

Use APQP gates to expose launch risk early

Use a launch evidence gate to expose dependencies and unresolved risk, with accountable decisions instead of a task-completion percentage.



Ninety-seven percent complete can still be unready

Fictional case: a new component launch has three open actions: measurement validation, supplier validation and a station reaction drill. Planner Tessa has a green schedule because most tasks are complete. The core lesson retains these three gaps. The team must decide what evidence is missing and who can authorize the next step.

Your role and the reference condition

Cross-functional launch leader with engineering, supplier quality and operations

Normal: Customer needs, design/process development, validation and operational controls are connected through clear deliverables and evidence-based decisions.

Gap: The team treats a high completion percentage as approval to launch, despite unresolved evidence needed to interpret product results and respond to abnormalities.

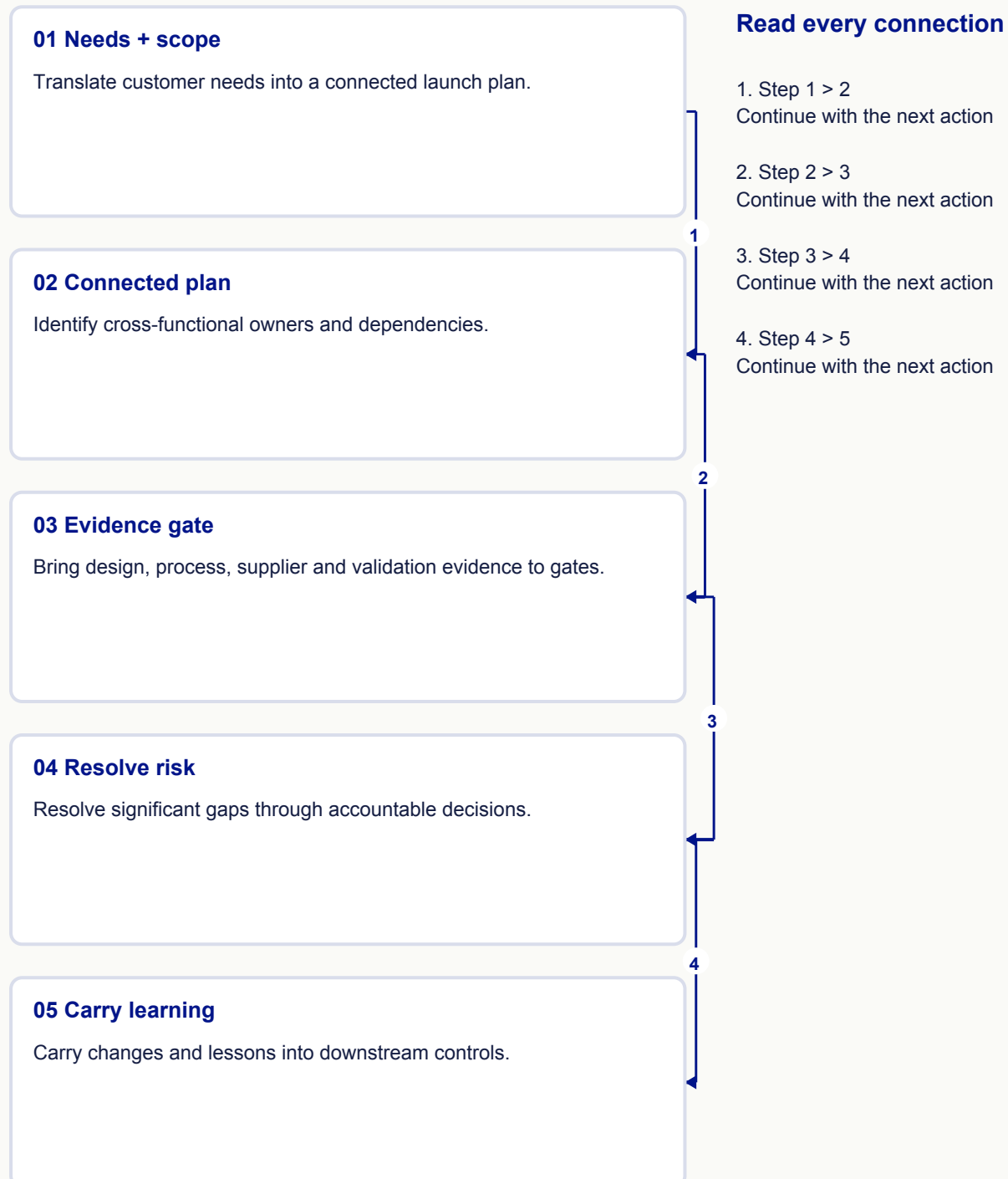
Work within these conditions

1. AIAG published APQP 3 and standalone Control Plan 1 in 2024; applicability and adoption remain customer-specific.
2. The three example actions are not a complete prescribed gate checklist.

Fictional teaching case. Supplied observations support the exercise; proposed actions are not verified customer results.

See how the method works

APQP links product and process development to evidence-based launch decisions. Translate customer needs into a plan with connected responsibilities, timing and deliverables. Use gates to expose unresolved risks, dependencies and changes rather than to celebrate document completion. Evidence from design, process development, suppliers and validation must fit the actual scope. Carry decisions and lessons forward so an approved change does not leave downstream records obsolete. The current public AIAG materials distinguish APQP third edition from the standalone Control Plan first edition. Customer adoption and requirements still need checking. This teaching map demonstrates decision discipline, not a complete mandated gate list or automatic launch authorization.



Method exhibit: Needs + scope, Connected plan, Evidence gate, Resolve risk, Carry learning.

Follow the evidence and decisions

Inspect the supplied case inputs

Open action	Why it matters	Owner
Measurement validation	Can the measured result support the decision?	Metrology lead
Supplier validation	Does supplied input meet the agreed conditions?	Supplier quality
Reaction drill	Can the station contain and escalate an abnormality?	Operations and quality

01 / Restate the launch decision

Tessa names the product/revision, intended production conditions and the specific decision the gate must support. She confirms customer requirements and the applicable planning method.

Why: A gate without scope can be passed using evidence from a different revision or trial condition. A date is not an acceptance criterion.

Evidence / check: The gate agenda states the decision, scope and approval roles.

02 / Map the evidence dependencies

She links measurement validation to interpretation of process trials, supplier validation to representative inputs, and reaction-drill results to the control plan and work instructions.

Why: Open tasks differ in consequence. Dependencies reveal why an apparently small incomplete action can undermine several downstream conclusions.

Evidence / check: The evidence map identifies which claims depend on each unresolved action.

03 / Inspect the actual deliverables

Each owner brings traceable records, their limitations and outstanding findings. Tessa distinguishes a scheduled study from a completed reviewed result and a document upload from accepted evidence.

Why: Administrative completion can hide a missing technical result. The gate must examine what the evidence establishes, not whether a file exists.

Evidence / check: Three action rows contain evidence status and remaining questions.

04 / Assign accountable decisions

The authorized team determines whether the applicable criteria are met, what restrictions or additional work are required, and who owns closure. Tessa does not invent a customer deviation or presume silence means approval.

Why: A conditional decision must have actual authority and explicit conditions. It cannot be manufactured from an optimistic progress score.

Evidence / check: The record names decision owner, scope, conditions and next review.

05 / Carry changes into operating controls

Validated changes flow into PFMEA, control plan, instructions, supplier controls and handover as applicable. The team verifies that the receiving operation can use them.

Why: A launch gate is connected to continuing control, not a ceremony that ends at shipment. Lessons and unresolved risks must reach the people doing the work.

Evidence / check: The handover identifies controlled revisions and receiving owners.

Completed launch-gap decision record

Gap	Required evidence	Gate disposition in this example
Measurement	Reviewed fitness/study evidence	Open; dependent claims qualified
Supplier	Validation under applicable input conditions	Open; owner and next review named
Reaction	Observed drill with corrected gaps	Open; not replaced by attendance
Overall	Authorized criteria-based decision	No automatic launch from percentage

The design changes after validation

A late revision changes a controlled characteristic after the trial evidence was accepted.

Decision

Assess which evidence and controls the revision affects, reopen those dependencies and obtain the required review before using the old acceptance for the new scope.

Reasoning

Prior evidence may remain useful, but applicability must be justified. Relabelling an old report with the new revision would break provenance.

What would change the decision?

A change-impact record identifies reused evidence, necessary revalidation and authority.

Practise with a changed case

Two closed tasks and one consequential gap

New fictional launch has closed packaging review and operator training, but the measurement method for a critical characteristic remains unresolved. The dashboard says 2 of 3 actions complete.

Action	Status
Packaging review	Closed with evidence
Training	Delivered and recorded
Measurement method	Fitness unresolved

Your task

1. Calculate the completion fraction and explain its limit.
2. Map the unresolved method to downstream validation claims.
3. Write a gate decision record that requests the required authority without inventing approval.

Use the next page to record your reasoning before reading the answer.

Your practice worksheet

Two closed tasks and one consequential gap

Scope/revision

Evidence dependency

Open risk

Decision owner

Conditions and next review

Complete your reasoning before turning to the answer. Use the separate learner workbook for group practice.

Check your reasoning and transfer it

1. $2/3=66.7\%$ administrative completion. That fraction does not establish readiness or the significance of the open measurement issue.
2. The method gap may undermine interpretation of validation results for the characteristic. Record the affected claims, required evidence, accountable decision and follow-up; do not declare launch approved from the count.

Suggested completed record

Item	Result	Meaning
Completion	2 of 3=66.7%	Task count only
Measurement	Unresolved	Dependent validation qualified
Gate decision	Authorized review required	No invented approval

Plausible wrong turns

1. A gate is not a task-count threshold.
2. Training attendance does not prove a reaction works.

Evidence of a sound answer

1. Identify the meaningful dependency.
2. Keep revision and authority explicit.
3. Carry open risk into the next review.

Take the learning back to work

Commitment	Agreed follow-through
Owner	Launch leader and receiving process owners
Record	Gate evidence, decision conditions and controlled handover
Review	At defined gates and material changes
Verification evidence	Applicable evidence and verified operational readiness
If unresolved	Reopen affected dependencies and escalate unresolved authority rather than using completion percentage as release permission.

Help someone else apply the method

Prepare

1. Three action cards
2. Dependency map
3. Blank gate record

Minutes	Activity and coaching prompt
5	Name the decision What exactly would this gate authorize?
8	Map dependencies Which claims rely on the measurement action?
10	Work the changed launch Why can one gap matter more than two closures?
5	Debrief handover Who receives the controlled changes?

Debrief

1. Ask for actual evidence rather than a status color.
2. Do not let the exercise imply a universal customer gate or waiver.

Individual or remote practice

Write a one-paragraph gate recommendation with scope, evidence, remaining risk and decision owner.

Connect the method and check its boundaries

Before application

1. Customer and launch scope
2. Owners and dependencies across functions

Outside this lesson

1. A universal complete gate list
2. Release authorization from completion counts

AIAG: APQP 3 and Control Plan 1 launch

AIAG: APQP 3 and Control Plan 1 launch

The 2024 release separates Control Plan 1 from APQP 3 and adds emphasis on launch, change/risk management, traceability and gated planning.

Customer applicability and effective dates differ; this announcement is not a complete requirement set.

[Open this lesson and its visual aids](#)