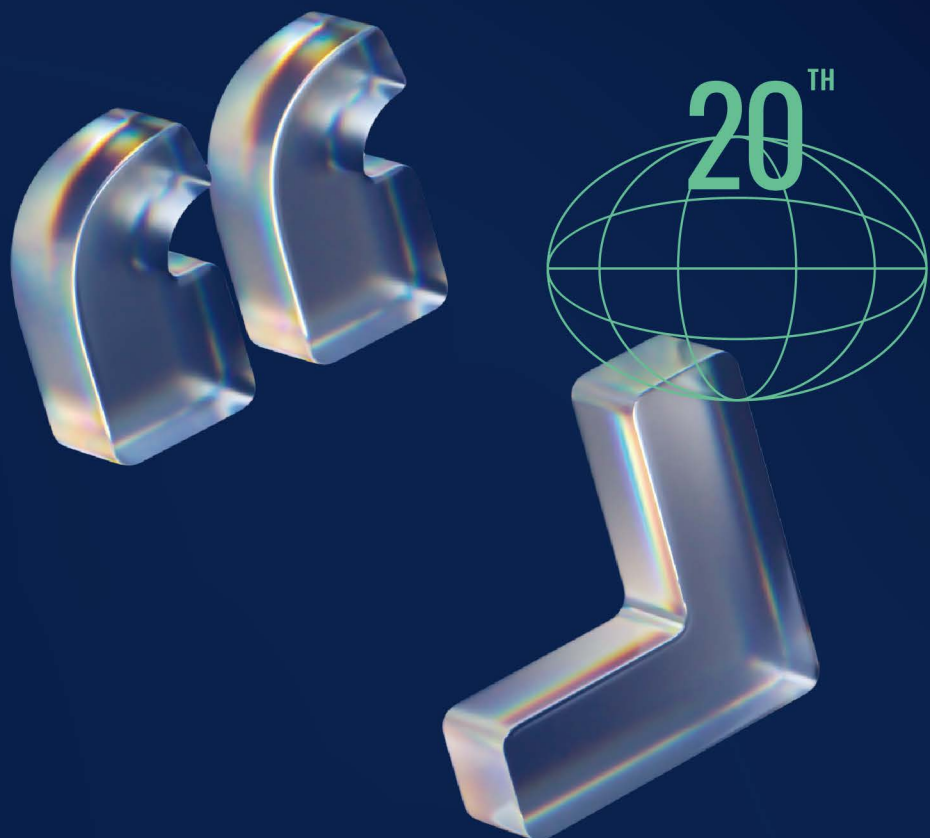


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2025



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11th since 2005, 20th Anniversary

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11th Congress of the International Association of
Societies of Design Research

December 2nd—5th, 2025
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EDITORS :

Chi-Yi Chang
Chien-Hsiung Chen
Yen Hsu

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Track Chairs:

Min-Yuan Ma; *National Cheng Kung University*
Chia-Han Yang; *National Cheng Kung University*
Yuichi Washida; *Hitotsubashi University*
Peter Lloyd; *TU Delft*

Realm: *Evolving Practices; Interdisciplinary Applications; Technology Convergence; Ethics/Sustainability; Future of Design Thinking Education*

Failing through Play: Integrating Iterative Design Methods to Foster Creativity in Primary Education

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IRIS-CEM: An AI-enabled toolkit for visual-verbal collaboration and semantic reframing in design

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The Process of Designers to Motivate Themselves for Their Creative Performance

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Bridging Innovation and Delivery: A Double-Helix Integration of Design Thinking and Lean Thinking in Taiwan's Regional Revitalization

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Design Thinking beyond the hype: organisational barriers and implementation challenges

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**Bridging Behavioral Theory and Design Practice: A Taxonomy-Driven
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Design Thinking beyond the hype: organisational barriers and implementation challenges

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Design Thinking beyond the hype: organisational barriers and implementation challenges

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Despite the growing popularity of Design Thinking (DT) as a catalyst for organisational innovation, agility, and user-centred transformation, its actual adoption often remains superficial, fragmented, or symbolic. This study presents a systematic literature review of 64 peer-reviewed publications, aiming to identify, categorise, and interpret the key barriers to DT implementation in organisational contexts. Findings reveal that resistance to DT is rooted not merely in technical or procedural limitations, but in deeper organisational structures, cultures, and mental models. Through thematic synthesis, four recurring macro-barriers are identified: (1) uncertainty induced by change, (2) leadership-related constraints, (3) incompatibility of approaches and languages, and (4) trivialisation of the method. The study contributes a structured and updated categorisation of these barriers, highlighting the need for long-term, systemic efforts—such as cultivating design-literate leadership, strengthening internal capabilities, fostering cross-disciplinary communication, and embedding a tolerance for ambiguity. By analysing the interrelations among these barriers, the paper sheds light on why DT initiatives often fall short of expectations and offers actionable insights for organisations seeking to integrate DT more meaningfully into their culture and operations. Moreover, it provides actionable insights to organisations and decision-makers seeking to integrate DT into their strategic and operational models. Ultimately, DT is presented not as a shortcut to innovation, but as an organisational mindset—one that requires clarity, resilience, and a sustained commitment to learning through uncertainty.

Keywords: *Design Thinking; Design Thinking adoption; barriers for adoption; organisational change.*

1 Introduction

In the past two decades, Design Thinking (DT) has come to be seen as a compelling approach for nurturing creativity and encouraging collaboration across different parts of an organisation. Its rise has been anything but limited: today, DT is applied in a wide range of industries and functional areas, often with the hope that it can help organisations stay afloat amidst unpredictable markets, rapid shifts in technology, and the ever-changing needs of customers. What makes DT particularly distinctive is its ability to bring empathy, experimentation, and iterative thinking into the strategic



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core of a company. Rather than simply reacting to problems as they arise, organisations are invited to proactively engage with what might be possible, what could be built or reimaged next (Brown, 2008; Martin, 2009; Liedtka, 2015).

Over time, the academic community's interest in Design Thinking (DT) has grown significantly, seeing an increasing development of articles on the subject. The different contributions referred to the fundamental steps to be followed (Plattner et al., 2012), the benefits that can be achieved (Liedtka, 2015; Beckman & Barry, 2007) and how the methodology can be applied in different contexts, from public to private and even non-profit organisations (Bason, 2014; Dunne, 2018). In parallel, it has become a staple in management education, business innovation strategies, and organisational change agendas. The literature increasingly views DT not only as a toolkit but as a meta-capability for navigating complexity and enabling learning-centred organisational evolution (Zurlo, 2019; Garbuio et al., 2015).

More recent empirical studies show that DT can speed up organisational agility, customer orientation, and cultural change, particularly in firms committed to deep change (Wrigley et al., 2020; Elsbach & Stigliani, 2018). In this sense, DT has appeared as a crossroads of design sensibilities and managerial agendas, offering a hybrid perspective for organisational sensemaking and innovation. Yet with this growing hype comes a nagging paradox: in tandem with the widespread rhetorical embrace of DT, actual real-world implementation of DT in organizations is often partial, shallow, or even absent (Carlgren et al., 2016; Junginger, 2009).

Even though more and more organizations are attempting to use DT, its principles are usually misinterpreted or diminished. Many businesses, to try to adopt Design Thinking, are implementing workshops, symbolic initiatives, or superficial creative exercises that cannot reflect their contribution to decision-making procedures or structures (Dunne, 2018a). Instead of overcoming resistance, these "superficial adoptions" of DT produce little change and may even increase cynicism. Sometimes DT turns into just another trend, used in strategy decks but not in actual practice. Empirical research has consistently demonstrated that cultural inertia, entrenched routines, misaligned leadership visions, and the trivialization of DT's methods and values limit its adoption (Carella et al., 2025; Gruber et al., 2015; Kolko, 2015).

These barriers are far from being solely technical or procedural in nature. More often, they stem from deeply rooted organisational habits and structures that instinctively reject ambiguity, decentralised collaboration, or user-driven approaches. As Carella and Melazzini (2023) emphasise, many organisations lack the internal capacity—such as skilled facilitators or experienced design leaders—needed to move from superficial engagement with Design Thinking (DT) toward a more authentic, sustained transformation.

What complicates the issue further is that DT calls for a mindset shift that doesn't align easily with prevailing management logic. It requires a redistribution of control, a tolerance for uncertainty, and a stronger focus on empathy than efficiency. Corporate norms based on forecasting, performance evaluations, and clearly defined authority may not stand well with these expectations. As a result, managers often find themselves caught between the promise of DT and the practical realities of their organisational context, particularly when its language and expected outcomes deviate from those typically associated with traditional managerial frameworks (Kimbell, 2011; Wrigley et al., 2020).

This study aims to reflect on the main problems arising during Design Thinking adoption by conducting a systematic review of the literature on barriers that may be encountered. The literature presents several contributions on barriers, but these remain fragmented and often lack a unifying framework. We propose a novel clustering of barriers into four macro-categories that synthesise insights across disciplines and case studies:

1. Uncertainty produced by change
2. Leadership issues
3. Incompatibility of approaches and languages
4. Trivialisation of the method

These clusters represent distinct but interrelated sources of friction that organizations can face when they try to integrate Design Thinking in their contexts. By mapping and analysing these barriers, we aim to offer a more coherent understanding of where and why DT adoption efforts break down.

In doing so, this paper contributes to supporting a theoretically clear understanding as well as giving practical guidance to stakeholders from organisations interested in DT adoption. The focus is on how to support large organisations that do not already operate in the design sector in approaching and incorporating it. The contribution of this paper builds on previous works on possible barriers during Design Thinking adoption, incorporating recent sources and consolidating clusters of barriers. Future works can support the validation of this framework, also complementing it with possible facilitators. Ultimately, this research seeks to move beyond celebratory powers of Design Thinking, supporting organisations in moving inside the uncertainty context with which they should deal—a necessary step if we are to unlock its transformative potential rather than merely perpetuate its symbolic appeal.

2 Theoretical background: The promise and pitfalls of Design Thinking

Design Thinking (DT) emerged as a methodological bridge between creativity and logic, user-centredness and systems thinking. Its canonical phases (empathise, define, ideate, prototype, and test) have become widely known in innovation circles and corporate training programmes (Brown, 2008; Plattner et al., 2012). These stages are typically nonlinear and iterative, encouraging organisations to approach problems with openness and empathy, and to validate solutions through experimentation rather than prediction. From its early applications in product design, DT has progressively extended to strategic management, service design, and organisational transformation, consolidating itself as a flexible meta-methodology.

Historically, DT gained traction in corporate contexts as companies searched for more adaptive, human-centred approaches to tackle complex, ill-defined problems. Over time, organisations began to integrate DT into innovation labs, internal accelerators, and cross-functional project teams. The method has been deployed in both private and public sectors, with use cases ranging from healthcare services to digital transformation, citizen engagement, and sustainable business modelling (Bason, 2014; Dunne, 2018a). DT is increasingly seen as a lever for organisational renewal and for fostering new behaviours that encourage openness, iteration, and empathy within complex systems.

The expected benefits of DT have been broadly articulated in the literature. These include the stimulation of creativity and ideation processes, a more empathetic understanding of user needs, and the promotion of co-creative dynamics that break down organisational silos (Kumar & Whitney, 2007;

Beckman & Barry, 2007). Several scholars have examined DT's potential to generate strategic alternatives (Martin & Martin, 2009), reframe existing problems, and develop dynamic capabilities that help organisations thrive in uncertainty (Elsbach & Stigliani, 2018). Organisations using DT have reported gains in customer satisfaction, team engagement, and innovation velocity (Gruber et al., 2015; Wrigley et al., 2020).

Moreover, DT has been recognized as a perfect tool not just for problem-solving but also to support cultural change. It invites organisations to explore “what could be” rather than just “what is,” encouraging a mindset that uses creativity while maintaining feasibility and viability. In this regard, DT has been closely linked with organisational agility, resilience, and the ability to respond to evolving market conditions (Liedtka, 2015). It has also been embraced as a pedagogical model within management education, promoting experiential learning and interdisciplinary collaboration (Zurlo, 2019).

Despite these promises, DT remains difficult to implement effectively in many organisational contexts. While its visibility has grown, actual integration into daily practice is often superficial or symbolic. Several authors have criticised the prevalence of “design theatre”, a term coined by Carlgren et al. (2016) to describe the performative use of DT practices without substantive change. In such cases, DT is reduced to brainstorming exercises or isolated workshops disconnected from strategic processes and decision-making routines. Similarly, Dunne (2018b) warns that organisations may adopt the surface forms of DT without engaging with its deeper epistemological commitments, leading to ritualisation rather than transformation.

The hybrid nature of DT—at the intersection of design and management—contributes to this challenge. As Carella et al. (2025) note, DT implies a reconfiguration of power, knowledge, and workflow norms within organisations. It often disrupts established roles and routines, calling for cross-functional collaboration, tolerance for ambiguity, and a shift from linear to iterative planning. These demands can generate tensions with existing organisational logics, especially in environments dominated by efficiency metrics, hierarchical structures, and risk-averse cultures.

As a result, the adoption of DT is often partial and fragile. According to Van der Bijl-Brouwer et al. (2019), companies may launch DT initiatives but lack the internal conditions, such as leadership support, training, and incentives, needed to sustain them. Others implement DT in isolated departments, without embedding it in the organisational culture or governance. Even when design competencies are developed internally, they are sometimes marginalised or underused due to misunderstandings about the method's scope and value.

In response to these challenges, an emerging strand of research has begun to investigate the barriers to DT adoption. These include psychological resistance to change, leadership inertia, misalignment of incentives, incompatibility with dominant organisational languages, and the simplification or trivialisation of DT as a mere set of creative tools. Some studies have also identified contextual factors such as industry norms, client expectations, and maturity of design capabilities as influencing adoption outcomes (Dunne, 2018a; Björklund et al., 2020).

While these studies provide valuable insights, a systematic synthesis of the barriers to DT adoption remains underdeveloped. Existing contributions often focus on individual obstacles or case-specific observations without offering an overarching classification.

The present paper aims to offer a comprehensive review and classification of the main barriers to DT adoption, articulated into four macro-clusters. This effort is intended to provide both theoretical clarity and practical guidance for organisations seeking to move beyond symbolic use and toward meaningful transformation through Design Thinking.

3 Methodology

This study adopts a systematic literature review (SLR) to identify, classify and synthesize the main obstacles obstructing design thinking (DT) within organizational contexts. The objective is to produce a comprehensive observation of the current status of research on the subject, which exposes recurring patterns, conceptual intervals and potential lensing points for organizational changes. The review was held to ensure systematic reviews and Meta-Analysis (PRISMA) guidelines, according to the preferred reporting items, transparency, replication and rigorous functioning.

3.1 Search strategy

To retrieve relevant publications, we performed an extensive search across four major academic databases: Scopus, Web of Science, ScienceDirect, and Google Scholar. These platforms were selected to capture a broad and interdisciplinary set of contributions from the fields of design, management, innovation, and organisational studies.

The search covered publications from 1974 to 2025, with the lower bound marking early contributions on organisational change (e.g. Ackoff, 1974), and the upper bound including the most recent empirical findings (e.g. Carella et al., 2024). We used Boolean combinations of the following keywords: "Design Thinking" AND adoption, "Design Thinking" AND barriers, "organisational resistance" AND "Design Thinking", and "challenges of implementing Design Thinking".

Reference lists of selected articles were also scanned (snowball sampling) to ensure inclusion of highly cited or foundational works not captured through keyword search alone.

3.2 Inclusion and exclusion criteria

To ensure the relevance and quality of the sources included, the following inclusion criteria were applied:

- Peer-reviewed journal articles or conference proceedings.
- Conceptual or empirical studies (qualitative, quantitative, or mixed-methods).
- Case studies or theoretical papers addressing DT adoption within organisational settings (public or private).
- Articles written in English.

The exclusion criteria comprised:

- Articles focusing solely on DT in educational or pedagogical contexts, unless they provide transferable insights into organisational change.
- Non-peer-reviewed content (blogs, opinion pieces, consultancy white papers).
- Publications lacking empirical grounding or theoretical contribution (e.g., those merely descriptive or anecdotal in nature).

3.3 Data extraction and synthesis

After removing duplicates and after the two-phase screening process (title/abstract and full-read review), a total of 64 articles were selected for analysis. These articles expand a diverse set of geography, organizational fields and disciplinary approaches.

We planned an inductive coding process, using thematic synthesis for removing and clustering recurring concepts related to obstacles for DT adoption. The articles were uploaded in qualitative analysis software (Maxqda), and two researchers had independently coded each text to ensure intercoder reliability. The discrepancies were solved through repeated discussion.

The initial code was classified into high-order subjects based on ideological equality and frequency. Through this process, we identified the four macro-themes of the obstacles that recur in literature:

- Uncertainty produced by change
- Leadership and managerial resistance
- Methodological and linguistic incompatibilities
- Trivialisation and superficial deployment of DT.

These categories serve as the analytical framework for the following section. Each macro-theme aggregates multiple sub-barriers and captures distinct, yet interconnected, sources of resistance to DT integration within organisations. The systematic nature of this process ensures that the resulting framework is grounded in evidence while offering a coherent basis for theoretical and practical reflection.

4 Results: Four macro-barriers to Design Thinking adoption

This section presents the results of the systematic review, structured around the four macro-categories of barriers that emerged from the thematic analysis of 64 peer-reviewed publications. These categories represent recurring and interrelated forms of resistance that organisations face when attempting to implement Design Thinking (DT). Although the specific manifestations of these barriers vary across industries and organisational types, the literature consistently highlights structural, cognitive, and cultural obstacles that undermine DT's strategic integration. Below, we explore each macro-barrier in depth.

4.1. Uncertainty produced by change

Design thinking is operated through repetitive loops, user experiment, and re-starting problems, which is opposite to traditional linear procedures centred on control, stability, and older improvement (March, 1991). As such, DT is inherently ambiguous and carries psychological and organisational risks.

Change-related anxiety is a persistent theme in the literature. As Leifer and Steinert (2013) argue, adopting Design Thinking entails 'dancing with ambiguity', where triple-loop learning (reflecting on actions, revising underlying assumptions, and transforming institutional processes) becomes essential for overcoming resistance to change and building sustainable innovation capabilities. Scholars such as Tetenbaum (1998) and Weeks et al. (2004) have emphasised how innovation initiatives, while promising, often provoke resistance when they disrupt familiar routines or challenge employees' perceived competence. Schneider and Rentsch (1988) identify organisational climate and culture as core enablers—or inhibitors—of change. If these elements are misaligned with DT principles (e.g.

openness to failure, decentralised decision-making), even the most well-designed initiatives risk failure.

Ackoff (1974) and Kilmann (1984) point out that managers often favour short-term, known solutions over exploratory approaches, particularly under performance pressure. In this context, DT's abductive reasoning and tolerance for failure may appear threatening. Employees, for their part, may view new methodologies like DT as implicit critiques of their expertise, leading to defensive routines and disengagement (Hutchison, 2001).

Broader trends magnify these tensions: increasing market volatility, technological disruption, and the erosion of clear cause-and-effect relationships. In this context, Design Thinking offers not predictability, but adaptability. Yet, as Ruiz et al. (2021) suggest, organisations often lack the absorptive capacity to translate this ambiguity into structured experimentation. Thus, the very conditions that make DT valuable—uncertainty and complexity—also render it difficult to adopt.

4.2. Leadership issues

The role of leadership is constantly quoted as an essential variable in determining the success or failure of the DT initiative. Transforming leaders are particularly important, as they promote experimentation, a culture of model vulnerability, and enabling cross-functional cooperation (Gill et al., 1999; Bass, 1990; Armstrong, 2012). These leaders are not just supporters of DT—they are sense-makers who interpret it as a strategic opportunity rather than a tactical toolkit.

Yet, many organisations suffer from a discrepancy between leadership rhetoric and operational behaviour (Dunne, 2018a). Leaders may promote DT in public forums or internal communications, but fail to allocate time, funding, or legitimacy to DT activities. This “symbolic adoption” fosters scepticism and weakens long-term sustainability (Carlgren et al., 2014).

Further, several studies highlight that top-down hierarchies and risk-averse leadership styles are incompatible with DT's distributed, exploratory ethos (Wrigley et al., 2020; Kimbell, 2011). Pedler et al. (1996) argue that organisations truly ready for transformation require leaders who embody the values of a “learning organisation”—those who decentralise control, reward curiosity, and accept failure as a source of learning.

In practice, however, many leaders fail to fulfil this role. Some misunderstand DT as a one-off intervention rather than an organisational mindset. Others delegate its implementation to lower-level staff or external consultants without embedding it into strategic planning processes. As Kabra & Mukerjee (2025) note, leadership failure is not merely about resistance—it is also about lack of vision and capability to lead through complexity.

4.3. Incompatibility of approaches and project languages

One of the most persistent and underappreciated barriers to DT adoption lies in the epistemological and linguistic divide between design practices and managerial conventions. While DT embraces ambiguity, iteration, and abductive logic, traditional business and engineering practices often value linear planning, efficiency, and predictive control (Simon, 1996; Kupp et al., 2017).

This mismatch creates not only procedural frictions, but also cognitive and communicative gaps. As Björklund et al. (2020) highlight, designers and managers often use different conceptual frameworks, terminologies, and success criteria, making collaboration difficult. Rauth et al. (2014) observed that

even well-intentioned DT initiatives falter when participants cannot align around a shared understanding of goals and methods.

In the absence of bridging mechanisms—such as shared language training, hybrid roles, or design-literate leadership—these incompatibilities persist.

Moreover, design activities are frequently interpreted as “creative exercises” rather than strategic levers, leading to their marginalisation within project governance. Lindgaard & Wesselius (2018) argue that DT needs to be integrated into core workflows and KPIs to be taken seriously. Without such structural anchoring, it risks being perceived as peripheral or ornamental.

4.4. Trivialisation and simplification of the method

A final, and particularly damaging, barrier is the oversimplification of Design Thinking in organisational settings. DT is often introduced through one-off workshops or short-term consultancy projects that prioritise “fun” and “creativity” over strategic alignment and profound transformation (Ersoy, 2018; Zurlo, 2019).

These superficial deployments create a distorted perception of what DT entails. Dunne (2018b) notes that when DT is disconnected from long-term organisational goals and cultural change, it becomes a ritualistic performance rather than a meaningful intervention. Liedtka et al. (2013) further observe that underprepared facilitators and generic toolkits often result in cookie-cutter implementations that fail to address the specific needs of different organisational contexts.

Partl & Hussein (2024) found that poor workshop design and insufficient follow-up structures diminish trust in DT, especially among sceptical or overburdened staff. Worse, negative experiences with trivialised DT can produce organisational antibodies—defensive reactions that make future transformation efforts even harder to sustain.

Moreover, the proliferation of unqualified consultants who present DT as a plug-and-play methodology contributes to its commodification. In such cases, organisations invest in training or tools without addressing the cultural or structural conditions required for DT to flourish.

Ultimately, this barrier reflects a broader pattern in organisational change efforts: the desire for quick wins and visible engagement often overrides the slower, riskier work of capability building and behavioural change. Without committed leadership, embedded practices, and cultural reinforcement, DT cannot deliver on its transformative potential.

5 Discussion

The four categories of barriers identified in this study – uncertainty produced by change, leadership issues, incompatibility of languages and approaches, and trivialisation of the method - do not act in isolation. Instead, they form a complex, mutually reinforcing system of organisational resistance. Each barrier amplifies the others: for example, weak or symbolic leadership exacerbates employee discomfort with ambiguity, while poor integration of DT into strategic planning fosters its perception as decorative or non-essential. The interdependence among these barriers reflects the multidimensional nature of organisational change, confirming that DT adoption is not a technical intervention, but a profound sociocultural shift (Kimbell, 2011; Dunne, 2018a).

5.1 Implications for organisations

From a strategic perspective, these findings highlight the necessity of holistic, system-level thinking in approaching DT adoption. Isolated interventions—such as launching workshops or hiring external facilitators—may raise awareness but are unlikely to produce sustained impact. The literature consistently shows that capability development, structural reinforcement, and cultural alignment must accompany DT practices if they are to lead to fundamental transformation (Carlgren et al., 2016; Liedtka et al., 2013).

First, organisations must reconceptualise change as a transformation of underlying mental models, not just workflows. Many employees experience DT as unsettling because it challenges deep assumptions about value creation, planning, and risk. Leaders must therefore invest in sensemaking efforts—including storytelling, dialogue forums, and reflective practices—that reframe DT as a legitimate and disciplined response to complexity (Weick, 1995; Elsbach & Stigliani, 2018). Highlighting successful DT case studies internally can reinforce its legitimacy, while transparent reflection on failure helps normalise learning through experimentation (Liedtka, 2015).

Second, DT must be embedded structurally. This means aligning organisational systems, including budgeting, performance evaluation, and hiring, with DT's values. KPIs should reward exploration, empathy, and user-centred outcomes, not only efficiency or short-term ROI (Wrigley et al., 2020). Furthermore, developing internal facilitators, creating DT career paths, and integrating design methods into core business processes are essential steps toward institutionalising DT. As Carella et al. (2025) observe, the shift from symbolic to substantive adoption requires internal champions who are empowered and structurally supported.

Third, the epistemological pluralism that DT introduces must be actively managed. The clash between design logics (open-ended, iterative, abductive) and managerial logics (predictive, linear, convergent) is not merely semantic, but it reflects divergent worldviews (Simon, 1996; Rauth et al., 2014). Bridging this gap requires boundary-spanning roles, interdisciplinary training, and the deliberate construction of shared languages. Approaches such as game-based learning, hybrid design-manager roles, and cross-functional labs can foster mutual understanding while building a shared vocabulary for problem framing and solution development.

5.2 Implications for managers

Managers play a pivotal mediating role between strategic intent and operational reality. They are uniquely positioned to either enable or undermine DT adoption, depending on their interpretation and enactment of the method. As such, managers must become both champions and translators of DT. This involves advocating for its integration at the strategic level while also interpreting its principles in a way that resonates with local teams and existing processes (Dunne, 2018a; Kimbell, 2011). Below are some reflections on the four main barriers identified in the article.

Addressing uncertainty produced by change: DT comes with iterative experimentation and uncertainty, which creates discomfort for organisations accustomed to control and determinism. Managers need to play the role of uncertainty stabilisers, creating psychological safety and redefining ambiguity as a learning space, not risk. They can achieve this through openness to experimentation at the individual level, tolerating mini failures as learning triggers, and providing clear explanations that

link DT activities to broader strategy. Encouraging low-risk pilot schemes and open dialogue about progress and learning outcomes makes employees perceive change as meaningful and manageable.

Overcoming leadership issues: Leadership commitment determines if DT is a one-off experiment or an embedded organisational capability. Every manager must cultivate transformational leadership habits through enabling cross-functional teamwork, making time and resources available for exploration, and sanctioning design-led experimentation. Leaders need to move beyond talk by institutionalising DT through strategic embedding: integrating it into planning cycles, governance processes, and performance measures. The development of internal champions and distributed leadership networks secures ownership and ensures DT is not dependent on specific individuals or temporary enthusiasm.

Bridging incompatibility of approaches and languages: Managers will also have to act as translators of managerial and design logics. The clash of deductive business reasoning and abductive design reasoning can become a problem in collaborations if not actively mediated. Managers can bridge this gap with standard vocabularies, hybrid training, and cross-functional teams that include both designers and business professionals. Adoption of design literacy programs for non-designers and encouraging mutual reflection sessions can reduce misconceptions, foster respect for difference, and permit collective sensemaking. By doing so, managers serve as cultural brokers, facilitating epistemological consistency without stifling diversity.

Preventing the trivialisation of the method: Finally, managers are accountable for safeguarding the integrity and depth of DT. DT is rendered useless as a strategic instrument when reduced to a few superficial workshops or rituals. Managers must ensure that DT activities are aligned with real organisational issues and sustainable objectives. This means resisting pressure for quick payoff and investing in capability-building instead: developing internal facilitators, facilitating reflective review after each project, and integrating findings into decision-making practices.

In sum, managers are not only those who apply DT practices but also the designers of the environment in which DT can thrive. Addressing the four barriers in an orderly manner, they can make Design Thinking from a mere symbolic practice to a sustained organisational mindset.

5.3 Future challenges and research directions

While this review provides a systematic classification of DT barriers, future research should explore the interdependencies between enablers and barriers, and how organisations successfully transition from superficial to embedded DT adoption. Longitudinal case studies, action research, and design ethnographies could provide deeper insight into how these dynamics unfold in practice. Moreover, empirical studies could validate the proposed clusters and test interventions designed to address them, such as leadership training, structural incentives, and language mediation tools.

A further avenue involves developing a framework for mapping organisational readiness for DT adoption, integrating variables such as leadership style, cultural flexibility, and absorptive capacity. Such tools would support both scholars and practitioners in diagnosing obstacles and designing tailored interventions.

6 Conclusion

Design Thinking (DT) holds considerable promise as a strategic approach to fostering innovation, agility, and human-centred value creation. However, this study reveals that a dense web of psychological resistance, structural inertia, and symbolic appropriation frequently obstructs its adoption. Through a systematic review of the literature, we identified and clustered these obstacles into four macro-barriers: uncertainty produced by change, leadership issues, incompatibility of approaches and project languages, and trivialisation of the method. These categories provide a conceptual roadmap for understanding the recurrent points of friction that hinder the systemic integration of DT into organisational practice.

The paper contributes to the literature by offering a synthesised and structured perspective on the barriers to DT adoption, an area that, until now, has remained fragmented across case studies and anecdotal accounts. By drawing together diverse empirical and conceptual contributions, this study consolidates current knowledge and provides a foundation for both theoretical advancement and practical application.

Nonetheless, the study presents some limitations. As a literature-based review, it does not include empirical validation through fieldwork or primary data collection, and thus relies on the interpretations and contexts of existing sources.

Future research should focus on empirical validation of the proposed framework across industries, geographies, and organisational sizes. Longitudinal case studies and action research could explore how the identified barriers evolve over time and how interventions can dismantle them. Moreover, extending the framework to include enablers and facilitators of DT adoption would support a more balanced understanding and inform targeted strategies for implementation.

In conclusion, DT should not be reduced to a toolkit or a trend. It demands a philosophical and operational shift, one rooted in courage, humility, and continuous learning. Only when organisations treat DT as a cultural commitment, rather than a procedural novelty, can its transformative potential be fully realised.

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