INTRODUCTION

Today's demanding business and public sector places strong emphasis on world-class organization. World-class organization is being achieved though quality. World-class is the ability to create consistent standard of quality which transcends global boundaries (Thorne & Machrey, 2000). The World-Class organization philosophy reflects those actions and values responsible for the continuous improvement of the design, development, and management processes of an organization's system, with the objective of improving, its profitability and ensuring its survival, as well as the profitability and survival of its customers (Burt et al., 2003).

The term "world-class" recognizes that organizations compete in an existing or impending global environment. As philosophy, World-Class Organization spans functional boundaries and company borders. World-Class Organization requires change driven by top management to shift decision making processes from an internal department or single company focus toward optimization of the intense focus on customers. Through Total Quality Management (TQM) practices, World-Class Organization is an ever-moving target that focuses on the whole organization's process improvement.

World-Class Organization practices in the oil and gas industry is not only departmentally or internally focused, but also concentrates on proactively and interactively improving process with the long-term goal of upgrading the competitive capability of the firm and the firm's supply and demand-chains. In recent years, the concept of supply and demand-chains management, introduced to address the integration of organizational functions ranging from the ordering and receipt of raw materials through the manufacturing processes to the distribution and delivery of products to customers with a view to enable organization to achieve higher quality in product and customer services with reduce inventory cost, has attracted considerable managerial attention because of its huge potential competitive impact (Steven, 1989 in Ohdar & Ray, 2003).

An integrated oil and gas industry is a multiplicity of micro sub processes, all synergistically building to the macro process of that oil and gas chain activities. All processes have suppliers and customers; these suppliers and customers can be internal or external to the oil and gas companies. A customer can be an...
and user or the next operations downstream (demand-chain of oil and gas). The customer does not even have to be a human; it can be an exploration system. A vendor can be another firm supplying raw stocks or storage or distribution services, or the prior operations upstream (supply-chain of oil and gas) (Gitlow, et. al. 2005; Treville et al. 2004). An oil and gas chain activities executes upstream (supply-chain performance) as well as downstream oil and gas operations (demand-chain performance). The objectives of oil and gas chain activities include supply fuel required domestically, exporting oil and gas to increase the state revenue and developing geothermal energy as an alternative energy for the future.

The Indonesia's oil and gas industry is committed to adopting the following Total Quality Management (TQM) principles in its journey to world-class company orientation: Quality Leadership, Stakeholders Focus, Integrated Business Strategy, Teamwork, Empowerment, Process Management, Asset Management, Continuous Improvement, Learning Organization, and Measurement of Company Performance (Hakim, 1996). Although TQM has been implemented, the management oil and gas companies in Indonesia realized that to reach their vision to be world-class companies, they must fundamentally rethink their way of conducting business.

The management oil and gas companies have encourage themselves to restructure the TQM implementation by examining the World-Class Company practices by developing an empirical study of quality factors and customer satisfaction for sustainable community development program. Customer satisfaction and total (company-wide) quality decision take place in the context of relationship marketing or Total Quality Marketing strategy. Relationship marketing strategies require an understanding of what quality as a competitive strategy seeks always to create enough value, trust, and long-term relationship in the sale to bring customer back for more (Christopher et al., 1993). Quality is both the act of making the offer different and sustains its position among competing offers over time. Quality must be perceived by customers (Kotler, 1997). A customer will be satisfied if the perceived overall quality meets his or her expectations Looy et al., 1998). Redefining an offering as a bundle of services and goods (the servitisation of businesses) may, therefore, meet customers' expectations. As a result, manufacturing businesses and service companies are no longer so very different, and each has something to teach the other.

The rest of this paper is organized as follows. The next sections of this study discuss objectives of the study, related literature and assessing sustainable community development, quality factors, and customer satisfaction, review of methodology, and interpretation of results. The conclusions and contributions are provided at the last session.

The study has elucidated perspective of top, middle, and level managers on quality factors and customer satisfaction for sustainable community development in their Strategic Business Units (SBUs) in the Indonesia's oil and gas industry. The study also seeks to determine the link between quality factors and customer satisfaction which managers consider important when implementing sustainable community development program in their organization.

**METHODS**

Two thousand and eight hundred (2800) questionnaires were distributed to the participating oil and gas companies in a qualified sample of 140 SBUs. An initial sample of 200 SBUs operating in Indonesia was drawn at random from the directory of Directorate General of oil and gas, Republic of Indonesia. Each SBU was contacted by telephone and e-mailed web system to establish that individuals with primary responsibilities for the three level of management position were identifiable. It was not possible to contact 12 SBUs because of incorrect contact details. A further 48 SBUs were either unable or unwilling to identify individual managers with the required responsibilities.

Each qualified sample of 140 SBUs received 20 questionnaires. Only responses and answered completely on of the research constructs were used. A total of 1,332 individual usable questionnaires were returned thus qualified for analysis, representing an effective response rate of 50.19 percent. Of these, 354 were from high level managers, 447 from middle level managers, and 531 from low level managers. A five-points measurement scale (1,3,5,7, and 9) is used to make the importance-performance analysis (the importance scale from slightly important to extremely important; the performance scale from fair performance to excellence performance) to evaluate 14 quality factors based on the Harrington & Akehurst's study (2000) and Storbacka and Lehtinen.

This study also used qualitative research techniques, such as focus groups and unstructured personal interviews, and managerial judgment for 20 selected managers (purposive sampling respondents). All useful in identifying potentially important quality factors which might otherwise be missed.

**Sustainable community development.** The period of 2001 – 2005 is important transition years
for Indonesia’s Oil and Gas Industry, following passage of a new oil and gas law in October 2001. The Indonesia Parliament passed the oil law on October 23, 2001 (Law 22/2001). This new Law, which replaced the 1960 Oil and Gas Law and Law for State Owned Company 8/1971, required the upstream and downstream sectors to deregulate within four years (2001-2005). The amendment of law created two new governmental bodies: the Executive Body that takes over State Owned Company’s upstream functions and the Regulatory Body that supervises downstream operations.

The Executive Body (Oil and Gas Upstream Implementing Body) was established on July 16, 2002 (Government Regulation No. 42/2002). It took over State Owned Company’s upstream regulatory functions and management of oil and gas contractors. The Regulatory Body (Oil and Gas Downstream Regulatory Body) was established on December 30, 2002 (Government Regulation No. 67/2002). It has license downstream operators to assure sufficient natural gas and domestic fuel supplies and the safe operation of refining, storing transport and distribution of petroleum products.

The oil and gas policy reform is necessary in order to maintain Indonesia’s status as a net oil exporter and enhance efficient use of energy resources. To do so, the government must implement legislation and policies that will attract new private direct investment and rationalize use of Indonesia’s energy resources (Embassy of USA, 2004). Based on the new law, there are three types of contracts: the Production Sharing Contract (PSC), the Technical Assistant Contract (TAC), and Enhance Oil Recovery (EOR) Contract. In addition to contracts that give bundle of right to explore and exploit, the participants in the PSC, TAC or EOR may also enter into separate agreements.

The objective of this agreement is to discuss how they are going to conduct petroleum operation. These are known as Joint Operating Agreements (JOA) and Joint Operating Bodies (JOB). To support the oil and gas policy reform, Ministry of State Owned Enterprises will establish the Indonesia Quality Award (IQA). This award will be given to the company to fulfill their vision to be recognized as World-Class companies successfully. This award is not the end of the oil and gas companies’ journey. It is only the beginning. The companies must continue to evolve and learn with perseverance, especially related to the sustainable community development program.

Sustainable Community Development Program is realization of oil and gas companies’ responsibilities towards the growth and development of the surrounding community. The oil and gas companies’ community development includes various initiatives including economic efficiency, social equity and participation and environmental system. The essential connections between economic, social and environmental have gained universal acceptance. Current researches must focus on collecting and integrating information to reflect the goals of sustainable community development.

According to Sekiyu (2004) and McDermott (2000) there are seven approaches to sustainable

![Figure 1. Approach to Sustainable Community Development](source: Showa Shell Sekiyu, 2004 and World Bank Institute, 2000.)
community development program: commitment to a solid earnings foundation, provision of value to customer (economic perspective), environmental protection, resource management (environmental perspective), respect and protection for all, contributions to society (social perspective), and collaboration with stakeholders (stakeholder perspective)—see Figure 1.

The relationship between quality factors and customer satisfaction. Based on Strandvik's study (1994), the relationship between quality and customer satisfaction is not necessarily linear. Different factors in relationship influence the customer's total perception in different ways. Connection between quality and customer satisfaction can be expressed as quality functions. Quality functions can be divided into four different types (Storbacka & Lehtinen, 2001, and Strandvik, 1994):

1. Critical factors: The relationship between quality and customer satisfaction is linear. Improvements in quality lead to direct improvements in customer satisfaction and vice versa; 2. Hygiene factors: Improvements in quality do not improve customer satisfaction, while quality below a certain level signifies a dramatic decrease in customer satisfaction. Quality thus has to reach a certain level, but after that, investing in quality is no longer necessary; 3. Insignificant factors: An improvement or decline in quality does not in any way affect the customers' general perception and satisfaction; 4. Profile factors: These are factors that distinguish a company from the average industry level and the competition. Better quality can significantly improve the customer's total perception and satisfaction, but a small decrease in quality does not really have any impact.

The quality functions described above are presented in Figure 2.

Quality as used in this study refers to both external and internal quality (Aguayo, 2004). External quality focuses on the understanding the needs and desires of customers so as to organize and manage the company to best fulfill them. Internal quality requires a company to maintain a high level of quality and efficiency. The company with better internal quality and systems is more flexible and better able to innovate and adapt to changes in the environment.

RESULTS AND DISCUSSION

To interpret the results of the study, the researcher used some quantitative tools: instrument reliability, factor analysis, factor loadings, and importance-performance grid in order to investigate the link between quality factors and customer satisfaction for sustainable community development. Instrument Reliability.

In determining the reliability of the multi-item scale, item-to-total correlations and coefficient alpha (Cronbach, 1951) were calculated. The results of the reliability analysis for the importance and performance of 14 quality factors are outlined in Table 1 and Table 2. The scale purification was not carried out because all items with item-total correlations of higher than 0.50. No such quality factors were eliminated. Also, the standardize item alpha for importance and performance of quality factors are 0.9367 and 0.9449, reliabilities of .070 or higher will suffice. These confirm the reliability of the importance and performance of quality factors.
Table 1. Reliability Analysis for The Importance of Quality Factor

| QF Number | Corrected Item Total | Alpha if Item Deleted |
|-----------|----------------------|-----------------------|
| 1         | 0.660               | 0.9930                |
| 2         | 0.649               | 0.9936                |
| 3         | 0.639               | 0.9938                |
| 4         | 0.746               | 0.9938                |
| 5         | 0.660               | 0.9931                |
| 6         | 0.685               | 0.9932                |
| 7         | 0.760               | 0.9931                |
| 8         | 0.807               | 0.9926                |
| 9         | 0.782               | 0.9924                |
| 10        | 0.729               | 0.9913                |
| 11        | 0.692               | 0.9921                |
| 12        | 0.615               | 0.9946                |
| 13        | 0.546               | 0.9963                |
| 14        | 0.738               | 0.9307                |

Alpha for entire scale : 0.9367

In order to apply the factor analysis approach a number of issues had to be addressed. Firstly the appropriateness of data for factor analysis was examine using Bartlett's test of Sphericity. The test results for sphericity were very large at 12017.978 with a corresponding small level associated significance 0.000 for importance of quality factors and at 12868.358 with a corresponding small level of associated significance 0.000 for performance of quality factors. Second, the Kaiser-Meyer Olkin (KMO) measures of sampling adequacy were also employed to measure the strength of the relationship among variables. The test results at 0.943 for importance of quality factors and at 0.953 for performance of quality factors can be classed as meritorious and provides further justification for using factor analysis.

Table 2. Reliability Analysis for the Performance of QF

| QF Number | Corrected Item Total | Alpha if Item Deleted |
|-----------|----------------------|-----------------------|
| 1         | 0.743               | 0.9403                |
| 2         | 0.680               | 0.9421                |
| 3         | 0.715               | 0.9411                |
| 4         | 0.777               | 0.9395                |
| 5         | 0.742               | 0.9404                |
| 6         | 0.705               | 0.9414                |
| 7         | 0.789               | 0.9390                |
| 8         | 0.768               | 0.9397                |
| 9         | 0.772               | 0.9395                |
| 10        | 0.762               | 0.9398                |
| 11        | 0.702               | 0.9414                |
| 12        | 0.608               | 0.9438                |
| 13        | 0.597               | 0.9442                |
| 14        | 0.724               | 0.9409                |

Alpha for entire scale : 0.9449

Table 3 presents the total variance explained. It shows the factors and their associated eigenvalues and the cumulative percentages. The study found that there are two factors. These two factors accounted for 64.692 per cent of the total variance.

Table 3. Variance Explained for Importance of Quality factor

| Component | Initial Eigenvalues | Extra Sums Squared Loading | Rotation Sums of Squared Loading |
|-----------|---------------------|----------------------------|---------------------------------|
|           | Total | % of Variance | Cumulative | Total | % of Variance | Cumulative | Total | % of Variance | Cumulative |
| 1         | 7.736 | 55.260 | 55.260 | 7.735 | 55.260 | 55.260 | 4.846 | 34.615 | 34.615 |
| 2         | 1.321 | 9.432 | 64.692 | 1.321 | 9.432 | 64.692 | 2.211 | 30.077 | 64.692 |
| 3         | 0.862 | 6.784 | 73.899 | 0.862 | 6.784 | 73.899 | -     | -     | -     |
| 4         | 0.607 | 4.332 | 77.736 | 0.607 | 4.332 | 77.736 | -     | -     | -     |
| 5         | 0.537 | 3.837 | 81.494 | 0.537 | 3.837 | 81.494 | -     | -     | -     |
| 6         | 0.526 | 3.735 | 84.562 | 0.526 | 3.735 | 84.562 | -     | -     | -     |
| 7         | 0.430 | 3.069 | 87.502 | 0.430 | 3.069 | 87.502 | -     | -     | -     |
| 8         | 0.412 | 2.940 | 90.260 | 0.412 | 2.940 | 90.260 | -     | -     | -     |
| 9         | 0.386 | 2.758 | 92.609 | 0.386 | 2.758 | 92.609 | -     | -     | -     |
| 10        | 0.329 | 2.349 | 94.777 | 0.329 | 2.349 | 94.777 | -     | -     | -     |
| 11        | 0.303 | 2.167 | 97.174 | 0.303 | 2.167 | 97.174 | -     | -     | -     |
| 12        | 0.282 | 2.018 | 99.194 | 0.282 | 2.018 | 99.194 | -     | -     | -     |
| 13        | 0.237 | 1.692 | 98.486 | 0.237 | 1.692 | 98.486 | -     | -     | -     |
| 14        | 0.212 | 1.514 | 100.000 | 0.212 | 1.514 | 100.000 | -     | -     | -     |

Table 4 shows two groups of importance of quality factors. The first group has eight significant loading (QF11-8), and the second group has six (QF19-14). To ensure that only very significant loadings are considered, the variables for a factor selected only when the absolute size of their factor loading is above 0.60. For the first group, the researcher identified one group of nine quality factors as Quality Function 1 or Internal Quality. For the second group, which have five quality factors can be assigned as Quality Function 2 or External Quality.

An exploratory principle components factor analysis was conducted to determine whether the 14 quality factors load collectively one component that may be termed as performance of quality factors. All 14 quality factors were extracted that accounted...
for 58.596% of the total variation in the observed variable and all of the 14 component matrix value above 0.5. Table 5 and Table 6 show the result of total Variance Explained for Performance of Quality Factor and Component Matrix for Performance of Quality Factors.

**Table 4**

Rotated Component Matrix for Importance of Quality Factors

| Importance of Quality Factors (QFI) | Quality Function 1 | 2 |
|-------------------------------------|-------------------|---|
| QF11                                | 0.683             | 0.311 |
| QF12                                | 0.677             | 0.295 |
| QF13                                | 0.817             | 0.123 |
| QF14                                | 0.771             | 0.326 |
| QF15                                | 0.757             | 0.231 |
| QF16                                | 0.747             | 0.276 |
| QF17                                | 0.628             | 0.505 |
| QF18                                | 0.622             | 0.572 |
| QF19                                | 0.553             | 0.616 |
| QF110                               | 0.367             | 0.735 |
| QF111                               | 0.352             | 0.709 |
| QF112                               | 0.211             | 0.760 |
| QF113                               | 0.103             | 0.780 |
| QF114                               | 0.357             | 0.765 |

**Table 5**

Total variance Explained for Performance of Quality Factors

| Component | Initial Eigenvalues | Extra Sums Squared Loading |
|-----------|---------------------|-----------------------------|
| Total     | % of Variance       | Cumulative                  |
| Total     | % of Variance       | Cumulative                  |
| 1         | 8.203               | 58.596                      |
|           | 58.596              |                             |
| 2         | 0.997               | 7.121                       |
|           | 65.716              |                             |
| 3         | 0.717               | 5.122                       |
|           | 70.838              |                             |
| 4         | 0.657               | 4.690                       |
|           | 75.529              |                             |
| 5         | 0.522               | 3.730                       |
|           | 79.258              |                             |
| 6         | 0.444               | 3.170                       |
|           | 82.428              |                             |
| 7         | 0.413               | 2.949                       |
|           | 85.377              |                             |
| 8         | 0.370               | 2.644                       |
|           | 88.021              |                             |
| 9         | 0.356               | 2.544                       |
|           | 90.565              |                             |
| 10        | 0.295               | 2.106                       |
|           | 92.671              |                             |
| 11        | 0.284               | 2.027                       |
|           | 94.698              |                             |
| 12        | 0.271               | 1.934                       |
|           | 96.632              |                             |
| 13        | 0.254               | 1.817                       |
|           | 98.448              |                             |
| 14        | 0.217               | 1.552                       |

**Importance – performance analysis.** The results of the survey on quality factors and customer satisfaction for sustainable community development are summarized in Table 7, which ranks the factors by their importance score (the higher the score the more important) and also gives the corresponding performance ranks for the quality factors. Table 7 outlines the means and standard deviations for the individual quality factor in the scale and for the overall scale. The average scores of importance of quality factors 12 to 7.81 for quality factor 1. Quality factor 12 has the largest standard deviation, at 1.70. Issue on which the score is relatively low is item 12. It would be seem that many of the respondents do not recommend that quality standards and customer satisfaction do not only important to improve financial performance but also to improve non-financial performance, such as a quality culture.

Table 7 also lists and ranks the critical factors...
with the greatest differences between importance and performance scores.

The survey indicates that there is much room for improvement in the quality factors and customer satisfaction for the sustainable community development as shown in the different between importance and performance scores. A. large difference between importance and performance scores (above the average of 14 difference values or > 1.02) show that improvements are needed and prioritized in these quality factors (QFs 7, 9, 1, 8, 10, 6, 4 or Ranks 1, 2, 3, 4, 5, 6, 7 of the difference values between Importance Rating, and Performance Rating) – 5 quality factors of internal quality and 2 of external quality: Quality Standards, Cross-department Relationships, Customer Feedback, Resources Management, Longterm Customer Relationship Top Management Commitment, and Customer as the Firm’s Key Asset.

The means important and performance ratings; and the difference values between importance and performance for the 14 quality factors are presented in Figure 3. According to Martilla and James (1977), Interpretation of the importance-performance grid may be illustrated with the results taken from each of the four quadrants.

### Table 6

| Quality Factors (QF) | Component 1 |
|---------------------|-------------|
| QFP1                | 0.785       |
| QFP2                | 0.728       |
| QFP3                | 0.761       |
| QFP4                | 0.815       |
| QFP5                | 0.787       |
| QFP6                | 0.735       |
| QFP7                | 0.826       |
| QFP8                | 0.807       |
| QFP9                | 0.813       |
| QFP10               | 0.800       |
| QFP11               | 0.746       |
| QFP12               | 0.658       |
| QFP13               | 0.647       |
| QFP14               | 0.764       |

**Figure 3. Importance-Performance Grid with Attribute Ratings for QFI and QFP**

**A. Concentrate here Quadrant.** Customers feel that quality factor is very important but indicate low satisfaction with the company’s performance. No such quality factors are in this quadrant.

**B. Keep up with the good work Quadrant.** All of 14 quality factors of Importance (QFI) and quality factors of performance (QPI) are placed in this quadrant. The difference scores between QFI and QPI indicate mismatched importance and performance of quality factors. Conversely, low difference values indicate that managers set appropriate quality factors with respect to customer satisfaction.

**C. Low Priority**

**D. Possible Overkill**
satisfaction and deploys sustainable community development accordingly. The Prioritization of improvements are based on the Ranks 1-7 (see Table). Ideally, the difference measure should equal zero.

C. Low priority quadrant. Quality factor is rated low, but customers do not perceive these factors to be very important. No such quality factors are in this quadrant.

D. Possible overkill quadrant. No performance rating is just to be doing a good job by the company, but customers attach only slight importance to them. No such quality factors are in this quadrant.

Table 7.
Mean Responses and Standard Deviations: Importance and Performance Ratings for Quality Factors & The Difference between Importance and Performance Scores

| QF Number | Quality Factors (QF) with a Significant Impact on Customer Satisfaction | Mean Importance Rating | Standard Deviation | Mean Performance | Standard Deviation | Difference Between Importance and Performance Scores (The Rank for Improvement)* |
|-----------|-------------------------------------------------------------------------|------------------------|--------------------|------------------|--------------------|--------------------------------------------------------------------------------|
| 1         | Customer Feedback is essential when implementing standards of quality    | 7.81                   | 1.52               | 6.72             | 1.69               | 1.09 (Rank 3)                                                                |
| 2         | There is sufficient training in quality procedures for customer satisfaction incentives are provided to lower level employees to encourage them to provide better quality for the customer | 7.03                   | 1.68               | 6.26             | 1.76               | 0.77                                                                         |
| 3         | We regard the customer as a vital business asset to be manage for customer satisfaction | 7.38                   | 1.46               | 6.57             | 1.55               | 0.81                                                                         |
| 4         | We provide employees with the authority and power to solve customer problems | 7.34                   | 1.42               | 6.30             | 1.61               | 1.04 (Rank 7)                                                                |
| 5         | Top management consistently reinforce the benefits of providing quality for the customer | 7.41                   | 1.54               | 6.53             | 1.60               | 0.88                                                                         |
| 6         | Internal quality (quality control and quality assurance) assist with the implementation of quality standards. Sufficient and appropriate resources is allowed to implement quality standards and sustainable community development | 7.44                   | 1.55               | 6.39             | 1.68               | 1.05 (Rank 6)                                                                |
| 7         | We work across department to bring about quality for the customers Long-term customer relationship is used to support the service which we provide to customer investment (Cost of Quality and Return on quality) are serious concern when implementing quality standards and sustainable community development | 7.42                   | 1.65               | 6.08             | 1.75               | 1.34 (Rank 1)                                                                |
| 8         | Quality standards and sustainable community development measurements are introduced only in so far as they can achieve improved the balance between financial and non financial performance for the firm The external quality offered to the sustainable community development is reviewed on a continual basis The quality and sustainable community development efforts are closely linked of the overall strategy of the organization | 7.17                   | 1.67               | 6.09             | 1.62               | 1.08 (Rank 4)                                                                |
| 9         | 6.88 | 1.63 | 5.82 | 1.69 | 1.21 (Rank 2) |
| 10        | 6.83 | 1.54 | 5.92 | 1.53 | 1.06 (Rank 5) |
| 11        | 6.79 | 1.70 | 5.79 | 1.60 | 0.91 |
| 12        | 6.03 | 1.66 | 6.04 | 1.57 | 0.99 |
| 13        | 7.11 | 1.52 | 6.12 | 1.67 | 0.99 |
| 14        | 7.03 | 1.66 | 6.04 | 1.57 | 0.99 |
Determining what quality factors should be assigned to more intense factors or satisfy the customer is critical. It is essential to determine the quality factors into two groups of importance: internal quality and external quality—so as to organize and manage the company to best fulfill the needs and desires of customers. Development of the quality functions related to customer satisfaction for sustainable community development should begin with identifying the rank of the difference values between importance and performance of quality factors.

The result of importance-performance analysis provides management with a useful focus for developing marketing and operations strategies. By determining the relevant quality functions, companies can invest in quality factors related to customer satisfaction with significant impact on sustainable community development. It is important to identify the various factors that affect quality in order to differentiate quality investment according to quality functions. The study found that there are two groups of quality functions—internal quality and external quality. The benefits from improving internal quality lead to better quality control and quality assurance implementations, more valid customer feedback, lower resources utilization costs, more top management commitment, and much greater willingness to build ‘the customer as the key asset’ philosophy. The company also gains the benefits of external quality: greater teamwork spirits to encourage cross-functional relationships, and stronger effort to improve company reputation through managing long-term relationships with the old customers (code of conduct).

CONCLUSION

The empirical analysis found that the link between quality factors and customer satisfaction is linear in the Keep Up Good Work Quadrant. The survey indicates that there is much room for improvement in the quality factors and customer satisfaction for the sustainable community development as shown in the difference between importance and performance scores. These scores indicate mismatched importance and performance of quality factors. Conversely, low difference values indicate that managers set appropriate quality factors with respect to customer satisfaction and deploy sustainable community development accordingly. Ideally, the difference measure should equal zero. This investigation is believed to make a contribution to the sustainable community development by providing empirical evidence from a single industry that has a set of unique characteristics that offer additional insights.

The oil and gas companies must continue to evolve and learn with perseverance both internal quality and external quality, especially related to the real sustainable community development program. Presentation of these results on the importance-performance grid facilitates management interpretation of the information and increases their usefulness in making strategic marketing and operations decisions based on four perspectives of sustainable community development: economic perspective, stakeholder perspective (internal quality); environment perspective, social perspective (external quality).

It is important to note that the first potential limitation of this study stems from the use of a cross-sectional analysis only. Cross-sectional analysis only gives us portrayed at a particular point of time. The researcher cannot examine the dynamic nature of trade-off which is changing over time (Silveira and Slack, 2001). In addition, the researcher encourages the think about whether the link between quality factors and customer satisfaction vary over time, either because other time the sustainable community developments are theoretically important or because this link is unstable for some reason. Next research should be conducted longitudinally to observe the progress of the linkage between quality factors and customer satisfaction (i.e., by developing ABC Analysis Antecedents, Behavioral, Consequences; or MTMM Multi trait—Multi method Measurement Model framework or Triangulation Method).

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