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Design Thinking as Strategic Capability: A Framework for Organizational Maturity

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Abstract. The world has become unpredictable. Traditional, linear management styles prove insufficient when facing deep complexity and uncertainty. This paper positions Design Thinking as a strategic organizational capability that integrates analytical, creative, and practical intelligence. We present a comprehensive framework comprising ten strategic organizational dimensions and introduce a five-level maturity model that enables organizations to systematically assess and develop design-oriented behavior. Drawing on Sternberg's triarchic theory of intelligence and organizational development research, we demonstrate how Design Thinking becomes strategically valuable when embedded in behavior, culture, and decision-making, instead of being applied as an isolated toolkit. We argue that for Design Thinking to succeed, it must evolve from a toolkit into a 'mental infrastructure'. This transformation requires specific leadership behaviors and a shift in organizational culture that views failure as a learning opportunity. The framework addresses the shift from efficiency-driven optimization to responsiveness-oriented adaptation, offering organizations a structured pathway from ad-hoc experimentation to internalized design capability. Our contribution lies in translating abstract design principles into observable behavioral dimensions across individual, team, and system levels, turning Design Thinking into a measurable and developable core organizational competence.

Keywords: Design Thinking, Strategic Capability, Organizational Maturity
Behavioral Dimensions, Collective Intelligence.

1 Introduction

1.1 Strategic Urgency in Volatile Environments

Organizations today face unprecedented volatility characterized by rapid technological disruption, geopolitical instability, ecological crises, and shifting societal expectations, demanding new skill sets (World Economic Forum, 2023).
Many organizations have polished their internal processes using lean or agile and data-approaches. However, efficiency becomes irrelevant as external conditions change faster than strategies can adapt.

1.2 Limitations of Traditional Management Models

Classical management approaches work when the world is predictable. It fails, however, with 'wicked problems' (Rittel & Webber, 1973): complex challenges with

unclear causes, conflicting interests, and contradictory effects. Buchanan (1992) argued that design offers a way of addressing these wicked problems through integrative thinking, connecting the indeterminacy of such problems to the distinctive capacity of design. In these contexts, command-and-control approaches that prioritize efficiency, prediction, and risk minimization may become counterproductive. The real challenge isn't finding a quick fix. It's figuring out what the problem actually is. Instead of collecting more data or creating better dashboards, organizations need the collective capacity to make sense of uncertainty.

1.3 Design Thinking as a Strategic Response

Design Thinking offers an alternative paradigm focused on exploration (Brown, 2009; Martin, 2009) instead of execution. It prioritizes asking better questions over finding fast answers. But if organizations treat it just as a method or innovation toolkit (Kolko, 2015), its strategic potential remains unrealized. Design Thinking is best understood as a mindset and a capacity for inquiry rather than a fixed methodology or algorithm. Martin (2009) specifically cautions against reducing it to a step-by-step process. This paper argues that Design Thinking becomes strategically valuable when developed as an organizational capability, visible in daily behavior, embedded in culture, and manifested in how people collaborate, decide, and learn.

1.4 Research Contribution

This paper makes three key contributions. First, it reframes Design Thinking from a method-centered intervention to a non-linear strategic organizational capability by identifying ten strategic dimensions that shape design-oriented behaviour. Second, it introduces a maturity model that enables organizations to identify development priorities. Third, it provides a behavioural framework that translates abstract principles into observable, systematically developable practices across individual, team, and organizational levels. Collectively, these contributions provide a lens for understanding how design-oriented capability becomes progressively embedded in organizational behaviour, culture, and decision-making.

2 Theoretical Framework

2.1 Three Forms of Organizational Intelligence

Drawing on Sternberg's triarchic theory of intelligence (Sternberg, 2000), we conceptualize Design Thinking as the integration of three complementary forms of organizational intelligence (see Fig. 1).

Analytical Intelligence enables organizations to slow down, reframe problems, recognize system tensions, and generate meaning. Rather than asking "what should we do?", analytically intelligent organizations ask "why does this friction exist?". This capacity involves pattern recognition, contextual understanding, and the ability to question assumptions.

Creative Intelligence facilitates thinking beyond existing frameworks, challenging established logic, and generating alternative possibilities even without immediate urgency. Organizations with creative intelligence cultivate imagination as a systematic practice, not just individual talent, using divergent thinking to explore "possibility spaces" before converging on solutions.

Practical Intelligence ensures ideas do not remain theoretical but become tangible, tested, and refined solutions. This involves learning through action, managing

incompleteness, and productively engaging with failure. Practical intelligence bridges the gap between concept and reality through iterative experimentation.

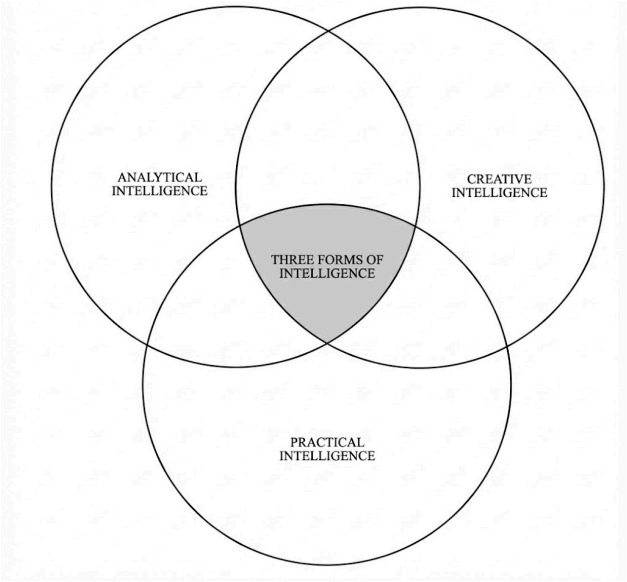

Fig. 1. Three forms of organizational intelligence

Organizations that activate these three intelligences concurrently develop a mindset oriented toward learning rather than knowing, toward adaptive capability rather than control, and toward agile precision rather than speed.

2.2. From Methodology to Mental Infrastructure

Design Thinking is commonly presented as a defined process: empathize, define, ideate, prototype, test (Plattner, 2010). While this structure provides accessibility, it can also obscure the deeper value. True power lies not in the steps, but in the underlying capabilities: the ability to give meaning to uncertainty, experiment without guarantees, and learn collectively in continuously changing systems. This shifts the focus from *what* organizations do to *how* they think, how they interpret events, handle uncertainty, and make decisions conceptually aligned with 'designerly ways of knowing' (Cross, 2001). Design Thinking becomes a mental infrastructure shaping organizational cognition.

2.3 Behavior as Strategic Infrastructure

Ultimately, strategic capability is behavioral. It shapes how organizations collaborate, discuss tensions, and learn from failure. In design-mature contexts, leadership is defined by asking questions instead of providing answers, just as policy is developed through prototyping instead of theoretical planning. When users act as co-designers and complexity is explored rather than prematurely reduced, Design Thinking begins to function as a strategic asset rather than as an isolated innovation practice. The critical challenge is therefore to extend these behaviours beyond isolated teams to the wider organization. This requires a shift in organizational culture and capability, not merely the distribution of methods.

3 Strategic Organizational Dimensions

To develop Design Thinking as a strategic capability, organizations need clarity on where to grow. We identify ten Strategic Organizational Dimensions derived through a conceptual synthesis of design research and organizational development literature. This theoretical foundation is combined with twenty years of professional practice and reflections from three years of longitudinal observation within executive education at TIAS School for Business and Society, involving participants from over 50 organizations.

Within each dimension, we apply Sternberg's triarchic framework to define specific observable behaviours (Analytical, Creative, and Practical intelligence). They describe how Design Thinking may evolve from incidental, person-dependent activity toward a more distributed, reflexive, and culturally internalized capability. In this sense, the framework functions as a developmental heuristic: a structured way of diagnosing present conditions and future growth rather than a prescriptive algorithm

3.1 The Ten Strategic Dimensions

We identify ten strategic organizational dimensions that collectively enable design-oriented organizational capability:

Table 1. Ten Strategic Dimensions

Strategic Organizational Dimension	Analytical	Creative	Practical
1. Mindset & Culture	◐	●	●
2. Strategic Anchoring	●	○	●
3. Cross-functional Collaboration	○	●	●
4. Problem Definition & Reframing	●	●	○
5. Ideation & Creativity	○	●	○
6. Prototyping & Testing Behavior	○	○	●
7. User Orientation	◐	●	●
8. Reflection & Learning Capacity	●	○	●
9. Leadership Behavior	●	◐	●
10. Capability Development	●	●	●

Mindset and Culture. Design maturity begins with a culture that values inquiry and curiosity. In mature organizations, failure represents a learning opportunity, which requires a climate of psychological safety (Edmondson, 1999). People feel free to question assumptions, embrace "not-knowing" and recognize complexity without immediately resorting to simplification or rigid hierarchy. This mindset appears in daily behavior: how mistakes are discussed, who speaks in meetings, and the space afforded to the unexpected.

Strategic Anchoring. When strategically anchored, Design Thinking guides work rather than merely supplements it. Strategy emerges not only through fixed KPIs, but also through continuous discovery, experimentation, and adjustment. Leadership plays a key role here, requiring the courage to deliberately slow down, allow course rethinking, and remain open to new perspectives.

Cross-functional Collaboration. Innovation stops where silos start. Design-mature organizations deliberately invest in connections across disciplines, departments, and hierarchical layers. They build bridges between technology, people, markets, and operations, viewing the resulting friction as an opportunity rather than an obstacle.

Problem Definition and Reframing. Good design begins with good questions, which are rarely immediately obvious. In design-mature organizations, problem definition is an ongoing process of reframing (Dorst, 2015), in which questions are continuously revised, deepened, and reframed. The core question is re-examined not to create complexity, but to understand the root problem. This involves deliberately delaying quick solutions in order to investigate through interviews and system maps.

Ideation and Creativity. Design-mature organizations create space for divergence before convergence. Ideas may be wild, unfinished, or unfeasible if they open new perspectives. Creativity becomes a systematic group practice rather than a matter of individual talent alone. Ideas are judged on potential first, feasibility later.

Prototyping and Testing Behavior. Ideas quickly become tangible through storyboards, mock-ups, fakedoors, or digital pilots. Feedback is treated as building blocks for the next iteration. Design-mature organizations actively protect this experimentation space through dedicated time, budget, and psychological safety.

User Orientation. Empathy becomes a basic organisational attitude from team members rather than a process step. Users transform into co-designers and go beyond a role as respondents, getting involved early and being taken seriously as knowledge sources. This requires structures that facilitate participation and influence on decision-making.

Reflection and Learning Capacity. Reflection becomes a rhythm (Schön, 1983) rather than an incident. Teams evaluate not just results but especially learning processes: What did we discover? What worked differently than expected? Which assumptions need adjustment? Learning is embedded in work through regular check-ins and retrospectives, becoming a natural habit.

Leadership Behavior. Leadership in design-mature organizations is visible in behavior. Leaders ask questions, listen actively, create space for uncertainty, and model learning, experimentation, and collaboration. They steer for capacity rather than control, and for direction rather than speed.

Capability Development. Design Thinking requires continuous development of individuals, teams, and the entire organization. In mature organizations, learning trajectories are integrated into daily work through coaching, peer learning, and workplace reflection. HR can play a strategic role, building learning ecosystems where development is anticipatory.

4 The Design Thinking Maturity Model

To sustainably develop Design Thinking as a strategic capability, organizations need insight into how deeply it is embedded in behavior, structure, and culture. While foundational frameworks like the Danish Design Ladder (Danish Design Centre, 2001) successfully mapped the strategic position of design, and functional models like the Nielsen Norman Group's UX maturity scale (Kaplan, 2021) effectively assess process adoption, a behavioral dimension remains underexplored. We present a five-level maturity model approaching Design Thinking as a cognitive and behavioral competence embedded in the organizational DNA. It addresses the gap between adopting design processes and actually thinking and acting as a design-oriented organization. Our framework focuses on the observable behaviors and collective intelligence that underpin a genuine design orientation. The five maturity levels were constructed as developmental stages indicating increasing degrees of embeddedness.

They should not be read as an implementation sequence or a universal organizational pathway.

Table 2. Design Thinking Maturity

Maturity Level	Status
Level 1	Ad hoc & Dependent
Level 2	Experimental & Local
Level 3	Streamlined & Supported
Level 4	Anchored & Distributed
Level 5	Internalized & Reflexive

4.1 Five Maturity Levels

Level 1 - Ad Hoc and Dependent. Design Thinking occurs incidentally and is largely person-dependent. Initiative rests with individuals without strategy or common language. Experiments remain reactive and short-lived; Design Thinking is present, but only as a contextual luxury.

Level 2 - Experimental and Local. Isolated experimental spaces begin to emerge, often with their own initiatives, tools and local champions. Energy exists but it remains small-scale and fragmented. There is still no broader learning climate or shared rhythm of reflection; Design Thinking lives on islands, not in systems.

Level 3 - Streamlined and Supported. Design Thinking gains more recognizable forms through rituals, formats, and learning trajectories. Teams begin to speak the same language, leadership offers support, and experimentation becomes more legitimate. The challenge at this stage is to avoid bureaucratization: Design Thinking must remain a living practice rather than becoming a rigid implementation program.

Level 4 - Anchored and Distributed. Design Thinking becomes integrated into culture, processes, and products. It becomes more self-evident and more strategically embedded. Feedback, collaboration, and co-creation are becoming increasingly standard. Risks shift from unfamiliarity to superficiality without critical reflection.

Level 5 - Internalized and Reflexive. Design Thinking is no longer experienced as a separate method or add-on, but becomes part of the organizational DNA. It is visible in natural patterns of behaviour oriented toward openness, learning, experimentation, and co-creation. This is not a final endpoint. Reflection, adjustment, and renewal remain essential in order to prevent internalization from hardening into automatism

4.2 Uneven Development

Organizations can exist at different stages across different dimensions. A team may score high on prototyping but low on strategic anchoring. Such unevenness is normal. What matters is the direction of development and the organization’s capacity to recognize these asymmetries and manage them consciously. For that reason, the framework should not be used as a simplistic ranking device. Its value lies less in assigning a fixed maturity label than in helping organizations diagnose tensions, blind spots, and developmental priorities. Maturity is not only about depth within each dimension, but also about the ability to notice where capability remains partial, fragmented, or fragile, and to strengthen it over time.

5 Implementation: Change as a Movement

5.1 Four phases of change

Design Thinking cannot be implemented as an organizational capability through step-by-step plans, training or KPIs alone. Such attempts may create the appearance of innovation without producing genuine behavioural change. Instead, its development is better understood as a movement-like process through which new ways of thinking and acting gradually gain meaning, visibility, legitimacy, and continuity within the organization. Based on Reflective Practice (Schön, 1983), we distinguish four phases in this process (see Fig. 2). These phases should not be read as a rigid sequence or universal implementation recipe, but as an interpretive framework for understanding how design-oriented capability may emerge, spread and eventually shape organizational identity.

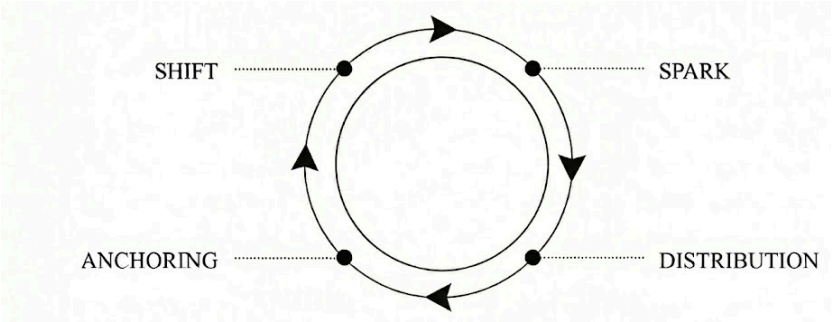

Fig. 2. Four phases of change

Phase 1: The Spark - Meaning Over Method. Movements often begin with experiences that trigger wonder, friction, or disruption. The "spark" emerges when people are affected and start acting differently. Crucially, Design Thinking should be positioned as an invitation, not a mandate. Success depends on working on meaningful wicked problems and giving pioneers trust. Avoid introducing rigid formats too early; focus on desire and meaning.

Phase 2: Distribution - Behavior Before Formats. Movements spread through imitation and curiosity. Making behavior visible without codifying it too quickly, is essential. This involves giving space to the movement without institutionalizing it immediately. Success requires ambassadors across different layers, rituals that normalize behavior and the open sharing of experiments including failures.

Phase 3: Anchoring - The System Must Adapt. Organisational systems mostly demand predictability, while Design Thinking requires flexibility. Organization and processes must accommodate the movement; the system must adapt. Organizations must reinvent themselves in order to support the emerging capability. Strategic frameworks need to leave space for learning, iterative decision-making, and HR policies that value reflection.

Phase 4: Shift - From Behavior to Identity. Over time, Design Thinking ceases to be experienced as a method and becomes a way of being. It becomes natural in thought, action, and decision-making. Characteristics include strategy starting with exploration, teams designing their own learning processes, and customers acting as co-designers. To prevent this "naturalization" from calcifying, the movement must be continuously fed with new questions and perspectives.

5.2 Leadership as Space Designer

Across all four phases, leadership plays a critical role. However, leaders act not primarily as process owners or controllers of implementation, but as creators of the conditions under which growth becomes possible. They create space, slow down when needed, protect experiments and support cross-boundary collaboration. Leadership becomes the art of designing space rather than controlling outcomes. They help create the structural, relational, and cultural conditions in which new patterns of inquiry, experimentation, and reflection can take root and become sustainable.

6 Discussion

6.1 Organizational Intelligence Beyond Rationality

Our framework suggests that the shift from efficiency to responsiveness may require a different understanding of what organizational intelligence means in practice. From this perspective, Design Thinking is not a bounded method, but a capability for collective sensemaking and adaptive response. This reframes strategic effectiveness. While efficiency and control remain important in stable contexts, more dynamic environments demand stronger interpretive, experimental, and collaborative capacities. Design Thinking complements rather than replaces traditional management rationality where linear approaches are insufficient.

6.2 Design Thinking as Social Technology

Design Thinking becomes strategically relevant when it enables collective learning across functions, hierarchies, and domains. Its value lies in fostering shared inquiry, user involvement, iterative reflection, and organizational learning. It can therefore be understood as a form of collective learning infrastructure that supports more intelligent responses to complexity.

7 Conclusion

This paper positions Design Thinking as a strategic organizational capability rather than a standalone methodology. It proposes a framework linking ten organizational dimensions to five maturity levels, drawing on design research, organizational development, and Sternberg's triarchic theory of intelligence. Its central claim is that value emerges from the integration of design-oriented thinking into behaviour, culture, leadership, and decision-making, treating it as a broader form of organizational intelligence.

As a conceptual model, further empirical research, including case studies and comparative analysis across organizations at different maturity levels, would strengthen the model and test its applicability in diverse contexts. We hope this work contributes to the ongoing conversation in design research about how design capability can be developed as a strategic organizational competence.

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