COECOSYSTEM WHITEPAPER

Business improvement and problem solving methodologies

How to choose and combine nineteen common approaches

A guide for leaders and improvement practitioners who need to understand the available approaches, select methods that fit the problem and turn an improvement initiative into sustained business performance.

CoEcosystem Pty Ltd

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Executive overview

Business improvement works best when the approach fits the performance problem. A queue, an inconsistent outcome, an unmet customer need and a difficult organisational transition require different kinds of investigation and intervention. Familiarity with a method is useful, but it should follow a clear understanding of what needs to improve.

This whitepaper explains and compares nineteen common approaches, from Lean and Six Sigma to Human Centred Design, Scrum and ADKAR. We organise them by their primary contribution to an improvement initiative. The categories help readers navigate the options; many approaches contribute across several categories and can work together.

We recommend examining the system first, establishing the performance gap, and identifying the uncertainty that matters. Then choose a lead approach and add complementary practices where they serve a defined purpose. For example, a warranty claims initiative may use Lean to remove duplicate work, Human Centred Design to test the customer journey and Kanban to manage the operational queue. ADKAR can support the people who need to use the resulting process.

The distinctions matter. Six Sigma is an improvement methodology that commonly uses DMAIC. Agile provides values and principles for adaptive delivery. Scrum is a specific framework, while Kanban is a method for managing and improving workflow. ADKAR addresses individual adoption, and Kotter addresses organisational mobilisation. Selecting between them as if they were interchangeable can leave a significant part of the problem untreated. [2, 3, 16–21]

Leaders should judge improvement by observable business outcomes. Shorter lead time, fewer errors, lower customer effort and more reliable service provide stronger evidence than the number of workshops, process maps or training completions. The measure must fit the intended benefit and cover the whole system affected by the change.

The descriptions draw on framework owners and established professional bodies. The selection guidance, comparison tables and worked example are CoEcosystem synthesis. They describe practical fit rather than a universal ranking or a quantified comparison of effectiveness. The example illustrates a possible approach and does not report a client result.

Reading guide

The method profiles explain purpose, application and limitations. The comparison matrix provides a quick reference. The selection guide and illustrative case show how to build an approach around a defined performance problem. The final sections cover measurement, supporting tools and source material.

Foreword

Business improvement begins with clarity about what needs to work better, for whom, and why. Yet organisations often begin by selecting a methodology, commissioning a technology solution or launching a programme before they fully understand the conditions producing the problem. Activity gathers momentum. Workshops are held, processes are mapped, and dashboards are built.

The harder question remains: is the organisation actually performing better?

The methodologies explored in this whitepaper offer valuable ways to investigate and improve performance, and each contributes a useful perspective. However, their value depends on how thoughtfully they are applied within the wider business system.

At CoEcosystem, we view organisations as human, interconnected and adaptive systems. Performance emerges from the relationships between people, processes, technology, data, incentives and decision rights. Understanding these relationships is fundamental to designing improvements that work in practice.

This philosophy shapes CoEcosystem's operations optimisation method. Its distinctive contribution is how it brings diagnosis, method selection, multidisciplinary delivery, and accountability together around an agreed business outcome. It provides a coherent structure within which established methodologies can make their strongest contribution. We select the right tool for the question, the available evidence, and the project phase, adapting the approach as our understanding improves.

The human dimension runs through every phase. Our philosophy emphasises clarity before tools, trust before candid diagnosis, and systems that make effective action easier. People need to understand the purpose, feel able to surface problems and have the capability to act. We make assumptions and data limitations visible, improve evidence progressively and use proportionate testing to support decisions. Early wins build confidence; feedback helps teams learn; clear expectations allow empowerment and consistency to coexist.

CoEcosystem's delivery model reinforces this discipline through embedded multidisciplinary capability, defined outcomes and structured decision gates.

This whitepaper explains nineteen common improvement approaches so leaders can understand their strengths, recognise their boundaries and combine them with purpose. Read through the CoEcosystem lens, they become resources for a larger task: helping the organisation work better as a whole, using the appropriate method at the right phase, and leaving it better able to improve again.

Nikan Rezvani



Managing Director

CoEcosystem

The methodology landscape

The word methodology often becomes a convenient umbrella for several different things. A philosophy shapes how people think about work. A methodology gives a structured approach to improvement. A framework sets boundaries and accountabilities. A diagnostic approach helps explain what is happening. A tool performs a particular analytical task.

Lean combines a management philosophy with practical improvement methods. Kaizen describes a discipline of continuous improvement. PDCA and PDSA provide learning cycles. DMAIC structures an improvement project. A3 brings disciplined reasoning, communication and coaching together. These relationships explain why one approach may contain or support another. [1, 3–6, 9]

1	**Process and quality**	Lean · Six Sigma · Lean Six Sigma Kaizen · PDCA and PDSA · Theory of Constraints
2	**Problem diagnosis**	Root Cause Analysis · A3 Problem Solving Eight Disciplines
3	**Process and system design**	Business Process Management Business Process Reengineering · Systems Thinking
4	**Solution design and delivery**	Human Centred Design and Design Thinking Agile · Scrum · Kanban
5	**Adoption and mobilisation**	ADKAR · Kotter

Figure 1 Nineteen approaches grouped by their primary contribution - CoEcosystem synthesis

Agile and Scrum also operate at different levels. The Agile Manifesto sets values and principles. Scrum specifies accountabilities, events and artifacts for adaptive work. A team can apply Agile principles through approaches other than Scrum. Kanban can complement Scrum or improve an existing service on its own. [16–19]

Human Centred Design and Design Thinking overlap substantially. Both use research and iterative testing to develop people-centred solutions. IDEO describes Design Thinking as balancing human needs with technical feasibility and business viability. The Double Diamond is one way to represent design activity. [14, 15]

The landscape above groups each approach by the contribution most relevant to this paper. It is a navigation aid. Systems Thinking, for example, should also influence process improvement, design, implementation and measurement.

Improving flow and quality

1. Lean

Lean focuses on customer value, less wasted effort and better flow. Teams examine the full value stream, identify interruptions and redesign work around demand. Practices include value stream mapping, standardised work, visual management and small experiments. [1, 23]

Use Lean for waiting, duplicate entry and avoidable handovers. Observe elapsed time, touch time, queues and rework. The work should produce a simpler process, clear standards and a routine for reviewing performance.

An onboarding team might combine duplicate information requests. Preserve necessary controls and examine downstream effects: removing an approval may shorten one step while increasing risk or rework elsewhere.

2. Six Sigma

Six Sigma reduces variation and defects through structured, evidence-based investigation. DMAIC commonly guides improvement of an existing process: Define, Measure, Analyse, Improve and Control. DMAIC can also be used independently of a Six Sigma programme. [2, 3]

Use it when outcomes are inconsistent, defects matter and causes need analysis. Validate measurement definitions and data quality before statistical investigation. Seek verified causes, tested interventions and a control plan.

A billing team might investigate different rejection rates across payers. Match analytical depth to the decision. A simple, observable problem may need a short experiment; a complex variation problem may justify specialist analysis.

3. Lean Six Sigma

Lean Six Sigma combines Lean practices for value and flow with Six Sigma practices for variation and defects. It draws on both approaches to improve speed and consistency in one effort. [2]

Use the combination when work is both slow and unreliable. Map the process, remove unnecessary handovers and investigate remaining errors. Useful outputs include redesigned flow, fewer defects and standards that sustain the changes.

A claims team might address duplicate checks and inconsistent eligibility rules together. Give each technique a clear purpose. A longer checklist of methods increases effort unless it improves evidence or outcomes.

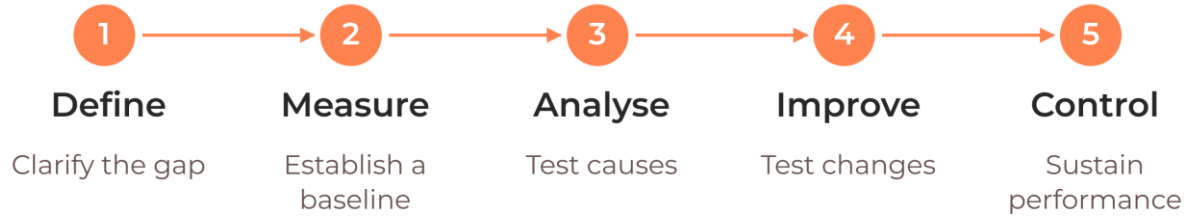


Figure 2 DMAIC for improving an existing process - Adapted from ASQ [3]

Continuous improvement and constraints

4. Kaizen

Kaizen means continuous improvement through regular, incremental changes involving the people who perform the work. It includes everyday improvements and focused events. PDCA supports learning, while updated work standards provide a baseline for the next change. [4]

Use Kaizen to build a routine of identifying friction, testing changes and reviewing results. Supervisors need to provide time and help resolve obstacles beyond the team's authority. Outputs include revised standards and a record of tested improvements.

A service team might simplify a confusing form field. Connect local ideas to the whole service: a structural problem may require wider redesign or a leadership decision.

5. PDCA and PDSA

PDCA means Plan, Do, Check, Act. PDSA replaces Check with Study and emphasises learning from a test. Both encourage repeated cycles. In PDSA, Do conducts the experiment; Act decides whether to adopt, adapt or abandon the change. [5, 6]

Use these cycles for manageable tests. Define the gap, explain the mechanism and predict a result. Collect evidence, compare the result with the prediction and decide the next action.

Test an appointment reminder with a defined group before wider use. Keep the test interpretable: changing message, timing and channel together can obscure what helped. Use PDCA and PDSA terminology deliberately.

6. Theory of Constraints

Theory of Constraints focuses on what limits the system's goal. Its five focusing steps are to identify the constraint, exploit existing capacity, subordinate other work, elevate capacity where necessary and repeat when the constraint moves. Constraints may involve capacity, demand or policy. [7]

Use TOC when overall throughput stays limited despite local improvements. Examine demand, capacity, queues and work release. Establish operating rules that protect the constrained activity.

A claims service might protect specialist assessment time by checking completeness upstream. Verify the limiting factor with evidence. The largest visible queue signals a problem but does not establish the true constraint.

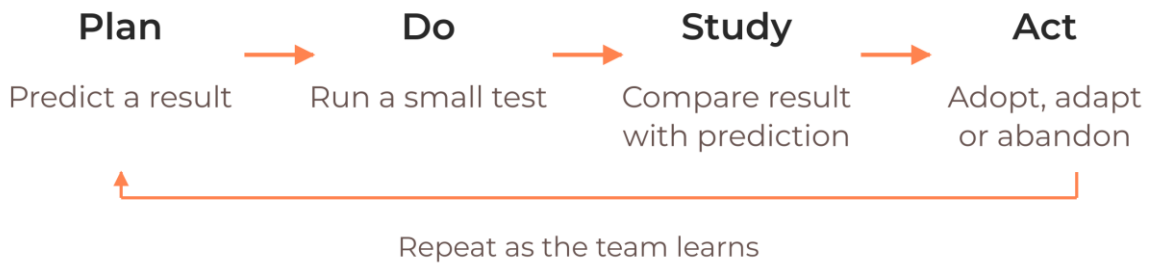


Figure 3 The PDSA learning cycle. Adapted from the Deming Institute [6]

Investigating and resolving problems

7. Root Cause Analysis

Root Cause Analysis is a family of approaches for investigating why a problem occurred. Teams use observations, event records and process evidence to test causal explanations. Complex problems may involve several interacting causes. [8]

Use RCA for recurring errors, failures or unexplained performance gaps. Separate observations from hypotheses and verify the proposed mechanism. The output should connect causal and contributing factors to corrective action.

Investigate why invoices use an obsolete rate. A fishbone diagram organises possibilities; it does not prove causality. Where people make an error, examine information, workload, controls and incentives alongside the action itself.

8. A3 Problem Solving

A3 combines disciplined problem solving, a concise record of reasoning and management coaching. The traditional A3-sized report covers the problem, current condition, analysis, countermeasures and follow-up. Its value comes from the thinking and dialogue behind the page. [9]

Use A3 when people need a shared understanding of an operational gap and coordinated action. Use observations and tested causes to support countermeasures. Make uncertainty visible and agree how the team will learn whether actions work.

An A3 might coordinate recruitment and payroll to reduce onboarding delays. Build the reasoning before choosing the solution. Completing a template afterwards can conceal unsupported assumptions.

9. Eight Disciplines

8D coordinates corrective action through team formation, problem definition, containment, verified root causes, selection and verification of corrections, implementation and validation, recurrence prevention and team recognition. Some organisations add D0 planning. [10]

Use 8D for significant or recurring defects needing immediate containment and a lasting response. Investigate both occurrence causes and why controls failed to detect the problem. Produce validated corrections and improvements to the control system.

A supplier defect might require temporary quarantine during investigation. Distinguish containment from correction. Extra inspection can protect customers temporarily, but should not automatically become the permanent operating model.

Approach	Distinct contribution
RCA	Investigate and verify causal explanations.
A3	Make the reasoning visible and coordinate learning and follow-up.
8D	Coordinate containment, correction and prevention of recurrence.

Designing processes and understanding systems

10. Business Process Management

BPM provides an ongoing discipline for defining, governing, measuring and improving organisational processes. It establishes ownership, documentation, measures and review routines. Technology supports the operating model where useful. [11]

Use BPM where responsibilities are unclear, practices vary, or performance disappears between departments. Examine process maps, rules, interfaces and outcomes. Outputs include process architecture, named owners, standards and improvement priorities.

A national organisation might define one employee change process with explicit local exceptions. Keep governance connected to actual work. A process repository creates value when people use it to operate the service and make decisions.

11. Business Process Reengineering

BPR fundamentally redesigns how a process achieves its purpose. It challenges inherited sequences, roles and assumptions. Technology may enable a new model, but the redesign concerns the process as a whole. [12]

Use BPR when the current architecture cannot meet the desired outcome. Examine needs, performance, dependencies and feasible alternatives. Produce a new process model, revised roles and a transition plan.

An organisation might replace separate intake channels with an integrated case service. Stage the transition and test the design. Establish how staff and customers will continue to work while the new operating model takes shape.

12. Systems Thinking

Systems Thinking examines relationships, feedback and behaviour across a whole system. It asks how structures and interactions produce observed outcomes. Different traditions offer different methods; it is a broad discipline rather than one prescribed sequence. [13]

Use it for problems crossing boundaries, delayed effects or fixes that create new problems. Examine perspectives, incentives, demand and feedback. Outputs include a clearer system boundary and hypotheses about useful interventions.

Backlog pressure may encourage bypassed checks, causing rework that expands the backlog. Connect the map to decisions: test the relationship and monitor effects. A diagram alone does not establish an explanation.

BPM establishes continuing ownership. BPR changes the process architecture. Systems Thinking helps the team understand the interactions that either approach must address. A redesign can therefore use all three without confusing their separate contributions.

Designing around human needs

13. Human Centred Design and Design Thinking

Human Centred Design starts with the people affected by a service or product. Teams research their needs and context, develop possibilities and test prototypes with them. Design Thinking shares this foundation and commonly balances what people need with what is technically feasible and commercially viable. [14]

Use these approaches when the problem or preferred solution is uncertain, or when an apparently efficient service remains difficult to use. Research may include observation, interviews, journey mapping and prototype testing. Useful outputs include validated needs, a clearer problem statement and evidence about the proposed design.

The Double Diamond depicts four connected activities: Discover, Define, Develop and Deliver. The first diamond broadens and then focuses understanding of the problem. The second broadens and then focuses potential solutions. Teams can return to earlier activities as they learn. [15]

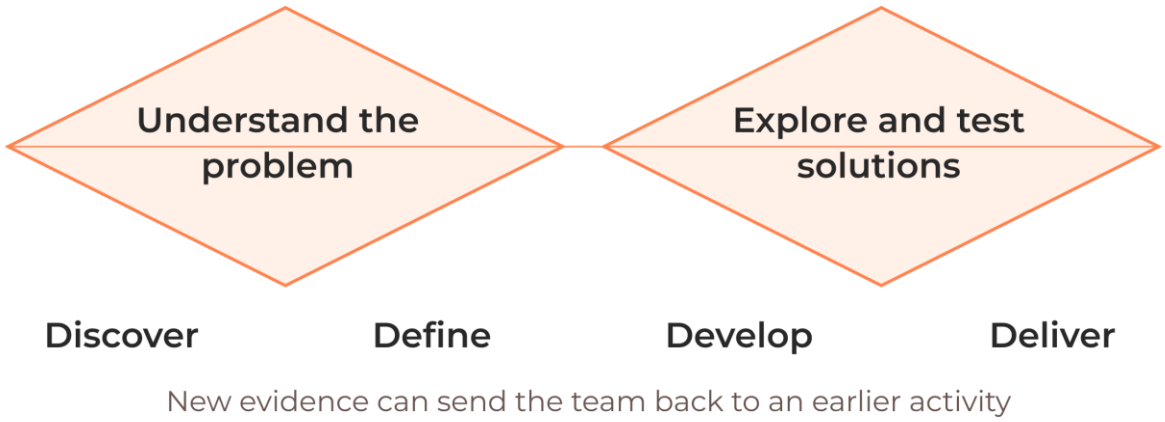


Figure 4 The Double Diamond Adapted from Design Council under CC BY 4.0 [15]

For example, a claims portal team could observe how customers gather purchase evidence before deciding which upload controls to build. We caution against excluding people with different capabilities and circumstances, particularly those who need assistance. A design that works in a workshop may fail under everyday conditions.

14. Design questions that improve the evidence

Who needs to achieve what, and under which conditions? Where does the current journey become difficult? What assumption does the prototype test? What would make the solution usable for someone who needs assistance? These questions connect research and testing to a concrete design decision.

Delivering work under uncertainty

15. Agile

Agile provides values and principles originating in software development. It emphasises collaboration, frequent useful delivery, responsiveness to change and reflection. It guides how teams work without prescribing one universal process. [16, 17]

Use Agile principles where requirements or solutions evolve and feedback can inform decisions. Teams need a clear purpose, stakeholder access and authority to reprioritise. Useful outputs are working increments and decisions grounded in their use.

A portal team might evaluate a complete submission journey before extending the service. Retain necessary governance and quality standards. Frequent changes only become useful adaptation when evidence connects them to a clear purpose.

16. Scrum

Scrum is a framework for adaptive work on complex problems. It defines the accountabilities of the Product Owner, Scrum Master, and Developers; Sprints of one month or less; five events; and three artifacts with explicit commitments. [18]

Use Scrum where a team can deliver useful increments towards a shared Product Goal. Planning, Daily Scrums, reviews and retrospectives support inspection and adaptation. A Definition of Done establishes the quality required for an Increment.

A portal team might deliver increments supporting complete user tasks. Provide decision authority and manageable dependencies. Scrum does not require story points or particular software. Meetings alone do not create useful learning.

17. Kanban

The Kanban Method manages and improves knowledge-work flow. It visualises work, limits work in progress, clarifies policies and uses flow information and feedback to evolve the service. A board supports the method but does not represent all its practices. [19]

Use Kanban for queues and requests with variable arrivals. Review work in progress, throughput, cycle time and unfinished-item age. Establish prioritisation and capacity policies that support reliable completion.

A claims team might limit cases awaiting specialist assessment and investigate ageing work. Measure completion and customer outcomes. Kanban can operate without Sprints and can complement Scrum; a board alone does not prevent overload.

Approach	What it provides
Agile	Values and principles for adaptive delivery.
Scrum	A defined framework with Sprints, accountabilities and artifacts.
Kanban	An evolving method for managing and improving service flow.

Supporting adoption and mobilisation

18. ADKAR

Prosci's ADKAR model describes five outcomes for individual change: Awareness of the need, Desire to participate, Knowledge of how to change, Ability to perform the new behaviour and Reinforcement to sustain it. These are adoption outcomes rather than a list of project activities. [20]

Use ADKAR to understand what is preventing a person or group from adopting a new way of working. Conversations, observed practice and targeted feedback provide useful evidence. Outputs include support that addresses the specific barrier, such as a clearer explanation, practical coaching or changed reinforcement.

For example, staff may understand a new billing rule but lack confidence applying it to exceptions. Our caution is to examine the work environment alongside individual needs. Training cannot resolve missing system access, conflicting targets or a process that is difficult to perform.



Figure 5 Individual adoption and organisational mobilisation Adapted from Prosci and Kotter [20, 21]

19. Kotter

Kotter's approach supports organisational mobilisation. Its current formulation covers urgency, a guiding coalition, strategic vision, broad participation, barrier removal, short-term wins, sustained acceleration, and institutionalisation. Kotter describes the development from the original linear eight-step model to a more dynamic set of accelerators. [21]

Use it when change requires leadership commitment and cross-functional participation. Useful evidence includes sponsorship, decision bottlenecks, engagement and whether management systems reinforce the intended behaviour. Outputs may include a coalition, a shared direction and action to remove organisational barriers.

For example, an integrated service redesign may need leaders to agree on ownership and revise performance targets across departments. Our caution is to connect mobilisation to observable service improvements. Communications and visible sponsorship help implementation, but the operating design must also work. Kotter can complement ADKAR by addressing a different level of change.

Both models can support implementation, but neither supplies a complete process design or a technical solution. Use them alongside the evidence and operational changes needed to improve the service.

Comparison of improvement and problem solving approaches

This matrix summarises the primary fit of each approach and the evidence or outputs a team should expect. The watch-outs are CoEcosystem application guidance. They help assess how an approach is being used, rather than rating the approach itself.

Approach	Primary purpose	Evidence and output	Watch out
Lean	Customer value and flow	Observe work and queues; redesign flow and standards.	Removing necessary controls or shifting delays elsewhere.
Six Sigma	Variation and defects	Trustworthy measurements; verified causes and a control plan.	Complex analysis without a useful decision.
Lean Six Sigma	Flow and consistency together	Process observations and defect data; tested process changes.	Using a large toolkit without a clear purpose.
Kaizen	Regular incremental improvement	Frontline ideas and small tests; updated work standards.	Local ideas that ignore wider dependencies.
PDCA and PDSA	Learning through repeated tests	Prediction and test results; adopt, adapt or abandon.	Rolling out a solution without studying the result.
Theory of Constraints	System throughput at the constraint	Demand and capacity; rules that protect the limiting activity.	Treating the largest queue as proof of the constraint.
Root Cause Analysis	Causes of an observed problem	Event and process evidence; verified causal explanation.	Treating plausible explanations as established causes.
A3 Problem Solving	Shared reasoning and follow-up	Observed gap and tested causes; concise problem narrative.	Filling a template after deciding the answer.
Eight Disciplines	Containment and lasting correction	Defect and detection evidence; validated corrective action.	Keeping temporary containment indefinitely.

Sources for the descriptions [1–10, 23]. RCA can sit inside DMAIC, A3 or 8D. Kaizen can use PDCA. Lean and Six Sigma can be combined when the problem includes both flow and variation.

Comparison of design delivery and adoption approaches

The approaches below address different parts of an initiative. Several may be needed where the work spans operating design, product development and adoption. The same outcome measures should connect their contributions.

Approach	Primary purpose	Evidence and output	Watch out
Business Process Management	Ongoing process governance	Process architecture and measures; ownership and review.	A repository that does not influence operations.
Business Process Reengineering	Fundamental process redesign	Needs and dependencies; new design and transition plan.	Disruption from an untested large change.
Systems Thinking	Interactions and feedback	Multiple perspectives; system map and intervention hypotheses.	A map without testable implications.
Human Centred Design and Design Thinking	Fit with people and context	Research and prototype tests; validated needs and design.	Assuming one user group represents everyone.
Agile	Adaptive delivery through feedback	Use of working increments; revised priorities.	Changing work without a clear purpose or evidence.
Scrum	Structured adaptive product work	Goals and usable increments; inspected progress and adaptation.	Ceremonies without authority or useful increments.
Kanban	Flow of a service or work queue	WIP, age and cycle time; explicit capacity policies.	Displaying work while allowing overload to grow.
ADKAR	Individual adoption	Observed behaviour and barriers; targeted support.	Assuming training resolves every adoption barrier.
Kotter	Organisation-wide mobilisation	Leadership and participation; coalition and barriers removed.	Visible activity without changes in operating conditions.

Sources for the descriptions [11–21]. Scrum is a specific framework. Agile is broader. ADKAR supports individual adoption, while Kotter supports mobilisation across the organisation.

Selecting an approach

Method selection starts with a precise performance gap. Name who experiences the problem, where it occurs, how often it occurs and why it matters. Establish the boundary of the system and check whether the gap reflects waste, variation, a constraint, an unmet need, delivery uncertainty or an adoption barrier.

Treat this classification as a working hypothesis. A long queue can reflect avoidable steps, missing information, insufficient capacity or a policy that releases too much work. Observations and data should help the team distinguish these explanations before committing to a major intervention.



Figure 6 Starting approaches for different problem signals CoEcosystem synthesis

Choose a lead approach for the most important uncertainty. Add another approach when it addresses a different need. RCA can support DMAIC. Human Centred Design can inform a Scrum backlog. BPM can establish ownership after BPR. ADKAR and Kotter can support implementation throughout, rather than appearing only at the end.

The infographic gives starting points rather than exclusive rules. A significant service or quality incident also requires prompt containment while investigation continues. Scale the analytical effort to the consequence of getting the decision wrong, the reversibility of the change and the quality of available evidence.

Combining approaches in one initiative

Consider a warranty claims service with incomplete submissions, repeated customer contact and a growing assessment queue. The organisation is considering a self-service portal. This is an illustrative scenario. It contains no assumed savings or reported client results.

First, establish the system. Trace the journey from a customer's initial need to a final resolution, including retailers, intake staff, assessors and finance. BPM helps identify process ownership. Systems Thinking helps the team examine how submission quality, incentives and queue policies interact. Define a baseline before treating the portal as the answer.

Next, investigate the performance gap. Lean can identify duplicate checks and unnecessary handovers. RCA, supported by DMAIC where the measurement problem justifies it, can test why submissions are incomplete. TOC can examine whether specialist assessment, a policy or another factor limits overall throughput. Contain any material service failures while the investigation proceeds.

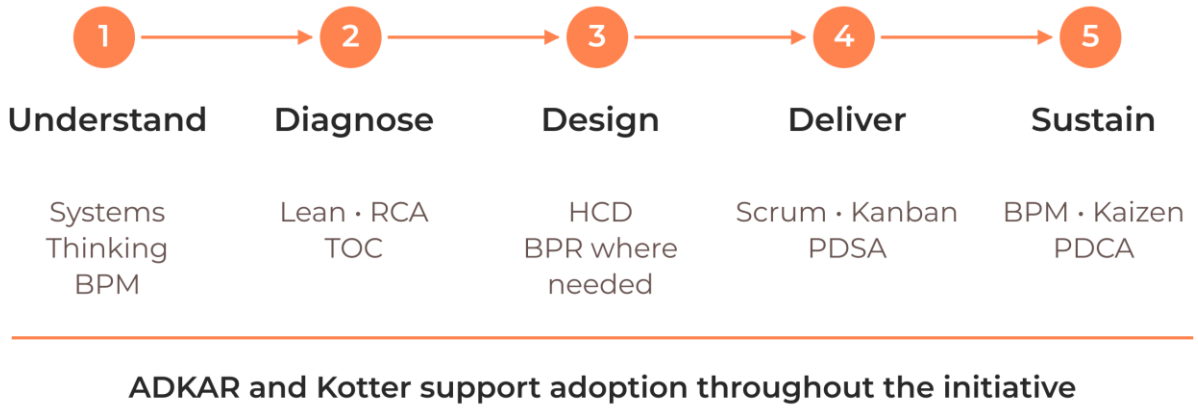


Figure 7 A possible combination for the illustrative claims service Select methods according to the verified need

Then design with users. Human Centred Design can reveal what customers know at the point of submission and where they need help. Test alternatives such as simpler questions, clearer evidence requests and assisted pathways. Use BPR if achieving the desired outcome requires a fundamental redesign of intake and ownership.

For product development, Scrum can organise a team around useful portal increments if the required accountabilities and dependencies are in place. Kanban can manage the continuing operational claims queue. These serve different purposes and may operate at the same time. PDSA can support smaller tests within the wider initiative.

Throughout implementation, Kotter can help leaders remove organisational barriers, while ADKAR can identify what staff need to perform the revised process. After launch, BPM assigns ongoing ownership, and Kaizen supports further improvement. Review resolution time, repeat contact, submission quality and observed adoption together. A faster portal submission is valuable only if it improves the service outcome.

Measuring outcomes and sustaining improvement

A method provides a way to investigate and act. It does not define success for the organisation. Before starting, agree on the outcome, the baseline, the measurement owner and the conditions under which the team will expand, revise or stop an intervention.

Combine a small set of outcome measures with indicators of process performance and adoption. Lead time shows how long customers wait. Rework indicates how much effort returns to the process. Observed behaviour shows whether the new way of working operates in practice. Measures should distinguish the benefit from the activity intended to create it.

Measure family	Possible measures	Interpretation
Customer outcome	Resolution time, repeat contact, customer effort	Check the complete journey and assisted pathways.
Quality	Defect rate, first-time-right rate, recurrence	Define the defect and the denominator consistently.
Flow	Lead time, throughput, work in progress, work item age	Check case mix and whether queues moved elsewhere.
Capacity and cost	Realised task time, available capacity, actual expenditure	Keep released time and cash savings separate.
Adoption	Observed use and correct performance of the new process	Completion of training is an input, not proof of ability.
Sustainability	Performance over time and response to drift	Name the process owner and the review routine.

Compare like with like when reviewing results. Account for changes in volume, case complexity, staffing and seasonality. Use a suitable observation period and inspect patterns over time. A change in the average can conceal a worse experience for complex cases or a new burden on another team.

Separate capacity released from cash savings. Minutes removed from a task can create available time. Cash savings require an identified change in actual expenditure. Capacity estimates should use the eligible transaction volume, realised time saving and adoption rate, with assumptions visible and overlapping benefits removed.

At each review, ask what changed, whether the evidence supports the proposed mechanism and whether the gains persist. Assign someone to respond when performance drifts. Where the process changes again, update the standard and the measurement definition so that ongoing comparisons remain meaningful.

Supporting tools and common mistakes

Tools perform a specific task within a wider approach. Select a tool according to the question the team needs to answer. A diagram, chart or worksheet becomes useful when it improves the evidence or the decision. FMEA means Failure Mode and Effects Analysis. [22, 23]

Tool	What it helps with	How to use it carefully
5 Whys	Explore a possible chain of causes	Verify each link and investigate alternative explanations.
Fishbone diagram	Organise possible contributing factors	Use the categories to prompt investigation, not confirm causes.
Pareto chart	Prioritise categories by frequency or impact	Frequency and severity can lead to different priorities.
Process map	Show activities, decisions and handovers	Compare the documented process with what people actually do.
Value stream map	Examine end-to-end work and information flow	Include waiting and timing data, not only activity boxes.
FMEA	Anticipate failure modes and prioritise preventive action	Keep scoring and assumptions transparent and revisit them.
Control chart	Study process behaviour and signals over time	Choose an appropriate chart and use consistent definitions.

Common application mistakes

- A familiar method can dominate the diagnosis. Ask which uncertainty the selected approach will resolve and what evidence could change the choice.
- Local optimisation can transfer work to customers or other teams. Review the complete service outcome and the distribution of effort.
- A workshop can turn plausible explanations into accepted facts. Record hypotheses and decide how each important causal claim will be tested.
- A new system can reproduce an old process with the same defects. Review rules, ownership and user needs before automating the work.
- Training and communications can appear successful while adoption remains weak. Observe whether people can perform the revised process under normal conditions.
- An improvement can fade after project closure. Name the ongoing owner, establish a review routine and update standards as the team learns.

Sources for the framework descriptions

Sources were consulted on 30 September 2026. Numbered references link the descriptions and adapted infographics to their source material. CoEcosystem's examples and selection guidance interpret the methods for business improvement.

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About CoEcosystem

CoEcosystem supports performance improvement through process optimisation, operational excellence, customer experience, data and analytics, technology enablement, adoption and capability uplift. We start with the performance problem, examine the system and build an approach around the outcome the organisation needs.

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