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LINKING ORGANIZATIONAL INNOVATION TO EXPORT PERFORMANCE AND COMPETITIVE ADVANTAGE: EVIDENCE FROM TECHNOLOGY PRODUCING BUSINESSES

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Abstract:
This study investigates the interplay between organizational innovation, competitive advantage, and export performance within technology-producing businesses in Turkiye. The study explores not only the direct effects of organizational innovation on export performance but also the mediating role of competitive advantage in this relationship. To achieve this, data were collected through a mixed-mode survey methodology, combining face-to-face and online questionnaires administered between January and April 2025. The sample comprised 548 upper-middle-level managers operating in the export departments of large, medium, and small-sized technology producing businesses in Turkiye. The findings demonstrate that organizational innovation has a significant and positive effect on export performance. Moreover, competitive advantage is shown to strongly influence export outcomes and serves as a critical mediating factor between organizational innovation and export performance. These results highlight the strategic importance of fostering innovation capabilities to strengthen international competitiveness. The study offers valuable insights for both scholars and practitioners by advancing theoretical understanding and providing actionable implications for innovation-driven export strategies in emerging economies.

Keywords:
Organizational Innovation, Competitive Advantage, Export Performance, Technology, Turkiye
JEL Codes:
E22, E23, E24, F00, F19

1. Introduction

In a global environment characterized by rapid technological advancement and increasing barriers to economic integration, emerging economies like Turkiye have begun to prioritize export-focused strategies as a path to sustainable competitive advantage. As technological advancement intensifies global competition, businesses face increasing pressure to improve their performance and adaptability in international markets. In this context, technology-producing businesses, in particular, are forced to improve their export performance to survive and thrive amidst volatile market dynamics (Martin et al., 2020).

Exports are widely recognized as a critical mechanism for businesses seeking access to new markets, revenue growth, and sustainable competitiveness in the global economy (Keskin et al., 2021). From a resource-based perspective, organizations' internal capabilities, including their structural and strategic characteristics, are influential in shaping both competitive advantage and export outcomes (Rua et al., 2018). Organizational innovation, defined as the implementation of new management practices, processes, or structural configurations, has emerged as the primary driver of such capabilities, particularly in knowledge-intensive sectors (Aboramadan et al., 2019; Bıçakcıoğlu et al., 2019).

In emerging economies like Turkiye, organizational innovation is increasingly viewed as a key element of product and process differentiation, export competitiveness, and sustainable market positioning. However, many technology-

producing businesses struggle to translate their technological innovations into global advantage due to underdeveloped organizational structures (Baesu et al., 2015). This highlights the strategic importance of fostering organizational innovation aligned with changing customer demands and market expectations. In this context, the relationship between organizational innovation, competitive advantage, and export performance is becoming increasingly complex in the constantly evolving technology and international markets. These developments necessitate the need for diverse perspectives. However, despite the growing interest in innovation management, empirical research specifically focusing on organizational innovation in technology-producing businesses remains limited (Busaible et al., 2017).

2. Literature Review

2.1. Organizational Innovation

Organizational innovation broadly refers to the development and application of novel managerial practices, structures, and administrative processes that aim to enhance organizational effectiveness and adaptability. It is often conceptualized as the formulation and implementation of non-technological changes designed to improve strategic or operational outcomes within existing organizational frameworks (Birkinshaw, 2008). These innovations may manifest in the form of new workflow models, decision-making structures, or human resource practices that foster greater alignment with organizational goals.

Janssen, Van de Vliert, and West (2004) emphasize the inherently complex nature of organizational innovation, underlining its multidimensional and iterative characteristics. Similarly, Damanpour (2014) frames organizational innovation as a subset of "management innovations" encompassing changes in governance systems, administrative mechanisms, and organizational hierarchies. These structural and managerial adjustments facilitate improved coordination, adaptability, and long-term sustainability.

However, a lack of definitional consensus persists in the literature. Meroño-Cerdán and López-Nicolás (2017) highlight this ambiguity, noting that organizational innovation remains a fluid and evolving concept. Ramadani et al. (2019) further refine the scope by defining it as the introduction of new or significantly improved approaches to resource management, particularly those that do not rely on technological advancements.

From a functional perspective, organizational innovation entails the application of creative solutions to enhance internal processes, employee engagement, and interdepartmental collaboration (Song et al., 2020). It is both an outcome and a catalyst of organizational learning and agility, directly influencing performance, flexibility, and competitiveness. Damanpour (2017) argues that organizational innovation contributes to superior organizational outcomes by promoting knowledge sharing, enhancing job satisfaction, and enabling structural adaptability.

2.2. Export Performance

Export performance is a multidimensional construct influenced by both internal and external organizational factors. Internally, elements such as strategic marketing capabilities, managerial orientation, and business-specific resources play a central role. Externally, industry characteristics, market conditions, and international trade dynamics significantly shape a business's ability to perform successfully in export markets (Zou & Stan, 1998; Mota, 2021). Managerial experience, attitudes toward internationalization, and the implementation of export marketing strategies are particularly emphasized in the literature as critical determinants of export success.

The assessment of export performance commonly incorporates both financial and non-financial indicators, including export sales volume, profitability, return on investment (ROI), market share, growth rate, and sustainability in foreign markets. Zou and Stan (1998) propose a comprehensive measurement approach that integrates objective metrics (e.g., revenue and ROI) with subjective evaluations (e.g., customer responsiveness and market adaptability).

Export performance is also regarded as a key enabler of national economic growth, particularly in emerging economies where international trade drives industrial development and global integration (AbdGhani et al., 2019). From a business-level perspective, enhanced export performance fosters innovation, competitiveness, and long-term sustainability.

Numerous studies have explored the relationship between innovation and export outcomes. Pla-Barber and Alegre (2007) found that innovation positively influences export intensity—a business's export-to-total-revenue ratio—demonstrating that innovation capability can serve as a catalyst for international expansion. Hultman et al. (2009) further conceptualize export success within a holistic framework that includes financial indicators and the business's

capacity to respond effectively to dynamic market conditions and customer needs. Collectively, these findings underscore the complexity of export performance and its dependence on strategic, organizational, and market-level factors.

2.3. Competitive Advantage

Competitive advantage is a central concept in strategic management and international business literature, often viewed as a business' ability to outperform its rivals by leveraging unique resources, capabilities, or strategies. One of the most widely adopted frameworks in this domain is Porter's (1985) generic strategies model, which identifies cost leadership, differentiation, and focus as the foundational approaches to achieving competitive advantage. Among these, cost leadership and differentiation are typically regarded as the core strategic dimensions, while the focus strategy is treated as a positional variant that emphasizes niche targeting rather than an independent strategic route (Allen et al., 2006). Cost leadership involves minimizing production and operational costs across the value chain to offer competitive pricing, whereas differentiation entails delivering superior value through unique product attributes such as quality, innovation, or brand reputation (Lechner & Gudmundsson, 2014). In international markets, these strategies enable businesses to either compete on price or build customer loyalty through non-price factors, thus enhancing their position relative to global competitors (Zou et al., 2008).

The resource-based view (RBV) provides a complementary perspective by asserting that sustainable competitive advantage arises from the possession or development of inimitable, valuable, and non-substitutable resources—such as advanced technology, intellectual capital, or skilled human resources (Alharahsheh, 2019). Kaleka (2017) underscores the importance of identifying such strategic capabilities—particularly cost efficiency, quality, speed, and flexibility—as key competitive priorities in dynamic markets.

Innovation is also recognized as a critical source of competitive advantage. Passemard and Kleiner (2000) identify five drivers of innovation-led advantage: the emergence of new technologies, evolving customer demands, new market segments, shifts in cost structures or resource availability, and regulatory changes. These factors can generate strategic opportunities for businesses to restructure their operations, improve efficiency, or deliver novel value propositions.

In this context, quality and operational efficiency are not merely outcomes but strategic levers that contribute directly to sustaining competitive advantage (Navarro-García et al., 2024). Businesses that fail to adapt or innovate in these areas risk losing relevance and market share, particularly in fast-evolving global industries such as technology production.

2.4. Organizational Innovation and Competitive Advantage

Organizational innovation has emerged as a key strategic resource in today's rapidly evolving and highly competitive business environments. It is widely regarded as a catalyst for organizational development, adaptability, and sustained performance (Songo-William, 2024). By fostering product, process, and technological improvements, organizational innovation facilitates the implementation of more effective marketing strategies and operational practices, thereby enhancing businesses' overall competitiveness (Chatzoglou & Chatzoudes, 2017).

A business's ability to innovate organizationally is critical for attaining and maintaining a competitive advantage. Innovative organizations are better equipped to respond to environmental uncertainties, leverage reinvestment opportunities, and pursue strategic differentiation. This, in turn, contributes to improved market positioning, economic resilience, and long-term sustainability. As such, innovation is a core driver of competitive success in dynamic markets.

Research suggests that organizations with advanced innovation capabilities can improve internal efficiencies and address external challenges more proactively than their less innovative peers (Jiménez-Jiménez et al., 2008). Organizational innovation entails the integration of new management approaches, administrative systems, and structural changes aimed at transforming both intra-organizational processes and external stakeholder interactions (Zeb, 2021). These transformations enhance a business's ability to create and sustain unique value propositions, which are fundamental to competitive advantage.

Moreover, empirical studies consistently demonstrate a strong link between organizational innovation and key performance outcomes, including market share, growth, and profitability (Abdi, 2014). The role of managerial leadership is also emphasized, as strategic vision and innovation-oriented decision-making are pivotal in mobilizing internal resources toward innovation-driven advantage (Naveed, 2022). Shu (2012) further underscores the necessity

of innovation in fostering sustainable organizational growth and preserving a business's competitive edge over time. Given this theoretical and empirical foundation, the following hypothesis is proposed:
H1: Organizational innovation has a positive and significant effect on competitive advantage.

2.5. Competitive Advantage and Export Performance

Export performance has long been recognized as a critical indicator of business-level success and national economic development. Businesses that engage in export activities often achieve superior sales growth, enhanced profitability, and increased long-term sustainability (Leonidou et al., 2007). The improvement in export performance has been linked to a variety of factors, including heightened global competition, trade liberalization, economic restructuring, and market saturation in domestic economies (Leonidou, 2000). These conditions necessitate a strategic orientation that can leverage unique capabilities—namely, competitive advantage—to thrive in international markets.

Competitive advantage enables businesses to outperform rivals by offering superior value to customers, whether through cost leadership, differentiation, or a combination of both. This strategic positioning enhances a business's ability to penetrate foreign markets, adapt to dynamic global conditions, and sustain export operations. As argued by Zou (1998), a business's export success is both a reflection of and a contributor to national economic progress. Businesses with strong competitive advantages—rooted in technological superiority, brand reputation, or unique resource configurations—are better positioned to succeed in global markets (Piñera-Salmerón, 2023).

Empirical studies support this view, indicating that competitive advantage significantly enhances export outcomes by reinforcing strategic, entrepreneurial, and productive capabilities (Barforoush, 2021; Saridakis et al., 2019; Ebrahimzadeh, 2018; Leonidou, Palihawadana, & Theodosiou, 2011). In particular, Murray et al. (2011) emphasize the mediating role of competitive advantage in transmitting the positive effects of market orientation and export marketing capabilities to export performance. It serves as a mechanism that consolidates and amplifies the returns of international expansion efforts.

Although some studies acknowledge nuanced or marginal impacts—such as the financial complexities of exporting (Leonidou et al., 2015)—the dominant consensus in the literature underscores a positive and significant relationship between competitive advantage and export performance. Based on these insights, the following hypothesis is proposed:
H2: Competitive advantage has a positive and significant effect on export performance.

2.6. Organizational Innovation and Export Performance

Organizational innovation plays a critical role in enhancing businesses' adaptability to the rapidly evolving global marketplace. Grounded in organizational theory, innovation within businesses refers not only to technological advancements but also to structural and managerial practices that align internal routines with the increasingly complex demands of international environments (Ortigueira-Sánchez, 2022). The ability of organizations to achieve such alignment—often conceptualized as "fit"—determines their capacity to respond to environmental changes and seize emerging opportunities abroad.

From this perspective, organizational innovation provides the institutional infrastructure required for businesses to acquire, integrate, and utilize foreign market intelligence and technical know-how. It serves as a foundational mechanism for improving export performance by fostering flexibility, enhancing decision-making, and enabling the successful implementation of product and process innovations across borders (Muhammad, 2024). Innovation also enhances businesses' readiness to adapt to diverse regulatory, cultural, and competitive conditions in foreign markets, a capability that is vital for export success.

Demircioglu (2016) argues that innovation is inherently multi-level, requiring strategic alignment between leadership, organizational culture, and operational systems. This alignment enables businesses to institutionalize innovative practices that support international expansion. Once a strategic orientation toward innovation is established, businesses must embed the necessary skills, structures, and processes across management levels to ensure effective execution and sustained performance.

Despite the appeal of flexible and adaptive organizations, organizational innovation has historically received limited attention in organization theory (Kim, 2018). Nevertheless, recent literature suggests that businesses engaged in organizational innovation are more capable of delivering unique value propositions in foreign markets and achieving superior export outcomes (Keskin et al., 2021; Bromiley, 2009).

Although some studies have begun to explore the mediating role of competitive advantage in this relationship (Muhammad, 2024), the direct link between organizational innovation and export performance remains fundamental. Organizational innovation allows businesses to generate differentiation and cost efficiencies—strategic imperatives that directly impact export productivity, customer value creation, and international competitiveness.
Based on this theoretical rationale and empirical evidence, the following hypothesis is proposed:
H3: Organizational innovation has a positive and significant effect on export performance.

2.7. The Mediating Role of Competitive Advantage

While organizational innovation has been consistently associated with improved export performance, emerging research suggests that this relationship may be more shaped by mediating strategic factors such as competitive advantage. Organizational innovation contributes to export performance by enabling businesses to restructure operations, adopt more agile managerial practices, and integrate foreign market knowledge. However, the realization of export gains often depends on a business's ability to convert innovative capabilities into distinctive strategic positions in the global market.
Competitive advantage serves as a crucial intermediary mechanism in this transformation. As businesses implement organizational innovations, they are better positioned to achieve cost leadership, differentiation, or both—strategies that enhance their value proposition to international customers (Zou&Stan,1998; Piñera-Salmerón, 2023). These advantages enable businesses to navigate the complexities of export markets, respond to competitive pressures, and deliver superior performance outcomes.
Muhammad (2024) highlights that intangible assets such as organizational capabilities, leadership orientation, and internal structures play a pivotal role in transforming innovation into competitive positioning, which in turn strengthens export performance. In this context, competitive advantage not only increases organizational innovation but also international success. The mediating role of competitive advantage is further supported by strategic management literature, which views it as a dynamic outcome of resource configuration and innovation-driven capabilities (Murray et al., 2011; Navarro-García et al., 2024).
Although the direct effect of organizational innovation on export performance remains well-established, integrating competitive advantage as a mediator offers a more comprehensive understanding of the mechanisms through which innovation translates into international competitiveness. This integrated view is especially relevant for technology producing businesses in emerging markets like Turkiye, where dynamic capabilities and innovation must be strategically mobilized to achieve export growth. Based on this reasoning, the following hypothesis is proposed:
H4: Competitive advantage mediates the relationship between organizational innovation and export performance.

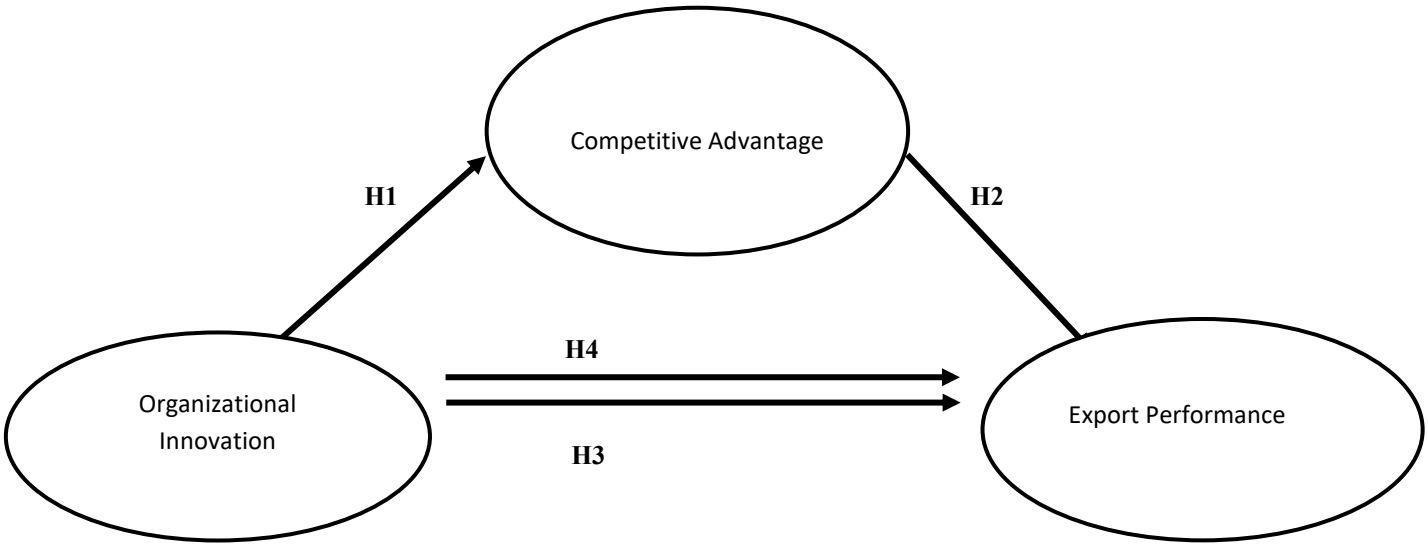

Figure 1. Research model

Figure 1 shows the research model of the study, emphasizing the interconnections among the variables.

2. Method

2.1. Sampling and Data Analysis

A purposive sampling approach was used to target managers and board members in the export departments of small, medium, and large technology enterprises in Türkiye, given their critical role in enhancing the sector's export performance and competitive advantage. Data were collected through face-to-face interviews and online surveys between January and April 2025. Of the 584 distributed surveys, 548 were retained as valid responses after screening, resulting in a 93.8% response rate. The survey was conducted with the approval of the Istanbul Commerce University Ethics Committee (Approval Code: E-65836846-044-341653; Date:12/06/2024). Data analysis was conducted using SPSS 25.0 and LISREL 8.7. Descriptive statistics summarized demographic variables and scale scores, while data normality was verified using kurtosis-skewness and central limit theorems. The reliability and validity of the measurement scales were verified using Cronbach's alpha, AVE, Composite Reliability and Fornell-Larcker criteria. Pearson correlation examined the variable relationships and regression analysis tested the study hypotheses regarding organizational innovation, export performance and competitive advantage.

Table 1. Sample characteristics

Variable	Group	n	%
Number of Countries Exported	Less than 5	170	31,02%
	5-9	177	32,30%
	10 and above	201	36,68%
Department	Export	276	50,36%
	Overseas Sales Depart.	272	49,64%
Title	Senior Manager	133	24,27%
	Mid-Level Manager	415	75,73%
Age	25-34	127	23,18%
	35-44	127	23,18%
	45-54	234	42,70%
	55+	60	10,95%
Education	Undergraduate	351	64,05%
	Postgraduate	147	26,82%
	PhD	50	9,12%
Experience Group	Less than 5	39	7,12%
	5-9 Years	111	20,26%
	10-14 Years	201	36,68%
	15-19 Years	130	23,72%
	20 +	67	12,23%
Business Activity Period	Less than 5	166	30,29%
	5-9 Years	162	29,56%
	10-14 Years	135	24,64%
	15-19 Years	63	11,50%

20 +	22	4,01%
Total	**548**	**100,00%**

Table 1 shows the demographic characteristics of the employees who participated in the research. In this direction, it was determined that 31.02% of the enterprises included in the sample worked in less than 5 countries (n: 170), 32.30% in 5-9 countries (n: 177), and 36.68% in 10 or more countries (n: 201). It was determined that the majority of the participants worked in the export department (50.36%, n, 276), were middle-level managers (75.73%, n, 415), were between the ages of 45-54 (42.70%, n, 234), were bachelor graduates (64.05%, n, 351), had 10-14 years of work experience (36.68%, n, 201), and had less than 5 years of business activity period (30.29%, n, 166).

The current literature was analyzed to determine the suitable constructions for assessing the study's variables. The scales, initially in English, were translated into Turkish employing the blind translation-back-translation technique outlined by Brislin (1976). In the absence of opposing evidence, a five-point Likert scale was utilized, defined as follows: "1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree." The scales utilized in the study are detailed below.

Table 2. Scales used in the study

Scale	**Developed by**	**Number of Items**
Organizational Innovation Scale	Sing and Smith (2004); Praiogo and Sohol (2003)	14
Competitive Advantage Scale	Schilke (2014)	6
Export Performance Scale	Adu-Gyamfi and Korneliussen (2013)	10

The study employed a 14-item organizational innovation scale originally developed by Singh and Smith (2004) and Prajogo and Sohal (2003), selected due to its prominence and frequent utilization in organizational innovation research (Yusr, 2016). Respondents indicated their level of agreement with statements reflecting innovation activities, including items such as "Increasing the innovation level of new products," "Incorporating the latest technological developments in new product development," and "Accelerating the speed of new product development." The scale is unidimensional, and confirmatory factor analysis (CFA) supported its robust construct validity ($\chi^2/df = 151.00/77 = 1.961$, RMSEA = 0.042, CFI = 0.99, IFI = 0.99).

Competitive advantage was measured using the 6-item scale developed by Schilke (2014), encompassing two dimensions: strategic advantage and financial advantage. Participants rated their agreement with items such as "Our business has gained strategic advantages over our competitors" and "Our business' profits consistently exceed the industry average." Consistent with prior literature, competitive advantage was operationalized as a composite score combining these two factors. CFA results indicated strong construct validity for this scale ($\chi^2/df = 12.89/8 = 1.611$, RMSEA = 0.021, CFI = 0.99, IFI = 0.99).

Export performance was assessed via a 4-item scale developed by Adu-Gyamfi and Korneliussen (2013). Respondents evaluated their level of agreement with statements including "I am satisfied with the success I have attained in my career," "Our export figures for the past three years have been satisfactory," and "Our export sales profitability over the past three years has been acceptable." This scale was treated as a unidimensional construct. Confirmatory factor analysis confirmed its strong construct validity ($\chi^2/df = 39.20/35 = 1.120$, RMSEA = 0.015, CFI = 0.99, IFI = 0.99).

3. Results

3.1. Reliability and Validity

Confirmatory factor analysis (CFA) was employed to investigate the factor structure, also known as a measurement model, which illustrates the links between latent components and observed variables (Yang, 2005). No alterations were made as the model index demonstrated an appropriate fit. Table 3 indicates that the measurement model has a favorable model value.

Table 3. Model index summary of the research model

Index	Model value	Threshold Level		Goodness to fit level
		Good fit	Acceptable	
$\chi 2$/df	$\chi 2$:12.41 df:6 $\chi 2$/df=2.068	≤3	≤4-5	**Good fit**
CFI	0.99	≥0.95	≥0.90	**Good fit**
IFI	0.99	≥0.95	≥0.90	**Good fit**
RMSEA	0.020	≤0.05	≤0.08	**Good fit**

The reliability and validity metrics of the scales are summarized in Table 4. Construct validity was assessed through Cronbach's alpha and Composite Reliability (CR). Each scale demonstrated strong internal consistency, with Cronbach's alpha coefficients exceeding the recommended threshold of 0.70 (Nunnally & Bernstein, 1994).
Similarly, CR values ranged from 0.80 to 0.91, surpassing the 0.70 benchmark suggested by Hair et al. (2010), thereby confirming the reliability and convergent validity of the constructs. Discriminant validity was established using the Fornell-Larcker criterion, as the square root of the Average Variance Extracted (AVE) for each construct exceeded the inter-construct correlations (Fornell & Larcker, 1981).

Table 4. Reliability and validity of the scales

Scale	CR	Discriminant Validity	Cronbach's α
Organizational Innovation	0.95	0.762	0.949
Competitive Advantage	0.94	0.849	0.903
Export Performance	0.96	0.831	0.957

3.2. Descriptive Statistics

Table 5 presents the correlation values among the variables, specifically organizational innovation, competitive advantage, and export performance, along with the descriptive statistics of the pertinent variables.

Table 5. Mean (M), Median (Md) Standard Deviation (Sd), Normal Distribution and Correlation Calues of Variables

No	Variable	Measures of Central Tendency			Skewness-Kurtosis		Correlation				
		Average	Median	S. s	Skewness	Kurtosis	1	2	3	4	5
1	Organizational Innovation	2,96	3,14	1,07	-0,19	-1,58	1				
2	Export Performance	3,03	3,60	1,18	-0,43	-1,56	,649**	1			
3	Competitive Advantage	2,94	3,17	1,08	-0,20	-1,39	,751**	,543**	1		
4	Strategic Advantage	2,97	3,33	1,20	-0,10	-1,41	,721**	,540**	,920**	1	
5	Financial Advantage	2,92	3,00	1,15	-0,06	-1,26	,654**	,454**	,913**	,680**	1

**p<0.01; r: Pearson correlation analysis

Kurtosis and skewness values ranged within the acceptable limits of -2 to +2, confirming normal data distribution (George & Mallery, 2010). In line with the Central Limit Theorem, the sample size (n = 401) exceeded the minimum threshold of 30, supporting the use of parametric statistical methods (Ghasemi & Zahediasl, 2012). As shown in Table 5, the data distribution justified the application of parametric analyses, which are statistically more powerful than non-parametric alternatives.

Likert-scale responses were interpreted using a 0.80-point interval, categorizing scores as very low (1.00–1.80), low (1.81–2.60), medium (2.61–3.40), high (3.41–4.20), and very high (4.21–5.00) (Durmaz, 2020). Participants' mean scores for organizational innovation (M = 2.96, SD = 1.07), export performance (M = 3.03, SD = 1.18), and competitive strategy attitudes (M = 2.94, SD = 1.08) fell within the medium range. Similarly, strategic advantage (M = 2.97, SD = 1.20) and financial advantage (M = 2.92, SD = 1.15) were also rated as medium.

Pearson correlation analysis, interpreted per Koklu et al. (2006), revealed moderate positive relationships between organizational innovation and export performance ($r = 0.649$, $p < 0.01$), and between export performance and competitive advantage ($r = 0.543$, $p < 0.01$). A strong positive correlation was found between competitive advantage and export performance ($r = 0.751$, $p < 0.01$).

3.3. Hypotheses testing

Regression analysis was used to evaluate hypotheses 1, 2, and 3 of the study, with the results given in Table 6.

Table 6. Regression analysis result

	Model 1			Model 2			Model 3		
	Export Performance			Competitive Advantage			Export Performance		
	β	S.E	t	β	S.E	t	β	S.E	t
Organizational Innovation	0.718**	0.036	19.933	0.759**	0.029	26.581			
Competitive Advantage							0.594**	0.039	15.110
R2	0.420			0.563			0.294		
F	397.334**			706.556**			228.298**		
Result of hypothesis	H1 supported			H2 supported			H3 supported		

**p<0.01

The regression analysis demonstrated that organizational innovation has a significant positive effect on export performance ($\beta = 0.718$, $p < 0.01$), thereby supporting Hypothesis 1. Similarly, organizational innovation significantly predicted competitive advantage ($\beta = 0.759$, $p < 0.01$), confirming Hypothesis 2. Competitive advantage was also found to positively influence export performance ($\beta = 0.594$, $p < 0.01$), lending support to Hypothesis 3.

Hypothesis 4, which posited that competitive advantage mediates the relationship between organizational innovation and export performance, was tested using Hayes' (2017) PROCESS Macro (Model 4) with bootstrap resampling. The indirect effect was significant (β = 0.106, Boot SE = 0.041, 95% CI [0.008, 0.200]), indicating a significant mediation effect. This finding was further corroborated by the Sobel test (Z = 2.584, p = 0.001). Detailed mediation results are presented in Table 7.

Table 7. The results of mediating effects

Indirect Effect	%95 Boot CL			Boot SE	T	Sig.	Result of Hypothesis 4
	β	LLCI	ULCI				
OI==>CA==>EP	0.1058	0.0098	0.2002	0.0486	11.278	0.001**	H4 supported
**p<0.01; Sobet Test Z:2.5839; sig:0.0098							
Note: OI: Organizational Innovation; CA: Competitive Advantage; EP: Export Performance; LLCI: Lower limit of the confidence interval; ULCI: Upper limit of the confidence interval.							

4. Discussion

This study shows the critical role of organizational innovation in fostering competitive advantage and enhancing export performance within technology producing businesses. Consistent with prior research (Prange, 2017; Fonchamnyo, 2016), research findings confirm that organizational innovation significantly strengthens competitive advantage, validating Hypothesis 1. Competitive advantage, was shown to have a positive and substantial effect on export performance (Hypothesis 2), aligning with extant literature highlighting its strategic importance in outperforming rivals and achieving superior export outcomes (Ismail, 2017; Chaubey, 2019; Sahu, 2017). Moreover, the results affirm that organizational innovation directly influences export performance (Hypothesis 3), emphasizing the necessity for businesses to cultivate innovative structures that enhance product value and facilitate market expansion through diversified export channels (Esmaeilpour, 2020). In the rapidly evolving global technology arena, maintaining competitive advantage demands continuous organizational adaptation to technological advancements and dynamic market conditions (Barney et al., 2021; Jamshidi, 2018; Vepo, 2020). In addition to these, the mediation analysis substantiates Hypothesis 4, demonstrating that competitive advantage significantly mediates the relationship between organizational innovation and export performance. The results indicate that the influence of organizational innovation on export performance is substantially moderated by the business' ability to convert innovative capabilities into a sustained competitive advantage. As the level of competitive advantage increases, the positive effect of innovation on export outcomes is correspondingly amplified, highlighting the dynamic interplay between innovation and competitive positioning in shaping export success in international markets.

This study offers several theoretical contributions to the literature on organizational innovation, competitive advantage, and export performance. First, it addresses a relatively underexplored area by empirically examining the link between organizational innovation and export performance, particularly within the context of technology-producing businesses. By doing so, it broadens the existing theoretical discourse and encourages further research across various industries where similar dynamics may apply.

The study also advances understanding of the mediating role of competitive advantage in the innovation–export performance relationship. By clarifying how competitive advantage translates organizational innovation into improved export outcomes, the findings contribute to a more integrated view of these constructs within international business and strategic management literature.

The results reinforce the notion that organizational innovation serves as a critical enabler of export performance. Businesses adopting proactive innovation strategies are better positioned to enhance their capabilities, adapt to changing market demands, and achieve superior export outcomes. The validation of Hypotheses 1 through 4 supports the theoretical proposition that competitive advantage not only influences export performance directly but also mediates the effect of organizational innovation.

From a practical perspective, the findings yield important implications for both managers and policymakers. Framing organizational innovation as a strategic capability enables businesses to more effectively allocate internal resources and enhance the value of their offerings in international markets. Businesses that successfully integrate innovation

with competitive positioning are more likely to scale their export activities and sustain performance in volatile and highly competitive global environments. These insights emphasize the necessity of aligning innovation strategies with broader organizational objectives to achieve long-term international success.

7.Conclusion

This study investigated the relationships among organizational innovation, competitive advantage, and export performance in technology-producing businesses in Turkiye, with a specific focus on the mediating role of competitive advantage. The technology industry was purposefully selected due to its strategic importance for value-added production and economic growth in emerging markets. In response to the dynamic nature of technological advancements and intensified global competition, the study conceptualized export performance as a measurable outcome influenced by organizational innovation and strategic positioning.Drawing on data from 548 upper- and mid-level managers in technology producing businesses, the findings confirmed all proposed hypotheses: organizational innovation positively influences both export performance and competitive advantage, and competitive advantage significantly contributes to export performance. Moreover, competitive advantage mediates the relationship between organizational innovation and export performance, emphasizing its critical role in translating innovation into tangible market outcomes.

By extending existing literature, this research highlights the strategic importance of organizational innovation in enhancing businesses' competitive positioning and export success. The findings offer valuable implications for both practitioners and policymakers in technology-intensive industries. Future research could build on these results by exploring the model in different industries and cultural contexts, thereby broadening its applicability and relevance across global markets. Although this study provides important insights into the relationship between organizational innovation, competitive advantage, and export performance, several limitations should be noted. First, the use of a single, survey-based quantitative method limits the depth of analysis. Future research could benefit from mixed-methods or qualitative approaches. Second, the cross-sectional design restricts causal inference; longitudinal studies are recommended to capture changes over time.

This study is subject to several limitations that offer avenues for future research. The sample was restricted to technology-producing firms in Turkiye, which may limit the generalizability of the findings. Future studies should extend the analysis to other industries and international contexts, particularly those characterized by greater cultural and institutional diversity. Moreover, the data were collected exclusively from managerial and export-related positions; incorporating insights from non-managerial employees could provide a more comprehensive understanding of organizational dynamics. Finally, while this study examined direct and mediating relationships, future research could investigate potential moderating variables and integrate related constructs—such as digital maturity and innovation orientation—to enrich the theoretical framework and enhance explanatory power.

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