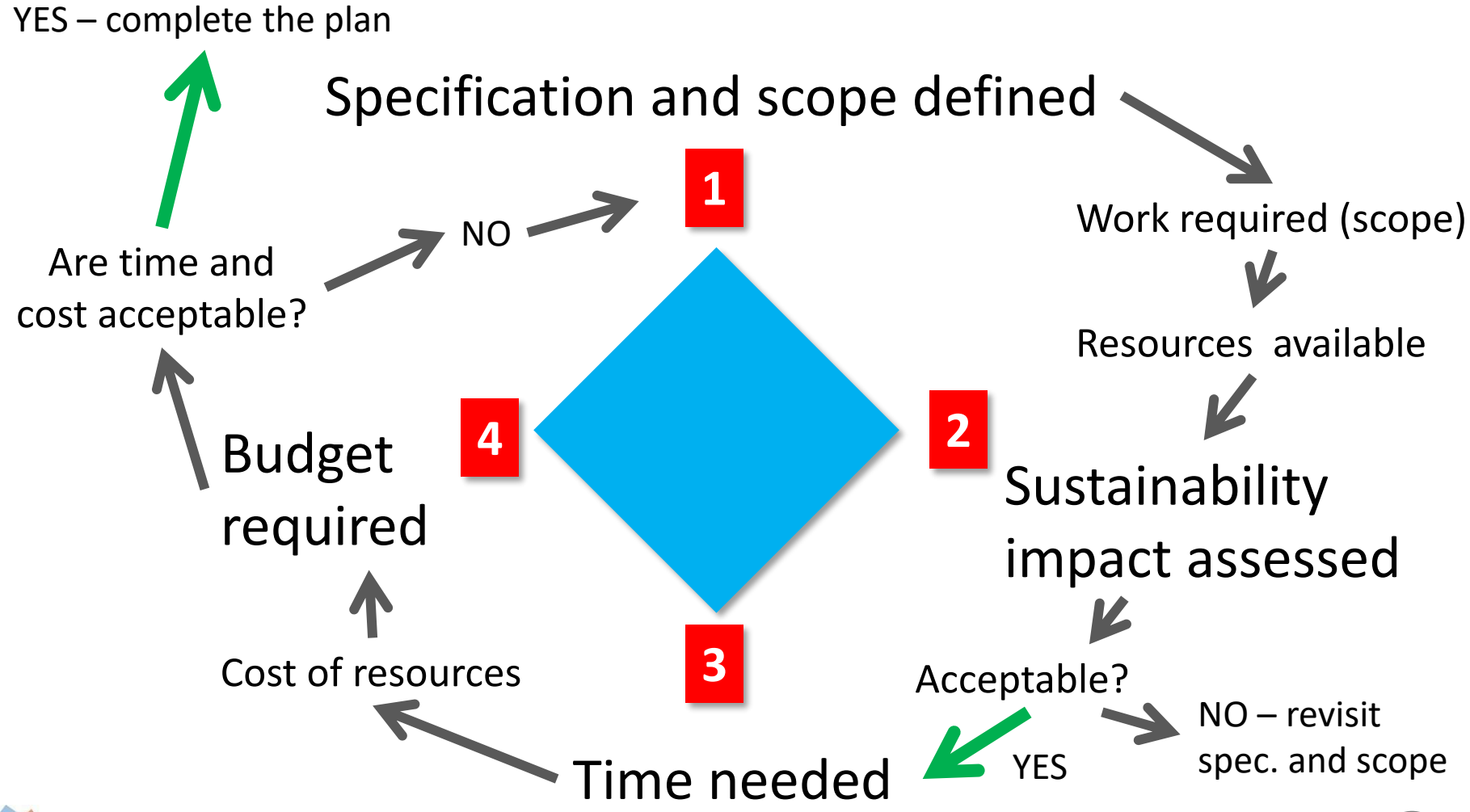
© Eric Woodcock 2024

The old planning sequence



© Eric Woodcock 2024

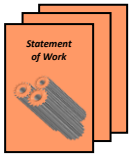
The new (and necessary) planning sequence



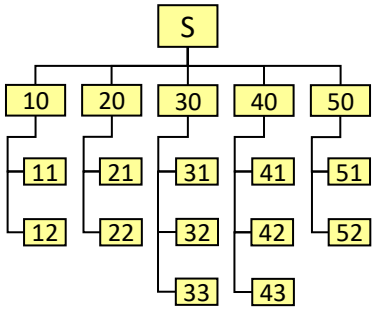
© Eric Woodcock 2024

The project planning process

Business case, project brief, specifications etc.

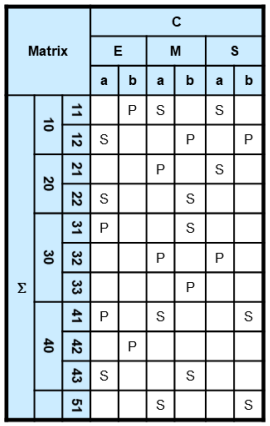


WHAT?



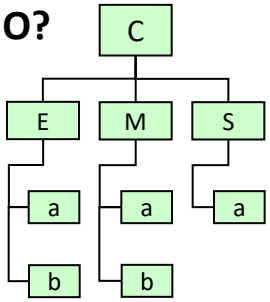
Work breakdown structure

WHO DOES WHAT?



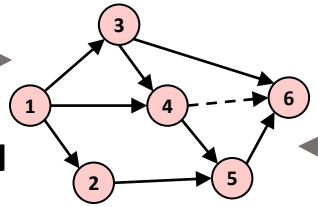
Responsibility matrix

WHO?



Organisation

HOW LONG, IN WHAT ORDER?

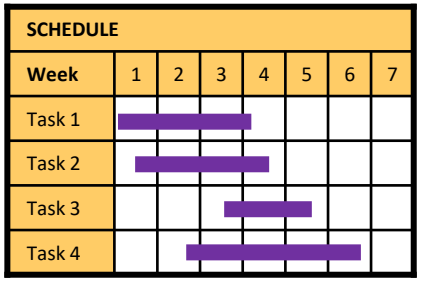


Task network

Timing and resources database

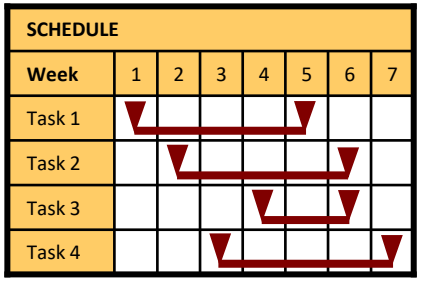
Costs and knowledge database

WHEN ROUGHLY?



First pass work schedule

WHEN PRECISELY?



Balanced work schedule

HOW MUCH?

Staffing and cost estimates

Project plan

After Morris, P. (1997) *The management of projects.* London: Thomas Telford, p262

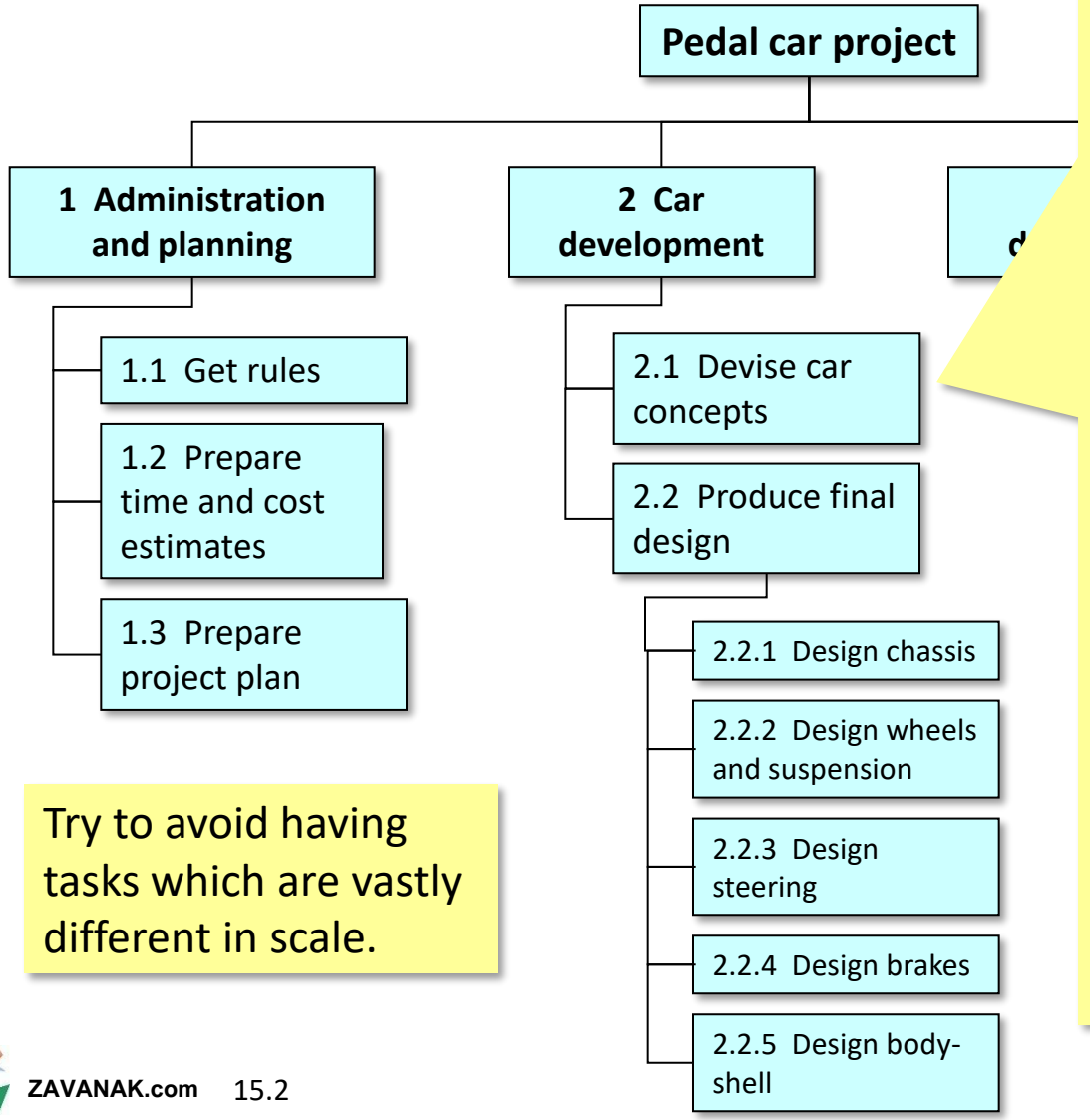
© Eric Woodcock 2024

The pedal car race

- **Second time college team has entered**
- Car back axle broke after 17 hours last time
- **No means to fix it**
- College expects a better result this time
- **This year's race takes place in 120 days time**

© Eric Woodcock 2024

Work breakdown structure

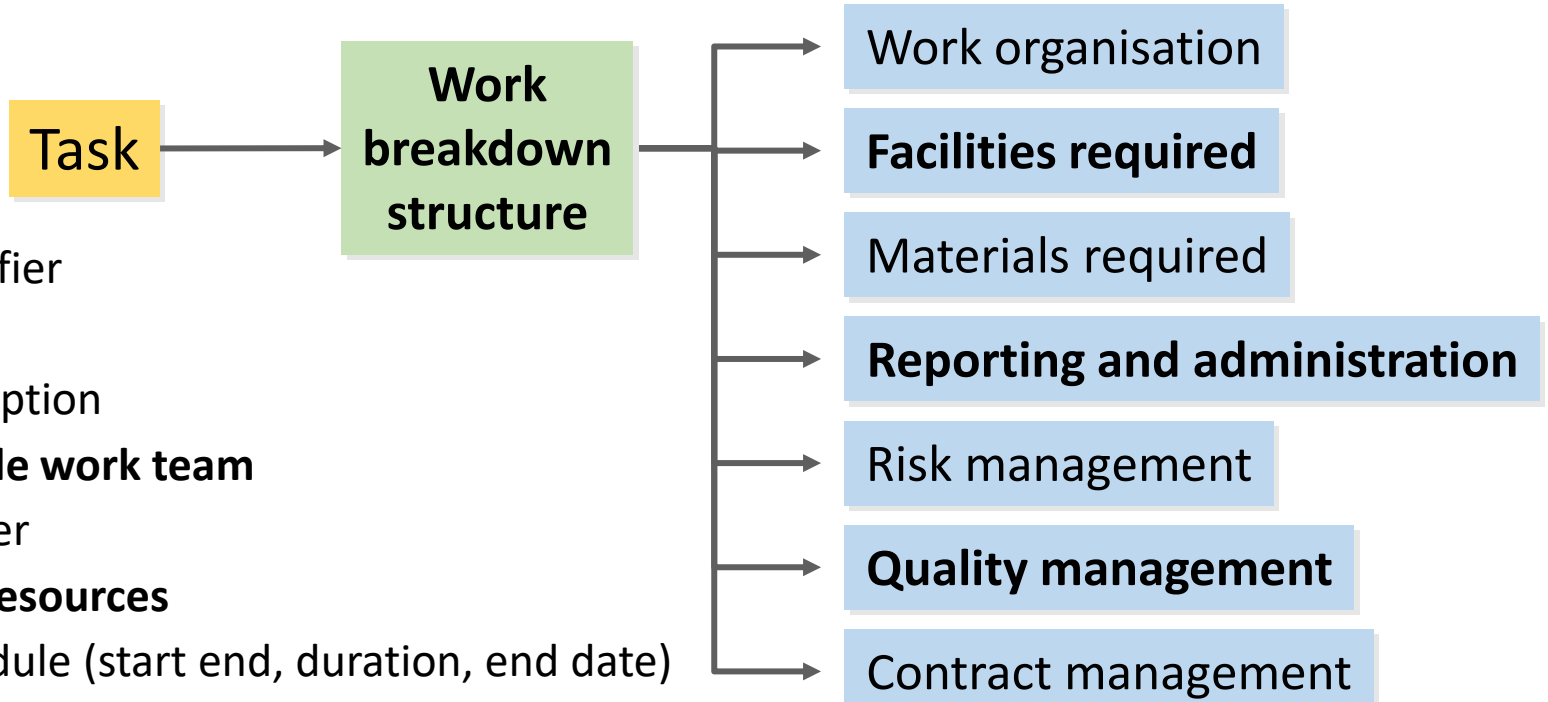


Try to avoid having tasks which are vastly different in scale.

- **Each task is self-contained with discrete inputs and output.**
- It is obvious when the output is finished satisfactorily.
- **Upstream and downstream task relationships are clear.**
- There is specific responsibility and authority.
- **It acts as a unit of control.**
- It employs a coding system for accounting, reporting, etc.
- **Time, cost and resource can be estimated easily and their use tracked for each task.**
- Many risks can be isolated at task level.

© Eric Woodcock 2024

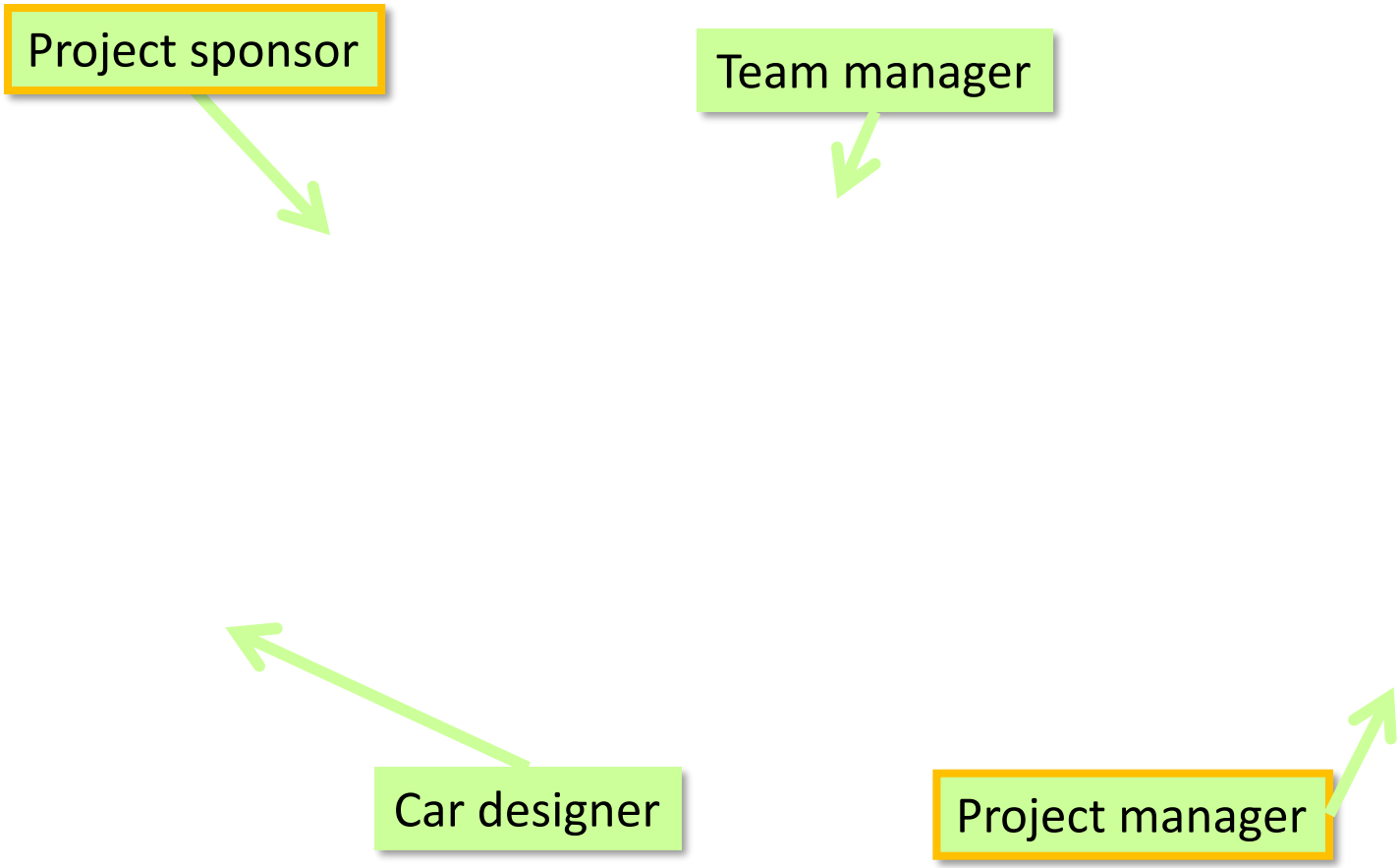
Task elements



Task identifier
Task name
Task description
Responsible work team
Team leader
Assigned resources
Time schedule (start end, duration, end date)
Budget (direct and indirect costs by type)
Predecessor(s) and descendant(s)
Quality requirements
Contract requirements
Sign-off procedure

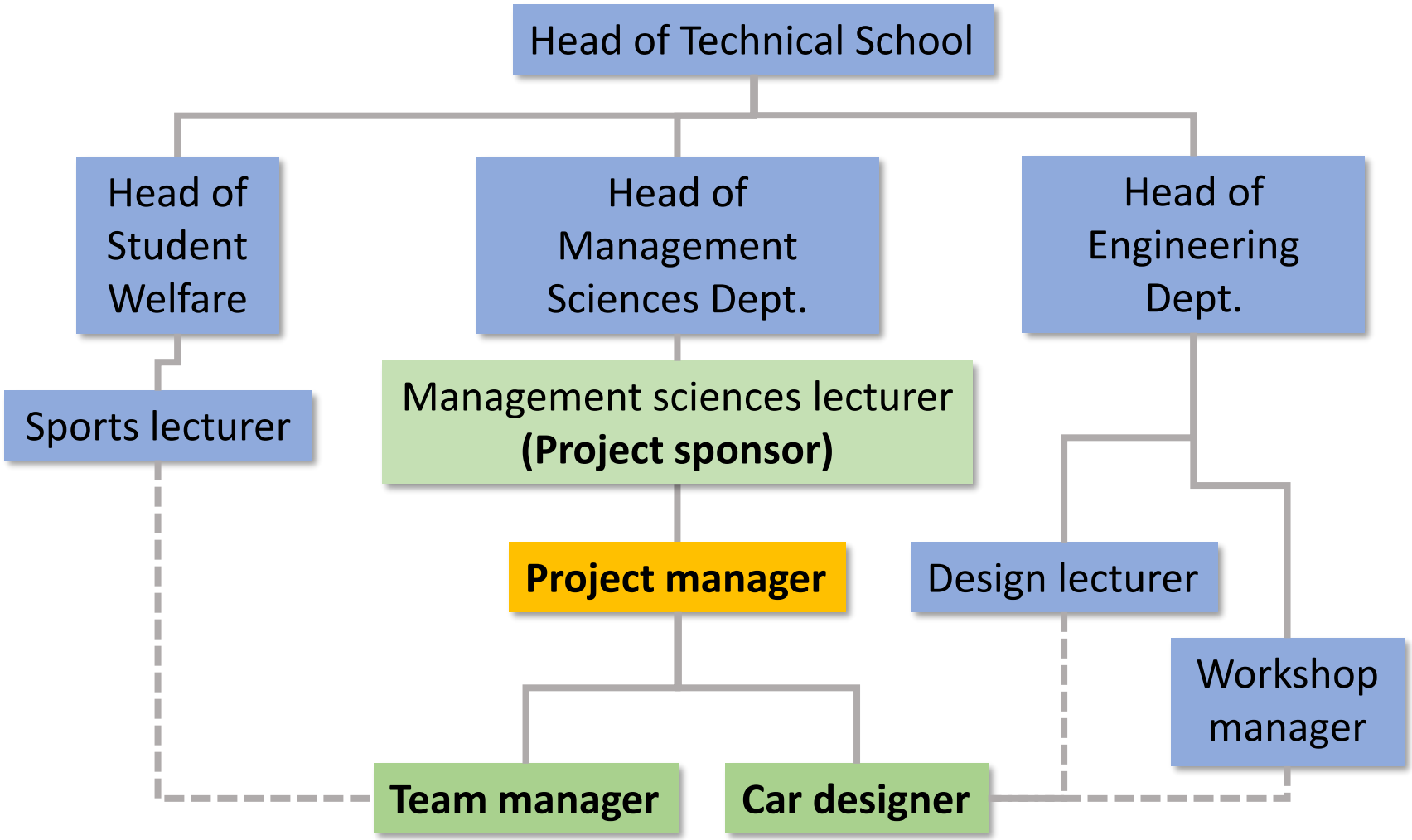
© Eric Woodcock 2024

The project actors



© Eric Woodcock 2024

Organisation breakdown structure



© Eric Woodcock 2024

Responsibility matrix

	Project sponsor	Project manager	Team manager	Car designer	Workshop manager	Design lecturer
Produce project plan and budget	P C	**X**	C	C		
Confirm entry	P D	**X**	d	d		
Design car		P	C	**X**	C T	C T
Build car		I		P	**X**	A
Select team	C	P	**X**	C		A

X = Executes the work
P = Manages work and controls progress
C = Must be consulted
D = Takes decisions solely or ultimately
d = Takes decisions jointly or partly
T = Provides tuition on the job
I = Must be informed
A = Available to advise

© Eric Woodcock 2024

Project management 101 *by Zavanak*

© Eric Woodcock 2024