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-RESEARCH ARTICLE-

THE ROLE OF ORGANIZATIONAL CREATIVITY IN THE RELATIONSHIP BETWEEN STRATEGIC AGILITY AND SUSTAINABLE COMPETITIVE ADVANTAGE

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-Abstract-

The case study aimed to examine the influence of Strategic Agility (SA) across its three dimensions—strategic sensitivity, resource fluidity, and leadership unity—on enhancing Sustainable Competitive Advantage (SCA) in Iraqi private universities through Organisational Creativity (OC). A descriptive-analytical approach was employed, drawing on a sample of senior leaders and supervisors from 16 of the largest private universities in Baghdad, selected from the total of 32 private universities operating in Iraq. These institutions were chosen due to their status as the first private universities established in the country. The study sample comprised university leaders, with 385 questionnaires distributed. Structural equation modelling (SEM) was utilised to test the proposed models using the Smart PLS programme. The findings confirmed a positive relationship between the study variables at both the variable and dimensional

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levels. The researchers recommended that Iraqi universities adopt flexible strategies to effectively respond to rapid changes in the higher education sector. This includes swiftly reallocating resources in alignment with shifts in demand and market trends, as well as fostering creativity and innovation within these institutions.

Keywords: Strategic Agility, Strategic Sensitivity, Resource Fluidity, Unity Leadership, Sustainable Competitive Advantage, Organizational Creativity, Private Universities.

INTRODUCTION

In the contemporary, dynamic environment, industries are faced with a multifaceted and complex landscape that necessitates rapid adaptation to achieve their organizational objectives (Porath, 2023; Volberda et al., 2021). In the fast-paced business climate of the 21st century, both threats and opportunities coexist. Companies that rely on rigid strategies or lack strategic planning risk falling behind, while those that act swiftly to address the changing needs of customers and investors can seize new opportunities. SA is increasingly attracting attention from scholars and policymakers; however, empirical studies linking perceived SA to SCA remain limited (Ayub et al., 2014). Universities and colleges are undergoing significant transformations due to intense competition and financial challenges, prompting administrators to seek improved strategies for managing institutional resources. Higher education is increasingly recognised as vital for economic development and the creation of knowledge-based societies, leading to a heightened focus on improving educational quality.

On a global scale, universities are expected to establish the foundations of excellence in knowledge, while simultaneously navigating complex environments and implementing reforms to ensure survival and growth, meeting the needs of diverse stakeholders. Clear strategic direction and sustainable diversity strategies can provide universities with a competitive advantage. Although the government has made strides in developing the higher education sector by establishing new universities, these efforts have not fully addressed the national demand for additional educational institutions (Flayyih & Khiari, 2023). Consequently, the involvement of the private sector in the development of higher education has become increasingly necessary. Many of the private universities in Iraq are newly established and are still competing with public universities to attract students. It is crucial to investigate strategies that contribute to attaining and maintaining a SCA in the context of private universities.

This article aims to explore the role of OC in mediating the relationship between SA and SCA within Iraqi private universities. Private universities in Iraq face challenges in effectively competing with government institutions. Many organisations struggle to anticipate future changes, ultimately falling behind in the competitive race (Hai et al.,

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2021). In contrast, those enterprises that swiftly adapt to external conditions and take measures to enhance productivity are better positioned to secure a SCA. Achieving such an advantage requires overcoming competitors and expanding market share. Over the past two decades, agility has become a critical asset for business survival, prompting numerous organizations to pursue transformations aimed at increasing agility (Kumkale, 2022). However, for organizations seeking to leverage the benefits of business agility, it is essential to understand the underlying motives that drive this transformation, as these factors significantly influence the success of the initiative (Ononiwu et al., 2024).

In dynamically changing markets, forces of competition change in a similar way (Mikalef et al., 2021). Hence, flexibility and strategy-making have an important role to play in dealing with uncertainty (Mikalef et al., 2021). As organizations strive to formulate competitive strategy, becoming business agile has been a core strategy (Serrat & Serrat, 2017). The modern-day business environment is characterized by rapid changes in technology, globalization, and heightened competition, all adding to uncertainty in various aspects of business (Attah et al., 2024). Companies must develop the capacity to perform in such turbulent environments to deliver value to the customer (Ojha et al., 2021). Flexibility to adapt to changes in a timely manner must be done in order to do so, with creativity to facilitate innovative value creation, optimize the acquisition of resources and distinctive skills, and come up with apt strategies to position in the market (Alolayyan et al., 2022). Organizations have to achieve a performance level characterized by SA to meet such needs so that they can respond to an uncertain business context with changes and uncertainty occurring at high speed (Elali, 2021). Organizations agile in nature have the capacity to reallocate resources in a quick manner to respond to changing business scenarios (Elali, 2021). Thus, the search for agility has emerged as a universal concern among firms in order to receive a larger market share (Elali, 2021). With alignment among resources, skills, and strategy, agility enhances the scope for organisational action and expansion (Elali, 2021). Therefore, organizations should be agile to be responsive to the challenges and opportunities presented in a dynamic context (Zahoor et al., 2022).

Organizational SCA depends greatly on entrepreneurial orientation, service innovation management, SA, and technological advancements. In Iraq's private sector, successful service innovation management plays a significant role in attaining SCA. Companies competing to attain better SCA must resist competitive forces. It has been researched that SA and service innovation management have a positive influence on SCA and play a pivotal role in enhancing performance. The factors play a crucial role in Iraq's private university sector (Kadhim et al., 2018). It will be challenging to sustain a SCA in a competitive market for companies in small economies like Iraq because they will be facing tough competition from larger economies like the USA, Germany, and China. Companies must enhance their competitive strategy without relying on the resources

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they possess at hand. A humble business approach to planning, strategizing, organizing, and resource allocation with consideration to corporate social responsibilities will be needed. Companies must review and realign their strategic plans with objectives and targets from time to time to be successful (Aghina et al., 2021).

The Iraqi private sector has immense technological stagnation that impacts public resources and educational facilities. A comparison with the global private sector shows apparent inefficiency and lower productivity. The productive efficiency in most private Iraqi universities is suboptimal and plagued with challenges in maintaining operations in the wake of stiff competition. Increasing such efficiency can be achieved through the application of agility and organisational innovation management and both play a crucial role in achieving a sustainable competitive advantage. The problems have not been researched well in Iraq, and especially in private universities, hence the justification of the current research study into such crucial factors. The research investigates the role played by OC in acting as a bridge between SA, tied to day-to-day managerial decisions and choices, and SCA, characteristic of long-term customer value. A case study in Iraqi private universities shows that OC has a crucial role to play in bridging SA to competitive advantage, an area that has been neglected in research work. The research presents a new perspective into such concepts in a strategically significant sector and identifies non-corporate actors to be drivers of economic growth in the wake of environmental challenges (Tajeddini et al., 2023).

The aim of this research is to investigate the mediating role played by OC between strategic flexibility and SCA in Iraqi private universities. The research questions to be answered in the current research are: Q1: What role is played by strategic flexibility in creating SCA in private universities in Iraq? Q2: How does OC play a mediating role in the relationship between strategic flexibility and SCA in private universities in Baghdad, Iraq? The first research question contributes to knowledge regarding the relationship between strategic flexibility and SCA in Iraq. As educational organizations operate at high speed, private university managers in Iraq should be aware of how changes in the environment either bring about or limit SCA to the institution. The new knowledge will enable managers to respond better to changes in the competitive environment. The findings will be expected to provide new insights and empirical evidence concerning the formation of SCA and offer private university managers additional ideas about how to manage the relationship between organisational flexibility and SCA (Dakhely Parast et al., 2014). On the contrary, OC is an important element in competitive success and indicates that only when creativity is well-integrated will organizations be effective. The literature shows that the role played by creativity in the relationship between strategic flexibility and SCA has not been studied before. Therefore, the conceptual knowledge regarding the mediating role played by OC is not well covered in the Iraqi context, especially in the private educational sector, and there is a lack of empirical evidence to support it. The aim of the current research is to cover

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the gap through exploring the mediating role played by OC in Iraqi private universities from the context of a developing country like Iraq. In a very competitive educational environment, understanding the relationship between SA and OC becomes crucial in achieving SCA in the context of Iraqi private universities (Ayub et al., 2014).

LITERATURE REVIEW

Organizational Creativity

This section talks about creativity in bridging SA and SCA. A review of literature highlights the role played by OC in the form of its concept and determinants. Survival and growth in a company rely on innovation driven through creativity in a time where competition grows. Adaptation in strategy is key to sustaining changes in the market, in contrast to rigid approaches. SA plays a role in the competitive performance of private universities in that they enable quick and effective responses to changing situations (Lyn Chan & Muthuveloo, 2021). Agility in response to changing situations is facilitated through creativity through sustaining continuous renewal in strategy and magnification of SA effects. Perceived creativity boosts service quality and service quality is key to achieving SCA. Managerial implications and potential contributions are elaborated in the discussion (Masood et al., 2011; Setyaningrum et al., 2023).

Strategic Agility

Technological advancements have removed boundaries between countries, enhancing market access and fostering international partnerships, yet rapid globalization introduces uncertainty for profit-driven firms, making stability essential (Otegui, 2024). Strategic management involves upper management's efforts to address challenges posed by unchangeable factors, aiming to strengthen organisations against competition and global changes (Franco et al., 2022; Yu & Huang, 2021). Existing literature offers methodologies for strategic management, aiding scholars and firms in acquisitions and case studies. Success requires comprehensive self-assessment through SWOT analysis to evaluate strengths, weaknesses, opportunities, and threats. Developing strategic insight and long-term visions is crucial to avoid reactive management, which hinders competitiveness (Ayub et al., 2014; Verma et al., 2024).

Sustainable Competitive Advantage

Organisations must adapt to market changes and consumer needs, ensuring that innovations deliver tangible benefits. This requires a commitment to continuous creative development, allowing the organisation to maintain a competitive edge by enhancing offerings and remaining relevant in a dynamic environment (Ameen et al., 2022). Administrative creativity improves the adoption of new methodologies and technologies, increasing efficiency in the production of goods and services. Enhancing creativity at individual or organisational levels can lead to a SCA, positioning a

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company advantageously for sustainable growth (Azeem et al., 2021). Research also highlights a significant positive effect of creativity on CA, although the link between creativity and SCA remains underexplored (Farida & Setiawan, 2022). SCA refers to an organisation's ability to create distinct value through strategic applications. To achieve SCA, companies must adopt agile strategies to respond to environmental demands and effectively formulate and implement relevant strategies across all levels (Azeem et al., 2021).

The Relationship Between Variables and the Development of Hypotheses

Private universities, both globally and in Iraq, face significant challenges in competing for sustainability within a highly dynamic and uncertain environment. A comprehensive literature review highlights OC as a critical intervening factor (Khamis et al., 2021). This study demonstrates that OC significantly moderates the relationship between SA and SCA, both gradually and directly, emphasising the importance of adopting SA and fostering creativity to sustain CAs. Universities, as engines of advancement, play a pivotal role in knowledge-oriented activities. With the rise of the knowledge-based economy, corporations increasingly rely on universities and research centres for CAs in strategic goods and services (Grant, 2021; Penprase & Pickus, 2023). As a result, private universities have embraced entrepreneurial approaches, planning and executing activities to enhance SA. Achieving competitive sustainability is crucial yet challenging, with competencies such as new publications and intellectual property being essential for establishing SCA (Nasib et al., 2022).

Furthermore, advancing strategic processes and theoretical systems will support the development of new knowledge, laying the groundwork for innovation (Asif & Rodrigues, 2015; Jackson, 2005). Higher education institutions now operate in a highly competitive, rapidly changing global environment (De Wit & Altbach, 2021). Despite limited empirical evidence on SA in higher education, its importance for adapting to external changes is clear (Turgay et al., 2014). Universities must become more flexible and responsive to remain competitive and improve their position (Li et al., 2022). The education sector, one of the growing service industries, must consider SA to maintain pricing power and thrive in a competitive market while developing an international strategy to establish themselves as world-class institutions (Menon & Suresh, 2021). This study aims to expand the understanding of SA in higher education, focusing on its role in developing SCA within Iraqi private universities. Additionally, while established concepts and techniques exist to improve strategic management competencies in education, a deeper understanding of strategic business management tools would benefit educational leaders (Sharp & Taylor, 2020). OC mediates the relationship between SA and SCA, transferring the benefits of SA into SCA through creative and innovative strategies. The following research hypotheses are formulated:

H1: *There is a statistically significant positive effect of SA on SCA in the studied Iraqi private universities.*
H2: *SA has a positive effect on enhancing OC in the Iraqi private universities studied*.

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H3: *OC significantly affects the SCA of the studied Iraqi private universities.*
H4: *OC mediates the relationship between SA and SCA of the Iraqi private universities studied.*

METHODOLOGY

Sample

A descriptive analytical approach was employed, focusing on a sample of senior leaders and supervisors from the 16 largest private universities in Baghdad, Iraq, out of the 32 universities operating in the country. These universities were selected due to their status as the first private institutions established in Iraq. The study population consisted of 4,560 individuals, from which a random sample of 430 participants was chosen, including university presidents, assistant presidents for administrative affairs, university deans, directors of scientific and administrative departments, assistant department directors, and department officials. A total of 385 valid responses were retrieved after excluding incomplete questionnaires, resulting in a final sample size of 385 valid questionnaires.

Table 1: Sample Characteristics

Sample	Details	Number	Ratio
Gender	Female	115	29.87%
	Male	270	70.13%
Education Level	Bachelor's	50	12.99%
	Higher Diploma	40	10.39%
	Master's	120	31.17%
	Doctorate (Ph.D.)	175	45.45%
Experience	Less than 5 years	48	12.47%
	From 5 to 10 years	99	25.71%
	From 11 to 15 years	85	22.08%
	From 16 to 20 years	120	31.17%
	More than 20 years	60	15.58%
Domain	University President	16	4.16%
	Vice President for Academic and Administrative Affairs	32	8.31%
	Deans of Colleges	40	10.39%
	Department Heads	80	20.78%
	Assistant Department Directors	65	16.88%
	Unit Managers	50	12.99%
	Employees & Lecturer's	102	26.49%

The results reveal a significant gender disparity, with males representing 70.13% and females 29.87%. This distribution may reflect the gender gap in Iraqi higher education or be influenced by cultural and social factors affecting admission and employment in academic institutions. Regarding educational qualifications, the largest proportion of participants hold a doctorate (45.45%), followed by a master's degree (31.17%), indicating a highly educated sample, primarily consisting of academics in academic and administrative roles. However, the smaller proportions of participants holding

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bachelor's degrees (12.99%) and higher diplomas (10.39%) suggest a focus on highly qualified staff. The experience distribution is diverse, with 31.17% of participants having 16 to 20 years of experience, indicating a sample of seasoned professionals. The low percentage (12.47%) of those with less than five years of experience suggests a preference for hiring individuals with strong professional backgrounds, which may impact innovation in academic thinking. From an administrative standpoint, lecturers and teaching staff constitute the largest group (26.49%), then department heads (20.78%) and assistant directors (16.88%). The diverse spread signifies a complex organisational structure with multiple levels of leadership. The results provide important information about the educational and professional backgrounds of the sample and confirm the validity of the answers given to the current study, in Iraqi private universities.

Model of Study

The independent variable SA (Strategic Sensitivity, Resource Fluidity, and Unity of Leadership) from Doz (2020) and Fakunmoju et al. (2020) and the dependent variable SCA (Market Share, Quality, and Cost). The mediating variable, OC (Creativity Novelty and Creativity Usefulness) includes two dimensions from the research work of (Ahmed et al., 2024).

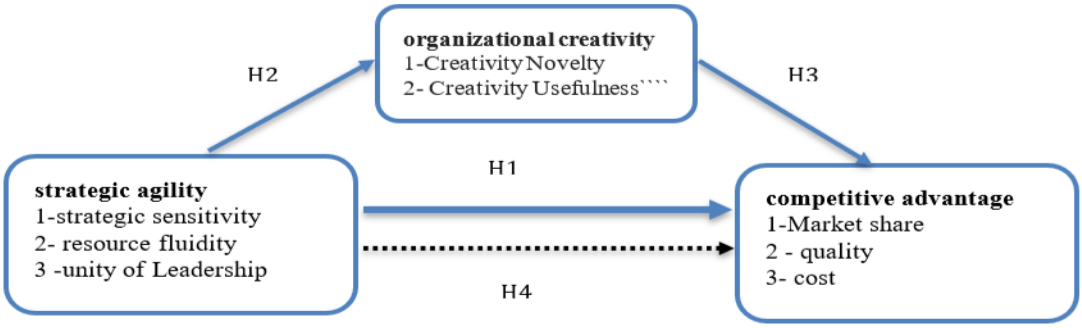

Figure 1: Model of Study

RESULT

Descriptive Statistics

Table 2 presents the results from descriptive statistics of the primary variables and the related sub-dimensions. The descriptive statistics of the variables under study provide information regarding participants' perceptions regarding the organizational performance in Iraqi private universities. The data were analyzed based on the number of observations, mean, standard deviation, and relative importance ratio (RII) per variable. The results reveal that the SA variable had a mean value of 3.788 and emphasizes the importance of responding to environmental changes in the studied private universities in a timely manner. The RII value of 0.757 reflects the ability of the universities to enhance the performance efficiency through adaptability and agility.

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Table 2: Descriptive Statistics.

Variables	N	Mean	Std. Deviation	RII
Strategic Sensitivity	385	3.7377	0.6037	0.7475
Resource Fluidity	385	3.7720	0.5707	0.7544
Unity of Leadership	385	3.8566	0.5813	0.7713
SA	**385**	**3.7888**	**0.4814**	**0.7578**
Creativity Novelty	385	3.6500	0.7823	0.7300
Creativity Usefulness	385	3.6461	0.8725	0.7292
OC	**385**	**3.6481**	**0.7596**	**0.7296**
COST	385	3.4899	0.7951	0.6980
QUALITY	385	3.3242	0.5928	0.6648
Market Share	385	3.3987	0.8241	0.6797
SCA	**385**	**3.4042**	**0.6493**	**0.6808**

Of the three sub-dimensions to SA, leadership unity emerged with a mean score of 3.856 and standard deviation 0.58. The scores indicate high levels of agreement among participants on the role played by effective leadership in achieving organisational goals. The high RII score of 0.77 indicates high awareness on the role played by leadership in ensuring cooperation and achieving desired outcomes. Resource flexibility emerged second with a mean score of 3.77 representing the role played in ensuring adaptability to changing environments within the organisation. The low standard deviation of 0.57 indicates high levels of agreement among participants and strengthens the belief that flexibility is a key determinant of organisational performance. The second dimension, that of strategic sensitivity, received a positive rating with a mean score of 3.737. The finding points to the need to acknowledge changes in the external environment and understand implications on organisational strategy.

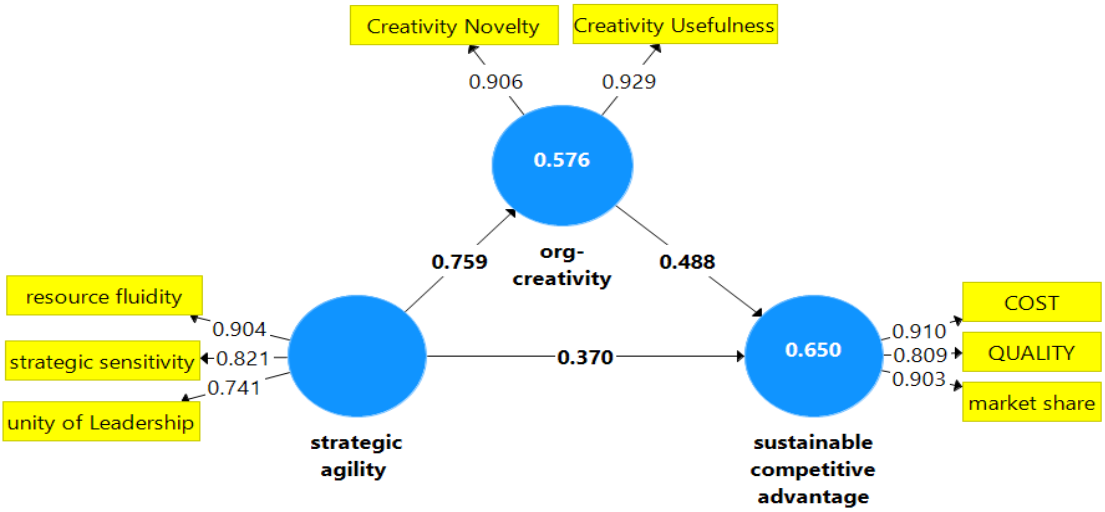

Figure 2: Reliability and Validity for Relationship Between SA, SCA And OC

The mean of 3.648 in the OC variable reflected participants' recognition of the necessity to enhance creativity in the organisation. The standard deviation of 0.759 reflects

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relative consistency in the opinion that creativity should be enhanced. About creativity in terms of novelty (mean = 3.6500) and utility (mean = 3.6461), the results indicate a strong appreciation of creativity with standard deviations 0.7823 and 0.8725 respectively, suggesting consistency in response. The cost dimension had a mean of 3.489 and the quality dimension had a mean of 3.3242 with a standard deviation of 0.592 suggesting relative consistency in the opinion that quality standards were not met despite the low mean. The market share dimension had a mean of 3.3987 and a standard deviation of 0.824 suggesting relative consistency in the opinion that market share impacts university performance. The mean in the SCA was 3.4042 and reflects the importance of the variable. The results provide a strong platform to establish measures to enhance creativity and efficiency and hence enhance the SCA in Iraqi private universities.

Relevance and Tests of the Relationship Between Variables for the First Model

The first model seeks to examine the direct and indirect effects of SA, the independent variable, on SCA, the dependent variable, with OC serving as a mediator. Table 3 provides a summary of the quality and suitability of the first model. The results in Table 3 indicate that the model demonstrates high reliability, as evidenced by Cronbach's Alpha and Composite Reliability. Both convergent and discriminant validity confirm the quality of the constructs. Based on these findings, we proceeded with analysing the model's paths to assess the effects, as presented in Table 4.

Table 3: Quality and Suitability of the First Model.

Indicator	Value	Interpretation
SRMR	0.079	Values less than 0.08 indicate good model fit.
d_ULS	0.224	Values closer to zero indicate a better fit.
d_G	0.161	Values closer to zero indicate a better fit.
Chi-Square	375.8	Sensitive to large sample sizes, but other values such as SRMR support model fit.
NFI (Normed Fit Index)	0.804	Values between 0.80 and 0.90 may be acceptable, but values above 0.90 are considered better.
R^2 (org-creativity)	0.576	The proportion of variance explained in OC by independent variables.
R^2 CA	0.650	Proportion of variance explained in SCA.
f^2 (org-creativity -> SCA)	0.289	Large effect (values > 0.15).
f^2 (SA -> org-creativity)	1.357	Very large effect.
f^2 (SA -> S C A)	0.166	Large effect.
Cronbach's Alpha (SA)	0.762	Values > 0.70 indicate good reliability.
Cronbach's Alpha (org-creativity)	0.813	Values > 0.70 indicate good reliability.
Cronbach's Alpha(S C A)	0.848	Values > 0.70 indicate good reliability.
Composite Reliability (org-creativity)	0.914	Values > 0.70 indicate good reliability.
SA	0.864	Values > 0.70 indicate good reliability.
Composite Reliability (S C A)	0.907	Values > 0.70 indicate good reliability.
AVE (SA)	0.680	Values > 0.50 indicate good convergent validity.
AVE (S C A)	0.766	Values > 0.50 indicate good convergent validity.
AVE (org-creativity)	0.842	Values > 0.50 indicate good convergent validity.

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Table 4: SA, SCA, and OC.

Path Coefficients	β	(M)	(STDEV)	T	P Values
org-creativity -> SCA	0.488	0.491	0.056	8.740	0.000
SA -> org-creativity	0.759	0.760	0.023	33.454	0.000
SA -> SCA	0.370	0.368	0.055	6.691	0.000

Tests of the Relationship Between Variables

Path 1: org-creativity -> SCA: β= 0.488 and statistical significance: p-value = 0.000 (statistically significant). This suggests that the relationship between org. innovation and SCA is strong and positive, meaning that increasing org. innovation enhances SCA.

Path 2: SA -> org-creativity: β= 0.759 and p = 0.000 (statistically significant). This indicates a strong and positive relationship between SA and organizational innovation, highlighting the significant impact of SA on fostering organizational innovation.

Path 3: SA -> SCA β =0.370 and p = 0.000 (statistically significant), meaning that the relationship between SA and SCA is positive and significant, indicating the role of SA in enhancing SCA.

Path 4: SA -> org-creativity -> SCA. The coefficient β = 0.371, and the value of p = 0.000 (statistically significant). This suggests that SA indirectly influences SCA by enhancing organizational innovation.

The direct effect of SA → SCA is statistically significant (0.370).
The indirect effect of SA →, org-creativity, → SCA is statistically significant (0.371).
The total effect of SA → SCA is statistically significant (0.741).
Relevance and Tests of the Relationship Between Variables for the Second Model

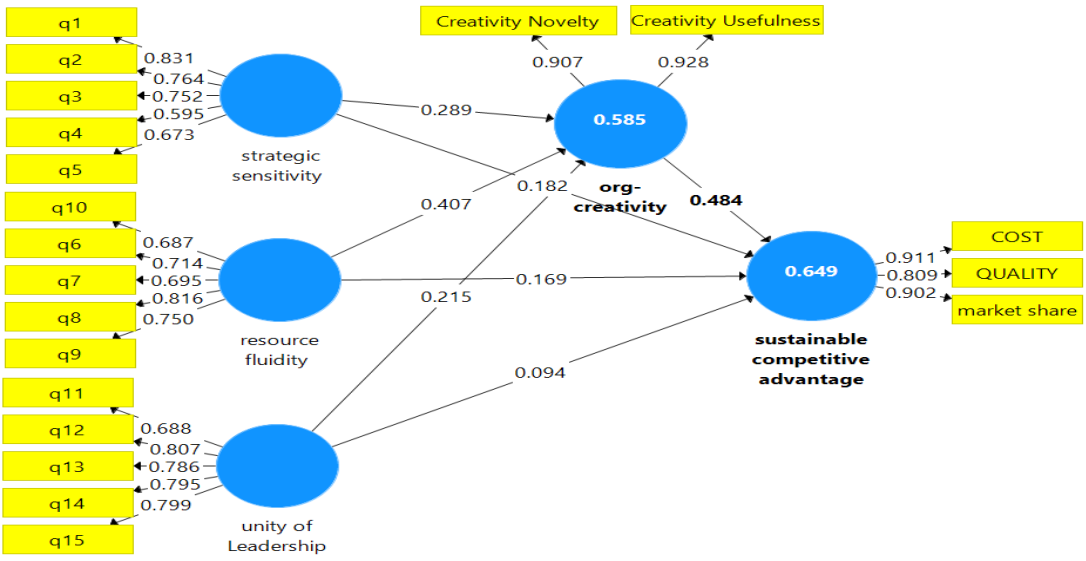

Figure 3: Reliability and Validity for the Relationship Between SA Dimensions, SCA, and OC

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Examine the impact of the three sub-dimensions of the independent variable, SA (Strategic Sensitivity, Resource Fluidity, and Unity of Leadership), on the dependent variable, SCA, considering the mediating role of OC, as illustrated in Figure 3.

Table 5 presents an analysis of the quality and suitability of the second model.

Table 5: Quality and Suitability of the Second Model.

Variables	Items	Outer loadings	Cronbach's Alpha	CR	(AVE)
Strategic Sensitivity	Q1	0.831	0.774	0.847	0.529
	Q2	0.764			
	Q3	0.752			
	Q4	0.595			
	Q5	0.673			
Resource Fluidity	Q6	0.714	0.785	0.853	0.539
	Q7	0.695			
	Q8	0.816			
	Q9	0.750			
	Q10	0.687			
Unity of Leadership	Q11	0.688	0.834	0.883	0.602
	Q12	0.807			
	Q13	0.786			
	Q14	0.795			
	Q15	0.799			
Org-Creativity	Creativity Novelty	0.907	0.813	0.914	0.842
	Creativity Usefulness	0.928			
SCA	COST	0.911			
	QUALITY	0.809	0.848	0.907	0.766
	Market Share	0.902			
Org-Creativity R^2	0.585				
S C A R^2	0.649				

The findings in Table 5 provide key insights into the validity, reliability, and overall quality of the second model. The external loadings indicate that most items exceed the minimum threshold of 0.7, confirming their strong representation of the variables, except for (q4, q5) under strategic sensitivity, (q7, q10) under resource fluidity, and (q11) under unity of leadership. As noted by Hair et al. (2017), items with loadings between 0.40 and 0.70 should be assessed for their impact on model criteria before removal. Since eliminating these items does not affect other measurement criteria, they were retained. Cronbach's alpha values demonstrate high reliability, with scores above 0.7 deemed acceptable and those exceeding 0.8 considered excellent. The composite reliability (CR) values surpass 0.7, affirming strong internal consistency. Furthermore, the average variance extracted (AVE) values exceed 0.5, indicating that the model captures more than half of the variance in the measured constructs. These results

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confirm the model's validity and reliability, warranting further analysis of variable relationships, as outlined in Table 6.

Table 6: Test of the Path for SA Dimensions, SCA and OC.

PATH	β	(STDEV)	T	P Values
Org-Creativity -> SCA	0.484	0.060	7.998	0.000
Resource Fluidity -> Org-Creativity	0.407	0.048	8.465	0.000
Resource Fluidity -> SCA	0.169	0.056	3.015	0.003
Strategic Sensitivity -> Org-Creativity	0.289	0.049	5.952	0.000
Strategic Sensitivity -> SCA	0.182	0.045	4.051	0.000
Unity of Leadership -> Org-Creativity	0.215	0.043	4.977	0.000
Unity of Leadership -> SCA	0.094	0.047	2.003	0.046
Indirect Effects				
Resource Fluidity -> Org-Creativity -> SCA	0.197	0.035	5.588	0.000
Strategic Sensitivity -> Org-Creativity -> SCA	0.140	0.029	4.850	0.000
Unity of Leadership -> Org-Creativity -> SCA	0.104	0.024	4.263	0.000

The results in Table 6 indicate that OC has the most significant impact on SCA, with a coefficient of 0.484, implying that a one-unit increase in OC enhances the SCA of Iraqi private universities by 48%. Among the three SA dimensions, resource fluidity has the strongest effect on OC (40.7%) and influences SCA by 16.9%. Strategic sensitivity impacts OC by 28.9% and SCA by 18.2%, while unity of leadership affects OC by 21.5% and SCA by 9%, making it the least influential factor. Regarding the indirect effect, all three SA dimensions significantly influence SCA through OC. Resource fluidity has the strongest indirect impact (0.197), followed by strategic sensitivity (0.14) and unity of leadership (0.104). The mediation effect of OC is partial, confirming its role in linking SA to SCA in Iraqi private universities. Based on these findings and the results from the first and second models, all four research hypotheses (H1, H2, H3, H4) are supported.

DISCUSSION OF RESULTS

Research has found SC to be a strong and positive predictor of SME performance. However, despite comprehensive literature and real-world applications, the mechanisms through which SC affects firm performance have not received extensive examination. The objective of the current study was to bridge the gap through an investigation into the extent to which OC mediates SA and the supply chain relationship. Drawing on data from Iraqi private universities, the study sheds new insights into the SA-OC-SC relationship and tests OC's role in mediating between SA and SC. The findings confirm SA to be an antecedent to SCA in line with supply chain theory. Supporting hypothesis H1, SA has a strong positive correlation with SCA and confirms the argument that organisational flexibility enhances the achievement of strategic goals. SA enables a firm's capacity to sense, shape, and seize opportunities through adaptive

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and agile resource allocation.

In contrast to traditional responses to strategy, flexibility entails a sense-and-response system (Turgay et al., 2014). Strategically flexible firms possess heightened awareness about market forces and adapt to changing conditions in a swift manner. Such flexibility enables firms to redeploy and reallocate resources cost-effectively and position themselves to react faster than competitors and to leverage change as a source of strength. The research findings indicate that building SCA in Iraqi private universities entails strategically investing in OC and SA. The research findings confirm hypothesis H2 and H3 and that such an investment constitutes a wise strategic decision. The research further confirms the strong direct and mediating effects of OC and SA on CA and supports hypothesis H4 and the contention that OC reinforces SA's impact on SCA. The effect may be varied in varied countries and particularly in view of the varied challenges confronting private universities in Iraq from those in other nations (Kadhim et al., 2018).

Theoretically, the study contributes to the limited literature through the clarification of the role played by OC in the SA–SCA relationship in developing countries like Iraq. Existing models of strategy based primarily on competitive market conditions in Western economies or NATO+5 countries may not capture the complexity involved in Iraq's unique higher education system. Instead, economic models in countries like Pakistan and India or the Middle East region may be more applicable in providing relevant strategic insights. With the limited international research in the field of SCA in the higher education system in conflict-stricken countries like Iraq, the study highlights the need to enhance curricula with SA and OC to improve SCA (Ayub et al., 2014). Policymakers can similarly utilize the findings to formulate evidence-based policies to improve institutional competitiveness and sustainability.

LIMITATIONS AND IMPLICATIONS

There are a range of limitations to the current study in that its concentration on a single industry in a single country might restrict the generalizability of the findings to other settings and contexts. Moreover, the quantitative method employed in the absence of qualitative research in the field limits the depth of insight into the complex dynamics between SA, organisational innovation, and SCA. Future research would be improved through the application of qualitative methods to provide a richer insight into the dynamics between the constructs. Future research may explore the relationship between the constructs in alternative sectors or at the organisational level with the inclusion of additional mediating or moderating variables informed through multiple theories. Other than meta-analytic techniques, the application of structural equation modeling or higher-order statistical methods to estimate the effects of mediation and moderation may provide richer insights.

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Although the sample size was adequate, the cross-sectional nature of the data—collected only from staff and managers at 16 universities—could affect the validity and generalisability of the findings. Longitudinal data collection or triangulation across sources would increase robustness, with time series data possibly contributing to an understanding of changing trends. With the potential for common method bias inherent in surveys and questionnaires, the addition of qualitative research or contextual data would support the study's findings. A mixed-methods design, incorporating experiments or intervention studies, would shed further light on the causal links between SA, OC, and SCA. Alternatively, case studies or interviews would complement survey data, enabling deeper insight into organisational cultures conducive to SA and OC. Cross-cultural or cross-sectoral studies in several countries would also result in a broader and more generalisable understanding of these relationships.

CONCLUSION

The study identified that creativity functions as an intervening variable in the positive link between SA and SCA. Enhanced agility in the strategy and operations of Iraqi private universities enhances considerably their SCA. Consequently, accuracy and timing in strategy initiatives and effective implementation of organisational processes with the aid of OC contribute to the achievement of SCA objectives such as cost reduction, market expansion, and quality enhancement in operations. A new framework for Iraqi private universities was introduced and its implications and limitations were examined along with recommendations for future research. With the findings from the research, there should be increased focus placed on the role played by OC in the establishment of strategic flexibility and enhancing CA and evading risks in institutions. Universities must implement adaptive mechanisms that enable them to be responsive to the changing higher education context through effective reallocation of resources in response to market changes. Iraqi private universities should further invest in training programmes that will improve OC. Training programmes may be in the form of workshops, training courses and interactive projects that enable innovative thinking and sharing of knowledge among teaching and administrative staff. The integration of technological advancements and establishment of strategic partnerships with domestic and international educational institutions would further facilitate sharing and innovation in knowledge. Such activities would facilitate best-practice transfer and ultimately enhance the SCA in Iraqi private universities.

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