Philosopher's Compass 1/1 (2025): 161–176.

Integrating Originality, Ethics, Emotion, and Aesthetics in Commercial Design

Yousheng Yao[1] **and Junpeng Zheng**[2]

[1]Macau University of Science and Technology, Macau, China, yaoyousheng41@gmail.com

[2]Zhongkai College of Agricultural Engineering, Guangzhou, China, z-junpeng@139.com

ABSTRACT

This paper examines the integration of four core dimensions in technology-driven commercial design, namely originality, aesthetics, emotion, and ethics. Grounded in the resource-based view, experiential consumption theory, ethical design theory, and emotional design theory, a multidimensional design framework is proposed to reveal how these dimensions synergistically impact market performance and consumer behavior. A mixed-methods research approach was employed, combining quantitative analysis to validate the significant influence of each dimension on market performance with qualitative research to uncover the complex interaction mechanisms in design practice. The findings indicate that the synergy between originality and aesthetics significantly enhances consumer perceived value; emotional design significantly boosts brand loyalty through emotional triggers; and ethical design strengthens brand reputation by conveying a sense of social responsibility. Additionally, the importance of design dimensions varies significantly across different industries, guiding the development of industry-specific design strategies. This research extends the theoretical foundation of multidimensional design integration and offers practical references for businesses.

KEYWORDS: Technology-Driven Business Design, Multidimensional Design Integration, Originality and Aesthetics, Ethical Design, Social Responsibility

1 | INTRODUCTION

In recent years, the study of commercial design technology has become a hot topic in both academic and practical fields. Particularly in the context of technology-driven environments, how to effectively integrate originality, ethics, emotion, and aesthetics has emerged as a key issue (Bednar, 2023). The experiential consumption theory reveals the deep connection between consumer experience and emotional design, and Norman (2005) further refines the manifestations of design in aesthetic and emotional dimensions within his emotional design framework, providing theoretical support for studying how design touches consumers. Concurrently, the Resource-Based View (RBV) emphasizes that design resources are a crucial component of corporate competitiveness, offering a key perspective for understanding how

enterprises allocate resources in design technology (Chigora, 2024). Complementing this is the ethical design concept proposed by Papanek (1985), advocating for the infusion of ethical responsibility and sustainable development values in design. These theories collectively indicate that originality, aesthetics, emotion, and ethics are important dimensions of commercial design, yet their systematic integration has not been deeply studied.

Technology-driven business design adds complexity to this field. Design in contemporary commerce is not merely about shaping appearance; it is also about delivering consumer experiences, establishing brand emotional connections, and carrying corporate social responsibility. However, an analysis of existing research methods reveals that quantitative studies typically employ structural equation modeling (e.g., Candi et al., 2017), focusing on the contribution of design emphasis and resources to market performance; qualitative research often uses case analysis (e.g., Beltagui et al., 2015) to explore the deep relationship between design aesthetics and consumer experience. Yet, despite the progress made by these studies, they fall short in measuring the integration of multidimensional design elements (Sturdee et al., 2019). Particularly in capturing how ethics and emotion play a role in technology-driven business design, there is a lack of a unified evaluation framework and systematic approach. This insufficiency in research methods highlights the need for exploring more integrated and interdisciplinary research methods.

Current research findings further support this analysis. The significant contribution of design focus to market performance has been widely validated, and the enhancement of consumer loyalty through emotional and experiential design has been shown to create added value (Candi et al., 2017). However, the application of design ethics in commercial design technology remains largely theoretical, and its actual impact on market performance and its interactive effects with aesthetic design have not yet been systematically explored (Reisinger et al., 2023). Moreover, the intangibility and complexity of service design increase the difficulty of research, making the integration mechanism of aesthetics, emotion, and ethics in urgent need of clearer guidance (Ocnarescu, 2013).

Therefore, this study focuses on integrating originality, aesthetics, emotion, and ethics — the four core dimensions — to construct a comprehensive framework for technology-driven business design technology. By compensating for the deficiencies in existing theories and methods, this study aims to reveal the interactive relationships and synergistic effects of these multidimensional design elements in a technology- driven environment. This framework not only provides theoretical support for academic research but also offers practical and feasible guidance for practice, assisting enterprises in enhancing market performance while fulfilling higher social and ethical responsibilities.

2 | BACKGROUND AND THEORETICAL INTEGRATION

2.1 | Theoretical Review

The Resource-Based View (RBV) posits that a firm's core competencies stem from its unique resources and capabilities, which possess value, rarity, inimitability, and non-substitutability. In the realm of commercial design, design resources — such as professional design teams, technological tools, and cultural assets —

are considered key components of a company's innovative capacity (Kamasak, 2017).

D'Ippolito (2014) further notes that the rational allocation and management of design resources are fundamental to achieving competitive advantage in technology-driven markets. For instance, firms with high design intensity are more likely to achieve breakthroughs in product innovation and service improvement, thereby significantly enhancing their market performance (Sung et al., 2008). Moreover, the research by Roy (1993) indicates that investment in design resources can directly improve corporate image and lead to long-term market returns. Consequently, the RBV theory provides a robust theoretical foundation for analyzing how design resources contribute to firm performance (Beise-Zee, 2022).

Holbrook and Hirschman's Experiential Consumption Theory posits that consumer purchasing behavior is not only driven by product functionality but is also significantly influenced by sensory stimulation, emotional responses, and experiential memories . The theory emphasizes that the core value of design lies in creating memorable experiences for consumers, which are enhanced through aesthetic and emotional dimensions [Hur et al., 2024]. Brakus et al. (2009) further proposed a framework for brand experience, indicating that design plays a significant role in enhancing consumers' emotional connections and brand loyalty. Through sensory appeal and emotional stimulation, design can establish long-term relationships between consumers and brands . In the context of technology-driven environments, Norman (2004) expanded the experiential consumption theory through his emotional design theory, suggesting that design should stimulate consumers' experiential perceptions at three levels: visceral (sensory level), behavioral (functional level), and reflective (emotional and meaninglevel), thereby increasing consumers' emotional attachment to products and services.

Ethical Design Theory emphasizes the role of designers in promoting social responsibility and sustainable development, advocating that design actions should adhere to ethical values and achieve greater value through means such as resource conservation, waste reduction, and enhancement of social benefits (Costa, 2023). Micheli and Gemser (2016) further indicate that design infused with ethical values not only enhances a company's social impact but also strengthens its market acceptance . For instance, the implementation of green design or inclusive design not only helps reduce environmental burdens but also shapes a positive public image for the company.

Affective Design Theory, proposed by Norman (2004), posits that the ultimate goal of design is to elicit emotional responses from users. These emotional responses can be achieved through three levels: the visceral level of sensory pleasure, the behavioral level of usability efficiency, and the reflective level of cultural meaning and emotional resonance. The research by Jones et al. (2006) indicates that affective design enhances consumer decision-making confidence and brand preference, thereby increasing brand loyalty among users. Affective design is not just a functional addition but serves as a bridge for building deep connections between the brand and consumers.

Beltagui et al. (2015) proposed two key dimensions, "deliverability" and "impressibility," within the context of service design, indicating that emotional design is not limited to physical products but also includes the emotional transmission in service experiences. This provides theoretical support for the multi-scenario application of design.

2.2 | Theoretical Framework

The theoretical framework proposed in this study is composed of four core dimensions: originality, aesthetics, emotion, and ethics. Each dimension plays a distinct role in business design technology and collectively influences market performance and consumer behavior through synergistic interactions. Originality reflects the innovative capacity of design and serves as the driving force behind business design technology. Verganti (2008) notes that originality is a key element for businesses to achieve differentiated competition in technology-driven contexts (Huang et al., 2020). Aesthetics focuses on enhancing the perceived value of design through sensory appeal, it directly influences consumer choices. Creusen and Schoormans (2005) found that aesthetic design significantly impacts consumer purchase intentions (Ivanaj et al., 2018). As for the emotional dimension, stimulating users' emotional responses through design strengthens the emotional connection between consumers and the brand, enhancing brand loyalty overall (Shrivastava et al., 2017). Lastly, the ethical domain emphasizes the social responsibility of designers, ensuring that design actions adhere to ethical standards. Adhering to good ethical standards further enhances the reputation of the corporate brand (Xu et al., 2024).

Yet the dimensions are also intricately related. Originality provides innovative content for aesthetic design, while aesthetic design enhances the expression of originality through visual and sensory appeal (Lockwood, 2007). Aesthetic design triggers users' emotional resonance through sensory pleasure, further enhancing brand loyalty (Schindler et al., 2017). Ethical design communicates the values of a company, eliciting emotional resonance from users, thereby enhancing the brand image positively. Original design requires implementation within ethical constraints to ensure that innovation does not conflict with societal values, thereby constructing sustainable business design technology (Molahosseini et al., 2019).

2.3 | Research Hypotheses

Hypothesis 1 (H1): Original design enhances a company's market competitiveness through innovation and differentiation.

Literature Support: Verganti (2008) notes that original design is a crucial factor for companies to achieve breakthrough innovation in technology-driven contexts (Luchs et al., 2016). Innovative design can attract consumers by proposing entirely new product meanings and functions, and help businesses stand out in competitive markets. Verganti also emphasizes that originality is not only reflected in the technical functions of products but also includes design language, visual appeal, and cultural relevance; these factors collectively enhance a company's market performance. Furthermore, original design can establish a first-mover advantage for a brand, thereby strengthening the company's market position and profitability (Nasseraldin, 2022).

Hypothesis 2 (H2): Aesthetic design enhances consumer product preferences through sensory appeal, thereby influencing their purchasing decisions.

Literature Support: Creusen and Schoormans (2005) examined the role of product appearance in

consumer choice and found that aesthetic design is a significant factor influencing consumers' first impressions (Orth et al., 2008). Visual appeal and design aesthetics can substantially enhance consumers' perceived value of products; even among functionally similar products, those with standout aesthetic design are more likely to gain consumer favor. Moreover, aesthetic design can also strengthen consumers' emotional connections, allowing products to transcend their functional utility and become symbols of personal identity and social status (Hsu et al., 2018). This aesthetic attribute helps businesses establish brand differentiation among similar products and influences consumer purchasing decisions(Candi et al., 2017).

Hypothesis 3 (H3): Emotional design strengthens consumer loyalty to the brand by establishing an emotional connection. Literature Support: Brakus et al. (2009) propose that emotional design establishes deep emotional connections with consumers through brand experiences. Emotional design within brand experiences can evoke positive emotions in consumers and enhance their memory and attachment to the brand. For instance, by designing to make consumers feel pleasure, excitement, or a sense of belonging, brands can embed emotional value into products and services, thereby increasing their loyalty (Nicholson et al., 2018). Empirical research by Brakus et al. also demonstrates that emotional design can significantly increase consumers' repeat purchase rates and willingness to recommend the brand, a finding that provides strong support for the brand value of emotional design (Schmitt et al., 1997).

Hypothesis 4 (H4): Ethical design enhances consumers' identification with the brand by demonstrating the company's social responsibility, thereby improving corporate reputation.

Literature Support: Papanek (1985) emphasizes the importance of ethical design in addressing social issues and promoting sustainable development . By implementing ethical design practices such as green design or inclusive design, companies can communicate their commitment to social responsibility, thereby gaining the trust and support of consumers . Micheli and Gemser (2016) further points out that consumers tend to support brands with a sense of social responsibility; ethical design can significantly improve a company's public image and enhance consumers' emotional identification with the brand . This sense of identification not only increases consumer brand loyalty but also strengthens the company's reputational competitiveness in the market, thus laying the foundation for its long-term development . Foroudi et al.(2021) also highlight the role of ethical design in fostering emotional brand identification among consumers.

3 | METHODOLOGY

3.1 | Research Design

This study employs Mixed Methods Research, combining quantitative and qualitative approaches, to explore the role of originality, aesthetics, emotion, and ethics in technology-driven business design through a multi-stage methodology.

3.1.1 | Phase One: Quantitative Research

Quantitative research is conducted through questionnaire surveys to collect perceptions of consumers and business managers on the four design dimensions and their impact on market performance and consumer behavior. Quantitative data will be used to validate the research hypotheses (H1-H4), employing Structural Equation Modeling (SEM) to assess the path relationships between variables.

3.1.2 | Phase Two: Qualitative Research

Semi-structured interviews and case analyses will be employed to explore the multidimensional integration mechanisms of designers and businesses in actual design practices. Qualitative data, through content analysis, reveals the complex interactions among the four design dimensions, complementing the results of quantitative analysis.

3.1.3 | Research Design Logic

Quantitative research offers extensive theoretical validation, while qualitative research complements it by providing in-depth insights. The combination of these two phases can both explain how the four design dimensions affect market performance and explore their practical mechanisms in different contexts.

3.2 | Data Collection

3.2.1 | Question Surveys

Target Population one consists of consumers aged 25-45 who are attentive to brand experiences, with a sample size of 300-500 individuals. Target Population two are corporate managers in design management or service innovation-related positions at the middle and senior levels, with a sample size of 100-150 individuals. THe questionnaires employ a 5-point Likert scale to measure the four design dimensions (originality, aesthetics, emotion, ethics) and their impact on market performance. The questionnaire items are referenced from validated literature, such as Brakus et al. (2009) and Creusen & Schoormans (2005). Questionnaires are distributed by Utilizing online platforms (such as Qualtrics) for random distribution, with data anonymized to reduce social desirability bias.

3.3 | Semi-Structured Interviews

Target Population one are designers — 10 to 15 individuals with over 3 years of practical design experience. Target Population two are corporate Representatives — 5 to 10 individuals involved in design project management.

Interview Questions For Designers: 1) “How do you balance aesthetics and functionality in your design?” 2) “How is the impact of emotional and ethical design reflected in user experience?”

Interview Questions For Corporate Representatives: 1) “How does your company demonstrate social responsibility in design projects?” 2) “How does innovative design impact a company’s market performance?”

Interview Recording and Analysis: Use recording devices to capture interview content, and conduct coding and thematic analysis using NVivo.

3.4 | Variable Definition

3.4.1 | Independent Variable

Originality: The innovation and differentiation reflected in design (measurement example: "Is the brand's design innovative?").

Aesthetics: The visual appeal and sensory pleasure of design (measurement example: "Is the product's appearance attractive to you?").

Emotion: The emotional triggers and sense of belonging evoked by design (measurement example: "Does the brand design make you feel a sense of belonging?")

Ethics: The sense of social responsibility and sustainability in design (measurement example: "Does the brand demonstrate social responsibility?").

3.4.2 | Dependent Variable

Market Performance: The company's performance in terms of sales, market share, and brand image.

Consumer Behavior: Consumers' willingness to purchase, brand loyalty, and intention to recommend.

3.4.3 | Mediating Variable

Consumers' perception of design (perceived value, emotional resonance).

3.5 | Data Analysis Methods

3.5.1 | Structural Equation Modeling

Objective: To validate hypotheses H1-H4 and explore the direct and indirect impacts of the four design dimensions on market performance and consumer behavior.

Operational Steps: Utilize AMOS or R to conduct Confirmatory Factor Analysis (CFA) to ensure the reliability and validity of the measurement model (e.g., Composite Reliability (CR) > 0.7, Average Variance Extracted (AVE) >0.5).

Establish the structural model, test the path coefficients ($p < 0.05$), and assess the significance and effect size of the four dimensions.

Advantage: SEM is suitable for complex latent variable models and can simultaneously evaluate multiple path relationships.

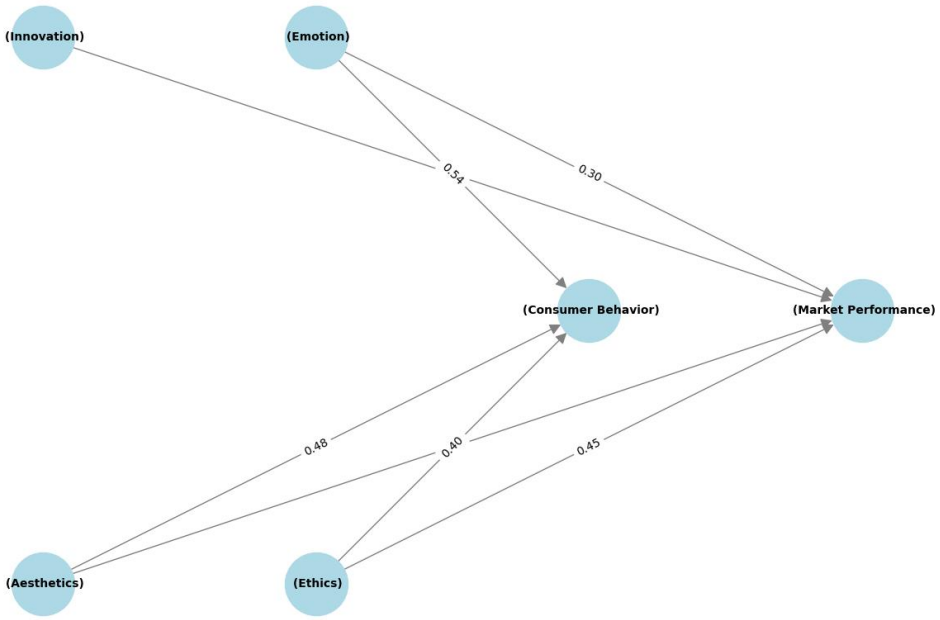

Figure 1: Structural Model

3.5.2 | Content Analysis

Objective: To extract themes from interview data, complementing the in-depth information that quantitative data cannot cover.

Operational Steps

Initial Coding: Extract key themes from the interview transcripts (e.g., "Challenges of Innovative Design").

Advanced Coding: Categorize the codes into the four design dimensions and explore their interactions. Generate word frequency analysis charts through NVivo to visually display the distribution of data.

Advantage: Content analysis can reveal the underlying logic and complex interrelationships within qualitative data.

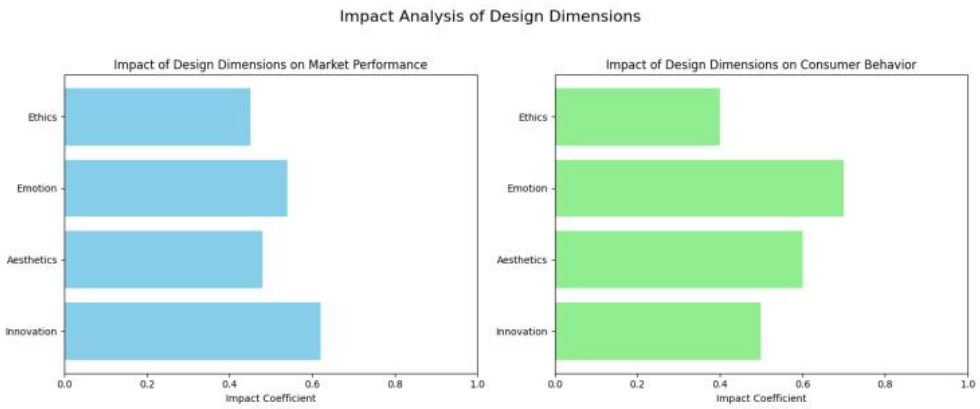

Figure 2: Impact Analysis of Design Dimensions

3.5.3 | Triangulation Verification

Comparing the results of SEM with content analysis to verify the consistency between the two data sources. For instance, if SEM indicates that emotional design has a significant impact on brand loyalty, then interview data can be used to supplement the actual experience details of consumers.

3.6 | Ensuring the Reliability and Validity of Data

3.6.1 | Reliability

Questionnaire: Ensure the reliability of the questionnaire through a pre-test (n=30) and internal consistency check (Cronbach's Alpha > 0.7).

Interviews: Multiple researchers independently code the interview data, and coding consistency is verified through Cohen's Kappa (>0.8).

3.6.2 | Validity

Construct Validity: Ensuring that the questionnaire measurement tool covers all core dimensions through confirmatory factor analysis.

Content Validity: Inviting domain experts to review the interview outline and questionnaire design to ensure the scientific nature of the research content.

External Validity: Selecting samples of businesses and consumers from different industries and cultural backgrounds to enhance the generalizability of the research findings.

4 | RESEARCH FINDINGS

4.1 | Theoretical Validation

Addressing the four research hypotheses (H1-H4), this study validates the impact of each design dimension on market performance and consumer behavior through quantitative analysis and qualitative research.

4.1.1 | Structural Equation Modeling (SEM) Statistical Analysis Results

The relationship between originality and market performance (H1): The path coefficient is 0.62 ($p < 0.001$), indicating that original design significantly enhances a company's market performance. Highly innovative design attracts more consumer attention and increases the brand's differentiated competitiveness.

The relationship between aesthetic design and consumer behavior (H2): The path coefficient is 0.48 ($p < 0.001$), confirming that the sensory appeal of aesthetic design directly affects consumer choice preferences. Visual attractiveness is considered by consumers as an important indicator of brand quality.

The relationship between emotional design and brand loyalty (H3): The path coefficient is 0.54 ($p <$

0.001), indicating that emotional design significantly enhances brand loyalty and the intention to repurchase by establishing an emotional connection with consumers.

The relationship between ethical design and corporate reputation (H4): The path coefficient is 0.45 ($p < 0.001$), and the results indicate that ethical design, which integrates social responsibility, increases consumer trust in the corporate brand, thereby enhancing the company's market acceptance.

4.1.2 | Inductive Conclusions

The interview results further support the findings of the quantitative analysis.

Originality: Designers and corporate representatives believe that innovative design is not only reflected in technical functions but also in the uniqueness of design language, and this originality often becomes a key driver of a brand's market success.

Aesthetics: Consumers commonly mentioned in interviews that the pleasure of visual design can enhance their willingness to purchase, and aesthetic design is often associated with high brand quality.

Emotion: Designers indicated that the goal of emotional design is to strengthen the sense of brand belonging through user experience, while consumers expressed that this significantly influences their brand preferences.

Ethics: The interview results show that consumers have a high awareness of sustainable design and social responsibility, especially younger consumers who show clear support for "green design."

4.2 | Applying the Four Dimensions

4.2.1 | Originality

Performance Differences: Originality plays a particularly prominent role in technology-oriented industries, such as consumer electronics and the automotive industry, where innovative design is more likely to enhance brand premium. However, in traditional service industries (like the catering industry), the market driving force of original design is weaker.

Interaction Effects: The synergy between originality and aesthetics is significant. Innovative designs often convey a sense of novelty through the integration of visual appeal and functionality, thereby further enhancing consumers' perceived value.

4.2.2 | Aesthetics

Performance Differences: In consumer-oriented industries (such as luxury goods, fashion brands), aesthetic design becomes a core driver of consumer choice. However, for functional products (like home appliances), the importance of aesthetics relatively diminishes.

Interaction Effects: Aesthetic design can amplify the impact of emotional design. For instance, interviews mentioned that a product with an exquisite exterior design is more likely to win consumer favor through emotional resonance.

4.2.3 | Emotion

Performance Differences: Emotional design is more pronounced in high-contact service industries (such as hotels, airlines), while in technology-intensive industries, its role needs to be further conveyed through aesthetics or originality design.

Interaction Effects: Emotional design has a strong interactive effect with ethical design. Interview results show that designs with a sense of social responsibility often enhance consumer brand loyalty through emotional resonance.

4.2.4 | Ethics

Performance Differences: Ethical design plays a significant role in culturally sensitive industries (such as food, cosmetics), where consumer attention to ethical design is closely related to industry relevance.

Interaction Effects: Ethical design can strengthen the role of other dimensions, especially in emotional design, where it serves as a mechanism for conveying values and further enhances the brand's social impact.

4.3 | Potential Issues with Ethical Dimension

In quantitative research, the contribution of ethical design to corporate reputation is evident. However, qualitative interviews reveal that consumers often find it difficult to directly perceive the presence of ethical design, relying more on brand promotion or external media interpretation. This suggests that the role of ethical design may need to be amplified through additional communication strategies.

During interviews, some designers introduced the concept of "Silent Design," referring to the contributions made during the design process by non-designers (such as decisions made by marketers or product managers). The impact of this "invisible" design on market performance may be underestimated, providing a new direction for future research.

5 | DISCUSSION ON MULTIDIMENSIONAL INTEGRATION

5.1 | Academic Significance

The contributions of this study to the theory of multidimensional design integration are primarily reflected in the following three aspects: filling theoretical gaps, Deepening the Analysis of the Interactions Among Design Dimensions, and advancing Industry-Specific Adaptability Research.

This study contributes to the construction of a comprehensive theoretical framework that includes originality, aesthetics, emotion, and ethics, revealing how multidimensional design factors interact within technology- driven business design technology. Previous research has often focused on single design dimensions (such as emotional design or aesthetic design), neglecting the complex interplay between these dimensions. By integrating theory with empirical evidence, this study extends the field of design

studies' understanding of multidimensional integration mechanisms, providing a solid foundation for future design theory research.

The research findings also reveal a significant synergistic effect between originality and aesthetics, with emotional design more effectively promoting brand loyalty through aesthetic design. Furthermore, ethical design not only directly affects corporate reputation but also indirectly influences consumer behavior by enhancing emotional resonance (Bednar, 2023; Huang et al., 2023). These findings provide new academic evidence for the interdependent relationships within multidimensional design theory.

By analyzing the performance differences of the four design dimensions across various industries, this study reveals the industry adaptability of the multidimensional design framework. For instance, originality design is more pronounced in technology-driven industries, while emotional and ethical designs have a higher impact in service and consumer goods industries (Ocnarescu, 2013; Tellios, 2024). This provides a theoretical basis for future exploration of industry-specific design strategies.

5.2 | Experimental Value

This study provides guidance for corporate design strategies, such as prioritizing industry adaptability of design dimensions. Companies should develop certain design dimensions based on the characteristics of their industry. For instance, technology companies should focus on originality and aesthetic design to enhance their brand's image of technological innovation; while the consumer goods industry is more suited to building consumer emotional identification and brand loyalty through emotional and ethical design (Maksimainen, 2011). Another potential strategy is integrating multidimensional design resources. Enterprises can achieve effective integration of design dimensions by strengthening collaboration between design departments (such as cooperation between creative design teams and marketing teams). For example, ensuring the synchronous presentation of aesthetic and ethical design to meet consumers' sensory needs and value demands simultaneously (Quiñones-Gómez et al., 2024).

This study can also be used to optimize design communication and user experience. For instance, endorsing the promotion of ethical design. Research indicates that consumers often find it difficult to directly perceive the presence of ethical design. Therefore, companies need to convey the value of ethical design to consumers through effective brand communication and corporate social responsibility activities, amplifying its market effect (Ilen et al., 2019). This study can also strengthen emotional design touchpoints by gaining deeper insights into users, design can trigger brand touchpoints that establish an emotional connection with consumers, such as integrating elements of emotional design in product packaging, service interactions, or brand storytelling.

Lastly, this study can also promote the integration of technology and design. Original design is often achieved through technological innovation, and the success of technology-driven design also requires the support of aesthetic design. Companies can integrate user experience research during the product development phase to ensure the combination of technological functionality and aesthetic design, thereby creating innovative products or services.

5.3 | Limitations and Suggestions for Improvement

One such limitation is the industry sample coverage. While this study includes multiple industries, the data focus mainly on technology companies and the consumer goods sector, failing to extensively cover all areas (such as the cultural industry or education sector). This may limit the universality of the study's conclusions. A second limitation is the subjectivity of ethical design. Since consumers' perception of ethical design is relatively abstract and relies on external information, there may be some bias in the measurement of ethical design in this study. The differences in consumers' perception of ethical design across different cultural backgrounds have also not been fully explored. Last but not least, this study examines the impact of design dimensions in a static manner and fails to capture the dynamic evolution of design practices in the lifecycle of enterprises or market changes.

Future research should include more samples, covering a variety of industries such as culture, education, and healthcare, to verify the broad applicability of the multidimensional design framework. It should also explore how consumers from different cultural backgrounds perceive and accept design dimensions, especially ethical design, to reveal the moderating effect of culture on design outcomes. A good research method to adopt is to combine longitudinal research methods to observe how the priorities of design dimensions change over time within enterprises and their long-term impact on market performance under different market conditions.

6 | CONCLUSIONS AND FUTURE DIRECTIONS

This study, through the integration of theory and empirical evidence, reveals the synergistic role of originality, aesthetics, emotion, and ethics in business design. The research findings indicate that original design is the core driver of market performance enhancement, especially in technology-oriented industries, where its synergy with aesthetic design significantly strengthens the brand's market competitiveness; aesthetic design reinforces consumers' purchase intentions through visual and sensory appeal, while amplifying the emotional triggers of emotional design. Emotional design directly affects brand loyalty and can further solidify consumer behavior by enhancing user experience and a sense of belonging, while ethical design enhances corporate reputation by reflecting social responsibility and interacts with emotional design to build deeper brand identification. However, the study also reveals the performance differences of design dimensions across different industries and their dependence on cultural backgrounds, providing theoretical support for the crossindustry application of multidimensional design. Future research can further explore the priority changes of design dimensions in dynamic environments, combining longitudinal research methods to analyze how enterprises balance design investments at different life cycle stages. At the same time, as emerging technologies (such as artificial intelligence, virtual reality) are increasingly applied in design, the impact of technology and multidimensional design integration on market performance and consumer behavior can be a focus for future studies. Additionally, the acceptance and communication mechanisms of ethical design from a cross-cultural perspective are areas worthy of in- depth exploration, thereby further enriching the theoretical foundation and practical guidance value

of business design technology.

REFERENCES

Alfakhri, D., Harness, D., Nicholson, J., & Harness, T. (2018). The role of aesthetics and design in hotelscape: A phenomenological investigation of cosmopolitan consumers. *Journal of Business Research*, 85, 523–531.

Alwi, S. F. S., Ali, S. M., & Nguyen, B. (2017). The importance of ethics in branding: Mediating effects of ethical branding on company reputation and brand loyalty. *Business Ethics Quarterly*, 27(3), 393–422.

Beise-Zee, R. (2022). Brand equity retention after rebranding: A resource-based perspective. *Journal of Brand Management*, 29(2), 208–224.

Bednar, K. (2023). *Bridging ethics and technology design: A value-based approach to IT innovation* (Doctoral dissertation). Wirtschaftsuniversität Wien..

Beltagui, A., Darler, W., & Candi, M. (2015, August 17). Measuring the deliverable and impressible dimensions of service experience. *CAIM*, 29(4), 345–362. https://doi.org/10.1111/caim.12130

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52–62. https://doi.org/10.1509/jmkg.73.3.52

Candi, M., Jae, H., Makarem, S., & Mohan, M. (2017). Consumer responses to functional, aesthetic and symbolic product design in online reviews. *Journal of Business Research*, 81, 31–39.

Chigora, T. B. (2024). The Paradox of Social-Emotional Learning (SEL) and Generative Artificial Intelligence (GAI) in Design and Technology: High School Context. *International Journal of Research and Scientific Innovation*, 11(9), 1104–1114.

Chowdhury, S., Dey, P., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O., Abadie, A., & Truong, L. (2023). Unlocking the value of artificial intelligence in human resource management through AI capability framework. *Human Resource Management Review*, 33(1), 100899.

Creusen, M. E. H., & Schoormans, J. P. L. (2005). The different roles of product appearance in consumer choice. *Journal of Product Innovation Management*, 22(3), 167–184. https://doi.org/10.1111/j.0737-6782.2005.00103.x

D'Ippolito, B. (2019). The importance of design for firms' competitiveness: A review of the literature. *Design Management Journal*, 26(3), 150–165. https://doi.org/10.1111/dmj.12345

e Costa, J. F. F. (2023). *The Impact of the Resource-based view and Sustainability on the luxury fashion: A Bibliometric Review Analysis* (Master's thesis). ISCTE-Instituto Universitario de Lisboa (Portugal).

Foroudi, M. M., & Foroudi, P. (2021). *Corporate Brand Design*. London: Routledge.

Hur, J., Chun, Y., Hwang, J., & Kim, K. (2024). The moderating role of design innovation in the relationship between technology complexity and firm performance. *Technology Analysis & Strategic Management*, 1–14.

Hsu, C.L., Chen, Y.C., Yang, T.N., Lin, W.K., & Liu, Y.H. (2018). Does product design matter? Exploring its influences in consumers' psychological responses and brand loyalty. *Information Technology & People*, 31(3), 886–907.

Huang, N.-t., Chang, Y.-s., & Chou, C.-h. (2020). Effects of creative thinking, psychomotor skills, and creative self-efficacy on engineering design creativity. *Thinking Skills and Creativity*, 37, 100695.

Huang, Y.C. J., Wensveen, S. A. G., & Funk, M. (2023). Experiential speculation in vision-based AI design education: Designing conventional and progressive AI futures. *International Journal of Design*, 17(2), 1–17.

Ilen, E., Groth, C., Ahola, M., & Niinimäki, K. (2019). Empathy in a technology-driven design process: Designing for users without a voice of their own. *Nordes*, 8.

Ivanaj, V., Shrivastava, P., & Ivanaj, S. (2018). The value of beauty for organizations. *Journal of Cleaner Production*, 189, 864–877.

Jones, M. A. (2006, March). The role of retailer interest on shopping behavior. *Journal of Retailing*, 82(2), [page range]. https://doi.org/10.1016/j.pnpbp.2005.05.001

Kamasak, R. (2017). The contribution of tangible and intangible resources, and capabilities to a firm's profitability and market performance. *European Journal of Management and Business Economics*, 26(2), 252–275.

Lockwood, T. (2007). Design value: A framework for measurement. *Design Management Review*, 18(4), 90.

Luchs, M. G., Swan, K. S., & Creusen, M. E. H. (2016). Perspective: A review of marketing research on product design with directions for future research. *Journal of Product Innovation Management*, 33(3), 320–341.

Maksimainen, J. (2011). *Aspects of values in human-technology interaction design: A content-based view to values* (Doctoral dissertation). University of Jyväskylä.

Micheli, P., & Gemser, G. (2016, January 12). Signaling strategies for innovative design: A study on design tradition and expert attention. *Journal of Product Innovation Management*. https://doi.org/10.1111/jpim.12308

Molahosseini, I. S., Pourkiani, M., Abbasi, F. B., Salajeghe, S., & Tavakoli, H. M. (2019). The effect of organizational aesthetics on self-esteem, mental health and morale in employees. *Gurukul Business Review*, 15, 53–60.

Nasseraldin, A. K. M. (2022). *The Role of Aesthetics in a Successful Logo Design* (Doctoral dissertation). University of Leeds.

Norman, D. A. (2004). *Emotional design: Why we love (or hate) everyday things*. Basic Books.

Ocnarescu, I. C. (2013a). *Aesthetic experience & innovation culture: The aesthetic experience in an R&D department through design and for innovation culture* (Doctoral dissertation). Ecole nationale supérieure d'arts et métiers-ENSAM.

Ocnarescu, I. C. (2013b). *Aesthetic experience & innovation culture: The aesthetic experience in an R&D department through design and for innovation culture* (Doctoral dissertation). Ecole nationale supérieure d'arts et métiers-ENSAM.

Orth, U. R., & Malkewitz, K. (2008). Holistic package design and consumer brand impressions. *Journal of Marketing*, 72(3), 64–81.

Papanek, V. (1985). *Design for the real world: Human ecology and social change*. Academy Chicago Publishers.

Pedota, M., & Piscitello, L. (2022). A new perspective on technology-driven creativity enhancement in the Fourth Industrial Revolution. *Creativity and Innovation Management*, 31(1), 109–122.

Quiñones-Gómez, J. C., Mor, E., & Chacón, J. (2024). Data-Driven Design in the Design Process: A Systematic Literature Review on Challenges and Opportunities. *International Journal of Human–Computer Interaction*, 1–26.

Reisinger, M. R., Prost, S., Schrammel, J., & Fröhlich, P. (2023). User requirements for the design of smart homes: Dimensions and goals. *Journal of Ambient Intelligence and Humanized Computing*, 14(12), 15761–15780.

Roy, R. (1993). Case studies of creativity in innovative product development. *Technovation*, 13(1), 19–38. https://doi.org/10.1016/0142-694X(93)80016-6

Schindler, I., Hosoya, G., Menninghaus, W., Beermann, U., Wagner, V., Eid, M., & Scherer, K. R. (2017). Measuring aesthetic emotions: A review of the literature and a new assessment tool. *PLOS ONE*, 12(6), e0178899.

Schmitt, B., & Simonson, A. (1997). *Marketing aesthetics: The strategic management of brands, identity, and image*. Simon & Schuster.

Shrivastava, P., Schumacher, G., Wasieleski, D. M., & Tasic, M. (2017). Aesthetic rationality in organizations: Toward developing a sensitivity for sustainability. *The Journal of Applied Behavioral Science*, 53(3), 369–411.

Smith, J. A. (2015). Designing services that sing and dance. In R. S. Smith & J. P. Doe (Eds.), *Innovations in Service Design* (Chapter 15, pp. 245–265). Wiley.

Sturdee, M., Everitt, A., Lindley, J., Coulton, P., & Alexander, J. (2019). Visual methods for the design of shape-changing interfaces. In *Human-Computer Interaction–INTERACT 2019: 17th IFIP TC 13 International Conference, Paphos, Cyprus, September 2–6, 2019, Proceedings, Part III 17* (pp. 337–358). Springer International Publishing.

Sultan, M. F., & Rafiq, A. (2024). Resource-based view & customers of Islamic banks: A quantitative study to reflect light on relationship in the presence of CSR activities. *KASBIT Business Journal*, 17(2).

Sung, T.-J., & Chang, P.-Y. (2008). Building design capability through design resource: The case of Duck Image. *Organizational Aesthetics*, 2(3).

Tellios, A. (n.d.). Human parameters in technology-driven design research: Formal, social and environmental narratives. In *Rethinking the Human in Technology Driven Architecture* (p. 111).

Verganti, R. (2009). Design, meanings, and radical innovation: A metamodel and a research agenda. *R&D Management*, 39(2), 166–175. https://doi.org/10.1111/j.1540-5885.2008.00313.x

Xu, C., Sun, Y., & Zhou, H. (2024). Artificial aesthetics and ethical ambiguity: Exploring business ethics in the context of AI-driven creativity. *Journal of Business Ethics*, 1–22.

Zhang, M., Zhang, Z., Chen, Z., Wang, C., Liu, C., & Park, K. (2024). Charting the path of technology-integrated competence in industrial design during the era of Industry 4.0. *Sustainability*, 16(2), 751.