# Measuring the Organizational Performance in the Government Departments of Dubai Using the Knowledge Management Process

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**Abstract**

In the latest years, the term knowledge management popped up frequently in government and private sector meetings. They expanded the horizon of the term and involved it in intensive discussions. This study, dive through the meaning of the term knowledge management and its effect on the performance of the government sector along with its impact and aspects on their performance , specifically in Dubai and from their managers point of view. The method of analytical descriptive is the one being conducted in this study to fulfill the research needs, thus make it easier to apply in the empirical studies through the framework drawn integrated approach. Following the lead of the Cronbach's Alpha value, this study will use the questionnaire to gather the required data. In order to predict the OP, the multiple linear regression analysis was used basing on the factors KG, KSR and KST. As the result showed with 49.6% of the total variance in Model favored that the KG, KSR and KST were the main predictors of the OP.

**Keywords:** knowledge, management, organization, performance

**Introduction**

While using the method of information gathering, discovering and improving by the developing countries and organizations, they adopted along the lines the term Knowledge Management as a focal strategy. Knowledge Management got nominated to be a strong element when developing a competitive advantage. Never the less, to insure a certain level of performance it is considered a required asset.

The government of the UAE is following the lead of other leading governments globally in seeking the effective ways to refurbishing their performance depending on knowledge as one of the valuable assets to left up the productivity of their employees (Radwan & Milhem, 2015). Eventually the outcome of successfully utilizing the knowledge management was the smart leadership, positive reputation and overall good government. The federal government of the excellences in the UAE have concaved the innovative practices to assure the desired changes (Ngah, Tai, & Bontis, 2016).

Following the vision of the UAE for the year of 2021, the government of Dubai had lifted up the spirit of perusing the Knowledge Management path to achieve economic growth. According to (Jahmani, Fadiya, Abubakar, & Elrehail, 2018) the logo of "United in Knowledge" played a role helping the government of Dubai to figure out the suitable indicators to evaluate the signs towards enhancing the knowledge economically. Moreover, to evaluate the knowledge performance along the process, His Hines Sheik Mohammed Bin Rashid Government Excellence Award used it as a platform towards archiving innovation practices. (Rahman, Moonesar, Hossain, & Islam, 2018).

Along the constant growth of interest for the term Knowledge Management, comes the doubts of the definition. The perception of Knowledge Management describes different processes and event to obtain new knowledge. Within the content of new experiences, knowledge management is the composition of information's and beliefs with in a plan (Girard

& Girard, 2015). In depends on the firm's acceptability of growth. According to (Dalkir, 2005) it is defined as the ability of the firms to gather data, process it, analyses it and share it effectively.

In simpler terms, knowledge management is the ability of the organization to generate, collect, acquisition, transfer, discuss and apply the clear knowledge, as part of their strategy to innovate, enhance and encourage the competitive advantage
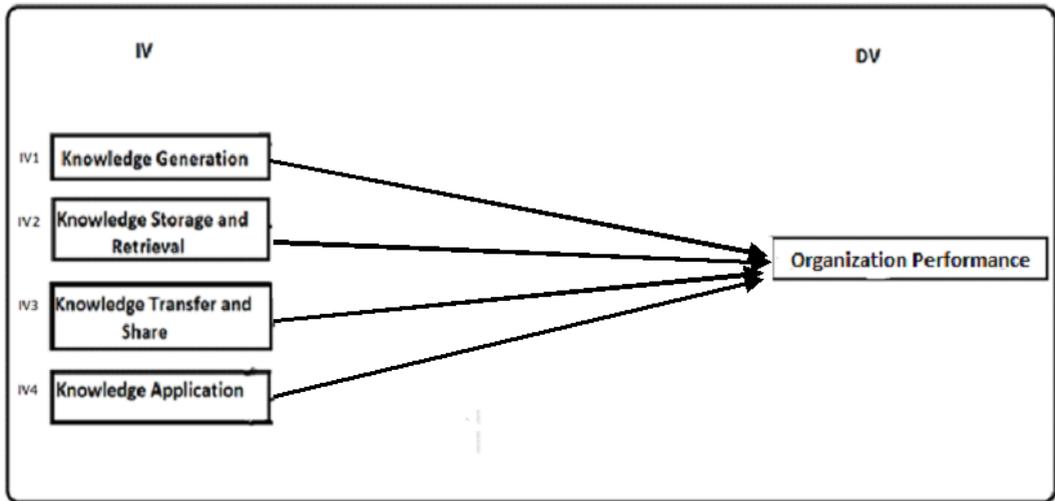


Figure 1: Proposed Conceptual Framework.

**Problem Statement**

It can be said that the knowledge is constantly changing. This change required further planning, management and strategies. According to Federal Authority for Competitiveness and statistics, the statistics indicated that the population of the United Arab Emirates reached up to 9,121,167 by the end of December 2016. Divided in to a total of 947,900 Emirates citizens and the rest are different nationalities (United Nations, 2017).

According to the Dubai Statistic Center, the residence of Dubai itself in the year 2016 reached to 3,808,600 person. Those include a variety of nationality (up to 120 nationality). This however will bring different variety of cultures and knowledge which needed to studied and utilized by the society. Never the less, how to manage this knowledge and concave it to its benefits is the organizations main target. By getting different ideas and concepts and manage them efficiently the working society can grow steadily in the right manor (Elmuti, 2001).

In this research, the process of Knowledge Management will be tested to conclude the effectiveness of using this method for the benefit to the governmental sector in the emirate of Dubai.

What is the connection between the firms' performance for the government of Dubai and the knowledge management process? Dose the Knowledge management considered a positive factor for enhancing the organization performance in the government of Dubai?

**Methods:**

Considering this type of study, it is recommended by the researchers to use the descriptive method so it will. Using this method, data will be collected, facts and classifications to indicate and provide a clear image of the sensation of the study.

In this research the quantitative method will be applied since it follows the procedure of collecting numerical and statistical information and process it using computational techniques and specifying it to a group of people to identify a phenomena. This methods gives an advantage by selecting a bigger sample of candidates, thus provide an accurate result and a wider comprehensive overview. (Muijs, 2011)

**Population and sampling methods**

In this study, the method of systematic samples were used which included head of departments, knowledge departments and those ISSN 2601-8659 ,ISSN 2601-8667, European Journal of Marketing and Economics monitoring the divisions of information technology and human recourses in governmental sector in Dubai, alongside some other samples from different departments. A questioner was distributed among the sample to through their emails to achieve the required data.

By using Cronbach's Alpha score, to measure the responses of the sample. It was distributed among 60 participants from the selected group. The outcome was an average of (0.723) was given by Cronbach's Alpha score, which was better that, the acceptable level of (0.7). Thus proves that the questioner was reliable and the below table summaries it:

Table 1: summarizes the Cronbach's Alpha scores of the questionnaire (Panayides, 2013).

| Variables | Cronbach's Alpha score |
|---|---|
| Knowledge Generation | 0.750 |
| Knowledge Storage and Retrieval | 0.728 |
| Knowledge Share and Transfer | 0.756 |
| Knowledge Application | 0.733 |

Scholars have used different sample sizes in order to collect data; Table 2 shows the sample sizes for several studies conducted on the subject of Knowledge Management. The ranges used in these studies starting from around 33 as the minimum to 426 as the maximum. The average sample size of all studies found to be around 215 participants

Table 2**:** Sample sizes according to the literature review

| Authors | Sample size |
|---|---|
| (Byukusenge,Munene&Orobia, 2016) | 234 |
| (Alrubaiee, Alzubi&Hanandeh, 2015) | 92 |
| (Al-Qarioti, 2015) | 300 |
| (Ahmed, Fiaz&Shoaib, 2015) | 256 |
| (Omogeafe& Friday, 2014) | 389 |
| (Al-Ghazi ,2014) | 101 |
| (Saini ,2013) | 250 |

| (Alsalim& Mohamed, 2013) | 33 |
| (Gholami, Asli, Shirkouhi&Noruzy, 2013) | 282 |
| (Alhawari& Al-Jarrah, 2012) | 77 |
| (Rašul a, VesnaBosilj Vu kšić&Štemb erg er, 2012) | 329 |
| (Daud& Yusuf, 2008) | 100 |
| (Lee & Choi, 2003) | 426 |

**Instruments (Questionnaire)**

The questionnaire developed for this study the questionnaire developed for this study according to the peer literature reviews. The questionnaire divided into two parts as follows: Section I: Includes the demographic data of the study sample using five main categories; (age, gender, education level, position and years of experiences). Section II: includes the four Knowledge Management processes (knowledge generation (KG), knowledge storage and retrieval (KSR), knowledge share and transfer (KST) and knowledge application (KA) as the indicators predicting the outcome organizational performance using a five questions scale. These variables chosen after reviewing peers studies to indicate them as the best measurements indicators for the organizational performance. These studies helped formulating the final questionnaire (Ahmed, Fiaz and Shoaib, 2015; Downes, 2014; Edwards, Handzic, Carlsson & Nissen, 2003; Lee and Choi, 2003).

Table 3: Number of items in questionnaires

| Dimension | No. of Items |
| --- | --- |
| Knowledge generation | 5 |
| Knowledge storage and retrieval | 5 |
| Knowledge transfer and share | 5 |
| Knowledge application | 5 |
| Government sector performance | 5 |
| Total | 25 |

**Research Results**

Regression was used as the methodology in this analysis. OP was chosen to be the dependent variable while KOP was chosen as the independent variable predicting the results of OP. table 4 illustrates the results of their correlations.

Table 4. Correlations between Predictor Variables

| | OP | KST | KSR | KG | KA |
| --- | --- | --- | --- | --- | --- |
| OP | 1 | .354** | .626** | .671** | .354** |

| KST | .354** | 1 | .331** | .349** | .881** |
| KSR | .626** | .331** | 1 | .753** | .331** |
| KG | .671** | .349** | .753** | 1 | .351** |
| KA | .354** | .881** | .331** | .351** | 1 |

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

The coefficients are positively correlated according to the table below. With respect to correlations between knowledge management process subscales and orgnization performance, it has been noticed that the values of the coefficients varied from .354 (0P and KST) to .881 which indicates that there is a clear relationship between the different knowledge management process components.

To get more information about the goodness of fit of a model, the results about R Square is presented in Table 5.

Table 5. Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .671a | .450 | .449 | .736 |
| 2 | .696b | .484 | .483 | .714 |
| 3 | .704c | .496 | .493 | .706 |

a. Predictors: (Constant), KG

b. Predictors: (Constant), KG, KSR

c. Predictors: (Constant), KG, KSR, KST

According to the analytical correlations in models 1 and 2, the addition of KSR increased the R2 values marginally from 0.45 to 0.484. on the other hand, the addition of KST increased the R2 values marginally from 0.484 to 0.496 in both model 2 and 3. These reults shows that organization performance was significantly influenced by KGMEAN, KSRMEAN, and KSTMEAN. 49.6% of the total model was explained by KGMEAN, KSRMEAN, and KSTMEAN.

Table 6.  The regression ANOVA

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 259.946 | 1 | 259.946 | 479.375 | .000b |
| | Residual | 317.223 | 585 | .542 | | |
| | Total | 577.169 | 586 | | | |
| 2 | Regression | 279.561 | 2 | 139.781 | 274.294 | .000c |
| | Residual | 297.607 | 584 | .510 | | |
| | Total | 577.169 | 586 | | | |
| 3 | Regression | 286.259 | 3 | 95.420 | 191.227 | .000d |

| | | | | | |
|---|---|---|---|---|---|
| Residual | 290.909 | 583 | .499 | | |
| Total | 577.169 | 586 | | | |

a. Dependent Variable: OP

b. Predictors: (Constant), KG

c. Predictors: (Constant), KG, KSR

d. Predictors: (Constant), KG, KSR, KST

Regression of the models was statistically significant. F values are significant beyond the 0.01 level for the three models; model 1($F_{(1, 585)}$ = 479.4, $p < .001$), model 2($F_{(2, 584)}$ = 274.3, $p < .001$) and model 3($F_{(3, 583)}$ = 191.2, $p < .001$) according to ANOVA Table. the three constructs KG, KSR and KST have a stronger influence in OP based on the fact that the full model $R^2$ was significantly greater than zero, $R^2$ = 49.6%.

KG, KSR and KST had positive prediction on OP. (Beta = 0.434, $p < .01$, Beta = 0.262, $p < .01$, Beta = 0.116, $p < .01$.

Table 7. Regression output (Regression Coefficients)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.545 | .155 | | 9.956 | .000 |
| | KG | .691 | .032 | .671 | 21.895 | .000 |
| 2 | (Constant) | 1.248 | .158 | | 7.903 | .000 |
| | KG | .474 | .046 | .460 | 10.204 | .000 |
| | KSR | .281 | .045 | .280 | 6.204 | .000 |
| 3 | (Constant) | 1.149 | .159 | | 7.248 | .000 |
| | KG | .447 | .047 | .434 | 9.593 | .000 |
| | KSR | .262 | .045 | .262 | 5.822 | .000 |
| | KST | .075 | .021 | .116 | 3.664 | .000 |

a. Dependent Variable: OPMEAN

**Conclusion**

This research main results according to the empirical results alongside the literature review shows that there is a significant influence between the four indicators (KG, KSR, and KST & KA) individually and combined and the organizational performance.

Noticing the relationship between the predictors among themselves and with their relationships with the organizational performance, the coefficients are positively correlated which indicates that each of these four indicators can be considered a good variable in measuring the output organizational performance.

The adjusted R2 value of 0.493 shows that the regression of the models was statistically significant. The coefficients shown in table 7 of th regrision analysis illustrates that the three varables of KG, KSR and KST influences the organizational performance greater than KA. Studies conducted to date employed varied and sophisticated research methods and they have yielded positive results in enhancing OP.

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