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The Relationship between Organizational Culture and Performance in Industrial Companies in Saudi Arabia

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Abstract:
The purpose of this researchis to examine the relationship between the four cultural dimensions of the competing values framework CVF (Group, developmental, hierarchical, and rational culture) and the three types of performance (Competitiveness of the organization, product quality, process clarity). Data were gathered by questionnaire and collected from 112 respondents who work in an industrial company in Saudi Arabia. Moreover, data were being analysed by using the Statistical Package for Social Sciences SPSS. The questionnaire was divided into three parts which are demographic questions, organizational culture questions, and organizational performance questions. It is found through Pearson correlation that there are significant relationships between the organizational culture and organizational performance factors that is competitiveness of organization, product quality, and clarity of processes. Between all of the dependent variables, competitiveness of organization found to be the highest correlated variable with organizational culture. Researcher recommended for organizations to focus on improving their culture in order to improve performance. Moreover, researcher recommended for the future studies to expand into other aspects that this study did not cover and include other variables to measure organizational culture and performance.

Keywords: Competitive advantage, organizational culture, superior performance

1. Introduction
Creating and maintaining a competitive advantage is an essential factor for any organization aiming to have a superior performance. All types of organizations are running in a socio cultural environment which affects the organizations` members' behaviour. Any organization top management should be concerned about any factors that affect the organization`s performance. In fact, the culture of any organization is basically shaped by the organization`s top management. The relationship between organizational performance and the culture of the organization has been a crucial subject in organization behaviour and management literatures. Many scholars such as Peters and Waterman (1982) conducted a study that linked a strong culture with excellent financial performance. Recently, many researchers conducted studies about the influence of organizational culture and performance in many industries such as Kotter and Heskett (1992), Aluko (2003), Yusuf, Rashid, Busu, and Zulkifli (2008), Joseph and Dai (2009), Prajogo (2010), and Alharbi and Alyahya (2013).

2. Research Structure
This study contains ten major parts, beginning with a review of literatures that are relevant to the study, and then the significance of the study is discussed followed by research objectives, research problem and methodology. The seventh part will be about the analysis and results of the study followed by major findings and limitation part. In addition, discussion and conclusions will discuss the findings resulted from SPSS analysis. Finally, the last part will include recommendations related to the study.

3. Literature Review
The idea of organizational culture has been recognized early by many scholars such as Hofstede (1980) and Schein (1985). Although there are many definitions for organizational culture, the common view is that the culture is a set of two elements, values and beliefs shared by members of an organization. The organizational culture is divided into four categories, developmental culture, rational culture, hierarchical culture, and group culture (Quinn and Spritzer, 1991). Aluko (2003) examined the multidimensional impact of culture on organizational performance in a number of textile firms from Nigeria. He used qualitative and quantitative methodologies. Aluko found that there was a positive relationship between organizational culture and organizational performance. He also stated that the Nigerian textile firms were not performing well because of many other factors inhibiting their performance. Aluko have proved in his paper that the inadequacy of technology, social infrastructure, and the market condition were the cause of the textile firms' low

performance. He defines the culture as "the sociocultural environment in its entirety" (Aluko, 2003, p. 172). He measured the culture in terms of four subjects, attitudes, beliefs, norms and values. He also defined the performance as "the ability of an organization to satisfy the desired expectations of three main stakeholders comprising of owners, employees and customers" (Aluko, 2003, p. 172). Furthermore, McDermott (2010) had examined the effect of the organizational culture on the competitiveness of the organizations. He concluded that there is a significant relationship between the competitiveness of a company and its culture (McDermott, 1999). In addition, Joseph and Dai (2009) believed that organizational culture is the most important factor which promotes innovation in the working environment. Employees' management, leadership style and organizational structure which are related to organizational culture are important in shaping organizational culture (Dai and Joseph, 2009). According to Prajogo (2010) the culture of any organization effects the quality of its product. In fact, each organization has to have certain type of culture which enhances its business strategy (Dai and Joseph, 2009). In addition, the competing values framework CVF which was developed by Quinn and Spritzer (1991) captures four different cultural dimensions. Every two values opposing each other in the four contrasting dimension. The first axis is flexibility versus control. The second one is internal versus external axis. The flexibility - control axis represent the degree to which extent an organization has a flexible culture in terms of spontaneity and development, and control culture in terms of continuity and stability. The internal - external axis represent the degree to which extent organizations maintain and improve their current situation, and focus on interaction and adaptation with the external environment.
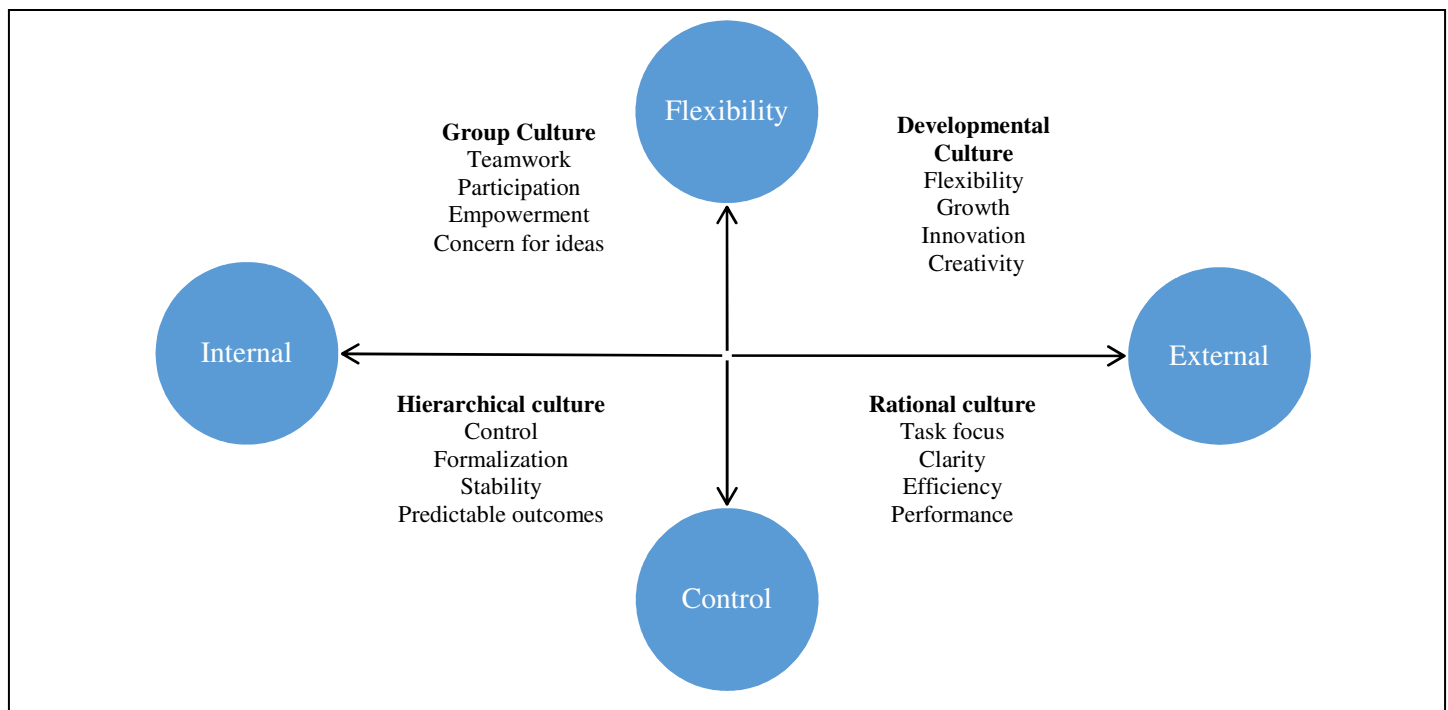

Figure1: The competing values framework of organizational culture

3.1. Research Significance
This study will be a significant contribution to promote excellent organizational culture in the workplace. This will improve the organizational performance in terms of revenues, sales volume, market share, and stock prices (Dai and Joseph, 2009). Having the right culture in an organization would help it to perform superiorly(Yusuff, 2008). So, understanding the relationship between the organizational culture and organizational performance is important for company success. Also, knowing the appropriate type of culture is critical for gaining a competitive advantage.

3.2. Research Objectives
The main purpose of this study is to describe the relationship between the organizational culture and the organizational performance in the industrial companies in Saudi Arabia. The objectives of the study are as follow:
- To examine the relationship between the organizational culture and organizational performance
- To identify which organizational performance variable correlates the most with organizational culture

3.3. Research Problem
This research is trying to examine the effect of organizational culture on the performance. Many organizations still do not believe that culture is vital cause for success and failure. Also, many companies do not know what type of culture they have to improve for maintaining its competitive advantage.

3.3.1. Research Framework
The following framework has been developed based on the research problem and literature reviews. The researcher applied the CVF model which was developed by Quinn and Spritzer (1991) for examining the organization`s culture and the correlation with the three quality components which are the competitiveness of the organization, product quality and clarity of processes. There are many scholars who used CVF model to predict the quality and innovation of companies` products and processes such as Deshpande (1993), McDermott and Stock (1999), Al-Khalifa and Asponwall (2001), Stock (2007), and Prajogo (2010). This paper used the Pearson correlation to examine the relationship between the four cultural dimensions which are group culture, developmental culture, hierarchical culture, and rational culture and the two types of performance in terms of quality and innovation. The independent variable is the organizational culture while the competitiveness of the organization, product quality and clarity of processes (organizational performance) are the dependent variables.
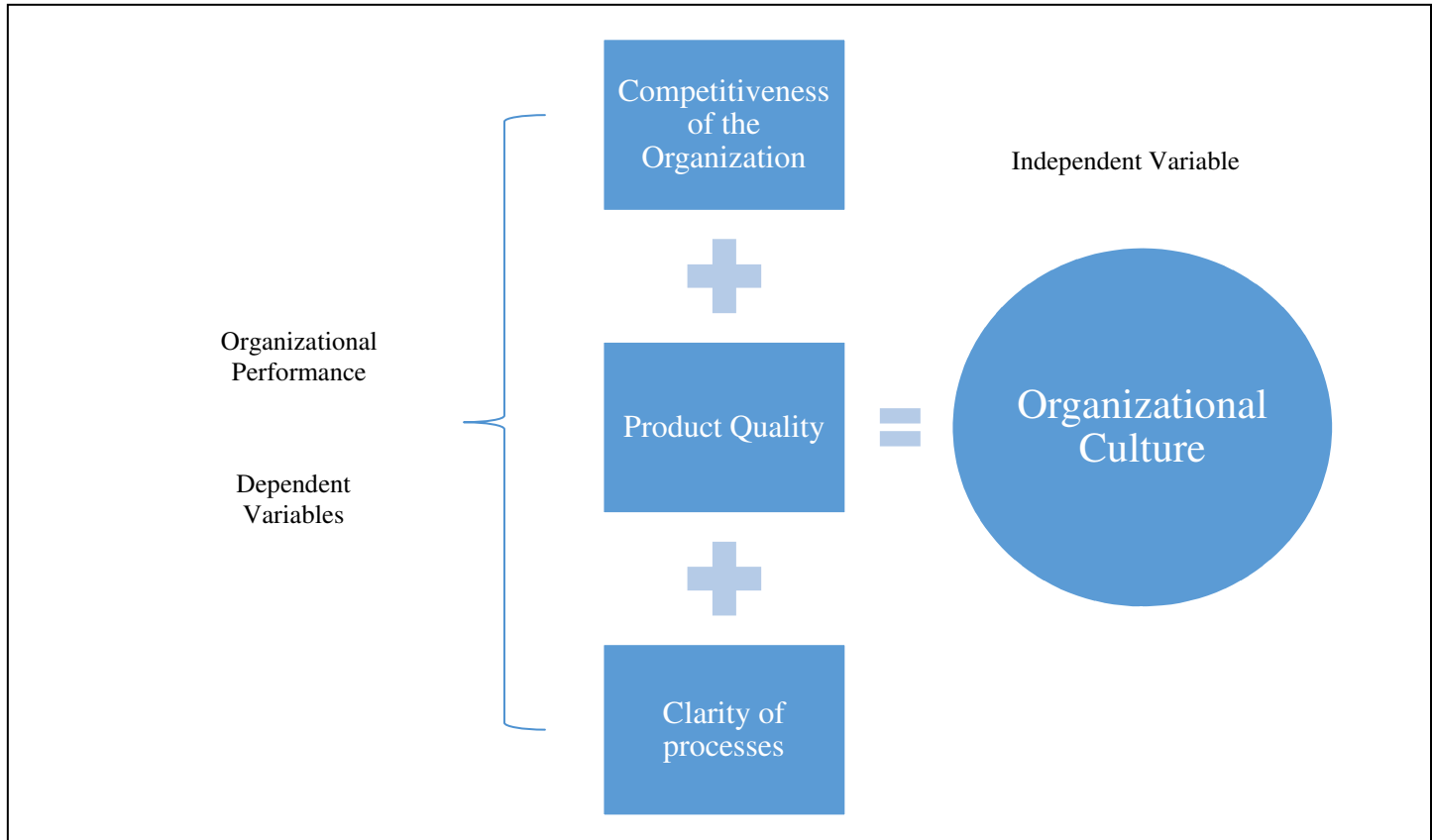

Figure 2

3.3.2. Research Hypotheses
H1: There is a positive relationship between organizational culture and organizational performance
H2: There is a positive relationship between organizational culture and the competitiveness of the organization
H3: There is a positive relationship between organizational culture and product quality
H4: There is a positive relationship between organizational culture and clarity of processes

4. Research Methodology
The researcher collected the data for this study through random distribution of an online questionnaire, which was developed using google drive to industrial companies` employees in Saudi Arabia. The questionnaire was obtained from a previous study which was titled by The Relationship between Multidimensional Organizational Culture and Performance for the author Prajogo (2010). This paper was chosen because of the high number of citations referring to it, highly related, reliable and valid questions, and ease of accessibility. In addition, Prajogo (2010) have used the CVF model for assessing the organizational culture which include clear and reliable items measuring cultures of organizations.

5. Questionnaire Design
The questionnaire was divided into three parts which are demographic questions, organizational culture questions, and organizational performance questions. There are 30 measurement items that measures the independent variable and the dependent variables by the five point Likert scale. Although the scaling type is Likert, there are two different types of scale`s items. The scaling in the first 18 items differs from the last 12 items. The measurement scales are shown in the table below.

Section	Variables	Items	Scale				
	Independent Variables		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Organizational culture	Group Culture (GC)	4	1	2	3	4	5
	Developmental Culture (DC)	4					
	Hierarchical culture (HC)	3					
	Rational culture (RC)	4					
Organizational performance	Dependent Variables						
	Process quality (PcQ)	3					
	Product quality (PdQ)	4	Laggard	Below Average	Average	Above average	Leader
	Product innovation (PdI)	4	1	2	3	4	5
	Process innovation (PcI)	4					

Table 1: Questionnaire Design

In fact, the second measurement scale was modified and adjusted to fit into the framework of this study. The original scale used to be a five point scale starting by behind, followed by comparable, and last with leader. While the new modified scale is starting with laggard, below average, average, above average, and leader.

5.1. Sample
The questionnaire was sent randomly to a total of 495 employees in industrial companies inside Saudi Arabia through email and mobile messages. The total responses received were 121 responses, but there were 9 cases deleted from the analysis, resulting to 112 respondents which accounts for an effective response rate of 22.6%. The responses were collected using google drive and then the data were transferred to the Statistical Package for Social Science SPSS for the analysis stage.

5.2. Respondents` Profile
Table 2 is the frequency table which shows the number of respondents of each group, the percentage of each group and the cumulative percentage. The collected data shows that most of the respondents are Saudis, which represent almost 92%, while about 8% are non-Saudis. Slightly less than half of the respondents, 43.75% are aged between 31 – 45 years old, while the least portion of the respondents are 46 years and older which represent 6.25% only. Furthermore, 23.21% are within the age of 26 – 30, while 26.79% of the respondents are within the age of 20 – 25 years. Moreover, 96.43% of the respondents are men, whereas only 3.57% are women. Also, 28.57% of the respondents are working for their current company for less than one year, and 16.07% are working for less than 3 years and more than 1 year, which results to have more than 44% of the respondents working for their current company for less than three years. In addition, %17.86, 24.11%, and 13.39% of the respondents have been working for 4 - 6, 7 - 10, and more than 10 years respectively. In fact, the respondents` two types of job are relatively equal, 50.9% are non-managerial type workers, and 49.1% are managerial type workers.

Demographic	Categories	Frequency	Percent	Cumulative Percent
Nationality	Saudi	103	91.96	91.96
	Non-Saudi	9	8.04	100
	Total	112	100	
Demographic	Categories	Frequency	Percent	Cumulative Percent
Age	20-25	30	26.79	26.79
	26-30	26	23.21	50
	31-45	49	43.75	93.75
	+46	7	6.25	100
	Total	112	100	
Demographic	Categories	Frequency	Percent	Cumulative Percent
Gender	Male	108	96.43	96.43
	Female	4	3.57	100
	Total	112	100	

Demographic	Categories	Frequency	Percent	Cumulative Percent
Length of employment at the current company	Less than 1 year	32	28.57	28.57
	1 - 3 years	18	16.07	44.64
	4 - 6 years	20	17.86	62.5
	7 - 10 years	27	24.11	86.61
	More than 10 years	15	13.39	100
	Total	112	100	
Demographic	Categories	Frequency	Percent	Cumulative Percent
Type of job	Managerial	55	49.11	49.11
	Technical (Non-managerial)	57	50.89	100
	Total	112	100	

Table 2: Respondents Demographic

5.3. Analysis Techniques

First of all, the researcher has discarded 9 responses out of the 121 responses received because the respondents are working for non-industrial companies. In order to know whether the items are measuring accurately what each item has to measure, factor analysis or validity test was carried out. In fact, the most popular tests for measuring validity are Kaiser-Meyer-Olkin KMO adequacy, Bartlett's Test and eigen value.

Thus, KMO measure shows whether the sample size is adequate or not for conducting factors analysis. For the purpose of analysing the KMO figure, Kaiser (1974) recommended the following interpretations (Alex, 2013).

KMO Measure of Sampling Adequacy	Sample size confident level
Value ≥ 0.9	Superb
0.8 ≤ Value < 0.9	Great
0.7 ≤ Value < 0.8	Good
0.5 ≤ Value < 0.7	Mediocre
Value < 0.5	Poor

Table 3: KMO Measure of Sampling Adequacy

For the Bartlett's test which examines the null hypothesis that the original correlation matrix is an identity matrix. In order to have a highly significant Bartlett's test, the P-value must be less than 0.001 (Alex, 2013). In addition, Eigenvalue scree plot had been used to identify the number of factors identified in the questionnaire which clusters the items with each other. For the purpose of testing the internal consistency and measuring how well each of the items on the scale are measuring the same thing as every other items in the scale, Cronbach's Alpha reliability test was conducted on every item. The internal consistency is determined based on the following information:

Cronbach's alpha	Internal consistency
α ≥ 0.9	Excellent
0.7 ≤ α < 0.9	Good
0.6 ≤ α < 0.7	Acceptable
0.5 ≤ α < 0.6	Poor
α < 0.5	Unacceptable

Table 4: Cronbach's alpha Interpretation

Moreover, in order to examine the relationship between the organizational culture or the independent variable and the organizational performance or the dependent variables, the researcher used Pearson correlation coefficient analysis to determine whether there is a significant positive or negative relationship between the independent and dependant variables.

6. Analysis and Results

6.1. Factors Analysis

Factor analysis is primarily used for two main reasons which are structure detection and data reduction. However, removing redundant variables or the highly correlated variables and replacing the entire data with a lesser number of uncorrelated variables is known as the data reduction process. On the other hand, examining the underlying relationships between the variables is known as the structure detection process. The researcher used many types of tests to conduct factor analysis such as KMO and Bartlett`s test. Also, the Eigenvalue, scree plot, variance table, and rotated component matrix.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.916
Bartlett's Test of Sphericity	Approx. Chi-Square	2.902E3
	df	435
	Sig.	.000

Table 5: KMO & Bartlett`s Test

Table 5 shows two tests which indicate whether the collected data are suitable for factor detection or not. The Kaiser-Meyer-Olkin KMO measure of sampling adequacy figure indicates the percentage of variance in the variables which might be affected by underlying factors. Table 5 shows that the KMO is 0.961which means that the collected data are mostly adequate to conduct factor analysis. Bartlett`s test was conducted to test the assumption or hypothesis which is the correlation matrix is an identity matrix. If the P-value or (sig) less than 0.001, than the significant level indicates that there are some relationship between the variables we want to include in the analysis. Therefore, the null hypothesis is rejected.

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.278	50.926	50.926	15.278	50.926	50.926
2	2.876	9.588	60.514	2.876	9.588	60.514
3	1.517	5.057	65.570	1.517	5.057	65.570
4	1.075	3.584	69.154	1.075	3.584	69.154
5	.957	3.188	72.343			
Extraction Method: Principal Component Analysis.						

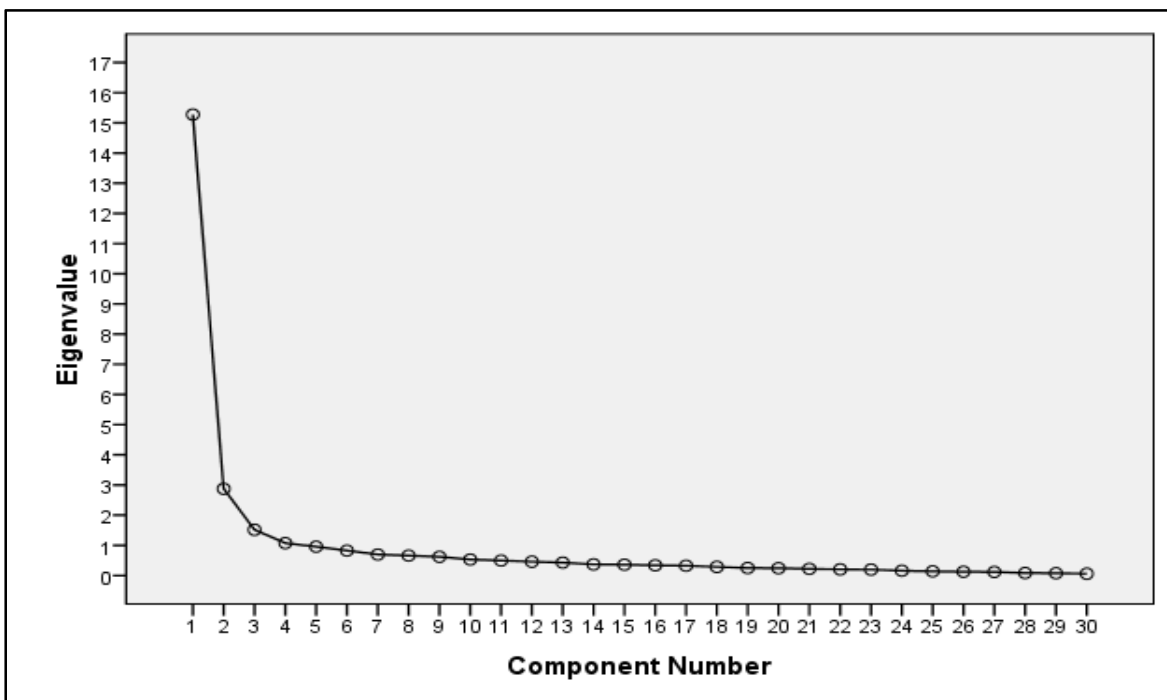*Table 6: Total Variance Explained*

Figure 2: Eigenvalue Scree Plot

The first column of Table 6 shows the variance explained by the initial solution of each variable. Only four factors in the initial solution have eigenvalue greater than 1. The first factor scored 15.278, the second factor scored 2.876, while the third scored 1.517, and the fourth factor recorded 1.075. On the other hand the rest of factors recorded less than 1 eigenvalue.

In addition, the above Eigenvalue scree plot and the *total variance explained* tableshow that there are only four components that have been considered because there eigenvalue score are greater than 1.

	Component			
	1	2	3	4
Task focus, accomplishment, goal achievement.	.842			
Empowerment of employees to act.	.805			
Efficiency	.799			
Outcome excellence, quality	.792			
Creative problem-solving processes.	.776			
Direction, objective setting, goal clarity.	.774			
Human relations, teamwork, cohesion.	.772			
The technological competitiveness of our company is […].	.767			
Innovation and change.	.766			
Assessing employee concerns and ideas.	.766			
The speed with which we adopt the latest technological innovations in our processes is […].	.752	-.386		
Participation, open discussion.	.748			
The level of newness (novelty) of our firm's new products is […].	.748	-.396		
Expansion, growth, and development.	.742	.301		
The performance of our products is […].	.739	-.353		
Durability of our products is […].	.723	-.327	.391	
The updated-ness or novelty of the technology used in our processes is […].	.719	-.429		
Reliability of our products is […].	.716		.421	
The rate of change in our processes, techniques and technology is […].	.704	-.349		
The number of our new products that is first to market (early market entrants) is […].	.694	-.425		
The speed of new product development process is […].	.672	-.387		
Stability, continuity, order.	.660	.405	.361	
Conformance to specifications of our products is […].	.645	-.347	.406	
The number of new products our firm has introduced to the market is […].	.644	-.421		
Flexibility, decentralization.	.640		-.433	
Predictable performance outcomes.	.633	.322		
We make an extensive use of statistical techniques (e.g. SPC) to improve the processes and to reduce variation.	.609			
We have clear, standardized and documented process instructions which are well understood by our employees.	.586	.347		.334
Routinization, formalization and structure.	.517	.391	.324	
We design processes in our firm to be "fool-proof" (preventive oriented).	.524			.581
Extraction Method: Principal Component Analysis.				
a. 4 components extracted.				

Table 7: Component Matrix

The relationships in the non-rotated component matrix are shown in Table 7. The next step is to rotate the factors and recalculate the number of factors to four.

Component	1	2	3	4
1	.681	.537	.414	.276
2	.557	-.725	-.209	.348
3	-.284	-.389	.861	.163
4	-.381	.190	-.207	.881
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				

Table 8: Component Matrix

The component transformation matrix above shows the rotated factor from the original or non-rotated factor matrix. The smaller figure exists in the element, represent a smaller rotation. On the other hand, the larger amount means a larger rotation.

Table 9 shows that the first rotated factor (Culture`s variables) is most highly correlated respectively with Innovation and change, Creative problem-solving processes, Human relations, teamwork, cohesion, Participation, open discussion, Empowerment of employees to act, Assessing employee concerns and ideas, Outcome excellence, quality, Direction, objective setting, goal clarity, Efficiency, Flexibility, decentralization, Expansion, growth, and development, Stability, continuity, order, Task focus, accomplishment, goal achievement, and Use of statistical techniques (e.g. SPC) to improve the processes and to reduce variation. These variables are not particularly correlated with the other three factors. The second factor (competitiveness of organization) is mostly highly correlated respectively with Early market entrants, Number of new products,Speed of new product development process, The level of newness (novelty) of new product, Adopt the latest technological innovations in processes, Updated-ness or novelty of the technology used in processes, Rate of change in processes, techniques and technology, The technological competitiveness of company. The third factor (product quality) is highly correlated respectively with Reliability of products, Durability of products, Conformance to specifications of our products, and The performance of our products. The fourth factor (clarity of process) is highly correlated respectively with Preventive oriented design of processes, Clear, standardized and documented process instructions, and Routinization, formalization and structure.

		Component			
		1	2	3	4
Culture`s variables	Innovation and change.	.804			
	Creative problem-solving processes.	.798	.308		
	Human relations, teamwork, cohesion.	.748			
	Participation, open discussion.	.739			
	Empowerment of employees to act.	.734	.361		
	Assessing employee concerns and ideas.	.706			
	Outcome excellence, quality	.680			.363
	Direction, objective setting, goal clarity.	.680			.354
	Efficiency	.668	.364		
	Flexibility, decentralization.	.663	.378		
	Expansion, growth, and development.	.661		.419	
	Stability, continuity, order.	.629		.529	
	Task focus, accomplishment, goal achievement.	.588	.335	.379	.379
	Predictable performance outcomes.	.522		.434	.353
	We make an extensive use of statistical techniques (e.g. SPC) to improve the processes and to reduce variation.	.495			
Competitiveness of organization	The number of our new products that is first to market (Early adapters of our new product) is […].		.832		
	The number of new products our firm has introduced to the market is […].		.789		
	The speed of new product development process is […].		.758		
	The level of newness (novelty) of our firm's new products is […].	.320	.729	.302	
	The speed with which we adopt the latest technological innovations in our processes is […].	.402	.706	.305	
	The updated-ness or novelty of the technology used in our processes is […].	.340	.677	.390	
	The rate of change in our processes, techniques and technology is […].	.365	.661		
	The technological competitiveness of our company is […].	.382	.551	.489	
Product quality	Reliability of our products is […].		.439	.720	
	Durability of our products is […].		.459	.720	
	Conformance to specifications of our products is […].		.441	.689	
	The performance of our products is […].		.538	.634	
Clarity of process	We design processes in our firm to be "fool-proof" (preventive oriented).				.714
	We have clear, standardized and documented process instructions which are well understood by our employees.	.455			.583
	Routinization, formalization and structure.	.371		.353	.580
	Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
	a. Rotation converged in 25 iterations.				

Table 9: Rotated Component Matrix

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	15.278	50.926	50.926
2	2.876	9.588	60.514
3	1.517	5.057	65.570
4	1.075	3.584	69.154

Table 10: Total Variance Explained Before Rotation

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	8.260	27.535	27.535
2	6.178	20.593	48.128
3	3.918	13.062	61.190
4	2.389	7.965	69.154
Extraction Method: Principal Component Analysis.			

Table 11: Total Variance Explained After Rotation

Table 10 and 11 show the variance explained by the extracted factors before and after rotation using Principal Component Analysis method. The first non-rotated factor used to explain 50.92% of variance, while after rotation it was reduced to 27.53%. Besides, the second non-rotated factor used to explain 9.58% of variance, while after rotation it increased to 20.59%. Likewise, the third non-rotated factor explained 5.05% of variance, whereas after rotation it increased to 13.06%. Finally, the fourth factor used to explain 3.58% before rotation, while it increased after rotation to 7.95%. In fact, before and after rotation the cumulative percentage of variance is 69.154%.

6.2. Reliability
The researcher used Cronbach`s alpha (Cronbach, 1951) to measure the reliability of the variables. The computation of Cronbach`s alpha is built on the number of items on the questionnaire and the ratio of the average inter-item covariance to the average item variance(Alex, 2013).
Table 12 shows the Cronbach`s alpha amount of all items within the four factors. Since the alpha is bigger than 0.9 in all the first three factors, the data collected are highly reliable. Also, because of the amount of alpha for clarity of process factor is equal to 0.696, then the internal consistency is acceptable.

Factor	Cronbach's Alpha	N of Items
Culture Variables	.956	14
Competitiveness of organization	.934	8
Product quality	.917	4
Clarity of process	.696	3

Table 12: Reliability Statistics

6.3. Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Competitiveness of the Organization	112	1.00	5.00	**3.1775**	**.92568**
Product quality	112	1.00	5.00	**3.7857**	**.91586**
Clarity of processes	112	1.00	5.00	**3.3810**	**.83930**
Mean score of culture	112	1.00	5.00	3.4356	.91999
Valid N (listwise)	112				

Table 13: Descriptive Statistics

Table 13 shows the minimum, maximum, and means scores of the independent and dependents variables. In addition, the standard deviation is also shown in Table 13. The questionnaire items are evaluated based on a 5 point scale which explains why the minimums and maximums are 1 and 5 respectively. Table 13 shows that the highest mean is on product quality which is 3.78, while the lowest mean is 3.17 on the competitiveness of the organization. In fact, the mean of score of culture and clarity of processes are almost equal with 3.43 and 3.38 respectively. Furthermore, since the standard deviation is the average deviation from the mean score, it is beneficial in knowing the proportion of scores in a normal distribution. In fact, about 95% of the scores are within two standard

deviations of the mean and around 68% of the scores are within one standard deviation of the mean(Mlane, 2007). Table 18 shows that the standard deviation of the competitiveness of the organization, product quality, clarity of processes and scores of culture are 0.92,0 .91, 0.83 and 0.91 respectively.
Cross Tabulation

Count		Respondent type of job		Total
		Managerial	Technical (Non-managerial)	
Competitiveness of the organization	1	3	3	6
	2	5	8	13
	3	24	30	54
	4	13	14	27
	5	10	2	12
Total		55	57	112

*Table 14: Competitiveness * Respondent job Cross tabulation*

Count		Respondent Length of employment at his/her company					Total
		Less than 1 year	1 - 3 years	4 - 6 years	7 - 10 years	More than 10 years	
Competitiveness of the organization	1	1	1	2	2	0	6
	2	1	3	4	1	4	13
	3	15	4	11	17	7	54
	4	9	9	2	4	3	27
	5	6	1	1	3	1	12
Total		32	18	20	27	15	112

*Table 15: Competitiveness * Respondent Length of employment at his/her company Cross tabulation*

Count		Respondent type of job		Total
		Managerial	Technical (Non-managerial)	
Product quality	1	1	1	2
	2	2	3	5
	3	13	18	31
	4	19	18	37
	5	20	17	37
Total		55	57	112

*Table 16: Product quality * Respondent type of job Cross tabulation*

Count		Respondent Length of employment at his/her company					Total
		Less than 1 year	1 - 3 years	4 - 6 years	7 - 10 years	More than 10 years	
Product quality	1	1	0	0	1	0	2
	2	0	1	3	1	0	5
	3	3	5	8	8	7	31
	4	14	7	4	7	5	37
	5	14	5	5	10	3	37
Total		32	18	20	27	15	112

*Table 17: Product quality * Respondent Length of employment at his/her company Cross tabulation*

Count		Respondent type of job		Total
		Managerial	Technical (Non-managerial)	
Processes Clarity	1	2	1	3
	2	6	6	12
	3	21	22	43
	4	18	27	45
	5	8	1	9
Total		55	57	112

*Table 18: Processes Clarity * Respondant type of job Cross tabulation*

Count		Respondent Length of employment at his/her company					Total
		Less than 1 year	1 - 3 years	4 - 6 years	7 - 10 years	More than 10 years	
Processes Clarity	1	1	0	1	1	0	3
	2	3	2	1	2	4	12
	3	14	4	7	13	5	43
	4	14	8	11	8	4	45
	5	0	4	0	3	2	9
Total		32	18	20	27	15	112

*Table 19: Processes Clarity * Respondent Length of employment at his/her company Cross tabulation*

Count		Respondent type of job		Total
		Managerial	Technical (Non-managerial)	
Scores of Culture	1	2	4	6
	2	4	4	8
	3	19	23	42
	4	21	23	44
	5	9	3	12
Total		55	57	112

*Table 20: Scores of Culture * Respondent type of job Cross tabulation*

Count		Respondent Length of employment at his/her company					Total
		Less than 1 year	1 - 3 years	4 - 6 years	7 - 10 years	More than 10 years	
Scores of Culture	1	2	1	0	3	0	6
	2	0	1	3	1	3	8
	3	9	6	9	12	6	42
	4	18	7	8	8	3	44
	5	3	3	0	3	3	12
Total		32	18	20	27	15	112

*Table 21: Score of Culture * Respondent Length of employment at his/her company Cross tabulation*

Count		Respondent Length of employment at his/her company					Total
		Less than 1 year	1 - 3 years	4 - 6 years	7 - 10 years	More than 10 years	
Competitiveness of the organization	1	1	1	2	2	0	6
	2	1	3	4	1	4	13
	3	15	4	11	17	7	54
	4	9	9	2	4	3	27
	5	6	1	1	3	1	12
Total		32	18	20	27	15	112

*Table 22: Competitiveness * Respondent Length of employment at his/her company Cross tabulation*

7. Major Findings

7.1. Correlation Coefficient
In order to know the correlations between the variables and the degree of the linear relationship the researcher used the Pearson correlation which is described by a number ranged between -1 to 1 and given by the letter r. If the p-value is less than 0.01, there is significant relationship and the H null is rejected. Also, if the r value is closer to positive one, the stronger positive relationship exist which means the higher value of X, the higher value of Y. On the other hand, if the r value is closer to negative one, the stronger

negative relationship which means the higher value of X the smaller value of Y. For the purpose of measuring the relationship between the overall performance and organizational culture, the researcher initiated a new column which represent the rounded means of answers of all three performance variables. The correlation between culture and overall performance was examined between two variables which are score of culture and average rounded performance.

		Score of Culture	Competitiveness	Product quality	Processes Clarity	Average Rounded performance
Score of Culture	Pearson Correlation	1	.658**	.588**	.640**	.726**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	112	112	112	112	112
Competitiveness	Pearson Correlation	.658**	1	.714**	.412**	.804**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	112	112	112	112	112
Product quality	Pearson Correlation	.588**	.714**	1	.408**	.833**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	112	112	112	112	112
Processes Clarity	Pearson Correlation	.640**	.412**	.408**	1	.701**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	112	112	112	112	112
Average Rounded performance	Pearson Correlation	.726**	.804**	.833**	.701**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	112	112	112	112	112
**. Correlation is significant at the 0.01 level (2-tailed).						

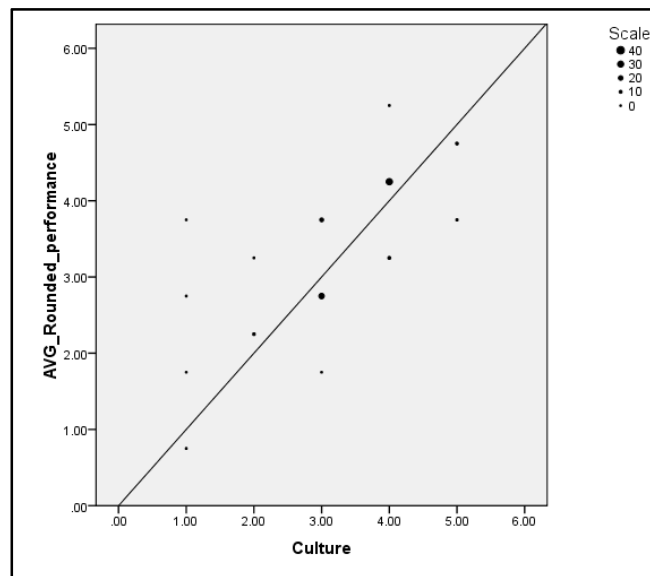*Table 23: Correlations Matrix*

Figure 3: Culture and Performance Scatter Plot

Table 23 shows that all p-values are less than 0.01 which means that all the variables are significantly correlated. Furthermore, the r values are positive which means that all of the variables are positively correlated.

- H1: There is a positive relationship between organizational culture and organizational performance

Table 23 shows that the culture and performance correlation r value of the Pearson correlation is 0.726 and p-value is less than 0.01. Therefore, we reject H null and we conclude that the organizational culture and organizational performance are significantly positive correlated.

- H2: There is a positive relationship between organizational culture and the Competitiveness of the Organization

Furthermore, Table 23 shows that the p-value of culture and the competitiveness of the organization is less than 0.01 and the r value is 0.658. So, we reject H null, and we conclude that there is a significant positive relationship between the organizational culture and the Competitiveness of the Organization. Also, the competitiveness of the organization variable is the highest correlated variable with the organizational culture.

- H3: There is a positive relationship between organizational culture and product quality

Table 23 shows that the p-value of culture and the product quality is less than 0.01 and the r value is 0.588. As a result, we reject H null and conclude that there is a significant positive relationship between the organizational culture and the product quality. In fact, the product quality is least correlated factor with organizational culture.

- H4: There is a positive relationship between organizational culture and Clarity of processes

In addition, Table 23 shows that the p-value of culture and the process clarity is less than 0.01 and r value is 0.640. So, we reject H null and conclude that there is a significant relationship between the organizational culture and process clarity.

7.2. Limitation of the Study

The limitation of the study is that it relies on the online collected data. Mainly the online data have a low level of reliability. Mostly the online respondents may not be encouraged to provide accurate and honest data. Also, respondents may not feel comfortable providing answers that present their current company. This study examines the attitude of an employee toward his/her organizational culture, it could not identify the existence of cultures in different department within organization. This may lead to a bias response due to personal experience. Furthermore, questionnaire with close ended questions have a lower validity rate than other questions. In addition, online questionnaire answer options could lead to unclear data because of the different understanding. Moreover, the research framework of this study does not cover all aspects of organizational culture and performance. Even though there is significant effect of culture on performance, the culture of an organization by its self is not enough to explain the variance of firms' performance. This study did not include many other factors that may affect organizational performance such as the organization size, financial condition, status of technology, and business trend.

8. Discussion and Conclusions

The research mainly aimed to achieve two main objectives. Firstly, examining the relationship between the organizational culture variables and the three organizational performance variables. Secondly, identifying which one of the three dependent variables is the highest correlated with organizational performance. Overall, results show that the three performance variables which are competitiveness of the organization, product quality and clarity of processes have positive values in correlation with the organizational culture. This means that organizational culture has an influence on organizational performance. Furthermore, the competitiveness of the organization have been identified as the highest correlated dependent variable with organizational culture. These findings indicate that organizations should improve their culture in order to improve their performance. Moreover, the findings show that in order to have a clear and easy business processes, organization top managers should focus on creating and enhancing the proper culture that suites with company`s business strategy. As a result, organizations must value their cultures as an asset and try to improve it.

In fact, the factor analysis of the literature which the researcher obtained the questionnaire from differs from the factor analysis of this study. This research found that organizational culture variables are only one component, while Prajogo (2010) found that it is divided into four components which are group culture, developmental culture, rational culture and hierarchical culture. Moreover, Prajogo (2010) found that organizational performance is divided into four components which are product quality, product innovation, process quality and process innovation. On the other hand, this study found that organizational performance variables are divided into three components which are competitiveness of organization, product quality and clarity of processes. Although this study used the CVF model to measure the organizational culture, there was no significant evidence that this model is divided into four components. As a result, the findings have not shown the uniqueness of each cultural dimension in their association with different variables of performance.

In addition, the results show that there is a strong positive relationship between product quality and competitiveness of organization which indicates that if an organization wants to maintain its competitive level, they have to make sure that the quality of their product remains the same or better. Also, the results show that clarity of processes is not strongly related to the competitiveness level which indicates that organizations must focus on product quality more than clarity of processes in order to maintain their competitiveness level. In fact, competitiveness of organization and product quality are both strong predictors of organizational performance. On the other hand, process clarity seems that is not a strong predictor of organizational performance.

9. Recommendations

In order to maintain a competitive advantage, enhance product quality and make business processes more clear, organization must focus on assessing and improving its culture through its top management influence. Organizations must enhance innovation, creative problem-solving processes, human relations and teamwork, participation and open discussions, empowerment of employees to act, assessing employees' concerns and ideas, goals achievement, flexibility, efficiency, and development. If organizations top managers want to improve their organizations competitiveness, improve their product quality and make their business processes clear and smooth, they have to create and improve all these cultures in their organizations.

This research did not cover many factors which may measure organizational performance such as financial conditions, customer satisfaction and employee productivity. So, the researcher recommends for the future studies to expand into other aspects that this

study did not cover and include other variables to measure organizational culture and performance. Furthermore, the researcher suggest that future studies can be conducted with larger sample size to enhance the study and generalize the findings.

10. Acknowledgement

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