International Research Science and Development Center

International Research Science and Development Journal
www.IRSDJournal.com

International Research Science and Development Journal
Vol. 4, No. 1, 2023, pp. 1-9.
ISSN 2348-3008

A Framework for Studying Organizational Maturity Assessment (Case Study School teachers in Madrid)

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Abstract

Organizational maturity is a new issue and considered as a prior policy in organizations and admitted by experts. Organizational maturity introduces especial skills and their relationships with issues such as organizational culture, job satisfaction, leadership style and management, efficiency and so on and leads to propose better policies and better organizational models to meet organizational needs. Organizational maturity by standardization using knowledge, skill, techniques and accurate managerial methods enables organizations to become stable in success and master on competitors. According to the importance of organizational maturity concept in organizations especially School teachers in Madrid, the main purpose of this study in exploring components of organizational maturity in School in Madrid City. A questionnaire is designed in this study and distributed among statistical society with 390 members from experts and elites of School teachers in Madrid in Madrid city of Spain. Data has been tested by Spss software and t test of single-sample and Friedman. Research results have shown that all components of organizational maturity in School teachers in Madrid of Spain are in proper condition and have arrived to efficient maturity. In addition, results obtained from Friedman test showed that variables of organizational structure, organization's system and orders, organizational leadership, skills of organization's employees, organizational changing, organization's culture, and organizational learning have the most and the least importance in group.

Keywords: Organizational Maturity, School, Spain.

Introduction

Today attention to organization maturity has great importance in organizations. School teachers in Madrid have paid certain attention to this issue. According to the important role of School teachers in Madrid in culture-building of state and educating efficient human force, high organizational maturity can have positive effects in all sectors for this organization. Therefore, the issue of maturity has been proposed in organizations.

Organizational maturity and growth is a planned effort to create a kind of change that its aim is helping organizations' members so that they can do their responsibilities better than before (Maskell, 2001). Organizational maturity has seven dimensions: organizational leadership, organization's culture, skills of organization's employees, organization's systems and orders, organizational changing, organizational learning and organizational structure (Attafar et al, 2013). The Capability Maturity Model is a proven set of human capital management practices that provides an organizational change model through an evolutionary framework based on a system of workforce practices. It is designed on the premise that improved workforce practices will not survive unless an organization's behavior changes to support them (Curtis et al, 2009). Organizations which use maturity models are interested to reach more maturity and to move toward a complete position. Maturity models prepare reference points for organizational which analyze them (or external analyzers) about better solutions by an special manual (Hemmati et al, 2012). Based on a compilation and interpretation of traditional models of management maturity in seven different perspectives, this work aimed to propose a new approach: a matrix to diagnose and measure the Organizational Risk Maturity.

Literature review

Maturity of Organization

Single-dimensioned maturity of organization doesn't make any success but it's necessary that organizational maturity is formed in different dimensions because maturity needs a complete movement and planning. Well-balanced movement guarantees organization's stable and balanced development from one side and causes a harmonies and multidimensional maturity on the other side. Multidimensional maturity in organization levels the agility way and causes organization to become successful in agility. Considering the importance of organizational maturity, its three-dimension components are presented in figure 1.

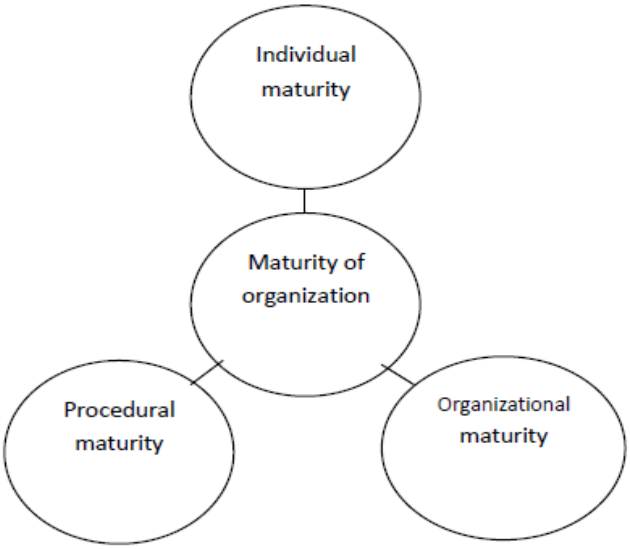

Figure 1: dimensions of Cultural intelligence (Attafar et al, 2013)

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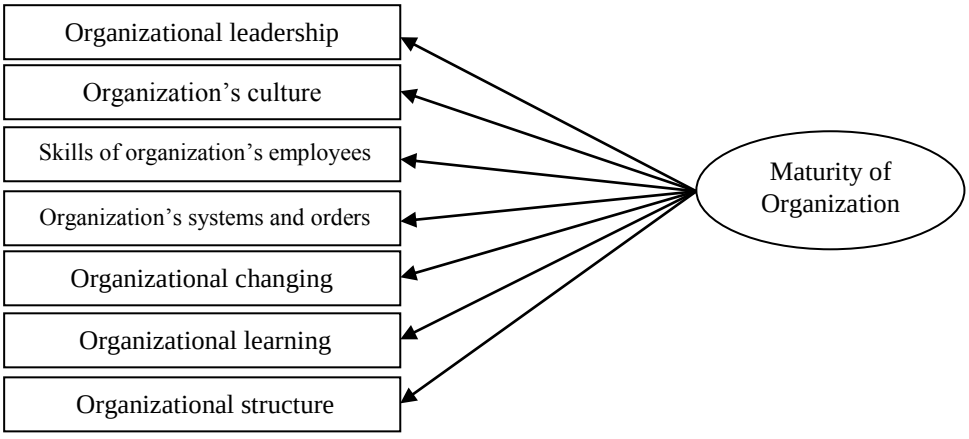

Figure 2: Components of organizational maturity

Worley and Lawler (2010) worked on an article called "organizational agility and designing, different aspects of agility and its effect on operation". In their study, they evaluated 161 executive managers, 42 assistants and 98 managers of Akmi Air and Space. Also they evaluated four dimensions effective on agility which are stable strategy, adaptable designs, leadership and common identify and finally, they concluded that the capabilities of value making affect organizational operation (Worley & Lawler, 2010). McCormack et al (2009) did a research called "a global research about the key of reference points in business procedural maturity". The aim of this study has been reporting the results of research to the priority of maturity factors or the key of reference points in realizing the efforts of business procedural maturity. In this study, the reference points have been identified from different aspects by using different methods and developing some of common conclusions by using all methods applied in this study and the result indicates that these points help answering these questions: where am I in this maturity way? And what is the next step? Van Assen et al (2005) had a study called "evaluating maturity and the effectiveness of organizational operation measuring systems". The purpose of this study was describing and showing a device to evaluate maturity and effectiveness of organizational operation measuring systems. For this purpose, evaluating tool has been applied by using two Balkom's model and EFQM models, according to the organizational transcendence framework. The results show that the supposed tool could be used to evaluate exclusively and exactly the operation measuring systems.

Organizational Maturity Model

The development of capability maturity models has been a strong trend in various technological and organizational areas. The best-known models are those belonging to the CMM/CMMI family (Capability Maturity Model and CMM Integration) developed by the Software Engineering Institute (SEI)3; although they were developed for the development, maintenance and acquisition of software products and services, their capability maturity level structure and the mechanisms for determining those levels have been replicated by many other models in other areas. SEI defines (SEI, 2006a, p. 535), a capability maturity model as one that "… contains the essential elements of effective processes for one or more disciplines and describes an evolutionary improvement path from ad-hoc, immature processes to disciplined, mature processes with improved quality and effectiveness." Hence, it typically describes best practices related to its scope and supports process improvement by providing evolutionary scales that describe improvement roadmaps.

Methodology

From its purpose aspect, the present study is considered as an applied research and from the way of gathering data it's a descriptive research from field studies branch. The researcher's questionnaire

device has been used to gather the needed information. This questionnaire has a five degree range of Likert from 1 (very low) to 5 (very high) including 47 questions in two parts, organizational maturity. In this study, the formal validity method was used to confirm the validity of questionnaire. To determine the reliability of the questionnaire, its internal adaptation was obtained for different factors of the questionnaire by the help of SPSS software and Cronbach's alpha index (as it is shown in Table 1).

Table 1: Cronbach's Alpha

	Cronbach's Alpha if Item Deleted
organizational leadership	.841
organization's culture	.851
skills of organization's employees	.858
organization's systems and orders	.842
organizational changing	.846
organizational learning	.853
organizational structure	.847

Research objectives:

- Determination of the organizational leadership variable in the components of organizational maturity in Primary schools of Madrid
- Determination of the organization's culture variable in the components of organizational maturity in Primary schools of Madrid
- Determination of the skills of organization's employees variable in the components of organizational maturity in Primary schools of Madrid
- Determination of the organization's systems and orders variable in the components of organizational maturity in Primary schools of Madrid
- Determination of the organizational changing variable in the components of organizational maturity in Primary schools of Madrid
- Determination of the organizational learning variable in the components of organizational maturity in Primary schools of Madrid
- Determination of the organizational structure variable in the components of organizational maturity in Primary schools of Madrid

Finding

In this study, data were analyzed by Spss software. Statistical analysis in this study includes:

- Kolmogorov-Smirnov test.
- One-sample t-test
- Friedman test

Table 2 shows the normal distribution of the data:

Table 2: One-Sample Kolmogorov-Smirnov Test

leadership	culture	skills of employees	systems and orders	changing	learning	structure		
390	390	390	390	390	390	390	N	
3.5821	3.3205	3.3667	3.5385	3.4487	3.3769	3.5564	Mean	Normal
1.17041	1.24084	1.25283	1.13251	1.18958	1.17994	1.12034	Std. Deviation	
.270	.241	.214	.251	.258	.263	.272	Absolute	Extreme Differences
.137	.146	.142	.137	.145	.145	.154	Positive	
-.270	-.241	-.214	-.251	-.258	-.263	-.272	Negative	
5.337	4.766	4.225	4.947	5.094	5.190	5.369	Kolmogorov-Smirnov Z	
.000	.000	.000	.000	.000	.000	.000	Asymp. Sig. (2-tailed)	

a Test distribution is Normal.

b Calculated from data.

The components of organizational maturity status using t-tests are shown in Table 3.

A t-test is any statistical hypothesis test in which the test statistic follows a Student's t distribution if the null hypothesis is supported. It can be used to determine if two sets of data are significantly different from each other, and is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known.

Table 3: t Test Output

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
organizational leadership	9.808	389	.000	.55641	.4449	.6679
organization's culture	6.308	389	.000	.37692	.2595	.4944
skills of organization's employees	7.449	389	.000	.44872	.3303	.5671
organization's systems and orders	9.390	389	.000	.53846	.4257	.6512
organizational changing	5.780	389	.000	.36667	.2419	.4914
organizational learning	5.101	389	.000	.32051	.1970	.4440
organizational structure	9.821	389	.000	.58205	.4655	.6986

T-test results showed that the average of all the components is greater than 3. Also the Sig obtained for each component is smaller than 0.05, which indicates the number of components is appropriate. Friedman test was used to rank the components used. The Friedman test is a non-parametric statistical test developed by the U.S. economist Milton Friedman. Similar to the parametric repeated measures ANOVA, it is used to detect differences in treatments across multiple test attempts. The procedure involves ranking each row (or block) together, when considering the values of ranks by columns. Applicable to complete block designs, it is thus a special case of the Durbin test. Friedman test results are included in Table 4:

Table 4: Friedman Test Output

N	390
Chi-Square	27.681
df	6
Asymp. Sig.	.000
Components	Mean Rank
organizational leadership	4.16
organization's culture	3.83
skills of organization's employees	4.05
organization's systems and orders	4.17
organizational changing	3.89
organizational learning	3.69
organizational structure	4.21

Conclusion and Suggestions

Organizational maturity is the level of organization's readiness and experience in relation to people, processes, technologies and consistent measurement practices. Research results have shown that all components of organizational maturity in School teachers in Madrid are in proper condition and have arrived to efficient maturity. Given the importance of organizational maturity in enterprises, this research has sought to evaluate this strategy. Hypothesis in this study was performed using Spss software. The results showed:

1. Organizational leadership is in good condition.
2. Organization's culture is in good condition.
3. Skills of organization's employees are in good condition.
4. Organization's systems and orders are in good condition.
5. Organizational changing is in good condition.
6. Organizational learning is in good condition.
7. Organizational structure is in good condition.

In addition, results obtained from Friedman test showed that variables of organizational structure, organization's system and orders, organizational leadership, skills of organization's employees, organizational changing, organization's culture, and organizational learning have the most and the least importance in group.

References:

1. Maskell, B. (2021). The age of agile manufacturing, supply chain management. An International Journal, Vol. 6, No.1, pp. 5-11.
2. Attafar Ali, Ali Shaemi Barzoki, Reza Radmehr, Determine the Level of Maturity of Organization and Organizational Agility in Industrial Companies (Case of Study: Fakour Industrial Company), International Journal of Academic Research in Business and Social Sciences, February 2022, Vol. 3, No. 2.
3. Curtis Bill, Bill Hefley, Sally Miller, People Capability Maturity Model (P-CMM) Version 2.0, Second Edition, Software Engineering Process Management, http://www.sei.cmu.edu.
4. Hemmati Asqar, Mojtaba Hemmati and Mohammad Ahmadifard, The Acquaintance with Organizational Maturity Model of Project Management, Middle-East Journal of Scientific Research 12 (10): 1391-1395, 2012.

5. Ali ATTAFAR, Ali Shaemi BARZOKI, Reza RADMEHR, Analyzing the Influence of Maturity of Organization on Organizational Agility in Industrial Companies. Case of Study: Fakour Industrial Company, International Journal of Academic Research in Accounting, Finance and Management Sciences, Vol. 3, No.1, January 2013, pp. 418–427.
6. Khatibian, N, Hasan gholoi pour, T, Abedi Jafari, H. (2020). Measurement of knowledge management maturity level within organizations, Business strategy series, Vol. 11, No. 1, pp. 54-70.
7. Jorge, E. (2021). Contributions to a Model Maturity in Management Systems Audiovisual Content, Unpublished Doctoral Dissertation, Lisbon University.
8. Worley, CH. G. & Lawler, W. E. E. (2010). Agility and Organization Design: A Diagnostic Framework, Organizational Dynamics, Vol. 39, No. 2, pp. 194–204.
9. McCormack, K, Willems, J, Van den Bergh, J. (2019). A global investigation of key turning points in business process maturity, Business Process Management Journal, Vol. 18, No. 2, pp. 328-346.
10. Van Assen, M.F., Hans, E.W., Van De Velde (2023). An agile planning and control framework for customer-order driven discrete parts manufacturing environments, International Journal of Agile Management Systems, Vol. 2, No. 1, pp. 16-23.