

Reshaping Fashion Industry System in South Korea: A Reflexive Thematic Analysis from the Perspectives of SMEs

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Introduction and Background: The fashion industry in South Korea has undergone a remarkable transformation and growth since the 1970s (Kim & Han, 2012). During the earlier decades, the country witnessed a significant turning point with the emergence of textile and garment manufacturing as key sectors. However, from the early 21st century and onward, the fashion industry in South Korea continued its evolution, propelled by technological advancements and innovation (Kim & Park, 2023). Particularly, Seoul, the capital of South Korea, has emerged as a leading fashion hub in Asia, attracting global industry professionals (Yun et al., 2019). The nation has become renowned for its fast-fashion production capabilities and embraced digital platforms, revolutionizing production and marketing strategies. However, despite its successes, emerging designers and small- to medium-sized fashion companies, referred to as fashion SMEs, encounter challenges. Particularly, with the ascent of globalization, SMEs that thrived in earlier eras struggle to compete with companies benefiting from lower labor costs in other countries. Thus, *the purpose of this study is to explore the challenges and opportunities in the fashion industry in South Korea, particularly related to technology, for fashion SMEs, with the aim of revitalizing the fashion ecosystem and enterprises in South Korea.* The findings from this study offer valuable insights into the perspectives of SMEs that need to be addressed to revive the fashion industry system in South Korea, with broader applications to other countries undergoing similar development stages.

Technology-Organization-Environment (TOE) Framework: The TOE framework is a model that analyzes how various companies implement technological innovations into their businesses, serving as a theoretical foundation for this study (Tornatzky & Fleischer, 1990). Specifically, it examines three factors influencing the adoption and application of these technologies within a company: technological, organizational, and environmental contexts (Anthony, 2020). At the core of all these factors lies a company's desire to implement more innovative technologies to succeed in their business endeavors (Raj & Jeyaraj, 2023). For technological context, the company should consider which technologies are essential to running their business. The organizational context considers internal factors within the company, including company size, resources, managerial structure, etc. The environmental context takes a broader view of the industry into account, considering competition, industry size/structure, as well as general environmental situations (Caldarelli et al., 2021). When considering these dimensions as a whole, they present all the various opportunities and drawbacks influencing how the firm views adopting innovation and technology. Thus, it is important to understand the perspectives of SMEs through the lens of TOE.

Method: The study utilized a qualitative one-on-one in-depth interview method, specifically targeting fashion stakeholders located in Seoul, South Korea. These stakeholders included fashion designers, patternmakers, and sewing professionals, as they have been keen observers of the changes, growth, and challenges within the fashion industry over the decades. The interview process continued until data saturation was achieved, with a total of 12 participants taking part in the interviews (Table 1). For data analysis, reflexive thematic analysis was employed. This method employs an organic approach to analyze themes and allows for the application of a deductive approach grounded in the theoretical foundation (Braun & Clarke, 2019).

Table 1. Participants demographics

Participant #	Pseudonym	Position	Gender	Age	Years in organization
1	David	Sewing professionals	Male	68	53
2	John	Patternmaker	Male	61	25
3	Peter	Designer	Male	31	8
4	Alice	Designer	Female	40	15
5	James	Patternmaker	Male	35	9
6	Henry	Designer	Male	29	10
7	Emily	Designer	Female	45	20
8	Olivia	Sewing professionals	Female	59	25
9	Thomas	Sewing professionals	Male	70	50
10	Sarah	Sewing professionals	Female	40	60
11	Jacob	Patternmaker	Male	56	30
12	Charles	Designer	Female	37	10

Results: Nine themes emerged centering on the TOE framework as follows: Technology sector (with four sub-themes: *efficiency and innovation of technology*, *environmental sustainability*, *brand sustainability*, and *technological limitations*), organization sector (with two sub-themes: *next-generation education* and *collaboration*), and environment sector (with three sub-themes: *fashion industry dilemmas*, *government funding initiatives*, and *fashion industry trends*). *Efficiency and innovation in technology* are key tools for developing the fashion industry (e.g., “Work can be done while reducing unnecessary time, cost, etc.”). For *environmental sustainability*, interviewees mentioned that technology helps reduce unnecessary production (e.g., “It makes me think that we are generating waste...We can enjoy it just by being virtual, without the need for physical presence”). *Brand sustainability* is essential to remain in the changing and innovative fashion industry (e.g., “To be sustainable, a brand must have its own identity...If a brand follows trends, it will eventually fail because of that trend”). However, technology cannot replace all human tasks due to *technological limitations* (e.g., “Especially in the case of women’s clothing, automation cannot be achieved because the designs and materials are so diverse”). *Next generation education* is also necessary for the in-depth sustainability of the fashion industry (e.g., “We need to train them in craftsmanship, and hand it over to future generations”). Experts at each stage of the fashion industry form *collaborations* to improve consumer experience (e.g., “Consumers come first. Imagine a scenario where there are no consumers. Could we sustain the operation of the factory?”). The *fashion industry* faces *dilemmas* such as the coexistence of technology and analog (e.g., “In the fashion industry, two elements have consistently coexisted. While digital advancements are always progressing, analog methods seem to be on the decline. Yet, despite this decline, analog is always there and will not vanish”). The fashion industry is supported in various ways through *government funding initiatives* (e.g., “The government started a ‘Smart Workshop’ project and we are currently operating by this support”). Last but not least, the fashion industry is consistently pondering the trajectory of fashion industry trends (e.g., “Universities often don’t impart skills applicable to the current fashion industry trends...Therefore, we must provide practical skills relevant to it”).

Discussion and Implications: Our findings provide insights to revive the fashion industry system

in South Korea based on the voices of SMEs. Specifically, the themes that emerged from the TOE framework in this study highlight areas that require greater attention to enhance the fashion industry system (Figure 1). Additionally, we found that fashion industry professionals need to earnestly strive for changes brought about by technology in the fashion industry. In terms of technology, it needs to aid the company to lead sustainability for the environment and brand itself. Through technology, fashion industry professionals in SMEs look to increase efficiency and innovation in production, which has made it possible to minimize environmental impact and extend the lifespan of brands (Zahra et al., 2021). For organization, there is a growing demand for next-generation education and collaboration with fashion experts, as they constitute fundamental aspects to secure competitiveness and achieve sustainable growth (Todeschini et al., 2020). This enables SMEs to swiftly adapt to market changes and enhance their ability to translate innovative ideas into practical solutions. In terms of the environment, government support is important in addressing the complex challenges facing the fashion industry. This necessitates active utilization of technology while harmonizing modern demands with past values and factors from the fashion industry. For future research, it is necessary to explore consumers' perspectives on how they perceive the fashion system. Also, it would be beneficial to examine cases from other countries (USA, Europe, and China) to identify diverse aspects, facilitating the growth of the industry.

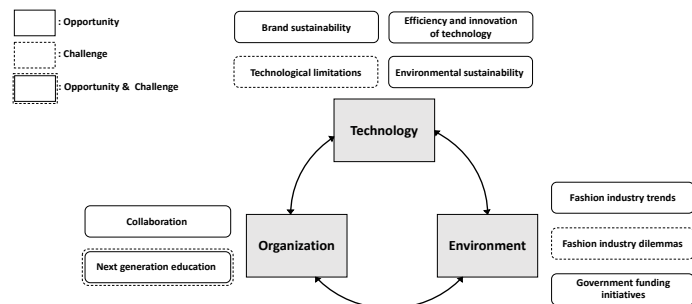


Figure 1. Results of themes and sub-themes

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