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RESEARCH ARTICLE

Regulatory Immunity as a Driver of Strategic Superiority: Evidence from Team Mart Supervisors in Erbil, Iraq

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Abstract

This study aims to investigate the role of regulatory immunity in enhancing strategic superiority from the perspective of supervisors working at the Team Mart Chain in Erbil, Iraq. Understand the notion of regulatory immunity by demonstrating the relationship and influence of the independent variable and its dimensions (organizational learning, memory, and DNA) in strategic superiority. To address the research problem, the following question was examined: to what extent does regulatory immunity contribute to strengthening strategic superiority? However, to acquire empirical data, the researchers created their own survey questionnaire. Empirical data were evaluated using a variety of statistical methods to test the research model and major hypotheses using statistical package programs (SPSS V.24). In Erbil Governorate, total of 216 supervisors from the Team Mart chain were invited to participate in the study, and 171 valid questionnaires were returned, representing a response rate of 79%.. The empirical analysis demonstrates a statistically significant positive correlation between regulatory immunity and strategic superiority. Within this framework, organizational memory emerges as the most dynamic mechanism for facilitating immediate regulatory adaptation. The findings imply that firms might achieve strategic superiority by aligning their DNA with the current regulatory framework. Companies build systemic resilience into their identities by aligning key governance mechanisms with institutional expectations. Furthermore, finding an appropriate balance between short-term adaptive learning and long-term structural stability, aided by organizational memory, is critical for maintaining a competitive advantage.

Keywords: Regulatory immunity, Strategic superiority, Organizational learning, Organizational DNA, Team mart supervisors in Erbil retail sector

1. Introduction

In today's dynamic business environment, organizations operate under increasing levels of uncertainty, complexity, and competitive pressure(Ahmed, 2022). Markets attaining strategic superiority involves more than just creative products; it requires an organizational "immune system" capable of going through challenging regulatory environments. However, large markets need to make significant efforts to maintain their position and fend off external threats. They must wisely monitor the energetic changes in the internal and external environment, and strengthening its interior environment by enhancing its strengths (Alshawabkeh, 2021). For this reason, organizations should effectively respond to environmental changes and the requirements (Amin & Ali Mhaibes, 2024). To achieve this important goal, it is essential to work on using effective and modern techniques to defend themselves against the threats they encounter in a competitive environment (Ebabekir, 2021, 374). One of the organizational approaches adopted by firms is organizational immunity, which refers to the processes used to protect organizations from external

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threats and identify the factors that generate such threats (Abass & Abdul Qader Al-Naimi, 2025a). Regulatory immunity has emerged as a key concept in strategic management, referring to an organization's ability to prevent, withstand, and react to regulatory changes and external institutional pressures without risking its main strategic goals. The retail sector in Erbil, especially represented by large-scale chains such as Team Mart, operates at the intersection of local traditional markets and modern international standards to attain superiority, a company must not only beat its competitors in terms of efficiency, but also display resilience in the face of external "shocks" to its value chain. Strategic superiority is now a dynamic capability based on the firm's capacity to be "immune" to the unpredictability of the host country's regulatory environment rather than a static condition. This study investigates how internal governance systems and adherence to international quality standards function as the foundation of this immunity by looking at the perspectives of Team Mart supervisors. In contemporary global market, attaining strategic superiority involves more than just creative products; it requires an organizational "immune system" capable of going through challenging regulatory environments. However, large markets need to make significant efforts to maintain their position and fend off external threats they face. To achieve this important goal, it is essential to work on using effective and modern techniques to defend themselves against the threats they encounter in a competitive environment (Ebabekir, 2021, 374). One of the techniques or organizational methods followed by organizations is organizational immunity, which pertains to the organizational processes aimed at protecting the organization from external threats and identifying the factors that cause such threats (Al-Ta'i, 2016). Regulatory immunity has developed as a key concept in strategic management, referring to an organization's ability to prevent, withstand, and react to regulatory changes and external institutional pressures without jeopardizing its main strategic goals. As argued by Al-Khafaji, (2022), companies with a high level of regulatory compliance and institutional alignment may establish a "defense" to ensure operational continuity while competitors face legal or administrative challenges. According to Majeed and Lafta, (2022), organizational immunity is capable of adapting to rapid and unexpected changes that are influenced by information systems, programs, expertise, knowledge, and experiences. The retail sector in Erbil, especially represented by large-scale chains such as Team Mart, operates at the intersection of local traditional markets and modern international standards to attain superiority, a company must not only beat its competitors in terms of efficiency, but also display resilience in the face of external "shocks" to its value chain. According to Barakat and Hassan, (2021, 112), Strategic superiority is now a dynamic capability based on the firm's capacity to be "immune" to the unpredictability of the host country's regulatory environment rather than a static condition. This study investigates how internal governance systems and adherence to international quality standards function as the foundation of this immunity by looking at the perspectives of Team Mart supervisors. Selecting a retail sector, Team Mart Chain; this revived sector is considered to be a suitable choice for examining how regulatory immunity can lead to strategic advantage. This is because retail companies frequently face regulatory examination, and successful compliance can translate directly into a stronger market position. In the context of business research, especially due to macroeconomic pressure and rising costs, regulatory immunity describes an organization's inherent capacity to manage, resist, and effectively counter external pressures and the consequences of noncompliance. This study is particularly significant due to its narrow focus on Erbil Governorate. It fills a significant knowledge gap: the lack of empirical evidence on how Iraqi retail managers comprehend the relationship between regulatory compliance and establishing market domination. As Salih, (2023, 18) notes, the KRI market presents unique challenges, including fluctuating import-export laws and licensing complexities. Therefore, understanding how Team Mart uses regulatory immunity to strengthen its market position provides valuable insights for both practitioners and policy makers. Accordingly, this study aims to investigate the relationship between regulatory immunity and strategic superiority and to assess the impact of the dimensions of regulatory immunity on strategic superiority. Specifically, the study seeks to answer the following research question:

To what extent does regulatory immunity contribute to enhancing strategic superiority among supervisors working in Team Mart stores in Erbil Governorate? The results and suggestions of this research may contribute or benefit the Team Mart chain in adopting organizational immunity and strategic superiority. This paper structure by four sections, section one describes theorical and related literature of research subjects, the second section focuses on methodology of the research, in the third section, the research discusses findings and finally in the fourth section explains conclusion. Therefore, understanding how Team Mart uses regulatory immunity to strengthen its market position provides valuable insights for both practitioners and policy makers. The research aims to better understand the relationship between organizational immunity and

strategic superiority, as well as to establish the nature of the influence of organizational immunity on the samples studied. The results and suggestions of this research may contribute or benefit the Team Mart chain in adopting organizational immunity and strategic superiority. This paper structure by four sections, section one describes theorical and related literature of research subjects, the second section focuses on methodology of the research, in the third section, the research discusses findings and finally in the fourth section explains conclusion.

2. Literature review and hypothesis development

Contemporary organizations operate in highly volatile and uncertain environments characterized by rapid technological advancements, evolving regulatory frameworks, and increasing competitive pressures. The business atmosphere is becoming increasingly unstable. This requires a shift in how we could understand organizational resilience. Under such conditions, organizations live like humans in a volatile, fast-moving, complex, and rapidly-changing environment; they need to adapt to the existing situations and keep themselves from the threats that may be exposed to -present day or in the forthcoming (Alshawabkeh, 2021). In this setting, regulatory immunity appears as a key strategy. In a direct parallel to human biology, just as the human body has physical capabilities through an immune system, organizations must embrace the philosophy of establishing a sound health system for the company, which refers to the company's flexibility in its ability to defend itself (Ahmed, 2022). As Saed (2025) defines it as the ability to identify and eliminate intruders inside and outside the organization, enabling it to maintain health in a highly risky environment. Identifying intruders is one of the primary objectives of the organization's immune function. Similarly, intricate networks of tasks and employees that protect the organization from changes (Abu Borhom, 2022); (Haasan & Haddadi, 2024). Likewise, it enables markets to detect environmental threats that today's highly dynamic and competitive businesses face continuous challenges (Husien et al., 2023); (Abd Alkawy, 2025). According to Al-Awamleh & A. Alshaer (2025). It's emerged as a dynamic tool for enhancing an organization's capacity to acclimate to such changes, keep its identity, and warrant the steadiness of its outstanding performance (Almaslawy, 2024). Emphasizes the organization's ability to adapt to challenges, including the increasing complexity of economic units. As it is one of the key competencies in business organizations and effective management in building and defending competitive advantages (Alsttar Mustafa Assayah, 2020). Moreover, organizational learning is a process that happens at the individual, group, and organizational levels. It involves intuiting, interpreting, integrating, and institutionalizing. This process can be adaptive, relying on single- loop learning, or it can be generative, based on double-loop learning. (Boztepe, 2022). The ability of the organization to recognize, recall, and react to environmental problems (Jabr & Mahmoud, 2022). Based on the theoretical foundations and empirical evidence, the following hypotheses are proposed:

H1: Regulatory Immunity is positively and significantly associated with strategic superiority.

H2: Regulatory Immunity has a significant Impact on strategic superiority.

Organizational learning is seen as a continuous process that arises from individual social interactions and behaviors (Ahmed, 2022). So, defined as the energetic method through which an entity detects environmental changes and converts them into adapted behavior and new knowledge (Al-Badayneh, 2021). Within the Middle Eastern food and retail sectors, strategic awareness is cultivated through continuous learning. stands as the most decisive safeguard against market volatility.

Sub.H1-1: There is a positive relationship between organizational learning and strategic superiority.

Sub.H2-1: Organizational learning has a significant impact on strategic superiority.

The effectiveness of the immune response is dependent on its ability to identify threats in advance. Equally, in organizational contexts, this function is accomplished by organizational memory. Organizational Memory comprises of earlier arranged information from decisions and solved problems (Almaslawy, 2024).

Sub.H1-2: There is a positive relationship between organizational memory and strategic superiority.

Sub.H2-2: Organizational memory has a significant impact on strategic superiority.

Organizational DNA represents the underlying "genetic code" that dictates how an organization executes strategy and behaves under pressure. This construct encompasses the core values of the

organization, its hierarchical structures of decision making, and the underlying normative "coding" that collectively determine patterns of organizational behavior. Proposed by Abass & Abdul Qader Al-Naimi (2025a) that organizational DNA simulates human genetics (DNA) as the "genetic code" that establishes an organization's particularity. Revealing that organizational DNA acts as a basic component that is considerably molded by a leader's capacity to balance exploration and exploitation. Besides, it carries the molecular commands for growing, progress, and function, supports markets to respond, adapt, and succeed in the face of uncertainty, and is powerful and compelling (Abd Alkawy, 2025). When compliance and ethical standards are woven into the company's DNA, the organization becomes naturally resistant to legal and reputational risks.

Sub.H1-3: Organizational DNA is positively and significantly associated with strategic superiority.

Sub.H2-3: Organizational DNA has a significant impact on strategic superiority.

Strategic superiority represents a comprehensive intellectual and philosophical method of management that relies on a method and methodology that specializes in how to achieve real results in the organization, in order to achieve some a balance in meeting the needs of all aspects related to the organization. Unlike temporary advantages, superiority is rooted in the "Strategic Awareness" of leadership, allowing them to decode complex market shifts and align resources toward long-term goals (Al-Badayneh, 2021). It is a state where corporations regularly use the benefits of enhanced "organizational learning" and "organizational memory" to not only compete but also set the pace of the market. In the end, an organization achieves strategic superiority when its internal immune system and strategic vision become so linked that they continuously evolve. In addition to navigating bureaucratic constraints in comparison to its competitors. According to Noviaristanti (2022), reputational immunity protects the company from external hostile shocks that influence buyer intentions, allowing it to maintain its strategic dominance in turbulent marketplaces.

3. Methodology

The research relied on the descriptive analytical approach as a main methodology for the research, given its suitability for describing research variables. Based on the above, the researchers were able to acquire the appropriate data to complete the research through books, theses, dissertations, and various studies done by different authors and researchers, as well as through the international information network, or "the internet." Data were collected primarily through a structured questionnaire, which will also be explained in the theoretical part of the research. The frequency, mean, and standard deviation of responses acquired by the researcher using the SPSS 24 program, as related to each statement given in the form of questionnaires, some of the tests that were acquired by the researcher, or suitable tests for acquiring knowledge about relationships between different variables.

3.1. Subject and procedure (Demographic profile)

The survey adopted a Census Sampling (Total Population Sampling) technique. 216 supervisors in the Team Mart chain in Erbil Governorate, Kurdistan Region. The questionnaire was distributed to all supervisor, and 171, or 79% of the supervisors, returned valid responses for analysis after being given the questionnaire. However, a further understanding of the respondents' profile is shown in Table 1

The demographic profile of the respondents in the study reflects a relatively young workforce. The majority of participants (39.8%) fall within the 21–25 age range, followed by 35.1% aged 26–30. A smaller portion of respondents are aged 31–35 (23.4%), while those above 35 years represent a very minimal share of the sample, with only 1.2% aged 36–40 and 0.6% aged 41–45. This suggests that the organizations surveyed are primarily composed of younger professionals, which may have implications for organizational learning and adaptability.

In terms of educational background, most respondents hold either a bachelor's degree (41.5%) or a technical diploma (34.5%), indicating a reasonably well-educated sample. Fewer participants reported a high school education (19.3%) or primary education (4.7%). The prevalence of higher education among respondents may contribute positively to organizational knowledge-sharing and strategic alignment efforts.

Regarding professional experience, a significant majority of respondents (64.3%) reported having between 1 and 5 years of total work experience. An additional 31.6% have worked for 6 and 10 years, while only 4.1% possess 11–15 years of experience. These findings are consistent with the earlier observation that the workforce is predominantly young. Moreover, a striking 79.5% of respondents have spent 1 and 5 years in their current positions, indicating a relatively fresh tenure within their current roles,

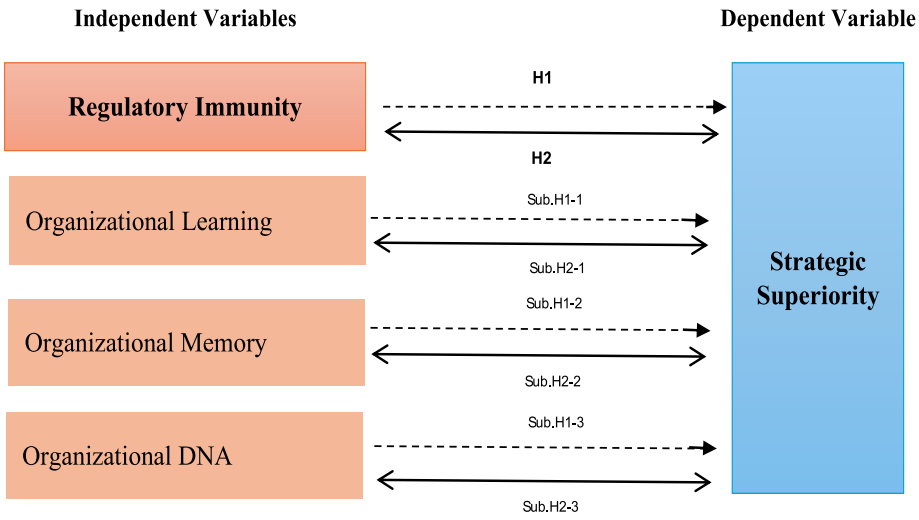

Fig. 1. Conceptual framework.
The source: Prepared by the authors.

Table 1. Demographic profile of responders.

Categorical Variables	Levels	N (%)	Regulatory Immunity Mean ± SD	Strategic Superiority Mean ± SD
Age Groups	21 - 25	68 (39.8%)		
	26 - 30	60 (35.1%)		
	31 - 35	40 (23.4%)		
	36 - 40	2 (1.2%)		
	41 - 45	1 (0.6%)		
Degree	Primary	8 (4.7%)	3.823 ± 0.485	3.958 ± 0.223
	High-School	33 (19.3%)	3.934 ± 0.610	3.823 ± 0.715
	Technic Diploma	59 (34.5%)	3.833 ± 0.622	3.751 ± 0.738
	Bachelor	71 (41.5%)	3.764 ± 0.539	3.573 ± 0.631
	ANOVA Test	F-Value (P-Value)	0.654 (0.581)	1.711 (0.167)
Total Experience	1 - 5	110 (64.3%)	3.857 ± 0.568	3.741 ± 0.688
	6 - 10	54 (31.6%)	3.779 ± 0.603	3.647 ± 0.686
	11 - 15	7 (4.1%)	3.643 ± 0.596	3.488 ± 0.470
	ANOVA Test	F-Value (P-Value)	0.678 (0.509)	0.705 (0.496)
Current Job Experience	1 - 5	136 (79.5%)	3.838 ± 0.572	3.747 ± 0.657
	6 - 10	34 (19.9%)	3.767 ± 0.621	3.520 ± 0.755
	11 - 15	1 (0.6%)	3.750 ± 0.000	3.583 ± 0.000
	ANOVA Test	F-Value (P-Value)	0.211 (0.810)	1.549 (0.216)
Workplace Location	Town	49 (28.7%)	3.803 ± 0.555	3.594 ± 0.652
	Township	25 (14.6%)	3.793 ± 0.597	3.757 ± 0.669
	inside the city	97 (56.7%)	3.842 ± 0.591	3.741 ± 0.696
	ANOVA Test	F-Value (P-Value)	0.114 (0.893)	0.860 (0.425)

The source: Prepared by the authors.

which might influence the perception and implementation of organizational practices.

Finally, when examining workplace location, over half of the respondents (56.7%) work in cities, followed by 28.7% in the countryside and 14.6% in district areas. The urban concentration of participants suggests a potential exposure to more dynamic competitive environments and access to broader organizational resources, which could impact their views on strategic superiority and organizational resilience.

3.2. Test of comparison

Descriptive statistics for the variable Regulatory Immunity across educational levels show similar mean scores: Primary (3.8230), high school (3.9344), technical diploma (3.8333), and Bachelor (3.7641), with an overall mean of 3.8236. Standard deviations are relatively low (0.48458–0.62249), indicating tightly clustered scores. **Levene's Test** for Regulatory Immunity ($p = 0.906$) confirms equal variances, allowing ANOVA to proceed.

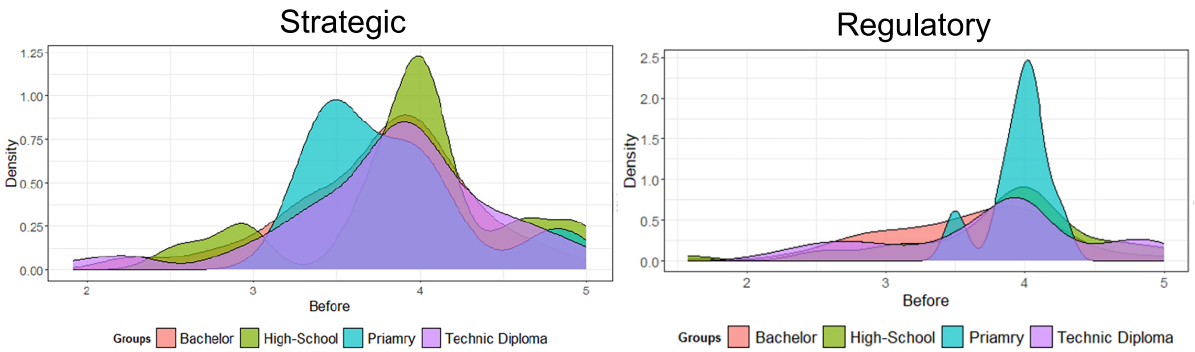

Fig. 2. Density distribution of both dimensions against educational background.
The source: Prepared by the authors.

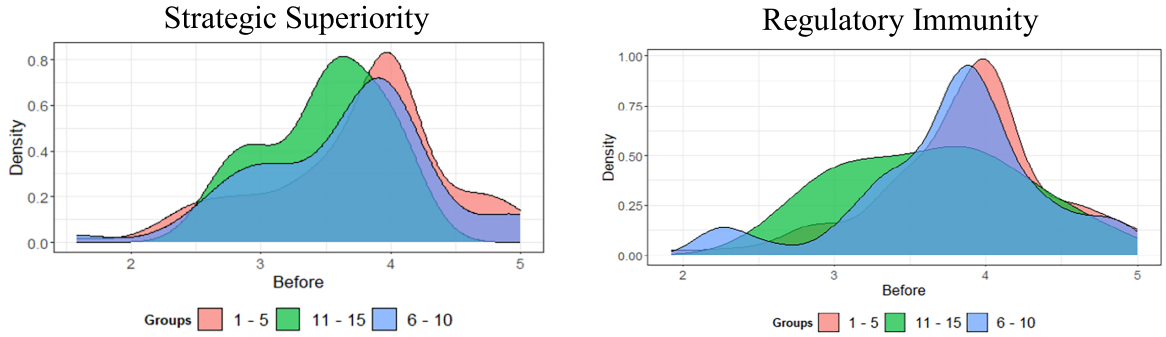

Fig. 3. Density distribution of both dimensions against total years of experience.
The source: Prepared by the authors.

ANOVA results ($F = 0.654$, $p = 0.581$) show no significant differences in Regulatory Immunity across education levels.

For variable Strategic Superiority, means vary more: Primary (3.9583), High-School (3.8232), Technical Diploma (3.7514), and Bachelor (3.5728), with an overall mean of 3.7008. Standard deviations range from 0.22268 to 0.73807, showing greater variability in higher education groups.

Levene's Test for Y ($p = 0.082$) suggests variances are acceptably equal. ANOVA ($F = 1.711$, $p = 0.167$) again indicates no significant differences across groups. Thus, educational level does not significantly affect the variables (Regulatory Immunity or Strategic Superiority), and Figs. 1 and 2 shows that their distribution was almost similar and overlapped completely

For variable regulatory immunity, when total experience is considered and grouped into ranges (1–5, 6–10, 11–15), the means are 3.8569, 3.7793, and 3.6429, respectively, with an overall mean of 3.8236. Standard deviations are similar across groups (0.56760–0.60340). Levene's Test ($p = 0.912$) confirms equal variances, so ANOVA was appropriate. The result ($F = 0.678$, $p = 0.509$) shows no significant difference across groups. This means that years of experience does not influence the employees to change their regulatory immunity.

For variable Strategic Superiority, means are 3.7410 (1–5), 3.6466 (6–10), and 3.4880 (11–15), with an overall mean of 3.7008. Standard deviations range from 0.46998 to 0.75498, with slightly higher variability in the 6–10 group. Levene's Test ($p = 0.556$) supports variance equality. ANOVA ($F = 0.705$, $p = 0.496$) indicates no significant differences in strategic superiority across the groups.

In summary, total experience grouping does not significantly affect the variables (Regulatory Immunity or Strategic Superiority). Fig. 3 illustrates that there were no notable differences between the employees with respect to total years of experience.

For variable Regulatory Immunity, location-based group means are: Town (3.8027), Township (3.7934), and City Center (3.8420), with an overall mean of 3.8236. Standard deviations are similar (0.55535–0.59715). Levene's Test ($p = 0.976$) confirms equal variances, and ANOVA ($F = 0.114$, $p = 0.893$) shows no significant difference across locations as illustrated in Fig. 4.

For the strategic superiority variable, means are: Town (3.5936), Township (3.7567), and City Center (3.7405), with an overall mean of 3.7008. Standard deviations range from 0.65197 to 0.69612. Levene's Test ($p = 0.969$) confirms homogeneity of variances. ANOVA ($F = 0.860$, $p = 0.425$) again shows no

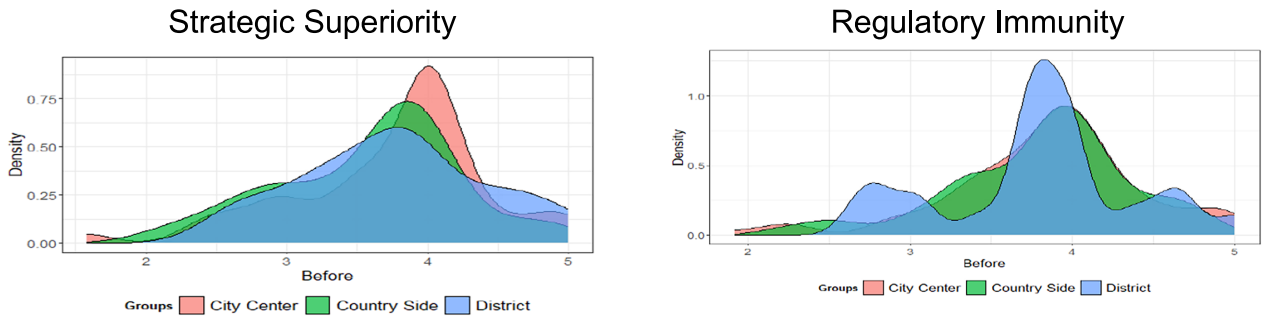

Fig. 4. Density distribution of both dimensions with respect to employees' workplace location.
The source: Prepared by the authors.

Table 2. Cronbach's Alpha for the full scale.

Reliability Statistics	
Cronbach's Alpha	N of Items
0.944	24

The source: Prepared by the authors.

significant location-based differences.In conclusion, location has no significant effect on the variables of regulatory immunity or strategic superiority.

3.3. Cronbach's alpha coefficient

To ensure the internal consistency of the measurement instrument used in this study, a reliability analysis was conducted using Cronbach's alpha. As presented in Table 2, the overall Cronbach's alpha coefficient for the 24 items was 0.944, indicating an exceptionally high level of internal consistency. This suggests that the items used to measure various dimensions of organizational immunity and strategic superiority are highly correlated and reliably assess the underlying constructs.

Individual item analysis shows that all corrected item-total correlations exceed 0.48, with most items scoring above 0.60—well above the commonly accepted threshold of 0.30, indicating that each item contributes meaningfully to the overall scale as show in Table 3. Furthermore, none of the items significantly reduced the alpha value when removed, affirming that all items are consistent with the scale's internal structure. For instance, the item "*The company excels in its ability to continuously change the rules of the competitive game*" had one of the highest item-total correlations (0.758), emphasizing its strong alignment with the overarching concept being measured.

In terms of item statistics, the mean scores for the individual items range from **3.60 to 4.04**, indicating a generally positive perception among respondents of their organizations' strategies. Standard deviations fall within a moderate range (approximately 0.73 to 1.02), indicating some variability in responses, but not to an extent that would suggest inconsistency or measurement error.

3.4. Regression analysis

The reliability results confirm that the instrument is both statistically sound and suitable for further inferential analysis, such as regression modeling, to examine the relationships between organizational immunity and Strategic Superiority. Table 4 shows the regression result for the models fit to achieve the objective of the study.

The first regression model explores the relationship between *Organizational Learning* and *Strategic Superiority*. The model shows a moderate to strong positive relationship ($R = 0.531$) and explains 28.2% of the variance in strategic superiority ($R^2 = 0.282$). The ANOVA results are highly significant ($F = 66.406$, $p < 0.001$), indicating that the model is a good fit. The coefficient for *Organizational Learning* is 0.511, with a standard error of 0.063, and a standardized beta of 0.531. This indicates that for every one-unit increase in *Organizational Learning*, *Strategic Superiority* increases by 0.511 units, and the relationship is statistically significant ($p < 0.001$).

The second model examines the impact of *Organizational Memory* on *Strategic Superiority*. The model shows a strong positive relationship with an R value of 0.610 and explains 37.3% of the variance in strategic superiority ($R^2 = 0.373$). The ANOVA results indicate a very strong model fit ($F = 100.331$, $p < 0.001$). The unstandardized coefficient for *Organizational Memory* is 0.672, and the standardized beta is 0.610, suggesting that *Organizational Memory* significantly contributes to strategic superiority. Specifically, for every unit increase in *Organizational Memory*, *Strategic Superiority* increases by 0.672 units, and this effect is highly significant ($p < 0.001$).

In the third model, variable Organizational DNA is used as a predictor for *Strategic Superiority*. The regression results show that the model accounts for 38.4% of the variance ($R^2 = 0.384$), with a slightly

Table 3. Item analysis and reliability statistics for organizational knowledge and competitive capability scale.

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The company has the necessary mechanisms to acquire knowledge from various sources.	86.5614	177.036	0.533	0.943
The company seeks to benefit from the expertise and skills of its creative supervisors.	86.5205	175.239	0.560	0.943
The company is constantly studying the variables surrounding the company and tries to link them in order to remove the ambiguity that distorts it.	86.4620	176.803	0.547	0.943
Key decisions in the company are made in light of the availability of clear and up-to-date information.	86.6550	173.133	0.638	0.942
The company has databases that are continuously updated.	86.2573	178.228	0.512	0.943
The company is continuously updating its managerial information systems data.	86.3333	176.024	0.644	0.942
The company employs its cognitive memory when making its decisions.	86.5263	177.427	0.586	0.942
The company is led by past experiences and supervisors' suggestions when making decisions.	86.5497	174.402	0.590	0.942
The company align between internal and external processes.	86.4971	174.769	0.669	0.941
The company focus on the culture of self-control among supervisors and employees.	86.4795	177.251	0.490	0.944
The company was faced to many situational problems and was able to solve them.	86.3275	175.857	0.610	0.942
The company has the ability to exploit regulatory immunity through internal and external adaptation.	86.4561	176.297	0.657	0.942
The company has a cohesive area of influence in the field in which it works.	86.4386	179.036	0.562	0.943
The company seeks to lead the market before competitors.	86.6842	172.135	0.615	0.942
The company maintains its position when rolling out its services offered to achieve strategic integration.	86.3567	176.878	0.631	0.942
The company is working to understand the influential competitors in the area of influence.	86.6374	172.703	0.621	0.942
The company knows and works to counter the type of competitive pressure that exists in the area of influence.	86.6842	171.676	0.663	0.941
The company seeks to build barriers that are difficult for competitors to overcome.	86.6901	173.333	0.617	0.942
The company develops creative strategies to sustain its position in the competitive environment.	86.5556	172.119	0.682	0.941
The company excels in adopting sustainable value in service delivery to overcome competitive pressure.	86.5673	171.612	0.741	0.940
The company exceptional in its ability to continuously change the rules of the competitive game.	86.6725	169.892	0.758	0.940
The company is committed to being proactive in building new competitiveness.	86.6608	171.920	0.705	0.941
The company is bearing in mind building a representation of the dominant forces over its own competitors in the competitive field.	86.6433	171.996	0.715	0.941
It tries to balance the sphere of influence with the competitive structure to remain the dominant force in its working sector.	86.5088	174.181	0.687	0.941

Source: Prepared by the authors.

stronger R value of 0.619. The ANOVA ($F = 105.134$, $p < 0.001$) confirms the model's strong statistical significance. The coefficient for Organizational DNA is 0.657 with a standardized beta of 0.619, implying that Organizational DNA has a substantial positive impact on *Strategic Superiority*. Each unit increase in Organizational DNA corresponds to a 0.657 unit increase in *Strategic Superiority*, with the result being statistically significant ($p < 0.001$).

The fourth model examines the combined effects of *Organizational Learning*, *Organizational Memory, and Organizational DNA* on *Strategic Superiority*. The

Table 4. Regression models predicting strategic superiority (Y) from organizational factors.

Model		Unstandardized Coefficients		T-value (p-value)	F Value (p-value)	R-Square
		B	SE			
Model 1	(Constant)	1.790	0.239	7.503 (p < .001)	66.406 (p < .001)	28.20%
	X1	0.511	0.063	8.149 (p < .001)		
Model 2	(Constant)	1.095	0.263	4.158 (p < .001)	100.331 (p < .001)	37.30%
	X2	0.672	0.067	10.017 (p < .001)		
Model 3	(Constant)	1.170	0.250	4.674 (p < .001)	105.134 (p < .001)	38.40%
	X3	0.657	0.064	10.253 (p < .001)		
Model 4	(Constant)	0.632	0.265	2.387 (0.018)	46.021 (p < .001)	44.30%
	X1	0.094	0.080	1.172 (0.243)		
	X2	0.334	0.097	3.442 (0.001)		
	X3	0.369	0.088	4.177 (p < .001)		
Model 5	(Constant)	0.735	0.262	2.806 (0.006)	131.239 (p < .001)	43.70%
	X	0.776	0.068	11.456 (p < .001)		

X1: Organizational Learning; X2: Organizational Memory; X3: Organizational DNA; X: Regulatory Immunity; Y: Strategic Superiority

Source: Prepared by the authors.

Table 5. Pearson correlation coefficients among organizational and strategic variables.

Strategic Superiority	Regulatory Immunity	Organizational DNA	Organizational Memory	Organizational Learning		
				1	Organizational Learning	X1
			1	0.691** (0.000)	Organizational Memory	X2
		1	0.688** (0.000)	0.643** (0.000)	Organizational DNA	X3
	1	0.874** (0.000)	0.890** (0.000)	0.889** (0.000)	Regulatory Immunity	X
1	0.661** (0.000)	0.619** (0.000)	0.610** (0.000)	0.531** (0.000)	Strategic Superiority	Y

Source: Prepared by the author.

model shows a moderate to strong fit, with an R value of 0.673 and an R^2 of 0.453, explaining 45.3% of the variance in *Strategic Superiority*. The ANOVA ($F = 46.021$, $p < 0.001$) confirms the significance of the model. Among the predictors, *Organizational Memory* ($B = 0.334$, $p < 0.001$) and *X3* ($B = 0.369$, $p < 0.001$) have significant positive effects on *Strategic Superiority*. However, *Organizational Learning* ($B = 0.094$, $p = 0.243$) does not significantly contribute to the model. These results suggest that *Organizational Memory* and Organizational DNA are more influential in enhancing *Strategic Superiority* than *Organizational Learning*. Organizational Learning remains important; however, its effect appears to be overshadowed by Organizational Memory and Organizational DNA.

The fifth model investigates the role of *Regulatory Immunity* in determining *Strategic Superiority*. The model presents a strong R value of 0.661, with an R^2 of 0.437, indicating that 43.7% of the variance in *Strategic Superiority* is explained by *Regulatory Immunity*. The ANOVA ($F = 131.239$, $p < 0.001$) further confirms that the model fits the data well. The coefficient for *Regulatory Immunity* is 0.776 with a standardized beta of 0.661, suggesting a significant and strong positive relationship. For every unit increase in *Regulatory Immunity*, *Strategic Superiority* increases by 0.776 units, and this relationship is highly statistically significant ($p < 0.001$).

Overall, the results show that several variables have significant positive effects on *Strategic Superiority*. *Organizational Memory* and *Regulatory Immunity* are the strongest predictors, with Organizational DNA also making a substantial contribution. *Organizational learning* was less influential, particularly in the presence of the other variables. These findings highlight the importance of organizational memory and regulatory immunity in enhancing a company's ability to maintain strategic superiority in its competitive environment.

3.5. Correlation analysis

As shown in Table 5, the correlation analysis shows significant positive relationships between the variables **X1**, **X2**, **X3**, **X**, and **Y**, with all p-values less than 0.05. **X1** has a strong positive correlation with **X2** (0.691), **X3** (0.643), **X** (0.889), and **Y** (0.531). Similarly, **X2** shows strong positive correlations with **X3** (0.688), **X** (0.890), and **Y** (0.610). **X3** is strongly correlated with **X** (0.874) and **Y** (0.619), while **X** and **Y** also have a strong correlation (0.661). Overall, these correlations indicate that as one variable increases, the others tend to increase as well.

4. Discussion

The statistical findings support earlier research on regulatory immunity and strategic superiority. Al-Badayneh (2021) demonstrated that strategic

awareness, fueled by continuous learning, improves organizational immunity in the retail sector. The current study adds to this discussion by demonstrating that, while organizational learning continues to be a positive contributor to strategic superiority, it is secondary to the tremendous impact of deep structural mechanisms known as organizational memory and organizational DNA. This is consistent with the emphasis on managerial cognitive abilities as dynamic drivers of adaptation. The great predictive value of organizational memory supports this (Mahmoud and Al-Jader, 2021), who believe that memory serves as intellectual capital, affecting cognitive development and guiding future action. The concept of organizational DNA aligns with (Simons', 2013) image of the "corporate immune system," where governance and values are incorporated in the firm's internal coding. These findings show that resilience is fundamentally encoded in organizational identity, rather than being reactive.

5. Conclusion

The findings reinforce Al-Badayneh (2021) argument that strategic superiority enhances organizational immunity, but they extend this by showing that Organizational Memory and Regulatory Immunity are even stronger predictors of Strategic Superiority. Create learning cultures, but ensure that knowledge is documented in organizational memory rather than being tacit. Organizations should view regulatory compliance as a strategic resource that enhances legitimacy and protects against environmental instability rather than merely as a regulatory obligation. Aligning fundamental values and governance structures with regulatory requirements strengthens an organization's DNA and adds flexibility to its identity. To establish sustainable strategic dominance, balance short-term adaptability (through learning) with long-term stability (by DNA and memory). Building organizational DNA requires flexibility, local adaptability, and core values. Key pillars include decentralized decision- making, employee care, alert resilience, community integration, and unified core values to maintain trust in times of instability. The study focuses on food and retail businesses in Erbil, limiting generalizations across industries and regions. Reliance on regression models limits causal inference; longitudinal designs better capture dynamic adaptation. Organizational DNA and regulatory immunity are complicated structures that can be oversimplified using quantitative proxies. The research team's reliance on Team Mart as an exemplary case reduces external validity.

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Conflict of interest

We declare that there is no conflict of interest regarding this study or its publication.

Authors' declaration

- All listed authors meet the criteria for authorship and approve the final manuscript.
- I/We hereby confirm that all the Figures and Tables in the manuscript are mine/ours. Furthermore, any Figures and images that are not mine/ours have been included with the necessary permission for re-publication, which is attached to the manuscript.
- No animal studies are present in the manuscript.
- No human studies are present in the manuscript.

Data availability

All data generated or analyzed during this study are included in this published article and analysis.

Ethical clearance

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