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Stakeholders' Engagement and Performance Efficiency at Oil and Gas Industry in Yemen

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Abstract

Oil and Gas industry in Yemen is considered as the biggest and variable sector. Therefore, the performance efficiency is very important to be attained during all the activities and phases that include searching, drilling, upstream, midstream, and downstream. As a crucial factor, stakeholders' engagement theories have been emphasized the central role of stakeholders' engagement to strategic planning efforts in contemporary organizations. This study therefore examined the impact of stakeholders' engagement on the performance efficiency (time, cost, and quality) at the Yemeni oil and gas industry. The quantitative method was employed and online questionnaire was used as a primary source for collecting data. The sample size was 312, selected from three oil and gas companies; namely; Yemen Liquid Natural Gas Company, Safer Exploration and Production Oil Company and OMV Company. This study targeted managers and non-managers. The results show that stakeholders' engagement has a significant relationship with the performance efficiency. In addition, stakeholders' engagement has a significant impact on the performance efficiency. The results suggest the consideration of early stakeholders' engagement in the planning, development, implementation, controlling and evaluation the performance. Managers should enhance every step regarding the participation of the stakeholders in the decision-making process. In addition, more effective practices will support achieving performance efficiency.

Keywords: Stakeholders' Engagement, Performance Efficiency, Time, Cost, Quality, Yemen, Oil and Gas Industry

1. Introduction

The performance of organization is a sign of the capacity of a company to efficiently achieve independent goals (Venkatraman & Ramanujam, 1986). In linking with planning, there is a strong relationship between planning and performance showed through the planning refers the decisions of future actions that make the whole process working smoothly to create the performance efficiency. For instance, the direction while performing task depending on the planning when setting clear objective, business environment, mission, goals, tasks, method of performing, required competencies of performance standards, policy, procedures, and responsibilities.

The aim of this paper to examine the impact of stakeholders' engagement on the performance efficiency (time, cost, and quality) of the Yemeni Oil and Gas industry. As crucial components of any performance efficiency of Oil and gas industry, this paper carried out to enrich the comprehensive understanding on the interrelation of Stakeholders engagement and performance efficiency. The motivation behind this research is to promote the attention for the concept of stakeholder's engagement as a means of becoming and remaining competitive in globally challenging industries. In addition to that there is a need to know the importance of stakeholder's engagement that help oil and gas industry to expect the proper planning. It is necessary to conduct such research for increasing the awareness about the impact of effective stakeholders' engagement on the performance efficiency.

The Oil and Gas industry is considered as the biggest and variable sector in Yemen. Therefore, the performance efficiency is very important to be attained during all the activities and phases (Iskakov, 2015). Toward growth and meeting economic expectations, SAFER, YEMEN LNG and OMV have to enhance appropriate planning that ensure a positive relationship focusing on increasing value for stakeholders' engagement in managing costs, time and quality for gaining performance efficiency, which is crucial factor for achieving the objectives.

The performance efficiency with its dimensions; namely; cost, quality, and time, could be impacted by the factor of stakeholders' engagement. Greenwood (2007) defined stakeholders' engagement as performance implemented by the organization to engage stakeholders in a positive method during the activities of organization. He highlights stakeholders' engagement theories could be gained from different literature on ethics of business, social accounting and human resources management. Related to responsibility treatment, the stakeholders' responsibility treatment is performing the interests of legitimate stakeholders (Greenwood, 2007).

As essential to strategic planning efforts, there are many scholars argued to expand the role of different stakeholder group interests that meet the expectations of multiple stakeholders of organizations impacting the experience of even the bottom line positively to enhance the reputation (Clement, 2005; Wood, 1991; Clarke, 2005; Baron & Diermeier, 2007). The mutual respect is very important that could be attained by exchange the views of others through effective participation for stakeholders with providing training which improve their knowledge to gain high technical decisions (Reed, 2008).

Stakeholders' engagement provides meaningful opportunities when taking in consideration their views related to planning and decision making for activities that may impact local communities. The interaction of relevant stakeholders can be attained through meetings, hearings or consultation proceedings. The way communication and trust of the participants on both sides are the main characteristics of effective stakeholders' engagement which is very helpful in the planning and decision-making concerning activities such as the intensive use of land, oil and gas production, which could significantly impact local communities (Donaldson & Preston, 1995).

2. Literature Review

2.1 Performance Efficiency

Widely, performance management is a continuing communication practices implemented in organization between an employees and immediate supervisors involving establishing clear prospects and understanding for the vital job tasks of employee to be achieved efficiently to clarifying the job contribution to the goals of the organization (Bacal, 1999). Armstrong (2006) identified that performance efficiency means getting better results from the entire organization through comprehending and managing an approved framework, the performance of planned goals, standards and competency requirements.

As confirmed by Morteza and Kamyar, (2009) by a short historical review the last decades it has been observed that the enterprise success is specified by performance efficiency through meeting the variables of the time, cost and quality integrated with resources and that was confirmed also by most of the earlier studies(1980s) such as Wernerfelt (1984), Rumelt (1984) and Barney (1986). Organizational performance efficiency is the ability of a company to achieve independent goals efficiently (Venkatraman & Ramanujam, 1986).

In their studies, Armstrong and Baron (1998) considered the relationship between stakeholders' engagement and performance efficiency as a strategic and integrated term to increasing the effectiveness of organizations by improving the performance of the people, by developing the capabilities of teams and individual contributors.

Borman and Motowidlo (1993) specified two types of performance, first type is task performance refers to behaviors which are directly related to service and production, or indirectly related to activities supporting the main technical processes of organization. Second type is contextual performance represented as individual efforts that are not directly concerned to the main task. The mentioned types are necessary for shaping the organizational, social, personnel as behavioral aspects enhancing the critical motivation for task activities and processes (Werner, 2000). According to Pinprayong and Siengthai (2012) studies, organizational efficiency reflects the improvement of internal processes of the organization, such as organizational structure, culture, communication and community. Excellent organizational efficiency could improve entities performance in terms of management, productivity, quality and profitability.

Wong, Wong and Prajogo (2007) have introduced various methods of performance evaluation of an organization to evaluate productivity. This includes the quality, quantity, knowledge or creativity of individual towards the

produced works that are in accordance with the responsibilities. Various articles and studies focused on performance efficiency including the triangle constraints (cost, quality, time) as one of the most important dependent variables.

According to Demarco (2008), planning and management for any business or project must be within quality, the time approach, and costing plan. Demarco (2008) defines time that refers to available period for achieving the activity or projects, whereas the cost is referring to the available budget amount for the projects and the quality is referring to what must be done to gain satisfaction and desired standards. The three dimensions (cost, quality and time) have interrelation and complementary so each one change can impact on others in implementing tasks but in case of any change in one of the triangles the rearrangement for the other two must be done to avoid any failure (Browser, 2008). Achieving the success may be attained by carrying out on time, within planned cost, delivering the desired output that gain the satisfaction of client (Slevin & Pinto, 1987). Cost, time and quality are called as "Iron Triangle" (Atkinson, 1999), these factors are critical as a part of management which influences success directly as shown in Figure 1.

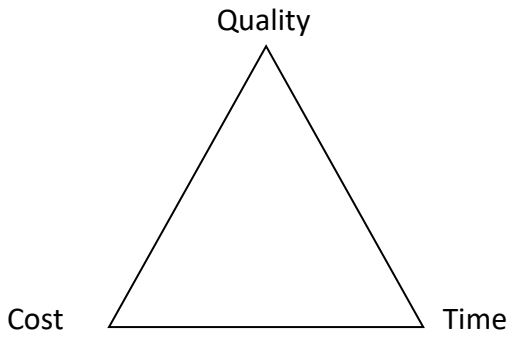

Figure 1. Three interrelated variables: Quality, cost, and time
Source: (Kless, 2007)

2.2 Stakeholders' Engagement

The term stakeholder has been widely utilized for meaning those who have "a stake" in an organization. Freeman, Reid and Becvar (1983) stated that stakeholders are any known group or individuals, who could impact the achievement of objectives. Clarkson (1995) referred that the people have, or claim, ownership, rights, or interests in a corporation and its activities. Other Scholars defined stakeholders as all those who have an interest in an organisation, its activities and its achievements, whereas Foley (2005) and Wreder, Johansson and Garvare (2009) defined stakeholders as actors that provide necessary support to the organization, requisites which could be withdrawn if their expectations or wants are not met.

In the study "Stakeholder engagement: beyond the myth of corporate responsibility", Greenwood, M. (2007) presented the relationship between the performance efficiency (with its dimensions; namely; cost, quality, and time) and stakeholders' engagement. He defined stakeholders' engagement as performance implemented by the organization to engage stakeholders in a positive method during the activities of organization. He highlights stakeholders' engagement theories could be gained from different literature on ethics of business, social accounting and human resources management. Related to responsibility treatment, the stakeholders' responsibility treatment is performing the interests of legitimate stakeholders.

The studies conducted by Clark (2005), Baron and Diermeier (2007) showed stakeholders' engagement as a crucial component of any performance efficiency. They explained the more central role of stakeholders' engagement as essential to strategic planning efforts that includes cost, quality and time and resource management of environmental in contemporary organizations. Other scholars argued to expand the role of different stakeholder group interests that meet the expectations of multiple stakeholders of organizations impacting the experience of even the bottom line positively to enhance the reputation (Clement, 2005; Wood, 1991).

In the study of Stakeholder participation for environmental management, Reed (2008) discussed the importance of stakeholders' participation that improve their knowledge and confidence which is necessary for performance and technical decisions. Reed, Fraser and Dougill (2006); and Estrella and Gaventa (2000) confirmed that early

stakeholders' engagement must be considered as possible in the planning, development, implementation, controlling and evaluation the performance. Through early engagement the organizations can obtain high quality performance efficiency and required decisions.

Other studies conducted by Karlsen (2002), Olander (2006), Walker (2008), Jepsen, and Eskerod (2009) explained that identifying the stakeholders who need to be engaged is one of the most difficult and important parts of the planning process and likely to be the key to the overall success of Stakeholders' Engagement. Foley (2005); and Garvare and Johansson (2007) defined stakeholders and actors that provide necessary support to the organization, requisites which could be withdrawn if their wants or expectations are not met. Stakeholders might include customers, investors, shareholders, members, suppliers, business partners, Employees, legislator and Government, media, trade unions, societies, competitors, academic and the scientific community (Jensen,2003).

To ensure a wide range of benefits for oil and gas industry, engagement with stakeholders is very important to protect the organization's license of operation to collect information about market improvement or product performance efficiency. It means if management of stakeholders' engagement is poor, the result stakeholder relations will be in mistrust and tension, as well as future relations is going to be much more difficult. Stakeholders might include customers, investors, shareholders, members, suppliers, business partners, employees, legislator and government, trade unions, societies, and competitors (Jensen, 2003). Stakeholders can be characterized from other interested groups as having both drawing concentration to the needs and proper action in case the needs are not gained. Regardless providing the necessary support to oil and gas industry, some groups can still have impact to eligibility being considered more than just interested parties. The secondary stakeholders could include non-governmental organizations, academics, mass media, syndicates of environment and other individuals that in some way could impact stakeholders in action on their behalf in case violation the needs or expectations (Mayer, Davis & Schoorman, 1995).

To maximize long-term shareholder value, researchers generally indicate to the importance of integration of "business-oriented" with "socially responsible" process taking into consideration a broad view of stakeholders' interests. Effective stakeholders' engagement asserts to create a desired quality with using a considerable amount of resources in correlating of cost planning implementing in proper time (Hoffman & Bazerman, 2005).

Collaboration, knowledge and expertise of stakeholders are very critical principles that effectively impact the social and environmental issues in oil and gas industry for leading to performance efficiency. The participation of stakeholders is basic for implementing solutions for some issues. In addition, stakeholders may provide a wider viewpoint about the issues and their solutions that oil and gas industry may not have accessibility, including awareness of the local situation and better comprehensions of outrage expression toward oil and gas industry due to its social or environmental impacts.

Stakeholders' knowledge with operations on the ground could support in exploring opportunities and providing supply chains especially in the period of potential risk which are not consistent with company policies. Furthermore, stakeholders' attention can have future vision about an early alerting of improvement public expectations or political situation, which may well rise with alerting fast.

By providing stakeholders with the interests and responding for these interests, stakeholders are going to be more collaborative. As a result of creating relationship, the conflicts are going to be changed to trusting cooperation on common issues of concern, as well as enabling stakeholders to understand the limitations of corporate actions.

There are many challenges in the implementation of stakeholders' engagement such as inability to recognize the right stakeholders, wrong selection of engagement activities, lack of effective engagement at early stages of exploration and development, and lack of capacity and support for effective engagement.

Briefly, stakeholders' engagement is integral to strategic planning efforts, and must be included in resources management of environmental oil and gas industry. Measurement of these efforts is imperative to demonstrate value and return on investment (Grumbine, 1994; Leverington et al., 2010; Wells & Brandon, 1993).

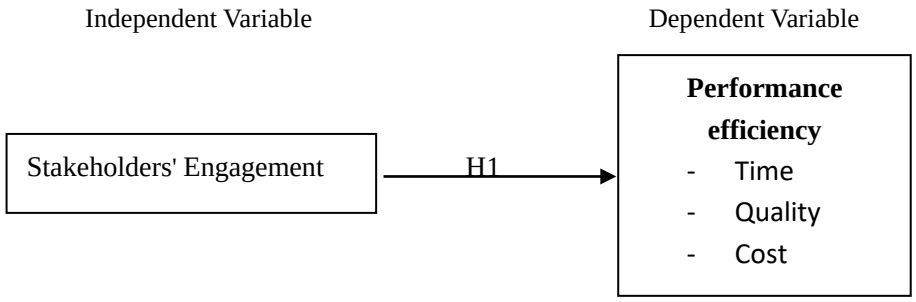

Figure2. Concepual Framework

Based on the extant literature review discussed above, one hypothesis has been developed as H1: stakeholders' engagement has a significant impact on the performance efficiency.

3. Methods

This research employed the quantitative approach and used online questionnaire as the main research instrument in order to collect the required data. Stakeholders' engagement was measured by adapting ten questions from OECD SURVEY developed by Delphine Clavreul and Walker (1997). Performance efficiency wes measured by adapting three dimensions; cost, quality and time from different studies. Cost performance measured by six questions adapted from Triest and Elshahat (2007), while quality performance measured by ten questions adapted from Ahire, Gohlar and Waller (1996). Time performance measured by eight questions adapted from Bond and Feather (1988); and Britton and Tesser (1991). This study targeted 312 employees from three large oil and gas companies in Yemen; LNG, Safer, and OMV.

To determine the scale reliability, the questionnaire was tested by using Cronbach's Alpha to ascertain the internal consistency. Table 1 shows that values of Cronbach's Alpha coefficient (α) for the the four variables are greater than 0.70, indicating a high reliability of the questionnaire instrument

Table 1 Cronbach's Alpha

Variables	Cronbach's Alpha	Number of Items
Stakeholders' Engagement	.869	10
Cost Performance	.755	6
Quality performance	.859	10
Time performance	.795	8
All	.956	34

4. Population sampling

Population

In this research, operator oil and gas companies; including three large Oil and Gas Companies; LNG, Safer, OMV in Yemen; are selected to be the targeted companies. The variation of background helps to provide a more accurate and larger understanding of the study. The population includes managers in the three levels (Top, Middle, and First-line), personnel and direct labor. The use of the key informant ion method allows each respondent to answer questions related to his/her specialty area, which increases the reliability of the research (Kumar, Stern & Anderson, 1993). Based on information provided by Human Resources Departments of the three companies, the total number of employees of the selected companies is 1674 persons (target population)

Sampling

Based on Krejcie and Morgan (1970) sample size table, the targeted population of this research is 1674. Therefore, the sample size is 312. Simple Random Method was the sampling method used to select the questionnaire respondents in the three targeted companies. The study targeted 312 employees from three large oil and gas companies; LNG, Safer, OMV in Yemen, but only 212 questionnaires were completed with no invalid data, representing a response rate of 68%. Table 2 shows the results of frequency analysis.

5. Findings

The frequency distribution of company name shows that the greatest number of the respondents comes from Yemen LNG with total number of 111 respondents, which represents 52.3% of the total respondents. The next company name group is Safer with total number of 57 respondents, which represents 26.9% of the total. The last company was OMV Yemen with 44 respondents, which represents 20.8% of the total respondents.

The result of the frequency distribution of the company major line of products shows that 51.8% of the respondents are from companies working in gas production, followed by exploration and production, and engineering services with 42.5% and 5.7% respectively. The frequency distribution of the gender of respondents shows that 87.3% of the respondents are male while the remaining of 12.7% of the respondents are females.

The result of age distribution shows that 62.2% of the respondents are between 30 to 40 years old, followed by 30.7% of the respondents are aged between 41 to 50 years old. The respndents aged under 30 years old and above 51 years old comes last with percentages of 5.2% and 1.9% respectively. The education frequency distribution shows that bachelor is the highest educational degree among the respondents with a percentage of 67%. Whereas, 19.8% of the total respondents are holding master degree and 9.4% have diploma education. Only eight respondents with 3.8% who have a PhD degree.

In regards to the position distribution, results show that 61.8% of the total respondents are non-managers, 17.9% of the total respondents are working as first-line managers, and 16.5% of the total respondents are working as middle managers. Only eight respondents or 3.8% of the total respondents are working as top managers.

In addition, the results of the frequency distribution of experience shows that the group of employees with experience in (6 – 10 Years) is the highest with a percentage of 49.5% of the total respondents. Then respondents with experience over 10 years and with experience from 2 to 5 years come after with percentages of 36.3% and 12.3% respectively. Only 1.9% of the total respondents are having less than 2 years experience.

Lastly, the frequency distribution of stakeholders indicates that the stakeholder category of local community group, neighborhood, and districts, has the greatest frequency with a percentage of 27.9%. Then the category of contractors comes next with a percentage of 24.2% of the total respondents, followed by the category of scientific community and researchers with 8.3%.

Table 2. Frequency Analysis

	Frequency	**Percent**
Company Name		
Yemen LNG	111	52.3%
Safer	57	26.9%
OMV Yemen	44	20.8%
Company Line of Products		
Exploration and production	90	42.5%
Engineering services (reservoir, well drilling, Facilities management)	12	5.7%
Gas Production	110	51.8%
Gender of Respondents		
Male	185	87.3%
Female	27	12.7%
Age of Respondents		
Under 30	11	5.2%
30 – 40 Years	132	62.2%
41 – 50 Years	65	30.7%
51 +	4	1.9%

	Frequency	Percent
Education of Respondents		
Diploma	20	9.4%
Bachelor	142	67.0%
Master	42	19.8%
PhD	8	3.8%
Position of Respondents		
Top Manager	8	3.8%
Middle Manager	35	16.5%
First-line Manager	38	17.9%
Non-Managers	131	61.8
Experience of Respondents		
Less than 2 years	4	1.9%
2 – 5 Years	26	12.3%
6 – 10 Years	105	49.5%
Over 10 Years	77	36.3%
Stakeholders		
Site owner	42	8.7%
Local authorities (town or city)	66	13.6%
Regional and national regulator	56	11.6%
Local community group (neighborhood, districts)	135	27.9%
Contractors	117	24.2%
Scientific community and researchers	40	8.3%
Others	28	5.7%

Descriptive statistics includes the means and the standard deviations for the independent variable; stakeholders' engagement show that item 2 (Financial resources is the most important challenge for effective stakeholders' engagement in oil and gas industry as a stakeholder) got the first rank with a mean of 4.25, and standard deviation of 0.876. Item 6 (My company shares information on issues and process of interest to stakeholders) ranked last with a mean of 3.94 and standard deviation of 1.149. The overall average of the variable is 4.14 and the standard deviation is 0.702.

Table 3. Descriptive Statistics of Stakeholders' Engagement

Rank	Items	Mean	Std. Deviation	Percent	Verbal Result
SE2	Financial resources is the most important challenge for effective stakeholders' engagement in oil and gas industry as a stakeholder	4.25	.876	85.0%	Strongly Agree
SE8	Stakeholders' Engagement effectively impact social and environment issues in oil and gas industry	4.25	.909	85.0%	Strongly Agree
SE3	Human resources ensure proper	4.24	1.031	84.8%	Strongly

Rank	Items	Mean	Std. Deviation	Percent	Verbal Result
	Stakeholders' Engagement (staff, skills, expertise, capacity development)				Agree
SE10	Stakeholders contribute in obtaining the economic performances of the organization	4.18	.991	83.6%	Agree
SE5	My company has strong willingness to contribute of other stakeholders (sense of community, trust)	4.17	1.031	83.4%	Agree
SE4	Sufficient time to manage the process and contribute stakeholders effectively	4.14	1.035	82.8%	Agree
SE7	My company is building trust with stakeholders	4.12	1.068	82.4%	Agree
SE9	My company offers financial incentives to stakeholders (projects, bonuses, commissions, premiums, discounts etc.)	4.09	1.047	81.8%	Agree
SE1	My company formulates appropriate strategies to manage stakeholders effectively	3.94	1.173	78.8%	Agree
SE6	My company shares information on issues and process of interest to stakeholders	3.94	1.149	78.8%	Agree
	Average	**4.14**	**.702**	**82.8%**	**Agree**

Six items were used in order to measure cost performance and Table 4 shows that the item 1 (Saving money is crucial factors in costing planning) got the first rank with a mean of 4.4, and standard deviation of 0.744. Item 3 (Sharing cost information is used in my company) ranked last with a mean of 3.83 and standard deviation of 1.174. The overall average of the variable is 4.14 and the standard deviation is 0.557.

Table 4. Descriptive Statistics of Cost Performance

Rank	Items	Mean	Std. Deviation	Percent	Verbal Result
CP1	Saving Money is crucial factors in costing planning	4.40	.744	88.0%	Strongly Agree
CP2	Cost plays the most important role in the success of my company	4.33	.870	86.6%	Strongly Agree
CP4	Costing information is necessary for decision making	4.26	.857	85.2%	Strongly Agree
CP5	My company has efficient and skilled accountants	4.17	1.012	83.4%	Agree
CP6	Activity-based costing theory is used in my company	3.85	1.101	77.0%	Agree
CP3	Sharing cost information is used in my company	3.83	1.174	76.6%	Agree
	Average	**4.14**	**.557**	**82.8%**	**Agree**

Ten items were used in order to measure quality performance and Table 5 shows that item 7 (The quality is considered as sustainability path of the organization) got the first rank with a mean of 4.27, and standard deviation of 0.891, with 85.4% of the respondents who strongly agree. Item 6 (Training for all employees is encouraged) ranked last with a mean of 3.94 and standard deviation of 1.218. The overall average of the variable is 4.04 and standard deviation is 0.728.

Table 5. Descriptive Statistics of Quality Performance

Rank	Items	Mean	Std. Deviation	Percent	Verbal Result
QP7	The quality is considered as sustainability path of the organization	4.27	.891	85.4%	Strongly Agree
QP10	ISO 9000had a positive impact to motivate company for performance efficiency.	4.12	.983	82.4%	Agree
QP9	Employees are encouraged to develop quality improvement approach in solving issues	4.06	1.127	81.2%	Agree
QP1	Top-level managers of my company allocate adequate resources toward efforts to improve quality	4.05	1.145	81.0%	Agree
QP5	Managers are often involved in quality training	4.03	1.118	80.6%	Agree
QP8	A problem-solving network is available to line workers in solving quality related problem	4.03	1.075	80.6%	Agree
QP2	My company has clear quality goals, rules, procedures to attain commercial leadership	3.96	1.034	79.2%	Agree
QP4	All employee's quality suggestions are evaluated	3.96	1.172	79.2%	Agree
QP3	During meetings top level managers often discuss the importance of quality	3.95	1.153	79.0%	Agree
QP6	Training for all employees is encouraged	3.94	1.218	78.8%	Agree
	Average	**4.04**	**.728**	**80.8%**	**Agree**

Eight items were used to measure time performance and Table 6 shows that the item 4 (I try to schedule my best hours for the most demanding work) got the first rank with a mean of 4.39, and standard deviation of 0.863. Item 1 (I plan my activities so that they fall into a particular pattern during the day) ranked last with a mean of 4.19 and standard deviation of 1.071. The overall average of the variable is 4.31 and standard deviation is 0.556.

Table 6. Descriptive Statistics of Time Performance

Rank	Items	Mean	Std. Deviation	Percent	Verbal Result
TP4	I try to schedule my best hours for the most demanding work.	4.39	.863	87.8%	Strongly Agree
TP5	My company provides high priority tasks on time	4.39	.874	87.8%	Strongly Agree
TP6	Planning is very important in time management	4.35	.631	87.0%	Strongly Agree
TP7	Motivation personnel helps to achieve goals on time	4.35	.709	87.0%	Strongly Agree
TP8	Time control and effective planning create performance	4.31	.612	86.2%	Strongly

Rank	Items	Mean	Std. Deviation	Percent	Verbal Result
	efficiency				Agree
TP2	I do enough with my time.	4.30	.991	86.0%	Strongly Agree
TP3	I make a schedule of activities that I have to do on workdays.	4.21	1.030	84.2%	Strongly Agree
TP1	I plan my activities so that they fall into a particular pattern during the day	4.19	1.071	83.8%	Agree
	Average	**4.31**	**.556**	**86.2%**	**Strongly Agree**

In order to examine the relationship between stakeholders' engagement and performance efficiency, correlation analysis was used. Table 7 illustrates the correlation matrix between the major variables. It indicates that stakeholders' engagement is correlated with performance efficiency. The Pearson's correlation coefficient (r) for the relationship between stakeholders' engagement and performance efficiency, is shown to be r = .642 with a p-value of .000, which is well below the conventional threshold of $p \leq .05$. Therefore, there is a significant relationship between stakeholders' engagement and performance efficiency and it is considered as a strong relationship.

Table 7. Correlations Analysis

		Performance Efficiency	Stakeholders' Engagement
Performance Efficiency	Pearson Correlation	1	.642**
	Sig. (2-tailed)		.000
	N	212	212
Stakeholders' Engagement	Pearson Correlation	.642**	1
	Sig. (2-tailed)	.000	
	N	212	212

**. Correlation is significant at the 0.01 level (2-tailed).

In addition, simple Regression was used to test the impact of stakeholders' engagement on performance efficiency. Table 8 indicates that the R square= 0.413 which means that 41% of the the variability of the performance efficiency is explained by stakeholders' engagement. In other words, Stakeholder Engagement can predict performance efficiency with a percentage of 41% and 59% comes from other variables.

Table 8. Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.642a	.413	.410	.332972

a. Predictors: (Constant), Stakeholders' Engagement

b. Dependent Variable: Performance Efficiency

According to the results of ANOVA generated by the simple Regression analysis as shown under Table 9 the F statistic is substantiated at the 5% significance level, implying that the model is accepted.

Table 9. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.362	1	16.362	147.582	.000b
	Residual	23.283	210	.111		
	Total	39.645	211			

a. Dependent Variable: Performance Efficiency

b. Predictors: (Constant), Stakeholder Engagement

In addition, according to the results from simple Regression analysis, stakeholders' engagement has a significant impact on performance efficiency (Beta= 0. 493, p= . .000< 0.05).

Table 10. Coefficientsa Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.034	.157		12.964	.000
	Stakeholders' Engagement	.493	.041	.642	12.148	.000

a. Dependent Variable: Performance Efficiency

Table 11. Summary of Hypotheses Testing Results

Hypothesis	Statement	Result
H1	Stakeholders' Engagement has a significant impact on performance efficiency.	Supported

6. Discussion and Conclusion

According to this study results, stakeholders' engagement has a significant impact on the performance efficiency that proved by the results of value Beta = .493 and p-value ≤ 0.01. The findings from this study were supported by other studies such as Slevin and Pinto (1987); Freeman and Reid (1984). This research concluded that companies are truly putting the stakeholders' relationships at the center of their business by keeping sustainability reports and using and periodical meetings as the way of communication with stakeholders. Within the analysis and survey of this research, the results found that effective stakeholders' engagement is considered as an important factor that impact the performance efficiency of Yemeni oil and gas industry by supporting the organization through establishing good relationship with local communities as the main stakeholders of oil and gas industry in Yemen.

Freeman (1984) confirmed that the effective means of value creation can be gained by enhancing collaboration among the stakeholders and companies. According to management scholars, Mitchell, Agle and Wood (1997); Donaldson and Preston (1995); Clarke (2005); Baron and Diermeier (2007); and Wood (1991), they emphasized that a planning is distinguished as the ground contribution in conflicts, consultation, value creation, and communication issues that enhanced the accountability toward stakeholders. This research is inline with the findings of numerous studies carried out on the stakeholders' engagement and performance. According to Partridge et al. (2005); Clement (2005) and Van der Laan (2008), the interaction relationship between stakeholders' engagement and performance efficiency was assured through mutual interests, working partnerships, communication, basic consultation, and in-depth dialogue.

In this research, it is urged to demonstrate the business for better stakeholders' engagement to create more trust and mutual cooperation for supporting sustainability that enhance performance efficiency. According to Karlsen (2002); Walker, Bourne and Rowlinson (2008); Jepsen and Eskerod (2009), recognizing the stakeholders is one

of the most difficult and important parts of the planning process and likely to be the key to the overall success of stakeholders' engagement.

The findings of this study show that the main stakeholders of the three selected companies are the local community group (neighborhood, districts), contractors and local authorities therefore the main motivations for engagement are to understand stakeholders' expectations and to identify sustainability issues that companies are facing. Mitchell, Agle and Wood (1997) emphasize the stakeholders' power to impact the organization's performance by legality based on contracts, legal label, legal rights, moral rights, risk situation, or moral interests in the harms and benefits produced by company actions.

According to the findings of this research, stakeholders' engagement is considered as an effective vehicle that helps to carry out the proper decision-making for obtaining performance efficiency through increasing the degree of harmonization that generate appropriate decisions and enhance the overall performance of the organization.

Stakeholders' engagement has many contributions that support performance efficiency such as solving problems, helps with future planning, creating trust, influencing partners and improving the company's public image. This research has endeavored to contribute to the understanding of performance efficiency improvement within effective stakeholders' engagement when quality performance is implemented alongside with cost and time performance.

7. Recommendations

As discussed in this study the effective stakeholders' engagement can be an extremely valuable tool that can be achieved to create an information-sharing platform clarifying valuable knowledge and insights at an early stage in the policy development process, allowing both policy-makers and stakeholders to benefit from more effective, responsive and relevant policies and productivity. The effective stakeholders' engagement enhances the opportunity to propose effective policies which support policy makers for assuring the cost, quality and time performance that result more efficient and sustainable policymaking.

As a crucial factor in strategic planning, effective stakeholders' engagement should be included in scheduling, budgeting, and resources management of the organizations. It is recommended to provide trainings for personnel to enhance the stakeholders' engagement. To ensure more effective stakeholders' engagement, the communication with stakeholders should be improved through developing consultation and transparency. Furthermore, building trust with stakeholders through proactive and effective engagement is necessary to support the company's reputation. In addition, it is recommended to expand sustainable decision-making by collaborative problem-solving that allows for the combining of knowledge and diverse perspectives to achieve mutual and sustainable goals and innovative solutions to complex policy issues.

Another important recommendation is ensuring more empowerment and motivation that makes stakeholders feel respected and valued having the opportunity to directly influence policies that impact their lives and those whom they represent. This motivation is going to create a sense of ownership and inclusion that create feelings of a greater sense of responsibility for decisions, thus improving their acceptance. In addition, the companies should ensure the capacity-building that help to enhance the better understanding of stakeholders for the policy, political and decision-making processes and how can be impacted these processes effectively with realistic expectations.

8. Limitations

While the analysis in this research paper is comprehensive, it has its limitations, which are related to the following areas.

- The research survey is based on a specific sample represented only by employees of the three oil and gas companies (Yemen LNG, OMV and SAFER).
- The research uses an online survey questionnaire as a research method.
- This research is limited to the implementation of oil and gas industry knowledge areas of Yemen LNG, Safer and OMV companies in Oil & Gas industry in Yemen.
- This research focused on one specific independent variable which represented by stakeholders' engagement and its impact on performance efficiency.

9. Future Research

As mentioned under the limitations, these points may lead to hypothesize in further study and research related to their relationship and impact on the efficiency of oil and gas industry in Yemen and other countries. Accordingly, this study provides some suggest ions for future research. Since this study targeted a specific sample represented only by employees of the three oil and gas companies (Yemen LNG, OMV and SAFER), it is highly recommended to include local communities' contractors and local authorities to participate in future research. Future research can use different methods, such as interviews, or a combination of questionnaires and interviews, that may bring further insights into the topic. This research focused on one specific independent variable (performance efficiency) with specific dimensions represented by Stakeholders' Engagement in oil and gas industry in Yemen selecting. Therefore, further research is recommended to discuss other variables for gaining more understanding. For example, the variables were not mentioned in this research such as mission, client acceptance, environment, technical task, monitoring-control etc.

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