The Role of Strategic Consciousness in Enhancing the Strategic Vigilance

Alaa Hussein Fadhil 1, Mohammed Faez Hasan 2*, Ahmed Abdullah Amanah AL-Sammari3, Ahmed Muhammadridha Abdulrasool Qandeel 4

1- University of Karbala - Faculty of Administration and Economics
2- University of Karbala - Faculty of Administration and Economics
3- University of Karbala - Faculty of Administration and Economics
4- University of Karbala - Faculty of Physical Education & Sports Sciences

*Corresponding Author: Mohammed Faez Hasan, University of Karbala - Faculty of Administration and Economics, Email: mohammed.faiz@uokerbala.edu.iq

Abstract:
The research aims to test the impact of strategic consciousness on strengthening the strategic vigilance in investment organizations by analyzing responses from 124 managers working for administrative, engineering and technical sectors inside Al-Kafeel Group for Public Investments in Karbala. We applied constructs of (Turkay et al., 2012) (for strategic consciousness (Reframing, System thinking, Learning orientation and Reflection) and the model of (Fadhiel et al., 2018) for strategic vigilance (Technological vigilance, Competitive vigilance, Marketing vigilance, and Environmental Vigilance). The collected responses were analyzed using structural equation modelling to measure Cronbach’s alpha coefficient, confirmatory factor analysis, and Pearson’s correlation for the constructs and latent variables. A manager’s strategic consciousness posed an active impact on enhancing the strategic vigilance of the firms. The research sample is in the context of competition in the Iraqi industrial and investing sectors. Strategic consciousness is instrumental in improving the positive relationship in strategic vigilance in line with the customized prerequisites and the dynamic setting of workplaces. Implications on the provision of valuable production would add up to the targeted local self-sufficiency.

Keywords: Strategic consciousness, Strategic vigilance, Systematic thinking, Learning orientation.

Introduction
The infrastructure of the Iraqi investment is rudimentary, yet diverse. However, all companies of public or private sectors, face tremendous challenges that impede seizing true opportunities. The rampant administrative and financial corruption in Iraq compromised the possibility of starting up domestic and foreign investment.
projects. The identification of causative factors and introducing effective solutions are at the centre of Iraqi researchers’ orientation. The strategic consciousness of managers and managers of these facilities may be of diagnostic and problem-solving values because strategic consciousness strengthens strategic vigilance and overall organizational performance of companies, especially in the investment sectors. The investment sector in Iraq has been deliberately disrupted, given the deeply rooted corruption it faced over the past years. Therefore, the contribution of this sector to societal needs is minimal.

The research aims to test the relationship between strategic consciousness and strategic vigilance. The main question about the conceptualization of the participants of the significance of strategic consciousness and strategic vigilance and their tenets is subdivided as follows.

1. Does the sample corporate managers have the strategic consciousness that distinguishes them from other competitors within the investment sector?
2. Does the sample corporate managers have adequate strategic vigilance?
3. Is there any correlation between the tents of strategic consciousness and strategic vigilance?
4. Is there any impact of strategic consciousness on enhancing strategic vigilance?

Several hypotheses, models related to the possibly efficient paths, outer weights and loadings are tested. Recommendations and practical implications for future managerial research are given.

2. Theoretical Framework
This section explores the basic tenets of the theoretical framework needed to analyze strategic consciousness and strategic vigilance and relate these variables to Iraqi organizations.

2.1 Strategic consciousness
2.1.1 Definition
The concept of strategic consciousness was coined in the 1980s and was polished further over the past decades to focus on all member organizations with their external and internal environments (Al-Khatib, 2018). Therefore, strategic consciousness is defined as appreciating the strategic position and relative success of the organization. Knowing how well it is doing, why and how – relative to its competitors – and appreciating the nature of the external environment and the extent of any need to change things (Arnold & Wade, 2015).

(Halis et al., 2010) defined strategic consciousness as a cognitive skill that enables firms to develop a clear vision and a system of thought based on inquiry, research, transforming values, increasing mental capabilities, among others. Strategic consciousness was also defined as the way in which managers become strategically aware of their company’s position and opportunities for change; it also involves being aware of all the internal and external environmental factors (Turkay et al.,
Strategic consciousness is also a requirement of achieving innovative strategy entrepreneurial management, especially the management team. From all the definitions mentioned above, we propose an operational definition for strategic consciousness as pioneering cognitive skills that are applied by managers as well as the innovative values and intellectual abilities that enable investing opportunities to reframe a strategic decision (Arnold & Wade, 2015).

### 2.1.2 Significance

Strategic consciousness and awareness are fundamental to all organizations. (Arnold & Wade, 2015) defined strategic consciousness abilities as follows.

1. Think strategically and holistically, encapsulating issues of past, present and future,
2. Maintain an awareness of environmental changes and their implications,
3. Design and operationalize a ‘fitting’ organization, the structure and systems of which match its environment(s) and stay matched in times of change and turbulence, and
4. Avoid the trap of self-enacted reality (whereby an organization would drift into problems because it retains an unrealistic view of its true position) and instead reach more objective, informed and environmentally aware decisions

### 2.1.3. Tenets of Strategic consciousness

Adopting (Turkay et al., 2012), we apply the following tenets to analyze a manager’s strategic consciousness.

a. Reframing:

(Maznevski & Chudoba, 2000) have also shown that reframing can be used to bring about a switch in (strategic) perspective. In this sense engaging in strategy-making is an ongoing process of framing and reframing. The frequently observed practice of reframing a project occurs when the circumstances of implementation change or when protagonists feel a new frame suits them better.

(Pisapia et al., 2005) described the term “system thinking” as the ability to see systems holistically by understanding the properties, forces, patterns, and inter-relationships that shape the behaviours of the systems which provide options for actions.

b. System thinking:

System thinking can be defined as the ability to understand the multilevel structure of those numerous components, their dynamic and nonlinear relationships (Heintze et al., 2016). This mental acquisition of complex accumulation processes requires a wide amount of cognitive abilities, compassing the structural as well as the reflective analysis of complex systemic behaviour (Radonjić et al., 2020).

Systems thinking is a set of synergistic analytic skills used to improve the capability of identifying and understanding systems, predicting their behaviours, and devising modifications to them in order to produce desired effects. These skills work together as a system (Arnold & Wade, 2017).

c. Learning orientation
Learning orientation is defined as the generation and development of new insights that have the potential to change behaviors (Tajeddini, 2011). Learning orientation is also considered a set of organizational knowledge-questioning values that influence a firm’s propensity to value double-loop learning,” and proposed three values of LO: (a) commitment to learning, (b) open-mindedness, and (c) shared vision (Choi, 2014).

d. Reflection

Reflection is the ability to apply knowledge to new situations and facts. (Pisapia et al., 2005) stated that the involvement of reflection in learning and understanding shows how critical its influences are to the sharpening of our consciousness. According to them, reflection is a vital element of all kinds of learning, and it is considered as a multi-faceted phenomenon, which produces the effect of, especially, experience-based learning.

2.2 Strategic Vigilance

2.2.1 Definition

(Ghalamallah, 2009) defined strategic vigilance as the informational process through which an organization can creatively listen to and predict proactive information about its environment, find opportunities and reduce uncertainty. However, (Heintzet al., 2016). proposed that strategic vigilance, in their study, refers to a number of capacities that anticipate the appropriate time in which potential partners are expected to have cooperative intentions and predict the factors behind such intentions. Dawood and (Fadhiela et al., 2018) presented another definition to strategic vigilance as the activity an organization does in order to collect and analyze data relevant to the organization's external environment. Therefore, the organization would have sufficient information to seize opportunities and avoid threats to ultimately ensure survival and sustain growth.

In this connection, (Tende& Onuoha, 2020) maintained that strategic vigilance denotes an ability to recognize creative opportunities and allocate the resources to new lines of work or identify and cease the use of unproductive resources. (Mahmood et al., 2020) considers strategic vigilance a competitive tool enabling organizations to predict and excel competitors as it helps the organization gaining several competitive advantages and enhancing goods and services continuously. Therefore, it enhances the organization's relationships with customers and suppliers.

Accordingly, strategic vigilance can be defined as proactive abilities to identify competitive information in the environment and allocate resources to make the best use of opportunities and avoid threats and uncertainty in order to survive and grow in early work domains, provide goods and services that satisfy customers and, ultimately, attain the organization's goals.

2.2.2 Significance

(Fadhiela et al., 2018)maintained that strategic vigilance (SV) contributes to the success of organizations significantly as follows.
a. SV facilitates the prediction of the forthcoming challenges or obstacles the organization is likely to encounter.
b. Vigilance is a competitive tool enables organizations to predict competitors and anticipate their future supremacy, and it helps organizations developing several competitive advantages because it guarantees continuous improvement of goods and services and, accordingly, enhances relations with customers and suppliers.
c. It grants access to vast knowledge and options.
d. SV guarantees a proper response to customer needs and the discovery of new markets.
e. It modifies the product to cope with the new changes and improves the technical characteristics, qualities and, at the same time, reduces the cost of the product.
f. SV enhances the capacities of the organization and speeds up the response to changes.
g. It helps the organization establish and balance current competitors in the sector and draws the attention to expected competitors that cannot be underestimated for their influence on the profits through the introduction of new capacities and techniques.
h. SV develops the creative capacities of the organization.
i. It curbs the threats of uncertainty and increases security levels.

(Mahmood et al., 2020) clarified that the significance of strategic vigilance emanates from being one of the new techniques in modern business strategies. It encourages the organization to listen to its environment through careful consideration of customers, suppliers, competitors and technology, among others. Strategic vigilance was essentially developed to assist the organization approach, identify and analyze its environment.

(Tende & Onuoha, 2020) stated that the significance of strategic vigilance is attributed to its ability to maintain salient focus on the environment for a long time enough to make predictions of tendencies in the industry. In addition, it boosts the capacities of any organization to be prepared for encountering external and internal acts of divergence such as fraud, corruption and other forms of misconduct. The coordination of strategic vigilance among business levels overcomes routine inertia so that organizations can discover new alternatives. Moreover, the dynamic ability of strategic vigilance allows organizations to attain competitive advantage in fluctuating markets.

2.2.3. Tenets of Strategic Vigilance
Considering the perspective of (Fadhiela et al., 2018), the following tenets of SV are implemented.
A. Technological Vigilance
Technological vigilance is a systematic and organized effort exerted by the organization to monitor, receive, analyze, publish and retrieve accurate and precise information about specific events significant to economic, technological, social or commercial information. This may represent an opportunity or a threat because it plays and develops an intelligence role through the due and precise distribution of information and communications in the organizations (Săvescu, 2014). According to (Fadhiela et al., 2018), technological vigilance is a key strategic variable because it is an integral factor in the organization's excellence. The technology an organization has must make the organization aware of its points of weakness and strength and competitors. In addition, the organization must find the appropriate method for monitoring the technological environment so that sustainable knowledge can be attained and technological knowledge can be improved locally and globally to eventually secure the future performance of the organization. Organizations, accordingly, must provide a technological vigilance mechanism for coping up with a variety of technological shifts.

B. Competitive Vigilance

On the one hand, (Brandstädter et al., 2012) explained that organizations that exercise competitive vigilance want to maintain its awareness of the constant changes in the surrounding competitive environment. The variety of changes and developments includes new activities of competitors, suppliers or organizations in new areas, discoveries of innovative techniques, and registrations of patents, among others. On the other hand, (Fadhiela et al., 2018) referred to competitive vigilance as the activity, which allows an organization to identify its competitors, their current and potential strategies, intentions and future projects. Thus, it can predict any decision, which is likely to impede the activity of the organization and result in missing several opportunities.

C. Marketing Vigilance

Marketing vigilance denotes a process carried out to perform research, process and disseminate information in the organization's markets. In other words, it is a process of following up the developments of the market and the behavior of customers and launching new products in the market. Marketing vigilance focuses on the dynamic needs of customers in the long run, fosters the organization-customers relations, develops new products and improves organization-suppliers relations. It also enhances the possibility of getting the product, the organization requests, by suppliers at a low cost. The competitive capacity of an organization is the goal of marketing vigilance. Therefore, it facilitates the discovery of new markets, suggestion of new products for customers and accompanying the launch of the new product, according to (Fadhiela et al., 2018). In addition, (Mahmood et al., 2020) considered customers the prime concern of the organization's strategy. To elaborate, any organization wants to secure competitive capabilities has to regard the identification of current and possible customers, understanding customers’ needs and aspirations and exerting more efforts.
than competitors to fulfil customers’ needs as the main focus of its strategy. The ultimate goal of marketing vigilance is the competitive ability of the organization.

D. Environmental Vigilance

(Brandstädter et al., 2012) stated that the vital goal of environmental vigilance is the continuous monitoring of the environment in order to influence, direct and assist in the implementation of the development strategy. It is associated with the calculation of the environmental risks and compliance with the systems. Environmental vigilance also studies environmental circumstances and assesses environmental changes (i.e., expects the costs and the adaptive measures associated with these changes and relevant to this context). Environmental vigilance is, therefore, the process of collecting information that is necessary for strategic decision-making. (Mahmood et al., 2020) equated strategic vigilance with the awareness of the various changes a society may encounter. It is also called social vigilance because it monitors all changes relevant to different aspects of social life, including population growth, consumption habits and the population community.

4. Methodology

The two hypotheses of this study are based on the theoretical background, and previous studies, assuming that:

Hypothesis (H) 1. In corporate management, there is no significant correlation between strategic consciousness and strategic vigilance.

H2. Strategic consciousness does not affect strategic vigilance.

The research aims to test the relationship between strategic consciousness and strategic vigilance. The main question is subdivided as follows.

1. Does the sample corporate managers have the strategic consciousness that distinguishes them from other competitors within the investment sector?
2. Does the sample corporate managers have adequate strategic vigilance?
3. Is there any correlation between the tenets of strategic consciousness and strategic vigilance?
4. Is there any impact of strategic consciousness on enhancing strategic vigilance?

According to the research problem and its objectives, a hypothetical model has been formulated that depicts the relationships between research variables and explains the relationship of strategic consciousness in strengthening the tenets of strategic vigilance. (Figure 1) displays the conceptual model and defines the latent variables and indicators.
Data were collected from 124 Iraqi respondents, who were managers working for administrative, engineering and technical sectors inside Al-Kafeel Group for Public Investments in Karbala. The items of the questionnaire were adapted from the constructs of (Turkay et al., 2012) for strategic consciousness (Reframing, System thinking, Learning orientation and Reflection) and the model of (Fadhiela et al., 2018) for strategic vigilance (Technological vigilance, Competitive vigilance, Marketing vigilance, and Environmental Vigilance). The compiled data were analyzed using structural equation modelling. The responses were collected from questionnaires that were formulated as explicitly as possible.

Other than calculating the weighted mean, standard deviation, as standard descriptive statistical tests, to verify the centralization of the collected answers, we calculated simple correlation coefficient, simple regression analysis, Cronbach’s alpha coefficient, and confirmatory factor analysis. The findings were considered statistically significant when the $p$-value was less than 0.05.

5. Results
5.1 Measures
The researcher has created a five-scale Likert questionnaire to be distributed among the volunteering participants. (Table 1) displays a detailed explanation of the reliability and validity measures. As tabulated, the values of Cronbach’s alpha were of higher than 0.7; indicating that the internal consistency is acceptable.

<table>
<thead>
<tr>
<th>Row</th>
<th>Search variables</th>
<th>Approved measure</th>
<th>Number of scale paragraphs</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strategic Consciousness</td>
<td>Turkay, 2012</td>
<td>19</td>
<td>0.76</td>
</tr>
<tr>
<td>2</td>
<td>Strategic Vigilance</td>
<td>Dawood &amp; Abbas, 2018:7</td>
<td>20</td>
<td>0.72</td>
</tr>
</tbody>
</table>
5.2 Convergent Validity
The confirmatory factor analysis (CFA) is used to investigate the construct validity of
the scale using a statistical program (IBM SPSS AMOS 23) that uses structural
equation modelling (SEM) to test hypotheses on complex variable relationships.

1. Confirmatory factor analysis of strategic consciousness:
(Figure 2) visualizes the results of the confirmatory factor analysis of strategic
consciousness. The results of Model Fit Index (CIMN/df = 1.04, CFI = 0.91, TLI =
0.89, RMSEA = 0.080) were within the acceptable values given that Estimates
Parameter > 0.50.

![Figure 2. Outputs of the confirmatory factor analysis of the independent variable (strategic consciousness)](image)

2. Confirmatory factor analysis of strategic vigilance:
(Figure 2) illustrates the results of the confirmatory factor analysis of strategic
vigilance. The results of Model Fit Index (CIMN/df = 1.98, CFI = 0.89, TLI = 0.88,
RMSEA = 0.081) were within the acceptable values given that Estimates Parameter >
0.50.

![Figure 2. Outputs of the confirmatory factor analysis of the dependent variable (strategic vigilance)](image)
For the confirmatory factor analysis of the SL construct, the values of the model fit index were acceptable (CIMN / df = 3.08, CFI = 0.92, TLI = 0.91, RMSEA = 0.070). The estimates parameter was acceptable too.

5.3 Descriptive Statistics
(Table 2) views the correlation matrix and descriptive statistics of the latent variables, noting that the hypothesized mean used for the scale was 3 in order to evaluate the representativeness of the sample to the studied variables and indicators.

Table 2. Correlation matrix, the arithmetic mean and standard deviations of the research variables

<table>
<thead>
<tr>
<th>Row</th>
<th>reframing</th>
<th>system thinking</th>
<th>learning orientation</th>
<th>reflecting</th>
<th>strategic consciousness</th>
<th>strategic vigilance</th>
</tr>
</thead>
<tbody>
<tr>
<td>strategic vigilance</td>
<td>0.44**</td>
<td>0.43**</td>
<td>0.45**</td>
<td>0.45**</td>
<td>0.68*</td>
<td>1</td>
</tr>
<tr>
<td>Arithmetic average</td>
<td>3.82</td>
<td>3.79</td>
<td>3.88</td>
<td>3.87</td>
<td>3.84</td>
<td>3.82</td>
</tr>
<tr>
<td>standard deviation</td>
<td>0.58</td>
<td>0.48</td>
<td>0.60</td>
<td>0.58</td>
<td>0.35</td>
<td>0.16</td>
</tr>
</tbody>
</table>

** Significant at (0.01) level

The weighted mean of managers’ reframing was 3.82 (SD= 0.58) (after adjusting). Given that the value of the mean was higher than the hypothetical mean, participating Iraqi managers enjoyed high integrity. The small values of kurtosis, skewness and SD indicate that the sample is homogenous.

The weighted mean of managers’ system thinking was 3.79 (SD=0.48) (after adjusting). Given that the value of the mean was higher than the hypothetical mean, participating Iraqi managers enjoyed high integrity. The small values of kurtosis, skewness and SD indicate that the sample is homogenous.

The weighted mean of the inclination to learning orientation was 3.88. In the same vein, the standard deviation was low (SD=0.60), which reveals similarity among participants in their learning orientation.

The weighted mean for reflecting was 3.87 (SD= 0.58). Managers in the kafeell/sponsor group pursue learning continuously. The responses of the participants were consistent as supported by the low standard deviation (SD=0.58).

Therefore, the overall weighted arithmetic mean of strategic consciousness was 3.84 and, accordingly, the arithmetic mean was higher than the working mean. This finding substantiates that managers strongly adopt this variable. In addition, the standard deviation was 0.35. For strategic vigilance, the weighted arithmetic mean of strategic vigilance was 3.82. Managers, consequently, maintain strategic vigilance strongly. The standard deviation for this variable was 0.16.
5.4 Testing the research hypotheses

The researcher adopted a set of statistical methods to test the following hypotheses.

**H1. There is no significant correlation between the manager’s strategic vigilance and strategic consciousness**

As (Table 2) illustrates, the correlations between the variables of the study. As tabulated, the correlation between strategic vigilance and strategic consciousness was positive and significant at 1%, at both the overall and dimensional levels. Based on this finding, the research rejects the abovementioned hypothesis. In other words, there is a statistically significant correlation between strategic vigilance and strategic consciousness.

**H2. There is no significant effect of manager’s strategic consciousness on strategic vigilance**

Simple regression analysis and interpretation coefficient $R^2$ test was used to verify the hypotheses stated above. (Table 3) shows the measures of the structural model.

<table>
<thead>
<tr>
<th>Row</th>
<th>strategic vigilance</th>
<th>tValue</th>
<th>f Value</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>reframing</td>
<td>3.35</td>
<td>0.12</td>
<td>5.48**</td>
<td>30.**</td>
</tr>
<tr>
<td>system thinking</td>
<td>3.27</td>
<td>0.15</td>
<td>5.30**</td>
<td>27**</td>
</tr>
<tr>
<td>learning orientation</td>
<td>3.36</td>
<td>0.12</td>
<td>5.50**</td>
<td>30**</td>
</tr>
<tr>
<td>reflecting</td>
<td>3.33</td>
<td>0.13</td>
<td>5.63**</td>
<td>31**</td>
</tr>
<tr>
<td>strategic consciousness</td>
<td>2.60</td>
<td>0.31</td>
<td>10.34**</td>
<td>107**</td>
</tr>
</tbody>
</table>

** Significant at (0.01) level

As tabulated, the tenets of strategic consciousness influenced at 1% the strategic vigilance as noticed in the F-statistics and t-test values.
1. The reframing dimension influenced strategic vigilance by 0.12 and interpreted 20% of the strategic vigilance changes.
2. The impact of the system thinking dimension on strategic vigilance was 0.15, and it interpreted 19% of the strategic vigilance changes.
3. The dimension of learning orientation had an influence of 0.12 on strategic vigilance and interpreted 20% of the strategic vigilance changes.
4. The reflecting dimension impacted strategic vigilance by 0.13 and interpreted 21% of the strategic vigilance changes.
5. The variable of strategic consciousness influenced strategic vigilance by 0.31 and interpreted 47% of the strategic vigilance changes.

Conclusions

This section draws the conclusions of the research and makes a recommendation in accordance with the theoretical and practical framework.
First, there are four pillars vital to any organization that aims at enhancing its strategic consciousness and, at the same time, influential in strengthening strategic vigilance. These four dimensions read as follows.

A. Orientation to continuous learning, acquiring knowledge and constructing knowledgebase, which distinguishes the administration of companies, ranked first according to the participants.

B. Reflecting the organization's thoughts and beliefs on the everyday routine at work, which is a primary focus of companies’ administration, came in the second place according to the studied sample.

C. Reframing the company’s strategies and goals to comply with the requirements of the surrounding investment environment was the third factor, as reflected in the responses of participants.

D. Adopting effective system thinking in respect to talented and knowledge-contributing human resources was the fourth factor.

Moreover, this study concluded that there are four major types of strategic vigilance (namely, technological, competitive, marketing and environmental), and they are consolidated by the dimensions of strategic consciousness. Similarly, strategic vigilance and strategic consciousness are found to be correlated. Thus, strategic consciousness influences the boosting of strategic vigilance and its dimensions.

Second, the following set of implications can be concluded from the previous findings.

A. The higher administration in the studied companies should improve system thinking as an integral part of the administration to reach the maximum positive results in the fulfilment of tasks. To that end, companies are recommended to adopt modern models of thinking to address current and expected problems and find potential solutions.

B. Companies should show enough flexibility to reframe their strategies and goals so that the companies can achieve sustainable responses to unexpected changes in the investment environment. Therefore, studies on the internal and external environment of the sampled companies should be pursued within the framework of environmental vigilance in order to cope up with current changes and expect future ones.

C. The strategic ideas and visions of the higher administration should be consistent with those of the employees so that the strategic consistency can be reflected in employees’ work performance. This is attainable through the participation of workers in the decisionmaking process and the implementation of the open-door policy to receive effective suggestions and creative proposals for improving the company’s performance.

D. Companies are recommended to pay more attention to learning and acquiring strategic knowledge which improves the company’s competitiveness in the environment through the construction of accumulative knowledgebase, including various resources. In addition, companies should benefit from the solutions to previous problems and prepare for the future.
References


