

# The Role of Intelligence-Driven Strategic Renewal in Reducing Strategic Fragility: A Case Study from Iraq

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**Abstract:** In dynamic industrial environments, organizations increasingly rely on intelligence-driven strategies to enhance adaptability and sustain competitiveness. This study investigates the role of intelligence-based strategic renewal in mitigating strategic fragility within the Fertilizer Company for Chemical Industries in Iraq. A quantitative research design was employed, with data collected from 300 employees selected from a population of 1200. The data were analyzed using structural equation modelling (SEM) through AMOS and SPSS to examine the relationships between strategic renewal dimensions - strategic exploration, strategic investment, and entrepreneurial orientation - and strategic fragility. The findings reveal a statistically significant negative relationship between strategic renewal and strategic fragility at the 0.05 significance level, indicating that higher levels of renewal practices contribute to reducing organizational vulnerability. In particular, intelligence-driven exploration and investment activities play a critical role in improving strategic responsiveness and decision-making effectiveness. The study contributes to the literature by providing empirical evidence on the importance of integrating intelligence into strategic renewal processes as a mechanism for enhancing organizational resilience in highly competitive industrial contexts.

## 1 INTRODUCTION

These days, organizations must overcome many strategic challenges due to technology, regulations, and market changes. S.R. is an enticing place to start when addressing these problems because it is one of the continuous methods and strategies that improve organizational capabilities and achieve efficiency, helping shift from an S.F. to a strong and sustainable scenario. Organizations can thrive and succeed in the face of rapid environmental changes, whether in the marketing or technological sectors. Companies must develop strategic plans that deliver cutting-edge products to satisfy and retain customers. It can be characterized as playing a crucial role in helping organizations succeed by identifying opportunities and problems that surround the organization and fall within the external environment [1].

The study [2] added that (S.R.I) is a complex development process aimed at reducing the tension resulting from the repercussions of the company's previous strategic crises. Al-Asmada Chemical

Industries Company faces strategic challenges that threaten its continuity and success in the market. These challenges include rapid technological change, intense competition, shifts in market supply and demand, and changing market conditions.

Environmental and regulatory legislation and regulations. To confront these challenges, many executives and strategic managers resort to (S.R.I), which involves developing new strategies and innovations in business structures, operations, products, and services to drive transformation and sustainable growth. (S.R.I) relies on various sources that enable companies to innovate and continuously improve [3].

The study focused on a fundamental aspect that companies are exposed to, which is financial fragility, which refers to the inability to meet the financial obligations of the company, whether due to a lack of cash flows, increased debt, or deterioration in economic performance, as financial fragility negatively affects the company's ability to grow and sustain and exposes it to risks. Therefore, the

Fertilizers Company for Chemical Industries is one of the largest and most influential companies in Iraq's industrial sector. However, it faces financial challenges that threaten its stability and success in the market. These challenges may include deterioration or fluctuations in raw material prices, high production costs, changes in supply and demand, and financing challenges, such as high debt and pressure on cash flows. While the study described the Fund (S.F.) as a "devil's circle", the more its influence increases, the weaker other aspects are. It is not a category of issues but rather a connected chain that can affect any company or country in various ways and can create pressures on several areas, including security, justice, economic performance, social cohesion, regional repercussions, climate, and the environment, so that countries become unable to manage these pressures, leading to long periods of instability and a weak ability to keep pace with progress in Social and economic development.

The study by established the state's susceptibility and the difficulty of protecting rights. It served as a guide for adopting treatment foundations and strategic directions as a means of accomplishing this. (S.R.I) has been described as a situation in which exposure to external or internal pressures outweighs one's ability to prevent or respond to them. This increases the likelihood of instability and leads to:

- Increased risk of exposure or collapse of the system functions.
- Active epilepsy or prolonged crises.

Based on the above studies, this research will analyze and evaluate these risks based on the research problems below:

- What is the actual S.R.I. of the company under investigation?
- Does the company under investigation experience S.F. on all fronts?
- Is the S.R.I. a point of contact for S.F. at the company under investigation?

As can be seen from the above, the research is divided into seven main sections: an introduction, the theoretical underpinnings of the research topics, the formulation of hypotheses through analysis of the academic relationships between the variables under study, the construction of a hypothetical plan, instruments for gathering data and information, and a summary of the company under study (Fertilizer Company for Chemical Industries, Salah al-Din Branch / Iraq), The final sections, six and seven, provide a summary of the study's findings, recommendations, and the most essential following projects.

## 2 BACKGROUND

### 2.1 Strategic Renewal

Strategic renewal is widely recognized as a critical organizational capability that enables firms to sustain competitiveness in dynamic and uncertain environments. It represents a strategic process through which organizations modify their resource base, strategic direction, or operational logic in response to environmental changes, technological disruptions, and evolving market conditions. In highly competitive sectors, organizations are increasingly required to develop adaptive strategic plans to retain customers and deliver innovative products and services [1].

The importance of strategic renewal has increased significantly due to rapid technological advancement, intensified competition, shortening product life cycles, and the emergence of highly skilled workforces. These factors collectively necessitate continuous organizational adaptation and innovation. In this context, strategic renewal contributes to improving organizational performance by enabling firms to reconfigure capabilities and align internal processes with external demands.

Accordingly, strategic renewal in this study is defined as a set of managerial processes and practices aimed at restructuring organizational resources and strategic orientation to enhance performance, exploit emerging opportunities, and achieve long-term organizational objectives.

### 2.2 Conceptual Perspectives on Strategic Renewal

Strategic renewal is also understood as a mechanism for enhancing organizational alignment with external environmental conditions and improving access to strategic opportunities. It enables firms to develop sustainable partnerships, strengthen resource acquisition capabilities, and improve profitability [4], [5]. The underlying assumption is that long-term organizational survival depends on maintaining alignment between external environmental dynamics and internal organizational structures, capabilities, and processes.

Table 1 summarizes key theoretical perspectives on strategic renewal as identified in prior studies. Empirical evidence further indicates that strategic renewal enhances organizational learning by integrating new knowledge into organizational culture and updating vision and mission statements. It is also frequently implemented through training and development programs aimed at improving employee skills and competencies.

Table 1: Theoretical perspectives on strategic renewal.

Researcher	Perspective	Conceptual Definition
[6]	Organizational updating	Strategic renewal involves continuous updating or replacement of organizational practices to enhance future strategic choices and improve performance outcomes.
[5], [7]	Environmental adaptation	Renewal is a process through which organizations adapt to environmental changes and identify opportunities for strategic transformation.
[8], [9]	Strategic transformation	Renewal reflects organizational decisions aimed at ensuring continuity and growth through the transition from traditional practices to innovative approaches.
[10]	Capability renewal	Strategic renewal involves modifying competitive methods by renewing existing capabilities or developing new ones to achieve long-term effectiveness.

### 2.3 Dimensions of Strategic Renewal

The literature presents divergent perspectives regarding the dimensions of strategic renewal; however, consensus exists on several core dimensions relevant to organizational transformation. Based on their relevance to the current study, the following dimensions are adopted [7].

### 2.4 Strategic Exploration

Strategic exploration refers to an organization’s ability to identify and pursue new opportunities through experimentation, innovation, and risk-taking in unfamiliar markets or product domains. It is a fundamental mechanism for achieving competitive advantage, as it enables firms to expand their strategic scope and discover novel value-creation opportunities [8].

This process involves continuous environmental scanning to detect emerging opportunities and align them with organizational capabilities [9]. Strategic exploration also supports long-term competitiveness by enabling firms to reconfigure resources and invest in new strategic directions.

Moreover, strategic exploration facilitates investment in emerging opportunities that require organizational restructuring, process reengineering, and the elimination of routine-based inefficiencies. Such investments enhance organizational adaptability and improve responsiveness to environmental turbulence [10].

Entrepreneurial orientation is a key determinant of successful strategic exploration, as it fosters innovation, learning, and proactive behavior in overcoming organizational constraints [11].

### 2.5 Strategic Fragility

Strategic fragility refers to an organization’s inability to sustain competitive performance and long-term viability in the face of rapid environmental changes. It emerges when firms fail to adapt effectively to technological, market, regulatory, and competitive

disruptions, resulting in declining performance and weakened strategic positioning [12], [13].

Several factors contribute to strategic fragility. External factors include market volatility, technological disruption, and intensified competition. Internal factors involve weak planning, poor coordination, and ineffective organizational control systems. Functional fragility arises from inefficiencies in core business functions such as production, marketing, finance, and sales. Additionally, cultural misalignment between organizational values and external expectations can further intensify fragility. Legal, financial, and technological constraints also contribute to organizational vulnerability [14].

The literature highlights multiple real-world cases illustrating strategic fragility. For instance, Kodak failed to adapt to digital transformation in the photography industry and subsequently filed for bankruptcy in 2012. Similarly, Nokia lost its dominant position in the mobile phone market due to its inability to respond effectively to the smartphone revolution.

Strategic fragility can manifest at multiple levels. At the individual level, it reflects misalignment between employee objectives and organizational goals, leading to reduced performance. At the organizational level, it indicates a failure to align strategic direction with environmental dynamics, resulting in reduced adaptability and competitiveness [18].

## 3 RESEARCH MODEL

The present study investigates the relationship between Strategic Renewal (S.R.) as an independent variable and Strategic Fragility (S.F.) as a dependent variable within the Fertilizers Company for Chemical Industries / Salah Uddin Branch (Iraq). The analysis is based on correlation and impact testing using primary data collected through a structured questionnaire. The

proposed model is interpreted in light of statistical results to examine how strategic renewal practices influence the mitigation of organizational fragility.

Strategic Renewal represents a critical managerial capability in contemporary organizations operating under conditions of dynamic markets and intensified competition. It enables firms to continuously reconfigure their strategic direction, enhance adaptability, improve organizational performance, and exploit emerging opportunities. Accordingly, S.R. serves as a foundational mechanism for sustaining competitiveness and ensuring long-term organizational viability [19], [20]. The conceptual research model is illustrated in Figure 1.

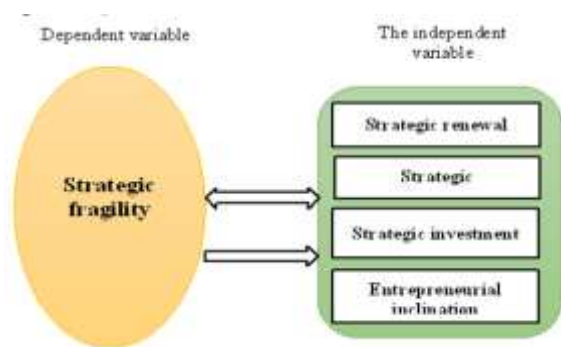


Figure 1: Conceptual research model.

Based on the adopted theoretical framework and prior studies [7], Strategic Renewal refers to the continuous process of reassessing and updating organizational strategy to enhance competitiveness and achieve sustainable growth. In contrast, Strategic Fragility represents the weakening of organizational strategic effectiveness, manifested through difficulties in achieving objectives and responding effectively to environmental changes [16].

From this perspective, the study assumes that Strategic Renewal acts as a corrective and developmental mechanism that enhances organizational resilience by improving internal capabilities, technological adoption, and environmental scanning [15]. Furthermore, it integrates operational, cultural, and technological adjustments that allow organizations to maintain alignment with external environmental changes [17], [18].

Accordingly, the following hypotheses were formulated:

- H1: The studied company suffers from Strategic Fragility across different levels, according to respondents' perceptions.

- H2: The company exhibits Strategic Renewal dimensions (exploratory, investment, and entrepreneurial orientations), according to respondents' perceptions.
- H3: There is a statistically significant relationship between Strategic Renewal and Strategic Fragility.
- H4: Strategic Renewal has a significant effect in addressing Strategic Fragility.

### 3.1 Data Collection Tools

To achieve the objectives of the study, multiple data collection methods were employed to ensure the reliability and validity of the findings.

Primary data were collected through a structured questionnaire distributed to relevant respondents within the organization. In addition, direct interviews (both face-to-face and virtual) were conducted with managerial and technical staff to complement survey data and provide deeper contextual understanding.

Secondary data were obtained through an extensive review of academic literature and relevant organizational documents to support the development of measurement indicators.

### 3.2 Measurement of Variables

The study variables were operationalized based on validated constructs adopted from prior literature to ensure conceptual clarity and measurement reliability. Strategic Renewal (S.R.) was measured as a multidimensional construct comprising exploratory, investment, and entrepreneurial dimensions, reflecting the organization's ability to adapt, innovate, and reconfigure its strategic orientation in response to environmental changes [7], [15].

Strategic Fragility (S.F.) was operationalized as a multidimensional construct reflecting organizational weakness in strategic alignment, adaptability, and environmental responsiveness. It captures the extent to which the organization experiences difficulties in sustaining performance under dynamic market conditions and internal structural constraints [16], [17].

Each construct was measured using a set of indicators derived from previous empirical studies and refined to suit the context of the current research. Respondents evaluated all items using a five-point Likert scale ranging from "strongly disagree" to "strongly agree," allowing for quantitative assessment of perceptions regarding each variable. Table 2 summarizes the measurement indicators of the study variables along with their academic sources.

Table 2: Questionnaire indicators and their sources.

Sub-variables	Sources	Main variables
Strategic exploration/ Strategic investment/ entrepreneurial inclination	[16]	Strategic renewal
	[3], [10]	
[16]		S.F.

Table 3: Strong gradient.

Items	Initial	Extraction
exploration1	1.000	.443
exploration2	1.000	.525
exploration3	1.000	.574
exploration4	1.000	.637
investment1	1.000	.521
investment3	1.000	.670
investment4	1.000	.727
Entrepreneurial1	1.000	.632
Entrepreneurial2	1.000	.539
Entrepreneurial3	1.000	.531
Entrepreneurial4	1.000	.572
Entrepreneurial5	1.000	.502
exploration1	1.000	.443
exploration2	1.000	.525
fragility3	1.000	.672
fragility5	1.000	.571
fragility6	1.000	.480
fragility7	1.000	.613
fragility8	1.000	.700
fragility9	1.000	.488

#### 4 RESULTS AND DISCUSSION

This research utilized exploratory factor analysis to obtain factor loadings, and ProMax rotation was applied to facilitate interpretation. The study followed the recommended guidelines proposed by Hare, Anderson, and Black (2010) to test the hypotheses. The first guideline is to ensure that adequate factors are available. This point involves examining the correlations and statistical significance within the correlation matrix. The study assessed the presence of relevant correlations and their statistical significance by conducting the exploratory factor analysis. The second piece of evidence concerns the Kaiser-Meyer-Olkin (K.M.O.) measure, which assesses sample adequacy. The researchers relied on the Kaiser-Meyer-Olkin measure, aiming for a minimum value of 0.6, which indicates satisfactory sample adequacy. The third piece of evidence concerns the Bartlett test of sphericity, which assesses the presence of significant relationships among variables. An important result at the 0.05 level indicates that the variables are not independent, which supports the suitability of factor analysis. Finally, the fourth piece of evidence concerns item communities, which must exceed the 0.50 threshold. These item communities represent factor loadings and indicate the strength of the relationship between variables and factors. Tables 3 and 4 will likely provide the factor loadings or item communities, illustrate their values, and confirm their adequacy.

Confirmatory factor analysis uses the AMOS statistical analysis software package, which relies on Confirmatory Factor Analysis (C.F.A.), a statistical tool used to analyze the relationships between the studied variables and the essential factors assumed in a specific model. Confirmatory factor analysis is also used to evaluate the ability of a factor model to fit an actual data set and to compare several factor models in this field. Figure 2 shows the factor analysis of the research variables and the measured indicators.

Table 4: Factor loading for observed variables and indicators - ProMax rotation.

Observable variables	Observable variables			
exploration4	.772			
exploration3	.752			
exploration2	.699			
exploration1	.598			
investment3		.811		
investment4		.792		
investment1		.619		
Entrepreneurial4			.743	
Entrepreneurial1			.642	
Entrepreneurial5			.642	
Entrepreneurial2			.598	
Entrepreneurial3			.552	
fragility8				.781
fragility7				.759
fragility3				.655
fragility6				.641
fragility5				.625
fragility9				.546
K.M.O.,.789; Bartlett's Test of Sphericity, 1297.433; Total Variance Explained, 62.204.				

The indicators confirm that confirmatory factor analysis was appropriate for the variables, as the model fits the data well: the comparative fit index (CFI) =.940, the incremental fit index (I.F.I.) =.941, and the Chi-square/degrees of freedom (cmin/pdf) = 142.399. A crucial measure is the root mean square error of approximation (RMSEA) = 0.70, which estimates how close the result is to non-matching and

vice versa.  $P = .014$  is the result of the closure analysis, which loaded all items on the corresponding constructs and found that each item had a coefficient and moral significance at the 0.001 level.

To investigate the links between the independent and dependent variables, an analysis of the relationships among alternatives was conducted. Bivariate correlations were employed for the several nuclear constructs used in the investigation. Relationships Differential Penalty Relationships look at relationships first, Table 4. The relationship between the two variables is strengthened when it is addressed more closely in practical terms. A correlation is generally considered moderately fit if the concordance correlation is less than 0.30, moderate between 0.30 and 0.70, and strong if it exceeds 0.70. When the relationship is less than the correct value, the agreement between the two variables is weak and may be inverse or temporary.

In structural equation modeling (SEM), hypotheses are tested by assessing how well the proposed model fits the data and examining the effects of variables on one another. An analysis was

conducted using structural equation modeling (SEM) to identify the best predictive model for the relationship among variables. The hypotheses were tested for the final part of the data analysis, and the results are as follows.6.3 Hypothesis Testing:

After the preliminary analyses mentioned above, the following section discusses hypothesis testing and research findings from path analysis using structural equation modeling (SEM), a powerful tool for purposes similar to multiple regression analysis. However, it offers additional advantages by representing interactions among variables, handling nonlinearity, correlated variables, and measurement error. S.E.M. also considers its associated error terms and many independent latent variables measured by multiple indicators. However, the results indicate a positive relationship between strategic exploration and S.F., with an estimated value of 0.106 and a p-value of less than 0.05, indicating a significant relationship between these variables. This result supports hypothesis H1.2 (strategic exploration and strategic fragility) and the latent variables.

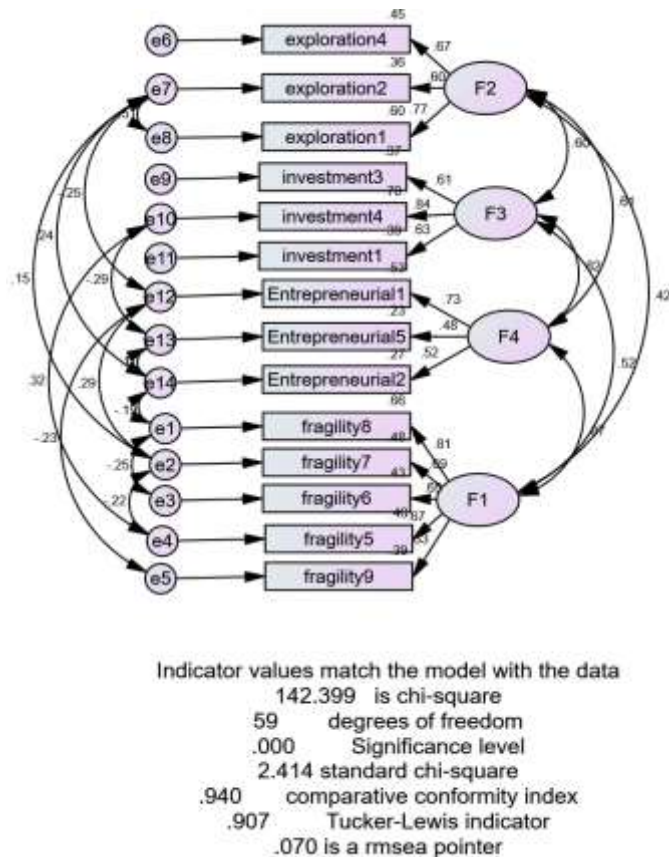


Figure 2: Confirmatory structural diagram of research variable.

Calculated using different indicators [19]. This research hypothesizes that strategic innovation (strategic exploration, strategic investment, and entrepreneurial tendency) has a positive relationship with strategic fragility in processing. The results indicate a positive relationship between strategic investment and entrepreneurial propensity, and strategic fragility, with a p-value less than 0.05, indicating a significant relationship. Similarly, the estimated value of the relationship between entrepreneurial propensity and A.I. is .002, with a p-value of less than 0.05, indicating a significant relationship for hypothesis H1.3 (entrepreneurial propensity and strategic exploration) and supporting hypothesis H1.1 (strategic exploration and S.F.). However, the results indicate a positive relationship between strategic exploration and S.F., with an estimated value of 0.106 and a p-value of less than.

## 5 CONCLUSIONS

Regarding strategic exploration, strategic investment, and entrepreneurial tendency, the study's findings showed a relatively positive correlation between strategic fragility and strategic renewal. These results support previous research, which also discovered a shaky relationship between strategic renewal and product creation. Additionally, research has demonstrated that strategic fragility affects business, national security, and infrastructure. It is a significant security flaw that could worsen on several fronts. Prior studies have shown a positive correlation between the traits investigated in this investigation, corroborating the results and highlighting the significance of strategic innovation based on intelligence as a crucial means of countering sci-fi. Additionally, research has demonstrated that strategic fragility affects business, national security, and infrastructure. It is considered a significant vulnerability in the security system that can worsen on multiple fronts. Based on the research findings, several managerial implications can be drawn. First, corporate decision-makers will gain insights into the importance of strategic renewal, based on intelligence, and its impact on strategic fragility. This understanding can guide them in making informed decisions and allocating resources to enhance strategic renewal within their organizations. Second, the study emphasizes the need for managerial focus on creating an environment that supports and encourages strategic renewal. This includes implementing policies, practices, and structures promoting innovation, learning, and adaptability.

Finally, the research can provide valuable recommendations to the company under study to address any identified failures. These recommendations should be tailored to the company's specific context and challenges to improve strategic renewal efforts and mitigate strategic fragility. Assess the current situation: The Company must conduct a comprehensive analysis of its current state, including its challenges and potential growth opportunities. The assessment can include a SWOT (strengths, weaknesses, opportunities, and threats) analysis, financial performance assessment, and market analysis:

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