

ADAPT for the 4P's Continuous Improvement Model

Integrated with the 4Ps Framework: People • Planet • Process • Profit (Together, it creates a holistic, regenerative CI system that meets Lean + ISO requirements while advancing ESG goals and competitive advantage).
ADAPT remains a simple, structured, Gemba-based cycle (Assess → Determine → Amend → Prevent → Train). The upgrade embeds the 4Ps at every step so every improvement simultaneously strengthens:
• People – safety, ergonomics, engagement, skills, morale, equity
• Planet – resource efficiency, waste/emissions reduction, circularity, energy & water
• Process – flow, standard work, quality, reliability, visual management, digital enablement
• Profit – cost, productivity, OTIF, inventory turns, risk reduction, long-term value

A – Assess the Situation (Go to Gemba, observe reality, collect multi-dimensional facts)

Core intent (unchanged): See the process as it actually runs before proposing solutions. 4P-enhanced structure:

4P Lens	What to Observe / Measure	Innovative Tools & Practices
People	Ergonomic strain, cognitive load, team communication, near-misses, engagement signals	Wearable sensors or simple “effort mapping”; real-time voice-of-operator capture via mobile app; diversity of observers (include night-shift, contractors)
Planet	Energy use, packaging waste, water, scrap, transport emissions, material over-consumption	IoT power meters on equipment; waste stream photography + mass balance; carbon-footprint quick calculator linked to WMS data
Process	Flow interruptions, motion, waiting, inventory piles, layout friction, digital/system gaps	Enhanced spaghetti + value-stream map with carbon & ergonomic overlays; time-motion + digital process mining
Profit	Cost of delays, rework, overtime, lost capacity, inventory carrying cost	Live KPI dashboard pulled during Gemba (accuracy, OTIF, cost/pick, energy cost/unit)

Innovative addition – “4P Snapshot”: In ≤15 minutes the team scores the current state on a simple radar chart (People/Planet/Process/Profit) so imbalances become visible immediately.

Key Questions (4P-expanded):

What is happening for the people who do the work? For the environment the process touches?
For the process itself? For P&L?

D – Determine the Problem (Define the gap with precision and multi-dimensional impact)

Core intent: Separate symptoms from the real issue and quantify the full cost of the gap. 4P-enhanced structure:

- Write a 4P Problem Statement using the template:
“In [process], [metric] is currently X versus target Y, creating [People impact], [Planet impact], [Process impact], and [Profit impact of \$Z / month].”

Example (warehousing):

“Order-picking error rate is 2.8 % (target <0.5 %), causing 47 returns/month → operator frustration & overtime (People), 180 kg extra packaging waste + transport emissions (Planet), rework loops that destroy flow (Process), and \$X extra cost + lost customer trust (Profit).” Innovative tools:

- Multi-impact Pareto (errors ranked by combined People + Planet + Profit score)
 - “True Cost of Quality / Waste” calculator that monetizes safety risk, carbon, and lost capacity
 - Scope boundary that explicitly includes or excludes upstream/downstream 4P effects
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A – Amend for Solution (Generate and select countermeasures that improve all four Ps)

Core intent: Choose the highest-leverage solution(s) with least disruption.

4P-enhanced structure:

1. Brainstorm freely, then score every idea on a 4P Impact/Effort Matrix (axes = combined 4P benefit vs effort).
2. Prefer solutions that create positive interactions (e.g., better slotting reduces travel → less fatigue + less energy + higher picks/hour + lower cost).

Innovative practices:

- “Regenerative brainstorming” rule: every idea must improve at least two Ps and not degrade any.

- Rapid digital twins or AR layout trials to test planet + process effects before physical change.
- Inclusion of operators as co-designers (People) and circular-economy specialists when relevant (Planet).

Warehousing example:

Revised slotting + pick-to-light + reusable totes + dynamic lighting that dims when aisles are empty → accuracy ↑, energy ↓, fatigue ↓, cost ↓.

P – Prevent Recurrence (Eliminate root causes systemically so the problem cannot return in any of the 4Ps)

Core intent: Mistake-proof the system. 4P-enhanced structure:

- Run classic 5 Whys / Fishbone, then layer a second pass asking: “Why did this root cause also harm People / Planet / Process / Profit?”
- Design poka-yoke that protects all four dimensions simultaneously.

Innovative tools & actions:

- 4P FMEA – Severity scored on safety, environmental, process reliability, and financial impact.
- “Systemic guardrails”: visual + sensor + procedural controls that also reduce energy or material use.
- Circular design principles (design out waste at source rather than manage it downstream).

Example actions:

Sensors that stop a conveyor on jam (Process + People safety) while logging energy spikes (Planet) and triggering automatic maintenance tickets (Profit).

T – Train & Standardize (Embed the new way so it becomes the permanent, multi-P standard)

Core intent: Make the improved state the new normal and sustain it. 4P-enhanced structure:

Element	4P Integration
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SOPs & Visual Standards	Include ergonomic cues, energy-saving steps, quality checkpoints, and cost-of-deviation notes
Training	Competency matrix covers technical skill + safety mindset + environmental awareness + commercial impact understanding
Sustainment Audits	Daily/weekly layered process audits now score all four Ps; digital dashboards show real-time 4P health
Knowledge Sharing	Cross-site “4P Improvement Library” so one site’s planet win becomes another’s profit win
Recognition	Celebrate teams that deliver balanced 4P results, not just cost or output gains

Innovative addition – “30/90-day Regenerative Review”:

At 30 and 90 days the team re-scores the original 4P radar chart. The improvement is only closed when all four dimensions have improved or held, and at least one has a stretch (regenerative) gain.

Updated Facilitation & Success Metrics

Team composition (enhanced): Operators + supervisors + engineers + safety + quality + sustainability/ESG + finance representatives.

New Success Metrics (track these):

- Number of ADAPT projects completed
- % of improvements still delivering 4P gains at 30/90 days
- Balanced scorecard movement: safety incidents, engagement scores, CO₂e or waste intensity, process capability, cost per unit / OTIF / productivity
- “Synergy Index” – percentage of projects that improved ≥3 of the 4Ps