

Measuring the Implementation and Adoption Gap of Strategic Foresight in Organisations: A Case Study at Al-Mustansiriya University

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The study aims to measure the gap in the application and adoption of strategic foresight in an organisation. The problem of the theoretical study was derived from the existence of a knowledge gap due to the lack of Iraqi and Arab studies and research that dealt with the study variable and its dimensions (environmental monitoring, strategic choice, and integrating capabilities). The study adopted the case study method by using a questionnaire. Al-Mustansiriya University was chosen as a community for study because of its importance in providing educational services. For the study sample, it was an intentional sample of (48) managers from supervisory departments (director of *administration*, director of department, and Division manager). The study identified a critical gap in applying and adopting strategic foresight in the study population (that is, in Al-Mustansiriya University).

Key words: *strategic foresight, environmental monitoring, capacity for strategic choice, ability to integrate capabilities.*

1. Introduction

Organisations today face a high degree of environmental uncertainty, as the elements of the external environment are characterised by sophistication and change, which makes the tasks of strategic management more complex. One of the most important tools for effective strategy is strategic foresight, which is concerned with the ability to accurately perceive and understand future changes. As the external environment is highly complex, strategic foresight will also face a major challenge in its ability to achieve its goals. It will be difficult to match the organisation's actual strategic performance with the planned performance. This indicates the strategic gap in adopting and implementing strategic foresight.

Strategic foresight is not only related to private organisations, but also has great importance in public and service organisations in particular. Public service organisations had to adopt strategic foresight and improve the use of resources to reach the desired strategic situation. Educational institutions are one of the good examples that should be concerned with adopting and implementing strategic foresight. There is great importance for government universities to explore their own future, as most of the fateful decisions are directly related to the outputs of strategic foresight operations, which positively affect organisations' pursuit of strategic and competitive goals.

In this study, we are looking for the strategic gap between adopting and implementing strategic foresight at Al-Mustansiriya University, which is one of the most important Iraqi public universities, and has a major impact on society. Thus, the study problem is reflected in the following questions:

- What is the relative importance of the dimensions of strategic foresight in the presidency of Al-Mustansiriya University?
- What is the extent of environmental monitoring in the presidency of Al-Mustansiriya University?
- Does the presidency of Al-Mustansiriya University possess tools that help them make a successful strategic choice?
- What is the level of the possibility of Al-Mustansiriya University presidency in integrating its capabilities?

2. The importance of the study

The importance of the study can be determined by the following points:

- The study will be a guideline to support strategic foresight at all levels of administration (upper, middle and operational) in the organisation.
- The study works on setting up a mechanism for conducting surveys to know the public's opinion about the work of the target organisation through (questionnaires, interviews and meetings) to know the possible future conditions in all technological, social and cultural fields.
- The study encourages integrating capabilities by sharing information across jobs to encourage the organisation to organisational learning in order to improve skills and abilities.

3. The purpose of the study

The study aims at the following:

- Committing to adopting and applying a culture of strategic foresight at the level of organisation in general and at the presidency of Al-Mustansiriya University in particular.
- Determining the level of the environmental survey in the presidency of Al-Mustansiriya University.
- Knowing the strategies that the Mustansiriya University presidency should focus on.
- Highlighting the ways in which organisations in general can integrate their capabilities.

4. The hypothetical framework of the study:

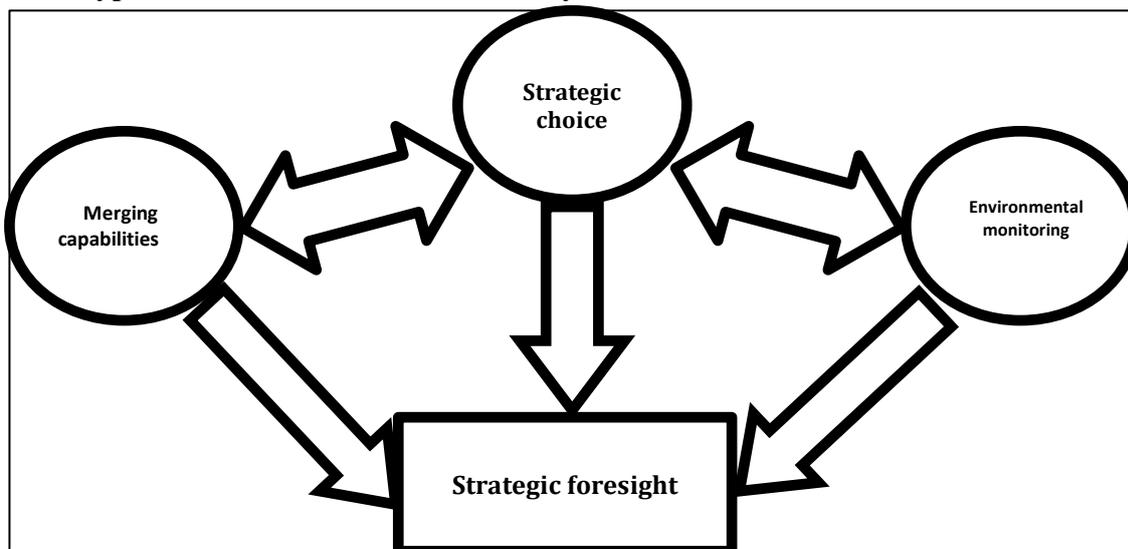


Figure (1) procedural framework

5. Study hypotheses

H1: The first main hypothesis: There is a gap in the application and adoption of the foresight strategy in the researched organisation. The following sub-assumptions can be formulated thus:

H1-2: *There is an implementation and adoption gap for environmental monitoring in the researched organisation.*

H1-3: *There is an implementation and adoption gap for the strategic choice in the researched organisation.*

H1-4: *There is an application and adoption gap for the ability to integrate capabilities into the researched organisation.*

6. Study limits

- Spatial boundaries: represented by the geographical area of the city of Baghdad, in which the researched organisation (Presidency of Al-Mustansiriya University) is located.

- The temporal limits are represented by the duration of the study, which extends from 1/8/2019 to 1/2/2020.
- Human limits: The study included the administrative leadership in the presidency of Al-Mustansiriya University, represented by general managers or those who act on their behalf, the directors of the administration, division directors, and directors of supervisory departments of the researched organisation.

7. Procedural definitions of the study concepts

Strategic foresight: is the ability to analyse and monitor future developments in the business, market and technology that may present opportunities or threats to the organisation.

Environmental monitoring: is the process by which the factors affecting the achievement of the tasks and objectives of the organisation will be known.

Strategic choice: It is the process of choosing an alternative from the strategic alternatives, which provide the best representation of the organisation's mission and its strategic goals according to a set of tools that help in adopting the most appropriate strategic alternative.

Integration of Capabilities: It is the process of continuously encouraging organisational learning by sharing information freely across all levels to improve the skills and capabilities of employees.

8. Population and sample of the study:

Al-Mustansiriya University, which is one of the Iraqi public universities, named after the Al-Mustansiriya School, was founded at the time of the Abbasids in Baghdad in 1233 AD by the Caliph Al-Mustansir Billah. It was an important scientific and cultural centre, located on the Rusafa side of the capital- Baghdad. It includes 13 colleges, mostly on the Rusafa side, with the exception of the College of Medicine and the College of Dentistry and Pharmacy due to their presence near an educational hospital on the Karkh side of the capital, Baghdad. It was founded in 1963. It was chosen as a study population due to its educational importance. The study sample was an intentional sample that included administrative leaderships in the university presidency as represented by general managers or those who act on their behalf, as well as the directors of the administration, division directors, and directors of supervisory departments of the researched organisation. Table 1 indicates the demographic characteristics of the study sample.

Table 1 demographic characteristics of the study sample

No.	Variables	Class distribution	The number	Percentage
1	Gender	Male	15	0.31
		Female	33	0.69
		Total	48	100%
2	Marital Status	Single	14	0.29
		Married	34	0.81
		Total	48	100%
3	Age	20-29	4	0.08
		30-39	23	0.48
		40-49	13	0.27
		50-59	6	0.13
		60- And more	2	0.04
		Total	48	100%
4	Academic Achievement	Ph.D.	3	0.06
		Master	2	0.04
		Bachelor	39	0.82
		Diploma	2	0.04
		Secondary school and less	2	0.04
		Total	48	100%
5	Career Title	Director of administration	8	0.17
		Director of department	19	0.40
		Division manager	21	0.43
		Total	48	100%
6	Length of Service	Under 10 years	20	0.42
		10-15	13	0.27
		16-20	7	0.15
		21-25	4	0.08
		26 years and over	4	0.08
		Total	48	100%
7	Participation in Courses	Specialisation courses	7	0.15
		General courses	35	0.72
		Not involved	6	0.13
		Total	48	100%

9. Methods of collecting study data

The methods used to collect the data required to complete the study varied and can be classified as follows:

- **The theoretical side:** The study relied on what is available in the researcher's hands, including books, periodicals, university theses and research related to the subject of the study, as well as the Internet to enter foreign libraries and research related to the subject of the study.
- **The practical side:** The study relied on the questionnaire as shown in Table 2, which was one of the main sources in collecting information and data to complete the requirements of the practical side and the results. Through this, the community members will be identified and explored in the subject of the study.

Table 2

The main variable	Sub variable	The number of paragraphs	Source and year
Strategic foresight strategy	Environment monitoring	6	TTALAB and REZA, 2015
	Strategic choice	7	
	Integrating capabilities	6	

10. Measuring the Validity and Reliability of the Questionnaire

Confirmatory factor analysis was used as a statistical method to verify the structural validity of the questionnaire in accordance with the researched environment. Confirmatory factor analysis is used to reduce the number of paragraphs in which the extraction coefficient is less than 30% to get away from the phenomenon of Multicollinearity, as well as in the detection on the nature of the relationship between dimensions and paragraphs, as shown in Table 3.

Table 3

Paragraphs	Extraction ratio	Paragraphs	Extraction ratio
Q1	.843	Q11	.804
Q2	.710	Q12	.686
Q3	.750	Q13	.832
Q4	.767	Q14	.619
Q5	.729	Q15	.815
Q6	.777	Q16	.777
Q7	.614	Q17	.723
Q8	.638	Q18	.746
Q9	.727	Q19	.764
.748	.748	Eigen value of all paragraphs = 1	

A KMO test was conducted as a measure to know the adequacy of the sample size to perform the confirmatory factor analysis, and it appears that the sample size (48) is sufficient for analysis, as its value (0.819) was at a significant level (Sig = 0.000). From the above we conclude that the questionnaire is appropriate for statistical analysis as shown in Table 4.

Table 4

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.819
Bartlett's Test of Sphericity Approx. Chi-Square	747.511
df	171
Sig.	.000
Value of KMO test and Bartlett's Test	

11. Data Analysis Tools

In its practical aspect, the study relied on statistical methods and the use of the SPSS23 software, which is a modern and specialised software in the field of data analysis, as shown in Table 5.

Table (5): Definition of the statistical methods used in the study

No.	Method	Definition
1	Percentage	It is used in determining the relative importance of the answers in the study variables, as it represents the result of dividing the partial value by the total value multiplied by 100.
2	Arithmetic mean	It is the sum of the observation values divided by their number to show the importance of answering the paragraphs
3	Standard deviation	It measures the level of dispersion in the answers of the sample individuals, as it represents the square root of the mean of the sum of the squares of values for the variables.
4	Frequency	It is a statistical method that is used to describe data in either tables or charts.
5	Coefficient of variation	It is used to compare the degrees of dispersion of two or more sets of values from their arithmetic means, and in the form of percentages that facilitate the comparison between them.
6	Confirmatory and exploratory factors analysis	It is a statistical measure used to confirm the measures of previous studies to suit the current study, and it is considered one of the best methods to verify the structural validity of the scale.

12. Previous studies

(1) The study of Adegbil et al (2018) entitled, “Strategic Foresight for Innovation Management: A Review and Research Agenda.”

This study was conducted in Germany / Berlin in (2018) on a comprehensive sample consisting of (258) academic publications, in the period between 1990-2014. This study introduced a comprehensive review toward strategic foresight, and its impact on innovation. The most important results of the study are the importance of strategic foresight in the organisation as well as its direct impact on the shaping of innovation management tools, and creating future oriented knowledge.

(2) The study of Jafari and Tabataba, 2017 entitled, “Corporate Foresight and its effect on Innovation, Strategic Decision Making and Organisational Performance (Case Study: Iranian Banking Industry).”

The study was conducted in Iran in 2017, and applied research on a group of banks, including the Central Bank of Iran, on a sample of (364) employees. The primary data was based on

interviews with academic and industry experts and questionnaires. The results of the study indicate that strategic insight can play a role in managing innovation and decision-making strategy, as well as in improving organisational performance.

12. Literature review

12.1 Strategic Foresight

Strategic foresight as a concept shows up in the 1950s. The French philosopher Gaston Berger used a term called "La Prospectives" that relates to human value, and he also pointed out the relationship between future concepts and strategy and distinguishes them in two phases: (1) Predictive stage: a study of potential and desired changes (2) Proactive phase: developing and evaluating possible strategic options in order to be prepared for the expected changes (Berger, 2007). In the 1960s, scientists began studying strategic foresight programs that aimed to determine future technologies that would generate significant economic wellbeing (Cuhls et al, 2009). The research conducted on this topic in the 1970s was called prediction and focused on the methods for future predictions, using the data of the past. The methods included trend extrapolation, S curves, trend curves, patent analysis and publication analysis (Anderson, 1997). In the early 1990s, a future cell called "front unit" was created in the European Commission at a meeting in Ispra, under the concept of supporters of the future (Miles, 2010).

In 1990s, the scope of research was expanded to include the regulation of future investigations that became an explosion of systematic regulation of these methods in large-scale technology foresight programs in Europe. In 1996, Ben Martin published a historical article in which he introduced the term "Foresight" and raised it for the first time on the organisation. He argued that it provides many potential future opportunities (Martin, 2010). Given the dominance of the English language over French, the term foresight, which was introduced in the 1990s, was adopted. Thus, the term strategic foresight was developed to refer to research focusing on Organisational Development (Slaughter, 1997).

The scientific population is paying increasing attention toward strategic foresight by increasing the number of articles related to strategic foresight. This proves that this field has become more important especially in Europe (Neef and Daheim, 2005; Schwarz, 2007; Alsan, 2008) (Tabooka et al., 2020). The period (1990-2014) witnessed a tremendous rise in scientific articles related to the causal link between strategic foresight and other variables. More than 13214 research papers were published in leading scientific journals such as ISI Science Web, Emerald, Science Direct, and Inderscience. Thematic classifications were as follows: (a) visualisation of strategic foresight, (b) development of strategic foresight as an organisational capacity, (c) strategic foresight as an introduction to innovation, (d) the impact of strategic foresight on innovation, (e) strategic foresight and innovation, (f) strategic foresight as an engine of innovation, and (g) the challenges of strategic foresight for innovation (Adegbile, et.al, 2017).

Strategic foresight emerged as a distinct organisational ability that enables organisations to successfully explore and exploit opportunities that competitors overlooked in high-speed environments (Chia, 2008). From an organisational perspective, strategic foresight has been widely considered as the ability to anticipate events before its occurrence, which helps organisations deal with the future (Proskuryakova et. Al, 2015). The rationale for this theoretical claim is that strategic foresight as a multiple space-time process that leads to actionable organisational outcomes such as learning (Bezold, 2010), ingenuity (Paliokaitė and Pačesa, 2014), and improved decision-making (Habegger, 2010). This means that strategic foresight connects the past, present and future as it builds on the past and looks at the present to plan for the future (Constanzo, 2004).

The business environment is facing rapid changes due to emerging new technologies that cause downtime, as well as social and cultural transformations, the changes in the political and legislative environment; and alternative business models (Becker, 2002; Day and Schoemaker, 2005). Downtime or disruptions are defined as major transformations that can become threats or opportunities for an organisation (Christensen, 2013). Strategic insight allows the analysis of possible future developments in the business, market or technology environment and the effects on management (Heger and Rohrbeck, 2012).

The European Foresight monitoring Network (EFMN) stated that foresight is used for seven reasons within the public and private sectors: (a) to foster innovation and provide inputs to policy formation, (b) strategic thinking (c), discovering opportunities (d) generating future visions, (e) anticipate challenges facing the organisation, (f) stimulus measures, and (g) encouraging public debate (Ttaleb and Ansari, 2015). There is a difference between the concepts of strategic foresight. Strategic foresight is seen as a process that governs the required steps that the organisation must test if it wants to understand the future and the rapid response to acquired ideas (Becker, 2002); as well as an organisational ability according to the ability perspective. Thus, strategic foresight is not just a process, but takes advantage of all the means the organisation needs in order to discover, predict, and respond to change (Radcliffe, 2006). The study relied on the concept of foresight as an organisational ability by selecting the appropriate scale for this.

Foresight can be seen as an innate human cognitive ability. Alternatively, the manner of foresight used by leaders varies according to contexts and tendencies. One of the dimensions of defining foresight is the ability to visualise images of how the future has evolved, and its purpose is to develop a direction that is beneficial from an organisational point of view, meaning that it is an important perspective that all stakeholders in organisational strategy need (vertically and horizontally, internally and externally), depending on the strategy being developed (Nelson Ruben, 2015). Chia emphasises that foresight can be developed through the systematic development of "peripheral" vision rather than "front" vision, that is, foresight is the product of insight and deep understanding that requires sustainable and deliberate

disassociation of the perception that dominates our intellectual habits (Chia 2004). Foresight is the "temporal, cognitive perspective" that leaders use to anticipate the future and demonstrate its structure, to guide their organisation based on future opportunities (Gary, 2008).

It is the consequences of foresight that matter. Biases and systemic errors may actually serve an adaptive purpose. For example, humans generally tend to anticipate more positive events than rationalists expect, and this bias for optimism has a relationship with foresight (Sharot et al. 2007). We may often be mistaken in our optimism as this positive mental attitude may have profound selective advantages on a more realistic (and perhaps grim) perspective. Sound and unbiased foresight has a positive contribution to this. In fact, we can say that it is a tremendous weapon for organisations (Suddendorf et. Al,2009).

Many authors agree that foresight is a critical qualification for leaders (Chia 2004; Day, Schoemaker 2008; Alsan 2008; Attila 2003; Boyatsis, 2008; Buchen 2005; Chermack 2004; Hamel 2009). Most major theories of strategy on the competitive advantage assume that leaders must have a high degree of foresight (Ahuja et al. 2005). Some definitions of foresight that appear in the literature often overlap and can be a source of confusion in an attempt to distinguish between the concepts of foresight, as terms such as strategic foresight, the process of foresight and organisational foresight have arisen in the literature. To study foresight, it is essential to distinguish between foresight as a cognitive ability and foresight as a strategy. Many studies have clarified the cognitive perspective of foresight as "innate", "human ability", "vision of mind" and are based on "deep vision and understanding" in its simplest form (Godet, 2001).

Foresight at the organisational level institutionalises the technique of combining the perceptions of many stakeholders to develop a set of alternatives to formulate perspectives on how the future can unfold with the best decisions that will be beneficial in organisational terms (Martin and Johnston 1999). Foresight at the individual level focuses on the mental, rational and irrational processes used in developing future images as a form of cognitive intelligence. Therefore, the efficiency of individual's foresight complements the method or the process of institutional foresight in its general form (Godet 2001).

Many foresight methodologies have been developed to assist organisations to develop and organise the creation of knowledge oriented towards foresight. This includes scenario planning and scenario thinking. The most popular of these methodologies is scenario planning, as the process begins with an analysis of trends and events in the external environment by building sensible scenarios and identifying its consequences and options for reaching optimal decisions about strategic goals (Adegbile et.al, 2017). Studies have shown that companies need to deal with learning behaviours such as environmental monitoring and experimentation in order to obtain new knowledge about the direction and scale of emerging external change , and is an activity to explore new business opportunities and adapt to new markets in times of continuous change (Yoon, et al., 2017). Strategic foresight works to identify future changes in

organisations in the long term, and enables organisations to develop appropriate early responses to protect themselves and survive. Foresight aims to create a long-term vision for the future to identify opportunities and threats as well as to enable strategic decision-makers to adapt to these challenges (Jafari and Seyed, 2017).

The following is a set of definitions that address strategic foresight from various aspects: foresight is the ability to anticipate events before they happen and help organisations deal with them by anticipating the future (D'Aveni, 1994). It is opening up the future by all means available to the organisation, developing perspectives for future options and then choosing between them. It is a process that tries to broaden the boundaries of human cognition, strategic choice, and perception (Slaughter, 1995). It is a systematic attempt to consider the long-term of science, technology, economics, and society with the aim of identifying areas of strategic research that are likely to achieve the greatest economic and social benefits (Georghiou, 1996). It is the process of developing a set of views on the possible ways in which the prospect can evolve well so that the individual is able to make a decision that can be taken today to create the best for tomorrow, developing future alternatives (Horton (1999). Foresight is the analysis of the current emergency cases and the degree of mobility of the analysis of the current emergency cases over time, or the analysis of the desired future situations and the determination of an advanced degree in time in relation to the emergency conditions under control, as well as the degree of analysis of future work paths to reach the desired future state of strategic monitoring (Amsteus, 2008).

13. Methodology

13.1: The reality of statistical measurements of study variables.

The results of the variables that reflect the dimensions of the environmental analysis and the public organisation strategy will be presented and analysed by knowing the answers of the study community and the direction of each item of the questions related to the study variables. Frequency distributions, arithmetic mean, standard deviation, relative significance, and variation coefficient was used. To know the direction of the study sample on each item, we applied the rule of addition (higher value minus the minimum value divided by 6) to measure the intensity of the answer as follows:

Amount of addition:	$6-1\div 6= 0.83$
0	1-1.83
1	1.84 – 2.67
2	2.68 – 3.50
3	3.51 – 4.33
4	4.34 -5.16
5	5.17-6

Table 6 shows that the value of the highest arithmetic mean of the environmental monitoring dimension was for the first paragraph (the organisation has an active network of communications with the scientific and research community), which reached 2.38, a standard deviation of 1.47, and a relative significance of 39.58. The direction of the sample on the content of the paragraph is 1, but the value of a lower Mean for the same dimension was the fifth paragraph (the organisation searches for developments in markets and industries that it does not currently involved in), which reached 1.79 with a standard deviation of 1.35, and a relative significance value of 29.86. The direction of the sample examined on the content of the paragraph was 0 in measuring the intensity of the answer.

Table 6: Descriptive analysis of environmental monitoring dimension

Q	Measure the severity of the answer												Arithmetic mean	standard deviation	Coefficient of variation	Relative importance
	0		1		2		3		4		5					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
1	5	10.42	7	14.58	17	35.42	10	20.83	2	4.17	7	14.58	2.38	1.47	61.8	39.58
2	7	14.58	12	25	16	33.33	9	18.75	3	6.25	1	2.08	1.83	1.21	65.93	30.56
3	7	14.58	12	25	10	20.83	8	16.67	4	8.33	7	14.58	2.23	1.63	73.01	37.15
4	7	14.58	12	25	10	20.83	9	18.75	6	12.5	4	8.33	2.15	1.52	70.64	35.76
5	11	22.92	8	16.67	15	31.25	10	20.83	2	4.17	2	4.17	1.79	1.35	75.46	29.86
6	6	12.5	8	16.67	15	31.25	11	22.92	4	8.33	4	8.33	2.23	1.4	62.93	37.15

Table 7 shows that the value of the highest arithmetic mean for the dimension of strategic choice was the twelfth item (the organisation is developing its plans for activities that achieve the organisational strategy), which reached 2.65 with a standard deviation of 1.42, and a relative significance of 44.10. The direction of the sample examined on the content of the item was 1, and the value of the lower mean was for the seventh paragraph (the organisation expects future conditions), which reached 2.13 with a standard deviation of 1.35 and a relative significance of 35.42. The direction of the sample examined on the content of the paragraph is (1).

Table (7) descriptive analysis of items of the ability to strategic choice decision

Q	Measure the severity of the answer												Arithmetic mean	standard deviation	Coefficient of variation	Relative importance
	0		1		2		3		4		5					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
7	5	10.42	13	27.08	10	20.83	14	29.17	3	6.25	3	6.25	2.13	1.35	63.38	35.42
8	6	12.5	5	10.42	14	29.17	19	39.58	2	4.17	2	4.17	2.25	1.23	54.63	37.50
9	3	6.25	10	20.83	11	22.92	13	27.08	8	16.67	3	6.25	2.46	1.34	54.35	40.97
10	7	14.58	6	12.5	10	20.83	9	18.75	11	22.92	5	10.42	2.54	1.58	62.32	42.36
11	6	12.5	7	14.58	13	27.08	10	20.83	5	10.42	7	14.58	2.46	1.56	63.33	40.97
12	4	8.33	4	8.33	16	33.33	12	25	5	10.42	7	14.58	2.65	1.42	53.73	44.10
13	7	14.58	7	14.58	8	16.67	16	33.33	7	14.58	3	6.25	2.38	1.45	61.19	39.58

Table 8 shows that the value of the highest mean for the dimension of the ability to integrate capabilities was for item seventeen (each employee builds and maintains formal and informal networks with other units) which reached 2.79 with a standard deviation of 1.43 and a relative significance of 46.53. The direction of the sample examined on the content of this paragraph was 2, but the value of the lowest mean for the fourteenth paragraph (there are regular incentives from the top management in the form of financial and moral rewards) which reached 2.00 with a standard deviation of 1.53 and relative significance of 33.33. The direction of the sample examined on the content of the paragraph was 1 on the intensity of the answer.

Table 8: Descriptive analysis of the paragraphs for the possibility of integrating capabilities dimension

Q	Measure the severity of the answer												Arithmetic mean	standard deviation	Coefficient of variation	Relative importance
	0		1		2		3		4		5					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
14	8	16.67	14	29.17	9	18.75	8	16.67	5	10.42	4	8.33	2	1.53	76.49	33.33
15	5	10.42	15	31.25	9	18.75	13	27.08	4	8.33	2	4.17	2.04	1.32	64.66	34.03
16	7	14.58	7	14.58	9	18.75	14	29.17	8	16.67	3	6.25	2.38	1.47	61.8	39.58
17	4	8.33	6	12.5	7	14.58	15	31.25	11	22.92	5	10.42	2.79	1.43	51.17	46.53
18	4	8.33	9	18.75	11	22.92	10	20.83	10	20.83	4	8.33	2.52	1.44	57.28	42.01
19	3	6.25	11	22.92	8	16.67	12	25	8	16.67	6	12.5	2.6	1.48	56.98	43.4

14. Findings

Table 9 shows the results of hypothesis in relation to the extent of the adoption of strategic foresight with its destinations (environmental monitoring, strategic choice, and possibility of integrating capabilities) in the researched organisation:

- The researchers concluded, as shown in Table 9, that there is a gap in the application and adoption of the foresight strategy in the researched organisation, as the amount of the strategic gap for the strategic foresight variable reached 0.65, thus the main hypothesis is valid.
- The researchers concluded, as shown in Table 9, that there is an application and adoption gap for environmental monitoring in the researched organisation, as the amount of the strategic gap for the strategic foresight variable reached 0.60, thus the first sub hypothesis is valid.
- The researchers, as shown in Table 9, find that there is a gap in the application and adoption of strategic choice in the researched organisation, as the amount of the strategic gap for the strategic foresight variable reached (0.60), thus the second sub-hypothesis is valid.

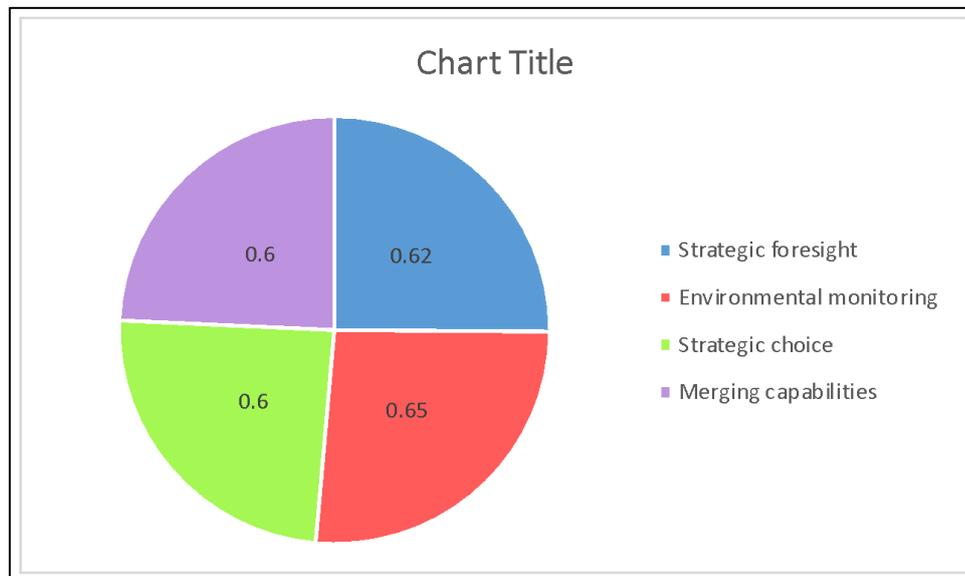
The researcher concluded, as shown in Table 9, that there is an application and adoption gap for the ability to integrate capabilities in the researched organisation, as the size of the strategic gap for the strategic foresight variable reached 0.62, thus the third sub-hypothesis is valid.

Table 9: Testing the hypothesis of the extent of application and adoption of the strategic foresight

No.	Item	less value	The highest value	Arithmetic Mean	Relative significance	Gap of applying strategic foresight
1	Environmental monitoring	0.00	5.00	2.10	35.01	1-35.01=0.65
2	The ability to make strategic choice	0.00	5.00	2.41	40.13	1-40.13=0.60
3	Integrating capabilities	0.00	5.00	2.39	39.81	1-39.81=0.60
4	The effectiveness of strategic foresight	0.16	5.00	2.30	38.41	1-38.41=0.62

Figure 2 shows the extent of the gap in relation to strategic foresight and its dimensions (environmental monitoring, the ability to strategic choice and the possibility of integrating capabilities) in the researched organisation.

Figure 2: The size of the strategic gap



15. Conclusions and recommendations

1. There is a strategic gap for the strategic foresight variable in the researched organisation, and this means that the importance of the variable is not realised from the knowledge and application side at the levels of individuals and the organisation in general.
2. The researched organisation does not carry out environmental monitoring on a regular basis to determine its strengths and weaknesses.
3. There is weakness in the organisation's ability to choose strategically from the available alternatives and choosing the best alternative.
4. The researched organisation needs to support the process that encourages the possibility of integrating capabilities.

Given the complex, rapidly changing environment in which the researched organisation operates, it must pay attention to the following:

- Establishing specialised units for strategic foresight, whose task is to collect information on patents that support the work of the organisation, as well as to poll the public's opinion to know their views on the work of the organisation through questionnaires, interviews and meetings for the purpose of developing future plans that work to develop their work in line with their desires and aspirations.
- Activating the tasks of adopting research on developments in the labour market in all areas (technological, social and cultural) through the departments of research and development and establishing and supporting an active network with the scientific and research community.



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- Using scenarios and strategic thinking to describe potential future directions by attracting talent, and working to support and develop the organisation's plans, activities and tools that are concerned with choosing the appropriate strategic alternative.
 - Working to support the workers, especially the talents, financially and morally, and support the employees' participation in the information freely in order to encourage continuous organisational learning to improve their skills and capabilities.

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