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The Role of Social Responsibility in Developing the Performance of the Economic Institution from the perspective of the Balanced scorecard - A case study of the Natural Gas Dilution Complex in Skikda-

The Role of Social Responsibility in Developing the Performance of the Economic Institution from the perspective of the Balanced scorecard - A case study of the Natural Gas Dilution Complex in Skikda-

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Abstract:

This study aimed to highlight the role of social responsibility in developing the performance of the economic institution from the perspective of the balanced scorecard, by studying the case of the natural gas dilution compound in Skikda, where (105 were distributed, of which (90) are valid for study, and the analysis was carried out using the descriptive analytical approach and the statistical package program for the social sciences spss. The study reached a set of results, the most important of which is the existence of a statistically significant relationship at a significant level of $\alpha \leq 0.05$ highlighting the contribution of the dimensions of social responsibility in developing the performance of the compound under study from the perspective of the balanced scorecard.

Keywords: social responsibility, performance, balanced scorecard.

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1. Introduction:

In light of the rapid and continuous changes taking place in the current era, the interest of many researchers and specialists in the concept of corporate social responsibility has increased, and after this interest was focused on the role that the institution can play towards the society in which it operates, whether it is an economic or social role, this interest has developed to a more important level, through the search for a new vision based on the concept of meeting the actual needs of society, whatever their nature, in addition to drawing appropriate strategies to respond

to expectations All its parties in parallel with achieving the goals sought by the institution, and in order to achieve balance and mutual integration between it and its community.

Social responsibility in its broad scope is of great importance to the institution or the society it serves alike, as it is assumed that the institution is not only rationalized by exploiting the resources available to it in order to achieve its economic goals, but its responsibility extends to meeting social requirements as well. This is done by investing part of its resources in order to achieve the welfare of society, improve its living conditions, and form a positive image of it. Gaining the trust and satisfaction of the customer helps the organization achieve sustainable economic development. On this basis, the success and growth of institutions can be linked to the extent to which the latter is aware of their social responsibility, the more institutions understand it and give it greater importance and value to the social responsibility associated with it, the better their performance develops. From this standpoint, this study came to illustrate how social responsibility through its dimensions contributes to the development of the performance of the economic institution from the perspective of the balanced scorecard.

1.1. The problem of the study:

The subject of social responsibility is one of the topics that have received great importance recently in light of the changes and developments in the business environment at all levels, as talking about social responsibility has recently been the title of many studies and research, and has become an integral part of the institution's strategy to interact with society and the surrounding environment on the one hand, and on the other hand it is considered a means to develop their performance, from this point of view the problem of the study can be crystallized more clearly through the following main question: **Is there a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of social responsibility in its dimensions (economic, legal, ethical, voluntary) in the development of the performance of the natural gas dilution complex in Skikda from the perspective of the balanced scorecard?**

1.2. Sub-questions:

In order to familiarize himself with all aspects involved in the problem of the study, the following sub-questions were asked:

- What is the level of commitment of the Skikda Natural Gas Liquefaction Complex to the application of social responsibility?
- What is the level of performance achieved from the perspective of the balanced scorecard in the natural gas liquefaction complex in Skikda?

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- Is there a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of the economic dimension of social responsibility to the development of the performance of the natural gas dilution complex in Skikda?
- Is there a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of the legal dimension of social responsibility to the development of the performance of the natural gas liquefaction complex in Skikda?
- Is there a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of the ethical dimension of social responsibility to the development of the performance of the natural gas dilution complex in Skikda?
- Is there a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of the charitable dimension of social responsibility to the development of the performance of the natural gas dilution complex in Skikda?

1.3. Study hypotheses:

Main hypothesis:

There is a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of social responsibility in its dimensions (economic, legal, ethical, charitable) to the development of the performance of the natural gas dilution complex in Skikda is highlighted from the perspective of the balanced scorecard.

From this main hypothesis emerge the following sub-hypotheses:

- **Hypothesis I:** There is a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of the economic dimension of social responsibility to the development of the performance of the natural gas dilution complex in Skikda is highlighted.
- **Hypothesis II:** There is a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of the legal dimension of social responsibility to the development of the performance of the natural gas liquefaction complex in Skikda is highlighted.
- **Hypothesis III:** There is a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of the ethical dimension of social responsibility to the development of the performance of the natural gas dilution complex in Skikda is highlighted.

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- **Fourth hypothesis:**

There is a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of the charitable dimension of social responsibility to the development of the performance of the natural gas dilution complex in Skikda is highlighted.

1.4. Importance of the study:

This study is important from the increasing importance of the topic it addresses, as the social responsibility of institutions is one of the topics that have occupied and still occupy the thought of many researchers and specialists, as a positive behavior that contributes to the success and superiority of institutions, especially economic institutions such as the natural gas dilution compound in Skikda, and the importance of this study lies in raising awareness of the importance of adopting social responsibility that supports performance from the perspective of the balanced scorecard with the possibility of benefiting the research compound from the results and recommendations of the study, and in a way that contributes to the development of programs and mechanisms Suitable for his work environment, which would be able to develop his performance better than it is currently.

1.5. Objectives of the study:

It lies in the following:

- Addressing some basic concepts about social responsibility and the balanced scorecard;
- To identify the level of commitment of the natural gas dilution complex in Skikda to the application of the dimensions of social responsibility;
- Identification of the level of performance achieved from the perspective of the balanced scorecard of the natural gas liquefaction complex in Skikda;
- Detection of the existence of a statistically significant relationship at a significant level of $\alpha \leq 0.05$ Between the dimensions of social responsibility and performance from the perspective of the balanced scorecard at the level of the institution under study;
- Provide some recommendations regarding the importance of commitment to the dimensions of social responsibility in a way that contributes to the development of performance from the perspective of the balanced scorecard in the institution under study.

2. Theoretical framework and previous studies

Through this axis, the theoretical aspects of the study variables will be familiarized with the presentation of the most important previous studies related to the topic.

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2.1. Social Responsibility:

2.1.1. Definition of Social Responsibility:

There is no single comprehensive and agreed definition of corporate social responsibility, but there are many definitions that differed as a result of the different views of researchers and thinkers, the most important of which are:

- It is a social contract between society and institutions, because of the latter's processes towards society (Al-Bakri, 2001, p. 23). According to this definition, social responsibility is a contract under which institutions commit themselves to their social duties towards the society in which they operate.

- It is the basic duty of the institution to make important decisions and actions in a way that achieves the welfare and interests of society (DAFT, 2002, p. 143). It is noted that this definition shortened social responsibility in making and implementing decisions, especially those related to achieving the well-being of members of society.

- It is the continuous commitment of business institutions to act ethically and contribute to achieving economic development while maintaining Environment, working with workers and their families, community and community In general with the aim of improving the quality of life for all these Parties (Al-Suhaibani, 2011, p. 4). It is worth noting that this definition focused on the economic dimension of social responsibility as a mechanism to achieve economic development and improve the quality of living of workers and their families.

- It is a platform followed by the Foundation through which it integrates its economic, social and environmental concerns in decision-making, and adherence to reporting according to the environmental standard (ISO 14000), as well as in accordance with the global standards for social accountability and the guide to writing sustainable reports (Qarn, 2017, page 4).

Through the previous definitions, it can be said that social responsibility is a voluntary act carried out by institutions regardless of the nature of their work or activity, through which they aim to achieve their economic goals in addition to achieving the goals of the society in which they are active, especially with regard to improving the quality of living for their workers and society as a whole.

2.1.2. The importance of social responsibility:

The importance of social responsibility for organizations is evident in the following elements (Ammari, 2019, p. 102):

- Design products that contribute to job satisfaction;

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- Work to improve the image of the institution in society and strengthen its competitive position;
- Provide suitable working conditions within the organization, so that employees work hard to improve their productivity and improve their performance;
- Help solve social and environmental problems and promote sustainable development;
- Contribute to attracting human competencies to work in the institution, considering that the latter, with its commitment to social responsibility, has become possessed of a set of important human values;
- Contribute to the removal of obstacles to export abroad.

The importance of social responsibility is also highlighted by increasing the institution's ability to respond to the various changes in the surrounding environment, especially those changes in the social needs of society, in addition to contributing to the formation and strengthening of the organizational culture prevailing within it, which is dominated by interdependence and cooperation between its various parties, which reflects positively on the development of its performance, especially its financial return.

2.1.3 Dimensions of Social Responsibility:

Social responsibility includes several dimensions, including (Habbar, 2019, p. 149):

Economic dimension: This dimension is based on the principles of competition and technological development, which include a wide range of elements of social responsibility, where enterprises must produce goods and services for the purpose of achieving benefits and profits but without harming society and the environment.

Legal dimension: This dimension is based on the need for institutions to protect legislation related to environmental protection, occupational safety, social justice and consumer protection laws, as well as to prevent damage to the environment through its arbitrary use... Etc.

Ethical dimension: This dimension is concerned with the organization's commitment to ethical principles and standards, behavioral aspects, beliefs and norms that prevail in the society in which it operates, even if these behaviors are not codified in special laws that must be respected.

Charitable (humanitarian) dimension: This responsibility focuses on the fact that the Foundation has the right to choose to adopt some social and environmental activities in a humane and non-binding manner in the form of programs for the benefit of society as a whole, or for some special groups in it.

The researcher Carroll also emphasizes that the comprehensiveness that covers the content of social responsibility makes it represented by four essential dimensions: the charitable dimension, the moral dimension, the economic dimension and the legal dimension. The responsibility of the social enterprise is the sum of the four dimensions mentioned by Carroll in the form of an equation as follows (Mohamed Atef, 2008, p. 33):

Social responsibility = charitable responsibility + moral responsibility + economic responsibility + legal responsibility.

The dimensions of social responsibility can also be clarified through the following figure:

Figure 01: Dimensions of social responsibility

Charitable dimension: Acting as a good citizen contributes to enhancing resources in society and improving the quality of life.
Ethical dimension: The institution takes into account the ethical aspect of its decisions, which leads to it working correctly and fairly.
The legal dimension: obedience to the law, which reflects what is right or wrong in society and represents the basic rules of business.
The economic dimension: The institution achieves a return, and this represents a basic basis for meeting other requirements.

Source: (Wali et al., 2016, p. 227)

2.2. Performance of the Economic Enterprise:

Performance is an essential and important concept for institutions in general, and economic institutions in particular, as it is considered the most important dimension for various institutions, as it revolves around the *raison d'être* of any institution, and the process of developing it is one of the most important concerns of practitioners and specialists in institutions, as well as experts and specialists in organization and management alike, because of its clear impact on the effectiveness of institutions in general, as the latter operate in highly changing and sharp environments that require a high degree of flexibility for these institutions, and a high degree of readiness to respond appropriately to these changes in their internal and external work environment (Mahmoud Abu Bakr, 2003, p. 373).

The concept of performance from an economic point of view refers to achieving profit through the optimal use of available resources, as it was known by several definitions, most notably:

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- It is a reflection of how the organization uses its financial and human resources, and exploits them efficiently and effectively in a way that makes it able to achieve its goals (Youssef, 2016, p. 16)..
- It is the result of work, in the sense of an estimate of the results obtained, i.e. the ability of the organization to achieve its objectives through the use of Resources available in an efficient and effective manner (Ammari, 2017, p. 101).
- It is the objectives and results expected to be achieved, and more broadly performance indicates the process of value creation, in a way that ensures the organization achieves significant profits and returns (Bin Zayed, 2017, p. 112).

What can be seen through the previous definitions is that they focused on effectiveness Efficiency to limit the concept of performance, efficiency means the optimal use of available resources, while effectiveness is related to the level of achievement of goals. Based on the above, it can be said that performance is the various activities and operations carried out by the institution in order to achieve its desired goals: through the rational use of available resources.

2. 3. Balanced Scorecard

2.3.1 Balanced Scorecard Definition:

There are many definitions that deal with the balanced scorecard, including the following:

- It is a management system that aims to help an organization translate its vision and strategy into a set of interrelated strategic goals and measurements, and is an effective tool for tracking performance against goals achieved (Horngren, 2005, p. 448)..
- It is a model that represents a multifaceted framework for depicting, implementing and managing an organization's strategy at all administrative levels by linking objectives, priorities and metrics to this strategy (Rehab Mohammed, 2016, p. 168)..
- It is the first systematic work that tried to design a performance appraisal system, as it is concerned with translating the organization's strategy into specific goals, targeted standards, and initiatives for continuous improvement, and it also standardizes all the metrics used by the organization (Balaska, 2012, page 23).

Through these definitions, it is clear that the balanced scorecard is: one of the contemporary and multifaceted administrative means according to which the level of development in the organization's performance towards achieving goals is measured.

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2.3.2. The importance of the balanced scorecard:

The importance of the balanced scorecard is as follows (Khalaf, 2017, pp. 181-182):

- Helps the organization in what needs to be done to improve its performance;
- Enables the enterprise to meet the requirements of competition;
- Through its dimensions, the Balanced Scorecard enables the organization to monitor financial results while monitoring intangible assets;
- instructs the management of the enterprise not to accept improvement in one area as opposed to the deterioration of the situation in another;
- The organization is useful in change processes and management, as it constantly guides the organization to adapt to various changes, especially market changes, which leads the organization to successful change that is supported and supported by all;
- It is considered one of the contemporary approaches to evaluating the strategic performance of economic institutions, through its contribution to providing a comprehensive perspective of their business performance, which in turn helps institutions to act in accordance with their interests;
- It helps the organization translate its strategy into goals that it works to achieve.

2.3.3. Dimensions of the Balanced Scorecard:

The balanced scorecard is one of the modern tools in management and performance evaluation, and its components are represented in the following dimensions (Mehidi, 2020, pages 130-131):

Financial dimension: This dimension focuses on the financial aspects, as it clarifies whether the implementation of the organization's strategy contributes or not to making basic improvements and achieving the final result that the institution aspires to achieve, and this dimension also focuses on the size and level of operating income and return on invested capital (financial returnability) resulting from cost reduction, sales volume growth for existing and new products, return on ownership's equity, return on total assets, economic value added, and the growth of cash flows generated from Operating activities.

customers dimension: Most institutions currently rely on placing the requirements and needs of customers at the top of the priorities of their strategies, because of the great importance that this poses to increase the chances of the organization's success, survival and continuity of its activity in light of the intensification of competition, which requires the institution to provide products (goods and services) of high quality and reasonable prices.

Learning and Growth Dimension: This dimension defines the capabilities that an organization must possess in order to achieve efficiency in the use of its economic assets and create value for customers and shareholders. The learning efficiency and growth of organizations can be measured as follows:

- The individual's competence and skills in the accomplishment of his tasks;
- efficiency of the information system;
- Efficiency of incentive and reward systems.

internal processes dimension: This dimension means all the activities that distinguish the organization from other institutions and through which the needs of customers are met, so the organization must identify the processes in which it can excel, and then determine the measures for these processes (Khalaf, 2017, page 187).

2.4. Previous studies:

Among the studies that dealt with both social responsibility and performance through the balanced scorecard are the following:

- **Study (Squid, 2019):** This study aimed to know the social role played by the Islamic banks that were selected compared to their position and market value, where four Islamic banks were selected and their community activities were analyzed according to the report and data issued in this field. The study concluded with a set of results, the most important of which is that Islamic banks are fully aware of the importance of assuming their social responsibility, and they focus heavily on their social responsibilities directed to various segments of society in exchange for less attention. With its responsibility towards workers and employees, community projects directed outside the country are absent, as well as coordination in these projects among Islamic banks.
- **Study (Bin Khalifa, 2017):** This study aimed to know the role of the balanced scorecard in evaluating the performance of economic institutions, by focusing on the main axes of the balanced scorecard, namely: the financial axis, the customer axis, the internal operations axis, the learning and growth axis, and the study reached a set of results, the most important of which are: The balanced scorecard is considered as a system to verify the balance of efficiency and effectiveness of performance, as well as to evaluate the overall performance of the various departments of the economic institution, as its application enables the latter to Diagnose the strengths and weaknesses of its performance clearly and comprehensively.
- **Study (Balaska, 2012):** This study aimed to find out the extent to which Algerian economic institutions can apply the balanced scorecard as a tool to evaluate their strategy, by knowing the components it contains and the obstacles they face in this regard, and the study reached a set of

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results that Algerian economic institutions do not have the main ingredients for the application of this card and that it is far from adopting this approach.

3. Practical side of the study:

3.1. Definition of the institution under study:

It is represented in the natural gas dilution complex in Skikda, which is one of the industrial and energy poles in Algeria in general and in the wilaya of Skikda in particular, and it was established by the Algerian-French company SONALGAZ In application of the agreement signed on July 29, 1967 between the Algerian and French governments, the company's capital was distributed equally between the two parties, and the task of completing this complex was entrusted to the French institutions, namely: CEMCITECCMP SOTRABAZ, this compound dilutes the natural gas obtained from the natural resource Hassi Sand directly through a pipeline that extends 580 km long and thick 40 inches.

As for the location of the boat, it is located in the industrial zone of Skikda, 3.8 km east of the state headquarters, bordered to the north by the coast of Larbi Ben M'hidi, to the east by the National Organization for Petroputation and Chemistry ENIP, to the west by the National Port Corporation EPS and to the south by the industrial maintenance company SOMIK..

The compound extends the production of natural gas from wells located in Hassi Ramel, through a network of pipelines to transport gas after treatment, liquefaction, treasoning and then filling natural gas vessels.

The boat is located 5 km east of the city of Skikda and sits on an area of 92 hectares and overlooks the coast for the purpose of using sea water to cool production equipment, and the main activity of the boat is to dilute the natural gas extracted from the wells of Hassi Raml, and the production capacity of the compound is estimated at 7.8 billionm³ per year, the compound contains units for liquefaction, namely: the central unit, the storage and unloading unit of the product, the petroleum gas processing unit. The Skikda natural gas dilution complex also employs 796 workers distributed among 17 departments.

3. 2. Study population and sample:

The study population was represented in all 796 workers of the natural gas dilution complex in Skikda, distributed over 17 departments, where a random sample of 105 workers was selected by 13.19% of the study population, the questionnaire forms were distributed to all of them, and only 95 questionnaires were retrieved, and after reviewing and examining the questionnaires, 5 questionnaires were excluded, due to their lack of processing and analysis conditions, so the

number of questionnaires subject or valid for study is 90 questionnaires. Only, which is equivalent to 85.71 % of the study sample, as shown in the following table:

Table (01): Distribution of questionnaires to the study sample

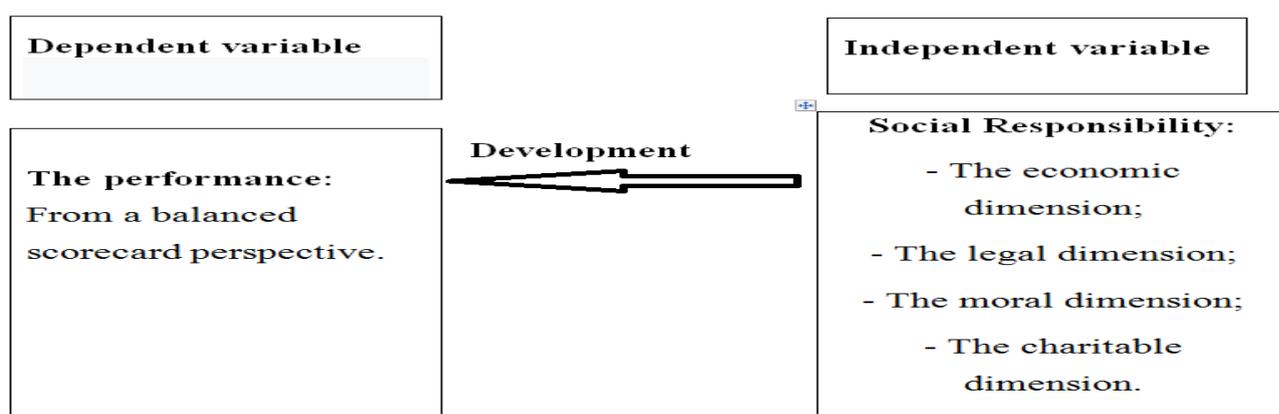
Statement	Number	Ratio %
Study Sample	105	100
Distributed questionnaires	105	100
Missing questionnaires	10	9.52
Retrieved Questionnaires	95	90.48
Rejected questionnaires	05	4.76
Accepted Questionnaires	90	85.71

Source: Prepared by researchers

3.3. Study Model:

The study model can be illustrated by the following figure:

Figure n° 02: Study model



Source: Authored by researchers

3. 4. Study Methodology:

In view of the nature of the subject of the study and its objectives, the descriptive analytical approach was used, in order to study in depth and comprehensive analysis of the role of social responsibility in developing performance from the perspective of the balanced scorecard in the natural gas dilution complex in Skikda, where the theoretical aspects of the study were taken note

of through the information obtained from sources and references related to its variables, as for the applied aspect, the questionnaire was used to obtain data and facts related to the level of commitment to the dimensions of social responsibility and the level of Performance achieved from the perspective of the balanced scorecard in the compound under study and the relationship between them.

3.5. Questionnaire Design Method:

To achieve the objective of the study of identifying the role of social responsibility in developing the performance of the natural gas dilution complex in Skikda, the study questionnaire was built and designed using similar previous literature and consulting - those with experience and competence in this field in the academic and professional field. The questionnaire consisted of two parts:

Part I: For personal data about the respondents: such as gender, age, educational level, years of experience, job position.

The second part: It is a measure that aims to identify the role of social responsibility in developing the performance of the institution under study from the perspective of the balanced scorecard, and this part contained a set of 32 paragraphs distributed on two axes, and the first axis measures: the level of commitment to the dimensions of social responsibility, and consists of 16 phrases, while the second axis measures the level of performance achieved in the compound from the perspective of the balanced scorecard, and also consists of 16 phrases. The likert scale has been used) five-point five-point Likert to determine the significance of each statement of the questionnaire.

3.6. Validity and reliability of the study tool:

To ensure the truthfulness and stability of the questionnaire and measure the degree of internal consistency between its statements, the alpha-Krumbach coefficient was used, and the results obtained were as shown in Table (02), where it is clear through that the general stability coefficient for the questionnaire was high, reaching (0.85), and the stability coefficient for the social responsibility axis reached (0.84), while the stability coefficient for the performance axis was (0.61), and this indicates that the questionnaire in all its axes has a high degree of stability, and can be relied upon to conduct As for the arbitration of the questionnaire, it was presented in its initial form by a group of academic arbitrators, and their observations and advice were taken into account while adjusting the questionnaire in its final form.

Table (02): Values of the stability coefficient of the study axes

Axis	Number of ferries	Ratio %
Social Responsibility	16	0.84
performance	16	0.61
The questionnaire as a whole (all axes)	32	0.85

Source: Prepared by researchers based on the outputs of the statistical program SPSS

3.7. Statistical treatments used:

In order to process the data obtained through the questionnaire, a set of statistical tools and measures were used: arithmetic mean, standard deviation, simple and multiple linear regression, frequencies and percentages, torsion and flattening coefficients, One Sample T-test T, and ANOVA single variance test..

To find out the general trend of the responses of the study sample members to the questionnaire statements, the following measures were given for the arithmetic mean shown in Table (03), as follows:

Table (03): Determining the general trend according to the values of the arithmetic mean

Arithmetic mean	$1.8 > x \geq 1$	$2.6 > x \geq 1.8$	$3.4 > x \geq 2.6$	$4.2 > x \geq 3.4$	$5 \geq x \geq 4.2$
General Direction	Very weak degree	Weak degree	Medium degree	High score	Very high score

Source: Prepared by researchers based on the outputs of the statistical program SPSS

4. Presentation and analysis of results:

4.1. Presentation and analysis of the results of the first part related to the personal data of the study sample members:

Table (04): Personal data of the study sample members

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Statement	characteristics	Duplicate	Ratio %
Sex	male	72	80
	female	18	20
lifetime	30 years and under	19	21.11
	31-40 years old	37	41.11
	41-50 years old	21	23.33
	More than 50 years	13	14.45
Education level	Secondary or less	12	13.33
	academic	77	85.56
	Other level	01	1.11
Experience	Less than 5 years	21	23.33
	5 to 10 years	16	17.78
	More than 10 years	53	58.89
Job Position	Control operator	21	23.33
	Execution agent	12	13.33
	frame	51	56.67
	Sublime frame	06	6.67

Source: Authored by researchers

It is clear from the above table that:

- The majority of the study sample are male, with 80% of the population;
- Most of the study sample is under 40 years old, with a percentage of more than 62%;
- The vast majority of the study sample have a university level;
- Most of the study sample have more than 10 years of experience, reaching 58.89%;
- The majority of the study sample are tires.

4.2. Presentation and analysis of the results of the second part related to the variables or axes of the study: Amira Abdul baqi...

Through Table (05) below, it is noted that the general trend of the responses of the study sample members about both the level of commitment to the dimensions of social responsibility and the level of performance achieved from the perspective of the balanced scorecard in the natural gas dilution complex in Skikda were in high degrees respectively, that is, the compound under study is committed to applying the dimensions of social responsibility, where the highest response was to the legal dimension with an arithmetic average of 3.88, while the lowest response was to the charitable dimension with an arithmetic average of 3.19.

The results also show a high level of performance achieved from the perspective of the balanced scorecard in the composite under study, where the arithmetic mean of the performance variable as a whole was 3.45 with a standard deviation of 0.652.

Table (05): Analysis of the answers of the study sample members about the study variables

Dimensions	Arithmetic mean	Standard deviation	Order	General trend of approval score
Social Responsibility				
Economic dimension	3.63	0.793	2	High
Legal dimension	3.88	0.909	1	High
Ethical dimension	3.28	0.739	3	Medium

The charitable dimension	3.19	0.834	4	Medium
Total	3.49	0.622	-	High
Performance achieved from the perspective of the Balanced Scorecard				
Financial dimension	3.65	0.689	2	High
After customers	3.70	1.263	1	High
After learning and growth	3.26	0.750	3	Medium
After internal operations	3.22	1.092	4	Medium
Total	3.45	0.652	-	High

Source: Prepared by researchers based on the outputs of the statistical program SPSS

4. 3. Hypothesis testing and discussion:

The hypotheses of the study are tested through a simple linear regression test as shown by the results of the statistical analysis through the following:

Table (06): Results of simple linear regression analysis of the impact of social responsibility dimensions on achieved performance

Variable	Correlation coefficient R	Coefficient of determination R ²	Regression coefficient β	F	Sig
Social Responsibility					
	0.532	0.283	0.327	26.271	0.000
Economic dimension					

Performance achieved from the perspective of the Balanced Scorecard	0.764	0.583	0.426	29.708	0.000
	Legal dimension				
	0.605	0.366	0.386	12.252	0.000
	Ethical dimension				
	0.391	0.153	0.172	3.833	0.007
	The charitable dimension				
	0.374	0.140	0.164	3.465	0.011

Source: Prepared by researchers based on the outputs of the statistical program SPSS

4.3.1. Testing the main hypothesis:

" There is a statistically significant relationship at a significant level of $\alpha \leq 0.05$ The contribution of social responsibility in its dimensions (economic, legal, ethical, charitable) in the development of the performance of the natural gas dilution complex in Skikda is highlighted from the perspective of the balanced scorecard"

The results of the statistical analysis through Table (06) show the existence of a statistically significant relationship for the dimensions of social responsibility as a whole on the performance achieved in the natural gas dilution complex in Skikda, as the correlation coefficient R reached (0.532) at a significant level ($\alpha \leq 0.05$), and this indicates the existence of a positive correlation between the dimensions of social responsibility as a whole and performance, and the coefficient of determination reached R^2 (0.283) That is, the value of (28.3%) of the changes in performance is caused by the dimensions of social responsibility as a whole, and the remaining percentage (71.7%) is due to other variables that were not included in the study model, and this result is due to the fact that the natural gas dilution compound in Skikda is committed to applying the dimensions of social responsibility, and the regression coefficient β (0.327) indicates a positive relationship between the independent variable and theThe change of the dependent, where the greater the social responsibility dimensions as a whole by one unit, the performance increases by 0.327, and the significance of this relationship confirms the calculated F(value, which amounted to (26.271), which is a function at the level of significance ($\alpha \leq 0.05$) and thus: **We accept the main hypothesis** Which states the existence of a statistically significant relationship for the dimensions of social responsibility as a whole on the performance achieved in the natural gas liquefaction complex in Skikda from the perspective of the balanced scorecard.

4.3.2 Sub-hypothesis testing: The sub-hypotheses are tested in light of the results of the previous table as follows:

Test of the first sub-hypothesis: There is a statistically significant relationship at a significant level ($\alpha \leq 0.05$) highlighting the contribution of the economic dimension to the development of the performance of the natural gas dilution complex in Skikda.

The results of the statistical analysis through Table No. (06) show a statistically significant relationship of the economic dimension on the performance achieved in the natural gas dilution complex in Skikda, as the correlation coefficient R (0.764) at a significant level ($\alpha \leq 0.05$), and this indicates a strong positive correlation between the economic dimension and performance, and the coefficient of determination R^2 (0.583) That is, the value of (58.3%) of the changes in performance is caused by the economic dimension of the first rank compared to other dimensions, and the remaining percentage (41.7%) is due to other variables that were not included in the study model, and the regression coefficient β (0.426) indicates a positive relationship between the independent variable and the dependent variable, where the more the economic dimension is strengthened by one unit, the performance increases by 0.426, and the significance of this relationship confirms the value of F Calculated which amounted to (29.708), which is a function at a significant level ($\alpha \leq 0.05$) Thus: **We accept the hypothesis**, which states that there is a statistically significant relationship between the economic dimension and the performance achieved from the perspective of the balanced scorecard in the natural gas dilution complex in Skikda.

Test of the second sub-hypothesis: There is a statistically significant relationship at the level of significance ($\alpha \leq 0.05$) highlighting the contribution of the legal dimension to the development of the performance of the natural gas dilution compound in Skikda.

The results of the statistical analysis through Table (06) show the existence of a statistically significant relationship for the legal dimension on the performance achieved in the natural gas dilution compound in Skikda, as the correlation coefficient R reached (0.605) at the level of significance ($\alpha \leq 0.05$), and this indicates the existence of a positive correlation between the legal dimension and performance, and the determination coefficient R^2 (0.366) That is, the value of (36.6%) of the changes in performance is caused by the legal dimension, and the remaining percentage (63.4%) is due to other variables that were not included in the study model, and the regression coefficient β (0.386) indicates a positive relationship between the independent variable and the dependent variable, where the more the legal dimension is enhanced by one unit, the performance increases by 0.386, and the significance of this relationship confirms the value of F calculated which amounted to (12.252), which is a function at a significant level ($\alpha \leq 0.05$) Thus: **We accept the hypothesis**, which states that there is a statistically significant relationship

between the legal dimension and the performance achieved from the perspective of the balanced scorecard in the natural gas dilution compound in Skikda.

Test of the third sub-hypothesis: There is a statistically significant relationship at the level of significance ($\alpha \leq 0.05$) highlighting the contribution of the ethical dimension to the development of the performance of the natural gas dilution complex in Skikda

The results of the statistical analysis through the previous table show a statistically significant relationship for the ethical dimension on the performance achieved in the natural gas dilution compound in Skikda, as the correlation coefficient R (0.391) at a significant level ($\alpha \leq 0.05$), and this indicates a positive but sub-average correlation between the ethical dimension and performance, and the coefficient of determination R^2 (0.153) That is, the value of (15.3%) of the changes in performance is caused by the ethical dimension, and the remaining percentage (84.7%) is due to other variables that were not included in the study model, and the regression coefficient β (0.172) indicates a positive relationship between the independent variable and the dependent variable, where the more the ethical dimension is enhanced by one unit, the performance increases by 0.172, and the significance of this relationship confirms the value of F calculated (3.833), which is a function at the level of ($\alpha \leq 0.05$), and therefore we **accept the hypothesis**, which states that there is a statistically significant relationship between the ethical dimension and the performance achieved from the perspective of the balanced scorecard in the natural gas dilution compound in Skikda.

Test of the fourth sub-hypothesis: There is a statistically significant relationship at a significant level ($\alpha \leq 0.05$) highlighting the contribution of the charitable dimension in the development of the performance of the natural gas dilution complex in Skikda.

The results of the statistical analysis through the same previous table show a statistically significant relationship for the charitable dimension on the performance achieved in the natural gas dilution complex in Skikda, as the correlation coefficient R reached (0.374) at a significant level ($\alpha \leq 0.05$), and this indicates a weak positive correlation between the charitable dimension and performance, and the coefficient of determination reached R^2 (0.140) That is, the value of (14%) of the changes in performance is caused by the voluntary dimension, and the remaining percentage (86%) is due to other variables that were not included in the study model, and the regression coefficient β (0.164) indicates a positive relationship between the independent variable and the dependent variable, where the more the charitable dimension is enhanced by one unit, the performance increases by 0.164, and the significance of this relationship confirms the calculated F value, which amounted to (3.465), which is a function at the level of significant ($\alpha \leq 0.05$) Therefore, **we accept the fourth sub-hypothesis**, which states that there is a statistically significant relationship between the charitable dimension and the performance

achieved from the perspective of the balanced scorecard in the natural gas liquefaction complex in Skikda.

5. Conclusion:

It is clear through this study, both theoretical and applied, that commitment to social responsibility is one of the necessary conditions for any strategy or mechanism adopted by economic institutions in order to develop their performance, and although most of the studies and research over recent years that have been conducted are related to performance evaluation through the perspective of the balanced scorecard, but this study considers the card as an input or as a mechanism through which performance is developed, in order to keep pace with the various developments at the level of the internal or external environment. This is what social responsibility aims at in its various dimensions, so this study sought to highlight the role of social responsibility in developing the performance of the economic institution from the perspective of the balanced scorecard, and reached a set of results, the most important of which are:

- The study showed that the natural gas dilution compound in Skikda adheres to the dimensions of social responsibility at a high level, as the average responses of the study sample members to the dimensions of social responsibility combined (3.4986) with a standard deviation of (0.62204);
- The study showed a high level of performance achieved in the natural gas dilution complex in Skikda, with an arithmetic mean of (3.5438) and a standard deviation of (0.65252);
- The results of the study show a statistically significant relationship at a significant level ($\alpha \leq 0.05$) highlighting the contribution of responsibility in the development of performance at the level of the institution under study, and there is a positive impact relationship for each of the dimensions of social responsibility (economic dimension, legal dimension, moral dimension, charitable dimension) on performance, which confirms the validity of the hypotheses adopted in this study, and therefore it can be said that the greater the degree of commitment to the dimensions of social responsibility, the greater the level of performance achieved in the institution, with greater impact importance for both the economic and legal dimensions compared to the ethical and charitable dimensions, which requires giving them special importance to achieve a very high performance of the institution from the perspective of the balanced scorecard.

In light of its findings, this study recommends the following:

- Formulate the organization's CSR activities and practices within a strategic framework, while bringing about a change in the vision and philosophy of the organization by considering it as a necessary option, not just a routine procedure that the organization resorts to at certain times;

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- Transforming the Foundation's social activities and practices into a platform to be practiced within detailed plans and programs;
- Giving more attention to social responsibility, due to the great role it plays in improving the performance of the organization for the better;
- The organization should work on building an organizational culture based on the principles and foundations of social responsibility;
- The need to diversify the social responsibility practices carried out by the institution, and that these practices are not limited to a specific dimension alone;
- The need to increase financial support allocated to social responsibility activities.

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