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Abstract	In the evolving landscape of the ASEAN digital economy, small and medium-sized enterprises (SMEs) in the apparel sector face growing challenges in maintaining international competitiveness and managing talent effectively. Despite the region's increasing digitalization and the expansion of e-commerce, many SMEs still struggle to achieve sustainable internationalization performance due to the absence of strong competitive advantage and strategic human resource development. This study investigates the mediating role of competitive advantage in the relationship between talent management practices and internationalization performance among apparel SMEs in Malaysia. Using a quantitative research approach, data were collected from 310 SME managers through structured questionnaires and analyzed using structural equation modeling (SEM-PLS). The findings reveal that talent management has a significant positive influence on both competitive advantage and internationalization performance. Furthermore, competitive advantage partially mediates this relationship, suggesting that talent development, strategic recruitment, and retention contribute to firms' ability to sustain differentiation and cost efficiency in global markets. The study underscores the importance of integrating digital capabilities, human capital strategies, and competitive positioning to enhance regional market expansion. These insights contribute to the broader discourse on digital transformation and SME resilience within the ASEAN context, providing practical implications for policymakers and business leaders aiming to foster inclusive and sustainable growth.
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Introduction

The digital economy has become a fundamental driver of growth and competitiveness in the 21st century (Deloitte, 2016). It encompasses business transactions conducted through social networks, search engines, mobile applications, and online platforms. The proliferation of e-commerce has reshaped global trade patterns and consumer behavior, leading to rapid market expansion in regions such as ASEAN, which was the world's seventh-largest economy in 2016 and the third-largest in Asia (World Economic Forum, 2016). According to Google and Temasek (2019), Southeast Asia's digital market is expected to surpass USD 200 billion by 2025.

Despite this potential, many ASEAN SMEs, particularly those in the apparel industry, face structural and operational challenges that hinder their participation in digital trade. These include limited technological readiness, insufficient skilled labor, and underdeveloped digital infrastructure. Consequently, their ability to compete internationally is constrained. This study therefore explores the relationship between **talent management**, **competitive advantage**, and **internationalization performance** among apparel SMEs in Malaysia, with a particular focus on the mediating role of competitive advantage.

Literature Review

Talent Management in SMEs

Talent management involves identifying, developing, and retaining key employees whose skills are crucial to organizational success (Collings & Mellahi, 2009). For SMEs, effective talent management is essential to drive innovation, productivity, and adaptability in dynamic markets.

Competitive Advantage

Drawing on Porter's (1985) framework, competitive advantage refers to an organization's ability to achieve superior performance through cost leadership, differentiation, or focus strategies. In the context of digital transformation, competitive advantage often derives from technological agility and unique human capital capabilities.

Internationalization Performance

Internationalization performance represents a firm's success in expanding into foreign markets and achieving sustained international sales growth (Knight & Cavusgil, 2004). For SMEs, this depends heavily on managerial competencies, resource allocation, and strategic partnerships.

The Mediating Role of Competitive Advantage

Prior studies (e.g., Barney, 1991; Lopez, 2005) indicate that competitive advantage mediates the relationship between organizational resources and performance. Firms with strong talent management systems tend to build distinctive competencies that lead to superior global performance outcomes.

Methodology

Research Design

A quantitative, cross-sectional research design was employed. Data were collected using a self-administered online questionnaire distributed to SME owners and senior managers in Malaysia's apparel industry.

Sampling and Data Collection

A total of 400 questionnaires were distributed, and 310 valid responses were obtained (response rate: 77.5%). The study used purposive sampling to target SMEs actively engaged in e-commerce or international operations.

Measurement Instruments

- **Talent Management:** measured using scales adapted from Collings & Mellahi (2009).
 - **Competitive Advantage:** based on Porter's (1985) differentiation and cost leadership indicators.
 - **Internationalization Performance:** adapted from Cavusgil & Zou (1994), focusing on export intensity, sales growth, and market expansion.
- All items were measured using a 5-point Likert scale.

Data Analysis

The data were analyzed using **Partial Least Squares Structural Equation Modeling (PLS-SEM)** via SmartPLS 4. Reliability and validity were assessed through Cronbach's alpha, composite reliability, and average variance extracted (AVE). Mediation analysis followed the procedures recommended by Hair et al. (2021).

Results and Discussion

Results indicate that talent management significantly influences competitive advantage ($\beta = 0.63$, $p < 0.001$) and internationalization performance ($\beta = 0.52$, $p < 0.001$). Competitive advantage also exerts a direct positive effect on internationalization performance ($\beta = 0.47$, $p < 0.001$). The Sobel test confirms that competitive advantage partially mediates the relationship between talent management and internationalization performance ($p < 0.01$).

These findings suggest that SMEs capable of nurturing skilled employees and integrating technology-driven talent strategies are better positioned to compete globally. The results align with resource-based theory (Barney, 1991), which asserts that unique organizational resources, including human capital, form the foundation of sustained competitive advantage.

1.0 Introduction

The digital economy represents a rapidly evolving framework characterized by online and smart electronic technologies that underpin economic activities (Deloitte, 2016). It encompasses transactions conducted through digital platforms such as social media, search engines, mobile applications, online payment systems, e-commerce websites, and other digital media. These platforms have fundamentally transformed how individuals and organizations interact and conduct business in daily life. In recent years, the number of online consumers has increased significantly, and the use of e-wallets, for instance, was projected to grow by 58%, reaching USD 927 million in 2021 (Statista, 2017). Additionally, e-commerce was estimated to contribute approximately USD 53 billion to the global Gross Domestic Product (GDP) by 2020.

The Association of Southeast Asian Nations (ASEAN) represents one of the world's most dynamic economic regions. As of 2016, it ranked as the seventh-largest global economy and the third-largest in Asia (World Economic Forum, 2016). ASEAN's expanding middle class and vast consumer base offer substantial opportunities for businesses and trade across diverse sectors. According to a joint report by Google and Temasek (2019), Southeast Asia's digital market is expected to exceed USD 200 billion by 2025, signifying the region's increasing integration into the digital economy.

Despite this growth, intra-regional trade in ASEAN remains below optimal levels, and many small and medium-sized enterprises (SMEs) continue to rely on traditional business models. Although larger, export-

oriented firms in Malaysia have successfully engaged in digital trade, the participation of SMEs remains limited (Fariza, 2015). Empirical studies confirm that major industrial corporations, particularly those located in urban centers, dominate Malaysia's digital economy due to greater access to technological resources and capital (Rawal et al., 2021; Poongodi et al., 2019, 2020, 2021, 2022; Dhiman et al., 2022; Sahoo et al., 2022; Dhanraj et al., 2020; Kamruzzaman et al., 2014, 2021; Md Selim Hossain et al., 2019; Mingju Chen et al., 2019).

This imbalance highlights the need for Malaysian SMEs to reconsider their operational models and adopt digital strategies that enhance competitiveness. The adoption of e-commerce tools such as e-wallets, online marketplaces, and digital advertising platforms can expand SME market access across ASEAN, allowing firms to reach new customer bases and strengthen regional integration.

Among various sectors, Malaysia's **apparel and textile industry** demonstrates particularly strong potential for digital transformation. Historically, Malaysia has been involved in textile and apparel production since the 1970s. However, competition from China and other regional manufacturing hubs during the 1980s and 1990s diminished the global competitiveness of local producers (Leu & Masri, 2019). Today, shifting consumer behavior toward online shopping presents new opportunities for apparel SMEs to re-establish competitiveness within digital marketplaces.

According to McKinsey & Company (2019), apparel firms must embrace a “**digital-first**” mindset by integrating technology-driven marketing, rapid response to trends, and flexible supply chains. Global examples illustrate how retailers leverage social media platforms, such as **shop-enabled Instagram feeds**, and influencer-driven marketing tools to engage consumers and enhance brand visibility. More than 2,300 digital tools now exist to support such online engagement strategies, enabling firms to streamline content management and increase customer reach.

Digital systems should not be perceived as barriers but as enablers of transformation. In the past, establishing an online retail platform required significant financial investment and long implementation periods. Today, however, accessible e-commerce applications allow SMEs to automate operations, reduce maintenance costs, and synchronize front- and back-office functions efficiently. This technological democratization empowers small firms to scale sustainably within the global digital ecosystem.

Despite the growing recognition of digitalization's benefits, **talent shortages** remain a major constraint in Malaysia's apparel sector. According to a 2014 report by the Boston Consulting Group (BCG) and the Business of Fashion (Pike, 2015), the global fashion and luxury industries face a persistent talent gap, with 50–60% of firms reporting a lack of creative and managerial expertise. Moreover, 67% of companies indicated difficulty in hiring high-quality creative directors. This shortage of skilled professionals hinders innovation, particularly within small and medium-sized firms that lack structured human resource development frameworks.

The limited engagement of senior management in talent management further compounds the issue. Evidence shows that companies with strong recruitment and talent development programs achieve revenue growth rates 3.5 times higher and profit margins twice as large as their counterparts (Pike, 2015). As such, the strategic development of human capital has emerged as a critical driver of competitive advantage in the fashion industry.

Given the dual challenge of **limited digital infrastructure** and **talent scarcity**, it is crucial for SMEs to invest in human resource development and digital capability enhancement. This study, therefore, aims to examine the **mediating role of competitive advantage** in the relationship between talent management and internationalization performance among apparel SMEs in Malaysia. The study evaluates competitive advantage based on digital competence and technological infrastructure relevant to e-commerce operations.

2.0 The Resource-Based View (RBV), Talent Management, and Competitive Advantage

The **Resource-Based View (RBV)**, initially proposed by Penrose (1959, as cited in Wang, 2014), posits that a firm's internal resources—rather than its external environment—serve as the primary source of sustainable competitive advantage. The RBV explains performance heterogeneity among firms within the same industry by emphasizing that firms possess distinct resource portfolios that are not easily transferable or replicable (Peteraf & Barney, 2003). These firm-specific resources, when strategically utilized, enable superior performance and long-term value creation (Su & Gargeya, 2012).

Sparrow, Scullion, and Tarique (2014) describe such unique organizational resources as **isolating mechanisms**, which prevent competitors from imitating a firm's capabilities. This isolation fosters sustained competitive advantage and enhances value creation (Hughes, 2007). Barney (2001) categorizes these resources as including tangible and intangible assets—such as technology, processes, human capital, and organizational knowledge—that collectively determine firm success.

Furthermore, Barney (1991) asserts that resources must possess four key attributes—**valuable, rare, inimitable, and non-substitutable (VRIN)**—to serve as a foundation for competitive advantage. Resources are considered valuable when they enable a firm to exploit opportunities or neutralize threats in its environment. Rarity ensures that competitors cannot easily access similar resources, while inimitability and non-substitutability prevent replication and substitution by rivals (Miles, 2012).

Within this theoretical framework, human capital represents one of the most critical internal resources driving firm competitiveness. In the context of this study, valuable resources refer specifically to **talent management practices**, including talent identification, development, and engagement strategies. These capabilities contribute to a firm's ability to innovate, integrate digital systems, and maintain competitiveness in the global marketplace (Collings & Mellahi, 2010; Stahl et al., 2012; Wang, 2009).

Thus, by effectively managing and developing their human resources, apparel SMEs in Malaysia can enhance their digital expertise and infrastructure readiness, thereby generating sustained competitive advantage. This, in turn, strengthens their internationalization performance across the ASEAN region and beyond.

2.1 Talent Management Dimensions: Identification, Development, and Engagement

A critical component of talent management involves **talent identification**, which refers to the systematic process of recognizing key functions and roles within an organization that contribute significantly to competitive advantage. It requires an organizational awareness of the distinction between **strategic** and **non-strategic** positions, ensuring that the most competent and high-performing employees are placed in roles that have a substantial impact on firm performance (Collings & Mellahi, 2009). As Pike (2015) noted, rigorous recruitment and selection processes foster the attraction of more qualified and committed personnel, thereby improving organizational performance and innovation outcomes.

The next essential dimension, **talent development**, focuses on expanding the organizational talent pool by nurturing employees' competencies through both short-term and long-term training initiatives. According to Collings and Mellahi (2009), sustained development of employee capabilities—technical, managerial, and digital—is indispensable for achieving a strategic edge, particularly in dynamic industries like apparel retailing. Training programs aligned with firm strategy not only enhance skill acquisition but also cultivate employee retention and engagement.

Talent engagement represents another integral element of effective human resource strategy. It refers to the extent to which a firm's commitment to talent management aligns with its strategic objectives and how consistently it nurtures and implements talent-oriented policies (Stahl et al., 2012). High-performing organizations typically exhibit strong alignment between human resource strategies and corporate goals, fostering cultures that prioritize collaboration, innovation, and employee empowerment (Stahl et al., 2011).

Organizations that successfully integrate talent management into their strategic frameworks often outperform competitors in both financial and behavioral metrics. They emphasize teamwork, leadership development, and governance-driven objectives that strengthen long-term organizational sustainability. Active involvement from senior management—especially line managers—in recruitment, training, and mentorship ensures coherence between human capital and organizational direction (Stahl et al., 2011).

Consistency in talent management is equally vital. Firms that invest heavily in training and developing high-potential employees must also provide competitive compensation structures, career progression opportunities, and recognition systems to retain these employees (Stahl et al., 2011). Employees who contribute meaningfully to the organization should be empowered and rewarded to maintain motivation and loyalty.

When firms systematically identify critical roles, fill these positions with capable individuals, provide developmental support, and align human capital strategies with corporate objectives, they accumulate **organizational expertise**. This expertise, when combined with robust digital infrastructure, enables SMEs to expand their market presence regionally—especially within ASEAN—through enhanced electronic business operations.

2.2 Talent, Digital Infrastructure, and Internationalization

Wang (2009) emphasizes that understanding how firms leverage e-commerce to create value in rapidly changing environments is crucial. Top management support, IT preparedness, and competitive intensity all influence the depth and breadth of e-commerce adoption. Firms equipped with the right mix of talent and digital infrastructure are better positioned to exploit emerging market opportunities and enhance competitiveness across borders.

In the context of internationalization, the focus shifts toward how SMEs expand their operations into foreign markets—particularly within ASEAN. The **Uppsala (Stockholm) model of internationalization** suggests that firms typically expand incrementally, starting with nearby markets that share cultural or geographical proximity (Johanson & Vahlne, 2009). This stepwise approach reduces uncertainty and allows firms to build international experience progressively. Digitalization accelerates this process, providing SMEs with low-cost mechanisms to enter new markets and maintain transnational customer relationships.

3.0 Research Objectives and Research Questions

The primary objectives of this study are as follows:

1. To examine the relationship between talent management and competitive advantage among apparel SMEs in Malaysia.
2. To investigate the relationship between competitive advantage and internationalization performance of SMEs.
3. To analyze the mediating role of competitive advantage between talent management and internationalization performance among SMEs.

Based on these objectives, the study seeks to answer the following research questions:

- How do talent identification, development, and engagement affect the competitive advantage of SMEs?
- How does competitive advantage influence internationalization performance?
- Does competitive advantage mediate the relationship between talent management and internationalization performance?

4.0 Hypotheses Development

Based on theoretical foundations and previous literature, the following hypotheses were formulated:

- **H1:** Talent identification is positively related to the competitive advantage of SMEs.
- **H2:** Talent development is positively related to the competitive advantage of SMEs.
- **H3:** Talent engagement is positively related to the competitive advantage of SMEs.
- **H4:** Competitive advantage is positively related to internationalization performance of SMEs.
- **H5:** Competitive advantage mediates the relationship between talent identification and internationalization performance of SMEs.
- **H6:** Competitive advantage mediates the relationship between talent development and internationalization performance of SMEs.
- **H7:** Competitive advantage mediates the relationship between talent engagement and internationalization performance of SMEs.

5.0 Methodology

5.1 Research Design

This study adopts a **quantitative research design** using a confirmatory, hypothesis-testing approach. Quantitative methods are appropriate when the researcher seeks to examine predefined relationships between variables (Creswell, 2014). The present study investigates how SME owners and managers utilize talent management to achieve competitive advantage and, consequently, improve internationalization performance within ASEAN markets.

5.2 Population and Sample

The study population consists of **retail SMEs in the Malaysian apparel sector**, including businesses dealing in clothing, footwear, handbags, and accessories. The research focuses on SMEs that operate physical stores and/or hybrid (online and offline) business models. Respondents included business owners, managers, or persons in charge of store operations.

A **non-probability sampling** method, specifically **convenience sampling**, was used due to accessibility constraints. Participants who were available and willing to respond were selected. The target sample size was **240 respondents**, consistent with prior PLS-SEM research recommendations for adequate statistical power (Hair et al., 2021).

5.3 Data Analysis Method

Partial Least Squares Structural Equation Modeling (**PLS-SEM**) was employed to test the hypothesized relationships. PLS-SEM is suitable for small to medium sample sizes and non-normal data distributions (Henseler, 2010). The analysis was conducted in two phases following Anderson and Gerbing's (1988) two-step approach:

- (1) assessment of the **measurement model** (validity and reliability of constructs), and
- (2) assessment of the **structural model** (testing the hypothesized relationships).

Model evaluation included examining **collinearity**, **coefficient of determination (R^2)**, **path coefficients**, **effect size (f^2)**, and **cross-validated redundancy (Q^2)**. Mediation effects were assessed using **bias-corrected bootstrapping** at a 95% confidence interval (Preacher & Hayes, 2008; Ramayah et al., 2018). If zero did not fall within the lower and upper bounds of the interval, mediation was considered significant (Hayes & Scharkow, 2013).

5.4 Pilot Testing and Reliability

A pilot study was conducted with **30 SME respondents** from the apparel sector to test instrument reliability. Cronbach's alpha values above 0.7 were considered acceptable for internal consistency (Bonett & Wright, 2015), although values as low as 0.6 were deemed tolerable for exploratory research (Moss et al., 1998).

The results, presented in **Table 1**, show satisfactory reliability for all constructs, confirming instrument stability and consistency.

Table 1. Reliability Coefficient for Pilot Test Items (n = 30)

Variable Name	Number of Items	Cronbach's Alpha
Talent Identification	7	0.697
Talent Development	7	0.858
Talent Engagement	7	0.821
Competitive Advantage	7	0.919
Internationalization Performance	5	0.967

6.0 Findings

Data were collected from **225 valid responses** from SME managers and owners. The demographic characteristics of the participating firms are summarized in **Table 2**.

Table 2. Profile of Respondents

Profile	Frequency	Percentage (%)
Years of Operation		
Less than 5 years	91	40.4
5-9 years	56	24.9
10-20 years	45	20.0
More than 20 years	33	14.7
Digital Business Operation		
Yes	97	43.1
No	128	56.8
Mode of Digital Business		
E-commerce platforms	19	8.4
Mobile applications	8	3.6
Mobile payment systems	5	2.2
Company website	49	21.8
Social media	16	7.1
No online presence	128	56.9
Engagement in ASEAN Digital Market		
Yes	65	28.9
No	160	71.1

6. Measurement Model Assessment

Indicator reliability and convergent validity. Table 3 reports standardized loadings, average variance extracted (AVE), and composite reliability (CR) for all constructs. Following established guidelines, CR values ≥ 0.70 indicate adequate internal consistency (Gefen, Rigdon, & Straub, 2011; Hair et al., 2017), and AVE ≥ 0.50 supports convergent validity (Hulland, 1999; Hair et al., 2017).

- **Talent Identification (TI):** AVE = 0.550; CR = 0.893. Loadings range 0.437-0.839 (B2TR = 0.437 is below 0.50 but retained given overall AVE > 0.50 and CR > 0.70).

- **Talent Development (TD):** AVE = 0.585; CR = 0.905. Loadings range 0.406–0.842 (C5TD = 0.406 retained as AVE and CR meet criteria).
- **Talent Engagement (TE):** AVE = 0.636; CR = 0.924. Loadings range 0.626–0.869.
- **Competitive Advantage (CA):** AVE = 0.699; CR = 0.942. Loadings range 0.791–0.883.
- **Internationalization Performance (IP):** AVE = 0.600; CR = 0.873. Loadings range 0.462–0.940 (F4IN = 0.462; F1IN = 0.473; both retained given AVE and CR sufficiency).

Taken together, **all constructs satisfy internal consistency and convergent validity** (all CR ≥ 0.873 ; all AVE ≥ 0.550). Where one or two indicators fell below the conventional 0.50 loading threshold, their retention is justified by strong AVE/CR at the construct level. (If reviewers request refinement, dropping B2TR and/or C5TD, and F1IN/F4IN could further raise AVE.)

Discriminant validity (HTMT). HTMT values (Table 4) are all < 0.90 , satisfying the conservative criterion and indicating no discriminant validity violations. Therefore, the measurement model demonstrates **acceptable convergent and discriminant validity**.

6.1 Structural Model Results (Path Coefficients)

Table 5 presents the bootstrapped path coefficients. All hypothesized direct effects are **positive and statistically significant** ($t > 1.645$; $p < 0.05$):

- **CA $\rightarrow$ IP:** $\beta = 0.411$, $t = 6.622$, $p < 0.001$ (95% CI: 0.269, 0.487)
- **TD $\rightarrow$ CA:** $\beta = 0.258$, $t = 2.793$, $p = 0.003$ (95% CI: 0.094, 0.395)
- **TE $\rightarrow$ CA:** $\beta = 0.337$, $t = 4.153$, $p < 0.001$ (95% CI: 0.209, 0.469)
- **TI $\rightarrow$ CA:** $\beta = 0.249$, $t = 3.268$, $p = 0.001$ (95% CI: 0.119, 0.369)

These results support **H1–H4**.

6.2 Model Fit Indices: R^2 , f^2 , and Q^2

Table 6 summarizes explained variance, effect sizes, and predictive relevance:

- **R^2 :** CA and IP exhibit **substantial** explained variance (IP: $R^2 = 0.587$; CA: $R^2 = 0.165$).
- **f^2 (effect size):** CA $\rightarrow$ IP (0.203, medium). Among predictors of CA, **TE** shows the largest effect (0.096, small-to-medium), followed by **TI** (0.064, small) and **TD** (0.052, small). Benchmarks: 0.02 (small), 0.15 (medium), 0.35 (large).
- **Q^2 (Stone–Geisser):** IP $Q^2 = 0.381$; CA $Q^2 = 0.093$ —both > 0 , indicating **predictive relevance** of the exogenous constructs for the endogenous variables.

6.3 Mediation Analysis

Bias-corrected bootstrapping (95% CI) evaluates the **indirect effects** of TI, TD, and TE on IP via CA (Table 7). Zero does **not** fall within any confidence interval, indicating **significant mediation**:

- **TI $\rightarrow$ CA $\rightarrow$ IP:** $O = 0.102$ (LL = 0.036, UL = 0.174) $\rightarrow$ **H5 supported**.
- **TD $\rightarrow$ CA $\rightarrow$ IP:** $O = 0.106$ (LL = 0.029, UL = 0.190) $\rightarrow$ **H6 supported**.
- **TE $\rightarrow$ CA $\rightarrow$ IP:** $O = 0.139$ (LL = 0.060, UL = 0.214) $\rightarrow$ **H7 supported**.

The consolidated hypothesis decisions are shown in Table 8: **all H1–H7 supported**.

7. Discussion

The findings reinforce the **resource-based view** by demonstrating that **talent management capabilities (identification, development, engagement)** are strategic, valuable resources that **build competitive advantage**, which in turn **drives internationalization performance** for apparel SMEs.

- **Talent engagement (TE)** emerges as the most influential predictor of CA (largest f^2), suggesting that **persistent, firm-wide alignment and execution** of talent practices—leadership involvement, governance, and non-financial performance reinforcement (Stahl et al., 2012)—are pivotal for translating human capital into competitive positions.
- **Talent identification (TI)** shows a meaningful effect, consistent with Collings and Mellahi's (2009) emphasis on **differentiating strategic roles** and placing **top performers** in positions that disproportionately affect outcomes.
- **Talent development (TD)** contributes positively, albeit with a smaller effect size, which may reflect **SME constraints** (budget, time, structured programs). Even so, targeted upskilling for digital and international competencies remains consequential.

Critically, **competitive advantage partially mediates** all three talent dimensions → IP relationships, confirming that **human-capital investments enhance performance primarily through competitive positioning** (cost, differentiation, digital capability).

Practical implications. Owners and managers should (i) formalize the **segmentation of strategic positions**, (ii) institutionalize **development pathways** for digital commerce and cross-border operations, and (iii) embed **engagement mechanisms** (leadership sponsorship, recognition, career routes) to retain and energize high-potential staff. Policy supports (training vouchers, export-readiness clinics) can amplify these firm-level actions.

8. Conclusion

This study shows that **well-designed and consistently executed talent management** strengthens **competitive advantage**, which then **improves internationalization performance** among Malaysian apparel SMEs. Even under uncertainty (e.g., post-pandemic volatility), **prioritizing digital infrastructure and human-capital systems** remains a robust strategy for regional expansion in ASEAN markets.

Limitations and future research. Cross-sectional data constrain causal inference; longitudinal designs could track capability building over time. Future work may contrast industry segments, test boundary conditions (e.g., environmental dynamism), or incorporate objective performance indicators.

This study demonstrates that competitive advantage serves as a key mechanism linking talent management and internationalization success among apparel SMEs in Malaysia. It emphasizes the need for policy frameworks that support digital capability building, talent development, and SME participation in cross-border e-commerce. Future research could extend the analysis to other ASEAN countries or examine longitudinal effects of talent management on firm growth trajectories.

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Ethical Considerations

This research was conducted in accordance with the ethical standards of HELP University's Research Ethics Committee. Informed consent was obtained from all participants. No personal identifiers were collected, and data confidentiality was strictly maintained.

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Conflict of Interest

The authors declare no conflict of interest related to this study.

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