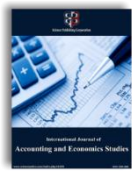
International Journal of Accounting and Economics Studies, 12 (3) (2025) 304-313

International Journal of Accounting and Economics Studies

Website: www.sciencepubco.com/index.php/IJAES
https://doi.org/10.14419/7d7fpb74
Research paper



Influences of Strategic Leadership, Organizational Innovativeness Capability on Effective Competitive Advantage

Mohammed Mansoor Ali Al-hamedi PhD *, Azelin Biniti Aziz, Sarah Shaharruddin

School of Business Management, Universiti Utara Malaysia, Kedah Darul Aman, Malaysia
**Corresponding author E-mail: abomansoor-2008@hotmail.com*

Received: June 17, 2025, Accepted: July 19, 2025, Published: July 29, 2025

Abstract

The study explored the influence of strategic leadership, organizational innovativeness, and information technology capabilities on effective competitive advantage within food industrial companies located in the Sahab region of Jordan. A total of (270) questionnaires were distributed to upper and middle management in these companies, with (216) being successfully collected. The data were analyzed using PLS-SEM. Findings revealed a significant correlation between strategic leadership, organizational innovativeness, IT capabilities, and effective competitive advantage. The study advocates for a transformative shift from the current management practices in Jordanian food industrial companies towards a leadership model driven by strategic leaders. This shift should be complemented by enhanced innovation and optimal use of available IT capability. Such changes are timely, given the significant reforms and developments the sector is currently undergoing.

Keywords: *Effective Competitive Advantage; IT Capability; Organizational Innovativeness; Strategic Leadership.*

1. Introduction

Strategic management is increasingly recognized as a vital tool for enhancing the performance of food industrial companies. The necessity for strategic management practices has intensified as these companies transitioned from a stable environment to one characterized by rapid change and heightened competition, marked by resource constraints (Schaedler et al., 2022). This shift underscores the relevance of strategic management in an era where new influences emerge and traditional norms, values, and organizational roles are being redefined (Afanasieva et al., 2020). A well-exploited competitive advantage can significantly elevate an organization's performance; however, its potential is limited if not effectively leveraged. Zubi and Khalid (2022) suggested that the prevalent issue among organizations is not the absence of competitive advantages but their underutilization. Kumkale (2022) emphasized that while leveraging advantages is challenging, ensuring their effective use is even more complex. Without proper implementation, no advantage will be successful (Kumkale, 2022). A robust approach to capitalizing on competitive advantage involves its effective utilization through operational planning, which includes refining programs, budgets, and daily decision-making processes related to resource allocation (Hitt et al., 2019; Priadana, 2021).

The existing literature indicates that competitive advantage derived from internal organizational competencies offers a more secure pathway for generating benefits for businesses (Arasa & K'obonyo, 2012; Mousa et al., 2024). This study seeks to empirically examine the significance of three specific internal competencies—strategic leadership, organizational innovativeness, and information technology capability—in enhancing performance through effective competitive advantage.

Currently, limited research has been conducted, predominantly in Europe and the United States, on the integration of these three critical variables—competencies—in evaluating their influence on achieving a competitive advantage. Existing studies have largely concentrated on profit-driven organizations. This paper aims to enhance the understanding of how strategic leadership behaviors, organizational innovativeness, and information technology capabilities contribute to effective competitive advantage by examining these dynamics within a different context, specifically in Jordan.

Although this study focused on food companies in Jordan, the main ideas—such as strategic leadership, organizational innovation, and IT capabilities—apply to many different industries and countries. These factors often help organizations gain a competitive advantage, and similar results have been found in other studies around the world (Malik et al., 2025; Lai, Feng, & Zhu, 2023; Ye et al., 2024). So, even though the setting of this study is specific, the results might still help us understand how these factors work in other places and industries.

2. Literature review

2.1. Strategic leadership

Strategic leadership, according to Ravet-Brown, Furtner & Kallmuenzer (2024), refers to a leader's capacity to anticipate future developments, envision opportunities, adapt to changing circumstances, and empower others to drive necessary strategic transformations. Strategic leadership is a flexible way of leading where leaders guide their team members to help the organization handle fast changes in today's global business world (Anggraeni et al., 2023). It also means being able to connect what is happening inside and outside the organization and to deal with complicated information.

Many scholars consider leadership, particularly strategic leadership, to be a crucial factor in achieving an effective competitive advantage (Świąder & Marczewska, 2021; Asbari, 2024; Al-Hamedi & Abujoma, 2021). Lack of leadership, especially in the strategic context, is identified as one of the major obstacles to an organization's competitive advantage (Alhyasat & Sharif, 2018; Ahmed et al., 2022; Mahdi & Nassar, 2021; Akhtar et al., 2017).

A comprehensive literature review on the influence of strategic leadership on competitive advantage across various global organizations reveals significant insights. Al-Zu'bi and Albloush (2022) investigated the effects of strategic leadership on the performance of companies within the food and beverage sector. Their qualitative research, which involved surveying 168 employees, including managers, department heads, and other stakeholders, highlighted that strategic leadership is pivotal for achieving effective competitive advantage within the industry. The study recommends that strategic leadership in food industry companies should be oriented towards enhancing competitive advantage. Additionally, Setiabudi, Siagian, and Tarigan (2021) conducted research within the Indonesian food and beverage industry, demonstrating that the three dimensions of strategic leadership they examined—transformational leadership, ERP system integration, and supply chain integration—contribute significantly to competitive advantage. Their study involved 100 respondents from various organizational levels within the sampled company.

Setiabudi, Siagian, and Tarigan (2021) argued that studies on competitive advantage can be categorized into two main types. The first type emphasizes the importance of individual factors that contribute to competitive advantage. This includes aspects such as the processes for acquiring and utilizing competitive advantage, managerial and employee roles, organizational structure, communication activities, commitment levels, interdepartmental relationships, different levels of advantage, utilization tactics, and the administrative system. The second type focuses on how these factors collectively interact within a unified model or framework to create a competitive advantage environment.

John-Eke and Eke (2020) conducted a study to explore how strategic planning and crisis management approaches impact the development of competitive advantage within organizations. Their findings revealed that management played a crucial role in gaining competitive advantage, resource acquisition, communicating the organization's mission and vision, developing plans, and fostering organizational culture.

Similarly, Anggraeni et al. (2023) investigated the role of leadership in securing competitive advantage in Tangerang, Indonesia. Their research involved administering a questionnaire to 105 participants, who constituted the sample for the study. Key factors such as vision and mission development, objective and goal setting, advantage acquisition, advantage utilization, and performance evaluation were notably significant. These results underscore the importance of strategic leadership in the success of companies in the food industry.

Phangestu, Kountur, and Prameswari (2020) conducted a survey-based study on selected food industry companies in Indonesia, involving 51 top managers as respondents. Their findings reveal significant relationships between entrepreneurial leadership and competitive advantage about business model innovation. However, the study did not find a direct relationship between entrepreneurial leadership and start-ups; the connection was identified as indirect. According to Nahak and Ellitan (2022), although effectively utilizing advantages, along with a robust skillset and human capital, is crucial for achieving competitive success, inadequate leadership remains a significant obstacle.

Fernandes et al. (2022) emphasized that it is essential for CEOs and other senior management to address the various organizational interfaces to enhance competitive advantage. A major challenge in securing a successful organizational competitive advantage involves ensuring employee engagement and aligning their capabilities with the new advantage. Consequently, effective and strategic leadership is deemed more critical than other factors (Quansah et al., 2022).

Strategic leadership helps organizations become more creative and innovative (Mahdi & Nassar, 2021). Strategic leaders play an important role in finding new opportunities and making decisions that support innovation (Mahdi & Nassar, 2021). Also, both good strategic leadership and organizational innovativeness are important for staying competitive in today's world (Abd Aziz & Samad, 2016).

2.2. Organizational innovativeness

Organizational innovativeness refers to the openness within an organization's culture toward adopting new ideas. As such, it serves as an indicator of the organization's tendency to pursue innovation (Acar & Özşahin, 2018; Groza et al., 2021).

Innovativeness refers to a company's inclination to try new ideas. To be innovative, certain things need to happen. Azeem and others (2021) suggest that a company should foster a culture that encourages learning, involves employees in decision-making, promotes teamwork, provides support, and shares power.

Çağlıyan et al. (2022) describe organizational innovation capacity as the ability to efficiently adopt or apply new ideas, processes, or products. Similarly, Azeem et al. (2021) emphasize that food industrial companies with higher innovation capabilities are more likely to achieve a competitive advantage and enhance their performance.

Administrative innovation encompasses the adoption of novel administrative practices, management frameworks, or employee development programs within a given organizational context. It affects the social dynamics of an organization by altering member interactions, including their roles, communication channels, and organizational structures (Vanhala & Ritala, 2016). This form of innovation can lead to significant transformations in job designs and work processes, the enhancement of skills, the adaptation of management practices, and the adjustment of reward systems (Donbesuur et al., 2020). As such, it is a critical factor in achieving a competitive advantage within the food industry (Chen et al., 2020).

According to Groza et al. (2021), Information Technology (IT) is very important for technical innovation in the food industry. It includes knowledge, tools, methods, and systems that help companies create products and services to meet customer needs. When IT is used effectively across areas like production, marketing, finance, and human resources, it helps businesses gain a strong competitive advantage (Miric et al., 2019).

2.3. IT capability

In 2024, Teneiji, Mohammed, and Murad introduced the idea of IT capability, describing it as a company's skill in collecting, combining, and using information technology resources. Later, Hoang et al. (2025) built on this idea by creating a well-known framework for understanding IT capabilities in organizations. Cendekiawan and Wardhani (2025) added that IT capability means a company's ability to use IT resources effectively along with other assets and skills. These resources include technical and management IT knowledge, as well as intangible assets like expertise, focus on customers, and teamwork across different parts of the organization.

2.4. Effective competitive advantage

Mishra and Yadav (2021) argue that leveraging advantages is more challenging than acquiring them. In line with this, Kharub et al. (2019) suggest that fewer than 15% of well-acquired advantages are utilized effectively. Similarly, Natalia and Ellitan (2019) and Ferreira et al. (2019) report that only about 15% of advantages are put to effective use. In a related study, Santalova et al. (2020) found that while 84% of organizations possess valuable advantages, only 18% manage to employ them effectively. Nazarova and Nazarov (2017), as well as Herzallah et al. (2017), contend that approximately 80% of advantages fail to be utilized successfully. They argue that even the most significant advantages become meaningless if an organization cannot effectively utilize them.

Effectively leveraging organizational advantages presents a complex and demanding challenge, often requiring substantial energy and focus from an organization. As organizations endeavor to evolve and maintain a competitive edge, previous accomplishments may be dismissed as irrelevant or even perceived as obstacles that need to be removed (Peprah & Ayaa, 2022). Wilson and Herceg (2022) argue that failing to secure a competitive advantage can lead to difficulties in prioritizing and achieving organizational objectives. Managing competitive advantage is commonly regarded as one of the most intricate and labor-intensive aspects of strategic management (Do, 2020). According to Wilson and Herceg (2022), the primary reason for failing to realize advantage goals is that leaders often do not allocate sufficient time, effort, and resources to manage the advantage as they do to acquire it. Furthermore, they may not recognize that effective management of competitive advantage necessitates well-coordinated procedures that extend beyond routine business practices. Consequently, for organizations to achieve their ambitious advantage goals, they must adeptly and meticulously manage their competitive strategies (Pasaribu et al., 2021).

3. Underpinning theory

The Resource-Based View (RBV) theory offers a conceptual framework that facilitates the interaction among strategic leadership, organizational innovation, information technology capabilities, and the achievement of a competitive advantage. According to the RBV, organizations can outpace their competitors by developing resources that are unique and widely dispersed (Ferreira et al., 2016). Ferreira et al. (2016) assert that companies attain sustained competitive advantages by possessing rare and economically valuable resources that are difficult for competitors to imitate or replace. As a result, firms with such distinctive resources are well-positioned to leverage them for specific organizational benefits. Mi et al. (2020) and Salsabila et al. (2022) elaborated on the concept of resources, defining them as assets controlled or owned by an organization, while capabilities refer to the organization's ability to mobilize and effectively utilize these resources. For instance, leveraging staff competencies and organizational practices to cultivate a uniquely innovative organizational culture can enhance employee performance beyond that of competitors. Resource-based theory views an organization as a potential generator of value-added capabilities (Alexy et al., 2018; Freeman et al., 2021).

Organizational resources include both tangible and intangible assets, as well as human and nonhuman resources that are either possessed or managed by the organization (Nadeem et al., 2024). An organization's distinctive or core competencies are defined by resources and capabilities that are valuable, rare, difficult to imitate, and essential, thereby providing a long-term competitive advantage (Hossain et al., 2022). Intangible assets are more likely than tangible ones to confer a competitive advantage (Hossain et al., 2022; Nayak et al., 2023). These intangible resources—such as strategic leadership, specialized expertise, and innovative capacities—enable organizations to increase the value of their production inputs (Nadeem et al., 2024) and thus sustain a competitive advantage (Freeman et al., 2021; Chen et al., 2021; Barney et al., 2021; Kustiningsih & Tjahjadi, 2020). This competitive advantage is developed over time and is challenging to duplicate. Nadeem et al. (2024) note that it is the organization's resources that grant it a competitive advantage, which, in turn, supports its growth, efficiency, and effectiveness.

4. Methodology

4.1. Population and sample

The study population comprises eight food industrial companies listed on the Amman Stock Exchange (ASE) in Jordan as of the end of 2023. These companies are chosen for their significant impact on the daily lives of Jordanians, given their broad range of products and their ongoing influence on consumer health and safety (Aldaihani et al., 2023; Zu'bi et al., 2015). The research focuses on upper and mid-level management, who are crucial for strategic decision-making and operational performance. Insights from these managers on competitive advantage and its effects can provide a valuable understanding of management practices and challenges within these companies. To ensure the reliability of the findings, multiple respondents from each company are considered, as having several respondents helps minimize potential measurement errors (Bakir, 2017; Aldaihani et al., 2023; Sekaran & Bougie, 2010; Palladan, 2017). Conversely, relying on a single respondent per company could lead to unrealistic outcomes (Palladan, 2017). Consequently, this study engaged 270managers across these companies.

4.2. Measurement

A structured survey was used to measure the various variables. The questionnaire comprised two major segments. Section one dealt with the variables under investigation, while section two solicited information about the respondent's demographic profile. The four variables employed, strategic leadership behavior (Palladan, 2017); organizational innovativeness (Palladan, 2017); IT capability (Tippins & Sohi, 2003), and effective competitive advantage (Hanafi, 2012), were measured using six Likert scale (1 = Strongly Disagree to 6 = Strongly Agree). The questions for strategic leadership behaviors were adopted from the previous works by Palladan (2017). The indicators for

organizational innovativeness are from Palladan (2017). IT capability was adopted by Tippins and Sohi (2003), and finally, for effective competitive advantage, the measures were adopted (Hanafi, 2012).
Questionnaires are widely recognized as a widespread and suitable instrument for collecting data in the field of survey research (Ametepe et al., 2023; Palladan, 2017). Therefore, we will employ a well-structured questionnaire featuring closed-ended questions with six Likert scales. Scholars have contended that scales ranging from 5 to 7 points offer enhanced reliability and validity in comparison to shorter or longer scales (Taherdoost, 2023). Additionally, opting for a six-point Likert scale is intended to discourage respondents from selecting a neutral point as the default choice. Brosnan et al. (2021) have asserted that the utilization of a six-point Likert scale prompts respondents to exhibit behaviors indicative of either survey optimization or satisfaction. Moreover, according to Taherdoost (2023), a Likert scale with 6 points not only demonstrates increased reliability but also exhibits a heightened capacity for discrimination.

4.3. Technique for data analysis

After collecting the required data, this research will employ both descriptive and inferential statistical techniques for data analysis. Specifically, it will adopt the PLS-SEM method, commonly referred to as second-generation structural equation modeling (Shiau et al., 2019; Akter et al., 2017). This advanced approach is particularly effective for analyzing structural equation models involving latent variables and a series of cause-and-effect relationships (Richter et al., 2016). was used for the main data analysis. To confirm the hypotheses in the study, a correlation analysis technique was employed.

5. Results

5.1. Assessing the measurement model

The measurement model is assessed through reliability and validity assessment (Hair et al., 2014a, b; Henseler, Ringle, & Sinkovics, 2009). A summary of the measurement model is presented in Figure 1, with detailed results shown in Table 1.

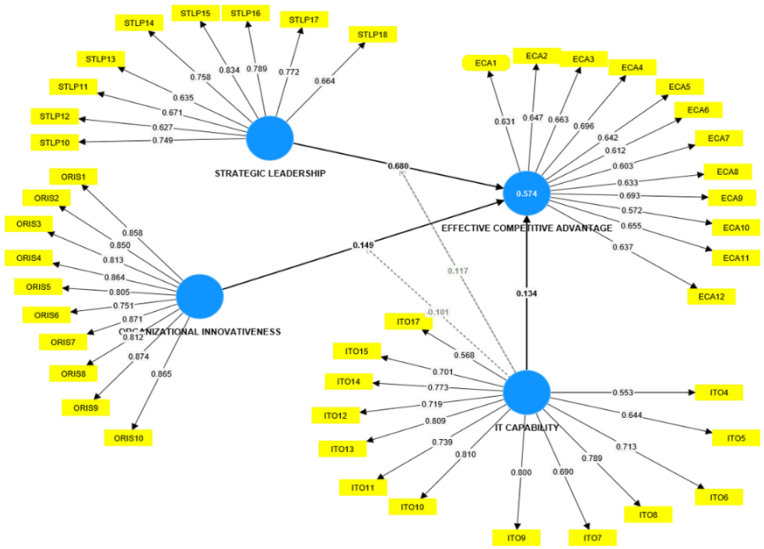


Fig. 1: Measurement Model.

Table 1: Reliability Assessment

Factor	Loading	Alpha	CR (rho_a)	CR (rho_C)	AVE
Effective Competitive Advantage	0.871	0.875	0.893	0.411	
ECA-1	0.631				
ECA-10	0.572				
ECA-11	0.655				
ECA-12	0.637				
ECA-2	0.647				
ECA-3	0.663				
ECA-4	0.696				
ECA-5	0.642				
ECA-6	0.612				
ECA-7	0.603				
ECA-8	0.633				
ECA-9	0.693				
Information Technology Capability	0.921	0.923	0.933	0.520	
ITO-10	0.810				
ITO-11	0.739				
ITO-12	0.719				
ITO-13	0.809				
ITO-14	0.773				
ITO-15	0.701				
ITO-17	0.568				
ITO-4	0.553				
ITO-5	0.644				
ITO-6	0.713				

ITO-7	0.690			
ITO-8	0.789			
ITO-9	0.800			
Organizational Innovativeness	0.953	0.972	0.959	0.701
ORIS-1	0.858			
ORIS-10	0.865			
ORIS-2	0.850			
ORIS-3	0.813			
ORIS-4	0.864			
ORIS-5	0.805			
ORIS-6	0.751			
ORIS-7	0.871			
ORIS-8	0.812			
ORIS-9	0.874			
Strategic Leadership	0.886	0.895	0.908	0.526
STLP-10	0.749			
STLP-11	0.671			
STLP-12	0.627			
STLP-13	0.635			
STLP-14	0.758			
STLP-15	0.834			
STLP-16	0.789			
STLP-17	0.772			
STLP-18	0.664			

5.2. Individual item reliability

Individual items' reliability is reflected through their factor loading or outer loading. Outer loadings of each construct measure are known as each item's reliability (Duarte & Raposo, 2010; Hair et al., 2014; Hulland, 1999). As suggested by researchers, the threshold to retain the holding items is between .50 and .70 (Hair et al., 2014). It is recommended that factor loadings below 0.50 should be removed from the dataset, as this helps in improving CR and AVE (Hair et al., 2010). The reliability of individual items was evaluated by examining their outer loadings. After this assessment of loadings, appropriate adjustments were made. In case of information technology capability, ITO-1, ITO-2, ITO-3, and ITO-16 were deleted due to low factor loading. While in the case of strategic leadership STLP-,1, STLP-,2, STLP-,3, STLP-,4, STLP-,5, STLP-,6, STLP-,7, STLP-,8, STLP-,9, STLP-,19 were also deleted because of low factor loading. Detailed results are appended in Table 1.

The deletion of several items from the constructs of Information Technology Capability (ITO-1, ITO-2, ITO-3, ITO-16) and Strategic Leadership (STLP-1 to STLP-9, STLP-19) was based on their low factor loadings, which were below the recommended threshold of 0.50 (Hair et al., 2010; Hair et al., 2014). According to established guidelines, items with low outer loadings do not reliably reflect the underlying construct and may reduce the overall reliability and validity of the measurement model (Duarte & Raposo, 2010; Hulland, 1999). Removing these items helped to improve the composite reliability (CR) and average variance extracted (AVE), thereby strengthening the internal consistency and convergent validity of the constructs. Although item deletion may raise concerns about construct coverage, careful consideration was given to ensure that the remaining items still adequately represented the core dimensions of each construct. As a result, the measurement model became more reliable, valid, and parsimonious without compromising the construct validity.

5.3. Internal consistency reliability

According to Sun et al. (2007); Bijttebier et al. (2000), internal consistency reliability refers to the extent to which all items in a study measure the same concept. According to Peterson and Kim (2013); McCrae et al. (2011), internal consistency reliability can be assessed through alpha and composite reliability. This study used CR and alpha to check reliability.

Cronbach's alpha can either overestimate or underestimate the reliability of an instrument, while composite reliability (CR) takes into account the varying loadings of items, addressing the limitations of alpha in estimating reliability. Internal consistency reliability is typically evaluated based on the guideline that a CR value of 0.70 or higher is considered ideal (Bagozzi & Yi, 1988; Hair et al., 2011). In contrast, alpha values ranging from 0.67 to 0.90 are generally regarded as acceptable (Bontis et al., 2002; Cavalier & Lombardi, 2001; Hackman and Oldham, 1980).

Table 1 shows the CR and alpha values. In the current study, alpha was 0.871 to 0.953. CR (rho_a) values in the study are between 0.875 to 0.972, and CR (rho_c) values were 0.893 to 0.959. Based on the results, this can be inferred that there is sufficient reliability in the current research.

5.4. Convergent validity

When two measures of the constructs are examined through different approaches, they form the convergent validity (Guo et al., 2008; Papoutsakis, 2008). Convergent validity can also be described as the degree to which indicators precisely represent their construct and align with other instruments measuring the same construct (Hair et al., 2006).

The current study followed Fornell and Larcker's (1981) criteria through average variance extracted (AVE) scores. Chin (1998) recommended a threshold of AVE to be 0.50 as acceptable. Current study findings regarding the AVE score are presented in Table 4.10. All AVE scores were in in range of 0.411 to 0.701. Only one value of effective competitive advantage was 0.411, lower than 0.50 (Chin, 1998). As these low values were not serious issues, as convergent validity can also be assessed through composite reliability scores (Fornell & Larcker, 1981), which are higher than 0.70, refer to Table 1.

The AVE for the Effective Competitive Advantage construct is 0.411, which is below the recommended value of 0.50, indicating that the items may not strongly represent the construct. However, the CR is above 0.70, showing that the items consistently measure the same concept. According to Fornell and Larcker (1981), if CR is acceptable, a slightly lower AVE can still be tolerated because CR reflects the overall reliability of the construct. Similar findings have been reported in previous studies where AVE values slightly below 0.50 were accepted as long as CR was satisfactory (e.g., Malhotra & Dash, 2011; Hair et al., 2014). Therefore, despite the low AVE, the construct can

still be considered reliable in this study. Nonetheless, future research should improve the measurement by revising or replacing weaker items to strengthen convergent validity (e.g., Hair et al., 2010; Henseler et al., 2015).

5.5. Discriminant validity

Discriminant validity refers to the extent to which one construct differs from another, or the point of distinction between two variables (Duarte & Raposo, 2010; Henseler, Ringle, & Sarstedt, 2015). It can be assessed using two key approaches: the square root of the average variance extracted (AVE), commonly known as the Fornell-Larcker criterion (Fornell & Larcker, 1981), and the more recently recommended HTMT inference of correlations (Henseler, Ringle, & Sarstedt, 2015). Scholars suggest an HTMT0.85, (Clark & Watson, 1995; Kline, 2011), while others propose a maximum value of 0.90 (Gold et al., 2001; Teo et al., 2008). If the HTMT0.90, it indicates a lack of discriminant validity.

The HTMT value between IT Capability and Strategic Leadership was 0.945, marginally exceeding the 0.90 threshold suggested by Gold et al. (2001). Item-level analysis revealed conceptual overlap between certain indicators. After refining the measurement items and assessing cross-loadings, the constructs remained highly correlated. However, theoretical justification supports their distinctiveness, as IT Capability refers to the technical infrastructure and systems integration, while Strategic Leadership pertains to visionary guidance and long-term planning. The HTMT confidence interval did not include 1.0, suggesting acceptable discriminant validity (Henseler et al., 2015).

The square root of AVE and HTMT values were examined to assess the level of discriminant validity. Table 2 shows the square root of AVE, and Table 3 shows HTMT values.

Table 2: Fornell & Larker 1981 criteria

Construct	ECA	ITO	ORIS	STLP
ECA	0.641			
ITO	0.622	0.721		
ORIS	0.158	-0.005	0.837	
STLP	0.710	0.843	-0.005	0.726

In Table 4.11, all the square roots of AVE were found to be higher than relative construct values except ECA→STLP and ITO→STLP

Table 3: HTMT Criteria

Construct	ECA	ITO	ORIS	STLP
ECA	==			
ITO	0.680	==		
ORIS	0.173	0.089	==	
STLP	0.769	0.945	0.093	==

Table 3 represents the HTMT criteria; all HTMT values were found below $HTMT_{0.90}$. Only one value of STLP→ITO was slightly higher than the $HTMT_{0.90}$ threshold, which is not a serious violation of discriminant validity. The current study has established a sufficient level of discriminant validity.

6. Hypothesis testing

The table below (Table 4) presents the results of the computed hypotheses (propositions). The propositions are outlined as follows:

H1: Strategic leadership has a significant relationship with an effective competitive advantage.

H2: Organizational innovativeness has a significant relationship with an effective competitive advantage.

H3: Information technology capability has a negative relationship with an effective competitive advantage.

Table 4: Hypotheses Testing

Hypothesis	relationship		beta	SD	t value	p value	decision
H-1:	STLP□ECA	0.680	0.118	5.787	0.000		Accepted
H-2:	ORIS□ECA	0.149	0.051	2.886	0.004		Accepted
H-3:	ITO□ECA	0.134	0.111	1.205	0.228		Rejected

The current research proposed three relationships, out of which 2 (H1: STLP→ECA and H2: ORIS•ECA) were accepted and one (H3: ITO→ECA) was rejected based on a p-value greater than 0.05. Path coefficient between strategic leadership and effective competitive advantage was found positive and significant relationship, H1: STLP→ECA (β = 0.680, SD=0.118, T value= 5.787, p value= 0.000); hence hypothesis between strategic leadership and effective competitive advantage was accepted. The path coefficient between organizational innovativeness and effective competitive advantage was also found positive and significant path coefficient H2: ORIS•ECA, β = 0.149, SD = 0.051, t value = 2.886, p-value = 0.004); hence, based on the findings, the relationship between organizational innovativeness and effective competitive advantage was also accepted.

Likewise, the path coefficient between information technology capability and effective competitive advantage, H3: ITO→ECA (β= 0.134, SD= 0.111, t value= 1.205, p value= 0.228) was found to be positive and insignificant. Hence, based on the results hypothesis between information technology capability and effective competitive advantage was not accepted based as the p-value was higher than 0.05.

The study found that the relationship between IT capability and competitive advantage was positive but not statistically significant (H3: β = 0.134, p = 0.228), which means the hypothesis was not supported. This suggests that IT capability alone may not directly lead to a competitive advantage in this context. One possible reason is that IT capability may influence competitive advantage through other factors, such as innovation, strategy, or employee skills. It is also possible that the industry or organizational environment limits the impact of IT capability on performance. In addition, the way IT capability was measured in this study may not fully reflect its strategic importance. Therefore, future research should explore the role of IT capability in more depth, taking into account factors such as the technological environment in Jordan, measurement issues, and other ways of understanding IT capability.

7. Conclusion and recommendations

Based on the findings, the study determined that the three independent variables examined (strategic leadership, organizational innovativeness, and IT capability) exert a positive and significant influence on achieving a competitive advantage in the companies studied. This conclusion is supported by the strong correlation coefficient, with a p-value of less than 0.05. Additionally, the overall impact of these variables was substantial, as indicated by the high coefficient of determination.

In examining the role of leadership within industrial settings, the researcher conducted a quantitative analysis of the presence of strategic leadership, organizational innovativeness, and information technology capabilities among food industry companies in the Sahab region of Jordan. The findings show that these factors are very important in helping companies gain and use a competitive advantage. So, companies should understand how much strategic leaders can help them succeed. Also, creating a more innovative work culture and improving IT skills is important for their future success.

The findings indicate that managers, who participated as respondents in the study, hold key administrative roles linked to strategic leadership. These leadership qualities can assist managers in transforming the strategic resources of food industry companies into a source of sustainable competitive advantage. Additionally, they help enhance efforts to foster IT capabilities and promote innovation among their subordinates. The three variables examined in this study are applicable not only in the food industry but also in other sectors facing turbulent environments.

Although this study focused on food companies in Jordan, the findings may still be useful for understanding similar situations in other industries or countries. The key factors examined—such as strategic leadership, organizational innovation, and IT capabilities—are important for achieving competitive advantage in many organizational settings. Therefore, while the results are based on a specific context, they could offer insights for managers and researchers working in different environments. Future studies are recommended to test these findings in other sectors and regions to confirm their wider applicability.

The implications of this study suggest the need for targeted policy interventions to support innovation in the food industry. Governments should consider offering incentives, such as tax breaks or subsidies, to encourage IT adoption among food companies. Additionally, national innovation programs tailored to the sector can enhance technological capabilities and competitiveness. Policymakers may also promote public–private partnerships to support research and development. Such measures can accelerate digital transformation and drive sustainable growth in the industry.

The findings support RBV theory by emphasizing the importance of strategic leadership and innovativeness for competitive advantage. IT capability alone does not significantly impact value creation. This challenges traditional views and calls for a deeper understanding of IT's role within the RBV. Organizations should integrate IT with broader innovation and leadership strategies. Future research should explore how IT complements other resources across industries and over time.

References

[1] Schaedler, L., Graf-Vlachy, L., & König, A. (2022). Strategic leadership in organizational crises: A review and research agenda. Long Range Planning, 55(2), 102156. https://doi.org/10.1016/j.lrp.2021.102156.

[2] Afanasieva, O., Volska, O., Khasanov, B., Yemtsev, V., & Matveeva, V. (2020). Strategic management mechanism of innovative development of industrial companies. Academy of Strategic Management Journal, 19(4), 1-7.

[3] Zubi, M., & Khalid, M. (2022). The effect of strategic leadership on intellectual capital: The mediating role of knowledge sharing in Kuwait industrial companies. Management Science Letters, 12(4), 291-306. https://doi.org/10.5267/j.msl.2022.4.004.

[4] Kumkale, İ. (2022). Organizational Ambidexterity. In Organizational Mastery: The Impact of Strategic Leadership and Organizational Ambidexterity on Organizational Agility (pp. 1-22). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-16-7582-9_1.

[5] Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2019). Strategic management: Concepts and cases: Competitiveness and globalization. Cengage Learning.

[6] Priadana, S., Sunarsi, D., Wahyitno, A. P. S., Mogi, A., Agustin, F., Irawati, L., ... & Purwanto, A. (2021). The Effect of Strategic Leadership on Competitive Strategy and Business Performance: Evidence from Indonesian SME's. Annals of the Romanian Society for Cell Biology, 4908-4918.

[7] Arasa, R., & K'Obonyo, P. (2012). The relationship between strategic planning and firm performance. International Journal of Humanities and Social Science, 2(22), 201-213.

[8] Covin, J. G., & Slevin, D. P. (2017). The entrepreneurial imperatives of strategic leadership. Strategic entrepreneurship: Creating a new mindset, 307-327. https://doi.org/10.1002/9781405164085.ch14.

[9] Mahdi, O. R., & Almsafir, M. K. (2014). The role of strategic leadership in building sustainable competitive advantage in the academic environment. Procedia-Social and Behavioral Sciences, 129, 289-296. https://doi.org/10.1016/j.sbspro.2014.03.679.

[10] Świąder, K., & Marczewska, M. (2021). Trends of using sensory evaluation in new product development in the food industry in countries that belong to the EIT regional innovation scheme. Foods, 10(2), 446. https://doi.org/10.3390/foods10020446.

[11] Samsir, S. (2018). The effect of leadership orientation on innovation and its relationship with the competitive advantages of small and medium enterprises in Indonesia. International Journal of Law and Management, 60(2), 530-542. https://doi.org/10.1108/IJLMA-01-2017-0005.

[12] Al-hamedi, Mohammed., Abujoma, Mahmud., (2020). The Impact of Strategic Leadership on Achieving the Competitiveness Ability in Al-Nabil Company for Food Industries/Jordan, IUG Journal of Economics and Business, Vol 29, No 1, 2021, pp 298- 323.

[13] Alhyasat, W. M. K., & Sharif, Z. M. (2018, September). The relationship between strategic leadership and organizational performance in the Jordan Industrial Estates Company. In AIP Conference Proceedings (Vol. 2016, No. 1). AIP Publishing. https://doi.org/10.1063/1.5055425.

[14] Ahmed, D., Yuantao, X., & Saeed Bhutta, U. (2022). Insurers' risk management as a business process: a prospective competitive advantage or not? European Journal of Management and Business Economics, 31(3), 345-366. https://doi.org/10.1108/EJMBE-08-2021-0221.

[15] Mahdi, O. R., & Nassar, I. A. (2021). The business model of sustainable competitive advantage through strategic leadership capabilities and knowledge management processes to overcome the COVID-19 pandemic. Sustainability, 13(17), 9891. https://doi.org/10.3390/su13179891.

[16] Akhtar, P., Kaur, S., & Punjaisri, K. (2017). Chain coordinators' strategic leadership and coordination effectiveness: New Zealand-Euro agri-food supply chains. European Business Review, 29(5), 515-533. https://doi.org/10.1108/EBR-08-2015-0082.

[17] Al-Zu'bi, H., & Albloush, A. (2022). The impact of green organizational Identity on green innovation at Jordanian food and beverage companies. Problems and Perspectives in Management, 20(2), 302-310. https://doi.org/10.21511/ppm.20(2).2022.25.

[18] Setiabudi, K. J., Siagian, H., & Tarigan, Z. J. H. (2021). The effect of transformational leadership on firm performance through ERP systems and supply chain integration in the food and beverage industry. Petra International Journal of Business Studies, 4(1), 65-73. https://doi.org/10.9744/ijbs.4.1.65-73.

[19] John-Eke, E. C., & Eke, J. K. (2020). Strategic planning and crisis management styles in organizations: A review of related literature. Journal of Strategic Management, 5(1), 36-46. https://doi.org/10.47672/jsm.501.

[20] Anggraeni, D. M., Prahani, B. K., Suprapto, N., Shofiyah, N., & Jatmiko, B. (2023). Systematic review of problem-based learning research in fostering critical thinking skills. Thinking Skills and Creativity, 49, 101334. https://doi.org/10.1016/j.tsc.2023.101334.

[21] Phangestu, J., Kountur, R., & Prameswari, D. A. (2020). The moderating effect of entrepreneurial leadership and competitive advantage on the relationship between business model innovation and startup performance. Journal of Business and Retail Management Research, 14(3). https://doi.org/10.24052/JBRMR/V14IS03/ART-06.

[22] Nahak, M., & Ellitan, L. (2022). The role of strategic leadership in supporting strategic planning and increasing organizational competitiveness. International Journal of Trend in Scientific Research and Development (IJTSRD), 6(3), 1441-1444.

[23] Fernandes, C. I., Veiga, P. M., Ferreira, J. J., Rammal, H. G., & Pereira, V. (2022). Assessing strategic leadership in organizations: Using bibliometric data to develop a holistic model. Journal of Business Research, 141, 646-655. https://doi.org/10.1016/j.jbusres.2021.11.067.

[24] Quansah, F., Ankomah, F., Agormedah, E. K., Abieraba, R. S., Srem-Sai, M., Hagan Jr, J. E., ... & Schack, T. (2022). COVID-digital health literacy and subjective well-being of students in Ghana: Mediation-moderation analyses. Health Science Reports, 5(6), e916. https://doi.org/10.1002/hsr2.916.

[25] Abd Aziz, N. N., & Samad, S. (2016). Innovation and competitive advantage: Moderating effects of firm age in food manufacturing SMEs in Malaysia. Procedia Economics and Finance, 35, 256-266. https://doi.org/10.1016/S2212-5671(16)00032-0.

[26] Acar, A. Z., & Özşahin, M. (2018). The relationship among strategic orientations, organizational innovativeness, and business performance. International Journal of Innovation Management, 22(01), 1850009. https://doi.org/10.1142/S1363919618500093.

[27] Groza, M. D., Zmich, L. J., & Rajabi, R. (2021). Organizational innovativeness and firm performance: Does sales management matter?. Industrial marketing management, 97, 10-20. https://doi.org/10.1016/j.indmarman.2021.06.007.

[28] Azeem, M., Ahmed, M., Haider, S., & Sajjad, M. (2021). Expanding competitive advantage through organizational culture, knowledge sharing, and organizational innovation. Technology in Society, 66, 101635. https://doi.org/10.1016/j.techsoc.2021.101635.

[29] Çağlıyan, V., Attar, M., & Abdul-Kareem, A. (2022). Assessing the mediating effect of sustainable competitive advantage on the relationship between organisational innovativeness and firm performance. Competitiveness Review: An International Business Journal, 32(4), 618-639. https://doi.org/10.1108/CR-10-2020-0129.

[30] Vanhala, M., & Ritala, P. (2016). HRM practices, impersonal trust, and organizational innovativeness. Journal of Managerial Psychology, 31(1), 95-109. https://doi.org/10.1108/JMP-03-2013-0084.

[31] Chen, Q., Wang, C. H., & Huang, S. Z. (2020). Effects of organizational innovation and technological innovation capabilities on firm performance: evidence from firms in China's Pearl River Delta. Asia Pacific Business Review, 26(1), 72-96. https://doi.org/10.1080/13602381.2019.1592339.

[32] Groza, M. D., Zmich, L. J., & Rajabi, R. (2021). Organizational innovativeness and firm performance: Does sales management matter?. Industrial marketing management, 97, 10-20. https://doi.org/10.1016/j.indmarman.2021.06.007.

[33] Miric, A. A., Petrović, M., & Aničić, Z. (2019). Organizational innovativeness: factors that drive innovations in social enterprises in Serbia. Management: Journal of Sustainable Business and Management Solutions in Emerging Economies, 24(3), 47-59. https://doi.org/10.7595/management.fon.2019.0014.

[34] Rachmawati, R., Heniawati, H., & Mubarok, T. M. S. (2020). Technology Implementation in SMEs. Management and Entrepreneurship Research Review, 1(1), 1-7. https://doi.org/10.35899/merr.v1i1.78.

[35] Marsudi, A. S., & Pambudi, R. (2021). The effect of enterprise resource planning (ERP) on performance with information technology capability as a moderating variable. Journal of Economics, Business, & Accountancy Ventura, 24(1), 1-11. https://doi.org/10.14414/jebav.v24i1.2066.

[36] Li, T. C., & Chan, Y. E. (2019). Dynamic information technology capability: Concept definition and framework development. The Journal of Strategic Information Systems, 28(4), 101575. https://doi.org/10.1016/j.jsis.2019.101575.

[37] Mishra, P., & Yadav, M. (2021). Environmental capabilities, proactive environmental strategy, and competitive advantage: A natural-resource-based view of firms operating in India. Journal of Cleaner Production, 291, 125249. https://doi.org/10.1016/j.jclepro.2020.125249.

[38] Kharub, M., Mor, R. S., & Sharma, R. (2019). The relationship between cost leadership competitive strategy and firm performance: A mediating role of quality management. Journal of Manufacturing Technology Management, 30(6), 920-936. https://doi.org/10.1108/JMTM-06-2017-0116.

[39] Natalia, I., & Ellitan, L. (2019). STRATEGIES TO ACHIEVE COMPETITIVE ADVANTAGE IN INDUSTRIAL REVOLUTION 4.0. International Journal of Research Culture Society, 3(6), 10-16.

[40] Ferreira, S. A., Neto, J. V., & da Silveira Batista, H. M. C. (2019). Critical success factors on project and process management in competitive strategy 133 implementation. Brazilian Journal of Operations & Production Management, 16(4), 605-616. https://doi.org/10.14488/BJOPM.2019.v16.n4.a6.

[41] Santalova, M. S., Soklakova, I. V., & Balabanova, D. K. (2020, March). The choice of the competitive strategy of the company. In International Scientific Conference" Far East Con"(ISCFEC 2020) (pp. 1282-1289). Atlantis Press. https://doi.org/10.2991/aebmr.k.200312.176.

[42] Nazarova, G., & Nazarov, N. (2017). The analysis of structural configurations for implementing competitive strategies. СУЧАСНИЙ СТАН НАУКОВИХ ДОСЛІДЖЕНЬ ТА ТЕХНОЛОГІЙ В ПРОМИСЛОВОСТІ, (2 (2)), 132-137. https://doi.org/10.30837/2522-9818.2017.2.132.

[43] Herzallah, A., Gutierrez-Gutierrez, L. J., & Munoz Rosas, J. F. (2017). Quality ambidexterity, competitive strategies, and financial performance: An empirical study in industrial firms. International Journal of Operations & Production Management, 37(10), 1496-1519. https://doi.org/10.1108/IJOPM-01-2016-0053.

[44] Peprah, W. K., & Ayaa, M. M. (2022). The convergence of financing decision, business strategy through organisational competitiveness to sustainable competitive advantage: A conceptual analysis. International Journal of Economics and Finance, 14(2), 87-96. https://doi.org/10.5539/ijef.v14n2p87.

[45] Wilson, N., & Herceg, I. V. (2022). The Quest towards Obtaining a Competitive Advantage in Organizations through Managing the Human Capital. Economic Analysis, 55(2), 31-48. https://doi.org/10.28934/ea.22.55.2.pp31-48.

[46] Do, N. D. (2020). Integrating Sustainability into Strategic Management to Gain Competitive Advantage.

[47] Pasaribu, F., Bulan, T. R. N., Muzakir, M., & Pratama, K. (2021). Impact Of Strategic Leadership and Organizational Innovation on Strategic Management: Mediational Role of It Capability. Polish Journal of Management Studies, 24(2), 354-369. https://doi.org/10.17512/pjms.2021.24.2.22.

[48] Ferreira, M. P., Serra, F. R., Costa, B. K., & Almeida, M. (2016). A bibliometric study of the resource-based view (RBV) in international business research using Barney (1991) as a key marker. Innovar, 26(61), 131-144. https://doi.org/10.15446/innovar.v26n61.57173.

[49] Mi, L., Yue, X. G., Shao, X. F., Kang, Y., & Liu, Y. (2020). Strategic asset seeking and innovation performance: The role of innovation capabilities and host country institutions. Journal of Risk and Financial Management, 13(3), 42. https://doi.org/10.3390/jrfm13030042.

[50] Salsabila, S., Radhiana, R., Juwita, J., & Mauliza, P. (2022, December). Challenges of the Resource-Based View Approach in Improving Business Organizational Performance. In Proceedings of International Conference on Multidisciplinary Research (Vol. 5, No. 2, pp. 120-125). https://doi.org/10.32672/pic-mr.v5i2.5416.

[51] Alexy, O., West, J., Klapper, H., & Reitzig, M. (2018). Surrendering control to gain advantage: Reconciling openness and the resource-based view of the firm. Strategic Management Journal, 39(6), 1704-1727. https://doi.org/10.1002/smj.2706.

[52] Freeman, R. E., Dmytriyev, S. D., & Phillips, R. A. (2021). Stakeholder theory and the resource-based view of the firm. Journal of Management, 47(7), 1757-1770. https://doi.org/10.1177/0149206321993576.

[53] Barney, J. B. (2018). Why the resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. Strategic Management Journal, 39(13), 3305-3325. https://doi.org/10.1002/smj.2949.

[54] Jogaratnam, G. (2017). The effect of market orientation, entrepreneurial orientation, and human capital on positional advantage: Evidence from the restaurant industry. International Journal of Hospitality Management, 60, 104-113. https://doi.org/10.1016/j.ijhm.2016.10.002.

[55] Hossain, M. S., Hussain, K., Kannan, S., & Kunju Raman Nair, S. K. (2022). Determinants of sustainable competitive advantage from a resource-based view: implications for the hotel industry. Journal of Hospitality and Tourism Insights, 5(1), 79-98. https://doi.org/10.1108/JHTI-08-2020-0152.

[56] Nayak, B., Bhattacharyya, S. S., & Krishnamoorthy, B. (2023). Integrating the dialectic perspectives of resource-based view and industrial organization theory for 154 competitive advantage–a review and research agenda. Journal of Business & Industrial Marketing, 38(3), 656-679. https://doi.org/10.1108/JBIM-06-2021-0306.

[57] Chen, M. J., Michel, J. G., & Lin, W. (2021). Worlds apart? Connecting competitive dynamics and the resource-based view of the firm. Journal of Management, 47(7), 1820-1840. https://doi.org/10.1177/01492063211000422.

[58] Barney, J. B., Ketchen Jr, D. J., & Wright, M. (2021). Resource-based theory and the value creation framework. Journal of Management, 47(7), 1936-1955. https://doi.org/10.1177/01492063211021655.

[59] Kustiningsih, N., & Tjahjadi, B. (2020). Mediating effect of business process performance on innovation strategy-cost performance relationship: case study of manufacturing industry in East Java Province, Indonesia. International Journal of Business Performance Management, 21(3), 346-362. https://doi.org/10.1504/IJBPM.2020.108324.

[60] Aldaihani, F. M. F., Al-Quran, A. Z., Al-hourani, L., Alkhawaldeh, M. I. G., Al-Adamat, A. M., Mohammad, A. A. S., ... & Al Kurdi, B. (2023). The effect of marketing knowledge on competitive advantage in the food industry companies in Jordan. In The effect of information technology on business and marketing intelligence systems (pp. 1761-1778). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_96.

[61] Zu'bi, M. F., Al-Dmour, H., Al-Shami, M., & Nimri, R. (2015). Integrated green purchase model: An empirical analysis on Jordan. International Journal of Operations and Logistics Management, 4(2), 139-51.

[62] Bakir, S. M. A. (2017). The reality of applying human resources diversity management and its impact on workers'(performance, cooperation, commitment, and loyalty): a field study on the Jordanian food industry companies. International Business Research, 10(3), 183-192. https://doi.org/10.5539/ibr.v10n3p183.

[63] Sekaran, U., & Bougie, R. (2010). Research methods for business: A skill-building approach (ed.). Chichester: John Wiley and Sons Ltd.

[64] Palladan, A. A. (2017). Effects of strategic leadership, organizational innovativeness, and information technology capability on effective strategy implementation. (Doctoral dissertation) Universiti Utara Malaysia.

[65] Tippins, M. J., & Sohi, R. S. (2003). IT competency and firm performance: is organizational learning a missing link?. Strategic management journal, 24(8), 745-761. https://doi.org/10.1002/smj.337.

[66] Hanafi, N. (2012). Business performance of women-owned SMEs in Malaysia: Learning and entrepreneurial orientations and the mediating roles of competitive advantage (Doctoral dissertation, Universiti Utara Malaysia).

[67] Shiau, W. L., Sarstedt, M., & Hair, J. F. (2019). Internet research using partial least squares structural equation modeling (PLS-SEM). Internet Research, 29(3), 398-406. https://doi.org/10.1108/IntR-10-2018-0447.

[68] Akter, S., Fosso Wamba, S., & Dewan, S. (2017). Why is PLS-SEM suitable for complex modelling? An empirical illustration of big data analytics quality. Production Planning & Control, 28(11-12), 1011-1021. https://doi.org/10.1080/09537287.2016.1267411.

[69] Richter, N. F., Cepeda, G., Roldán, J. L., & Ringle, C. M. (2016). European management research using partial least squares structural equation modeling (PLS-SEM). https://doi.org/10.1016/j.emj.2016.08.001.

[70] Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M. (2014a). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). UK: Sage.

[71] Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. Journal of the Academy of Marketing Science, 29(3), 318–319. https://doi.org/10.1016/0167-8116(92)90003-4.

[72] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate Data Analysis (7th ed.). Upper Saddle River, NJ: Prentice Hall.

[73] Tabachnick, B. G., & Fidell, L. S. (2007). Using Multivariate Statistics (5th ed.). Boston, MA: Allyn and Bacon/Pearson Education.

[74] Bijttebier, P., Delva, D., Vanoost, S., Bobbaers, H., Lauwers, P., & Vertommen, H. (2000). Reliability and validity of the critical care family needs inventory in a Dutch-speaking Belgian sample. Heart and Lung: Journal of Acute and Critical Care, 29(4), 278–286. https://doi.org/10.1067/mhl.2000.107918.

[75] Peterson, R. A., & Kim, Y. (2013). On the relationship between coefficient alpha and composite reliability. The Journal of Applied Psychology, 98(1), 194–198. https://doi.org/10.1037/a0030767.

[76] Mccrae, R. R., Kurtz, J. E., & Terracciano, A. (2011). Internal consistency, retest reliability, and their implications for personality scale validity. Personality and Social Psychological Bulletin, 15(1), 28–50. https://doi.org/10.1177/1088868310366253.

[77] Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. Journal of the Academy of Marketing Science, 16(1), 74-94. https://doi.org/10.1007/BF02723327.

[78] Bontis, N., Crossan, M., & Hulland, J. (2002). Managing an organizational learning system by aligning stocks and flows. Journal of Management Studies, 39(4), 437-469. https://doi.org/10.1111/1467-6486.t01-1-00299.

[79] Cavaliere, V., & Lombardi, S. (2001). Organizational antecedents shaping knowledge sharing behaviors: Empirical evidence from innovative manufacturing sectors. In Academic Conferences (pp. 95–104).

[80] Hackman, J. R., & Oldham, G. R. (1980). Work Redesign. Reading, MA: Addison-Wesley.

[81] Guo, B., Aveyard, P., Fielding, A., & Sutton, S. (2008). Testing the convergent and discriminant validity of the decisional balance scale of the trans-theoretical model using the multi-trait multi-method approach. Psychology of Addictive Behaviors, 22(2), 288-294. https://doi.org/10.1037/0893-164X.22.2.288.

[82] Papoutsakis, H. (2008). On measuring organizational relationships: Threats to validity in the use of key informants. Electronic Journal of Knowledge Management, 6(2), 145-156.

[83] Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). Multivariate Data Analysis (6th ed.). Upper Saddle River, NJ: Prentice Hall.

[84] Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with unobservable variables and measurement error. Journal of Marketing Research, 18, 39-50. https://doi.org/10.1177/002224378101800104.

[85] Chin, W.W. (1998). The Partial Least Squares Approach to Structural Equation Modeling: In Modern Methods for Business Research, Marcoulides, G.A. (ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

[86] Duarte, P., & Raposo, M.L. (2010). A PLS model to study brand preference: An application to the mobile phone market. In V. Esposito Vinzi, W. Chin, J. Henseler, & H. Wang (Eds.), Handbook of Partial Least Squares: Concepts, Methods and Applications. Texas: Springer. https://doi.org/10.1007/978-3-540-32827-8_21.

[87] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8.

[88] Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. Journal of Management Information Systems, 18(1), 185–214. https://doi.org/10.1080/07421222.2001.11045669.

[89] Teo, T. S. H., Srivastava, S. C., & Jiang, L. (2008). Trust and electronic government success: An empirical study. Journal of Management Information Systems, 25(3), 99-132. https://doi.org/10.2753/MIS0742-1222250303.

[90] Fornell, C., & Larcker, D. F. (1981). *Evaluating structural equation models with unobservable variables and measurement error*. Journal of Marketing Research, 18(1), 39–50. https://doi.org/10.2307/3151312.

[91] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson Prentice Hall.

[92] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.

[93] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). *A new criterion for assessing discriminant validity in variance-based structural equation modeling*. Journal of the Academy of Marketing Science, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8.

[94] Malhotra, N. K., & Dash, S. (2011). *Marketing research: An applied orientation* (6th ed.). Pearson Education.

[95] Duarte, P., & Raposo, M. (2010). A PLS model to study brand preference: An application to the mobile phone market. In V. Esposito Vinzi et al. (Eds.), Handbook of Partial Least Squares (pp. 449–485). Springer. https://doi.org/10.1007/978-3-540-32827-8_21.

[96] Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Sage.

[97] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate Data Analysis (7th ed.). Pearson.

[98] Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. Strategic Management Journal, 20(2), 195–204. https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<195::AID-SMJ13>3.0.CO;2-7.
[99] Mousa, K. M., Ali, K. A. A., & Gurler, S. (2024). Strategic planning and organizational performance: an empirical study on the manufacturing sector. Sustainability, 16(15), 6690. https://doi.org/10.3390/su16156690.
[100] Malik, M., Raziq, M. M., Sarwar, N., & Tariq, A. (2025). Digital leadership, business model innovation, and organizational change: role of the leader in steering digital transformation. Benchmarking: An International Journal, 32(5), 1632-1662. https://doi.org/10.1108/BIJ-04-2023-0283.
[101] Lai, K. H., Feng, Y., & Zhu, Q. (2023). Digital transformation for green supply chain innovation in manufacturing operations. Transportation Research Part E: Logistics and Transportation Review, 175, 103145. https://doi.org/10.1016/j.tre.2023.103145.
[102] Ye, F., Ke, M., Ouyang, Y., Li, Y., Li, L., Zhan, Y., & Zhang, M. (2024). Impact of digital technology usage on firm resilience: a dynamic capability perspective. Supply Chain Management: An International Journal, 29(1), 162-175. https://doi.org/10.1108/SCM-12-2022-0480.
[103] Sbari, M. (2024). The Influence of Hard skills, Organizational learning, and Soft skills on Teacher innovation capability during the digital era. PROFESOR: Professional Education Studies and Operations Research, 1(02), 33-45.
[104] Anggraeni, R. D., Ismail, T., Lestari, T., & Ramdhani, D. (2023). The Relationship between Strategic Leadership, Competitive Advantage, and Intellectual Capital: Evidence from Hotels in Tangerang, Indonesia. Britain International of Humanities and Social Sciences (BIoHS) Journal, 5(2), 100-112. https://doi.org/10.33258/biohs.v5i2.899.
[105] Teneiji, A., Mohammed, T., & Murad, M. A. (2024). Predictors of competitive advantage in information technology for SME entities: Knowledge management and innovation capabilities. Global Business & Management Research, 16.
[106] HOANG, D. V., Duy, H. A., Thuy, D. T., Giang, D. T., Chau, V. N. M., Ngoc, N. L. M., & Quynh, V. H. (2025). DIGITAL CAPABILITIES AND COMPETITIVE ADVANTAGE IN THE CONTEXT OF TECHNOLOGICAL UNCERTAINTY: EVIDENCE FROM EMERGING MARKET SMEs. International Journal of Innovation Management, 29(03n04), 2550018. https://doi.org/10.1142/S1363919625500185.
[107] Cendekiawan, K. A., & Wardhani, F. A. (2025). The Role of Information Technology and Product Innovation on the Competitive Advantage of Companies at Jember, East Java. Dirya: Journal of Economic Management, 2(1), 40-47. https://doi.org/10.1080/09537325.2025.2502601.
[108] Nadeem, K., Wong, S. I., Za, S., & Venditti, M. (2024). Digital transformation and industry 4.0 employees: Empirical evidence from top digital nations. Technology in Society, 76, 102434. https://doi.org/10.1016/j.techsoc.2023.102434.
[109] Nadeem, K., Wong, S. I., Za, S., & Venditti, M. (2024). Digital transformation and industry 4.0 employees: Empirical evidence from top digital nations. Technology in Society, 76, 102434. https://doi.org/10.1016/j.techsoc.2023.102434.
[110] Ravet-Brown, T. É., Furtner, M., & Kallmuenzer, A. (2024). Transformational and entrepreneurial leadership: A review of distinction and overlap. Review of Managerial Science, 18(2), 493-538. https://doi.org/10.1007/s11846-023-00649-6.
[111] Taherdoost, H. (2023). Exploring the impact of response option sequences/order on survey rating scale responses. In Forum for Philosophical Studies (Vol. 1, No. 1, pp. 452-452).