Appendix I

Measurement Items of Research Instruments

Construct	Sources
I. Deming's Principles: **I.1 Deming's 14 Points--5-point scale with completely true/not at all true anchors** 1. Create constancy of purpose to improve product and service, with the aim to become competitive, stay in business, and provide jobs. 1. Top management makes long-term plans 2. Top management provides for research and development 3. Top management provides for new technology 4. Top management promotes employee training/education 2. Adopt a new philosophy for the new economic age with management learning what their responsibilities are, and by assuming leadership for change 5. Top management is committed to quality improvement as a way to increase profits 6. Top management is committed to setting objectives for quality improvement 7. Top management is committed to continuous quality enhancement as a primary goal 3. Cease dependence on inspection to achieve quality by building quality into the product 8. Suppliers use statistical quality control techniques 9. Statistical control techniques are used to minimize reliance on mass inspection 10. Top management supports the belief that quality must be 'built into' the product and not 'inspected into' it 4. End the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for anyone item on a long-term relationship or loyalty and trust. 11. Suppliers selection is based on both quality and price rather then price alone 12. Suppliers are involved in the product/service development process 13. Long-term relationships are developed with suppliers 14. There is reliance on a few dependable suppliers 5. Improve constantly and forever the system of production and service to improve quality and productivity, and thus constantly decrease costs. 15. Customers' requirements are analyzed in the process of developing a product/service 16. Customers' feedback is used to continually improve the product/service 17. Top management assesses its competitors in order to improve the product/service 6. Institute training on the job 18. Employee are trained in statistical improvement techniques 19. Employee are trained in quality-related matters 20. Employee are trained in specific work-related skill 21. Supervisors are trained in statistical improvement techniques	Deming, 1986 Aguayo, 1990 Tamimi, 1995 Tamimi, 1998 Grandsol and Gershon, 1998 Saraph, Benson, and Schroeder, 1989 Black and Porter, 1996 Ahire, Golhar, and Waller, 1996 Berterfield, Besterfield-Michna, Berterfield, Besterfield-Sacre, 2003 Gitlow, Oppenheim, Oppenheim, Levine, 2004

(Continued)

7. Institute leadership with the aim of supervising people to help them to do a better job 22. Supervisors help their employees on the job 23. Supervisors work to build the trust of their employees 24. Supervisors lead in a way that is consistent with the aims of the organization 25. Supervisors are viewed as coaches by their employee 8. Drive out fear so that everyone can work effectively together for the organization 26. Employees express new ideas related to improving work method 27. Employees seek their supervisors' assistance when unsure of their tasks 28. Employees are not afraid to report working conditions that interfere with quality 29. Employees feel they have job security 9. Break down barriers between departments. Encourage research, design, sales and production (four main organizational functions) to work together to foresee difficulties in production and use 30. Different departments have compatible goals 31. In the product/service design process there is teamwork between different department 32. There is good communications between different departments 10. Eliminate slogans, exhortations and numerical targets for the workforce that asks for zero defects and new levels of productivity without providing methods. 33. Top management provides its workers with the method/procedures to meet their goals 34. Top management, not the hourly worker, is responsible for removing obstacles that cause defect/errors 35. Top management does not use vague slogans (e.g. Do It Right The First Time) in communicating with its employees 11. (a) Eliminate numerical quotas (work standard) for production. Instead, learn and institute methods for Remove barriers that rob people of their right to pride of workmanship. The responsibility of supervisors must be changed from stressing sheer number to quality. (b) Eliminate M.B.O. (management by objective). Instead, learn the capabilities of processes and how to improve them 36. Works standards are based quality and quantity rather then quantity alone. 37. Works standards are set based on process capability studies 38. Numerical quotas are not given higher priority than quality of workmanship 12. Remove barriers that rob people of their right to pride of workmanship. The responsibility of supervisors must be changed from stressing sheer number to quality. 39. Performance appraisals are not used to rank employees 40. The quality of the working environment is good 41. There is adequate documentation on how to do the job 42. There is no pressure for short term results 43. Top management sets realistic goals for its employees 13. Institute a vigorous education and self-improvement program	

(Continued)

44. There are programs to develop team-work between employees 45. There are programs to develop effective communication between employees 46. There are programs to develop employees' conflict resolution skills 47. There are programs to broaden employees' skills for future organizational needs 14. Put everyone in the company to work to accomplish the transformation 48. Top management takes action towards executing its quality improvement policies 49. Top management makes its quality improvement policies visible to all employees 50. Top management relies on internal or external consultants to implement its quality improvement policies	
I.2 Quality Management Practices (QMPs)-- 5-point scale with completely true/not at all true anchors	
QMP 1: Quality Improvement Program 40: The quality of the working environment is good. 41: There is adequate documentation on how to do the job. 43: Top management sets realistic goals for its employees. 44: There are programs to develop team work between employees. 45: There are programs to develop effective communications between employees. 46: There are programs to develop employees' conflict resolution skills. 47: There are programs to broaden employees' skills for future organizational needs 48: Top management takes action towards executing its quality improvement policies. 49: Top management makes its quality improvement policies visible to all employees	Deming, 1986 Aguayo, 1990 Tamimi, 1995 Tamimi, 1998 Grandsol and Gershon, 1998 Saraph, Benson, and Schroeder, 1989 Black and Porter, 1996 Ahire, Golhar, and Waller, 1996 Berterfield, Besterfield-Michna, Berterfield, Besterfield-Sacre, 2003 Gitlow, Oppenheim, Oppenheim, Levine, 2004
QMP 2: Supervisory Leadership 22: Supervisors help their employees on the job. 23: Supervisors work to build the trust of their employees. 24: Supervisors lead in a way that is consistent with the aims of the organization. 25: Supervisors are viewed as coaches by their employees. 26: Employees express new ideas related to improving work method. 27: Employees seek their supervisors' assistant when unsure of their tasks 33: Top management provides its workers with the methods/procedures	
QMP 3: Supplier Involvement 8: Suppliers use statistical quality control techniques. 9: Statistical control techniques are used to minimize reliance on mass inspection. 10: Top management supports the belief that quality must be 'built into' the product/service and not 'inspected into' it. 11: Suppliers selection is based on both quality and price rather than price alone. 12: Suppliers are involved in the product/service	

(Continued)

development process. 13: Long-term relationships are developed with suppliers. 15: Customers' requirements are analyzed in the process of developing a product/service. **QMP 4: Top Management Commitment** 1: Top management makes long-term plans. 2: Top management provides for research and development. 3: Top management provides for new technology (EOR) 4: Top management promotes employee training/education. 5: Top management is committed to quality improvement as away to increase profits. 6: Top management is committed to setting objectives for quality improvement. 7: Top management is committed to continuous quality enhancement as a primary goal. **QMP 5: Training to Improve Products/Services** 16: Customers' feedback is used to continually improve the product/service. 17: Top management assess its competitors in order to improve the product/service 18: Employees are trained in statistical improvement techniques. 19: Employees are trained in quality-related matters (such as Six Sigma). 20: Employees are trained in specific work-related skills. 21: Supervisors are trained in statistical improvement techniques. **QMP 6: Cross Functional Team Relationships among SBUs** 30: Different departments have compatible goals. 31: In the product/service design process there is teamwork between different departments or SBUs 32: There is good communications between different Departments or SBUs. **II. World-Class Performance in Operations** **<u>II.1 World-class company practices (WCC)-- 5-point scale with completely true/not at all true anchors</u>** *1. Hayes and Wheelwright Principle 1 (HWP1): Workforce skills and* **capabilities** 51. Direct labor undergoes training to perform multiple tasks in the production process 52. Plant employees are rewarded for learning new skills 53. Our plant has a low skill level, compared with our industry ® 54. Direct labor technical competence is high in this plant 55. We use knowledge and skill level as a criterion in selecting employees 56. We use ability to work in a team as a criterion in employee selection 57. We use problem solving ability as a criterion in selection of employees 58. We use work values and ethics as a criterion in employee selection *2. Hayes and Wheelwright Principle 1 (HWP2):Management technical competence* 59. Technical literacy as a prerequisite for management careers 60. We frequently are in close contact with our customer 61. Our customers seldom visit our plant ® 62. A very important objective is to obtain satisfied customers	Hayes and Wheelwright, 1984 Flynn, Schroeder, and Flynn, 1999 Schonberger, 1990 Flynn, Schoeder, Flynn, Sakatibara, Bates, 1997 Yamashina, 2000 Rubrich and Watson, 2000 www.mapics.com Hayes and Wheelwright, 1984 Flynn, Schroeder, and Flynn, 1999 Schonberger, 1990 Flynn, Schroeder, Flynn, Sakatibara, Bates, 1997

(Continued)

63. Our customers give us feedback on quality and delivery performance	Yamashina, 2000 Rubrich and Watson, 2000 www.mapics.com
64. Customer requirements are thoroughly analyzed in the new project planning process	
65. There is a strong customer focus in our project planning process	
66. Direct employees are involved to a great extent on teams before introducing new projects or making project changes	
67. Direct employees are consulted before introducing new projects or making projects changes	
68. Manufacturing engineers are involved to a great extent before the introduction of new projects	
69. There is little involvement of manufacturing and quality people in the early design of products, before they reach the plant ®	
70. We work in teams, with members from a variety of areas in Upstream and Downstream, to introduce new projects	
3. Hayes and Wheelwright Principle 1 (HWP3): Competing through quality	
71. Quality of team participation is a significant part of performance evaluation at this plant	Hayes and Wheelwright, 1984 Flynn, Schroeder, and Flynn, 1999 Schonberger, 1990 Flynn, Schroeder, Flynn, Sakatibara, Bates, 1997 Yamashina, 2000 Rubrich and Watson, 2000 www.mapics.com
72. Strategies and goals are communicated primarily to managers	
73. I know how we are planning to be competitive at this plant	
74. Supervisors encourage the persons who work for them to work as a team	
75. Supervisors encourage people who work for them to exchange opinions and ideas	
76. Supervisors frequently hold group meetings where the people who work for them can really discuss things together	
77. Managers here are more likely to send a memo than to tell us something face-to-face ®	
78. During problem solving session, we make an effort to get all team members' opinions and ideas before making decision	
4. Hayes and Wheelwright Principle 1 (HWP4): Workforce participation	
79. Our plant form teams to solve problems	Hayes and Wheelwright, 1984 Flynn, Schroeder, and Flynn, 1999 Schonberger, 1990 Flynn, Schroeder, Flynn, Sakatibara, Bates, 1997 Yamashina, 2000 Rubrich and Watson, 2000 www.mapics.com
80. In the past five years, many problems have been solved through small group session	
81. High ability to design/production operations equipment for their own workplace	
82. High ability to perform major repairs and modifications for their own workplace	
83. High ability to compete on the basis of unique process technology	
84. All employees believe that it is their responsibility to improve quality in the plant	
85. Continuous improvement of quality is stressed in all work processes throughout our plant.	
86. I am constantly working to improve quality	
87. Quality improvement is not a high priority for me ®	
88. Workers are rewarded for quality improvement	
89. Supervisors are rewarded for quality improvements	
90. If I improve quality, management will reward me	
91. Managers are rewarded for making continuous improvements	
5. Hayes and Wheelwright Principle 1 (HWP5): Rebuilding manufacturing engineering	
92. Processes in our plant are designed to be 'fool proof'	
93. We have standardized process instructions which are given to personnel	

(Continued)

94. A large percentage of processes on the project filed are currently under statistical quality control	Hayes and Wheelwright, 1984 Flynn, Schroeder, and Flynn, 1999 Schonberger, 1990 Flynn, Schroeder, Flynn, Sakatibara, Bates, 1997 Yamashina, 2000 Rubrich and Watson, 2000 www.mapics.com
95. We make extensive use of statistical techniques to reduce variance in processes	
96. Charts showing defect rates are posted on the project execution	
97. Charts showing schedule compliance are posted on the project field	
98. Charts plotting the frequency of machine break-downs are posted on the project field	
99. Information in quality performance is readily available to employees	
100. Information on productivity is readily available to employees	
101. We have laid out the project field so that processes and machines are in close proximity to each other	
102. Direct labor is authorized to stop production operations for quality problems	
103. We use *a pull system* to control our production	
104. We use a *Kanban* pull system for production control	
105. We use *Kanban* squares, containers or signal for production control	
106. Our vendors supply us on a just-in-time basis	
107. We receive daily shipments from most suppliers	
6. Hayes and Wheelwright Principle 1 (HWP6):Incremental improvement approaches	
108. Our suppliers are certified, or qualified, for quality	
109. We have long-term arrangements with our suppliers as an integral part of world-class supply chain management.	Hayes and Wheelwright, 1984 Flynn, Schroeder, and Flynn, 1999 Schonberger, 1990 Flynn, Schoeder, Flynn, Sakatibara, Bates, 1997 Yamashina, 2000 Rubrich and Watson, 2000 www.mapics.com
110. Six Sigma has already been implemented in your company in moving towards "World-class Oil and Gas Company in Operational excellence practices"	
111. Six Sigma is "data driven" measuring a wide variety of factors, such as customer satisfaction, both external and internal.	
112. Six Sigma is an overall business improvement method.	
113. While six sigma utilizes many TQM tools, these tools are applied for breakthrough business process improvement	
114. While six sigma utilizes many TQM tools, these tools are applied for breakthrough sustainable financial factors	
115. Your company proactively pursue TQM implementation to support Six Sigma	
116. Six Sigma is effectively used to drive World-class Oil and Gas Company	
117. Six Sigma is effectively used to drive operational excellence practices	
II.2. Operational excellence practices (OE)--5-point scale with Excellence/Poor anchors	
1. OE1: World-class in safety	
2. OE2: World-class in environmental	
3. OE3: World-class in health	
4. OE4: World-class in reliability	
5. OE5: World-class in efficiency	
III. Operating performance (Operations Performance)	
III.1 Company Financial Performance (CFP) or Monetary Gain Performance (MGP))--5-point scale with Excellence/Poor anchors	
1. MGP1: Financial performance (net income, profits, and profit margins) for the last 5 years (2000-2005)	ChevronTexaco, 2003

(Continued)

2. MGP2: Market performance (increase market share, sales volume) for the last 5 years (2000-2005)	Schneider Electric, 2003 Allen and Kutnick, 2002
3. MGP3: Operating costs for the last 5 years (2000-2005)	Indonesia Business Unit, 2002
III.2 Company Non Financial Performance (CNFP) or Value Gain Performance (VGP))--5-point scale with Excellence/Poor anchors	
1. VGP1: Quality of product and service offerings	
2. VGP2: Delivery of product and service offerings	
3. VGP3: Variety of product and service offerings	
4. VGP4: Customer satisfaction	Cook and Virma, 2002
5. VGP5: Employee satisfaction	Wright and Geroy, 2001
6. VGP6: Community involvement (Community Development Program & Corporate Social Responsibility—sustainable development program)	
	Cook and Virma, 2002 Wright and Geroy, 2001

Appendix II

QUESTIONNAIRE

FOR STRUCTURED INTERVIEW

2005/2006 (English Version)

THE IMPLEMENTATION OF *TOTAL QUALITY MANAGEMENT* (TQM) IN OIL AND GAS INDUSTRY IN INDONESIA

Wakhid Slamet Ciptono

Ph.D. Student

Faculty of Business & Accountancy
University of Malaya
Kuala Lumpur, Malaysia

Date: 27th January 2005

Dear Sir/Madam,

RE: Doctoral Research on "The Implementation of *Total Quality Management (TQM) in the Oil and Gas Industry in Indonesia"*

I am **Wakhid Slamet Ciptono**, a student pursuing the Doctor of Philosophy program at the Faculty of Business and Accountancy, University of Malaya, Kuala Lumpur, Malaysia. As part fulfillment of this program, I am required to submit a research report. I am currently conducting a research on **"The Implementation of *Total Quality Management* (TQM) in Oil and Gas Industry in Indonesia".**

I would be grateful if you could provide me with the necessary assistance and cooperation to enable me to collect the information required for the above purpose. I would appreciate it very much if you could kindly arrange for a decision maker of your company to make an appointment to interview with me and/or to fill in the questionnaire provided.

The questionnaire will only require a few minutes of your time. There is no right or wrong answer; I am simply interested in your opinion/perception. It is very important that you answer all of the questions.

All of your responses to the interview and the questionnaire will be completely confidential. Only summary, aggregate information will be reported.

I will collect the completed questionnaire I can be reached at **081 215 96 219** should you have any queries. Your kind cooperation is crucial to the success of this research.

Thank you very much.

Yours sincerely,

Wakhid Slamet Ciptono
Ph.D. Candidate
Faculty of Business & Accountancy
University of Malaya
Kuala Lumpur, Malaysia

Jakarta, 27 January 2005

TO: Manager of Oil and Gas Companies In Indonesia

This is to certify that Wakhid Slamet Ciptono, Passport No: **G154294** and Metric No: **CHAQ01008** is a student pursuing the Doctor of Philosophy Program at the Faculty of Business & Accountancy, University of Malaya, Kuala Lumpur for the 2005/2006 academic session. As a part of the requirements of this course, he is required to write a research report (a doctoral thesis).

We would be grateful if you could provide him with the necessary assistance and cooperation to enable him to collect the data required for the above purpose.

Thank you

Iin Arifin Takhyan
Director General of Oil and Gas,
Department of Energy and Mineral Resources,
Republic of Indonesia, Jakarta, Indonesia

Dr. Wan Sabri Wan Hussin
Deputy Dean (Doctoral Degree)
Faculty of Business & Accountancy
University of Malaya, Kuala Lumpur Malaysia

RESEARCH QUESTIONNAIRE
2005-2006

GENERAL INSTRUCTIONS

Please circle (O) the appropriate number which accurately reflects your company's present position.

PART I: DEMING'S PRINCIPLE—DEMING'S 14 POINTS (50 QUALITY MANAGEMENT PRACTICES)

No	Attributes	Not at all True	Slightly True	Somewhat True	Mostly True	Completely True
1	Top management makes long-term plans	1	2	3	4	5
2	Top management provides for research and development	1	2	3	4	5
3	Top management provides for new technology	1	2	3	4	5
4	Top management promotes employee training/education	1	2	3	4	5
5	Top management is committed to quality improvement as a way to increase profit	1	2	3	4	5
6	Top management is committed to setting objectives for quality improvement	1	2	3	4	5
7	Top management is committed to continuous quality enhancement as a primary goal	1	2	3	4	5
8	**Suppliers** use statistical quality control techniques	1	2	3	4	5
9	Statistical control techniques are used to support continuous improvement.	1	2	3	4	5
10	Top management supports the belief that quality must be 'built into' the product and not 'inspected into' it	1	2	3	4	5
11	Supplier selection is based on both quality and price rather than price alone	1	2	3	4	5
12	Suppliers are involved in the product/service development process	1	2	3	4	5
13	Long-term relationships are developed with suppliers	1	2	3	4	5
14	There is reliance on a few dependable suppliers	1	2	3	4	5
15	Customers' requirements are analyzed in the process of developing a product/service	1	2	3	4	5
16	Customers' feedback is used to continually improve the product/service	1	2	3	4	5
17	Top management assesses its competitors in order to improve the product/service	1	2	3	4	5
18	**Employees** are trained in statistical improvement techniques	1	2	3	4	5
19	**Employees** are trained in quality-related matters	1	2	3	4	5
20	**Employees** are trained in specific work-related skill	1	2	3	4	5
21	**Supervisors** are trained in statistical improvement techniques	1	2	3	4	5
22	**Supervisors** help their employees on the job	1	2	3	4	5
23	**Supervisors** work to build the trust of their employees	1	2	3	4	5
24	**Supervisors** lead in a way that is consistent with the aims of the organization	1	2	3	4	5
25	**Supervisors** are viewed as coaches by their employees	1	2	3	4	5
26	**Employees** express new ideas related to improving work methods	1	2	3	4	5
27	**Employees** seek their supervisors' assistance when unsure of their tasks	1	2	3	4	5
28	**Employees** are not afraid to report working conditions that interfere with quality	1	2	3	4	5
29	**Employees** feel they have job security	1	2	3	4	5
30	Different departments have compatible goals	1	2	3	4	5
31	In the product/service design process there is teamwork between different departments	1	2	3	4	5
32	There is good communications between different departments	1	2	3	4	5
33	Top management provides its workers with the methods/procedures to meet their goals	1	2	3	4	5
34	Top management, not the hourly worker, is responsible for removing obstacles that cause defects/errors	1	2	3	4	5
35	Top management does not use rhetoric slogans (e.g., Do It Right The First Time) in communicating with its employees	1	2	3	4	5
36	Work standards are based on quality and quantity rather than quantity alone	1	2	3	4	5
37	Work standards are set based on process capability studies	1	2	3	4	5
38	Numerical quotas are not given higher priority than quality of workmanship	1	2	3	4	5
39	Performance appraisals are not used to rank employees ®	1	2	3	4	5
40	The quality of the working environment is good	1	2	3	4	5
41	There is adequate documentation on how to do the job	1	2	3	4	5
42	There is no pressure for short term results	1	2	3	4	5
43	Top management sets realistic goals for its employees	1	2	3	4	5
44	There are programs to develop team-work between employees	1	2	3	4	5
45	There are programs to develop effective communications between employees	1	2	3	4	5

(Continued)

46	There are programs to develop employees' conflict resolution skills	1	2	3	4	5
47	There are programs to broaden employees' skills for future organizational needs	1	2	3	4	5
48	Top management takes action towards executing its quality improvement policies	1	2	3	4	5
49	Top management makes its quality improvement policies visible to all employees	1	2	3	4	5
50	Top management relies on professional consultants to implement its quality improvement policies.	1	2	3	4	5

PART II: WORLD-CLASS COMPANY PRACTICES—SIX DIMENSIOS OF HAYES AND WHEELWRIGHT PRINCIPLES

No	Attributes	Not at all True	Slightly True	Somewhat True	Mostly True	Completely True
51	Direct labor undergoes training to perform multiple tasks in the production process	1	2	3	4	5
52	Plant employees are rewarded for learning new skills	1	2	3	4	5
53	Our plant has a low skill level, compared with our industry ®	1	2	3	4	5
54	Direct labor technical competence is high in this plant	1	2	3	4	5
55	We use knowledge and skill level as a criterion in selecting employees	1	2	3	4	5
56	We use ability to work in a team as a criterion in employee selection	1	2	3	4	5
77	We use problem solving ability as a criterion in selection of employees	1	2	3	4	5
58	We use work values and ethics as a criterion in employee selection	1	2	3	4	5
59	Technical literacy as a prerequisite for management careers	1	2	3	4	5
60	We frequently are in close contact with our customer	1	2	3	4	5
61	Our customers seldom visit our plant ®	1	2	3	4	5
62	A very important objective is to obtain satisfied customers	1	2	3	4	5
63	Our customers give us feedback on quality and delivery performance	1	2	3	4	5
64	Customer requirements are thoroughly analyzed in the new project planning process	1	2	3	4	5
65	There is a strong customer focus in our project planning process	1	2	3	4	5
66	Direct employees are involved to a great extent on teams before introducing new projects or making project changes	1	2	3	4	5
67	Direct employees are consulted before introducing new projects or making projects changes	1	2	3	4	5
68	Manufacturing engineers are involved to a great extent before the introduction of new projects	1	2	3	4	5
69	There is little involvement of manufacturing and quality people in the early design of products, before they reach the plant ®	1	2	3	4	5
70	We work in teams, with members from a variety of areas in Upstream and Downstream, to introduce new projects	1	2	3	4	5
71	Quality of team participation is a significant part of performance evaluation at this plant	1	2	3	4	5
72	Strategies and goals are communicated primarily to managers	1	2	3	4	5
73	I know how we are planning to be competitive at this plant	1	2	3	4	5
74	Supervisors encourage the persons who work for them to work as a team	1	2	3	4	5
75	Supervisors encourage people who work for them to exchange opinions and ideas	1	2	3	4	5
76	Supervisors frequently hold group meetings where the people who work for them can really discuss things together	1	2	3	4	5
77	Managers here are more likely to send a memo than to tell us something face-to-face ®	1	2	3	4	5
78	During problem solving session, we make an effort to get all team members' opinions and ideas before making decision	1	2	3	4	5
79	Our plant form teams to solve problems	1	2	3	4	5
80	In the past five years, many problems have been solved through small group session	1	2	3	4	5
81	High ability to design/production operations equipment for their own workplace	1	2	3	4	5
82	High ability to perform major repairs and modifications for their own workplace	1	2	3	4	5
83	High ability to compete on the basis of unique process technology	1	2	3	4	5
84	All employees believe that it is their responsibility to improve quality in the plant	1	2	3	4	5
85	Continuous improvement of quality is stressed in all work processes throughout our plant.	1	2	3	4	5
86	I am constantly working to improve quality	1	2	3	4	5
87	Quality improvement is not a high priority for me ®	1	2	3	4	5
88	Workers are rewarded for quality improvement	1	2	3	4	5
89	Supervisors are rewarded for quality improvements	1	2	3	4	5
90	If I improve quality, management will reward me	1	2	3	4	5
91	Managers are rewarded for making continuous improvements	1	2	3	4	5
92	Processes in our plant are designed to be 'fool proof'	1	2	3	4	5
93	We have standardized process instructions which are given to personnel	1	2	3	4	5
94	A large percentage of processes on the project filed are currently under statistical quality control	1	2	3	4	5
95	We make extensive use of statistical techniques to reduce variance in processes	1	2	3	4	5
96	Charts showing defect rates are posted on the project execution	1	2	3	4	5
97	Charts showing schedule compliance are posted on the project field	1	2	3	4	5

Continued

98	Charts plotting the frequency of machine break-downs are posted on the project field	1	2	3	4	5
99	Information in quality performance is readily available to employees	1	2	3	4	5
100	Information on productivity is readily available to employees	1	2	3	4	5
101	We have laid out the project field so that processes and machines are in close proximity to each other	1	2	3	4	5
102	Direct labor is authorized to stop production operations for quality problems	1	2	3	4	5
103	We use *a pull system* to control our production	1	2	3	4	5
104	We use a *Kanban* pull system for production control	1	2	3	4	5
105	We use *Kanban* squares, containers or signal for production control	1	2	3	4	5
106	Our vendors supply us on a just-in-time basis	1	2	3	4	5
107	We receive daily shipments from most suppliers	1	2	3	4	5
108	Our suppliers are certified, or qualified, for quality	1	2	3	4	5
109	We have long-term arrangements with our suppliers as an integral part of world-class supply chain management.	1	2	3	4	5
110	Six Sigma has already been implemented in your company in moving towards "World-class Oil and Gas Company in Operational excellence practices"	1	2	3	4	5
111	Six Sigma is "data driven" measuring a wide variety of factors, such as customer satisfaction, both external and internal.	1	2	3	4	5
112	Six Sigma is an overall business improvement method.	1	2	3	4	5
113	While six sigma utilizes many TQM tools, these tools are applied for breakthrough business process improvement	1	2	3	4	5
114	While six sigma utilizes many TQM tools, these tools are applied for breakthrough sustainable financial factors	1	2	3	4	5
115	Your company proactively pursue TQM implementation to support Six Sigma	1	2	3	4	5
116	Six Sigma is effectively used to drive World-class Oil and Gas Company	1	2	3	4	5
117	Six Sigma is effectively used to drive operational excellence practices	1	2	3	4	5

Note: ®indicates that this question was reversing coded.

Your company is continually striving to improve. To assist us in this endeavor, I need your feedback. Would you please grade your operating performance in each category? The grade scale is

Ratings For Performance:

5 = Excellent
4 = Very Good
3 = Average
2 = Below Average
1 = Poor

PART III: OPERATIONAL EXCELLENCE PRACTICES

NO	ATTRIBUTES	PERFORMANCE				
1	World-class in safety	1	2	3	4	5
2	World-class in environmental	1	2	3	4	5
3	World-class in health	1	2	3	4	5
4	World-class in reliability	1	2	3	4	5
5	World-class in efficiency	1	2	3	4	5

PART IV: OPERATING PERFORMANCE (MONETARY GAIN PERFORMANCE AND VALUE GAIN PERFORMANCE

NO	ATTRIBUTES	PERFORMANCE				
	MONETARY GAIN PERFORMANCE (Company Financial Performance)					
1	Financial performance (net income, profits, and profit margins) for the last 5 years (2001-2005)	1	2	3	4	5
2	Market performance (increase market share, sales volume) for the last 5 years (2001-2005)	1	2	3	4	5
3	Operating costs for the last 5 years (2001-2005)	1	2	3	4	5
	VALUE GAIN PERFORMANCE (Company Non Financial Performance)					
1	Quality of product and service offerings	1	2	3	4	5
2	Delivery of product and service offerings	1	2	3	4	5
3	Variety of product and service offerings	1	2	3	4	5
4	Customer satisfaction	1	2	3	4	5
5	Employee satisfaction	1	2	3	4	5
6	Community involvement (Community Development Program & Corporate Social Responsibility)	1	2	3	4	5

GENERAL INFORMATION

I need some personal data about yourself to enable meaningful interpretations and comparisons of the results. Please remember that this information will be treated with strict confidence and your responses will be aggregated to preserve your anonymity. Please circle one number for each of the following questions.

1. Your sex: (a) Male (b) Female

2. Your age_____ (please write down your age)

3. Your department: _____
4. Your current position (please specify): _____
5. How many years have you been employed at this company? Please circle the associated number below.

1-2 years……1
3-5 years…….2
6-10 years……...3
11.15 years……4
Over 16 years…….....5

6. Approximately how many years have you previously been involved in the Total Quality Management program at this company. Please circle the associated number below.

1-2 years……1
3-5 years…….2
6-10 years……...3
11.15 years……4
Over 16 years…….....5

7. How often do use computer?
Never □
Several times per week □
Nearly everyday □
Everyday □

Implementation of TQM

1. Do you understand TQM? ----Yes -----No
2. Does your company implement TQM? -----Yes ------No
[If Yes, please go to question 3]
[if No please go to question 2]
3. Would you consider implementing TQM in the future?
Definitely not 1 ; May not 2 ' Undecided 3 ; May will 4; Definitely will 5
4. How long has your company implemented TQM
----less than a year; -----1-2 years; -----2-3 years; -----3-5 years; -----over 5 years
6. Please comment on effectiveness of TQM implementation at this company:
7. Please comment on effectiveness of achieving world-class manufacturing:
8. Please comment on effectiveness of achieving of operational excellence practices:
9. Please provide your name and e-mail address if you like to have a copy of this research

Name	
E-mail Address	

Thank you very much for your cooperation.

Researcher,

Wakhid Slamet Ciptono

Ph.D. Candidate
Faculty of Business & Accountancy
University of Malaya
Kuala Lumpur, Malaysia

Appendix III

KUESIONER PENELITIAN PERUSAHAAN MIGAS DI INDONESIA TAHUN 2005/2006 (Indonesian Version)

THE IMPLEMENTATION OF *TOTAL QUALITY MANAGEMENT* (TQM) IN OIL AND GAS INDUSTRY IN INDONESIA

Wakhid Slamet Ciptono

Ph.D. Student

Faculty of Business & Accountancy
University of Malaya
Kuala Lumpur, Malaysia

27 Januari 2005

Kepada Yth.
Bapak/Ibu
Direktur, VP, Manajer, Engineer, Staf
Perusahaan Migas di Indonesia

Saya **Wakhid Slamet Ciptono** adalah staf pengajar Fakultas Ekonomi Jurusan Manajemen Universitas Gadjah Mada yang sedang menyelesaikan Program Doktor di Fakultas Bisnis dan Akuntansi, *University of Malaya*, Kuala Lumpur, Malaysia. Sebagai bagian dari pemenuhan kelulusan program ini, saya wajib menulis laporan penelitian. Saya melakukan penelitian secara langsung dengan judul **"The Implementation of Total Quality Management (TQM) in Oil and Gas Industry in Indonesia."**

Penelitian ini dimaksudkan untuk memotret keunggulan penerapan Sistem Manajemen Mutu di Perusahaan Migas di Indonesia. Kesuksesan TQM (*Total Quality Management*) merupakan upaya secara berkesinambungan dan bertahap seluruh komponen organisasi untuk melakukan perubahan proses yang tujuannya untuk meningkatkan kinerja dan daya saing perusahaan.

Saya dapat dihubungi di no **081 215 96219** atau wakhidsciptono@yahoo.com atau Wakhidsciptono@ugm.ac.id jika Bapak dan Ibu memerlukan bantuan dalam mengisi kuesioner penelitian ini. Partisipasi Bapak/Ibu sangat berarti bagi kesuksesan penelitian ini.

Terima kasih atas kesediaan Bapak/Ibu meluangkan waktu untuk mengisi kuesioner ini. Semoga ketulusan Bapak/Ibu mendapat pahala dari Allah. Amien

Hormat saya,

Wakhid Slamet Ciptono
Ph.D. Student
Faculty of Business & Accountancy
University of Malaya
Kuala Lumpur, Malaysia

KUESIONER PENELITIAN INDUSTRI MIGAS DI INDONESIA TAHUN 2005/2006

Lingkarilah salah satu jawaban di bawah ini yang Bapak/Ibu anggap sesuai dengan pendapat/persepsi Bapak/Ibu.

1 = Tidak benar 2 = Kurang benar 3 = Kadang-kadang benar 4 = Benar 5 = Sangat benar

No	Atribut	Tidak benar	Kurang benar	Kadang-kadang benar	Benar	Sangat benar
1	**Manajemen** (**Direktur, VP, Manajer**) membuat rencana jangka panjang (Visi dan Misi Perusahaan)	1	2	3	4	5
2	**Manajemen** menyediakan penelitian dan pengembangan	1	2	3	4	5
3	**Manajemen** menyediakan teknologi baru	1	2	3	4	5
4	**Manajemen puncak** mendukung pelatihan/pendidikan bagi karyawannya	1	2	3	4	5
5	**Manajemen** mempunyai komitment terhadap peningkatan kualitas sebagai salah satu cara untuk meningkatkan keuntungan	1	2	3	4	5
6	**Manajemen** berkomitmen untuk menetapkan tujuan perbaikan kualitas	1	2	3	4	5
7	**Manajemen** berkomitmen untuk menerapkan perbaikan kualitas yang berkelanjutan sebagai salah satu tujuan utama	1	2	3	4	5
8	**Mitra kerja** menggunakan teknik pengendalian kualitas berbasis statistika	1	2	3	4	5
9	Teknik pengendalian kualitas berbasis statistika digunakan untuk mendukung perbaikan berkelanjutan	1	2	3	4	5
10	**Manajemen** mendukung keyakinan bahwa kualitas harus dilihat dalam proses E & P Migas dan bukannya mengontrol Migas saja.	1	2	3	4	5
11	Pemilihan mitra kerja berdasarkan pada aspek kualitas dan harga dan bukannya aspek harga saja	1	2	3	4	5
12	**Mitra kerja** dilibatkan dalam proses pengembangan barang/ jasa	1	2	3	4	5
13	Hubungan jangka panjang dibina dengan mitra kerja	1	2	3	4	5
14	Perusahaan mempercayakan hanya kepada beberapa mitra kerja saja.	1	2	3	4	5
15	Hal-hal yang diminta/dibutuhkan tim kerja di bagian lainnya dianalisis dalam proses pengembangan migas	1	2	3	4	5

Continued

No	Atribut	Tidak benar	Kurang benar	Kadang-kadang benar	Benar	Sangat benar
16	Umpan balik tim kerja di bagian lainnya digunakan untuk perbaikakan mutu secara berkesinambungan	1	2	3	4	5
17	Manajemenmenilai para pesaingya untuk melakukan perbaikan pengembangan E & P migas	1	2	3	4	5
18	**Para karyawan** dilatih dalam teknik perbaikan mutu berbasis statistika	1	2	3	4	5
19	**Para karyawan** dilatih hal-hal yang berhubungan dengan kualitas (seperti Gugus Kendali Mutu)	1	2	3	4	5
20	**Para karyawan** dilatih dalam hal yang berhubungan dengan pekerjaan E & P	1	2	3	4	5
21	**Tim leader** dilatih dalam teknik perbaikan E & P berbasis statistika	1	2	3	4	5
22	**Tim leader** membimbing karyawannya dalam bekerja E & P	1	2	3	4	5
23	**Tim leader** berupaya membangun kepercayaan karyawannya	1	2	3	4	5
24	**Tim leader** memimpin dengan cara yang konsisten dengan tujuan perusahaan	1	2	3	4	5
25	**Tim leader** dipandang sebagai pembimbing oleh karyawannya	1	2	3	4	5
26	**Karyawan** mengekspresikan ide baru (sumur baru) yang terkait dengan metode perbaikan kerja	1	2	3	4	5
27	**Karyawan** meminta penjelasan pada tim leadernya jika mereka menemukan tugas-tugas yang tidak jelas	1	2	3	4	5
28	**Karyawan** tidak segan (berani) melaporkan kondisi kerja yang menghambat kualitas	1	2	3	4	5
29	**Karyawan** merasa memperoleh perlindungan dalam melaksanakan pekerjaannya	1	2	3	4	5
30	Departemen (bagian) yang berbeda mempunyai tujuan yang sejalan	1	2	3	4	5
31	Dalam proses di lapangan terdapat kerja tim antara bagian Eksplorasi & Produksi	1	2	3	4	5
32	Terdapat komunikasi yang baik antara bagian Eksplorasi dan Produksi	1	2	3	4	5
33	**Manajemen (Direktur, VP, Manajer** membekali karyawannya dengan metode/prosedur untuk mencapai tujuan	1	2	3	4	5
34	**Manajemen** bertanggung jawab terhadap kendala yang menyebabkan penurunan kinerja perusahaan	1	2	3	4	5

Continued

No	Atribut	Tidak benar	Kurang benar	Kadang-kadang benar	Benar	Sangat benar
35	**Manajemen** tidak menggunakan slogan yang bersifat retorika dalam berkomunikasi dengan karyawannya	1	2	3	4	5
36	Standar kerja lebih didasarkan pada kualitas dan kuantitas bukan hanya pada kuantitas saja	1	2	3	4	5
37	Standar kerja ditentukan berdasarkan kajian kemampuan mengelola proses E & P	1	2	3	4	5
38	Target kuantitatif bukan merupakan prioritas utama dibandingkankualitas kerja karyawan	1	2	3	4	5
39	Penilaian kinerja tidak digunakan untuk merangking karyawan	1	2	3	4	5
40	Kualitas lingkungan kerja bagus	1	2	3	4	5
41	Terdapat dokumen petunjuk bagaimana cara melaksanakan suatu pekerjaan (E & P)	1	2	3	4	5
42	Tidak ada tekanan yang menuntut hasil kerja jangka pendek	1	2	3	4	5
43	**Manajemen** menetapkan tujuan yang realistis bagi karyawannya	1	2	3	4	5
44	Terdapat program-program untuk membangun kerja tim antar karyawan	1	2	3	4	5
45	Terdapat program untuk membangun komunikasi yang efektif antar karyawan	1	2	3	4	5
46	Terdapat program-program untuk membangun kemampuan untuk menyelesaikan konflik	1	2	3	4	5
47	Terdapat beberapa program untuk mengembangkan kemampuan karyawan bagi kebutuhan perusahaan di masa yang akan datang	1	2	3	4	5
48	**Manajemen** mengambil tindakan nyata berkaitan dengan pelaksanaan kebijakan perbaikan kualitas	1	2	3	4	5
49	**Manajemen puncak** membuat kebijakan perbaikan kualitas yang diketahui oleh semua karyawannya	1	2	3	4	5
50	**Manajemen** mempercayakan pelaksanaan kebijakan perbaikan kualitas kepada konsultan profesional	1	2	3	4	5
51	**Karyawan (Engineers)** mengikuti pelatihan untuk melaksanakan berbagai tugas dalam proses E & P	1	2	3	4	5
52	**Karyawan bagian eksplorasi/pengembangan** diberi penghargaan atas keahlian baru yang diperolehnya	1	2	3	4	5

Continued

No	Atribut	Tidak benar	Kurang benar	Kadang-kadang benar	Benar	Sangat benar
53	**Perusahaan kami** mempunyai tingkat keahlian yang rendah dibandingkan dengan perusahaan lain dalam industri yang sama	1	2	3	4	5
54	Kemampuan teknik tenaga kerja langsung sangat tinggi di dalam perusahaan (bagian eksplorasi/produksi)	1	2	3	4	5
55	**Kami** menggunakan tingkat pengetahuan dan keahlian sebagai kriteria dalam penyeleksian karyawan	1	2	3	4	5
56	**Kami** menilai karyawan saat bekerja dalam tim sebagai kriteria penyeleksian karyawan	1	2	3	4	5
57	**Kami** menilai kemampuan karyawan dalam menyelesaikan masalah sebagai kriteria penyeleksian pegawai	1	2	3	4	5
58	**Kami** menggunakan nilai-nilai dan etika kerja sebagai kriteria penyeleksian karyawan	1	2	3	4	5
59	Penguasaan teknologi merupakan prasyarat untuk manajemen karir	1	2	3	4	5
60	Kami selalu melakukan hubungan baik dengan para tim kerja di bagian lainnya	1	2	3	4	5
61	**Tim kerja di bagian lainnya kami** jarang sekali mengunjungi perusahaan/bagian eksplorasi/pengembangan kami	1	2	3	4	5
62	Tujuan yang terpenting adalah mempertahankan kepuasan tim kerja di bagian lainnya	1	2	3	4	5
63	**Tim kerja di bagian lainnya kami** memberikan umpan balik terhadap kinerja mutu dan kinerja pengiriman/distribusi	1	2	3	4	5
64	Keinginan tim kerja di bagian lainnya akan direalisasikan dalam desain eksplorasi baru	1	2	3	4	5
65	Dalam prosesE & P kami memfokuskan kepada pentingnya keinginan tim kerja di bagian lainnya	1	2	3	4	5
66	**Para pekerja** dilibatkan dalam tim yang solid sebelum eksplorasi baru diperkenalkan atau sebelum dilakukan proses eksplorasi	1	2	3	4	5
67	**Para pekerja** diajak berkonsultasi sebelum eksplorasi baru diperkenalkan atau sebelum dilakukan proses E & P	1	2	3	4	5
68	**Insinyur geologi, teknik perminyakan, teknik mesin, dan teknik kimia** dilibatkan secara luas dalam tim yang solid sebelum eksplorasi baru atau proyek baru dilakukan	1	2	3	4	5

Continued

No	Atribut	Tidak benar	Kurang benar	Kadang-kadang benar	Benar	Sangat benar
69	**Karyawan bagian eksplorasi dan kualitas** tidak begitu dilibatkan dalam rencana eksplorasi baru ke bagian eksplorasi/pengembangan	1	2	3	4	5
70	**Kami** bekerja dalam tim yang beranggotakan dari berbagai bidang, seperti pemasaran, E & P untuk meperkenalkan proyek baru (eksplorasi baru)	1	2	3	4	5
71	Kualitas partisipasi tim merupakan bagian yang signifikan dari evaluasi kinerja di perusahaan (bagian eksplorasi/pengembangan)	1	2	3	4	5
72	Strategi dan tujuan dikomunikasikan terutama kepada para tim manajer	1	2	3	4	5
73	**Saya** tahu bagaimana kami nantinya menjadi lebih kompetitif di perusahaan/bagian eksplorasi/pengembangan	1	2	3	4	5
74	**Tim leader** mendorong anak buahnya agar bekerja dalam tim yang solid	1	2	3	4	5
75	**Tim leader** mendorong anak buahnya untuk bertukar pendapat dan ide	1	2	3	4	5
76	**Tim leader** secara rutin mengadakan pertemuan kelompok dimana orang-orang yang bekerja untuk mereka dapat mendiskusikan sesuatu bersama-sama	1	2	3	4	5
77	**Para tim manajer** di perusahaan kami lebih sering mengirimkan memo daripada mengatakan langsung kepada yang bersangkutan	1	2	3	4	5
78	Selama sesi pemecahan masalah, kami mengusahakan untuk memperolah pendapat semua anggota tim sebelum membuat keputusan	1	2	3	4	5
79	**Perusahaan kami** membuat tim untuk memecahkan masalah	1	2	3	4	5
80	Dalam lima tahun terakhir ini, banyak masalah telah diselesaikan melalui sesi kelompok kecil (Gugus Kendali Mutu)	1	2	3	4	5
81	**Perusahaan kami** memiliki kemampuan yang tinggi untuk mendesain perlengkapan yang diperlukan oleh bagian eksplorasi/pengembangan	1	2	3	4	5
82	**Perusahaan kami** memiliki kemampuan yang tinggi untuk melakukan modifikasi dan perbaikan penting bagi fasilitas manufaktur sendiri	1	2	3	4	5
83	Kemampuan yang tinggi untuk bersaing berdasarkan teknlogi proses yang canggih	1	2	3	4	5

Continued

No	Atribut	Tidak benar	Kurang benar	Kadang-kadang benar	Benar	Sangat benar
84	**Seluruh karyawan** percaya bahwa memperbaiki kualitas dalam perusahaan merupakan tanggung jawab mereka	1	2	3	4	5
85	Perbaikan kualitas secara terus menerus ditekankan dalam seluruh proses kerja di perusahaan	1	2	3	4	5
86	**Saya** terus menerus berusaha memperbaiki kualitas kerja	1	2	3	4	5
87	Perbaikan kualitas bukanlah priotitas utama bagi **saya**	1	2	3	4	5
88	**Para pekerja** diberi penghargaan karena melakukan perbaikan kualitas	1	2	3	4	5
89	**Tim leader** diberi penghargaan karena melakukan perbaikan kualitas	1	2	3	4	5
90	Jika **saya** memperbaiki kualitas, manajemen akan memberi penghargaan kepada **saya**	1	2	3	4	5
91	**Para tim manajer** diberi penghargaan karena melaksanakan perbaikan secara terus menerus	1	2	3	4	5
92	Proses di dalam bagian eksplorasi/pengembangan kami didesain agar tidak terjadi kesalahan	1	2	3	4	5
93	**Kami** mempunyai instruksi proses yang terstandardisir untuk para karyawan	1	2	3	4	5
94	Sebagian besar prosentase proses dalam bagian eksplorasi/pengembangan menggunakan pengendalian kualitas berbasis statistika	1	2	3	4	5
95	**Kami** menggunakan secara luas teknik berbasis statistika untuk mengurangi penyimpangan proses	1	2	3	4	5
96	Bagan yang menunjukkan tingkat produk cacat dipasang di papan pengumuman di bagian eksplorasi/pengembangan	1	2	3	4	5
97	Bagan yang menunjukkan penyimpangan jadwal produksi dipasang di papan pengumuman di bagian eksplorasi/pengembangan	1	2	3	4	5
98	Bagan yang menunjukkan frekuensi kerusakan mesin dipasang di papan pengumuman di bagian eksplorasi/pengembangan	1	2	3	4	5
99	Informasi mengenai kinerja kualitas selalu tersedia bagi karyawan	1	2	3	4	5
100	Informasi mengenai produktivitas selalu tersedia bagi karyawan	1	2	3	4	5
101	**Kami** telah mendesain bagian eksplorasi/pengembangan sehingga peralatan pengeboran yang digunakan dalam proses eksplorasi di *lay out* saling berdekatan satu dengan yang lain	1	2	3	4	5

Continued

No	Atribut	Tidak benar	Kurang benar	Kadang-kadang benar	Benar	Sangat benar
102	**Pekerja lapangan (E & P)** diberi kewenangan untuk menghentikan mesin pemompa minyak yang terkait dengan kualitas pemeliharaan mesin atau peralatan	1	2	3	4	5
103	**Kami** menggunakan sistem jaringan untuk mengontrol aktivitas eksplorasi dan pengembangan untuk mengendalikan aktivitas eksplorasi dan pengembangan	1	2	3	4	5
104	**Kami** menggunakan sistem kartu pengontroluntuk mengendalikan aktivitas eksplorasi dan pengembangan	1	2	3	4	5
105	**Kami** menggunakansinyal yang menunjukkan adanya gangguan untuk mengendalikan aktivitas eksplorasi dan pengembangan	1	2	3	4	5
106	**Mitra kerja kami** mengirim informasi dan sumber daya yang diperlukan tepat waktu	1	2	3	4	5
107	**Kami** menerima pengiriman harian dari para mitra kerja	1	2	3	4	5
108	**Perusahaan kami** bersertifikasi dan memenuhi standar kualitas (memperoleh ISO 9000)	1	2	3	4	5
109	**Kami** mempunyai rencana jangka panjang dengan mitra kerja kami sebagai bagian integral dari *world-class supply chain management*	1	2	3	4	5
110	*Six Sigma* telah diterapkan di perusahaan kami dalam rangka menuju "*World Class Performance in Operations*"	1	2	3	4	5
111	*Six Sigma* dan *MBNQA* adalah pengukuran berbasis data untuk mengukur bermacam-macam faktor seperti kepuasan tim kerja di bagian lainnya	1	2	3	4	5
112	*Six Sigma* adalah suatu metode perbaikan bisnis secara menyeluruh	1	2	3	4	5
113	*Six Sigma* menggunakan berbagai alat TQM, alat-alat tersebut digunakan untuk menyelesaikan permasalahan yang berkaitan dengan perbaikan proses bisnis	1	2	3	4	5
114	*Six Sigma* menggunakan berbagai alat TQM, alat tersebut digunakan untuk menyelesaikan permasalahan yang berkaitan dengan keuangan	1	2	3	4	5
115	**Perusahaan kami** secara proaktif menerapkan TQM guna mendukung *Six Sigma*	1	2	3	4	5
116	*Six Sigma* efektif digunakan untuk mewujudkan *World Class Operations*	1	2	3	4	5
117	*Six Sigma* efektif digunakan untuk mewujudkan *operational excellence*	1	2	2	4	5

Perusahaan kami terus melaksanakan proses perbaikan. Berkaitan dengan upaya perbaikan ini, kami memerlukan pendapat Bapak/Ibu. Berikanlah penilaian (persepsi) Bapak/Ibu dengan memberikan angka kinerja perusahaan Bapak/Ibu. Skala kinerja adalah seperti berikut.

Skala Kinerja:
1 = Buruk 2 = Kurang Baik 3 = Cukup Baik 4 =Baik 5 = Sangat Bai

NO	DESKRIPSI ATRIBUT	KINERJA				
1	Keselamatan kerja berkelas dunia dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
2	Lingkungan kerja berkelas dunia dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
3	Kesehatan kerja berkelas dunia dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
4	Keandalan (*reliability*) berkelas dunia dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
5	Efisiensi berkelas dunia dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
6	Kinerja keuangan (pendapatan bersih, keuntungan, dan *profit margins*) yang lebih baik selama lima tahun terakhir (1998-2003) dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
7	Kinerja pasar (kenaikan pangsa pasar, volume penjualan) yang lebih baik selama lima tahun terakhir (1998-2003) dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
8	Biaya operasi lima tahun terakhir yang lebih rendah selama lima tahun terakhir (1998-2003) dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
9	Kualitas Kerja E & P yang ditawarkan lebih baik selama 1998-2003 dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
10	Pasokan Migas yang ditawarkan lebih cepat selama 1998-2003 dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
11	Lebih banyak eksplorasi sumur baru yang dilakukan selama 1998-2003 dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
12	Kepuasan tim kerja di bagian lainnya yang lebih baik selama 1998-2003 dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
13	Kepuasan karyawan yang lebih baik selama 1998-2003 dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5
14	Keterlibatan dalam masyarakat yang lebih intens selama 1998-2003 dibandingkan dengan sesama perusahaan migas di Indonesia	1	2	3	4	5

Informasi Umum

Mohon Bapak/Ibu melengkapi formulir ini. Semua data yang diperoleh dalam studi ini akan dirahasiakan dan hanya akan digunakan untuk keperluan studi ini saja.
Kami ingin mendapatkan beberapa informasi mengenai latar belakang Bapak/Ibu.

Jenis Kelamin 1. Wanita 2. Pria

Umur _____(mohon diisi)

Departemen _____

Jabatan Pekerjaan _____

Berapa tahun Bapak/Ibu bekerja di perusahaan ini _____(tahun)

Berapa tahun Bapak/Ibu terlibat dalam *Quality Management* _____(tahun)

Berapa tahun menggunakan computer (IT) _____(tahun)

Seberapa sering menggunakan computer?

1. Tidak pernah 2. Beberapa kali per minggu 3. Hampir setiap hari 4. Setiap hari

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Silakan tulis nama dan alamat e-mail Bapak/Ibu jika Bapak/Ibu ingin mendapatkan salinan hasil dari penelitian ini.

Nama	
Alamat E-mail	

Terima Kasih atas Kerjasama Bapak/Ibu.

Peneliti,

Wakhid Slamet Ciptono
Ph.D.Student
Faculty of Business & Accountancy
University of Malaya
Kuala Lumpur, Malaysia