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Research Article

Design Thinking and Strategic Management in Fashion Tech Firms: Practitioner Perspectives

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ABSTRACT

The convergence of design thinking and strategic management has become increasingly significant in fashion technology (fashion tech) firms operating within highly dynamic and innovation-driven environments. This study explores how design thinking influences strategic decision-making processes by integrating user-centred innovation with long-term organisational objectives. Drawing on a qualitative research design based on secondary data, including academic literature, industry reports, and practitioner case studies, the study identifies key themes related to innovation capability, customer-centricity, digital integration, and sustainability. The findings reveal that design thinking enhances strategic flexibility, supports dynamic capabilities, and enables firms to respond effectively to changing market conditions. However, challenges such as organisational resistance, scalability issues, and tensions between creativity and efficiency remain prevalent. By synthesising theoretical perspectives and practitioner insights, the study contributes to the understanding of how design-led approaches can be embedded within strategic frameworks to achieve competitive advantage. The research offers practical implications for managers in fashion tech firms and highlights avenues for future empirical investigation.

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1. Introduction

The global fashion industry is undergoing a profound transformation driven by digitalisation, sustainability imperatives, and rapidly evolving consumer expectations. The emergence of fashion technology (fashion tech) firms, organisations that integrate technological innovation with fashion design, production, and retail, has redefined traditional industry boundaries. These firms operate in a highly dynamic environment characterised by short product life cycles, volatile demand patterns, and intense global competition. As a result, strategic management in fashion tech contexts requires new approaches that go beyond conventional planning models and incorporate adaptive, user-centred, and innovation-driven frameworks.

One such framework is design thinking, which has gained prominence as a methodology for addressing complex and ill-defined problems through iterative, human-centred processes. Design thinking emphasises empathy with users, collaborative ideation, rapid prototyping, and continuous testing (Brown, 2009). Originally associated with product and industrial design, the approach has expanded into business strategy, organisational innovation, and service design (Martin, 2009). In the context of fashion tech, design thinking aligns closely with the need to anticipate consumer preferences, experiment with new concepts, and respond quickly to market feedback.

The integration of design thinking into strategic management represents a paradigm

shift in how organisations conceptualise and execute strategy. Traditional strategic management models, such as those based on the resource-based view (RBV) or competitive positioning, often emphasise stability, long-term planning, and resource optimisation (Barney, 1991; Porter, 1985). While these models remain relevant, they may be insufficient in environments characterised by uncertainty and rapid change. Fashion tech firms, in particular, must continuously innovate and adapt, making flexibility and responsiveness critical components of strategic success.

Dynamic capabilities theory provides a useful lens for understanding how firms can achieve such adaptability. Defined as the ability to integrate, build, and reconfigure internal and external competencies in response to changing environments, dynamic capabilities are essential for sustaining competitive advantage in volatile industries (Teece, Pisano, & Shuen, 1997). Design thinking complements this perspective by offering practical tools and processes for sensing opportunities, seizing them through innovation, and transforming organisational practices accordingly.

In recent years, the convergence of design thinking and strategic management has attracted increasing attention in both academic and practitioner communities. Scholars argue that design thinking can enhance strategic decision-making by incorporating user insights and fostering creativity, while strategic management ensures alignment with organisational goals and resource constraints (Liedtka, 2018). In fashion tech firms, this integration is

particularly important due to the dual emphasis on creativity and technological innovation. For example, digital platforms, artificial intelligence (AI), and data analytics are enabling new forms of design and customer engagement, requiring firms to rethink their strategic approaches.

Practitioner perspectives provide valuable insights into how design thinking is implemented in real-world contexts. Industry leaders often highlight the importance of cross-functional collaboration, iterative experimentation, and customer-centricity in driving innovation. However, they also point to challenges such as organisational resistance, difficulty in scaling design thinking processes, and tensions between creative exploration and strategic discipline. Understanding these perspectives is crucial for developing a nuanced view of how design thinking contributes to strategic management in fashion tech firms.

Despite the growing interest in this area, there remains a gap in the literature regarding the systematic integration of design thinking and strategic management within fashion tech contexts. Much of the existing research focuses either on design thinking as an innovation tool or on strategic management as a separate discipline. There is a need for studies that bridge these domains and examine how they interact in practice, particularly from the perspective of industry practitioners.

This study seeks to address this gap by exploring the role of design thinking in shaping strategic management practices in fashion tech firms. Using a qualitative research approach based on secondary data,

the study analyses case studies, industry reports, and academic literature to identify key themes and patterns. The focus on practitioner perspectives allows for a deeper understanding of how theoretical concepts are applied in real-world settings.

The research is guided by the following questions:

- How do fashion tech firms integrate design thinking into strategic management processes?
- What benefits and challenges are associated with this integration from practitioner perspectives?
- How does design thinking contribute to innovation and competitive advantage in fashion tech firms?

By addressing these questions, the study contributes to both theory and practice. Theoretically, it advances the understanding of how design thinking and strategic management can be integrated to support innovation in dynamic environments. Practically, it offers insights for managers and practitioners seeking to leverage design thinking as a strategic tool in fashion tech firms.

2. Literature Review

The literature on design thinking and strategic management has expanded significantly in recent years, reflecting the growing importance of innovation and adaptability in contemporary business environments. In the context of fashion technology, this body of research highlights the need to integrate human-centred design approaches with strategic decision-making

processes. Existing studies examine design thinking as a driver of innovation, while strategic management theories emphasise competitive advantage and resource optimisation. However, limited attention has been given to their intersection, particularly within fashion tech firms. This section reviews key theoretical and empirical contributions to establish a foundation for understanding their integration.

2.1 Conceptual Foundations of Design Thinking

Design thinking is widely recognised as a human-centred approach to innovation that emphasises empathy, creativity, and iterative problem-solving. Brown (2009) defines design thinking as a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and economically viable. The process typically involves stages such as empathising with users, defining problems, generating ideas, prototyping solutions, and testing outcomes.

Martin (2009) further conceptualises design thinking as a balance between analytical and intuitive thinking, arguing that it enables organisations to move beyond traditional logic-based decision-making. This perspective highlights the importance of abductive reasoning, generating plausible solutions in the absence of complete information, which is particularly relevant in uncertain and rapidly changing environments like fashion tech.

Liedtka (2018) identifies several key benefits of design thinking in organisational contexts, including enhanced user understanding,

improved collaboration, and increased innovation capability. These benefits are especially valuable in industries where consumer preferences are highly dynamic and difficult to predict.

2.2 Strategic Management Theories and Their Relevance

Strategic management has traditionally focused on achieving competitive advantage through effective resource allocation and positioning within an industry. Porter's (1985) framework emphasises the importance of competitive forces and strategic positioning, while Barney's (1991) resource-based view highlights the role of valuable, rare, inimitable, and non-substitutable resources in sustaining competitive advantage.

However, these traditional models have been critiqued for their limited ability to address rapidly changing environments. Teece et al. (1997) introduced the concept of dynamic capabilities to address this limitation, emphasising the need for firms to continuously adapt and innovate. Dynamic capabilities involve processes such as sensing opportunities, seizing them through strategic investments, and transforming organisational structures and practices.

In the context of fashion tech, dynamic capabilities are critical due to the fast pace of technological change and shifting consumer demands. Firms must not only develop innovative products but also adapt their business models and operational processes to remain competitive.

2.3 Fashion Tech and Innovation Ecosystems

Fashion tech represents a convergence of fashion, technology, and innovation ecosystems. It encompasses a wide range of applications, including digital design tools, AI-driven trend forecasting, virtual fitting rooms, and e-commerce platforms. These technologies are transforming the way fashion products are designed, produced, and consumed.

Recent studies highlight the role of emerging technologies such as generative AI and the metaverse in shaping the future of fashion. These innovations enable new forms of creativity and customer engagement, while also introducing new strategic challenges (Ahmed et al., 2025). For example, virtual fashion items and digital avatars are creating entirely new markets, requiring firms to rethink their value propositions and revenue models.

Sustainability is another key driver of innovation in fashion tech. The industry faces increasing pressure to reduce environmental impact and adopt more sustainable practices. Design thinking can support this transition by enabling firms to develop innovative solutions that balance environmental, social, and economic considerations (Claxton & Kent, 2020).

2.4 Integration of Design Thinking and Strategic Management

The integration of design thinking and strategic management has emerged as an important area of research. Design thinking provides tools for innovation and problem-solving, while strategic management ensures

alignment with organisational goals and competitive positioning.

Liedtka (2018) argues that design thinking can enhance strategic processes by incorporating user insights and fostering experimentation. This approach allows firms to explore multiple strategic options and adapt to changing conditions. In fashion tech firms, this is particularly important due to the need for rapid innovation and responsiveness to consumer trends.

Research also suggests that design thinking can support the development of dynamic capabilities. Promoting iterative learning and cross-functional collaboration, it enables firms to sense and seize opportunities more effectively. This alignment between design thinking and dynamic capabilities is critical for achieving sustained competitive advantage.

2.5 Practitioner Perspectives on Design Thinking

Practitioner perspectives provide valuable insights into how design thinking is implemented in real-world contexts. Industry reports and case studies highlight several key themes:

- **Customer-centricity:** Practitioners emphasise the importance of understanding customer needs and preferences. Design thinking facilitates this by encouraging empathy and user research.
- **Collaboration:** Cross-functional collaboration is essential for integrating design thinking into organisational processes.

- **Experimentation:** Iterative prototyping and testing enable firms to explore new ideas and reduce risk.

However, practitioners also identify challenges, including resistance to change, difficulty in scaling design thinking processes, and tensions between creativity and efficiency. These challenges highlight the need for organisational support and leadership commitment.

2.6 Research Gap

Despite the growing body of literature on design thinking and strategic management, there is limited research on their integration in the context of fashion tech firms. Most studies focus on either design thinking as an innovation tool or strategic management as a separate discipline. There is a need for research that examines how these approaches interact and contribute to organisational performance.

This study addresses this gap by exploring practitioner perspectives on the integration of design thinking and strategic management in fashion tech firms. Analysing secondary qualitative data provides a comprehensive understanding of how these concepts are applied in practice.

3. Theoretical Framework

This study is grounded in an integrative theoretical framework that combines design thinking theory, dynamic capabilities theory, and strategic management theory to explain how fashion tech firms align innovation processes with long-term strategic objectives. The intersection of these perspectives

provides a robust foundation for understanding how organisations navigate complexity, uncertainty, and rapid technological change.

3.1 Design Thinking Theory

Design thinking is a human-centred approach to innovation that emphasises empathy, creativity, and iterative experimentation. Brown (2009) conceptualises design thinking as a methodology that integrates user desirability, technological feasibility, and business viability. This triadic framework is particularly relevant for fashion tech firms, where innovation must simultaneously address aesthetic preferences, technological integration, and market competitiveness.

From a theoretical standpoint, design thinking challenges traditional linear models of problem-solving by promoting iterative cycles of ideation, prototyping, and testing. Martin (2009) highlights the role of abductive reasoning in design thinking, which enables decision-makers to generate novel solutions in situations characterised by ambiguity and incomplete information. This is crucial in fashion tech environments, where consumer preferences are constantly evolving and difficult to predict.

Furthermore, Liedtka (2018) identifies design thinking as a set of practices that enhance organisational learning and innovation capability. These practices include user observation, visualisation, experimentation, and collaborative problem-solving. In strategic contexts, design thinking enables firms to explore multiple possibilities and refine strategies based on real-world feedback.

3.2 Dynamic Capabilities Theory

Dynamic capabilities theory provides a complementary perspective by focusing on a firm's ability to adapt to changing environments. Teece et al. (1997) define dynamic capabilities as the capacity to integrate, build, and reconfigure internal and external competencies to address rapidly changing conditions. This theory is particularly relevant for fashion tech firms, which operate in highly volatile and innovation-driven markets.

Teece (2007) further elaborates on dynamic capabilities through three core processes: sensing, seizing, and transforming. Sensing involves identifying opportunities and threats in the external environment; seizing refers to mobilising resources to capture these opportunities; and transforming involves continuous renewal of organisational capabilities.

Design thinking aligns closely with these processes. For instance, the empathy stage of design thinking supports sensing by providing deep insights into user needs. Ideation and prototyping facilitate seizing by enabling firms to develop and test innovative solutions. Finally, iterative learning and feedback contribute to transforming organisational practices.

By integrating design thinking with dynamic capabilities, fashion tech firms can enhance their ability to innovate and adapt. This synergy enables organisations to respond effectively to technological disruptions, changing consumer preferences, and competitive pressures.

3.3 Strategic Management Theory

Strategic management theory provides the overarching framework for aligning innovation with organisational goals and competitive positioning. Traditional approaches, such as Porter's (1985) competitive strategy model, emphasise industry analysis and positioning as key determinants of performance. Similarly, the resource-based view (RBV) focuses on leveraging unique organisational resources to achieve sustained competitive advantage (Barney, 1991).

However, in dynamic and uncertain environments, these traditional models must be complemented by more flexible and adaptive approaches. Grant (2016) argues that strategy should be viewed as a dynamic process rather than a static plan, requiring continuous adjustment and learning. This perspective aligns with the principles of design thinking and dynamic capabilities.

In fashion tech firms, strategic management involves balancing creativity with operational efficiency, short-term responsiveness with long-term planning, and innovation with risk management. Design thinking contributes to this balance by providing tools for exploring new opportunities and reducing uncertainty through experimentation.

3.4 Integrative Conceptual Model

Based on the above theoretical perspectives, this study proposes an integrative conceptual model in which:

- **Design thinking** serves as the primary driver of innovation and user-centred problem-solving
- **Dynamic capabilities** enable the organisation to adapt and implement innovative solutions
- **Strategic management** ensures alignment with long-term goals and competitive advantage

In this model, design thinking processes generate insights and ideas that feed into strategic decision-making. Dynamic capabilities facilitate the translation of these ideas into actionable strategies, while strategic management provides the structure and direction needed to sustain competitive advantage.

This integrative framework highlights the complementary roles of creativity and strategy in fashion tech firms. It suggests that successful organisations are those that can effectively combine design-led innovation with strategic discipline and adaptive capabilities.

4. Research Methodology

This study adopts a qualitative research methodology to explore the integration of design thinking and strategic management in fashion tech firms. Given the exploratory nature of the research, a secondary data approach is employed to analyse existing academic literature, industry reports, and practitioner case studies. This methodological choice enables a comprehensive understanding of real-world practices and theoretical developments across diverse contexts. The section outlines

the research design, data sources, and analytical techniques used to identify key themes and patterns. Emphasis is placed on ensuring methodological rigour through systematic data collection, thematic analysis, and triangulation of sources.

4.1 Research Design

This study adopts a qualitative research design based on secondary data analysis to explore the integration of design thinking and strategic management in fashion tech firms. Qualitative research is particularly suitable for examining complex phenomena and gaining in-depth insights into organisational practices and practitioner perspectives (Creswell & Poth, 2018).

Given the exploratory nature of the research and the focus on practitioner perspectives, a qualitative approach allows for the identification of patterns, themes, and relationships that may not be captured through quantitative methods. Secondary data analysis is appropriate in this context due to the availability of rich sources of information, including academic literature, industry reports, and case studies.

4.2 Data Sources

The study relies on multiple secondary data sources to ensure a comprehensive and triangulated analysis. These sources include:

- **Academic Journal Articles:** Peer-reviewed studies on design thinking, strategic management, and fashion tech provide theoretical and empirical insights.
- **Industry Reports:** Reports from consulting firms and industry

organisations offer practitioner perspectives and real-world examples.

- **Case Studies:** Documented cases of fashion tech firms illustrate how design thinking is applied in practice.
- **Practitioner Narratives:** Interviews, blogs, and professional publications provide insights into the experiences and challenges faced by industry practitioners.

The use of diverse data sources enhances the validity and reliability of the findings by enabling cross-verification of information (Yin, 2018).

4.3 Data Collection Process

The data collection process involved a systematic review of relevant literature and documents. Key steps included:

- **Keyword Search:** Terms such as “design thinking,” “strategic management,” “fashion tech,” and “innovation” were used to identify relevant sources.
- **Inclusion Criteria:** Sources were selected based on relevance, credibility, and recency. Peer-reviewed articles and reputable industry reports were prioritised.
- **Data Organisation:** Collected data were categorised based on themes such as innovation processes, strategic practices, and organisational challenges.

This systematic approach ensures that the data are comprehensive and aligned with the research objectives.

4.4 Data Analysis Method

The study employs thematic analysis to identify and interpret patterns within the data. Thematic analysis is a widely used qualitative method that involves coding data and organising it into meaningful themes (Braun & Clarke, 2006).

The analysis process followed these steps:

- **Familiarisation:** Reviewing the data to gain an overall understanding
- **Coding:** Identifying key concepts and assigning codes
- **Theme Development:** Grouping codes into broader themes
- **Interpretation:** Analysing themes in relation to the research questions

Thematic analysis allows for a flexible and iterative examination of the data, making it suitable for exploring complex and multifaceted phenomena.

4.5 Reliability and Validity

Ensuring the rigour of qualitative research is essential for producing credible findings. This study adopts several strategies to enhance reliability and validity:

- **Triangulation:** Using multiple data sources to verify findings
- **Transparency:** Clearly documenting the research process
- **Consistency:** Applying systematic coding and analysis procedures

These measures help to minimise bias and enhance the trustworthiness of the results (Creswell & Poth, 2018).

4.6 Ethical Considerations

As the study relies on secondary data, it does not involve direct interaction with human participants. However, ethical considerations remain important. All sources are properly cited, and intellectual property rights are respected. The study also ensures that data are used responsibly and accurately represented (Mannan & Farhana, 2026).

4.7 Limitations of the Methodology

While secondary qualitative research offers several advantages, it also has limitations. These include:

- **Lack of Primary Data:** The study relies on existing data, which may not fully capture current practitioner perspectives
- **Potential Bias:** Secondary sources may reflect the biases of their authors
- **Limited Generalizability:** Findings may not apply to all fashion tech contexts

Despite these limitations, the methodology provides valuable insights into an emerging area of research and lays the foundation for future empirical studies.

5. Findings and Analysis

The thematic analysis of secondary data reveals that the integration of design thinking into strategic management in fashion tech firms is multifaceted, dynamic, and context-dependent. Practitioner perspectives, derived from case studies, industry reports, and academic literature, highlight both the transformative potential and inherent challenges of this integration. The findings

are organised into six major themes: design thinking as a strategic capability, customer-centric innovation and value creation, agile organisational structures and iterative processes, digital integration and data-driven decision-making, sustainability-oriented strategy, and organisational and strategic challenges.

5.1 Design Thinking as a Strategic Capability

A key finding is that design thinking is increasingly viewed not merely as a problem-solving tool but as a strategic capability embedded within organisational processes. Practitioners emphasise that design thinking enhances strategic decision-making by enabling firms to explore complex, ambiguous problems through iterative experimentation and user engagement. This aligns with the argument that design thinking supports abductive reasoning, allowing firms to generate innovative solutions in uncertain contexts (Martin, 2009).

In fashion tech firms, this capability manifests in the integration of design thinking into strategic planning cycles. Rather than relying solely on traditional forecasting and analysis, firms incorporate user insights and rapid prototyping to inform strategic choices. This approach allows organisations to test assumptions before committing significant resources, thereby reducing risk and increasing the likelihood of successful innovation (Liedtka, 2018).

From a dynamic capabilities perspective, design thinking contributes to the sensing and seizing functions of organisations. Facilitating deep customer insights and rapid

experimentation enables firms to identify emerging opportunities and respond effectively. This reinforces the notion that innovation capabilities are central to sustaining competitive advantage in dynamic environments (Teece, 2007).

5.2 Customer-Centric Innovation and Value Creation

Another prominent theme is the role of design thinking in fostering customer-centric innovation. Practitioners consistently highlight the importance of understanding consumer needs, preferences, and behaviours as a foundation for strategic decision-making. Design thinking's emphasis on empathy and user research enables firms to develop products and services that resonate with target audiences.

In fashion tech contexts, this customer-centric approach is particularly critical due to the rapid evolution of consumer trends and preferences. Technologies such as AI-driven analytics and digital platforms provide valuable data on consumer behaviour, which can be integrated into design thinking processes. This combination of qualitative insights and quantitative data enhances the accuracy and relevance of strategic decisions.

Furthermore, customer-centric innovation contributes to value co-creation, where consumers actively participate in the design and development process. For example, digital platforms allow users to customise products or provide feedback on prototypes, creating a more interactive and engaging experience. This not only enhances customer satisfaction but also strengthens brand loyalty and competitive positioning.

The findings suggest that firms that effectively integrate customer insights into their strategic processes are better positioned to achieve sustained success. This supports the argument that user-centred innovation is a key driver of competitive advantage in contemporary markets (Brown, 2009).

5.3 Agile Organisational Structures and Iterative Processes

The adoption of design thinking is closely associated with the development of agile organisational **structures**. Practitioners report that fashion tech firms increasingly embrace flexible, cross-functional teams that support collaboration and rapid decision-making. These structures facilitate the iterative processes central to design thinking, such as prototyping and testing.

Agility enables firms to respond quickly to changes in market conditions and consumer preferences. In contrast to traditional hierarchical structures, agile organisations prioritise adaptability and continuous learning. This shift is particularly important in fashion tech, where innovation cycles are short, and competition is intense.

The iterative nature of design thinking also supports organisational learning. By continuously testing and refining ideas, firms can accumulate knowledge and improve their capabilities over time. This aligns with the concept of dynamic capabilities, which emphasises the importance of learning and adaptation in achieving sustained performance (Teece et al., 1997).

However, practitioners note that the transition to agile structures can be challenging, particularly for organisations

with established hierarchical systems. Resistance to change and cultural barriers may hinder the effective implementation of design thinking processes.

5.4 Digital Integration and Data-Driven Decision-Making

The integration of digital technologies is a critical component of design thinking in fashion tech firms. Practitioners highlight the role of technologies such as artificial intelligence, data analytics, and digital platforms in enhancing innovation and strategic decision-making.

Digital tools enable firms to collect and analyse large volumes of data, providing insights into consumer behaviour, market trends, and operational performance. These insights can be incorporated into design thinking processes to inform ideation and prototyping. For example, AI-driven trend forecasting can guide the development of new products, while virtual prototyping tools enable rapid testing and refinement.

The findings indicate that data-driven design thinking enhances both efficiency and effectiveness. By combining qualitative insights with quantitative data, firms can make more informed decisions and reduce uncertainty. This integration also supports the alignment of design thinking with strategic management objectives, as data provides a basis for evaluating the feasibility and impact of different strategies.

Nevertheless, practitioners emphasise the need for balancing data-driven approaches with creativity. Over-reliance on data may limit innovation by constraining thinking within existing patterns. Therefore,

successful firms adopt a hybrid approach that combines analytical and intuitive decision-making (Martin, 2009).

5.5 Sustainability-Oriented Strategy

Sustainability emerges as a significant theme in the integration of design thinking and strategic management. The fashion industry faces increasing pressure to address environmental and social challenges, including resource depletion, waste, and labour issues. Design thinking provides a framework for developing innovative solutions to these challenges.

Practitioners report that design thinking supports sustainable innovation by encouraging holistic problem-solving and consideration of multiple stakeholders. For example, firms use design thinking to develop eco-friendly materials, optimise supply chains, and create circular business models. These initiatives align with the broader strategic goal of achieving sustainability while maintaining competitiveness.

The integration of sustainability into strategic management reflects a shift toward triple bottom line thinking, which considers economic, environmental, and social performance. Design thinking facilitates this shift by enabling firms to explore creative solutions that balance these dimensions (Claxton & Kent, 2020).

However, implementing sustainability-oriented strategies can be complex and resource-intensive. Firms must navigate trade-offs between cost, performance, and environmental impact, requiring careful strategic planning and execution.

5.6 Organisational and Strategic Challenges

Despite the benefits of integrating design thinking into strategic management, practitioners identify several challenges. One major challenge is the difficulty of scaling design thinking processes across large organisations. While small teams may successfully adopt design thinking, extending these practices to the entire organisation can be challenging.

Another issue is organisational resistance to change. Employees and managers accustomed to traditional decision-making processes may be reluctant to adopt new approaches. This resistance can hinder the effective implementation of design thinking and limit its impact.

Additionally, there is often a tension between creativity and efficiency. Design thinking emphasises exploration and experimentation, which may conflict with the need for efficiency and cost control in strategic management. Balancing these competing priorities requires careful leadership and organisational alignment.

Finally, practitioners highlight the challenge of integrating design thinking with existing strategic frameworks. Traditional models may not fully accommodate the iterative and flexible nature of design thinking, necessitating the development of new approaches and tools.

6. Discussion

The findings of this study provide important insights into the integration of design

thinking and strategic management in fashion tech firms. By synthesising practitioner perspectives with theoretical frameworks, this section offers a critical analysis of how these concepts interact and contribute to organisational performance.

6.1 Integration of Design Thinking and Dynamic Capabilities

The results strongly support the alignment between design thinking and dynamic capabilities theory. Design thinking enhances the microfoundations of dynamic capabilities, particularly in the areas of sensing, seizing, and transforming (Teece, 2007). For example, empathy-driven user research enables firms to sense emerging trends and opportunities, while prototyping and experimentation facilitate the seizing of these opportunities.

This integration highlights the role of design thinking as an enabler of organisational adaptability. By fostering continuous learning and innovation, design thinking strengthens the ability of firms to respond to changing environments. This is particularly relevant in fashion tech, where rapid technological advancements and shifting consumer preferences require constant adaptation.

However, the findings also suggest that the effectiveness of this integration depends on organisational context. Firms must develop the necessary capabilities and cultural mindset to support design thinking processes. Without these elements, the potential benefits of design thinking may not be fully realised.

6.2 Reframing Strategic Management through Design Thinking

The integration of design thinking challenges traditional notions of strategic management. Rather than viewing strategy as a static plan, the findings support a dynamic and iterative conception of strategy. This perspective aligns with contemporary views that emphasise flexibility, experimentation, and learning (Grant, 2016).

Design thinking contributes to this reframing by introducing new tools and practices for strategic decision-making. For example, prototyping and testing allow firms to explore multiple strategic options and refine them based on feedback. This reduces uncertainty and enhances the quality of strategic decisions.

At the same time, the findings highlight the importance of maintaining strategic coherence. While design thinking encourages exploration, it must be aligned with organisational goals and resource constraints. This underscores the need for a balanced approach that integrates creativity with strategic discipline.

6.3 The Role of Digital Technologies

Digital technologies play a critical role in enabling the integration of design thinking and strategic management. The findings indicate that technologies such as AI and data analytics enhance the effectiveness of design thinking by providing valuable insights and supporting rapid experimentation.

This integration reflects the broader trend of digital transformation in the fashion industry.

Firms that successfully leverage digital technologies are better positioned to innovate and compete in the global market. However, the findings also highlight the need for careful management of technology adoption to ensure alignment with strategic objectives.

6.4 Sustainability and Strategic Innovation

The study also underscores the importance of sustainability as a strategic priority in fashion tech firms. Design thinking provides a valuable framework for addressing sustainability challenges by enabling holistic and creative problem-solving.

The integration of sustainability into strategic management reflects a shift toward more responsible and inclusive business practices. This aligns with the growing emphasis on corporate social responsibility and stakeholder engagement in contemporary management literature.

However, achieving sustainability requires significant investment and organisational commitment. Firms must balance short-term financial performance with long-term sustainability goals, which can be challenging in competitive markets.

6.5 Critical Insights and Future Directions

While the integration of design thinking and strategic management offers significant benefits, the findings highlight several areas for further research and development. First, there is a need for empirical studies that examine the impact of this integration on organisational performance. Second, research should explore the role of leadership

and organisational culture in facilitating design thinking adoption.

Additionally, the development of new strategic frameworks that incorporate design thinking principles could enhance the effectiveness of this integration. Such frameworks would provide practical guidance for managers and support the broader adoption of design thinking in strategic contexts.

7. Conclusion, Implications, and Future Research

This study has examined the integration of design thinking and strategic management in fashion tech firms, emphasising practitioner perspectives and theoretical alignment. The findings demonstrate that design thinking plays a pivotal role in enhancing strategic flexibility, fostering customer-centric innovation, and supporting the development of dynamic capabilities. By enabling iterative experimentation and user-focused problem-solving, design thinking complements traditional strategic management approaches and contributes to sustained competitive advantage in rapidly changing environments.

From a theoretical standpoint, the study advances the understanding of how design thinking can be embedded within strategic management frameworks. The integration of design thinking with dynamic capabilities theory highlights the importance of adaptability, learning, and innovation in achieving long-term organisational success (Teece, 2007). Moreover, the findings support the argument that strategy should be viewed as an iterative and evolving process

rather than a static plan (Grant, 2016). This perspective is particularly relevant in the fashion tech industry, where uncertainty and rapid change are inherent.

The study also offers important managerial implications. Practitioners are encouraged to adopt design thinking as a strategic tool to enhance innovation and responsiveness. This requires investment in organisational capabilities, including training, cross-functional collaboration, and leadership support. Additionally, firms should leverage digital technologies to complement design thinking processes, enabling data-driven decision-making while maintaining creativity. Addressing challenges such as organisational resistance and scalability is essential for maximising the benefits of design thinking integration.

Despite its contributions, the study has limitations. The reliance on secondary data may limit the depth of insights into specific organisational contexts, and the findings may not be fully generalizable across all industries. Future research should address these limitations by conducting empirical studies based on primary data, such as interviews and surveys with industry practitioners. Comparative studies across different sectors could also provide valuable insights into the broader applicability of the findings.

In conclusion, the integration of design thinking and strategic management represents a promising approach for fashion tech firms seeking to navigate complexity and achieve sustainable growth. By bridging creativity and strategy, organisations can enhance their ability to innovate, adapt, and

compete in an increasingly dynamic global environment.

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