How Organizational Culture Affects the Innovativeness of Firms in Djibouti

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Abstract:
The study focused on determining how organizational culture affects the innovativeness of firms in Djibouti. Primary sources of data were used which were sourced from the selected elements of the population and the selected elements were some of the employees of some firms in Djibouti. Pearson correlation and regression analysis were used as the estimation techniques in the study. The regression result depicted that organizational culture has a positive and significant impact on firm performance, innovation has a positive and significant impact on firm performance, that is, a unit increase in innovation will increase the firm performance of the organization, while adhocracy in organization exhibits a positive and significant impact on firm performance. Based on the method used, the findings of the study concluded that organizational culture is regarded as the major driver of performance and the culture of the organization motivates employees to be innovative at all time. Also, innovativeness promotes organizational culture and gives hedge among its competitors and most firms generate new ideas internally rather than external means and agreed that management always motivate the employees to create new ideas and to make decision on organizational culture.

Keywords: Culture, organizational culture, firm performance, and innovativeness

1. Introduction
Organizational culture idea has viewed by various administration and organizational scholars over the last decades. Meanwhile, culture is seen as the totality of the lifestyle of individuals that give request and importance to their social, political, and religious standards and methods of association, this however differentiating them from other people. In this regard, culture defines the cognitive, normative, value, production and authoritative systems of an organization. Organization culture is regarded as the actual motivation for higher outcome and a certain means of competitive advantage which is in some cases seen as challenging for participants to emulate. Organizational culture is the main portion of advancement policy of the firm as it contains the concept of arrangement, advertising, directing, inspiration and leading (Emeka & Philemon, 2012). The strategy of an organization in one way or the other have effect on the outcome that in tune affect the eminence of organizational culture which influences performance of organizations directly or indirectly. Each new individual learns the way of life of the organization. Additionally, Acar and Acar (2012) opined that culture will in general change gradually after some time. Innovativeness refers to the main concept that offers competitive lead in recent time among businesses or organizations. Innovativeness is turning into an outright need in the present business situation. In business world, organized strategy resulted into success and this clue had led various firms to imitate different strategies of successful dealings round the globe. Though, changes occurred in time, competition rules, and so as organization’s policy needs to swing them. Every organization has a culture embedded upon operations. This then left this study to investigate how organization affect the innovative ness of firms using Djibouti as a case study.

2. Literature Review
Martins and Terblanche (2003) carried out an investigation on whether organizational culture stimulates creativity and innovation in South Africa. They used descriptive research survey in their study, and it shown that open system is one of the best approaches to describe organizational culture. Deshpande and Farley (2004) studied the connection between organizational culture, market orientation, innovativeness, and firms’ performance among some countries of the world. The study used a content nature to simplify the conclusions including the empirical review differences in the findings of other researchers. It was revealed that the gradients relating the used independent variables to firm performance do not differ systematically over observed countries. Hartmann (2006) investigated connection between organizational culture and innovative motivating behaviour in Netherland construction firms. Qualitative analysis was used in the study. The findings showed that interviewees affirm that there is diminutive awareness to take risks in relation with new ideas.
Acar and Acar (2012) investigated the connection between organizational culture and innovativeness on business performance in the industry of healthcare in Turkey using questionnaire among the staff of 65 private hospitals with use of multivariate analysis. The findings of the study showed that positive impact exists between innovation and organizational culture. Emeka and Philemon (2012) examined organizational culture impact on employee performance and organizational productivity in manufacturing industry of Nigeria. They used survey research method employing Chi-square method. The findings of this study supported that organizational culture portray impact on employee performance and also supported that there exist many factors that impact employee performance and regulate the productivity level.

Tajudin, Musa and Musa (2012) examined organizational culture, market orientation and innovativeness in Malaysian SMEs using questionnaire to the participants of the population. The study revealed that organizational culture impacts new product performance through innovativeness as the mediating factor, but an entrepreneurial culture straight impacts on new product performance. Riivari and Lamsa (2012) explored the connection between ethical culture of organization and organizational innovativeness in private and public sectors of Finnish organization. Descriptive analysis, correlation and multivariate analysis were used as the estimation techniques in the study. The results depicted that organization ethical culture is connected with innovation and that different magnitudes of ethical culture are related with diverse magnitudes of innovation. Devaraja (2012) wrote on organization culture, its implication on the firm in India. The study employed both primary and secondary source with ANOVA and Chi-square statistics as the estimation techniques. The result showed that the staff whose morals tie with the organizational morals has a better obligation for the job, continuing loyalty to the organization.

Messner (2013) studied organizational culture and its impact on employee commitment of information technology services industry in India. The study used questionnaire to gather the data and analyzed with descriptive and inferential with regression analysis. It was showed that organizational culture proportions, in-group togetherness and performance positioning revealed significant impact on employee commitment while other culture proportions showed changing degree of signs influence on employee commitment. Alnasseri et al. (2013) studied the connection between organizational culture, leadership style and effectiveness in middle Eastern using explanatory method. The study findings show that that organizational culture is legitimately and empirically identified with execution and adequacy, while project supervisors' authority style has a backhanded relationship to viability.

Szczeńawska-Woszynska (2014) wrote on the role of organizational culture for innovation in Polish companies of Silesia province using quantitative analysis and frequency percentage. The study revealed that smaller the enterprise, the smaller the sentiment of risk emerging from change. Such a circumstance might be since workers in littler organizations are frequently increasingly "adaptable" and play out the errands doled out to various positions, and in this manner their misfortune is progressively serious for the organization. Ahmed and Shafiq (2014) examined the effect of organizational culture on its performance utilizing Telecom sector as a case study. Questionnaire type of quantitative research approach is used to gather the data. The outcome shows that the magnitudes of the culture influences the different perspective of performance of the organization.

Kurian (2015) studied the impact of culture on innovativeness in India IT firms. He employed descriptive and ANOVA as the estimation technique. The findings show that organizational culture offer significant ways on organization's innovativeness in India IT firms. Palladan, Abdulkadir and Chong (2016) investigated leadership strategic, organization innovativeness, IT capability on effective implementation in Nigeria tertiary institutions using descriptive and PLS structural equation model. The findings of this revealed that positive relationship exist between organization effectiveness and strategy implementation.

| Author & Date       | Country       | Title                                                                 | Method               |
|---------------------|---------------|----------------------------------------------------------------------|----------------------|
| Martins and Terblanche (2003) | South Africa | Organizational culture stimulates creativity and innovation in South Africa. | Descriptive Survey Design |
| Deshpande and Farley (2004) | Different Countries | studied the connection between organizational culture, market orientation, innovativeness, and firms’ performance. | Content Analysis |
| Hartmann (2006) | Netherland | investigated connection between organizational culture and innovative motivating behaviour in Netherland construction firms. | Qualitative analysis was used in the study. |
| Acar and Acar (2012) | Turkey | Organizational culture and innovativeness on business performance in the industry of healthcare in Turkey. | Multivariate Analysis |
| Emeka and Philemon (2012) | Nigeria | Effects of organizational culture on employee performance and organizational productivity in Nigeria. | Chi-square method. |
| Tajudin, Musa and Musa (2012) | Malaysia | Organizational culture, market orientation and innovativeness in Malaysian SMEs. | Content Analysis |
### Table 1: Review Summary

| Author & Date          | Country       | Title                                                                 | Method                                      |
|-----------------------|---------------|-----------------------------------------------------------------------|---------------------------------------------|
| Riivari and Lamsa     | Finland       | Ethical culture of organization and organizational innovativeness in private and public sectors of Finnish organization. | Descriptive analysis, correlation and multivariate analysis. |
| Devaraja (2012)        | India         | wrote on organization culture, its implication on the firm in India.   | ANOVA and Chi-square statistics.            |
| Alnasser et al. (2013) | Middle Eastern| studied the connection between organizational culture, leadership style and effectiveness in middle Eastern. | Explanatory method                          |
| Messner (2013)         | India         | Organizational culture and its impact on employee commitment of information technology services industry in India. | Descriptive and inferential with regression analysis. |
| Szczepańska-Woszozyna  | Poland        | Role of organizational culture for innovation in Polish companies of Silesia province. | Quantitative analysis and frequency percentage |
| Ahmed et al. (2014)    | Bahawalpur    | Organizational culture on its performance using Telecom sector as a case study. | Questionnaire form of quantitative research approach |
| Kurian (2015)          | India         | Impact of culture on innovativeness in India IT firms.                 | Descriptive and ANOVA as the estimation techniques. |
| Palladan, Abdulkadir   | Nigeria       | Leadership strategic, organization innovativeness, IT capability on effective. | Descriptive and PLS structural equation model (SEM) |
| and Chong (2016)       |               |                                                                        |                                             |

### 3. Method

Primary data was employed with the use of descriptive and inferential research design. The descriptive research describes the data and characteristics about what is being studied while inferential statistics is used to make decisions of the likelihood that a watched contrast between gatherings is a reliable one or one that may have occurred by chance in this investigation. In this study, the total population was 150 (one hundred fifty) employees which will be randomly selected in Djibouti for analytical purpose. However, questionnaires were conveniently distributed to the staff of the selected firms in Djibouti. Out of 150 questionnaires, 144 were valid and used for the analysis.

#### 3.1. Model Specification

This study shall employ a functional model to achieve the stated objectives. The model is presented as:

\[ FP = f(INN, OGC, U) \]

Where

\[ FP = \text{Firms' Performance} \]
\[ INN = \text{Innovativeness} \]
\[ OGC = \text{Organization Culture} \]
\[ U = \text{Other} \]

The mathematical form of the model is presented as

\[ FP = \lambda_0 + \lambda_1 \text{INN} + \lambda_2 \text{OGC} \]

The econometric form is presented below

\[ FP = \lambda_0 + \lambda_1 \text{INN} + \lambda_2 \text{OGC} + \epsilon \]

Where

\[ \lambda_0 \] is the constant

\[ \lambda_1 - \lambda_2 \] are the shift parameters

### 4. Result Discussion

#### 4.1. Reliability Analysis

| Cronbach’s Alpha | No of Items |
|------------------|-------------|
| .925             | 18          |

| Table 2: Reliability Result
| Source: Writer’s Computation (2019) |
The reliability statistic presented in the table above through Cronbach's alpha test reveals the value of 0.925 with 18 items, implying that the items as stated in the questionnaire have 92.5 percent variation to explain the objective of the study. It also implies that the study survey method is reliable in achieving its purpose.

4.2. Factor Analysis

| Component | Initial Eigenvalues | Extraction Sums of Squared Loadings |
|-----------|---------------------|-------------------------------------|
|           | Total               | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1         | 8.127               | 45.148       | 45.148       | 8.127 | 45.148       | 45.148       |
| 2         | 1.294               | 7.191        | 52.339       | 1.294 | 7.191        | 52.339       |
| 3         | 1.101               | 6.116        | 58.455       | 1.101 | 6.116        | 58.455       |
| 4         | .948                | 5.267        | 63.723       | .948  | 5.267        | 63.723       |
| 5         | .878                | 4.875        | 68.598       | .878  | 4.875        | 68.598       |
| 6         | .783                | 4.349        | 72.947       | .783  | 4.349        | 72.947       |
| 7         | .622                | 3.455        | 76.402       | .622  | 3.455        | 76.402       |
| 8         | .589                | 3.274        | 79.676       | .589  | 3.274        | 79.676       |
| 9         | .560                | 3.114        | 82.789       | .560  | 3.114        | 82.789       |
| 10        | .479                | 2.660        | 85.449       | .479  | 2.660        | 85.449       |
| 11        | .448                | 2.487        | 87.936       | .448  | 2.487        | 87.936       |
| 12        | .429                | 2.384        | 90.320       | .429  | 2.384        | 90.320       |
| 13        | .400                | 2.221        | 92.541       | .400  | 2.221        | 92.541       |
| 14        | .315                | 1.750        | 94.291       | .315  | 1.750        | 94.291       |
| 15        | .313                | 1.737        | 96.028       | .313  | 1.737        | 96.028       |
| 16        | .263                | 1.460        | 97.488       | .263  | 1.460        | 97.488       |
| 17        | .242                | 1.346        | 98.833       | .242  | 1.346        | 98.833       |
| 18        | .210                | 1.167        | 100.000      | .210  | 1.167        | 100.000      |

Table 3: Total Variance Explained
Extraction Method: Principal Component Analysis
Source: Writer's Computation (2019)

The analysis of the variance explained using extraction method of principal component analysis shows that at component 1, the variable has about 45.148, at component 2, it has about 52.339, while at component 3, there is a variance value of 58.455 which means that at component 3, the items have above average of 58%.

4.3. Regression Analysis

| Model | Sum of Squares | df  | Mean Square | F       | Sig.  |
|-------|----------------|-----|-------------|---------|-------|
| 1     | Regression     | 93.276 | 3       | 31.092  | 41.307 .000a |
|       | Residual       | 106.131 | 141     | .753    |       |
|       | Total          | 199.407 | 144     |         |       |

Table 4: ANOVA
a. Dependent-Variable: Firm Performance
b. Predictors: Constant, Adhocracy in organizational, Organizational Culture, Innovation
Source: Writer's Computation (2019)

The ANOVA result presented in table 4 shows the residual and F-statistic values. The results show the residual value of 106.131 and the F-value of 41.307 with the significance value of 0.000. This indicates that the independent variables can jointly influence the dependent variable.

| Model     | Unstandardized Coefficients | Standardized Coefficients | t      | Sig.  |
|-----------|----------------------------|---------------------------|--------|-------|
|           | B  | Std. Error | Beta |        |      |
| 1         |    |            |      |        |      |
| (Constant)| .012 | .220 | .054 | .957  |
| Organizational Culture | .303 | .296 | 4.434 | .000  |
| Innovation | .337 | .329 | 4.709 | .000  |
| Adhocracy in organizational | .355 | .304 | 4.642 | .000  |

Table 5: Coefficients
a. Dependent Variable: Firm Performance
Source: Writer's Computation (2019)
The above table shows the coefficients of the regression analysis and it was showed that the constant coefficient value is 0.12 and its significance value is 0.957, indicating that, at constant, there is a positive but insignificant influence of the mediating proxies on the dependent proxy. The coefficient value of organizational culture is 0.303 and its significance value is 0.000, implying that organizational culture exhibited a positive and significance influence on firm performance. The coefficient value of innovation as one of the proxies used in this study is 0.337 with the significant value 0.000, indicating that innovation portray a positive impact and its significant on firm performance, that is, a unit increase in innovation will increase the firm performance of the organization. More so, the coefficient value of adhocracy in organization is 0.355 and its significance value is 0.000, showing that adhocracy in organization exhibits a positive and significance impact on firm performance.

### 4.4. Correlation Analysis

| Firm Performance | Adhocracy in organizational culture | Innovation | Organizational Culture |
|------------------|-----------------------------------|------------|-----------------------|
| Pearson Correlation | .549** | .483** | .474** |
| Sig. (2-tailed) | .000 | .000 | .000 |
| N | 145 | 145 | 145 |
| Adhocracy in organizational culture | Pearson Correlation | .474** | 1 | .343** |
| Sig. (2-tailed) | .000 | .000 | .021 |
| N | 145 | 145 | 145 |
| Innovation | Pearson Correlation | .549** | .343** | 1 |
| Sig. (2-tailed) | .000 | .000 | .389** |
| N | 145 | 145 | 145 |
| Organizational Culture | Pearson Correlation | .483** | .191* | .389** |
| Sig. (2-tailed) | .000 | .021 | 1 |
| N | 145 | 145 | 145 |

**Table 6: Correlations**

*Source: Writer's Computation (2019)*

Table 6 presented the correlation result of the variables of interest and the result reveals that firm performance and adhocracy in organization has the Pearson correlation value of 0.474 and significant values of 0.000 which means that there exists a positive association-ship between firm performance and adhocracy in organization. The result of firm performance and innovation shows the Pearson correlation value of 0.549 and its significance value is 0.000 which indicates that firm performance and innovation of the selected companies have a positive correlation between each other. Furthermore, the Pearson correlation value of firm performance and organizational culture is 0.483 with significance value of 0.000, implying that there exhibits a positive association-ship between the two variables during the study survey.

### 5. Conclusion and Recommendations

The study examined how organizational culture affect innovativeness of firm in Djibouti where several concepts had been addressed including the literature review. Based on the method used, the findings of the study concluded that:

- Organizational culture is regarded as the major driver of performance and the culture of the organization motivates employees to be innovative at all time.
- Innovativeness promotes organizational culture and gives hedge among its competitors and most firms generate new ideas internally rather than external means and agreed that management always motivate the employees to create new ideas and to make decision on organizational culture.
- The adhocracy in organizational culture encourages employees to contribute and introduce new idea in the organization and organizational culture that centers on rigidity, control and predictability affects innovativeness.
- In line with the findings, the following policy recommendations were formulated as:
  - The firms should encourage organizational culture as part of their objectives and this could improve the operating performance of the firm and they should culture be created in a way that the employees could easily understand.
  - The management should implement culture that will be less centers on rigidity, control and predictability.
  - Employees adaptively to organizational culture should be encouraged to stimulate operational performance and motivational incentives should be encouraged for the creation of new ideas in the organization.

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