The Double Diamond

Idea In Short

Leaders, innovation teams and strategy practitioners who want to reduce the rate of failed initiatives and misaligned solutions should adopt the Double Diamond as their standard process architecture for problem definition and solution development. The British Design Council formalized the Double Diamond in 2005, basing it on research conducted across 11 global companies including Alessi, BT, LEGO, Microsoft, Sony and Virgin Atlantic.3 The model's central value is structural: it enforces a mandatory problem-space exploration before any solution development begins. This sequencing discipline is precisely what most organizational innovation processes — which move from symptom identification directly to solution design — omit. A 2020 study published in the Brazilian Journal of Operations and Production Management, applying the Double Diamond alongside Lean Thinking to optimize organizational processes at a law firm, reported a return on investment [ROI] of 815 percent during the project's execution.4 The case for deploying it is not theoretical — organizations that define problems rigorously before investing in solutions consistently outperform those that do not.

The Design Council developed the Double Diamond framework in 2003, formalizing it and releasing it publicly in 2005. Richard Eisermann, then Director of Design and Innovation at the Design Council, initiated the work after recognizing a fundamental contradiction in the organization's message: it was promoting design management as a strategic practice while lacking a standard account of what design process actually looked like. 5The team's research involved mapping the actual design processes used across 11 global organizations — not constructing a theoretical ideal — which is why the model's architecture reflects real practice rather than prescriptive aspiration.

The Double Diamond's intellectual ancestry traces to the divergence-convergence model proposed by Hungarian-American linguist Béla H. Bánáthy in 1996.6 Bánáthy's model formalized the cognitive pattern that effective designers, architects and strategists had long applied intuitively: open thinking must precede closed thinking and the opening and closing

of options must occur twice — once around the problem and once around the solution. The Design Council's contribution was to name the four phases, anchor them in practitioner research across recognizable organizations and make the underlying logic accessible to non-designers.

In 2019, the Design Council updated the Double Diamond to reflect developments in design practice since 2005. The updated framework added three design principles — leadership commitment, user focus and communication — and positioned the four-stage model within a wider Framework for Innovation that acknowledges the iterative, non-linear reality of complex design work in organizations.7 The core four-stage structure remained intact, confirming that the original 2005 architecture had sufficient descriptive validity to survive 14 years of practice evolution without structural revision.

The Four-Stage Architecture

The Double Diamond organizes the design and innovation process across four sequential stages divided into two diamonds. The first diamond addresses the problem space; the second addresses the solution space. Each diamond contains one divergent phase and one convergent phase, producing the alternating pattern of opening and closing options that gives the model its shape and its analytical logic.

Discover opens the first diamond and operates through divergent thinking. The team moves outward from an initial assumption or brief, exploring the situation as broadly as the problem demands. Discover is an empirical phase — it requires direct engagement with the people, systems and contexts involved in the challenge.8 Methods at this stage include stakeholder observation, contextual inquiry, ethnographic research and challenge mapping. The purpose is not to generate solutions — it is to challenge the initial framing of the problem and to surface the real challenge that the subsequent stages must address. Many innovation failures trace directly to this stage: the brief that begins with a solution already in mind, the discovery phase that is abbreviated to two stakeholder interviews, the team that moves to Define before it has genuinely questioned its assumptions.

Define closes the first diamond through convergent thinking. The team synthesizes everything gathered in the Discover phase and commits to a precise articulation of the problem to be solved.9 The output of Define is typically a design brief, a How might we...? formulation or a validated problem statement that the team and its stakeholders agree on.

This convergent commitment is the fulcrum of the entire model. Everything invested in Discover is wasted if Define produces the wrong problem statement. Everything invested in Develop and Deliver is wasted if it addresses a problem that Define failed to characterize accurately. Define is therefore the highest-leverage decision point in the Double Diamond — and the most frequently under-invested.

Develop opens the second diamond and returns to divergent thinking, now directed at the solution space rather than the problem space. The team generates multiple, diverse potential solutions to the problem defined in the previous stage — through brainstorming, co-creation, scenario development, rapid prototyping and structured ideation.10 The discipline of Develop is to resist the pressure to converge prematurely — to stay divergent long enough that the solution space is genuinely explored rather than anchored to the first plausible answer. In organizational contexts, this is culturally difficult. Most organizations reward speed and decisiveness. Develop rewards patience and option generation — virtues that feel like inefficiency to action-oriented leadership teams but that determine solution quality at Deliver.

Deliver closes the second diamond through convergent testing, evaluation and launch. The team progressively narrows the solution space through user testing, prototype iteration and real-world piloting, committing to the solution — or set of solutions — that evidence supports.11 Deliver is not a single launch event. In the Double Diamond's updated 2019 form, it encompasses phased rollout, continuous feedback integration and the discipline of abandoning what testing disconfirms rather than defending the investment made in developing it. Organizations that treat Deliver as the end of a linear process miss the iterative feedback loop the model's updated version builds in: a completed Deliver cycle generates new insights that can and should trigger a new Discover phase.

The Divergence-Convergence Logic

The Double Diamond's structural contribution to organizational problem-solving is the explicit separation of divergent and convergent thinking modes — and the enforcement of the correct sequence between them. Divergent thinking expands the option space; convergent thinking narrows it. Both are necessary; neither is sufficient alone. The sequence matters because convergence applied before sufficient divergence produces solutions to the wrong problem or solutions that ignore viable options.12

Most organizational decision-making cultures default to premature convergence. The pressure to produce outputs, the cognitive discomfort of sustained ambiguity and the institutional bias toward action over exploration all push organizations to close options before the divergent phase has done its work. The Double Diamond externalizes this failure mode in a format that leaders can use to diagnose and challenge their own process. When a project review asks where are we in the Double Diamond? and the answer is we are in Develop, but the team cannot articulate what Define concluded, the diagnostic is visible and actionable before significant resource has been committed to the wrong solution.13

The model also challenges a specific assumption embedded in most strategic planning cycles: that the problem to be solved is defined by the person who holds the budget. The Double Diamond's Discover phase deliberately exposes the difference between the stated problem in a brief and the real challenge surfaced by genuine user and system research. In practice, Discover frequently reveals that the brief defines a symptom rather than a cause — and that solving the brief will not resolve the underlying performance deficit it was written to address.

Organizational and Strategic Applications

The Double Diamond applies directly to three organizational contexts beyond product and service design: strategy development, organizational transformation and technology implementation.

In strategy development, the Double Diamond disciplines leadership teams to distinguish between problem definition and strategy development. Strategy processes that begin with options — acquisition targets, market entry scenarios, cost reduction programs — typically embed a problem definition that has never been tested. Applying the Discover and Define stages to a strategic challenge before developing options surfaces assumptions, challenges the framing of the problem and ensures that the strategy that emerges addresses the real competitive or operational challenge the organization faces.14

In organizational transformation, the Double Diamond prevents a failure mode that is structurally endemic to large-scale change programs: the deployment of a solution — a new operating model, a technology platform, a restructured organization — against a problem that was never sufficiently characterized. The 2020 Brazilian Journal of Operations and Production Management study illustrates this: the research team used the Double Diamond

to define the actual process inefficiencies in the law firm's operations before designing interventions, rather than imposing a predetermined Lean template. The 815 percent ROI reported in the study reflects the value of that problem-definition discipline as much as the quality of the solutions it produced.15

In technology implementation, the Double Diamond has become foundational to user experience [UX] and product design disciplines, where it directly addresses the gap between technically feasible solutions and solutions that users will adopt. Splunk, the data analytics platform, documents the Double Diamond as a core framework in its product development process, noting that the model helps teams avoid building solutions to problems that don't actually exist — a failure mode that represents one of the largest categories of avoidable technology investment waste.16

The 2019 Framework Update

The Design Council's 2019 update to the Double Diamond reflected the framework's evolution over 14 years of global organizational practice. The update preserved the four-stage core but introduced three surrounding principles and four design methods that practitioners should bring to bear across the entire process.17

The three principles are: put people first (all design work should be grounded in a deep understanding of real users, employees and other stakeholders), communicate visually and inclusively (prototyping and visual tools should be used throughout, not only at Develop) and collaborate and co-create (design processes generate their best outcomes when they involve diverse teams and active stakeholder participation). These principles function as operating conditions, not additional process stages. They describe how the four stages should be conducted rather than adding new phases to the sequence.

The four design methods the update introduced are: research, analysis, ideation and prototyping — positioned not as phase-specific tools but as methods that can and should recur at multiple points in the process as the team cycles through discovery and development. This recurrence design reflects the updated framework's acknowledgment that real innovation work is iterative — the model's diamonds are better understood as recurring patterns than as a sequence that runs once and terminates at Deliver.

Summary

The Double Diamond, formalized by the British Design Council in 2005 from research across 11 global organizations, maps the design and innovation process across four stages — Discover, Define, Develop and Deliver — through two alternating cycles of divergent and convergent thinking. Its structural value is that it enforces rigorous problem definition before solution development, a discipline that organizational evidence consistently links to higher initiative success rates.