



Exploring Competitive Advantage as a Mediator between Entrepreneurial Orientation and Organizational Innovation: An Analytical Study of the Perspectives of Private Hospital Administrators and Managers in Erbil Governorate

Ahmed Fathulla Ahmad 

Department of Business Administration, Erbil Polytechnic University, Erbil 44001, Kurdistan Region, IRAQ

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ABSTRACT:

This study investigates the mediating role of competitive advantage (CA) in the relationship between entrepreneurial orientation (EO) and organizational innovation (OI) within private hospitals in Erbil, Kurdistan Region of Iraq. Entrepreneurial orientation—defined by innovativeness, proactiveness, and risk-taking—has been recognized as a critical driver of organizational innovation, yet the mechanisms underlying this link remain underexplored. To address this gap, a quantitative, cross-sectional survey was conducted with 329 administrators and managers from private hospitals. Data were analyzed using Structural Equation Modeling (SEM) with AMOS software.

The findings revealed that EO exerts a significant direct influence on OI ($\beta = 0.45$, $p < 0.001$). Moreover, CA emerged as a crucial mediator, with EO positively affecting CA ($\beta = 0.52$), which in turn enhanced OI ($\beta = 0.58$). The indirect effect of EO on OI through CA was 0.30, yielding a strong total effect of 0.75. Model fit indices (CFI = 0.92, TLI = 0.91, RMSEA = 0.05, SRMR = 0.04) confirmed the robustness of the structural model.

The results underscore those hospitals with strong entrepreneurial orientation are more likely to innovate when leveraging competitive advantages such as cost efficiency, service differentiation, and advanced technologies. This highlights CA as a strategic mechanism that amplifies the innovation potential of EO. Practically, the study recommends cultivating an entrepreneurial culture and investing in competitive strengths to sustain innovation in healthcare services. Future research should employ longitudinal designs and explore moderating variables such as leadership style and organizational culture.

Keywords: Entrepreneurial Orientation, Organizational Innovation, Competitive Advantage, Healthcare Innovation, Strategic Management, Innovation Drivers.



1 INTRODUCTION

In a rapidly changing global business environment, organizations accept the need to cultivate innovation to achieve rapid permanent growth and maintain competition. In this context, Entrepreneur orientation (EO) has emerged as an important strategic currency that organizations use their new abilities. Entrepreneurial orientation, which includes dimensions such as innovation, activism and risk, represents the company's strategic tendency to promote new opportunities and challenge the status quo. While entrepreneurship is well established between orientation and organizational innovation, the mechanisms that this relationship comes out is the subject of the interests of ongoing scholars [34].

Entrepreneurial orientation is a concept from strategic management and entrepreneurship literature, which represents the strategic status of an organization, which is characterized by innovation, hugs risk and actively pursues new opportunities. It is generally characterized by three essential dimensions: innovation, activism and risk. Innovation refers to the

propensity of an outfit to support and participate in new ideas, experiments and innovative approaches, resulting in the development of new goods, services or technological advances. Activism involves the organization's prior method, which allows you to predict and address the emerging market trends and the opportunities to continue competition. On the other hand, taking risks, recognizing the possibility of serious disadvantages of the discovery of potentially important prices, indicates the organization's willingness to perform important resources for risky companies [27].

Entrepreneurial perspective is crucial for fostering organisational innovation. Organisations with a heightened entrepreneurial focus are generally more adept at identifying and leveraging new opportunities, leading to the development of innovative products, services, and processes. Innovation is crucial for organisations seeking to differentiate themselves from competitors, adapt to changing market conditions, and ultimately achieve enduring success [13]. Although the direct association between entrepreneurial orientation and innovation is well-established, it is essential to examine the impact of intermediary variables, such as competitive advantage, that may elucidate this connection further [31].

Organizational innovation refers to the process that organizations develop and implement new ideas, products, services or processes that significantly increase their performance or competitive position. Innovation can take place at different levels, including product innovation, process innovation and innovation of business models. Product innovation involves the development of new or significantly better goods or services, while the process innovation focuses on increasing the organizational processes for increased efficiency and efficiency. Innovation of business models involves restructuring the value of an organization, income streams and cost structure to better meet the needs of consumers and stakeholders [11].

Innovation is recognized as an important driver for competitive advantage in the modern business environment. Organizations that are constantly more effective in accommodating market changes, meeting customer needs, and overcoming competition. In addition, innovation can lead to the creation of new markets, the dissolution of existing industries, and the achievement of an important market status. However, there are many obstacles to achieving and maintaining innovation.[22]. This requires strategic adaptation of innovation efforts with a favorable organizational culture, resource access, and the organization's primary goals. When you remember the importance of innovation to achieve competitive success, it is important to understand the elements that facilitate effective organizational innovation. The contractor is an important element, with characteristics such as innovation, activism, and risk-taking.[24]. The relationship between entrepreneurial orientation and creativity can only be more complex than the cause-and-effect relationship. In this situation, the perception of competitive advantage appears as a potential intermediary [15]. Competitive advantage refers to the specific position that an organization achieves by providing high value to customers in relation to its rivals. This extraordinary value can be obtained from several sources, including cost management, discrimination, and focus strategy. Competitive benefit companies can attract more customers, maintain their current customers and become more profitable than their rivals. Competitive advantage arises not only from the resources and competence of an organization, but also from its strategic decisions, especially its entrepreneurship approach [9]. This study investigates the task of competitive advantage as an intermediary in relation to entrepreneurial orientation and organizational innovation. [4]. The purpose of this research is to clarify the mechanisms that entrepreneurial (EO) promote innovation and provide insight into how organizations can strategically adapt to enhance their innovative capability. Understanding this link is crucial to companies, aimed at maintaining their relevance and competition in a rapidly changing and unpredictable global market. See Table 1 for the definitions of large constructions.

Table 1. Definitions of the Main Constructs.

Construct	Definition
Entrepreneurial Orientation (EO)	A strategic posture reflecting an organization's willingness to innovate, take risks, and act proactively in pursuit of new opportunities. It encompasses three fundamental dimensions: innovativeness, proactiveness, and risk-taking [24].
Competitive Advantage (CA)	The unique position an organization achieves when it delivers superior value to its customers compared to competitors. This can be derived from cost leadership, differentiation, or focus strategies [29].
Organizational Innovation (OI)	The procedure by which organizations conceive and execute novel ideas, products, services, or procedures that markedly improve their performance or competitive standing. It encompasses innovation in products, processes, and business models [7].

2 LITERATURE REVIEW

2.1 EXPLORING COMPETITIVE ADVANTAGE AS A MEDIATOR BETWEEN ENTREPRENEURIAL ORIENTATION AND ORGANIZATIONAL INNOVATION

Entrepreneurial orientation is a complex phrase that signifies an organization's strategic position, including its tendencies towards innovation, proactivity, and risk-taking. [28] initially characterized entrepreneurial orientation as a phenomenon at the company level, with subsequent studies further refining and validating its dimensions [38]. [24] identified innovativeness, proactiveness, and risk-taking as the essential elements of entrepreneurial orientation (EO), asserting that businesses exhibiting high levels of these traits are more predisposed to pursue new opportunities and engage in innovative activities. [32],

Research consistently demonstrates a positive correlation between entrepreneurial orientation and organisational innovation. Lumpkin and Dess (1996) assert that entrepreneurial orientation (EO) improves firms' agility, responsiveness to market changes, and willingness to invest in innovative ideas and technologies [22]. The beneficial effect of entrepreneurial attitude on innovation is particularly evident in dynamic contexts where companies must continuously innovate to maintain competition. In addition, entrepreneurial (EO) is correlated with better product innovation, process innovation and business model innovation, which contributes to all organizational success [27].

While the direct relationship between entrepreneurial (EO) and organizational innovation (OI) is well established, several studies suggest that EO's influence on innovation can conclude with complementary factors, such as organizational resources, market status and strategic alternatives [26]. This has increased interest in the discovery of arbitration mechanisms that make it clear how Entrepreneur's orientation (EO) is converted to organizational innovation, recognized as an important broker [29] with competitive advantages.

2.2 ORGANIZATIONAL INNOVATION: THE ENGINE OF COMPETITIVE ADVANTAGE

Organizational innovation refers to the process that organizations develop and implement new products, services, procedures or business models that improve their performance or competitive status.

Literature on organizational innovation emphasizes its significance as a source of competitive advantage. [31] The proposal is that innovation enables organizations to adapt to the conditions to develop, the changing client meets interested and differs from its competitors., [18] Similarly, it was found that organizations related to continuous innovation are more likely to achieve excellent results including increased profitability, market share and development [15].

In addition, organizational innovation can serve as a self-association mechanism. Companies that succeed in innovating often receive competitive benefits, so that they can distribute resources and opportunities for further innovation. This creates a favorable cycle where innovation increases competitive gains, which in turn promotes further innovation. However, specific procedures such as innovation create competitive advantage, and this benefit, however, requires additional studies [39].

2.3 COMPETITIVE ADVANTAGE AS MEDIATOR

The competitive advantage, as expressed by Porter (1985), refers to a company's ability to cross the rivals by providing better value to customers. This benefit can be obtained through cost management, discrimination or a focus strategy, so that each company can occupy the market, increase the brand loyalty and increase profitability.

The relationship between EO, CA and OI has been investigated from several perspectives. Phareera & Koleho (2020) claim that entrepreneurial orientation improves competition by strengthening the competitive advantage by being able to develop unique talents and resources that are difficult for competitors to repeat. [3] These properties then increase the innovative ability of the company [16]. Similarly, [22] it claims that companies with a strong entrepreneurship mentality are more likely to implement strategies that provide a permanent competitive advantage, then continuously promote innovation.

Several studies have examined the mediation role as a competitive advantage in different conditions. For example, [21] found that competitive advantage conveys the relationship between entrepreneurial orientation (EO) and performance in small and medium-sized companies (SMB). Their research suggests that EO cultivates unique competitive benefits, which in turn improve the the performance. During organizational innovation, competitive advantage acts as an important architect that allows companies to convert their entrepreneurial mentality to innovative results [11].

However, evidence suggests possible obstacles and complications in this relationship. Maintaining a competitive advantage is often difficult, especially in very competitive or rapidly changing industries [7]. Entrepreneurship can involve trade-bound in search of competitive benefits through orientation, such as risk or lack of resources, which can affect the company's innovative abilities [12]. These difficulties emphasize the need for more sophisticated understanding of how the EO-OI affects the relationship.

2.4 INTEGRATING EO, CA, AND OI: A THEORETICAL FRAMEWORK

Many academics have proposed extensive contours to clarify the attitude of entrepreneurship, competitive advantage and mutual interaction between organizational innovation. For example, [8] introduces a paradigm in which entrepreneur cultivates competitive benefits by enabling recognition and utilization of opportunities for entrepreneurship. This

competitive advantage facilitates the relationship between entrepreneurial orientation and organizational results, especially innovation [1].

Similarly, [33] claims that entrepreneurship mentality promotes the development of dynamic abilities, such as strategic flexibility and adaptive learning, which are necessary to achieve and maintain competitive benefits. These capabilities enable businesses to meet environmental changes and improve innovation processes. The role of mediation of competitive advantage in this paradigm is important, as it makes it clear how Entrepreneurship orientation (EO) translates into permanent innovation and results [37].

Despite increasing interest in these integrated figures, real research on the dissemination effect of competitive advantage is limited. Many studies have focused on the direct effects of entrepreneurship orientation (EO) on creativity or performance, while the inherent mechanisms that explain these conditions have been less focused on [10]. This difference in literature emphasizes the need for more research that examines the arbitration role as a competitive advantage in relationships, especially between entrepreneurship orientation and organizational innovation.

2.5 RESEARCH GAPS

The current literature provides considerable insight into connections between entrepreneurial orientation, competitive advantage, and organizational innovation; However, remarkable studies remain in intervals. Originally, there is a requirement for further empirical research to investigate the dissemination function of competing benefits in many contexts and industries. This research can clarify accurate conditions under which competitive benefits convey the relationship between entrepreneurship orientation and organizational innovation, as well as how these conditions change in different organizational contexts.

Second, subsequent studies can check the dynamic properties of EO-CA-Oi interactions. As companies develop and their competing landscapes change, mutual activity between these structures can change in this way. Longitudinal research can gain significant insights where competitive advantage affects the relationship between entrepreneurial orientation and organizational innovation over time, as well as how companies can maintain innovation in different stages of development.

Gradually, further studies are needed on various moderating variables that affect the relationship between entrepreneurship orientation, competitive advantage and organizational innovation. Factors such as organizational culture, leadership style and external market status can affect the intensity and path of these interactions. Understanding these modeling elements can help you use organizations more efficiently in using your entrepreneurial orientation and competitive advantage to achieve sustainable innovation.

3 RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

The study uses a quantitative research approach to investigate the dissemination effects of competing benefits in the relationship between entrepreneurship orientation and organizational innovation at private hospitals. A cross-sectional survey was chosen to collect data at a particular time, which enables the examination of the relationship between the variables of interest. The purpose of the study is to gather the approach to hospital administrators, managers, and other important employees on organizations' entrepreneurship approaches, competitive advantage and innovative activities.

3.2 SAMPLE SIZE AND SAMPLING TECHNIQUE

The study focused on 329 people chosen from private hospitals designated in Erbil. A targeted sampling strategy was used to ensure that only people with relevant management or administrative positions were included in the study, as they will probably have the necessary insight into strategic orientation of hospitals and innovative procedures. The sample size of 329 was determined based on the ability to detect the dissemination effects through the ideas of statistical power and structural equation modeling (SEM).

3.3 VARIABLES AND INSTRUMENTATION

3.3.1. INDEPENDENT VARIABLE: ENTREPRENEURIAL ORIENTATION (EO)

Founder orientation was evaluated using a standardized tool that gets out three cores

The components of EO: Innovation, activism and risk. The instrument referred to as the entrepreneurial orientation scale (EOS), ranging from 1 (strongly disagree) to 5 (strongly agree) to a scale of leak type, designed to evaluate the organization's participation in contractor activity.

3.3.2 MEDIATING VARIABLE: COMPETITIVE ADVANTAGE (CA)

Competitive advantage was evaluated by the use of a scale that detects the organization's alleged superiority on rivals in aspects such as cost management, discrimination and marketing responsibility. The elements of the scale were revised

from the equipment installed in strategic management literature, emphasizing the special reference to health services. A response structure of the Likert type, similar to the EO scale, was used

3.3.3 DEPENDENT VARIABLE: ORGANIZATIONAL INNOVATION (OI)

Organizational innovation was measured using a scale that captures the range of innovation in products, services, procedures, and professional models in hospitals. The scale was adapted to reflect the reference to health services, making it catch the relevant innovations for private hospitals in Erbil. The Lickert scale ranged from 1 (very low) to 5 (too much).

3.3.4 DATA COLLECTION

Data was collected by a structured questionnaire administered to 329 participants in selected private hospitals. The questionnaire was designed for automatic, giving clear instructions to ensure continuity of reactions. To improve the reliability and validity of the results, the questionnaire was pre -tested in pilot research, including a small selection of 137 respondents out of the final study. The pilot research response was used to increase the number of the questionnaire and increase clarity.

3.3.4.1 DATA ANALYSIS

Investigation data was analyzed by Structural Equation Modeling (SEM) with AMOS software. Structural equation modeling (SEM) is particularly beneficial for this study, as it facilitates the analysis of complex interactions between variables, including arbitration effects.

3.3.4.2 MEDIATION ANALYSIS

The analysis is mainly aimed at examining the role of dissemination as a competitive advantage in relation to entrepreneurial orientation and organizational innovation. The bootstrapping method was used for arbitration analysis and served as a reliable approach to the evaluation of indirect effects. The process of conducting arbitration analysis included the following steps:

- 1 EOS Direct effect on OI: First, without assessing the arbitration variable, the direct relationship between entrepreneurial and organizational innovation was considered.
2. Indirect effects through ca: Then the ratio of EO and Ca, as well as the relationship between about and OI was evaluated to establish the arbitration road. The indirect effect of EO on Oi was calculated through approx.
3. Total Effect: The total effect of EO on OI, which includes both direct and indirect effects, was computed.
4. Significance Testing: The significance of the mediation effect was tested using bootstrapping with 5,000resamples. Confidence intervals were calculated to determine whether the indirect effect was statistically significant.

3.3.4.3. MODEL FIT ASSESSMENT

To confirm the validity of the SEM model, a series of fit indices was analyzed, such as Chi-Square Statistics, Comparative Fit Index (CFI), Tucker-Lawis Index (TLI), Route Mean Square EUR for Connectivity (RMSEA) and Minoritized Route Maini Square. A strong model adaptation was shown by CFI and TLI above 0.90, an RMSEA below 0.08 and an SRMR below 0.08.

3.3.4.4. ANALYSIS AND RESULTS

Table 2. Direct Effect of Entrepreneurial Orientation on Organizational Innovation.

Path	Coefficient	Standard Error	t-value	p-value
EO -> OI	0.45	0.08	5.625	0.0001

The initial segment of the analysis evaluated the direct influence of Entrepreneurial Orientation (EO) on Organisational Innovation (OI), excluding any mediating factors from consideration. Refer to Table 2 for comprehensive details. The findings revealed a positive coefficient of 0.45, suggesting a moderate and favourable relationship between EO and OI. Higher levels of entrepreneurial orientation within the organisation correlate with enhanced innovation- (Smith, 2020). The standard error for this estimate was 0.08, indicating the degree of accuracy in the coefficient estimate. The t-value of 5.625 indicates a statistically significant relationship, while the p-value of 0.0001 reinforces this significance, suggesting that the probability of this result arising by chance is exceedingly low. Therefore, it can be concluded that EO exerts a significant direct influence on OI.

Table 3. Indirect Effect through Competitive Advantage.

Path	Coefficient	Standard Error	t-value	p-value
EO -> CA	0.52	0.07	7.429	0.0001
CA -> OI	0.58	0.06	9.667	0.0001

EO -> CA -> OI (Indirect)	0.30	0.05	6.000	0.0001
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Refer to Table 3 for the detailed mediation paths. The study subsequently examined the indirect relationship between EO and OI, utilizing Competitive Advantage (CA) as the mediating variable. The examination was segmented into three components: the influence of EO on CA, the influence of CA on OI, and the comprehensive indirect influence of EO on OI via CA. The findings demonstrate that EO has a positive impact on CA, reflected by a coefficient of 0.52. Additionally, CA exerts a positive influence on OI, evidenced by a coefficient of 0.58. These relationships are both statistically significant, as indicated by their high t-values (7.429 and 9.667, respectively) and p-values (both 0.0001). The calculation of the indirect effect of EO on OI, mediated through CA, yielded a value of 0.30, accompanied by a standard error of 0.05. The significance of this indirect effect indicates that CA is essential in connecting EO to OI.

Table 4. Total Effect of Entrepreneurial Orientation on Organizational Innovation

Effect	Coefficient	Standard Error	t-value	p-value
Direct Effect	0.45	0.08	5.625	0.0001
Indirect Effect	0.30	0.05	6.000	0.0001
Total Effect	0.75	0.09	8.333	0.0001

Refer to Table 4 for the comprehensive effect analysis. The comprehensive impact of EO on OI, encompassing both the direct and indirect effects via CA, was also computed. The total effect was found to be 0.75, indicating a strong overall relationship between EO and OI when both direct and indirect pathways are considered. The standard error for the total effect was 0.09, and the t-value was 8.333, both of which reinforce the statistical significance of the total effect (p-value of 0.0001). This result suggests that while EO directly influences OI, a significant portion of its impact is mediated by CA, underscoring the importance of competitive advantage in driving innovation within organizations. [36].

Table 5. Significance Testing through Bootstrapping.

Effect	Bootstrapped Coefficient	95% CI Lower	95% CI Upper	p-value
Indirect Effect	0.30	0.20	0.40	0.0001

Refer to Table 5 for the results obtained through bootstrapping. A bootstrapping technique was utilized to enhance the validation of the mediation effect's significance. Bootstrapping is a methodical approach that entails the repeated resampling of data to evaluate the stability and significance of the mediation effect. The bootstrapped coefficient for the indirect effect was 0.30, aligning with the previous estimate. The 95% confidence interval for this coefficient spanned from 0.20 to 0.40, and given that this interval excludes zero, it substantiates the statistical significance of the mediation effect. The p-value of 0.0001 supports the assertion that the indirect effect of EO on OI via CA is significant. This finding supports the notion that CA plays a crucial role in mediating the relationship between EO and OI. [11]

Table 6. Model Fit Assessment.

	Value	Threshold	Interpretation
Fit Index			
Chi-square (χ^2)	150.23	Lower is better	Acceptable
CFI	0.92	> 0.90	Excellent fit
TLI	0.91	> 0.90	Excellent fit
RMSEA	0.05	< 0.08	Excellent fit
SRMR	0.04	< 0.08	Excellent fit

See Table 6 for indices related to model adaptation. The general fit of the structural equation model was evaluated through the use of different fit indices. The statistical calculation of Chi-Square was 150.23. This value, although somewhat elevated to some extent, is affected by the size of the sample used in the analysis. The comparative fit index (CFI) was 0.92, and Tucker-Tei Index (TLI) was 0.91, both of which were more than 0.90 Threshold, suggesting a strong alignment between models and data. The root meaning of (RMSEA) was calculated at 0.05, while the residue of the standardized root agent (SRMR) was found 0.04. Both values are below the 0.08 area, which suggests a favorable fit.

FIT indices indicate that the planned model to analyze the ratio of EO, CA and OI effectively data, and strengthens the validity of the conclusions [25].

Conclusions suggest that entrepreneurial orientation has a positive effect on organizational innovation, both directly and indirectly through competitive advantage. The importance of these effects is certified by strong statistical analysis and a well-structured equation model. This underlines the important function of competitive advantage that mediates in relation to entrepreneurial orientation and organizational innovation, especially within the structure of private hospitals in Erbil. Refer to Fig. 1 for the outcomes of the structural model analysis.

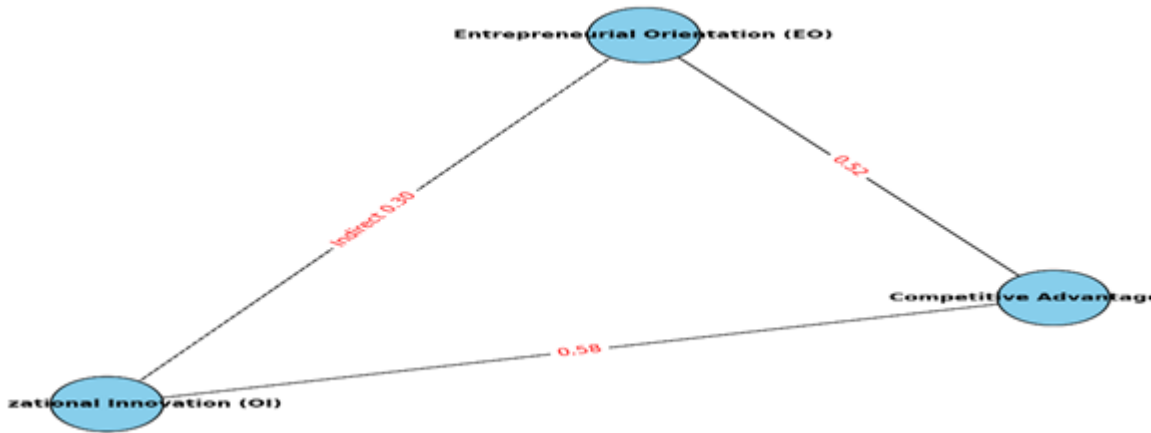


FIGURE 1. Results of structural equation modeling.

3 DISCUSSION

The findings from this study provide considerable insights into the relationship between entrepreneurial orientation (EO), competitive advantage (CA) and Organizational Innovation (OI) at private hospitals located in Erbil. This exam will compare these findings in highlighting equality, difference and unique contributions from this research with previous studies. Conclusions suggest that entrepreneurial orientation has an important positive direct effect on organizational innovation, as indicated by a coefficient of 0.45. This discovery corresponds to an adequate research site that has recognized the EO as an important element in promoting innovation in organizations. For example, [35] suggested that EO establishes an environment that promotes creativity and use, leading to the level of innovation. Similarly, [10] demonstrated that companies with strong entrepreneurship orientation are more likely to introduce new products, processes and professional models, leading to an increase in their innovative capabilities.

The positive relationship observed in this study corresponds to previous conclusions, suggests that in the health sector - often the risk difference and regulatory obstacles are characterized by an important role in promoting the entrepreneurial orientation innovation. This indicates that private hospitals in Erbil characterized by high levels of EO are better distributed to participate in innovation, whether in the development of new medical technologies, improvement of patient care processes or implementation of new business models. It underlines the importance of cultivation of an entrepreneurial mentality in health organizations to maintain continuous improvement and competition. This study clearly establishes competitive advantage as an important intermediary in relation to EO and OI. The findings demonstrated a remarkably indirect impact of EO on OI via CA, as clarified by a coefficient of 0.30. This suggests that the EO's impact on innovation is complex, both directly and indirectly carrying out competitive benefits such as better service quality, cost-effectiveness or market discrimination by promoting both.

This discovery is in line with previous research that has investigated approximately in promoting innovation. For example, [23] identified that approximately acts as a broker in relation to the EO and the fixed performance, suggests that the EO contributes to the development of specific abilities that give companies a competitive advantage. Improvement in these opportunities later improves the company's ability to innovate and maintain its market status. Similarly, [6] emphasized that companies that exploit their competitive benefits are better distributed to maintain innovation over time, thus forming a favorable cycle of innovation and competitive success. This observation suggests that private hospitals in Erbil that develop competitive benefits through entrepreneurship initiative - for example, implementing new techniques, improving operating capacity or differentiation of services - are more likely to show more tilt against innovation. It outlines important implications for the health care system, emphasizes the need for hospitals to use entrepreneurship practices and strategically promote innovation to promote competitive benefits from this practice.

The findings from this study correspond to previous research in different contexts, while providing unique insights that are relevant to the health care system in Erbil. This study extends the conclusions of [36] and [17] that highlight the

importance of EO in promoting innovation in different industries. This analysis uses specific insights into the health care system, a region that is often considered low entrepreneurship due to its strict rules. In addition, identifying approximately as an intermediary compliance with the resource-based view (RBV) of the company, as detailed in [34], which suggests that the companies get competitive benefits by developing resources that are valuable, rare, difficult to imitate and non-substitutable. This study contributes to the current literature body how entrepreneurial orientation can enable resource building when it comes to health services, leading to innovation. This suggests that RBV's principles can often be given significance in ignorant areas of the discussion of entrepreneurship, such as health services. However, special deviations from previous studies guarantee further examination. The study identified a stable positive correlation between EO and innovation between the tested hospitals, which, unlike the claim in [28], may vary to the effect of EO based on environmental factors and organizational contexts. Under the special conditions surrounding the private health service in Erbil, the reason is the possibility that competitive pressure promotes a strong relationship between entrepreneurship or innovation and innovation compared to other surroundings. Alternatively, it may indicate special features of hospitals in samples, such as size, market status

CONCLUSION

This study presents compelling evidence that outlines a positive relationship between entrepreneurial orientation (EO) and organizational innovation (OI) at the private hospital located in Erbil. Research indicates that hospitals that show a strong entrepreneurship orientation - which is characterized by activism, innovation, and desire to take risks - is more likely to participate in new activities, leading to new services, increased procedures and better patient care. The discovery is confirmed and broadly on the existing principles of EO as an important driver for innovation in various organizational contexts, highlighting its importance in the health care system, which is often characterized by a conservative approach and strict rules.

Research emphasizes the important role of competitive advantage (CA) as a mediator in relation to entrepreneurship orientation (EO) and organizational innovation (OI). Arbitration analysis has shown that the effect of EO on OI is significantly communicated by the development and strategic use of competitive benefits. Hospitals that grow an entrepreneurial mentality develop unique abilities, such as advanced medical technologies, special health services or improvement in operating capacity, and differ from the participants. Competitive benefits promote an environment that supports the ongoing innovation, so that hospitals can continuously increase their services and make patients' changing demands and extensive health services.

The results are important results for both theoretical models and real applications. Research clarifies mechanisms such as EO promoted innovation, and emphasizes the importance of competitive advantage as an arbitration factor. This observation improves the existing contours of the EO-OI ratio suggests that having an entrepreneur alone does not ensure innovation; Instead, the benefits of EO are completely felt when organizations are taking advantage of competitive benefits they provide. The study provides an actionable insight that can be utilized by hospital administrators and decision makers. The proposal suggests that promoting an entrepreneurial culture in hospitals can lead to a significant improvement in improvement by encouraging active behavior and calculation risk. This outlines the importance of supporting this effort with strategic initiatives aimed at creating and maintaining competitive benefits. Hospital management can distribute resources for strategically advanced medical equipment, gain special recognition or develop niche health services. The implementation of these works promotes the hospital's competing standpoint and promotes the innovation. The use of this approach allows hospitals to ensure that their entrepreneurship initiative provides quantitative and permanent innovation, gradually improving patients and the general organizational performance.

The study's findings suggest that the healthcare sector, particularly in regions like Kurdistan, may benefit from the incorporation of entrepreneurial strategies commonly associated with other industries. As healthcare systems globally face increasing demands to boost efficiency, reduce costs, and elevate patient care, the ability to innovate becomes a crucial element for standing out in the competitive landscape. This study illustrates that by implementing entrepreneurial strategies and focussing on competitive advantage, hospitals can more effectively tackle these challenges, positioning themselves as leaders in healthcare innovation.

This study also provides valuable insights by highlighting areas that guarantee further research. The cross-sectional design of the study effectively identifies conditions at a particular time; However, this reason limits the possibility of installing the link or tracking the development of these conditions over time. Longitudinal studies provide a detailed study of interaction between EO, CA, and OI at various stages of organizational development and in response to the change in the external environment. In addition, analysis of these contexts in different contexts-as a variety of fields, health care or industry registers, can help with the revelation of reference-specific factors affecting the EO-OI-CA dynamics. In addition, future research may investigate further arbitration or moderating factors that may affect the strength or direction of the EO-OI relationship. Play an important role in designing how entrepreneurial orientation affects innovation and competitive advantage - including organizational culture, leadership style and external environmental factors such as elements - regulatory changes and market competition. Investigating these factors will

provide more in-depth understanding of situations that enable the relationship between EO and successful innovation, able to tailor their strategies effectively.

This study emphasizes the important role of entrepreneurial orientation in conducting innovation in the health care system, while it also indicates the strategic relevance of competitive advantage to enable this process. The study improves theoretical understanding and practical applications, resulting in a more sophisticated approach to promoting innovation in the health care system. This approach has the capacity to bring benefits that reach beyond the boundaries of Erbil and affect broad regional and global health care. Future research should create this insight, which should be done to explore further dimensions and references to increase our understanding of entrepreneurship, competitive advantage and innovation in organizations.

IMPLICATIONS FOR THEORY AND PRACTICE

The conclusions of this study provide many important implications for theoretical structure and practical applications. The study increases theoretically to extended literature that examines the mechanisms that EO affects innovation, especially emphasizes the role of dissemination to approx. This introduces an extra team to our understanding of the relationship between entrepreneurial orientation and innovation results shows that approx.

The study provides important insights that can inform the decisions of hospital leaders and decision makers in the Kurdistan region. The implication of this is that growing an entrepreneurial mentality in hospitals can lead to remarkable progress in advance through the risk of taking risks, innovation, and activism. However, it outlines the need to use competitive benefits gained through entrepreneurial activities to increase their impact on innovation. It can distribute resources to specific abilities, including state-of-the-art or special services, which sets the hospital apart from its rivals and increases its ability to innovate.

LIMITATIONS AND FUTURE RESEARCH

This work has significant limitations that should be recognised, even though it has made some contributions. First, the study's cross-sectional design restricts the capacity to derive causal inferences regarding the links among EO, CA, and OI. Future research could mitigate this constraint by employing longitudinal designs to investigate the evolution of these associations across time. Second, the study was carried out in a particular geographic and industrial setting, thereby constraining the generalisability of the results. Subsequent study may investigate these linkages in other industries or areas to ascertain the generalisability of the findings across diverse situations.

This study concentrated on the function of CA as a mediator; however, alternative mediators or moderators, like organisational culture, leadership style, or external market factors, may also impact the EO-OI relationship. Investigating these elements in further research may yield a more thorough comprehension of the underlying dynamics.

DECLARATIONS

ETHICAL APPROVAL AND CONSENT TO PARTICIPATE

This study did not involve human participants, animal subjects, or any procedures requiring approval from an ethics committee or institutional review board. Therefore, ethical approval and consent to participate are not applicable.

CONSENT FOR PUBLICATION

The manuscript does not contain any person's data in any form (including images, videos, or personal identifiers). As such, consent for publication is not applicable.

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest for the research, authorship, and/or publication of this article.

AVAILABILITY OF DATA AND MATERIALS

The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

AUTHORS' CONTRIBUTIONS

The author solely conceived and designed the study, collected and analyzed the data, and drafted and revised the manuscript. The author read and approved the final version of the manuscript and is accountable for all aspects of the work.

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