

USE CASE 05 / COTO PPT 135

AI-assisted design with production approval

Proposed operating design, version 2.0, 28 October 2026. Source concepts are from the COTO presentation; detailed controls, timelines, test gates and charging units are implementation proposals, not PPT quotations or live-service promises. All examples are synthetic. Prices and trade principal remain USD; local labour payments follow mandatory local rules. No invented partners, committed customers, tariffs or efficiency results are asserted.

Business outcome

Reduce avoidable design iteration while protecting design rights, maker knowledge, physical feasibility and explicit customer approval.

Accountable roles

A designer owns the brief and rights review; a weaver/production specialist checks manufacturability; the buyer approves the physical sample and final specification. The AI operator does not decide those approvals.

Required information

Rights-cleared references and permitted uses; construction/loom limits; dimensions and tolerances; palette/material availability; repeat/grid resolution; target effort/cost assumptions; buyer constraints; prohibited motifs/uses; model/vendor/data-handling permission; sample acceptance criteria.

Separate lifecycle states

Brief draft > rights-cleared > candidates-generated > feasibility-screened > sampled > buyer-approved > production-version-released. Rejected candidates never replace the approved design. A new material/design revision repeats the required checks.

THE OPERATING WORKFLOW

From a real input to an approved outcome

01 / Freeze the constraints

Responsible: Buyer + designer + weaver

List fixed versus flexible attributes, including technique, colour count, material, scale and tolerances. Estimate production effort with the maker; do not let a visually attractive rendering conceal an unworkable weave or unpaid labour.

02 / Clear the input rights and data route

Responsible: Rights holder + data owner

Log each reference, owner/licence, permitted generation/use and confidentiality restriction. Obtain separate maker image/story permission if relevant. If the selected AI vendor/data-processing route is not approved, use a rules-based/manual design trial instead of uploading customer files.

03 / Generate a bounded candidate set

Responsible: AI operator + designer

Propose a small fixed maximum set per brief and log model/version, prompt/template, input references, date and cost. Keep drafts clearly synthetic and private. Limit budget and retries; generation is not evidence of ownership, originality or production performance.

04 / Screen and shortlist

Responsible: Designer + production specialist

Apply deterministic checks for dimensions, repeat geometry, palette count and known technique constraints. Review possible copied motifs and licensing issues manually. A similarity tool is a warning aid, not IP clearance. Reject impractical detail before spending on samples.

05 / Sample and cost the actual work

Responsible: Weaver + quality reviewer + buyer

Produce the agreed physical sample, record materials, hours, cost and deviations from the rendering. Buyer and maker assess appearance and feasibility; quantify acceptable handmade variation. Do not release based only on a screen image or inferred AI confidence.

06 / Release one approved specification

Responsible: Designer + buyer + planner

Record authorized approvals, final design version/fingerprint, sample reference, dimensions, materials, tolerances and work instructions. Production uses only that version. Further change requires a documented reapproval and a decision on price/time and work already completed.

CONTROLS AND IMPLEMENTATION

Make exceptions visible

Failure handling and human safeguards

Unclear input licence: stop generation using that reference. Vendor outage: retain manual design route. Repeated constraint failure: stop the run at its budget cap. Suspected copying: escalate before sampling/publication. Sample mismatch or maker effort increase: revise or reject the candidate with buyer agreement; never force unchanged pay for a materially harder design.

Blockchain, AI and private evidence

Begin with a human-operated design tool and structured approval register. A specific model/provider is not selected or integrated. External AI processing needs an approved contract/data route and no-training terms where required. An optional later ledger digest timestamps the approved version only; it does not grant copyright or prove originality.

Start with the existing pilot

Use a manually prepared brief, rights register, candidate log and physical sample approval. The existing lot can reference an approved design version through its title/evidence description, but that is not a structured design-management service.

Additional software required

Add private asset/version storage, input licences, prompt/run metadata, deterministic feasibility rules, sample approval records and a model-cost ceiling. Link released designs to production work orders. Benchmark before choosing an AI subscription or making efficiency claims.

Current boundary: invited profiles, lot/order records and approvals, selected fulfilment events, invoices, operator-attested receipts, balances and protected private audit are configured. Several actions are API-only. Public blockchain worker, payments/crypto/escrow, AI, bidding, public passport resolver, evidence-vault uploads and the richer registers described here are not activated by publishing this design. Roles are proposed functions to assign and resource, not additional named team appointments.

PILOT AND COMMERCIAL VALIDATION

Prove the mechanism before scaling

Synthetic worked scenario

Compare five representative rights-cleared briefs against the same manual baseline. Allow up to six candidates and two samples per brief as proposed pilot limits, not service promises. Keep original maker inputs and record all rejected candidates and reasons.

Required acceptance tests

Supply an unlicensed reference, ask for a fourth colour in a three-colour brief, change the buyer-approved file and simulate vendor unavailability. Confirm no rejected design enters a work order and manual fallback remains possible.

Measures and go/no-go

Time from complete brief to approved physical sample; maker hours and sample cost; constraint-failure rate; rights exceptions; buyer rejection/rework. A useful pilot must reduce total effort/cost without worsening quality, rights or producer remuneration.

Proposed payer, charging unit and cost drivers

Proposed payer: manufacturer/buyer under a fixed design-support or clearly capped project order. Track vendor generation cost, designer time, maker sample pay and rework. No undisclosed licence transfer, unlimited generation charge or free extraction of artisan designs.

Pilot sign-off record

Before execution, assign the actual responsible people, permitted data source, cohort/route, approved costs, test dates, evidence reviewer and release authority. Record each test outcome, unresolved exception, manual fallback and rollback procedure. Do not activate an unapproved model, payment provider, public-chain transaction or unsafe equipment connection.

Source and scope

COTO presentation slides 135. Detailed operating steps, test cases and commercial units are new implementation proposals. Read operating-model.pdf for shared controls, templates, release gates and primary technical references. The legal pack remains draft until completed and reviewed.