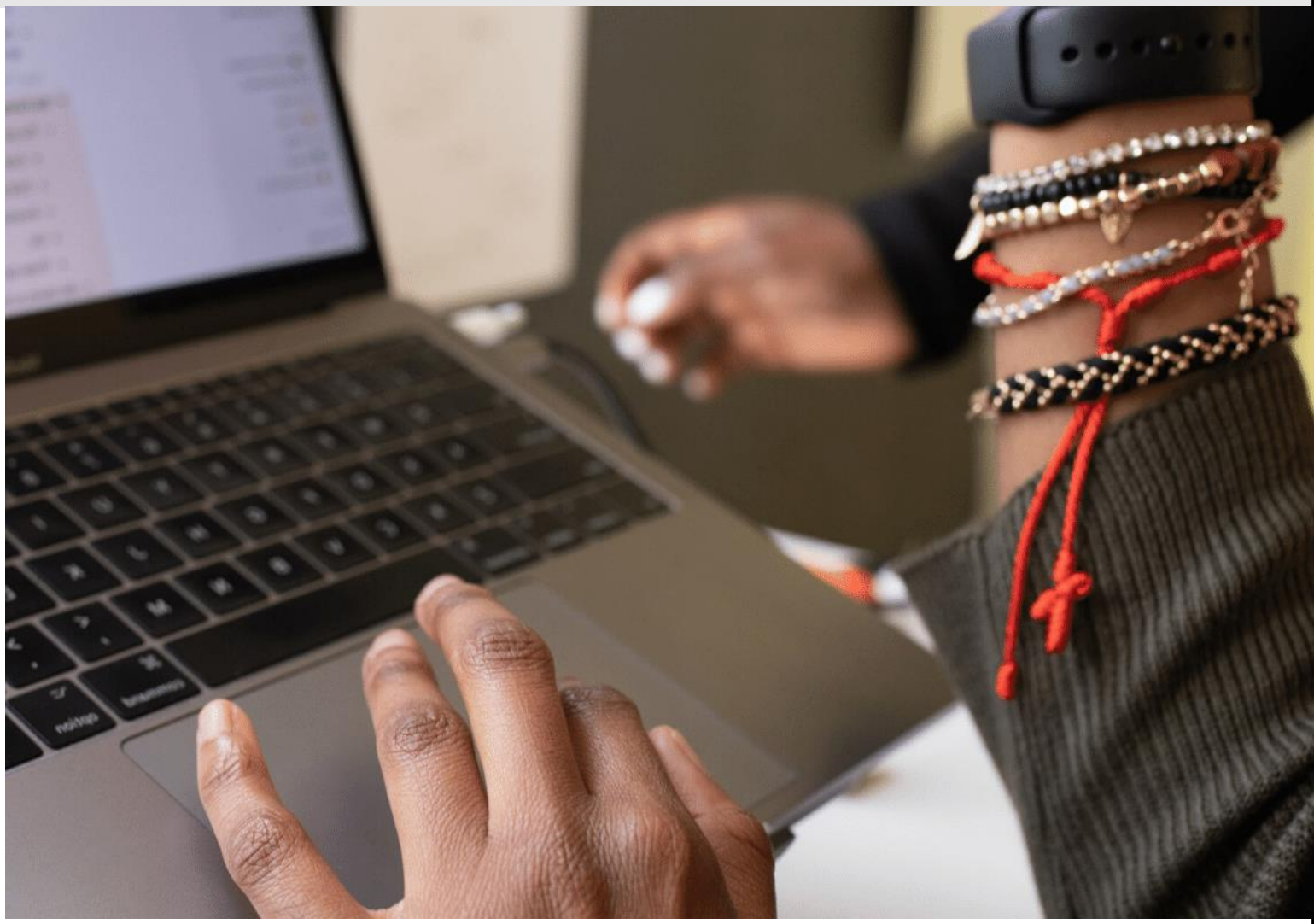
Module 05: Execution and Feedback Process

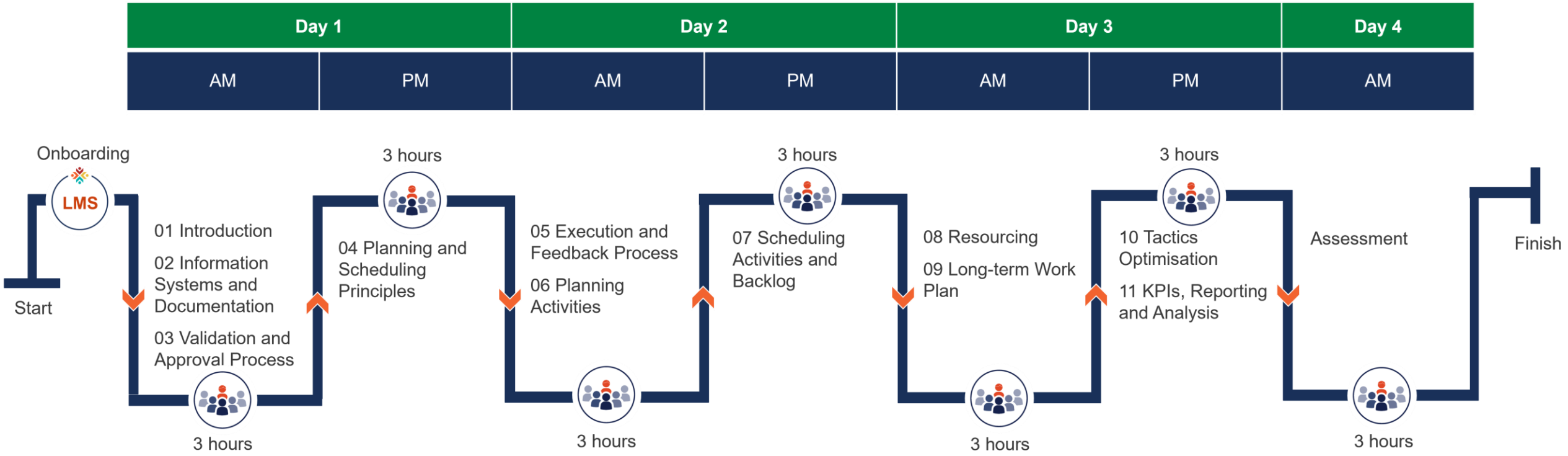
Maintenance Work Management

Rules of engagement in the VILT environment

1. Mute yourself when you are not speaking.
2. Close your email and any other distractions on your desktop and mute your phone notifications.
3. Let us know if you step away from the session – just type us a note into the chat.
4. Participate and be prepared to be called upon by name to give a response.
5. Speak up, use the chat or raise your hand when you have a question or comment.
6. Use annotations when instructed to do so.



Illovo MWM learning journey



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Schedule for this session – Day 2

Time	Content to be covered
	Welcome
60 minutes	**Module 05: Execution and Feedback Process**
120 minutes	**Module 06: Planning Activities**
	Lunch
180 minutes	**Module 07: Scheduling Activities**

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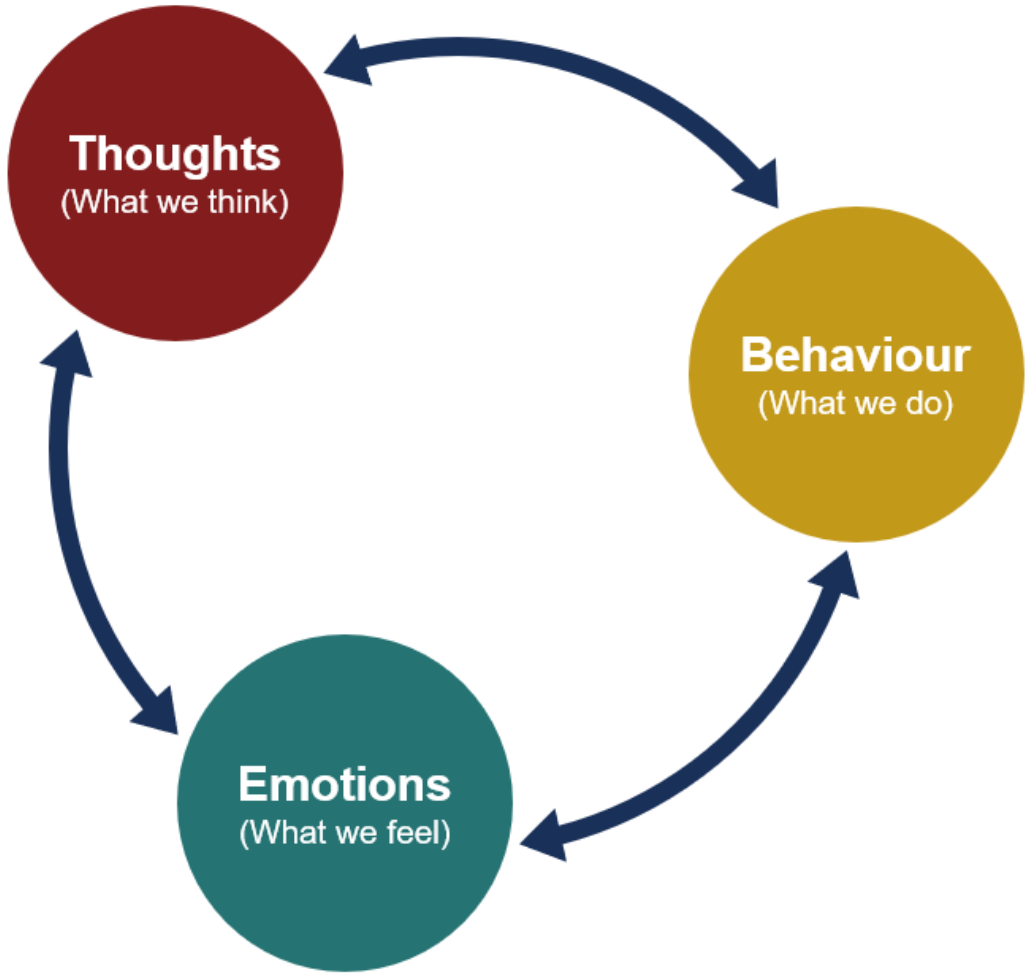
Ice-breaker



Which one of the following best describes how you feel right now?

A. Happy
B. Okay
C. Excited
D. Stressed

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Learning objectives for this module

- Explain daily allocation as well as the roles and responsibilities for scheduling and daily work management.
- Explain the benefits of a visual work order tracking system and how the planner tracks the work execution process.
- Describe the concept of work order feedback and its impact on optimising future planning and scheduling.
- Explain the impact of master data maintenance work and the importance of work order feedback for maintaining master data.
- Distinguish between capturing of information, analysis of information and feedback of information, and how these can be used continuously to improve planning, scheduling and work execution.
- Explain the concept, importance and benefits (consequences) of effective document control and the impact on the maintenance operation.

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Daily allocation

Unpacking daily allocation

What happens between scheduling and work execution?

Share your thoughts with the rest of the class.

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Unpacking daily allocation

Who in your organisation manages the daily allocation?

A. Scheduler
B. Maintenance supervisor
C. Section engineer
D. Data administrator
E. Other

Unpacking daily allocation

How do you measure the effectiveness of the daily allocation process?

Share your thoughts with the rest of the class.

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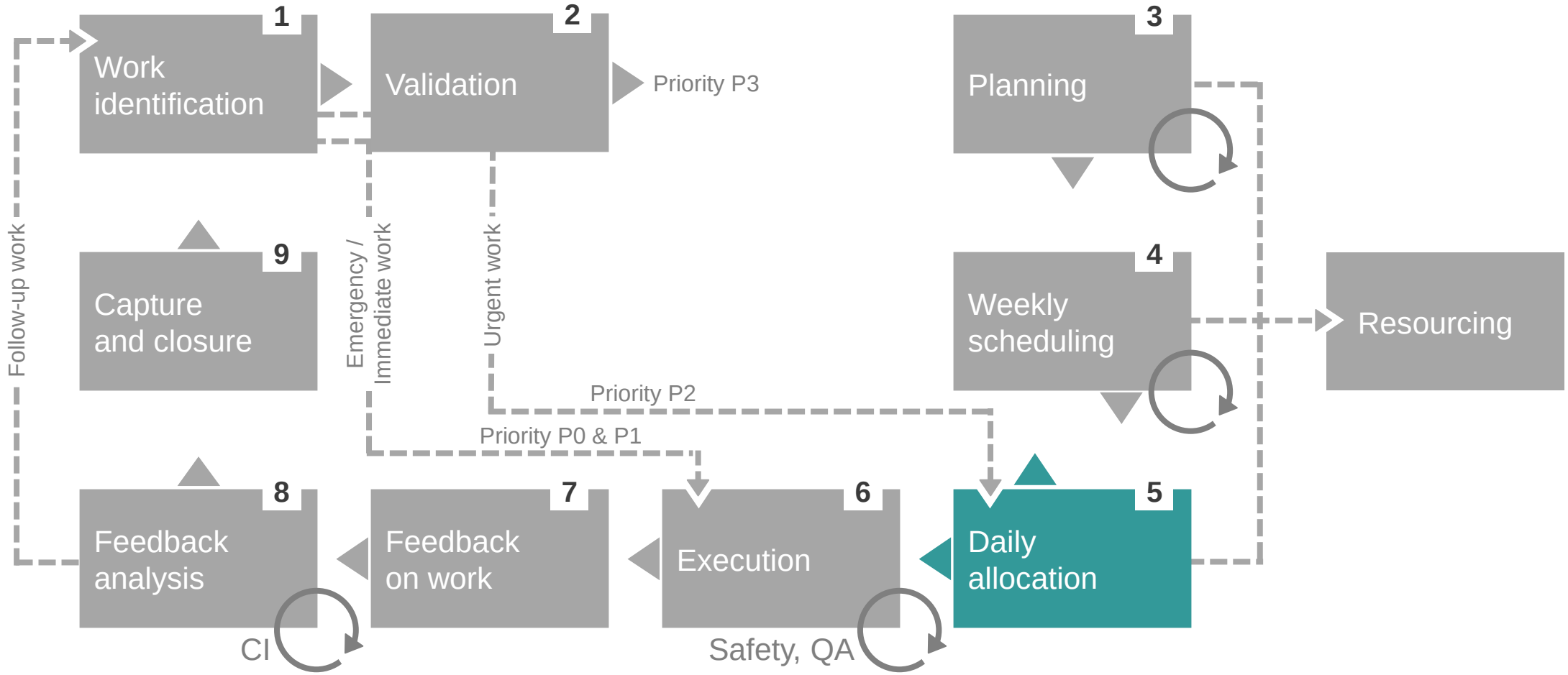
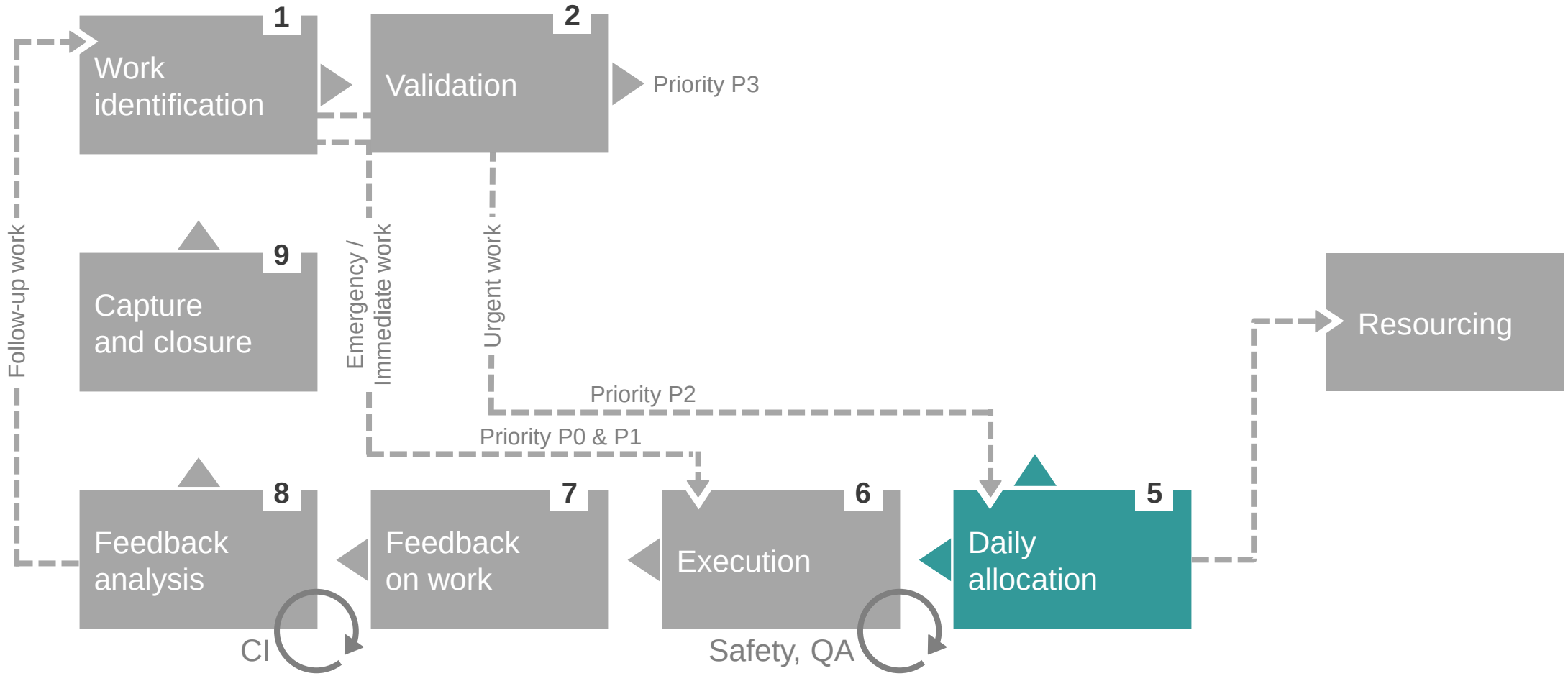
Position in the maintenance work management cycle



Position in the maintenance work management cycle



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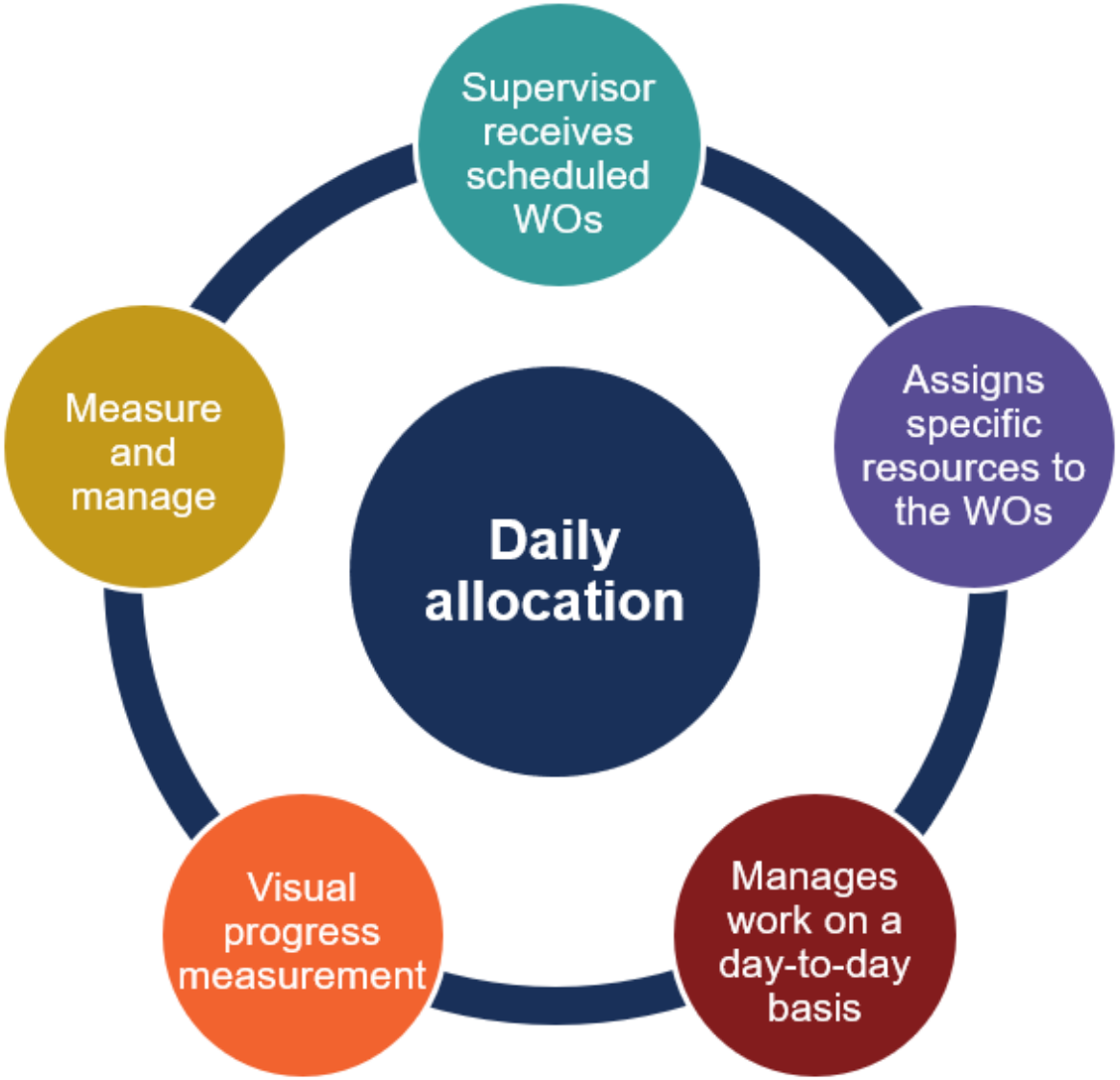
The main elements of daily allocation



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Supervisor receives the scheduled WOs

Supervisor receives scheduled WOs

Daily allocation happens after the scheduling meeting when Planning, Operations and Maintenance execution have agreed on the work priorities for the scheduling period.

The maintenance supervisor has discretion to decide on the priorities of the day including whether to follow the schedule or not.

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Assigns specific resources to the WOs

Assigns specific resources to the WOs

- The maintenance supervisor is responsible for assigning work to individual maintenance crew members.
- Ideally, the work order must be very specific about the types of skills and resources required.

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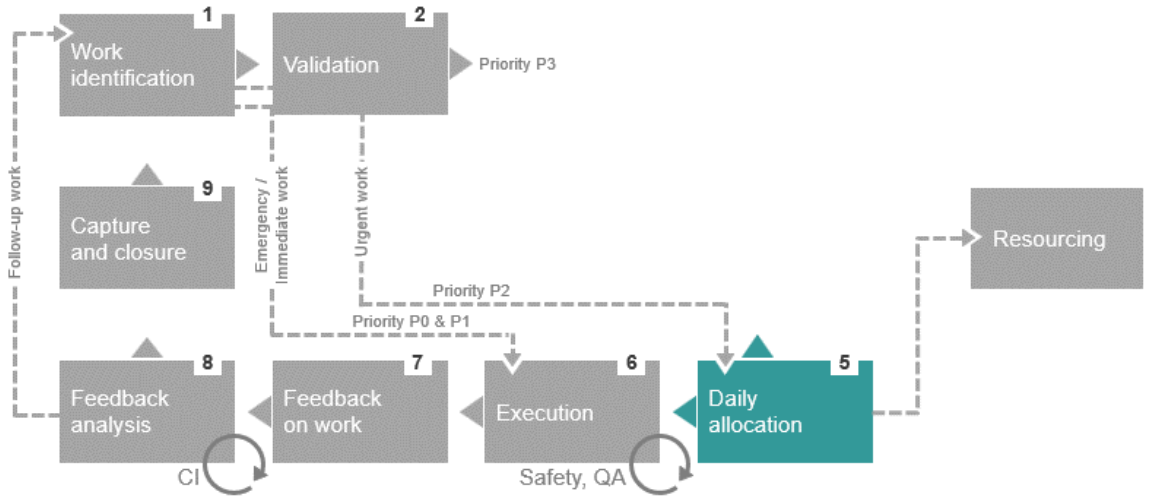
Manages work on a day-to-day basis

Manages work on a day-to-day basis



Any work not agreed to as scheduled work is called “break-in work”.

The maintenance supervisor is responsible for the resources needed for the execution of “break-in work” because all break-in work bypasses the Planning department.

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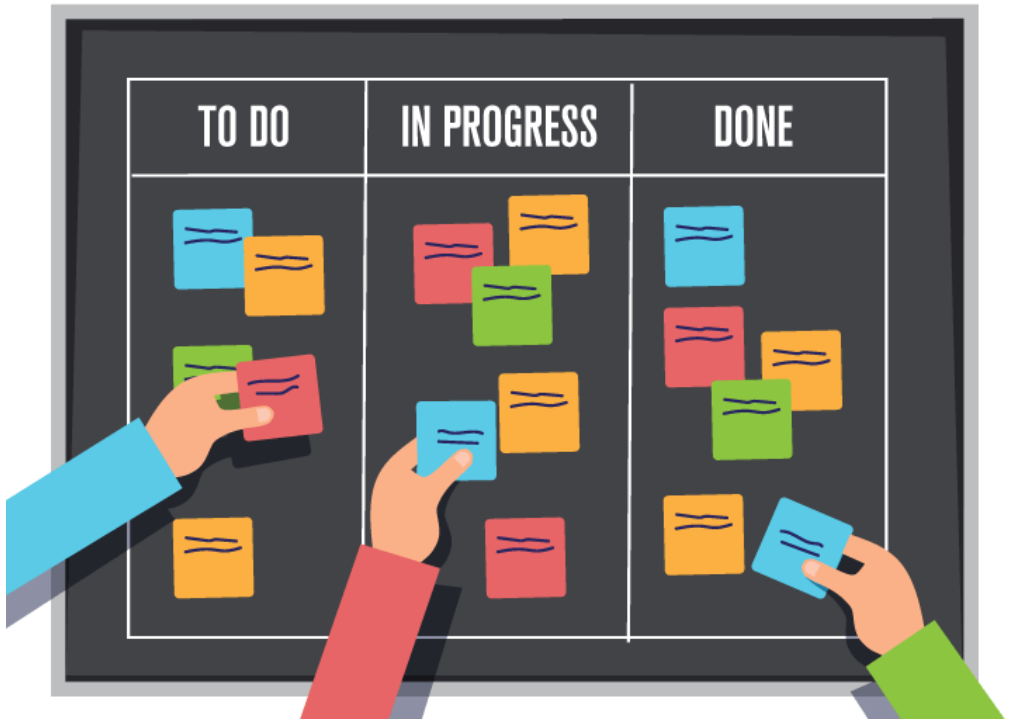
Visual progress measurement

Visual progress measurement



Tracking progress using a visual is a powerful way to enable the maintenance crew members and the maintenance supervisor to gauge how well they are progressing over the scheduling period.

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Measure and manage

Measure and manage

- Daily plan compliance
- Backlog management
- Daily schedule attainment
- Investigate possible causes if needed

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Using visual trackers

What visual tool or method are you using to ensure crew members can easily observe the overall progress?

Write your answer into the public chat.

Execution

Unpacking execution

What do you think would be sufficient detail for execution to happen?

Share your thoughts with the rest of the class.

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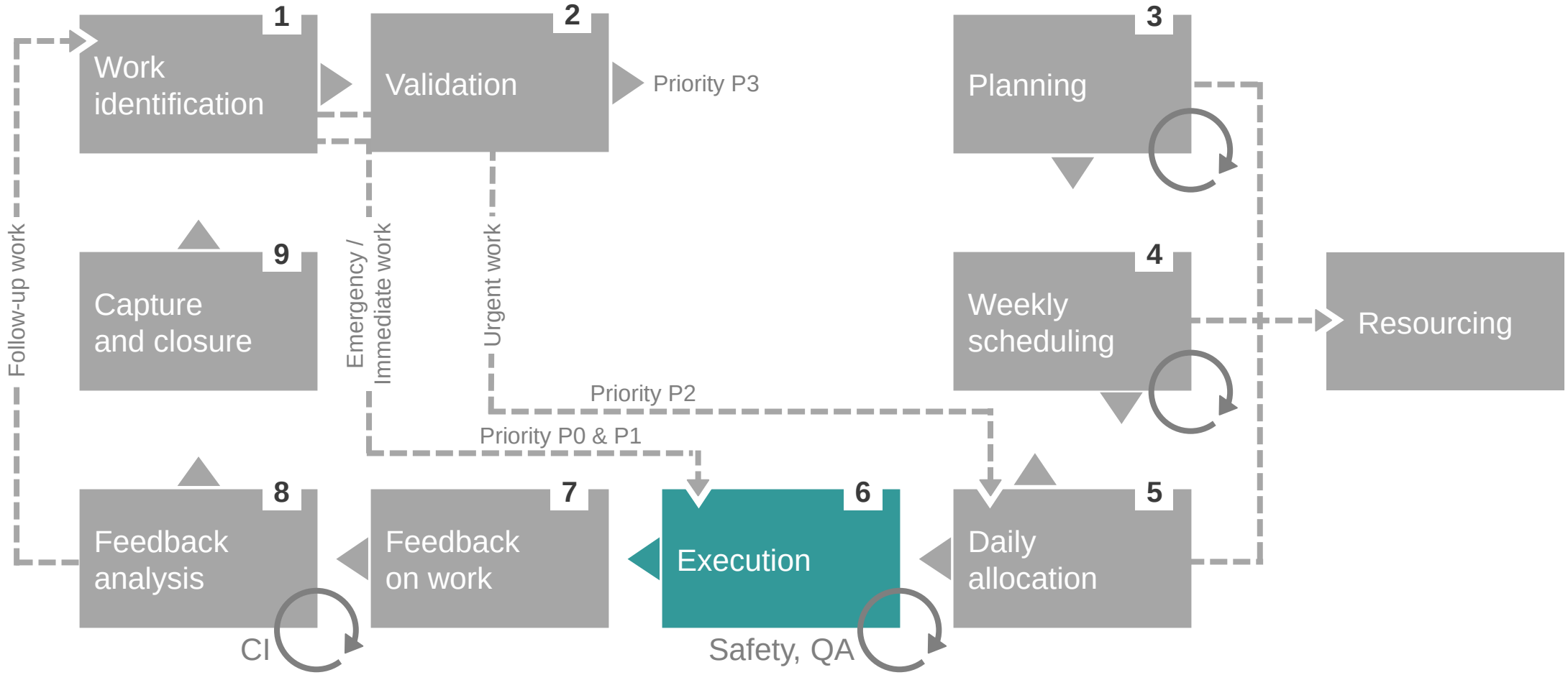
Position in the maintenance work management cycle



The main elements of execution

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Precision maintenance

Precision maintenance

Why do items fail? Can we eliminate these causes?

F **Fastening**

L **Lubrication**

A **Alignment**

B **Balancing**

The planning process takes into consideration precision maintenance requirements, FLAB and standard operating procedures for ensuring that enough time is allowed for the work to be completed to standard.

Drew Troyer, CRE, CEM

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Risk assessments

Risk assessments

The maintenance crew member is responsible for how the work is completed to standard, including health and safety requirements, permit requirements, quality of work requirements, and effectiveness and efficiency requirements.

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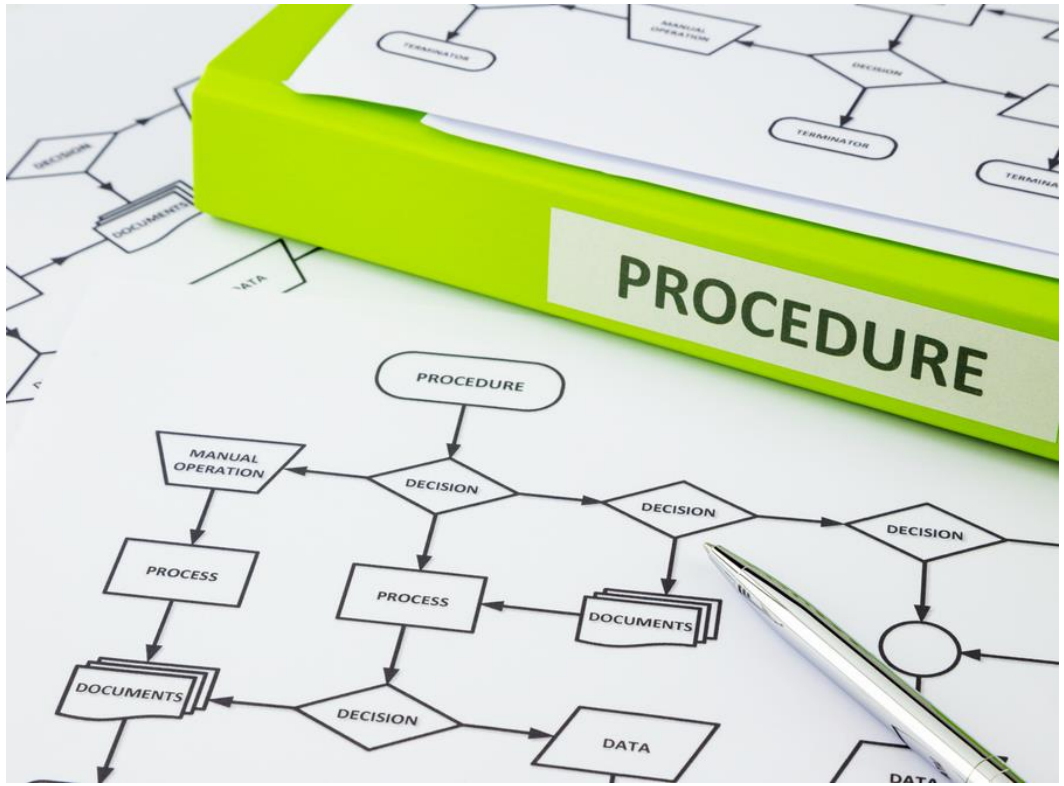
Access to work procedures

Access to work procedures



The maintenance supervisor is responsible for ensuring that the maintenance crew member understands the work that needs to be done and for ensuring that it is done to the correct standard.

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Over-inspection and planned task observations

Over-inspection and planned task observations

The planner is responsible for engaging with the maintenance supervisor to identify the areas where the planning and scheduling process needs to be improved.

The maintenance supervisor is responsible for planned job observations (PJOs) and over-inspection of the tradesperson's work depending on the experience of the individual and the criticality of the work.

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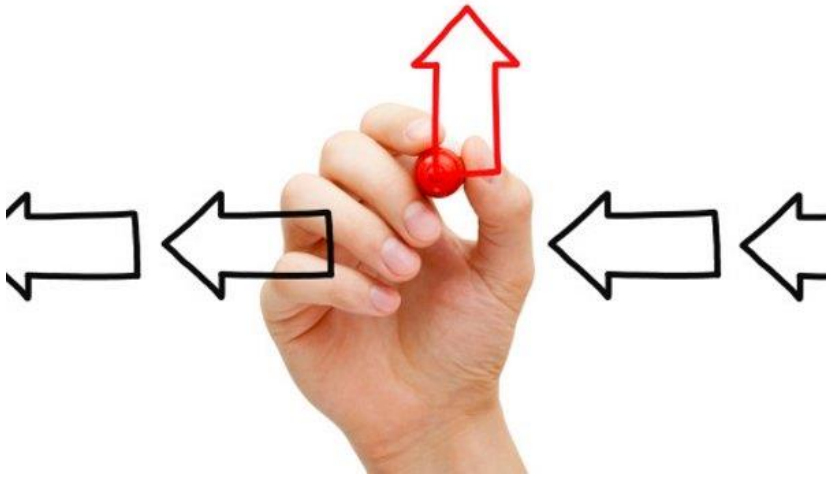
Analyse and improve

Analyse and improve (processes and people)



Deviations from the standard are used as learning opportunities for the development of crew members and are identified and managed by the maintenance supervisor.

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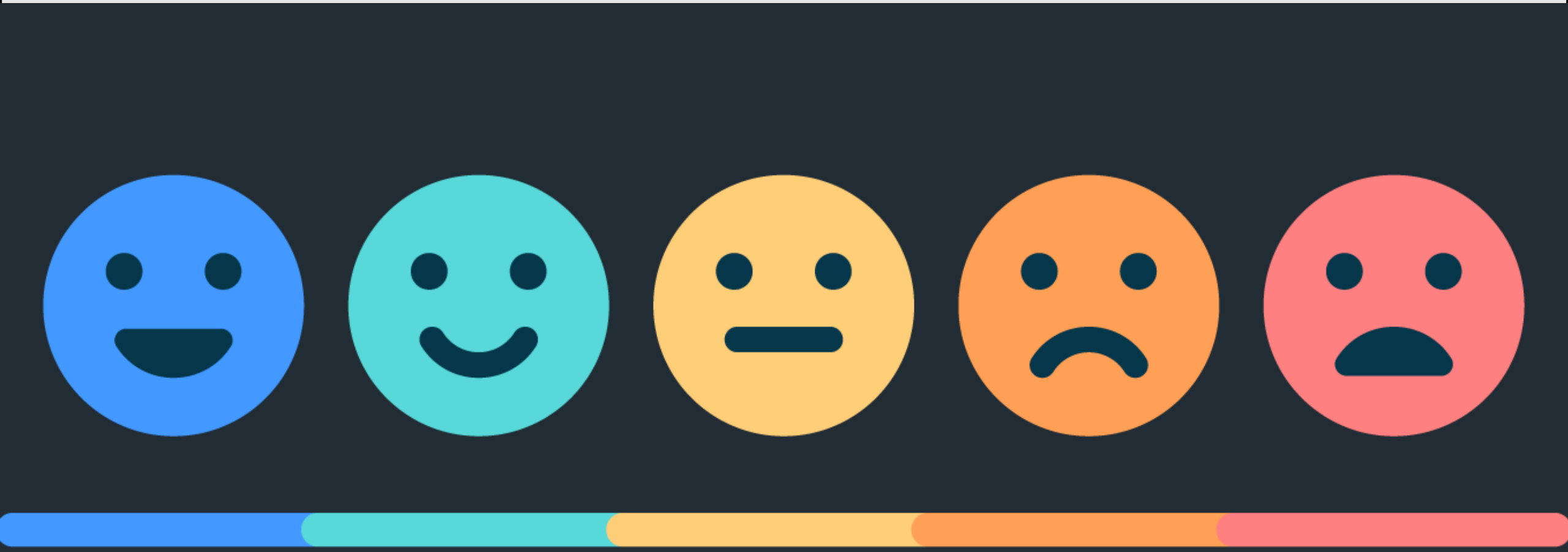
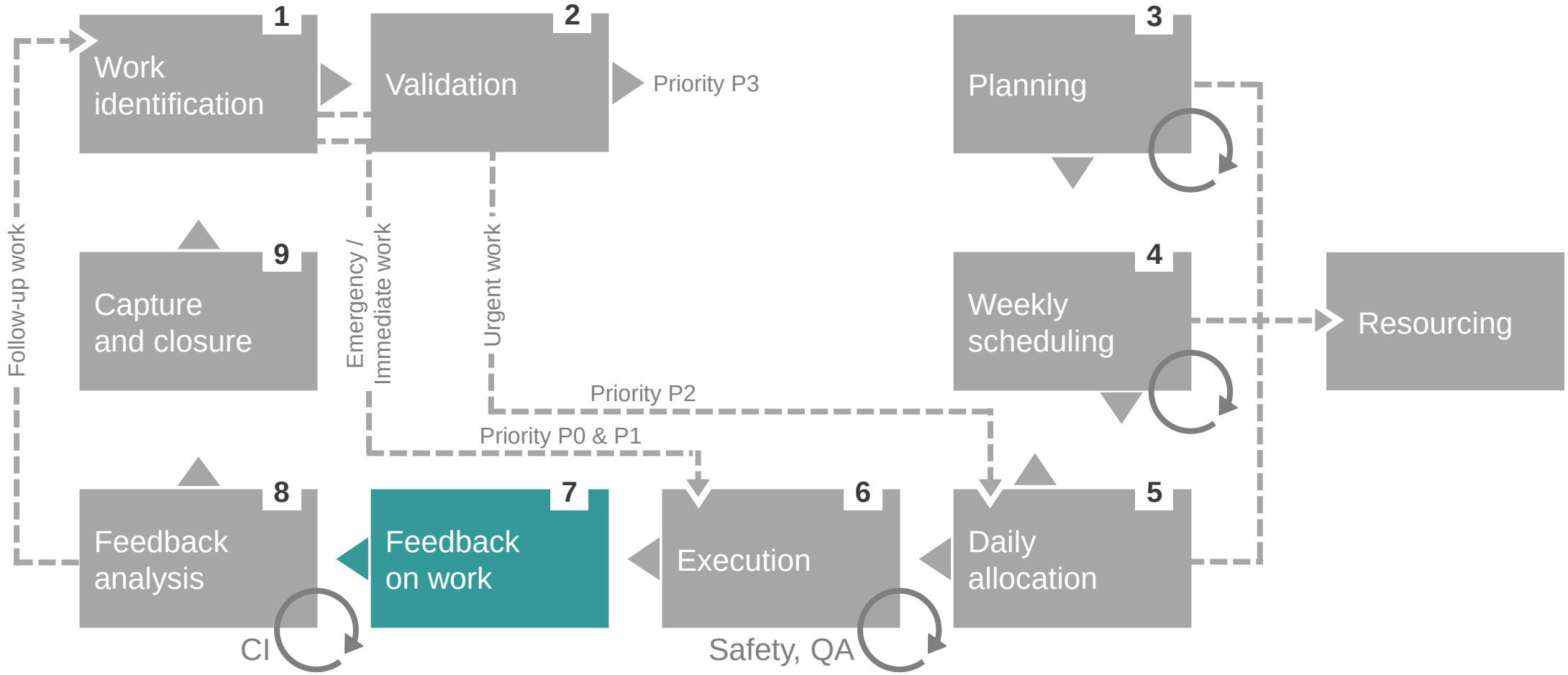
Work order feedback



Position in the maintenance work management cycle



Identify the various elements for effective work order feedback

Join your breakout room and discuss the following questions. You will then share your thoughts with the rest of the class.

- Who is **accountable** for the quality of data?
- List the EAM data fields that they expect the **accountable** person to check for accuracy.
- How is the data used effectively?
- How do you drive **accountability** for poor data and feedback?

"The **accountable** person is the individual who is ultimately answerable for the activity or decision. This includes 'yes' or 'no' authority and veto power. Only one **accountable** person can be assigned to an action.

The **responsible** person is the individual(s) who actually completes the task."

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The main elements of work order feedback

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Who performed the work and the hours needed?

Who performed the work and the hours needed?

The maintenance execution crew member is responsible for completing the work order feedback, returning unused materials to the store, and creating follow-up work requests.

The maintenance execution member is responsible for:

- corrective action at the asset
- recording resources used for “break-in work”
- actual time spent on attending to the work order
- updating of documentation, triggering management of change processes
- creating a work request for follow-up work.

The maintenance supervisor is responsible for signing the work orders off.

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Reasons for failures

Reasons for failures

The maintenance execution member is responsible for recording the evidence at the location:

- What failed (component)?
- How did it fail (mode of failure)?
- Repair type
- 5-Why / “cause and effect” of the failure (break-in work)

Information to assist with future work

Information to assist with future work

The maintenance execution member is responsible for:

- recording any deviations and reasons for the deviations on the planned work orders.

Quality feedback

Quality feedback

The maintenance supervisor and the planner should select random work orders for review in the daily meeting to drive accountability for the quality of feedback.

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Failure analysis feedback

PUx00001	Centrifugal Pump
PUx00002	Multistage centrifugal pump
PUx00003	Vertical spindle Centrifugal
PUx00004	Rotary Vane Vacuum Pump
PUx00005	Submersible Pumps
PUx00006	Rotary Vane Pump
PUx00007	Gear Pump
PUx00008	Diaphragm Pump
PUx00009	Screw Pump
PUx00010	Peristaltic Pump
PUx00011	Lobe Pump
PUx00012	Plunger Pump
PUx00013	Piston pump
PUx00014	Axial Flow Pump
PUx00015	Split casing centrifugal Pump

PU200001	Centrifugal Pump-5Why&Tasks
PU500001	Centrifugal Pump-FailCause
PUA00001	Centrifugal Pump-Activity
PUB00001	Centrifugal Pump-Object Part
PUC00001	Centrifugal Pump-FailMode
PUD00001	Centrifugal Pump-Fixed Priority

Failure cause

PU500001	2001 - Abrasive Wear
PU500001	2002 - Component Quality
PU500001	2003 - Contaminated Gland Water
PU500001	2004 - Contaminated Lubricant
PU500001	2005 - Corrosion Protection Failure
PU500001	2006 - Foreign Object
PU500001	2007 - Friction Wear
PU500001	2008 - High Temperature
PU500001	2009 - Inadequate Gland Water
PU500001	2010 - Inadequate Lubrication
PU500001	2011 - Incorrect Adjustment
PU500001	2012 - Incorrect Assembly
PU500001	2013 - Incorrect Component Fitted
PU500001	2014 - Incorrect Lubrication
PU500001	2015 - Incorrect Operation

Repair type

PUA00001	3001 - Adjusted
PUA00001	3002 - Calibrated
PUA00001	3003 - Discarded
PUA00001	3004 - Inspected
PUA00001	3005 - Isolated
PUA00001	3006 - Measured
PUA00001	3007 - Realigned
PUA00001	3008 - Recharged
PUA00001	3009 - Refilled
PUA00001	3010 - Replaced
PUA00001	3011 - Reset
PUA00001	3012 - Restored
PUA00001	3013 - Rework
PUA00001	3014 - Serviced
PUA00001	3015 - Tested

Component

PUB00001	0009 - Adjustment Bolt
PUB00001	0059 - Balance Disc
PUB00001	0082 - Bearing
PUB00001	0084 - Bearing Assembly
PUB00001	0220 - Casing Bolt
PUB00001	0389 - Diffuser
PUB00001	0479 - End Liner
PUB00001	0726 - Impeller
PUB00001	0836 - Mechanical Seal
PUB00001	0908 - Packing
PUB00001	0959 - Plunger
PUB00001	0999 - Pump Casing
PUB00001	1040 - Relief Valve
PUB00001	1123 - Screw
PUB00001	1133 - Seal

Failure mode

PUC00001	1001 - Bent
PUC00001	1002 - Binding Or Jamming
PUC00001	1003 - Broken
PUC00001	1004 - Chaffed
PUC00001	1005 - Contaminated
PUC00001	1006 - Corroded
PUC00001	1007 - Cracked Or Fractured
PUC00001	1008 - Distorted
PUC00001	1009 - Fails To Close
PUC00001	1010 - Fails To Open
PUC00001	1011 - Loose
PUC00001	1012 - Out Of Tolerance (Drift)
PUC00001	1013 - Overheated
PUC00001	1014 - Pitted
PUC00001	1015 - Scored

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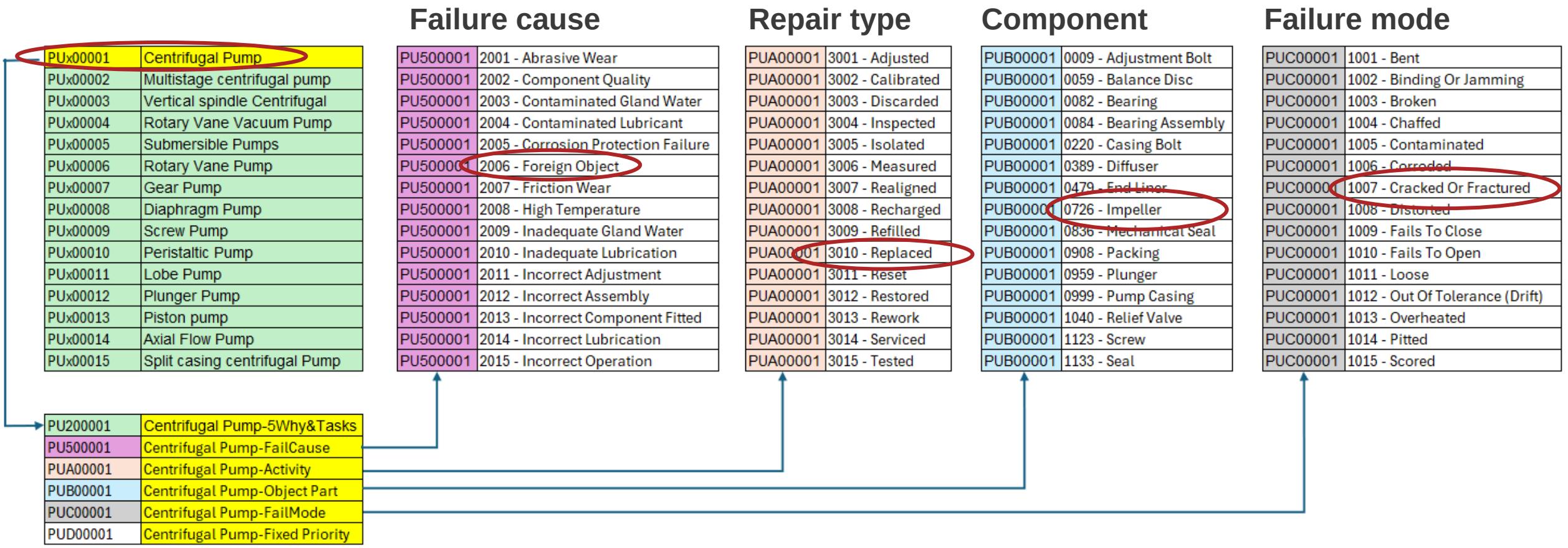
Failure analysis feedback



Codes are “filtered” per equipment type to improve the quality of data collected.

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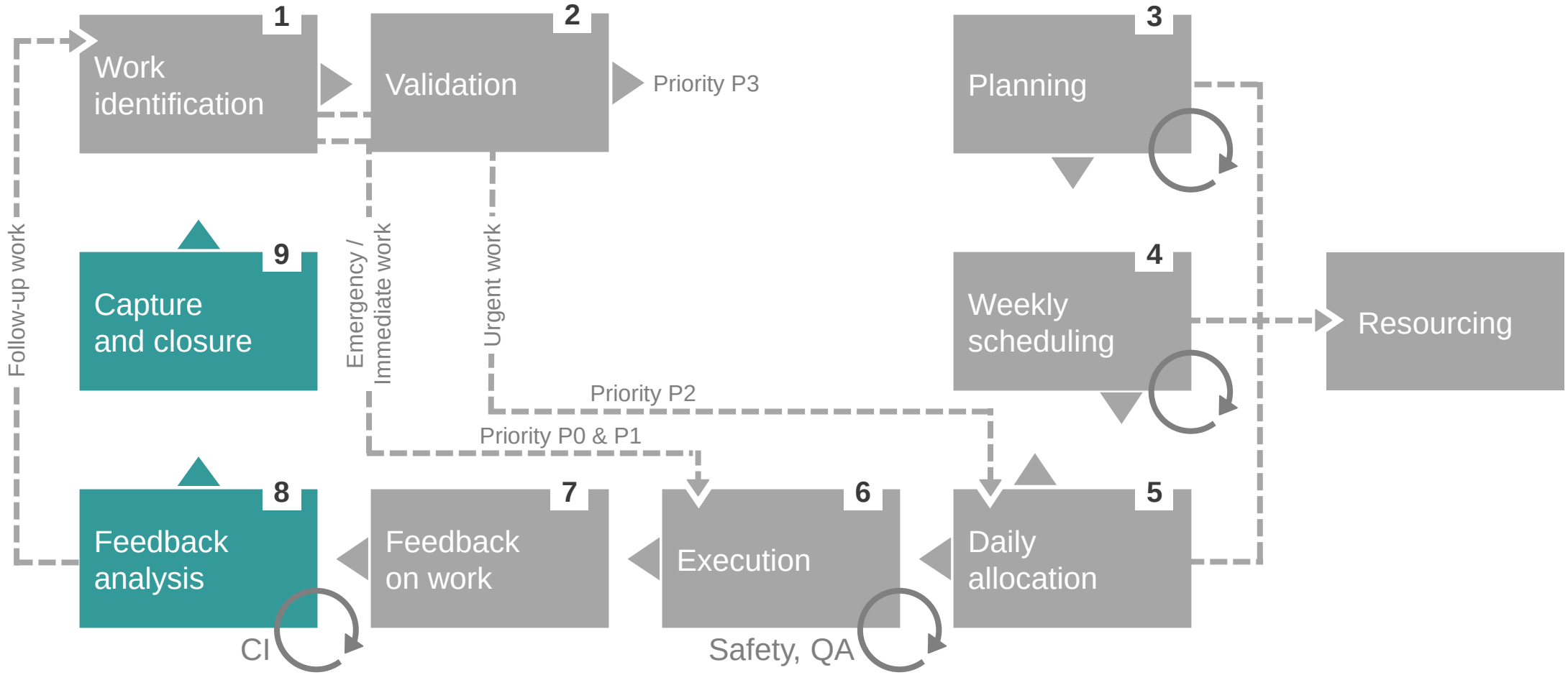
Feedback analysis, capture and closure

Position in the maintenance work management cycle



Unpacking feedback analysis

How is root cause analysis triggered?

Share your thoughts with the rest of the class.

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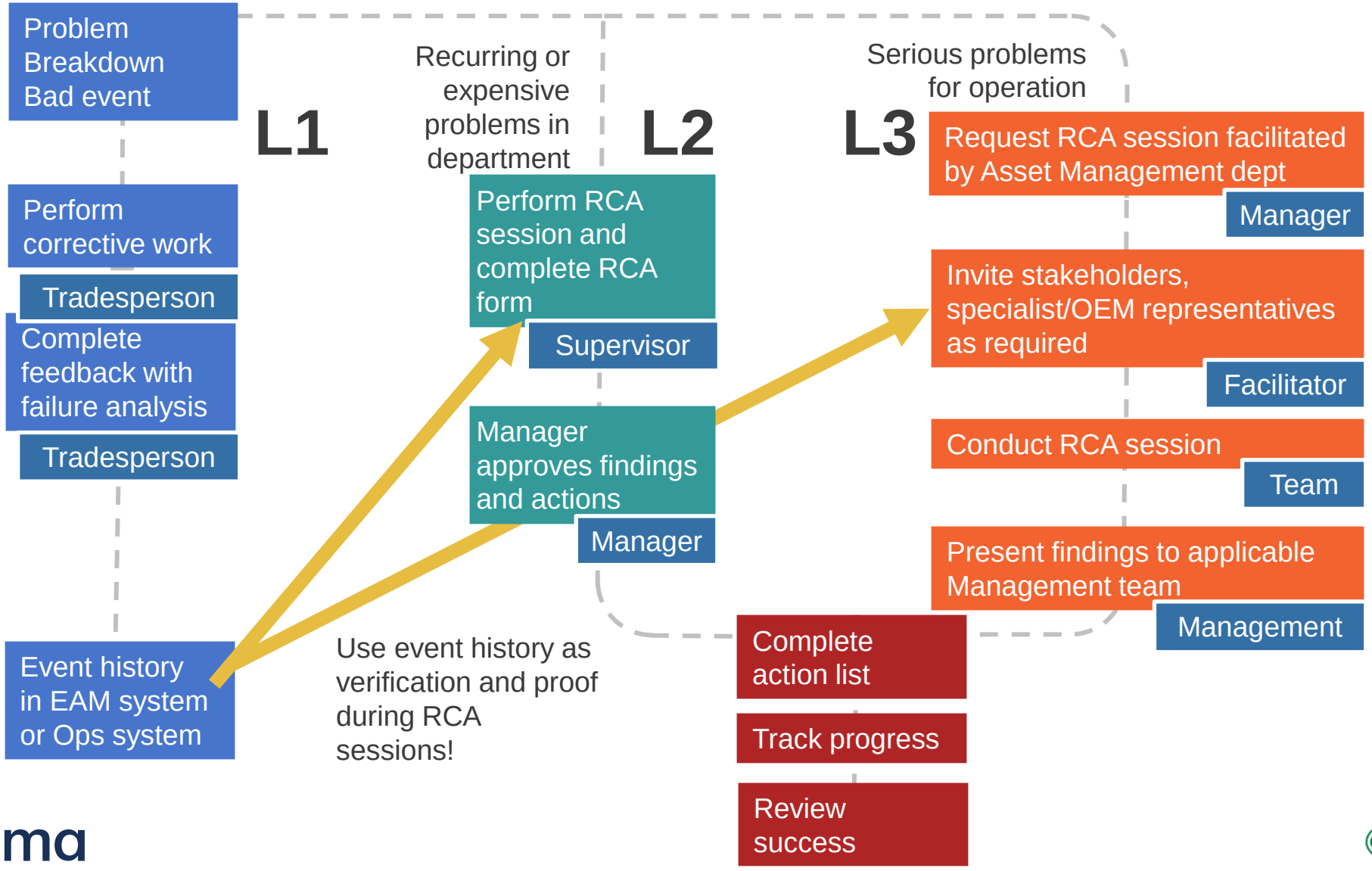
Unpacking feedback analysis

Who at your site is responsible to ensure that the findings from the feedback analysis reach the right people and departments?

Share your thoughts with the rest of the class.

Three levels of reactive failure analysis



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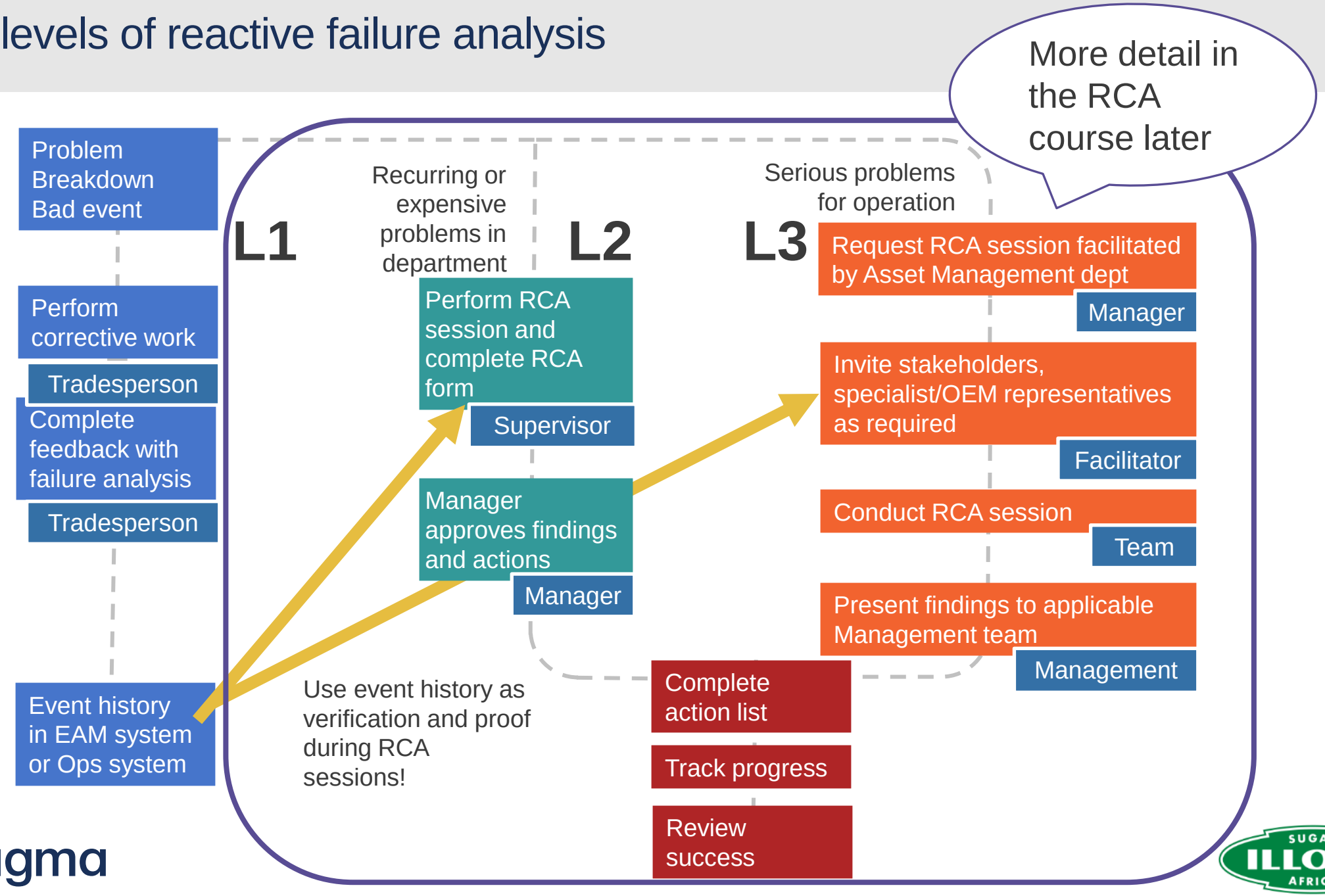
Three levels of reactive failure analysis



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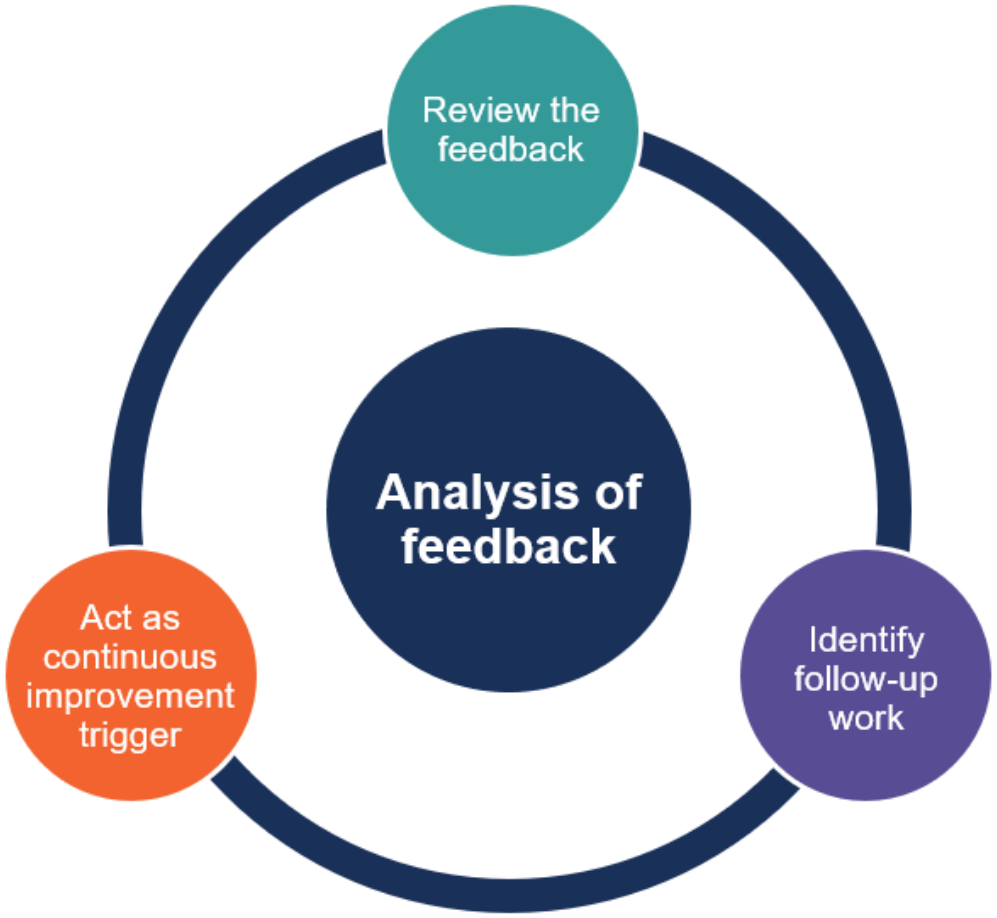
Analysis of feedback



Analysis of feedback should be seen as a transactional review.

Before closing the work order, someone technically minded must review the feedback and take appropriate action:

- Raise follow-up work order
- Updating of drawings
- Changing asset tree or equipment register
- Changing spare parts list (Bill of Materials)
- Changing maintenance tasks
- Adding additional maintenance tasks
- Changing to long-term plan or schedule
- Rotable management

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Review the feedback

Review the feedback

- Identify all of the people who performed work relating to the work order.
- Identify the labour hours of each person. Provide start and finish times of tasks. Explain any variance from the plan estimates if greater or less than 20%.
- Describe the problem if not accurately specified by the plan.
- Describe the action taken if the task did not proceed according to the plan.
- If nothing was done or found, state this specifically.
- Be sure to perform the lowest level of failure analysis, ie the actual failed component (such as a bearing) and not the asset as a whole. This should be coded to simplify and make it easy to analyse.
- Failure analysis should be performed for all non-tactical maintenance work. Ensure that the EAM system configuration is set to apply failure analysis on relevant work orders, ie do not perform failure analysis for simple tasks such as changing a light bulb.
- The tradesperson repairing the problem is in a very good position to identify the first failed component and at the very least, the failure mode.

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Identify follow-up work

Identify follow-up work

- A follow-up work order may need to be raised if a tradesperson needs to revisit an asset to attend to another task.
- Additional maintenance tasks might need to be included after feedback analysis has been completed.
- If the physical look of an asset changes (eg due to design improvement) then the asset's technical drawing will need to be updated.

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Act as a continuous improvement trigger

Act as a continuous improvement trigger

- Feedback is given regarding who performed the work and other related information that can assist in future work execution.
- Identifying trends when it comes to recurring failures will act as a trigger for focused improvement projects that could save time, money and even lives.
- The result of the analysis might require that updates be made to the list of maintenance tasks for a specific asset.

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Follow-up work

Unpacking follow-up work

How is follow-up work identified and flagged in your organisation?

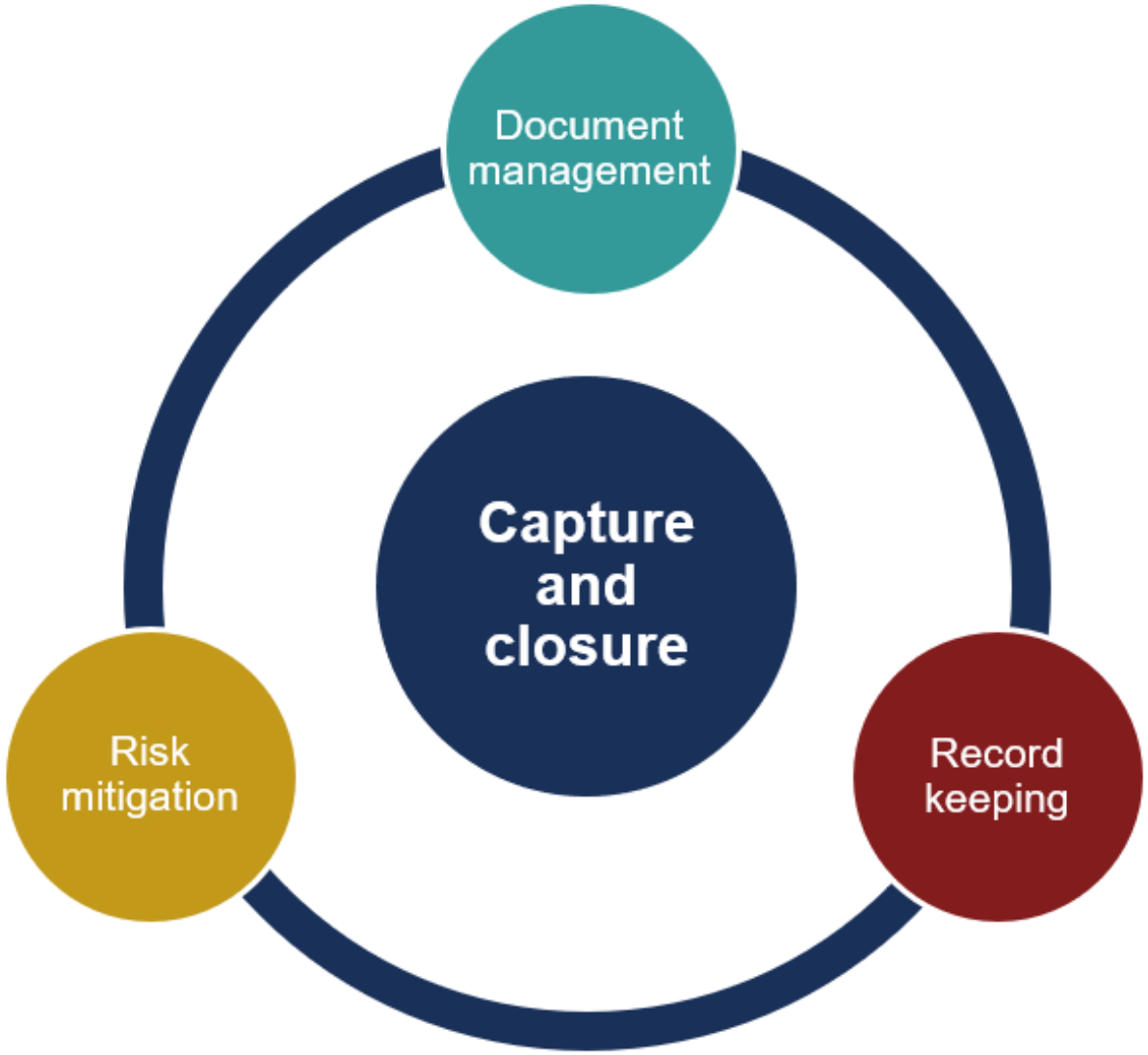
Share your thoughts with the rest of the class.

Unpacking follow-up work

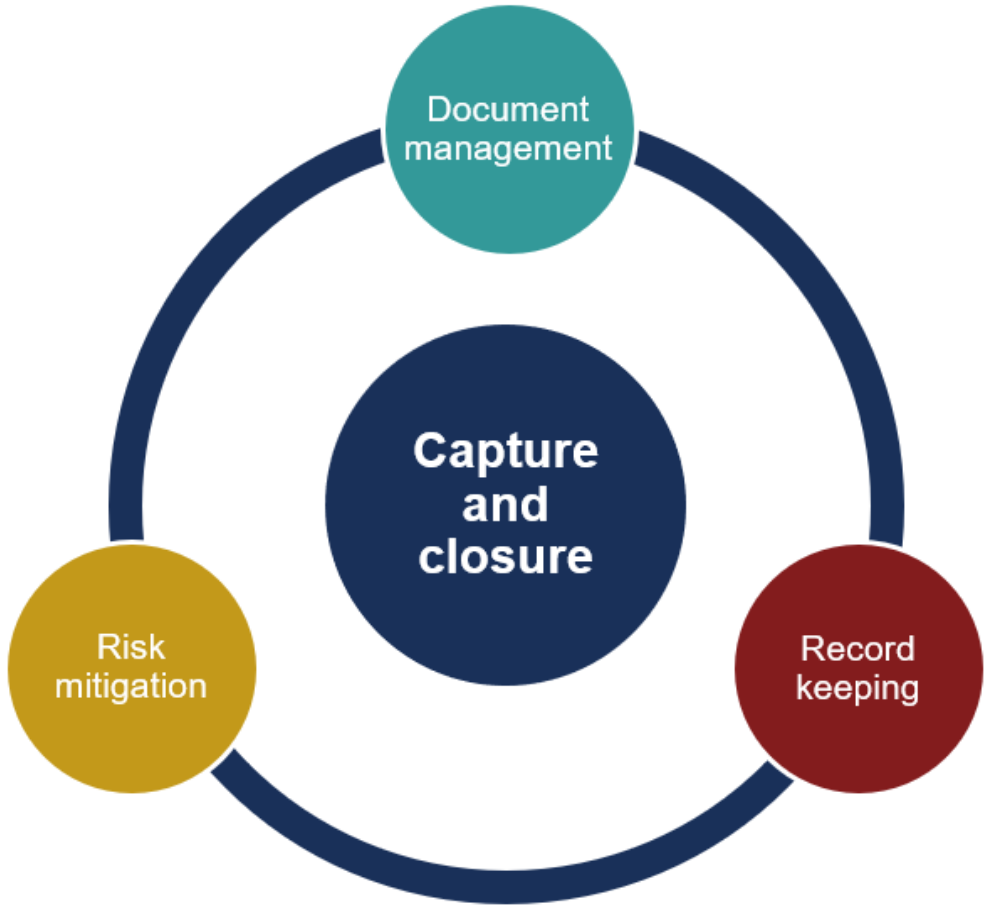
Who receives condition monitoring reports?

A. Maintenance supervisor
B. Reliability engineer
C. Section engineer
D. Planner
E. Production supervisor

The elements of capture and closure



Capture and closure



- This is the one of the most important tasks of the planning function as it will ensure more efficient planning of future jobs.
- This analysis acts as a trigger for other business processes.
- If data capturers are not able to analyse recorded information and act on it, then a separate review of data will be needed.
- This is a critical function to ensure continuous improvement and risk mitigation within your asset management function.

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Document management

Document management

- ISO 55000 defines documented information as information required to be controlled and maintained by an organisation and the medium on which it is contained.
- The principles that information document management rely on are:
  1. safety
  2. accessibility
  3. speed.
- Upstream and downstream stakeholders need to know that documents are kept in a safe and secure environment, and that it is easy and quick enough to get hold of the information needed.

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Record-keeping

Record-keeping

It is important to have a document control and management system in place.

Record-keeping needs to be able to:

- communicate the correct information
- communicate accurate information
- provide evidence of correct procedures and standards followed
- highlight areas that pose a risk.

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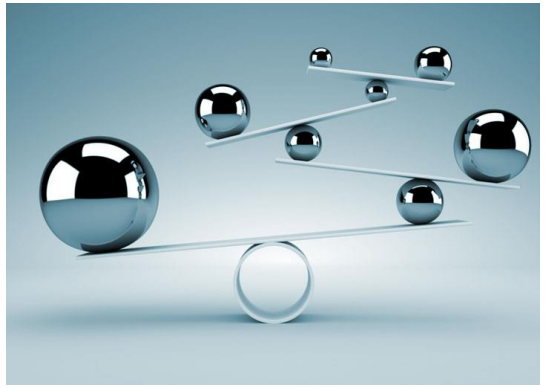
Risk mitigation

Risk mitigation



Managing business risk

Maximising the value of information to the end user

Ensuring that the asset can be operated, maintained and disposed of in a safe and economical manner

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Analyse the process and value of work order feedback

Join your breakout room and discuss the following:

What does the future look like?

Think about the future and how you see the process improving, by answering the following two questions:

1. Should tradespeople capture the WO feedback directly into the EAMS via a mobile app or kiosk? Why or why not?
2. Can you make any suggestions on making the WO feedback more accurate and useful?

Reflect on the learning objectives of this module

Are you able to:

- explain daily allocation as well as the roles and responsibilities for scheduling and daily work management
- explain the benefits of a visual work order tracking system and how the planner tracks the work execution process
- describe the concept of work order feedback and its impact on optimising future planning and scheduling
- explain the impact of master data maintenance work and the importance of work order feedback for maintaining master data
- distinguish between capturing of information, analysis of information, and feedback of information and how these can be used continuously to improve planning, scheduling and work execution
- explain the concept, importance and benefits (consequences) of effective document control and the impact on the maintenance operation?

A. Yes

B. No

C. Partially

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Module 06: Planning Activities

Maintenance Work Management

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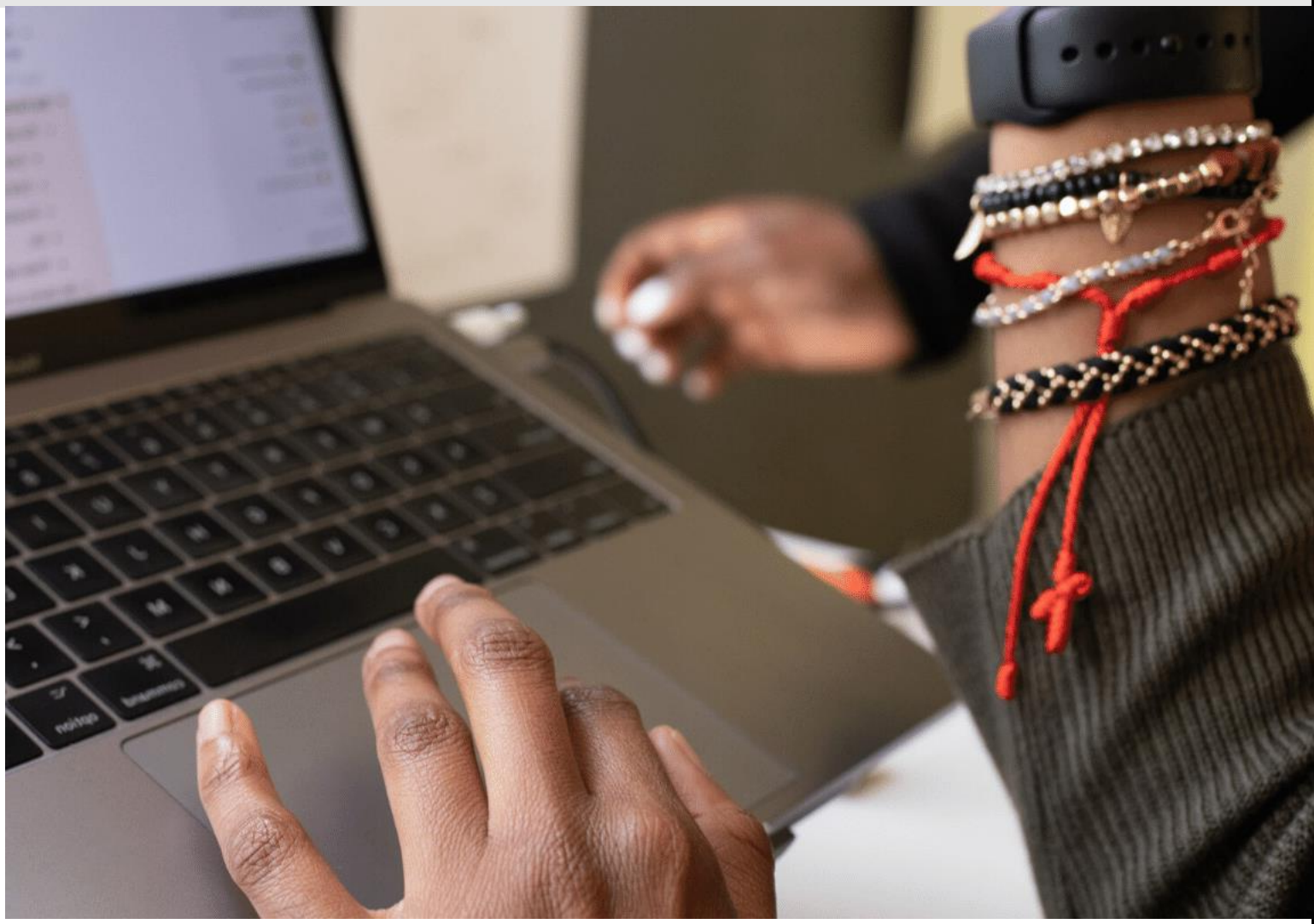

Ice-breaker

If your manager gave you the opportunity to buy one item (regardless of the price) that would help you at work, what would it be?

Type your answer using the public chat feature.

You might be asked to explain your answer.

Learning objectives for this module

- Describe the core activities of an effective planner.
- Explain the importance and benefits of effective scoping of work.
- Make decisions on effective scope of work detail to ensure appropriate skills identification for work execution.
- Make decisions based on task details and skills required, to identify the task duration and estimated work hours needed for work.
- Make decisions based on Bills of Materials, OEM manuals and system master data to identify appropriate spare parts, special tools and specialised resources for planning work packages.
- Critically evaluate the various elements of a work package and suggest improvements.

Baseline assessment

Best practices

What is the main reason for the best practice that tradespeople must find their own tools, spare parts or resources once the schedule has been finalised?

A. The tradesperson is closer to the stores, therefore it is more efficient.

B. The planner must focus on future work and get feedback from the manager/supervisor if there is a problem.

C. The tradespeople know exactly what is needed – they are working on the equipment.

D. The planner does not have access to the equipment drawings.

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Placement of planners

Which of the statements below are beneficial for having planners in a centralised, separate department from Maintenance Execution?

1. To enable them to develop specific planning techniques and learn from each other
2. To prevent them from being drawn into executing work
3. To enable them to focus on future work
4. To ensure that they are held accountable for the quality of work order information in the EAM system
5. To ensure that they are closer to Supply Chain and follow up on outstanding purchase orders

A. Options 2 and 3

B. Options 2 , 3 and 5

C. Options 1 and 5

D. Options 1, 2 and 3

E. Options 1, 4 and 5

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Work order information

When equipment is worked on repetitively, the work order information is retained to:

1. get the maximum value for money from the EAM system
2. enable the planner to search and see what task lists have been used previously
3. develop work plans and avoid anticipated delays in work on specific assets
4. keep a record of consumables drawn from the stores by the workshops
5. better anticipate the time that will be taken to carry out tactical work orders.

A. Options 2 and 3

B. Options 2 , 3 and 5

C. Options 1 and 5

D. Options 1, 2 and 3

E. Options 1, 4 and 5

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Lowest required skill level

What is the main reason that we plan for the lowest required skill level?

A. So that we can work down higher skilled resources to improve utilisation.

B. To save money on the budget.

C. To give everyone an opportunity to do every type of work.

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Scheduled work

Work that is scheduled reduces delays between work orders, and work that is planned reduces delays during work orders.

A. True

B. False

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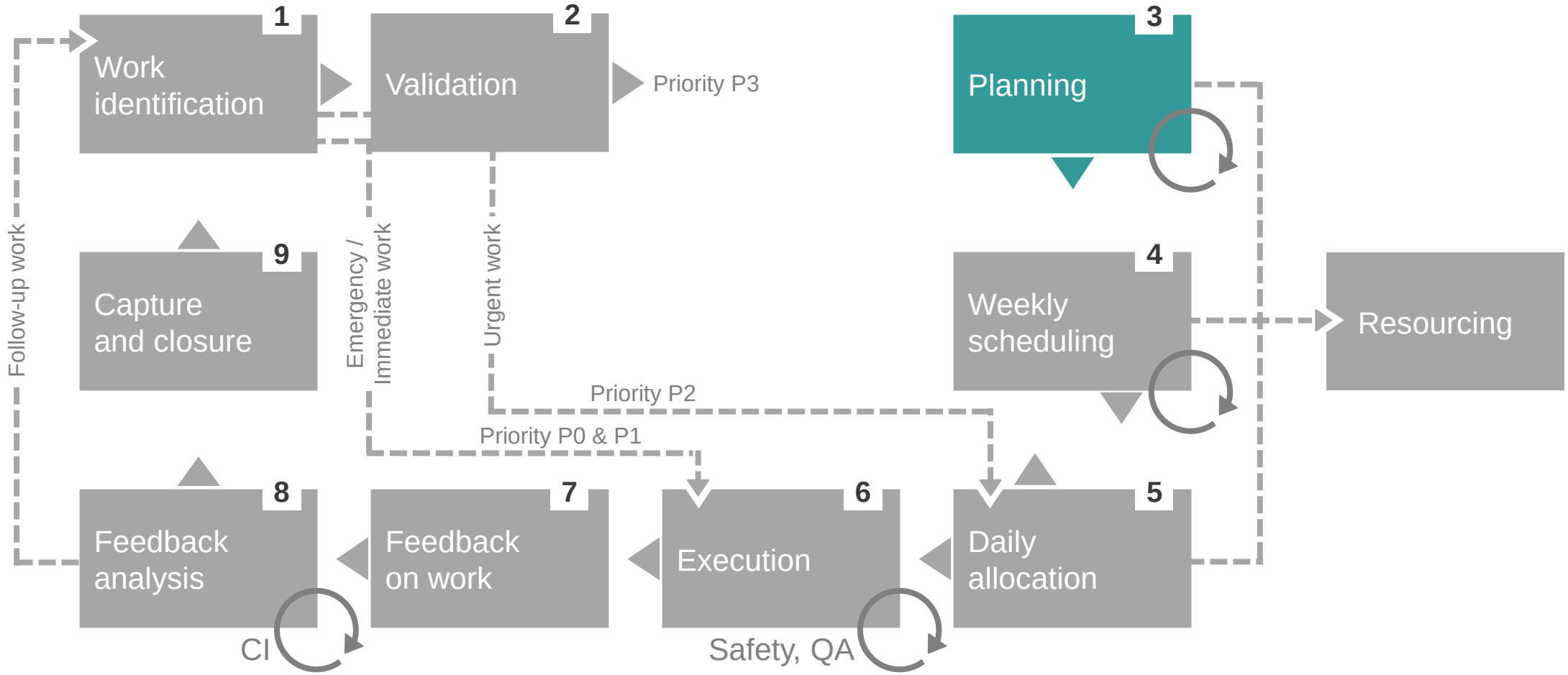
Position in the maintenance work management cycle



The benefits of properly planned work

What benefits can you expect from properly planned work?

Use the shared notes to type up all the benefits you can think of.

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Planning activities

Planning for different levels of experience

How do you plan for different levels of experience when scoping work?

Type your answer into the public chat.

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What must be done?

The definition of scoping

What must be done?

Scoping means identifying all the work required for the job.

It is a sub-set of the planning process.

The scoping process is necessary even if the requestor has provided descriptive information.

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Responsible for scoping

Who is responsible for scoping the work order?

A. Planner
B. Maintenance supervisor
C. Tradesperson
D. Administrator
E. Scheduler

Who is responsible?

What must be done?

The responsibility depends on the operational environment.

Planners, supervisors and tradespeople could all be responsible for scoping, depending on the environment.

In principle, the finalisation of the scope of work must be done by a person with technical expertise.

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The need for scoping

What must be done?

Some work requests do not define the work needed to remedy the problem:

- “The boiler feed pump is running hot.”

Some work requests incorrectly identify the work to be done:

- “Replace the gasket for the leaking flange.”

This may be requesting the wrong work, because it may have been caused by a loose pipe hanger two metres away.

Some work requests do not include all the information needed to do the job, eg the need for scaffolding to be erected to access the leaking flange.

The benefits of scoping

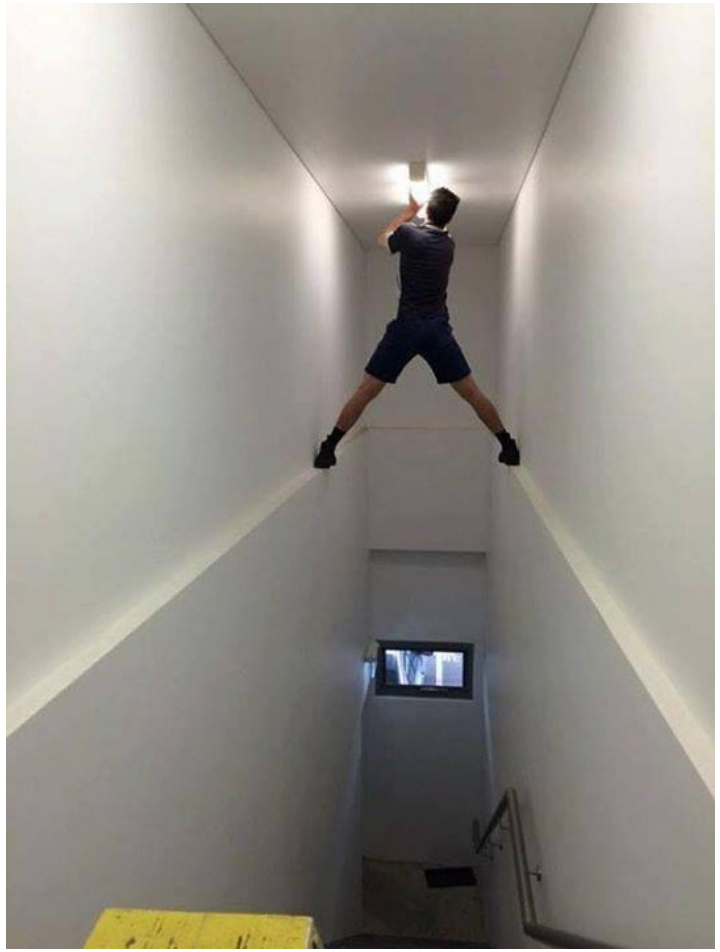
What must be done?

A complete scoping will ensure that the work order instructions are:

- clear
- meaningful
- provide enough information to execute the tasks.

Risk mitigation

What must be done?



A complete scoping will ensure that all safety requirements are adhered to:

- For any special safety risk, the planner must describe the risk and attach or reference any pertinent information.
- This information goes onto the work order and also into the asset data and maintenance history records.

Note that confined spaces and hazardous materials need special attention.

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Linking typical skills of the trade to the type of work

Grade A: entry level Grade B: 15 years + Grade C: 30 years +

Millwright (Grade C)	Millwright (Grade B and C)	Millwright (Grade B)	Millwright (Grade A)	
Instr. Mech. (Grade C)	Boilermaker (Grade B)	Boilermaker (Grade A)	Instr. Mech. (Grade A)	Process (Grade A)
Boilermaker (Grade C)	Fitter and turner (Grade B and C)	Fitter and turner (Grade B)	Fitter and turner (Grade A)	Fitter and turner (Grade A)
Electrician (Grade C)	Electrician (Grade B and C)	Electrician (Grade B)	Electrician (Grade A and B)	Electrician (Grade A)
Mechanic (Grade C)	Mechanic (Grade B and C)	Mechanic (Grade B)	Mechanic (Grade A and B)	Mechanic (Grade A)
Assemble	Install	Reassemble	Repair	Operate and Maint.

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Typical repair tasks – which is best practice and why?

- Millwright (Grade A)
- Instr. Mech. (Grade A)
- Fitter and turner (Grade A)
- Electrician (Grade A and B)
- Mechanic (Grade A and B)
- Artisan assistant

The cooling tower fan v-belts are squealing and need to be adjusted. The work can be planned for the next scheduling period. An on-site inspection reveals that the motor baseplate feet are in poor condition; one is broken and the other cracked. From the EAMS, the motor bearings are due for replacement within the next two weeks.

Option 1: give the whole job to a millwright – they have all the skills (4 hrs)

Option 2: break the work order into sub-tasks and assign the appropriate skill level to the sub-tasks

- Isolate and disconnect the motor cables – electrician Gr A (30 min)
- Remove motor, belts, etc to workshop – mechanic Gr A (45 min)
- Repair baseplate feet – fitter and turner (60 min)
- Replace motor bearings – artisan assistant (45 min)
- Reassemble, install and align – mechanic (60 min)
- Reconnect motor cables, direct test – electrician (45 min)

Using resources

Which is best practice?

A. Option 1: give the whole job to a millwright – they have all the skills (4 hrs).

B. Option 2: break the work order into sub-tasks and assign the appropriate skill level to the sub-tasks.

Who must do it?

Reflecting on the last breakout room activity

Is it clear now how the effective task breakdown of the scope of work drives better utilisation of all the artisanal skills available?

A. Yes

B. No

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Who must do it?

Who must do it?

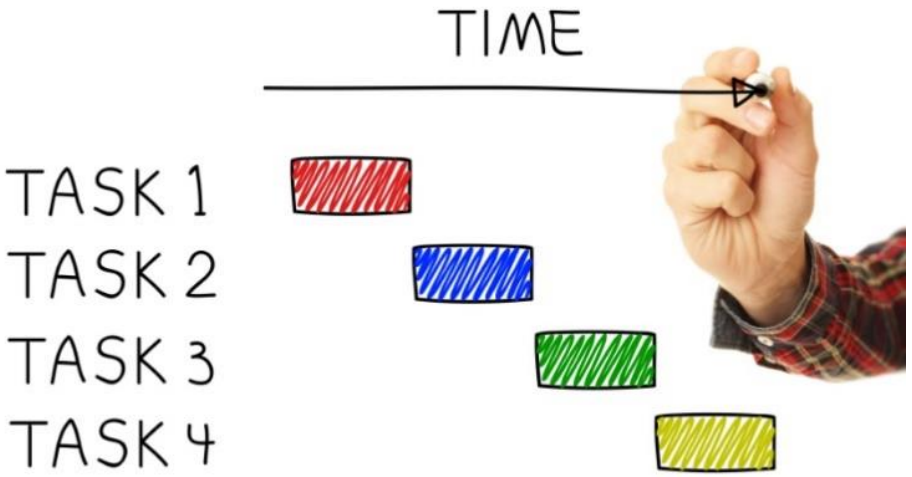
Planners designate the lowest qualified trade level required on the tasks:

- This allows appropriate flexibility during scheduling.
- Section supervisors can determine which tradesperson to assign to the task.

How long will it take?

How long it should take

How long will it take?



Operators need a task duration to estimate how long equipment will be out of operation.

Task duration is useful when trying to allocate work during an opportunity such as a short-notice shutdown.

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How long it should take

How long will it take?

Planners perform the following actions:

- Determining estimated work hours for each task
- Specifying number of persons and work hours for each person
- Specifying all labour hours on a work order
- Specifying the estimated task duration on a work order

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Estimated hours

How long will it take?

The planner should try to estimate the hours reasonably required by **experienced tradespeople**.

The planner should plan for a good tradesperson, not the average.

- Not the slowest (too much slack, no incentive)
- Not the fastest (not realistic)

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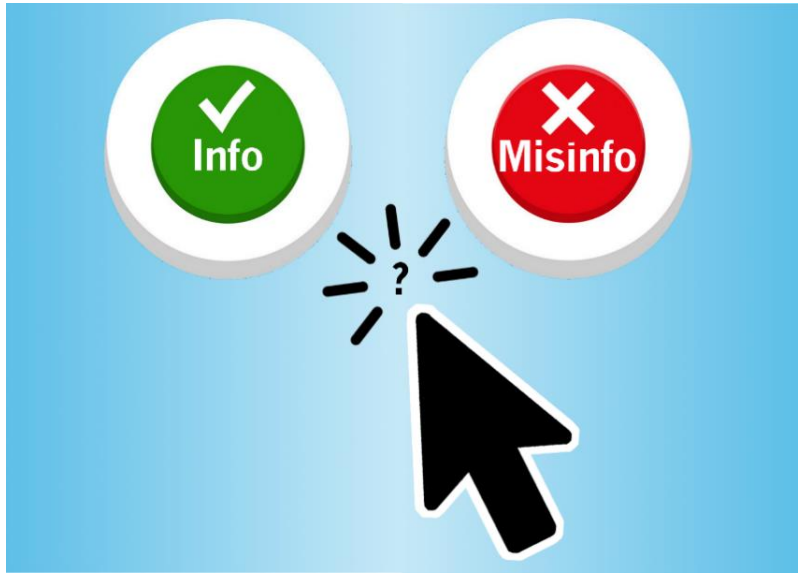
Estimated hours

How long will it take?



Planning for a good tradesperson should allow “average” tradespeople to rise to the challenge of doing a good job.

To determine how long a good tradesperson should take to complete a task, the planner needs to be a good tradesperson themselves, which gives credibility to the plan.

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Estimated hours

How long will it take?

Time estimates help explain the job scope (tradespeople will try to fill all the allocated time and may perform unnecessary tasks that were not part of the job scope).

Time estimates gives the tradesperson a reasonable target to work towards and keeps the work moving.

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Do not plan for unexpected delays

How long will it take?

The planner should try to estimate the hours reasonably required by experienced tradespeople without unexpected delays.

Plans do not include time for unexpected delays (looking for spare parts, tools or instructions).

Adding time “just in case” may cause the delays not to be reported, because the actual job duration is within the planned time.

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Continuous improvement

How long will it take?

Running over or under time is not as important as ensuring that continuous improvement takes place by planning around previously experienced delays.

- Variances must be reported to planners so that they may improve the plans for future work.

A quality focus must be in place before productivity is pushed – good quality work is more important than schedule attainment.

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Work hours and job duration

A fitter and an assistant need five hours to rebuild a pump.

Afterwards the electrician is needed for another five hours to complete the task.

What is the work duration?

A. 5 hours

B. 10 hours

C. 15 hours

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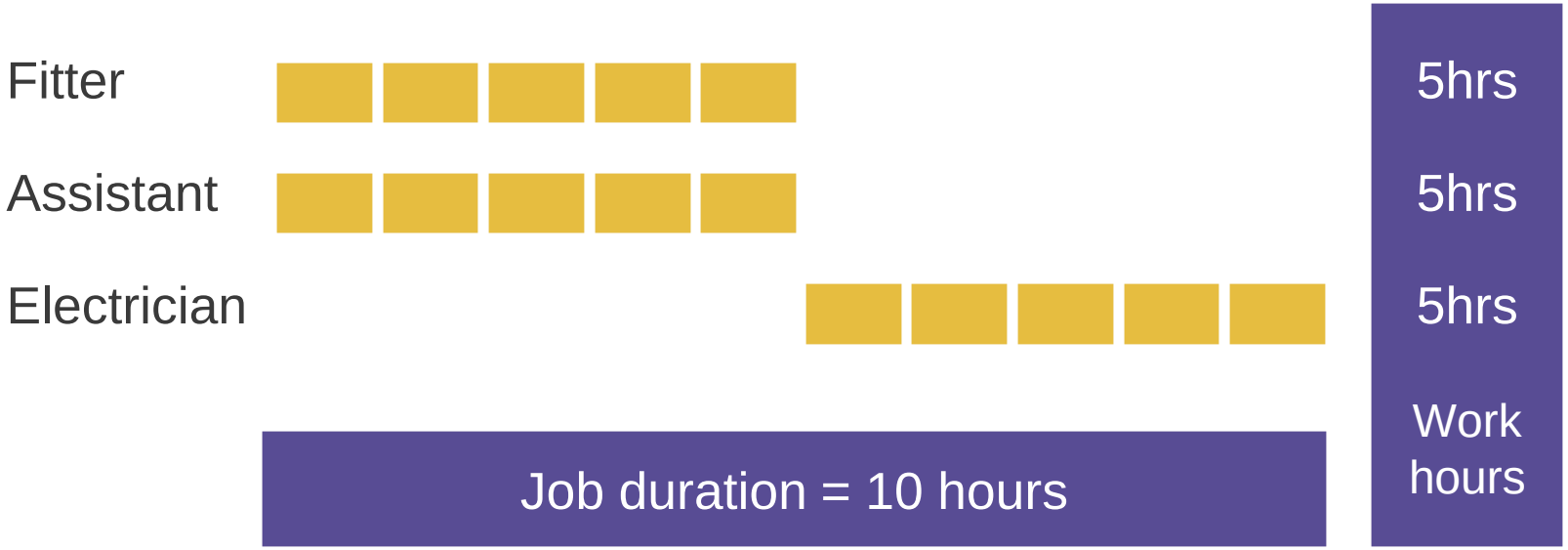
Work hours and job duration

How long will it take?

A fitter and an assistant need five hours to rebuild a pump.

Afterwards the electrician is needed for another five hours to complete the task.



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Spare parts

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Identifying the necessary spare parts

What spare parts are needed?

Identifying and coordinating parts is one area where planners can greatly improve section productivity.

The planner’s role here consists of only the following two activities:

- Identifying parts needed for each task
- Ensuring the availability of parts before work begins

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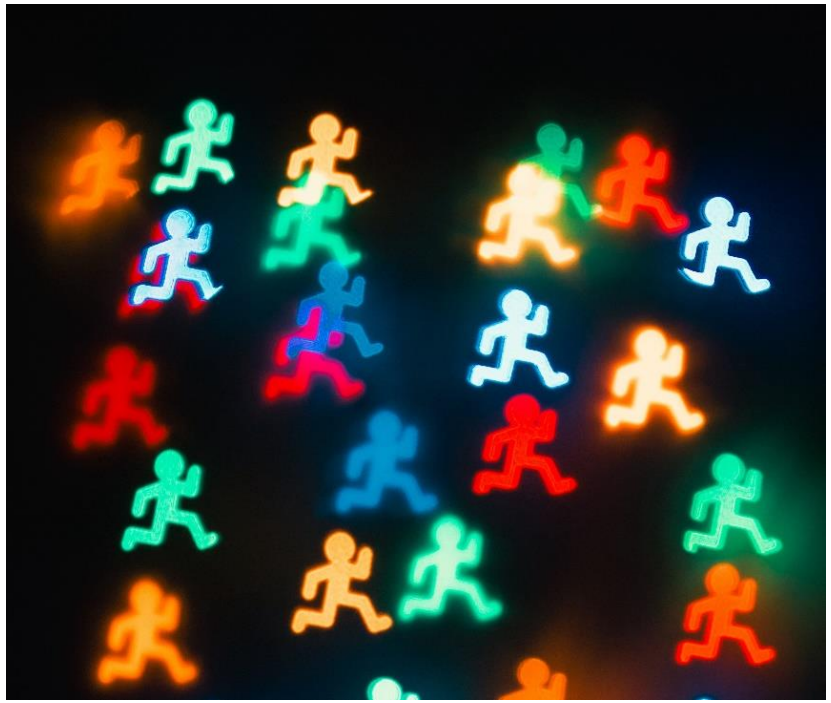
What spare parts are needed?

What spare parts are needed?



Once work execution begins, the planner is no longer responsible for identifying any necessary parts.

- They must focus on future work.
- They can receive feedback and make sure that the additional parts are planned for the next time.

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Special equipment and resources

Special tools or resources required

What special tools or resources are required?

A special tool is any device that would not ordinarily be carried in a craft tool box.

Identifying and coordinating special tools is another area where planners can greatly improve section productivity.

The planner’s intent is to allow tradespeople to gather all the necessary special tools before they go to the site.

Special tools are identified from the planner’s experience, asset data or maintenance history.

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The importance of estimating costs

What is the estimated cost?

Job costing information is critical for planners to make informed decisions about replacement vs maintenance and also to determine whether work should be carried out at all.

Many companies have levels of approval and this initial estimation will inform which level in the organisation has to provide preliminary approval for the work.

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Which costs must be estimated?

What is the estimated cost?

Plan task costs within the following categories:

- Labour cost – use a standard rate (no need to differentiate between individuals – this makes little difference and the planner is not sure who will eventually perform the job)
- Parts cost
- Special tools cost – only applicable if special tools are not available
- Contractor cost

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Scenario: work request

You are Mark, the maintenance planner for Green Pea Processing, and you receive a work request from John, the production supervisor.

GreenPea Processors

John writes:
“Mark, please get somebody to sort out the electrical motor of vibrating screen no. 2b in recovery. It is making a terrible noise. I think it is misaligned.”

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Planning a job

At GreenPea Processors, it is the maintenance planner’s responsibility to plan this job.

Discuss in your groups and write down all the actions you will take to plan this job.

Be prepared to share your answers with the group.

Scenario: the problem

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Reflect on the learning objectives of this module

Are you able to:

- describe the core activities of an effective planner
- explain the importance and benefits of effective scoping of work
- make decisions on effective scope of work detail to ensure appropriate skills identification for work execution
- make decisions based on task details and skills required, to identify the task duration and estimated work hours needed for work
- make decisions based on Bills of Materials, OEM manuals and system master data to identify appropriate spare parts, special tools and specialised resources for planning work packages
- critically evaluate the various elements of a work package and suggest improvements?

A. Yes

B. No

C. Partially

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