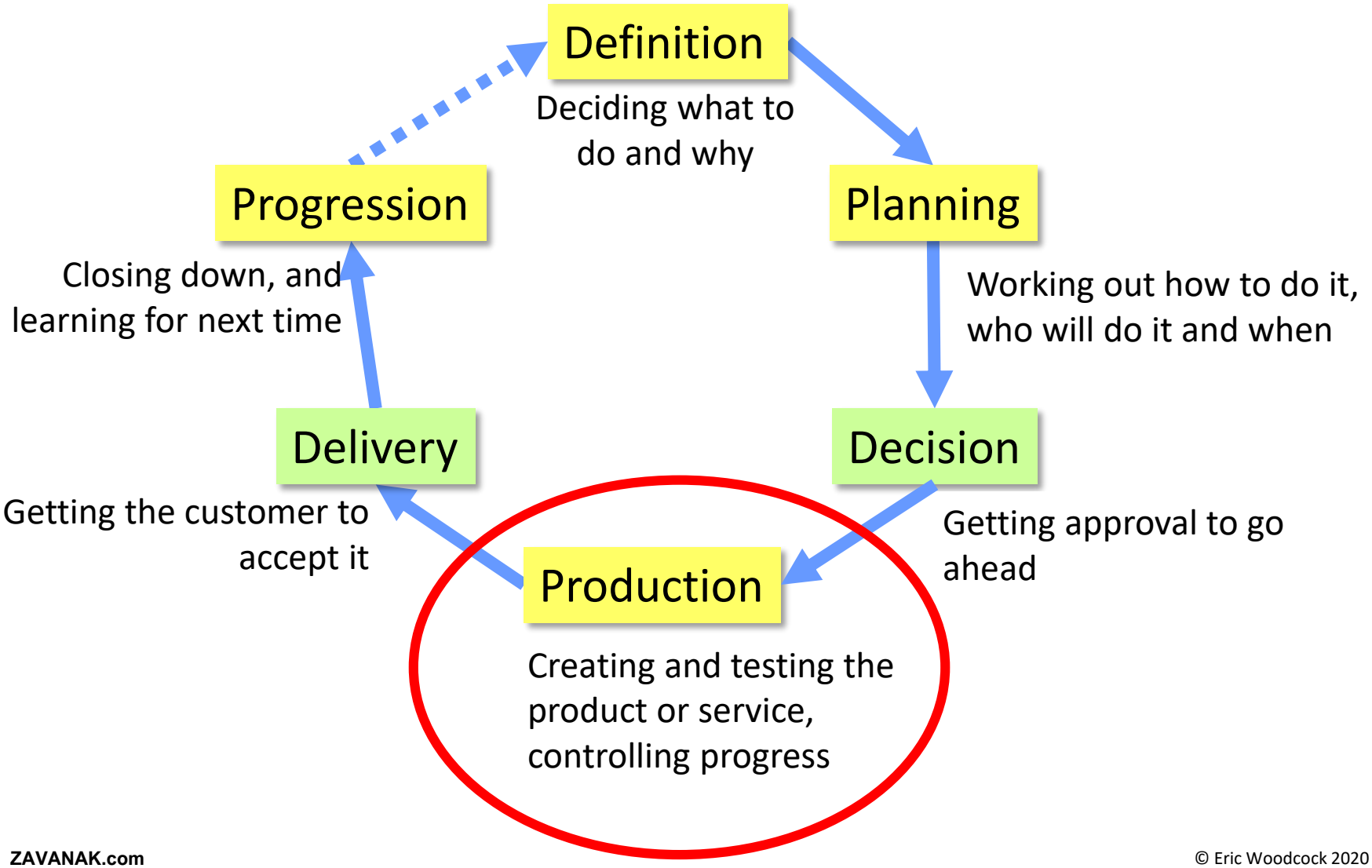
PM101: Lecture 17
Production and monitoring

The typical project life cycle



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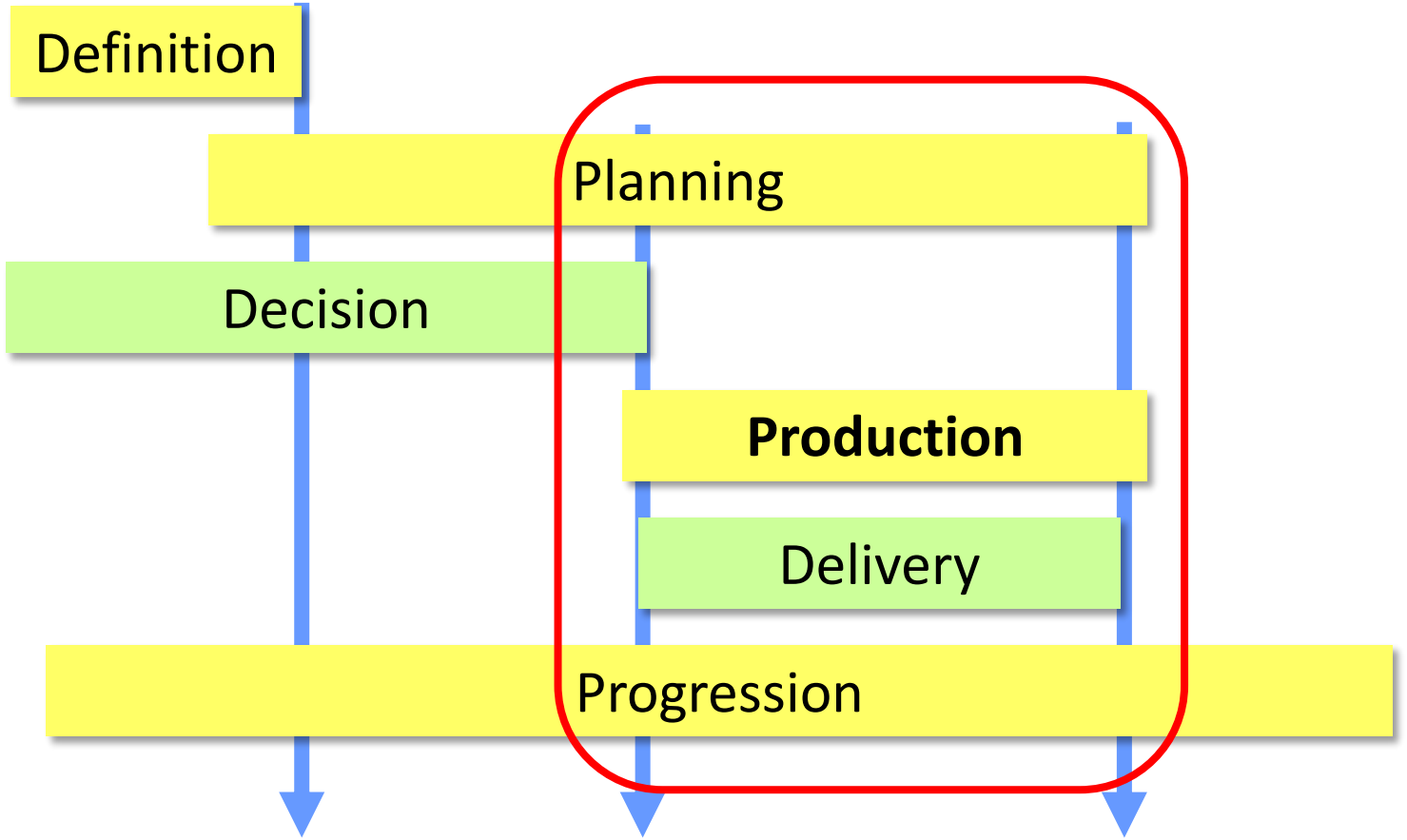
The actual project life cycle



Approval to spend resources on planning

Approval to begin full scale production

Acceptance that the output is satisfactory

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Facets of managing the production phase

Effective project management – maintain progress towards milestones and gateways, handle issues, run the operational aspects of having a team.

Pace – focus on progress and results, setting deadlines, sustain a sense of urgency, keep targets short-term.

Shape the culture – nurture a culture which is right for the project (behaviour, dress code, etc.) but is also in tune with the overall corporate culture.

Sense of purpose – reinforce the importance of the project and the importance of everyone's contribution.

Trust the team – allow teams to 'perform' and manage by exception when problems occur.

Stakeholder support – have lots of communication with stakeholders to sustain support. Who is important may change over time, e.g. end users towards hand-over.

Customer satisfaction – constantly focus on a successful delivery of the output, manage expectations.

Set an example – behave in a professional manner that you expect everyone to follow.

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The project must always be in control

Managed change

Reset course to alternative airport

Original destination shut due to snow

Under control at all times !

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Why monitoring is necessary

Mistakes are made

Risks occur

New risks arise

Project moves outside baseline tolerances

Budget is cut

Opportunities come up

Deadline is brought forward

Customers change their minds

Assumptions are wrong

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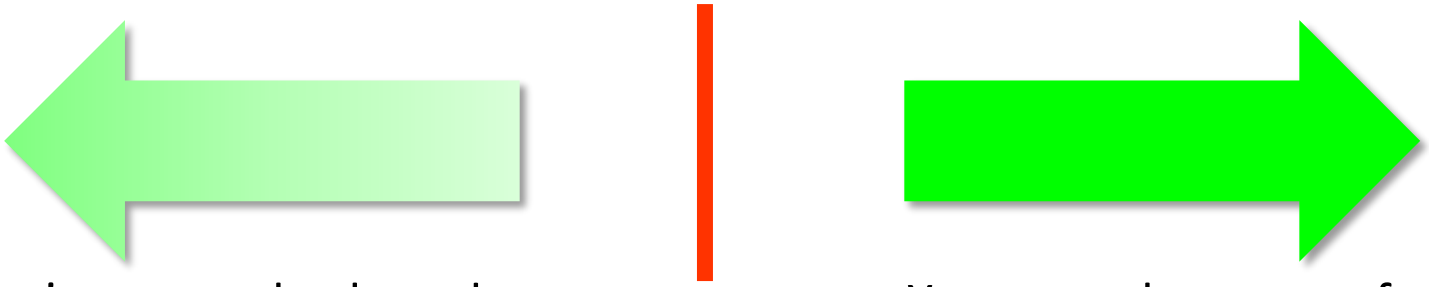
Monitoring is everyone's job



You can't manage backwards;
the past is gone

TODAY

You can only manage forwards

Insist on honest reporting

Have a culture that encourages openness

Keep face and avoid blame

Take preventative action when possible

Involve people in resolving issues

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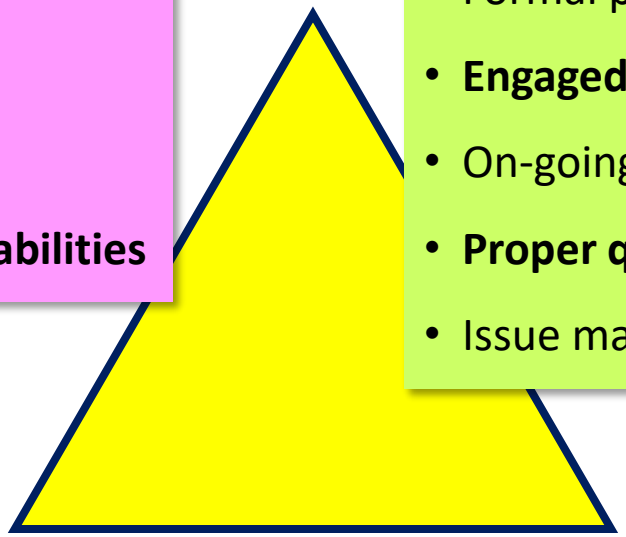
A controllable project

ESSENTIAL INPUTS

- **Clear scope and specification**
- Clear budget and time scales
- **Clear success criteria**
- WBS, risk register
- **Milestones, cash flow plan**
- Defined work packages
- **Responsibilities and accountabilities**



LEVERS OF CONTROL

- **Regular reporting**
- Special focus on critical areas
- **Performance analysis**
- Formal project meetings
- **Engaged, effective governance**
- On-going risk management
- **Proper quality management**
- Issue management & change control

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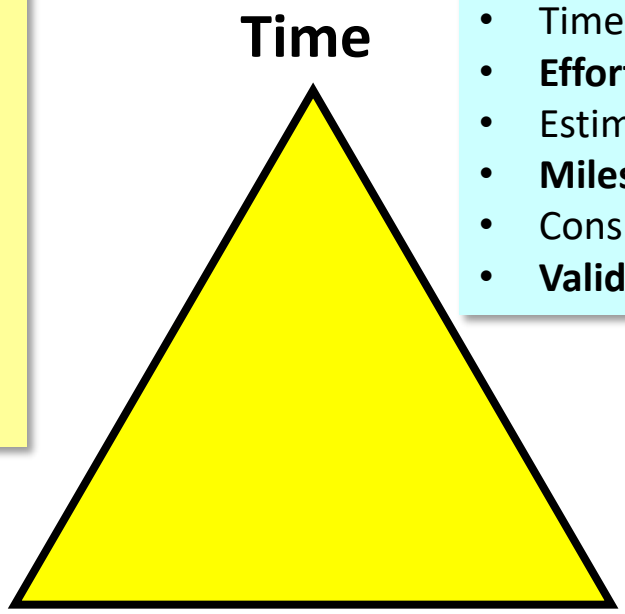
What to monitor – classic view

Project activity:
- **Issues**
- Risks materialising
- **Significant variations from plan**
- Unexpected events
- **Imposed changes**
- News
- **Communications**



Planned time and work effort
- Time elapsed and time left
- **Effort (work days) consumed and left**
- Estimated work required to complete
- **Milestone status**
- Consumption of time by WBS code
- **Validity of assumptions**

Planned cost
- Estimated costs versus actual costs
- **Actual cost and estimate to complete**
- Expenditure by cost type and WBS code
- **Validity of assumptions**

- **Milestone outputs achieved**
- Quality assurance
- **Quality control**
- Customer satisfaction
- **Defined success criteria**
- Delivery of benefits
- **Realism of targets**

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A broader view of project success

Project efficiency – meeting time and budget goals

Impact on the customer – meeting requirements and achieving customer satisfaction, benefits and loyalty

Organisation performance – return on investment, achievement of benefits to cost targets, market share, growth, etc.

Sustainability – extent to which project balances environmental, societal and economic needs

Preparation for the future – new technologies, new markets, and new capabilities

Impact on the team – satisfaction, retention and personal growth

Shenhar, A. & Dvir, D. (2007). *Reinventing project management*, Harvard Business Press , p27.

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What to monitor – broader view

Milestones status
Time elapsed
Effort spent
Estimated time left

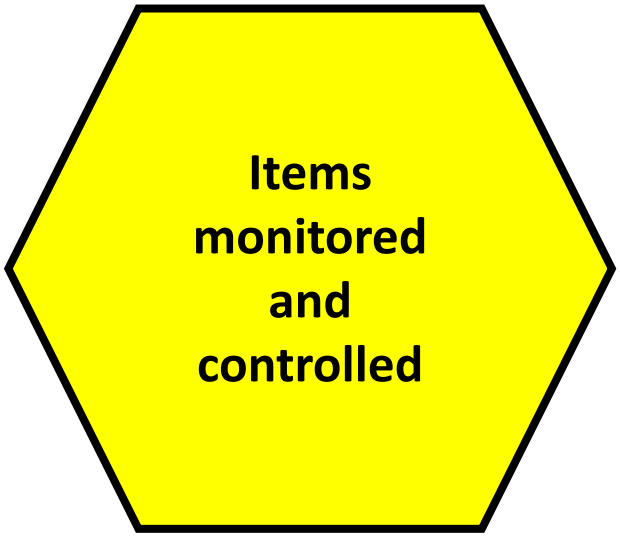
TIME

BENEFITS

Progress towards stated benefits
Customer satisfaction
Progress towards broader success goals

Estimated cost
Actual cost
Budgeted to end
Estimated to end

COST



SUSTAINABILITY

Performance against specific sustainability targets
Usage of key resources

QUALITY

Quality plan
Methods & procedures
Quality of outputs
Quality of project delivery

TEAM

Training and development
Personal attainment
Team satisfaction

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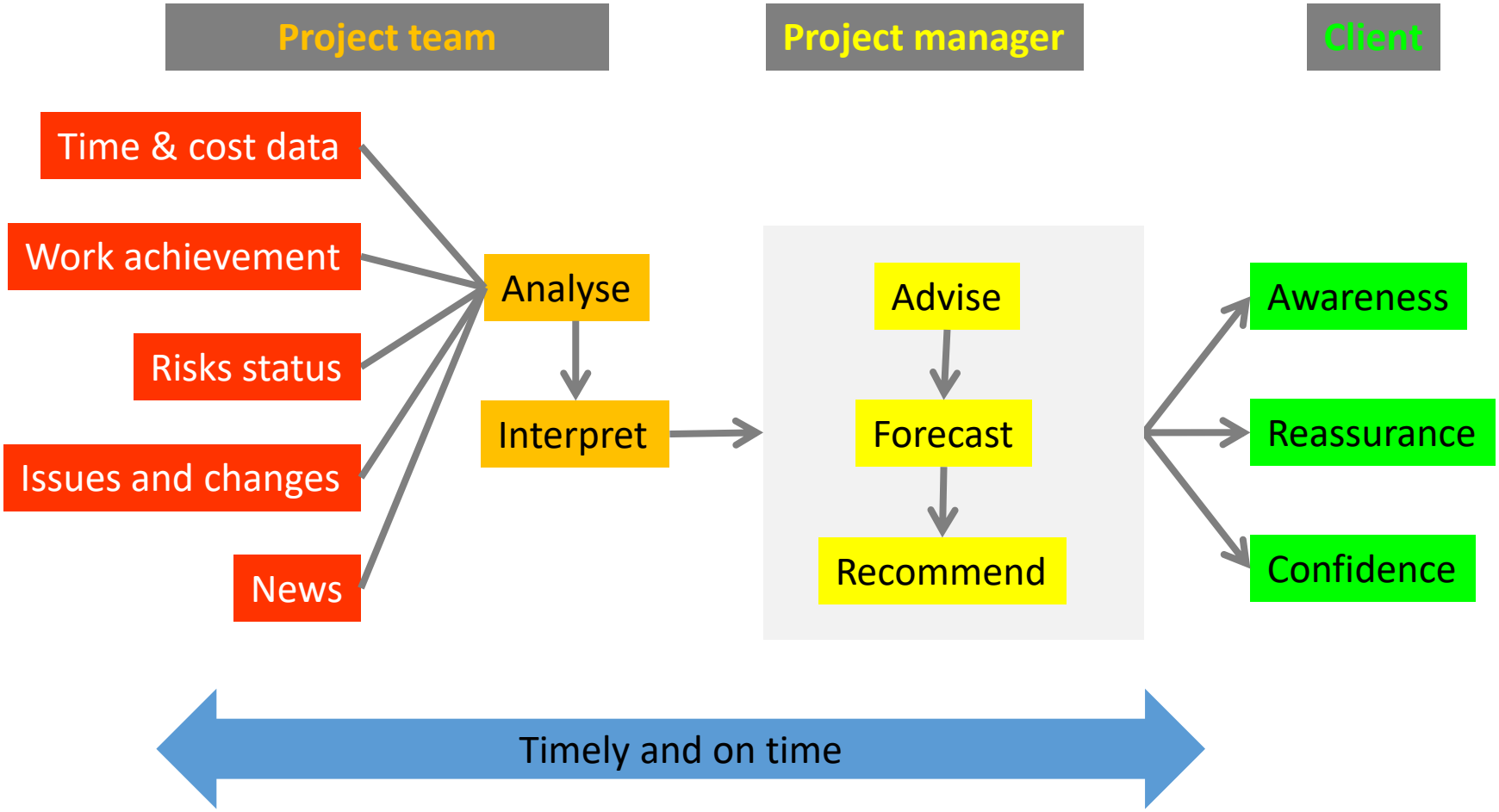
Reporting



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Reporting audiences

SPONSOR: Progress towards milestones; significant issues; risks status; benefits realisation; viability of business case *(Weekly/monthly)*

HEAD OF FINANCE: Actual costs vs budget; cost-benefit analysis; financial risks *(Monthly)*

PROJECT BOARD MEMBER: Progress towards milestones; high level financial performance; significant issues; major risks; benefits realisation; viability of business case *(Monthly/quarterly)*

PROJECT FIRM CHIEF: Productivity of project team; profitability of project; significant project firm issues; risks status *(Weekly/monthly)*

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Reporting audiences

PROJECT MANAGER: Team level performance; supplier performance; progress towards milestones; significant issues; risks status *(Daily/weekly)*

END USERS: High level status of project; milestone achievement; expected benefits; short term disruptions *(Monthly/quarterly)*

PROJECT TEAM MEMBERS: Progress towards milestones; summary of financial performance *(Weekly/monthly)*

KEY STAKEHOLDERS: High level status of project; status on issues of stakeholder concern *(Monthly/quarterly)*

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Reporting project progress and status

Simple systems work best

R A G reports:

- **Milestone achievement**
- Schedule performance
- **Cost performance**
- Resource utilisation
- **Benefits realisation**
- Customer satisfaction
- **Stakeholder attitude**
- Team morale and performance

Drill down for more information

Koster, K. (2010). *International Project Management.* London: Sage Publications, p201.

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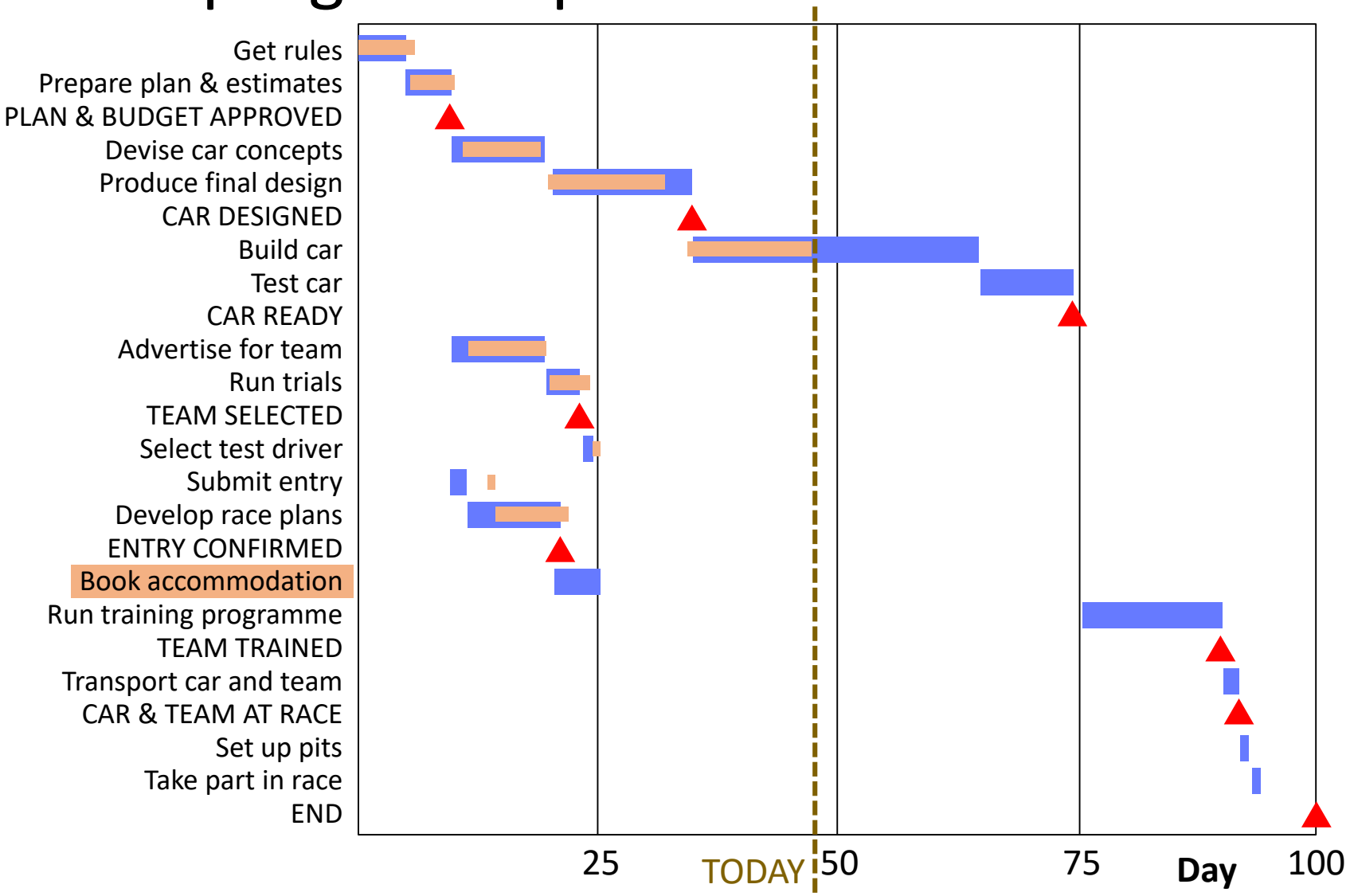
A progress report: the Gantt chart



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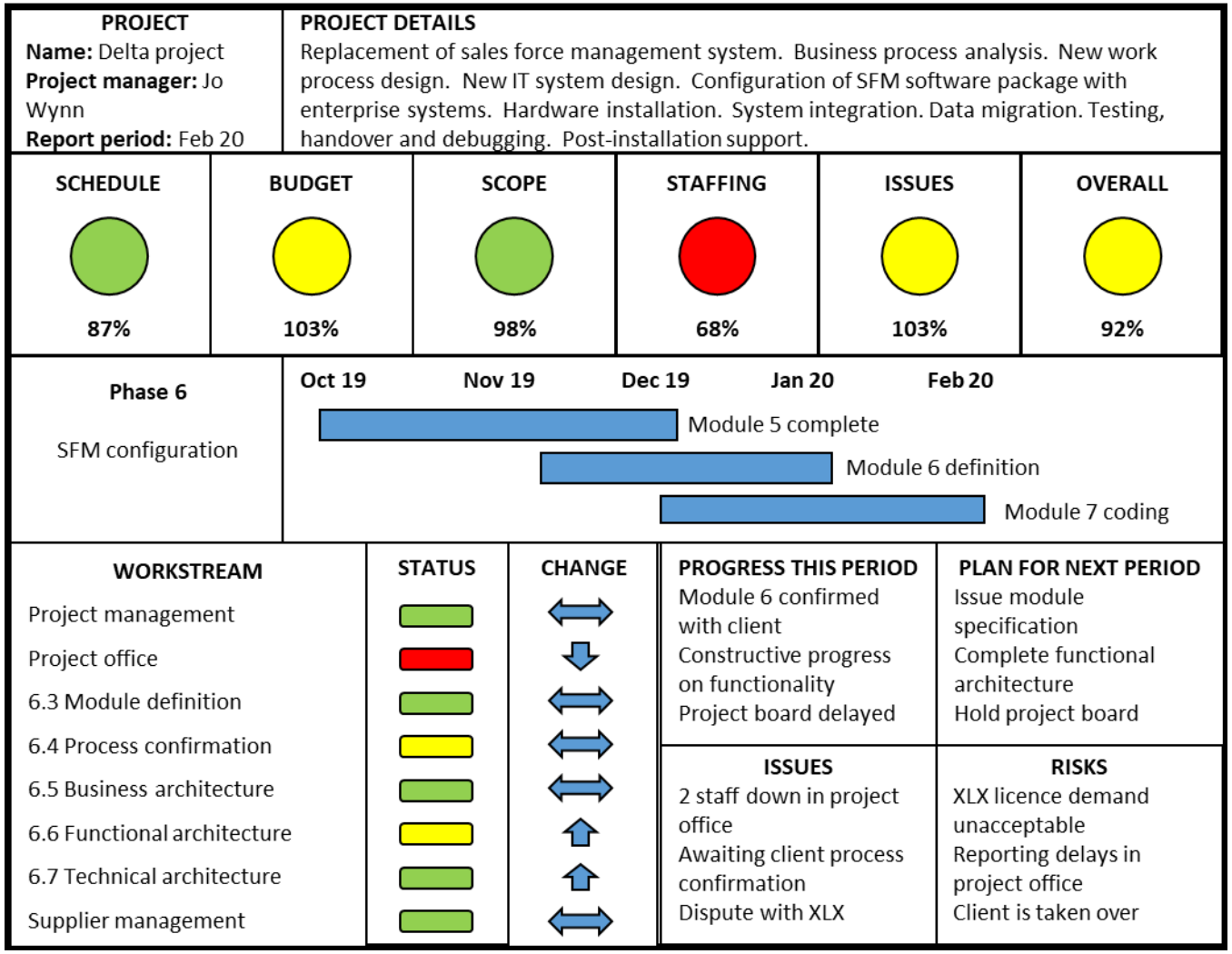
A project dashboard



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A simple progress report template

PROJECT STATUS SUMMARY

Project:
Period covered by this report:

Project headlines:
-
-
-

Performance statistics

Major issues

Benefits realisation

Next steps

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Reporting project progress and status

Major events can be held to brief the whole team

- Critical achievements in the project
- Connect individual effort to overall achievement
- Call to action (punctuated equilibrium?)

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Production and monitoring: core ideas

Project management in the Production phase is primarily about keeping the project under control and keeping the project team and the stakeholders focussed on the objective.

Monitoring is necessary to discover whether any part of the project is going off plan and needs corrective action.

What to monitor is linked to what the success criteria are.

Reporting should be as clear as possible, highlighting important issues and actions being taken to resolve them.

It is as much about reinforcing client confidence as about presenting actual progress.

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