

OPERATING CASE STUDY / STRATEGY & CAPITAL ALLOCATION

Operating Investment & Incremental Value

Rank operating initiatives by the value they add to the existing portfolio

An operating-project case on finding the next useful intervention in an established delivery network. It examines a mechanism-gap analysis, corrects its measurement and benefit logic, and designs a test of portfolio selection and mature outcomes.

OPERATING STRATEGY & PORTFOLIO VALUE

BLUF / BOTTOM LINE UP FRONT

Fund the next mechanism when its added value can be delivered and tested.

RECALCULATED FINDING

Analytical finding: a high benefit-to-cost ratio can select the wrong bundle under a budget, and overlap can reverse the choice. In a separate hypothetical test, improved selection still loses to a cheaper fixed portfolio after evidence costs.

CONTRIBUTION IN THE SOURCE RECORD

Provisional hoop evidence: framing, exclusions and decision criteria. Other delivery owners were proposed; acceptance remains unverified.

EVIDENCE STATUS

Historical originals were not recovered. Analytical design case; adoption, mature customer benefit and savings remain unverified.

BLUF: analytical inference. Source contribution: historical record. Client and internal identities anonymized.

STRUCTURED ABSTRACT / DECISION BRIEF

Choose the next initiative by its added value to the operating portfolio

[AI] A mechanism can be new to a team yet duplicate an existing investment. It can also be cheap to describe and expensive to verify, authorize or operate.

Context

[HR] A delivery-network leader commissioned a review of operating mechanisms after repeated requests for additional defect-reduction actions. The review mapped existing programs, searched other operating contexts, challenged candidate proposals and produced a ranked recommendation set. Its central distinction was between recording a corrective action and checking its result.

Objective

[HR] The brief sought practical additions to existing assets, with explicit owners, a first step, an operating measure and an effort-sensitive priority. It excluded already funded work and favored closing gaps in accountability, feedback and execution. The record establishes a recommendation artifact; subsequent implementation is unverified.

Approach

[PD] The Mature-Outcome Portfolio Contract (MOPC) defines the incumbent portfolio, eligible population, authorized action package, outcome-maturity clock, incremental value and decision owner. It tests both the selection rule and the completed operating intervention. An independently constructed model compares the rule with fixed and simpler portfolio choices.

Findings

[AI] A decline after an action is not identified effectiveness. A training benefit must be restricted to exposures the timing can reach. Even correctly measured benefit-to-cost ratios can select the wrong portfolio under a budget, and overlap can reverse the preferred bundle. Existing ownership does not prove either adequate performance or zero marginal value.

Decision value

[PD] The operating sponsor should first compare feasible fixed portfolios, then commission bounded calibration of any added selection method. Measurement and program owners must validate maturity and accept the scope. Scaling requires a positive incremental net-value bound, the predefined service-harm gate and performance beyond a feasible simpler alternative under matched costs.

Implications

[AI] The contribution is a disciplined strategy question and a challenge to duplicated work. The analytical extension is a falsifiable portfolio contract. Neither a ranked document nor a favorable hypothetical model establishes accepted ownership, customer improvement, realized savings or sole personal authorship.

[HR] Selected source register S1; original recovery and historical coordinates are private. [RC] recalculated; [AI] analytical inference; [PD] proposed design. Historical adoption and causal impact are not established.

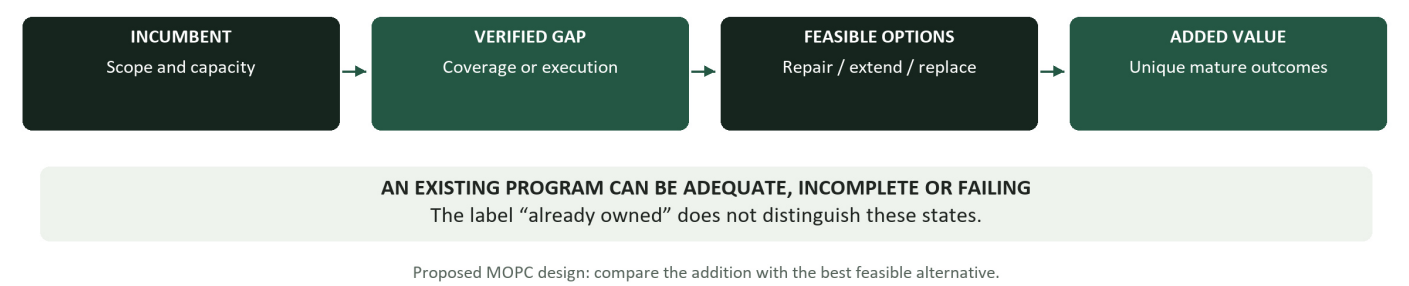
EXECUTIVE EXHIBIT 1 / INCREMENTAL OPPORTUNITY

Treat existing ownership as a coordination boundary, not a proof of zero value

[HR] The source cut large opportunities because related assets and accountable programs already existed. It salvaged narrower proposals that used those assets.

INCREMENTAL VALUE / START WITH THE ACTUAL INCUMBENT

Ownership identifies a coordination boundary; performance and coverage determine the investment need



Portfolio question	Evidence needed for the next decision
What already exists?	A versioned inventory of mechanism, population, owner, funded capacity, implementation stage and outcome evidence. A program name alone is insufficient.
What is still missing?	A verified gap in coverage, quality, execution, feedback or capacity. Distinguish a missing document from a missing capability and a failed search from an absent program.
What would the addition change?	The marginal action and eligible outcomes relative to the actual incumbent. Repair, extension, integration and replacement require different comparisons.

[AI] A struggling incumbent does not automatically justify a parallel program or restore a raw-dollar ranking. Compare repair and replacement with the proposed addition, including transition cost and interference. Ownership evidence should prompt coordination; performance evidence determines the investment case.

SPONSOR ACTION

[PD] Ask the incumbent owner to confirm the specific uncovered need and feasible alternatives. Record a reopen trigger based on inadequate coverage or mature performance, rather than permanently excluding a domain because someone owns it.

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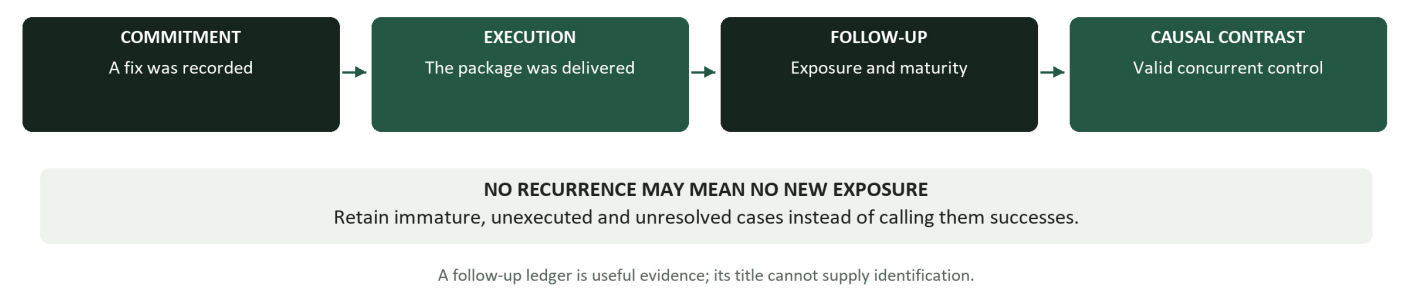
EXECUTIVE EXHIBIT 2 / EFFECTIVENESS VALIDITY

A result that falls after an action still needs a counterfactual

[HR] The leading proposal joined action commitments to later site-by-category performance. Its proposed success measure counted cases where the post-window rate declined.

EFFECTIVENESS / OBSERVED CHANGE DOES NOT IDENTIFY CAUSAL CHANGE

The action, exposure, comparison and reporting window must refer to the same eligible population



Observed event	Permitted conclusion
Action documented	A commitment was recorded. Verify that an authorized action was actually delivered to the eligible population.
Rate declined afterward	A descriptive change in the chosen population and window. Common shocks, selection, reporting and other programs remain alternative explanations.
Problem did not recur	An absence of observed recurrence. Check subsequent exposure and reporting maturity before interpreting resolution.
Controlled mature difference	A candidate intervention effect under the stated assignment, comparison, measurement and interference assumptions.

[AI] The proposed repeated-callout measure is not the complement of the decline measure: recurrence and rate movement can coexist, and their eligible frames differ. A common outcome table should retain both dimensions rather than force them to sum to a success percentage.

MEASUREMENT OWNER ACTION

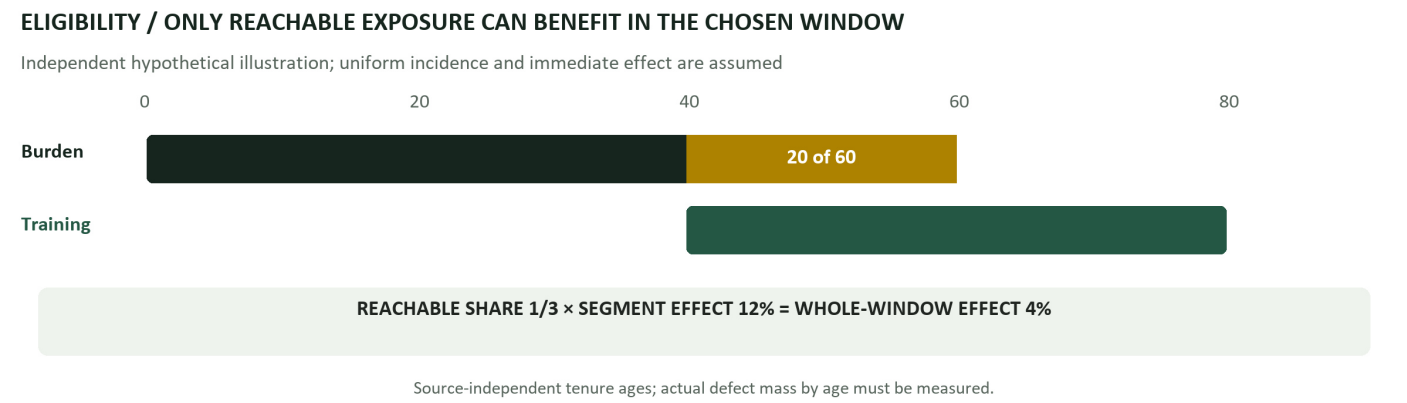
[PD] Label the initial ledger as follow-up evidence. Reserve effectiveness for an identified contrast. Preserve zero-exposure, immature, unexecuted and unresolved records; do not auto-close them as successful fixes.

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EXECUTIVE EXHIBIT 3 / MATURITY AND ELIGIBILITY

Align intervention eligibility with the outcome population before sizing benefit

[HR] The source sized retraining against an early-tenure burden while recommending enrollment later in tenure. Its proposed review windows were also shorter than the stated reporting-maturity interval.



[PD] Independent illustration: the burden covers tenure ages [0,60), while immediate training is available only over [40,80). Under uniform pre-intervention defect incidence across the burden interval, only one-third of that burden lies after eligibility begins. A 12% reduction confined to that reachable segment implies a 4% whole-window reduction—not 12%.

Clock	Required alignment
Eligibility and treatment	Record first eligibility, assignment, delivery and the onset of any effect. A completion-only analysis can exclude early failures and change the estimand.
Exposure and outcome	Keep the original eligible population and follow-up. Late training cannot prevent already incurred events; subsequent benefits belong to their own horizon.
Reporting maturity	Freeze outcomes only after a validated maturity rule. A longer rolling window does not make its newest events mature.

[AI] The illustration assumes uniform incidence, immediate efficacy and no spillovers. Actual age-specific exposure and defect mass are unknown. Estimate that distribution before scaling benefits; calendar overlap alone cannot estimate the historical reachable share. Aligning eligibility, assignment and follow-up also prevents avoidable design bias (Hernán et al., 2016).

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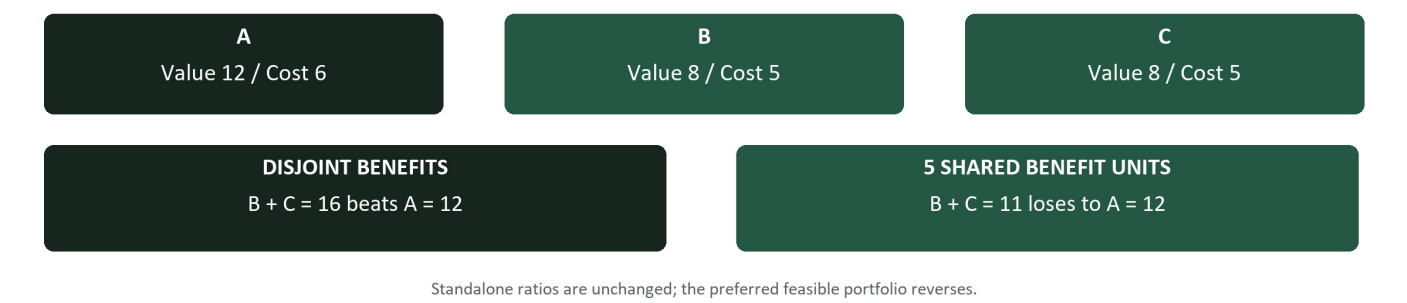
EXECUTIVE EXHIBIT 4 / PORTFOLIO ARITHMETIC

A priority ratio can lose to a feasible bundle—and overlap can reverse the answer

[HR] The source preferred impact per effort to raw-dollar opportunity, but did not document enough scoring components to reconstruct the ranking.

PORTFOLIO ARITHMETIC / BUNDLE VALUE DEPENDS ON OVERLAP

Independent hypothetical construction; budget 10; benefit units and resource units are distinct



[PD] Independent construction: maximize benefit within a resource budget of 10. Initiative A costs 6 and delivers benefit 12; B and C each cost 5 and deliver benefit 8. A has the highest benefit-to-cost ratio, yet selecting it leaves too little budget for another initiative. B plus C delivers 16 if benefits are disjoint. Cost is the constraint, not a second deduction.

Decision model	Preferred feasible portfolio
Disjoint benefits	B + C: value 16 versus A: value 12. A greedy ratio rule loses 4 units of value.
Five shared benefit units	B + C: unique value 11. A now wins with value 12, although all standalone ratios remain unchanged.
Undocumented composite score	No defensible conversion to a benefit-to-cost ratio. Reconstruct dimensions, scales, weights, uncertainty and effort before optimizing.

[AI] The construction does not establish that the source ranking was wrong. It shows the information required to defend it: the feasible budget, unique incremental outcomes, interactions and explicit values for measurement and coordination work. Tied or close scores should not imply a precise total order.

PORTFOLIO OWNER ACTION

[PD] Compare feasible bundles against the incumbent and repair alternatives. Publish which assumptions reverse the choice; do not conceal them behind a single priority score.

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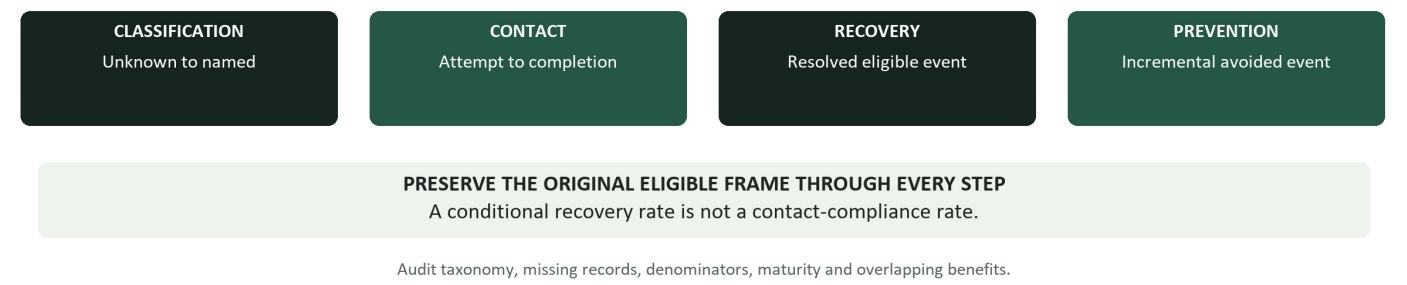
EXECUTIVE EXHIBIT 5 / METRIC INTEGRITY

A cleaner classification and a completed contact are different from prevention

[HR] Recommendations included reducing an unattributed category and tracking a customer-contact workflow. Their labels and modeled benefits did not consistently distinguish diagnosis, activity, recovery and prevention.

METRIC CONTRACT / KEEP DIAGNOSIS, ACTIVITY AND BENEFIT DISTINCT

A change in label or process state does not by itself remove a customer failure



Measure	What the contract must preserve
Unattributed-event rate	Stable taxonomy, unresolved cases and independent coding accuracy. Moving an event into a named bucket does not remove the customer failure.
Contact execution	A defined required-contact population, attempted and completed contact states, timing and missing records. Do not label a conditional recovery outcome as compliance.
Recovery after contact	A mature outcome on the original eligible frame, with costs and adverse consequences. Restricting to contacted cases changes the population.
Customer defect prevention	An incremental physical outcome relative to a valid comparator, after maturity and concurrent-program adjustment.

[AI] A shared platform can make another region’s mechanism technically feasible. It does not transport the causal effect across customer mix, contactability, authority, service design or baseline performance. Benchmark results are leads for a local test; they are not this project’s benefits.

ANALYST ACTION

[PD] Maintain a bridge from original eligible events through actions, classification, recovery and final customer outcomes. Keep all dispositions and avoid claiming the same avoided event in multiple programs.

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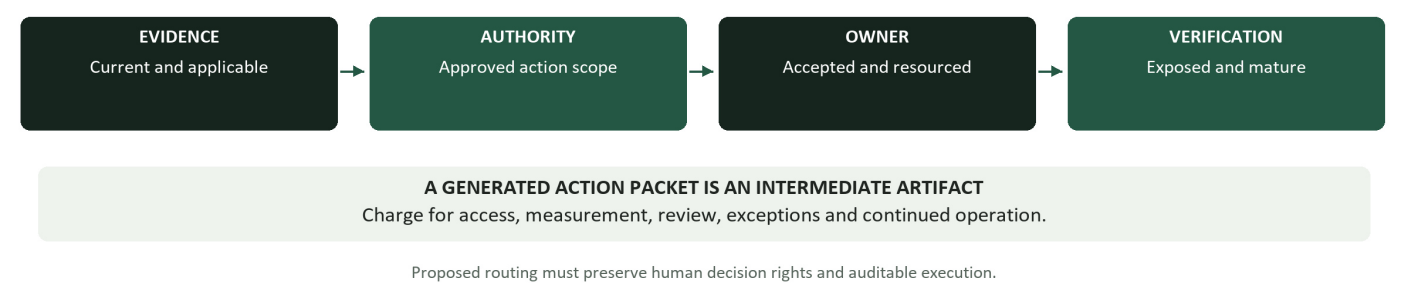
EXECUTIVE EXHIBIT 6 / EXECUTABLE MECHANISM

Turn a recommendation into an accepted action before calling it an operating system

[HR] The source favored AI-generated action artifacts with a recipient, prescribed fix and later check. It proposed lightweight joins and exports before fuller automation.

EXECUTION CONTRACT / ACCEPT THE WORK BEFORE AUTOMATING THE ROUTE

A prototype inherits the unresolved dependencies of the operating mechanism



Release condition	Required owner response
Current evidence	The data owner verifies freshness, eligible grain and access. Repeated searches over shared stale sources do not independently validate a number.
Accepted authority	The operating and policy owners confirm who may act, what may be changed and which approvals are required. A proposed recipient is not an assigned owner.
Deliverable action	Record the action package, resources, acceptance, execution evidence and exception route. A draft packet is an intermediate artifact.
Valid verification	Use exposure-aware, mature outcomes. Separate successful execution from causal effectiveness and re-open ambiguous follow-up.

[AI] Startability is a property of the whole mechanism. A document may be created promptly while data access, measurement joins, contractual authority and training capacity remain unresolved. Include these dependencies in effort and elapsed time; a low-cost prototype is not a free operating service.

OPERATING OWNER ACTION

[PD] Accept a bounded package and its verification workload before launch. Keep automated recommendations within approved actions, with accountable review of exceptions and an auditable record of what actually happened.

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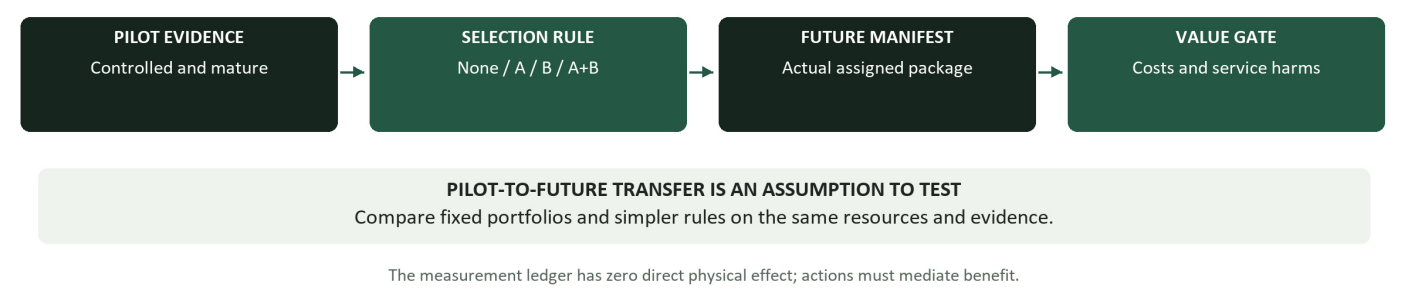
EXECUTIVE EXHIBIT 7 / EVALUATION AND CONTRIBUTION

Test the selection policy separately from the intervention it selects

[AI] The ledger has no direct physical effect. Its value depends on better decisions that lead to feasible actions and mature customer outcomes.

EVALUATION CONTRACT / MEASURE THE DECISION RULE AND ITS CONSEQUENCES

A shared evidence packet supports selection; a separate future population supports evaluation



Evaluation layer	Decision it can support
Historical contribution	The register supports framing, exclusion discipline, ranking and review by the requesting leader: provisional registry-level hoop evidence. It does not establish sole authorship or delivery of the proposed mechanisms.
Selection-policy test	Compare rules on the same available evidence and feasible actions. Price information, coordination, errors and delay; include fixed and simple alternatives.
Operating intervention test	Measure the assigned package on an independent future population through mature outcomes. Keep nonadherence, ordinary-flow harms and concurrent programs in scope.

[PD] In the independent hypothetical benchmark, the base and refreshed selectors both improve on the original rule but lose on total resource burden to fixed A+B after evidence costs. The fixed choice causes more ordinary-flow harm and needs its own safety test. Evaluate every choice on a separate future manifest; more observations cannot repair an obsolete pilot-to-future response model.

INVESTMENT GATE

[PD] Require positive incremental net value with uncertainty, an acceptable harm bound and performance against the strongest feasible simpler choice. Keep decision-information value separate from outcome benefit, and retain unfavorable comparisons.

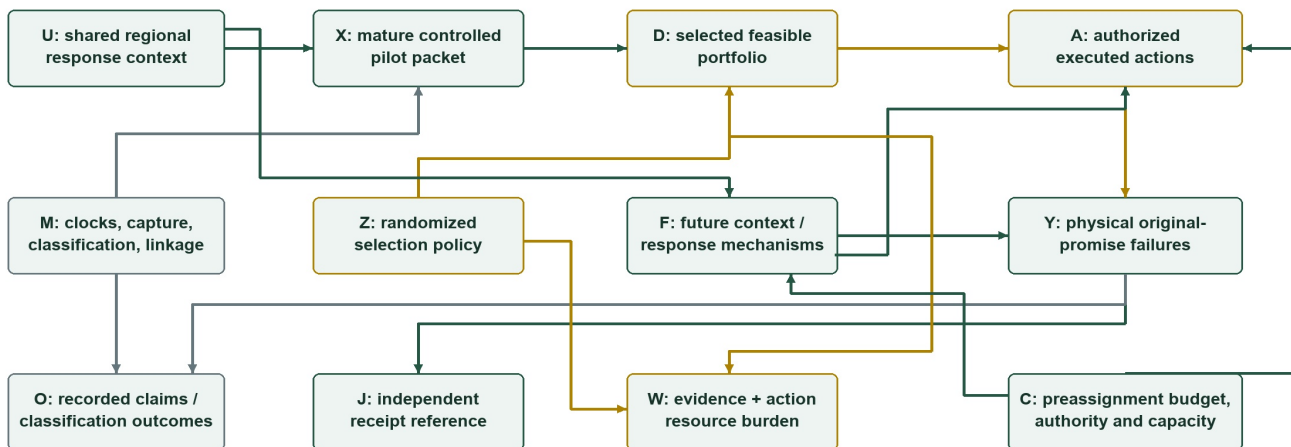
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TECHNICAL ANALYSIS

A portfolio needs a causal and a resource contract

[PD] The Mature-Outcome Portfolio Contract (MOPC) links admissible evidence, feasible allocation, actual execution and independently observed customer outcomes. A ranked document establishes none of those downstream links.

MOPC: EVIDENCE CHANGES ALLOCATION; EXECUTED ACTION CHANGES OUTCOMES



U induces historical / future dependence; policies never observe latent response types.

Common eligible trigger S is frozen before Z; selection from past high rates limits transport.

J reconstructs Y independently of reporting M. Ascertainment independence is not independence from truth.

No direct X → Y benefit is assumed. Ordinary-flow effects and every original booking remain in Y and W.

[PD] Shared regional context U generates historical pilot evidence X and future response context F; recording process M affects observed evidence. Randomized selection policy Z changes portfolio D and evidence work W. Preassignment capacity, authority and budget C constrain feasible actions A. Historical response need not persist into F. Physical failure Y is reconstructed by independent reference J; recorded claims O also depend on capture and classification.

[AI] A ledger can improve decisions through X to D to A to Y, while producing no direct physical change. Shared personnel can also displace ordinary work. Compare the whole offered policy on all original bookings, including no-action choices, unsuccessful actions and spillovers within the assigned capacity domain.

[HR/AI] The historical inventory is bounded by the searched estate, failed access paths and inherited definitions. Existing daily practices, finer-grain metrics and a related pre/post view qualify its universal gap claim. Shared-source agent agreement is not independent confirmation that no other mechanism exists. Neither a residual classification nor a site label proves individual controllability.

Basis: MOPC proposed causal structure [PD]; source-scope critique [AI]. Historical numerical coordinates remain private.

TECHNICAL ANALYSIS

Standalone rankings can reverse at the portfolio level

[AI] Independent synthetic example: budget 10; indivisible A costs 6 and prevents 12 distinct losses; B and C each cost 5 and prevent 8. These granted causal benefits are invented, not inferred from historical labels.

Feasible choice	Cost	Benefit if B/C disjoint	Benefit if overlap = 5
None	0	0	0
A	6	12	12
B	5	8	8
C	5	8	8
B + C	10	16	11

[AI] A has the highest standalone benefit-per-cost ratio: 2 versus 1.6. Taking it first leaves insufficient budget for either other move. Yet B+C wins when disjoint; A wins when their overlap is five. The standalone benefits, costs and budget are identical in both worlds. Overlap four produces a tie. The exact enumeration retains every feasible subset.

[PD] Optimize marginal value conditional on the selected set, not a fixed row score: choose S to maximize $V(S)$, subject to full resource cost $C(S)$ at most B, authority and dependency constraints. Shared setup may lower $C(S)$; congestion or incompatible actions may raise it. Complementarity can make $V(A+B)$ exceed the sum, while overlap can make it smaller. Neither relationship is established by a category taxonomy.

[AI] Even this proof grants known causal benefits and perfect execution. The historical ordinal score has undocumented component scales and weights, so interpreting it as a cardinal return ratio adds another unsupported step. Sviridenko’s budgeted algorithm and Nemhauser and colleagues’ cardinality result require specified objective properties; they do not validate an arbitrary programme ranking.

Decision changed

Request the joint opportunity map, marginal effects and full costs before fixing the sequence. This proof does not establish that the historical ranking was wrong.

Basis: counterexample.py/json exact independent construction [AI]; primary optimization sources, scoped in references.

TECHNICAL ANALYSIS

A decline can conceal benefit, no effect or harm

[AI] A bridge is an action commitment. Calling it effective because its subsequent rate fell conflates an observed change with a causal contrast.

Synthetic world	Observed pre	Observed post	Untreated post	Causal change
Beneficial	140	100	120	-20
Null	140	100	100	0
Harmful	140	100	80	+20

[AI] The same recorded decline occurs in every world. The unobserved untreated post value determines the sign of the causal effect on the adverse outcome. Conversely, a useful action can coincide with a rising rate if the untreated rate would have risen further. A later reread supplies follow-up, not a control group.

Eligibility must overlap the burden being priced

[AI] A separate invented example defines baseline burden over tenure [0,60) and immediate intervention eligibility over [40,80). Their overlap is 20 of 60 days. Under uniform baseline defect intensity, no ramp or carryover, and a constant 12% reduction of eligible burden, prevention within the baseline cohort is 4%. Without the age-specific burden distribution, its attainable range is 0% to 12%. Outcomes after day 60 belong to a different estimand.

[HR/AI] The source prices one tenure cohort while enrolling another. A joined tenure-at-action and outcome-age panel could resolve this; the headline share cannot. Likewise, changing an unattributed count into an attributed count identifies a reporting transition, not prevented customer harm.

[PD] Require an action version, eligible age support, actual start and dose, original customer deadline, outcome cohort, extraction date and cost grain. Preserve no-action and unresolved cases. Cross-geography results need comparable treatment, outcome, population and authority before any effect is transported.

Basis: independent bridge and tenure proofs [AI]. Public intervals and values are wholly hypothetical.

TECHNICAL ANALYSIS

Mature the cohort and validate the measurement chain

[PD] Calendar delay, persistence and outcome maturity are distinct. A later weekly comparison does not establish that both cohorts have reached a common observation age.

Object	Required observation	Failure to prevent
Commitment	Unique action, owner acceptance, intended eligible set	A drafted bridge counted as execution
Implementation	Actual dose, timing and original eligible units	Completed-only denominator or expired eligibility
Outcome	Original deadline plus prespecified follow-up; as-of vintage	Late posting or recoding mistaken for prevention
Cost	Unique avoided events, legitimate line items, full work	Attribution unlock added to downstream savings

[HR/AI] The source pairs a short post-window convention with a longer reported attribution lag. Neither convention establishes a mature risk set without episode clocks and the applicable arrival distribution. Repeated snapshots should separate new events, backfill, reversals and denominator changes. A stable net total can hide gross revisions. Display provisional operational monitoring separately from the locked evaluation endpoint.

[PD] Draw a prespecified stratified validation sample from original actions, non-actions and unresolved cases, covering versions, tenure, source regions and overlapping eligibility. Two coders blinded to assignment and measured effects independently label eligible execution and linkage. An illustrative simple random sample of 400 gives about +/-4.9 percentage points for worst-case simple agreement; this is not kappa precision or a clustered design calculation.

[PD] Report weighted confusion tables, prevalence, missingness and kappa with domain-bootstrap intervals. Adjudicate disagreements against independent records rather than majority vote. Test measurement invariance across versions and contexts. Agreement validates reproducibility; an external receipt reference and sensitivity bounds address truth. Contact can alter claim access, so preserve all-channel customer reporting alongside physical receipt.

Basis: proposed measurement protocol [PD]; Cohen agreement and source-maturation critique [AI].

TECHNICAL ANALYSIS

Estimate the added value of the selection policy

[PD] The proposed trial is a portfolio-policy evaluation. It does not estimate the historical effect of the ranked strategy paper or automatically identify each component's contribution.

[PD] Freeze independent matched pairs of capacity domains, the eligibility trigger, authorized menu and separate future manifests before opening the common pilot packet. Randomize policy labels within pairs; crews and capacity remain separate. Retain every future booking, including empty portfolios and failed implementation. Reconstruct original-deadline receipt by original promise plus 28 days; late receipt remains a miss. The numerical law conditions on admissible complete packets; unresolved authority or reference failures need a separately calibrated hold pathway.

[PD] Let $L(z)$ be priced mature customer harm plus all variable evidence and action work per original booking, and K the additional fixed assigned cost per original booking. The primary gross resource contrast is $\text{delta_L} = E[L(0) - L(1)]$; adoption needs delta_L greater than K . Report physical failure difference $\text{delta_Y} = E[Y(0) - Y(1)]$ separately. An ordinary-flow harm margin uses its own fixed preassignment denominator and requires explicit approval.

[PD] A favorable resource result may buy less prevention at lower cost. This design requires resource superiority and prespecified noninferiority on both all-original and ordinary-flow physical failures. Preserve absolute risks and adverse subgroup effects; a net score cannot conceal excess harm. Allocation effects average over the declared eligible-pair distribution, not only selected or successful actions.

[AI] Package effects and interactions are different estimands. For potential outcomes $Y(a,b)$, the factorial interaction is $E[Y(1,1) - Y(1,0) - Y(0,1) + Y(0,0)]$. A randomized component design can identify it under its assumptions; a bundle-versus-usual comparison cannot. Collins and colleagues motivate choosing these contrasts and their resource requirements explicitly.

[PD] Pilot evidence and future implementation are separate cohorts. Lock priors, response-transfer assumptions and selection rules before evaluation. Compare context-matched fixed packages, no action and simpler selectors. Sample splitting avoids evaluating the selected policy on the same noisy outcomes that chose it; it does not guarantee transport.

Basis: prospective ITT and factorial estimands [PD]. No historical treatment effect or component effect is claimed.

TECHNICAL ANALYSIS

Separate process screening from causal diagnosis

[RC/AI] The available register does not contain a repeated measured bridge-effectiveness series. Its mechanical screens cannot establish field efficacy or a stable operating phase.

[RC] The final inventory contains 3 source/sensitivity screens, 14 separate version/basis audits, 10 design-shape audits and 10 unordered profiles: 37 vectors. The source screens comprise reconstructed reported-change pairs and different research-run counts. All fitted X and moving-range points fall inside tentative limits. There is no holdout or authenticated stable phase, and no eligible or computed Laney panel.

[AI] The private calculation uses X limits at mean plus/minus 2.66 times mean moving range, and moving-range upper limit 3.267 times that mean. Pairwise fits have little diagnostic content. Profiles and engineered targets are not time-series performance evidence; a zero first value has no baseline-100 ratio. An eligible attribute chart would require repeated exact binary numerators, exposures, subgroup definitions and an established phase.

[PD] For selected high-rate domains, an assumed linear untreated conditional-mean model is $m + \rho \times (x - m)$, where x is the selected baseline and m the population mean. Assumed persistence ρ of .4, .7 or .9 implies reversion of 60%, 30% or 10% of the selected excess. These are hypothetical sensitivities, not estimated fractions of the reported change.

[PD] Prespecify modifiers from baseline: tenure mix, untreated burden, bundle overlap, authority version, capacity and source-to-target similarity. Analyze interactions with assignment, not comparisons conditioned on realized acceptance, compliance or successful closure. Report uncertainty and multiplicity handling; discovery strata require independent validation.

[PD] If later rollout is observational, define group-time ATT, concurrent eligible controls, calendar and exposure adjustment, and adequate mature preperiods. Plot event-study leads and use equivalence or sensitivity analysis for departures from parallel trends. A nonsignificant pretrend is not proof; interference and changing measurement can invalidate the comparison.

Basis: frozen raw/SPC inventory [RC]; RTM and later-design sensitivities [PD/AI]. Historical scales remain private.

TECHNICAL ANALYSIS

Credit the decision work without inventing execution

[HR/AI] The available register records a commissioned strategy answer, selection rules, exclusions and a format correction. Current original-source recovery and shared lineage limit how strongly those records establish personal contribution.

Claim	Current evidence grade	What would strengthen it
Framed the question and exclusions	Provisional registry-level hoop	Authenticated request and decision history
Research and prose authorship	Agent-produced in the register; sole authorship unsupported	Versioned drafts and accountable author records
Accepted ownership or built ledger	Not established	Accepted handoff and dated working artifact
Customer or financial improvement	Not established	Executed exposure, mature reference and counterfactual

[AI] A prepared-for header identifies an addressee. Creator or last-modifier metadata associates a saved artifact with an account; it does not establish sole invention. Repeated memory and deliverable summaries can share one lineage. Named proposed actors do not prove accepted responsibility, and a future forum target does not prove the promised output appeared.

[HR/AI] The source’s pending programme-retirement premise, conflicting metric versions and failed refresh paths remain explicit. A search miss bounds what was located, not what existed. A scoped ownership inventory is useful for avoiding duplicate work, but ownership alone does not prove adequacy or zero value from improvement in an existing programme.

[PD] Separate decision rights for measurement, resource allocation, package execution, customer contact and partner consequences. A metric label cannot grant authority or establish individual fault. Location-based work also needs an applicable approved process; this case does not authenticate a blanket exemption from employment or data-use constraints.

[AI] The defensible contribution is the registered framing and prioritization of a portfolio question, with several proposals narrowed during review. The causal correction and exact constructions in this case are present analytical work. They are not retroactive evidence of the original leader’s analysis or of historical implementation.

Basis: registry-mediated process tracing [HR/AI]; originals and accepted downstream implementation are not established.

TECHNICAL ANALYSIS

Power the economic threshold and preserve strong alternatives

[PD] The numerical model that follows is a prospective, source-independent design exercise. Its pilot packets, response types, prices and transfer assumptions are invented and require calibration.

[PD] A common controlled pilot packet informs locked policies on separate future manifests. The independent replication unit is the matched pair; individual parcels are correlated through selected actions and regional response. Shared future response type is a planning idealization, with imperfect pairing stressed separately. Redundant and complementary response types, ordinary-flow effects and evidence work remain explicit, including when no package is selected.

[PD] Derive finite conditional means and covariances from the actual count and selection process. Compare a few declared allocations using explicitly approximate normal planning. Check the minimum detectable effect against the break-even cost and validate the selected economic, physical and ordinary-harm boundary laws with direct finite simulation, reporting Monte Carlo uncertainty. Neither a normal approximation nor a tested boundary supplies uniform finite-sample coverage.

[PD] Examine noisy raw-max selection, fixed feasible portfolios and no action at matched contexts and costs. If a cheap rule wins, beating the historical-style selector does not justify a complex ledger. Preserve adverse comparisons and explored design changes. A refreshed evidence version must pay additional sampling, delay and processing; it is a different intervention, not simply a larger sample.

[PD] Value evidence as expected improvement in the best feasible decision after seeing a signal, minus acquisition cost. If no authorized action or budget can change, a more accurate ledger can have zero operating decision value. Do not add that information value again to the same downstream prevention benefit.

[PD] Stress benefit attenuation, maturity, missing reference and transport while charging added harms and work in full. Support any favorable/adverse decomposition with explicit categories or a declared cross-world coupling. Price reattribution as improved information only until a separate action changes physical outcomes. Recruitment feasibility, shared staff and reference ascertainment remain pilot prerequisites.

Basis: proposed design and audit requirements [PD]. Reported numerical results appear only in the separately audited model pages.

TECHNICAL ANALYSIS

Four refutable propositions define the next decision

[PD] MOPC is useful only if its claims can fail against independent evidence and a feasible alternative.

Proposition	Prespecified rejection or hold rule
P1: the scoped inventory finds an incremental action gap	Versioned owner audit reveals an equivalent available mechanism or invalid eligibility
P2: the evidence rule improves portfolio value	An upper bound below the value target or a dominating simple rule rejects the claim; imprecision holds funding
P3: pilot response transports to the target frame	Prespecified interaction or transfer check exceeds the tolerated loss in value or customer protection
P4: outcome movement tracks customer benefit	Independent receipt and all-channel claims contradict the named-bucket improvement beyond allowed measurement error

[AI] Nemhauser and Sviridenko clarify that diminishing returns, costs and constraints belong in the objective, not an undocumented score. Smith and Winkler motivate independent validation after noisy selection. Linden qualifies pre/post decline; Westreich and colleagues qualify cross-population transfer. Collins and colleagues separate component questions from package evaluation. These methods do not validate any historical effect size.

[AI] Deming warns against reacting to routine variation; Campbell and Goodhart explain why a targeted closure rate may change reporting. Ittner and Larcker require a tested measure-to-action-to-value chain. Tucker and Edmondson distinguish local fixes from unresolved system problems. Composite-measure guidance demands explicit weights and denominator choices. Here those ideas support mature outcomes, accepted response capacity and marginal portfolio value.

Limitations and identifying assumptions

[AI/PD] Original artifacts and executed mechanisms remain unverified in the available record. No joined historical exposure panel or credible untreated trajectory identifies effect. The trial assumes common eligible frames, approved actions, independent pairs, valid original-deadline reference and calibrated matching and pilot-to-future laws. Evidence errors, learning, congestion and spillovers may defeat those assumptions. Synthetic precision cannot establish authority, recruitability, transport or customer benefit. Reopen the decision when those prerequisites fail.

Basis: four proposed falsification tests [PD]; source limits and primary-literature positioning [AI].

A better ledger must improve the decision

[PD] MOPC tests a portfolio-selection wrapper. A is approved standard-work support; B is approved address/access repair. Their bundle has an explicit joint effect. The ledger itself prevents nothing.

[PD] Randomize policy labels within independent matched pairs, with separate crews and 320 original future bookings per domain: 80 target and 240 ordinary. A common mature pilot packet precedes selection; future manifests are frozen before opening it. A blinded reference reconstructs each original deadline by promise + 28 days. Failed, diverted and untreated bookings remain. Promises and remedies stay unchanged.

Hidden response type / prior	A reduction	B reduction	AB reduction
A-responsive / 25%	0.110	0.010	0.120
B-responsive / 25%	0.010	0.110	0.120
Redundant / 20%	0.080	0.080	0.085
Complementary / 20%	0.035	0.035	0.130
Neither / 10%	0	0	-0.020

[PD] Failure means nonreceipt by the original promise, including later recoveries. Target risk starts at 0.26; ordinary risk at 0.04. A/B/AB add ordinary risk 0.002/0.003/0.007 and work 0.045/0.055/0.105 per booking. All original-booking failures and selected-package work are priced. Failure cost is 12; common pilot collection costs 0.025 per booking. Processing adds 0.008 even when none is selected.

[PD] The policy cannot see the response type

Usual stacks A/B when their pilot post-rates are below 0.28. MOPC uses a locked five-type model to choose none/A/B/AB by expected net value. Four pilot arms have 12 units each, with a shared baseline of 0.20 or 0.32, equally likely. Counts are conditionally independent. Types, prices and models require external calibration; no historical experiment was preregistered.

[PD] All inputs are invented. No sanctions or unapproved work. Known authority, maturity or reference blockers require retained calibration cases; the numeric law assumes admissible complete packets.

A powered comparison still may not justify purchase

[PD] All three gates must clear: resource gain exceeds added cost, all-booking harm stays below +0.5 percentage points, and ordinary-flow harm below +0.3 points. Both margins require approval; neither means no harm.

[PD] A pilot type persists into the future with probability 0.85; otherwise it is redrawn. Stress lowers persistence to 0.45. The refreshed version adds a separate 24-unit-per-arm packet with 0.85 persistence and pays 0.018 for added collection, processing and waiting. Neither rule observes future outcomes.

Allocation	Pairs	Detect break-even	80% MDE	Joint floor
Initial	128	2.7%	> full effect	0.0%
Base candidate	12,288	88.3%	0.0072	94.5%
Transfer stress	12,288	87.7%	0.0073	88.3%
Refreshed evidence	6,144	99.9%	0.0102	96.7%

[PD] Break-even gain is 0.008 in the first three designs and 0.018 for refresh. Base expected gain is 0.0171; its illustrative lower bound is 0.0118. Exact finite moments supply fixed variance ceilings; normal radii are approximate. MDE counts beneficial-direction rejection using the two-sided 5% cutoff. Each decision gate uses nominal one-sided 2.5%. A zero joint floor is uninformative.

[PD] Ten finite-process runs of 6,000 trials each give joint clearance 94.23% [93.61, 94.80] for base and 96.73% [96.25, 97.15] for refresh. Selected boundary errors have Wilson intervals; checks do not prove uniform coverage or field calibration.

[PD] Recruitment is a warning, not a launch plan

The base assumes 24,576 domains in 12,288 independent matched pairs and 7,864,320 future bookings. Shared regional response type within pairs is an idealization. At 75% type retention per arm, the same-allocation normal floors become 90.5% base, 84.6% stress and 51.2% refreshed. Refresh cannot cure poor matching by assertion.

[PD] MDE, costs and confidence bounds use hypothetical resource units per original booking. Four allocations tested; no minimum sample claim. Research adjudication is separately budgeted.

PROPOSED PORTFOLIO TEST / 3 OF 4

The fixed bundle blocks the purchase decision

[PD] Lower burden is better. Every comparator uses the same future type distribution, original cohort and price basis. Fixed rules retain common collection cost but do not buy processing they do not use.

Policy / total resource burden	Base	Stress	Refreshed
Rank-and-stack	1.0413	1.0491	1.0491
MOPC + full cost	1.0322	1.0409	1.0352
Raw controlled maximum	1.0610	1.0744	1.0548
Model, single package only	1.0550	1.0690	1.0552
Fixed none	1.1650	1.1650	1.1650
Fixed A	1.0690	1.0690	1.0690
Fixed B	1.0880	1.0880	1.0880
Fixed AB	1.0300	1.0300	1.0300

[PD] The exploratory raw controlled maximum loses to usual. The subsequently specified model rule improves on usual but loses to fixed AB after costs. This is a proposed future evaluation, not retrospective preregistration. Fixed AB still needs its own safety and feasibility test.

[PD] Net = $a \times h \times \text{favorable physical contrast} - \text{adverse contrast} - \text{added work} - \text{information cost}$. Here a is avoidability and h non-overlap. Split target and ordinary changes within regional-type/portfolio-pair cells before aggregation. This declared coupling does not identify individual causal harm. Price every adverse component and all work fully.

Net at stated information cost	Base	Stress	Refreshed
$a \times h = 1.00$	0.0091	0.0082	0.0139
$a \times h = 0.75$	-0.0045	-0.0061	-0.0035

[PD] Price judgments change the best policy

The grid varies avoidability, overlap and information cost $\pm 50\%$. Failure price 6 favors the single-package rule in base and fixed A otherwise; prices 12 or 18 favor fixed AB. Rules stay locked. Prices are uncalibrated resource judgments, not dollars or savings.

[PD] Hypothetical resource units per original booking; common denominators throughout. Prespecified old/new packet coupling governs sensitivity. No independent ledger benefit is added.

PROPOSED PORTFOLIO TEST / 4 OF 4

Buy information only when it can change the choice

[PD] A separate research decision asks whether to retain a fixed portfolio, calibrate the selector, or calibrate refreshed evidence. Its utility is never added to the operating gain.

Action / net utility by state	Stable value	Weak transfer	Simple sufficient
Retain fixed portfolio	8	6	10
Calibrate selector	14	1	5
Calibrate refreshed evidence	11	9	3

[PD] Invented state probabilities are 0.40/0.35/0.25. Payoffs include later action costs. Without research, refresh calibration has expected utility 8.30. Base signals have state-conditional probabilities (0.70,0.20,0.10), (0.15,0.65,0.20) and (0.10,0.20,0.70). Enumerating all 27 signal-to-action policies yields expected utility 9.665 before study cost. Perfect information is worth at most 2.95.

Information scenario	Gross EVSI	Study cost	Net EVSI
Low	0.4146	0.60	-0.1854
Base	1.3650	0.70	0.6650
High	2.1575	1.20	0.9575

[PD] Low information mixes the base experiment equally with its prior-independent signal distribution; high information mixes it equally with perfect state revelation. These are hypothetical experiments, not confidence limits. The best policy routes signals to selector calibration, refresh calibration and retention. Low information destroys net value.

[PD] At per-arm reference error ϵ , resource-gain uncertainty is up to $\pm 24\epsilon$ and physical contrasts $\pm 2\epsilon$. Use all 320 originals for total outcomes and the original 240 ordinary units for that guardrail; unknown stratum membership needs separate bounds. A 0.1% error per arm can outweigh the economic margin. Late revisions, missing packets and differential capture require calibration.

[PD] Release condition

Prespecify acceptable authority, maturity, reference error, matching and costs; then compare MOPC with the strongest feasible fixed policy. Retain unobserved outcomes and ordinary harms. Better bookkeeping is useful only if an approved decision changes and its additional value exceeds the complete cost.

[PD] Study utilities, priors and likelihoods are independent judgments, not operating savings. Same-cohort capture illustrations require no false positives and nondifferential sensitivity.

REPRODUCIBILITY / READER PROTOCOL

Reproduce the choice, its alternatives and its mature outcome

[AI] MOPC separates an attractive idea, an accepted action, a defensible portfolio choice and an observed operating benefit. The evidence must preserve each transition.

Reproduction layer	Required reconstruction
Historical record	Verify selected register cells, conflicting versions, source-recovery attempts and role evidence. Keep requested, proposed, accepted, executed and measured stages distinct.
Portfolio and priority	Rebuild the incumbent inventory, candidate versions, ownership boundaries, effort assumptions and feasible budget. Calculate unique incremental value and overlap; do not treat undocumented composite scores as ratios.
Exposure and measurement	Align eligibility, assignment, execution, follow-up and reporting maturity. Preserve original eligible denominators, missing records, taxonomy transfers and concurrent programs.
Selection and evaluation	Enumerate the hypothetical pilot evidence and portfolio choices under the declared joint law. Reproduce future outcomes, costs, ordinary-flow harms and both fixed and simple policy comparators.
Uncertainty and economics	Recalculate cluster variance, finite operating characteristics and economic break-even. Apply avoidable-cost and overlap assumptions only where warranted; keep information value separate.

Protected history; reproducible public logic

[AI] Historical raw values, indexed coordinates, source identities and version maps remain in the private annex. Public numerical examples are independent constructions. The budget proof is invariant to consistent positive rescaling; the tenure proof depends on the stated exposure distribution, not merely the units used to report age.

What a successful test would establish

[AI] A selection-policy result applies to the tested evidence quality, action set, costs, response distribution and outcome horizon. It does not establish effectiveness of all source recommendations. A changed incumbent, stale pilot signal or unavailable action requires re-evaluation before the rule is reused.

DECISION HANDOFF

[PD] Invest in the next mechanism only when its marginal contribution can be specified, delivered and evaluated. Keep an explicit no-addition option, accepted ownership and a reopen rule for assumptions that change the preferred portfolio.

Private source maps, executable calculations, explicit hypothetical models and hash-bound reviews support reproduction. They do not authenticate missing originals or demonstrate historical impact.

RESEARCH REFERENCES / PORTFOLIO AND TRANSPORT

Choose feasible bundles and test response transfer

Primary research informs interpretation and prospective design. It does not authenticate historical files, establish adoption or supply a missing operating effect.

Nemhauser, G. L., Wolsey, L. A., & Fisher, M. L. (1978). An analysis of approximations for maximizing submodular set functions—I. *Mathematical Programming*, 14, 265–294. doi:10.1007/BF01588971. Original paper, selected definition and theorem passages: diminishing marginal returns and a cardinality-constrained greedy guarantee require explicit conditions. A programme score does not establish them.

Sviridenko, M. (2004). A note on maximizing a submodular set function subject to a knapsack constraint. *Operations Research Letters*, 32(1), 41–43. doi:10.1016/S0167-6377(03)00062-2. Full original paper: budget feasibility and marginal portfolio benefit enter a defined optimization problem; the proven algorithm includes enumeration, not a standalone score ranking.

Smith, J. E., & Winkler, R. L. (2006). The optimizer’s curse: Skepticism and postdecision surprise in decision analysis. *Management Science*, 52(3), 311–322. doi:10.1287/mnsc.1050.0451. Publisher abstract and metadata: selecting the largest uncertain value estimate can produce optimistic postselection expectations even with unbiased inputs. Validate the selected policy on separate outcomes.

Collins, L. M., Dziak, J. J., & Li, R. (2009). Design of experiments with multiple independent variables: A resource management perspective on complete and reduced factorial designs. *Psychological Methods*, 14(3), 202–224. doi:10.1037/a0015826. Original abstract and indexed general-discussion passages: choose component contrasts and aliasing deliberately, balancing conditions, sample size and costs. A bundle trial does not identify every component.

Linden, A. (2013). Assessing regression to the mean effects in health care initiatives. *BMC Medical Research Methodology*, 13, 119. doi:10.1186/1471-2288-13-119. Original abstract and indexed methods passages: selection on high baseline values can create untreated decline; distributional assumptions matter when quantifying it. No healthcare effect is transferred.

Westreich, D., Edwards, J. K., Lesko, C. R., Stuart, E., & Cole, S. R. (2017). Transportability of trial results using inverse odds of sampling weights. *American Journal of Epidemiology*, 186(8), 1010–1014. doi:10.1093/aje/kwx164. Original publisher abstract and indexed method/discussion passages: target-population effects require measured modifiers, overlap and conditional transport assumptions; common technology does not supply these.

Hernán, M. A., Sauer, B. C., Hernández-Díaz, S., Platt, R., and Shrier, I. (2016). Specifying a target trial prevents immortal time bias and other self-inflicted injuries in observational analyses. *Journal of Clinical Epidemiology* 79, 70–75. Original abstract and indexed manuscript: synchronize eligibility, treatment assignment and start of follow-up. Application here is to intervention timing, not a transferred clinical effect.

Primary scholarly or official sources; access scope is documented privately. Methods and conceptual frameworks do not transfer empirical effects across settings.

RESEARCH REFERENCES / MEASUREMENT AND EVALUATION

Fix the eligible population and mature causal contrast

Primary research informs interpretation and prospective design. It does not authenticate historical files, establish adoption or supply a missing operating effect.

NIST/SEMATECH. e-Handbook of Statistical Methods, section 6.3.2.2: Individuals Control Charts. Official method. Separate real ordered mature outcomes from versions, targets and portfolio profiles. Provisional limits cannot validate a bridge causal-effect label.

Laney, D. B. (2002). Improved Control Charts for Attributes. *Quality Engineering*, 14(4), 531–537. Primary publisher abstract. A Laney adjustment requires authentic binary counts and exposures; hypothetical reduction targets and rounded aggregate rates do not meet that contract.

Cohen, J. (1960). A Coefficient of Agreement for Nominal Scales. *Educational and Psychological Measurement*, 20, 37–46. Primary publisher record. Use blinded coders for action implementation, overlapping eligibility and outcome linkage; report kappa with prevalence and a separate reference-error analysis.

Barnett, A. G., van der Pols, J. C., & Dobson, A. J. (2005). Regression to the Mean: What It Is and How to Deal with It. *International Journal of Epidemiology*, 34, 215–220. Primary abstract. High-rate selection can produce untreated reversion. Keep a concurrent comparison and an explicitly assumed persistence sensitivity when auditing bridge outcomes.

Hudgens, M. G., & Halloran, M. E. (2008). Toward Causal Inference with Interference. *Journal of the American Statistical Association*, 103, 832–842. Original manuscript. Portfolios share analysts, training capacity and customers. Assign independent capacity domains and measure spillovers before claiming original-cohort policy effects.

Callaway, B., & Sant'Anna, P. H. C. (2021). Difference-in-Differences with Multiple Time Periods. *Journal of Econometrics*, 225, 200–230. Author manuscript. A later staggered observational rollout needs group-time ATT, eligible controls and defensible trends. A before/after bridge table is not that design.

Strong, M., Oakley, J. E., Brennan, A., & Breeze, P. (2015). Estimating the Expected Value of Sample Information Using the Probabilistic Sensitivity Analysis Sample. *Medical Decision Making*, 35, 570–583. Author repository. Value a ledger through decisions it can change within a feasible response budget; charge evidence and downstream action costs without adding the same benefits twice.

Primary scholarly or official sources; access scope is documented privately. Methods and conceptual frameworks do not transfer empirical effects across settings.

RESEARCH REFERENCES / OPERATING GOVERNANCE

Make the decision rule accountable to operating evidence

Primary research informs interpretation and prospective design. It does not authenticate historical files, establish adoption or supply a missing operating effect.

Collier, D. (2011). Understanding Process Tracing. *PS: Political Science & Politics*, 44, 823–830. Primary publication. Separate the recorded request, ranking decisions, accepted ownership and implementation. Derivative working memory is a provisional hoop for role attribution.

Tucker, A. L., & Edmondson, A. C. (2003). Why Hospitals Don't Learn from Failures. *California Management Review*, 45(2), 55-72. Author manuscript. A locally routed fix can leave the system constraint intact. Test accepted cross-team handoffs and response capacity alongside the new reporting layer.

The W. Edwards Deming Institute. The Funnel Experiment. Official exposition. A routine fluctuation can trigger wasteful reallocation. Use mature process evidence before treating each recurring callout as failed corrective action.

Campbell, D. T. (1976). Assessing the Impact of Planned Social Change. Original institutional record. Rewards tied to post-window decline may change bridge selection, reporting and classification. Retain independent all-cause outcomes and the original denominator.

Goodhart, C. A. E. (1992). The Objectives for, and Conduct of, Monetary Policy in the 1990s. Reserve Bank of Australia Annual Conference. Original author paper, section 1(b)(i). Targeting a proxy can alter its relation to the objective. A falling unattributed bucket or rising closure rate is not physical prevention.

Ittner, C. D., Larcker, D. F., & Randall, T. (2003). Performance Implications of Strategic Performance Measurement in Financial Services Firms. *Accounting, Organizations and Society*, 28, 715-741. Author manuscript. Specify the measurement-to-allocation-to-action-to-outcome chain. A measurement layer has contingent information value, not an automatic benefit multiplier.

OECD / European Commission JRC (2008). Handbook on Constructing Composite Indicators. Official handbook. Scores require documented dimensions, scales, weights and sensitivity. An ordinal impact-per-effort score is not a reproducible economic ratio or portfolio optimum.

Primary scholarly or official sources; access scope is documented privately. Methods and conceptual frameworks do not transfer empirical effects across settings.

FINAL REFEREE REPORT / INTERNAL AGENT-ASSISTED REVIEW

Accept the portfolio correction; test the incremental operating value

[AI] This author-led, agent-assisted review is not external peer review. Acceptance concerns the analytical correction and prospective design, not historical adoption or financial benefit.

Major issue	Disposition in the revised case
Post-action decline called effectiveness	Separate follow-up from a causal contrast. Preserve exposure, maturity, assignment and valid controls; repeated callouts are a different measure.
Owned work assumed valueless	Treat ownership as a coordination boundary. Compare addition, repair, extension and replacement using unique mature outcomes and transition costs.
Priority score treated as optimal portfolio	Disclose missing components. Exact constructions show budget and overlap can reverse the preferred choice even with valid standalone ratios.
Benefit extrapolated beyond eligibility	Align tenure, treatment and outcome windows. Separate actual unknown exposure mass from the independent uniform-incidence illustration.
Recommendation treated as delivery	Keep proposed ownership, access, authority and execution unresolved where evidence is absent. Bound personal contribution to supported framing and decision work.

Partner critique: can a COO act on page one?

[AI] Yes: require a defined incremental outcome, an accepted owner and a credible test before funding the addition. Validate maturity and incumbent coverage, then compare selection rules with feasible simpler choices. A compelling recommendation can justify learning without being presented as a realized benefit.

Remaining conditions and minor issues

[AI] Source authentication, candidate scoring, age-specific exposure, transport, intervention costs and reference validity remain incomplete. Hypothetical power and value depend on the declared law. Insufficient break-even detectability, unsafe service trade-offs or a superior simpler comparator requires revision before reliance.

REVIEW DISPOSITION / PASS WITHIN STATED SCOPE

[AI] Accept the evidence reconciliation, exact counterexamples and falsifiable evaluation. Historical customer improvement, savings and implementation remain unestablished.

Internal evidence, numerical, methodological, executive and actual-page reviews. No external endorsement, consulting rank or verified historical effectiveness is claimed.