
Investigating the effect of organizational architecture on good governance (case study: Office of the President - Presidential Office)

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Editor Científico: José Edson Lara
Organização Comitê Científico
Double Blind Review pelo SEER/OJS
Recebido em 17.07.2019
Aprovado em 26.03.2020



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Abstract

The purpose of this research is to examine the impact of organizational architecture on good governance in the presidential office-presidential institution. The statistical population of this research is the number of employees in the presidential office in Tehran with a staff of 750 people. Using the Cochran formula, the sample was 256 people. The research method is descriptive-survey and is a part of applied research. A standard questionnaire is used to collect data. In this research, SPSS software is used to analyze the data. The results of the analysis of the research data showed that the dimensions of organizational architecture on good governance had a positive and significant effect. In other words, it turned out that the objective architecture, information architecture, application architecture, data and technology architecture have a positive and significant impact on good governance. Finally, suggestions are presented regarding the results obtained.

Keywords: Organizational Architecture, objective architecture, Information Architecture, Application Architecture, Architecture Data, Technology Architecture, Good Governance.

Investigando o efeito da arquitetura organizacional na boa governança (estudo de caso: Gabinete do Presidente - Gabinete Presidencial)

Resumo

O objetivo desta pesquisa é examinar o impacto da arquitetura organizacional na boa governança no escritório presidencial-instituição presidencial. A população estatística desta pesquisa é o número de funcionários no escritório presidencial em Teerã com uma equipe de 750 pessoas. Utilizando a fórmula de Cochran, a amostra foi de 256 pessoas. O método de pesquisa é uma pesquisa descritiva e faz parte da pesquisa aplicada. Um questionário padrão é usado para coletar dados. Nesta pesquisa, o software SPSS é usado para analisar os dados. Os resultados da análise dos dados da pesquisa mostraram que as dimensões da arquitetura organizacional na boa governança tiveram um efeito positivo e significativo. Em outras palavras, verificou-se que a arquitetura objetiva, a arquitetura da informação, a arquitetura de aplicativos, a arquitetura de dados e tecnologia têm um impacto positivo e significativo na boa governança. Por fim, são apresentadas sugestões sobre os resultados obtidos.

Palavras-chave: Arquitetura Organizacional; Arquitetura da Informação; Arquitetura de Aplicativos; Arquitetura Tecnológica; Boa Governança.

Introduction:

Governance is not a new concept, but a prelude to human civilization. The Simple Meaning of Governing is the Decision Process and the process by which the decisions are implemented (or not). Since governance is the process of decision-making And The process of implementing decisions, Since governance is the process of decision-making And decision-making process, analysis of governance over formal and informal actors in the decision making Implementing formal and informal decisions and structures that are designed to achieve goals and implement decisions which are created in one placed, are focused. Good governance has

eight main attributes: partnership, consensus-based, Responsible, transparent, accountable, effective and efficient, fair and egalitarian and in keeping with the rule of law. This form of government makes corruption less possible, minority views are taken into account, the voices of vulnerable segments of decision making are heard, and the needs of the present and the future of the community are answered. Although good governance is an ideal idea, however, all societies must take steps towards realizing it. (Kamali and Abdolahpur, 2014). In good governance, there are no predetermined prescriptions for countries, and they are just the people of one country who can choose the path to develop (Midari and Kheirkhahan, 2004).

Therefore, one of the important things that should be addressed in developing countries is the establishment of good governance, and since our country is also among these countries, the need to examine the components of good governance is felt. Also, with the establishment of good governance components, the necessary context for the dynamics of society and its movement towards development can be provided. The general results of domestic and foreign studies show that the issue of good governance in performance Long-term economic growth is important, so that there is a positive and direct correlation between good governance and growth of long-term economic situation. (KimJani and Salatin, 2010) The decisions made by the director of the organization against different circumstances make changes: organizational processes may undergo changes, some of the important physical locations of the organization may be removed or added to current locations, new events may can be defined in the organization, and in general it can be said that various aspects of the organization may change. (Khoshnevis, 2007).

Today's organizations are complex organisms, which technical descriptions of different aspects of their information systems require the use of a specific architecture called Organizational architecture. Organizational architecture can be used to describe the status quo (state of the architecture) or the optimal situation (optimal state architecture). (Shams and Razi, 2007) Organizational architecture is a macro-based approach to missions and organizational tasks, work processes, information entities, communication networks, hierarchy, and work order arrangements that aim to create integrated and efficient information systems. (Iyamu & Mphahlele, 2014) Therefore, considering the importance of finding these concepts and the need to pay attention to them, due to continuous changes in societies and their relationship with each other, determining the levels of employment and the custodians of its flow is significant. For this reason, the distinction and precise definition of any of the concepts of government,

governance, good governance, and management can determine the role of each of the main actors and the responsibility of managers, and the ability to determine the appropriate model and create the necessary infrastructure for Managing the organization and enjoying the benefits of good governance can be arranged in a good way. (Nobari and Rahimi, 2010).

According to what was said one of the major problems that can be mentioned and undoubtedly the presidential office is facing, is the lack of flexibility regarding the issues facing the organization. For this reason, it is imperative that the Presidential Office, as an influential institution in the country, in the complex world and the current diplomacy of the world, takes the opportunity and take a fundamental step in order to have the power of response avoid unwanted changes and problems. Regarding this, the organization is required to have a plan to deal with such problems. Therefore, this study examines the impact of organizational architecture on good governance in the presidential office. One of the studies that has been done in this regard is the study Tabarsa et al (2015) which examined the effect of good governance on social capital. To this end, five dimensions of rule of law, right to comment, accountability, transparency and trust Good governance were considered. The results indicate the effect of good governance on social capital. Among the various dimensions of good governance, rule of law has had the greatest impact on social capital. Yousaf, Ihsan & Ellahi (2016) did a research entitled "The Impact of Good Governance on Citizens' Trust in Pakistan.". The purpose of this study was to assess the effect of good governance on the level of citizen's trust. The results of this study confirm the causal relationship between good governance and citizen trust and the negative impact of immoral activities.

Research methodology:

The present research in terms of research purpose is considered to applied research and based on the nature of research is in the classification of descriptive research And scrolling. This is described that this research examines the status quo and regularly and systematically describes its current state and examines its features and attributes. This research is a survey research because the parameters of society are investigated. The methods for collecting information in this study can be generally divided into two categories of library and field. The collection of literature information on the subject and background of the research is library methods and for collecting information to confirm or reject hypotheses Field research (distribution of questionnaires) has been used. In this research, good governance variable is a component of dependent variable and organizational variable as independent variable.

To measure good governance, the sum of scores related to good governance questionnaire questions has been used, which includes answering questions related to outcome, the effectiveness of roles and tasks, enhancing values, clarity, capacity building and accountability. Also, for measuring organizational architecture, the sum of algebraic scores related to the questions of the organizational questionnaire has been used, which includes the answer to the questions of architectural purposes, architecture Information, Application Architecture, Data Architecture, and Technology Architecture. According to researcher’s studies particularly in the subject of research, the following conceptual model is derived from organizational research of OPM CIPFA (2004) and Winter & Fischer (2006) it is considered as a conceptual model of research.

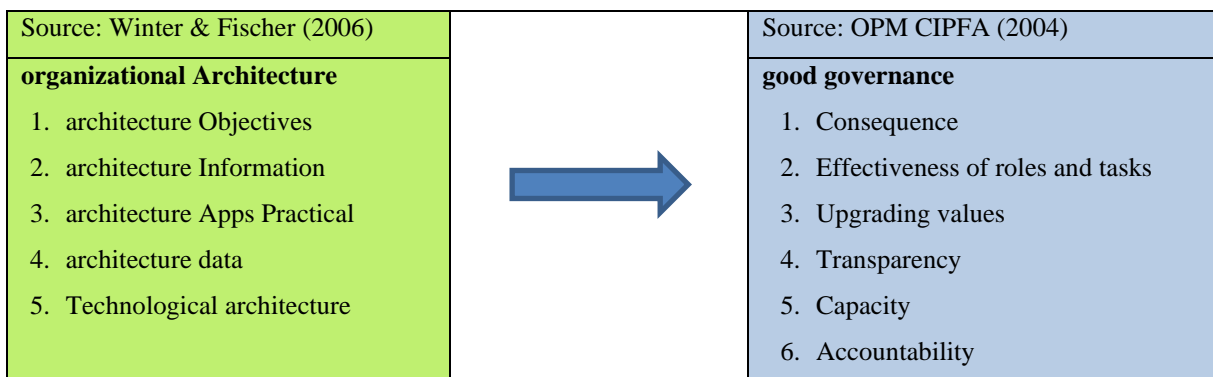


Diagram 1: Conceptual model of research derived from research of OPM CIPFA (2004) and Winter & Fischer (2006)

This research was conducted in 2017. Distribution interval and questionnaire collection was Farvardin 2017. Research place is presidential office in Tehran. Also the statistical community of this research is staffed by the Presidential Office in Tehran with a staff of 750 people. It should be noted that according to the Jersey-Morgan table, the statistical sample will be 256 people selected by simple random sampling.

Also, the sample size according to the Cochran formula is 254/43, which is calculated with a 5% error rate. Each of the dimensions of organizational architecture and good governance in the questionnaire are summarized in the following table:

Table 1: Questionnaire Dimension

Variables	Dimensions	Question numbers
	architecture Objectives	1-6
	architecture Information	7-10
Organizational architecture	architecture Apps Practical	11-14
	architecture data	15-17
	Technological architecture	18-20
	Consequence	21-25
	Effectiveness of roles and tasks	26-33
Good governance	Upgrading values	34-37
	Transparency	38-42
	Capacity	43-48
	Accountability	49-54

Results:

Firstly, the demographic studies of the sample are investigated. The table and diagram below and subsequent descriptions describe gender status in the statistical sample. As shown in table 2, out of a total of 256 statistical samples, 210 are men and 46 are women. In other words, it can be stated that the statistical sample consists of 82% male and 18% female.

Table 2: Distribution and percentage of subjects on a gender basis

	Abundance	Frequency	The cumulative frequency
Men	210	82	82
women	46	18	100
total	256	100	

The following table describes the varying status of education in the sample. Of the total sample of 256 people, 10 were Diploma and lower graduated, 30 were above-mentioned Diploma, 110 graduate students, 81 graduate master students, and 25 Ph.D. In other words, it can be said that members of the statistical sample comprised 3.9% of graduates and 11.7% of graduate students, 43% had bachelor's degrees, 31.7% had master's degree and 9.7 % had doctoral degrees.

Table 3: Distribution and frequency of subjects based on education

	Abundance	Frequency	The cumulative frequency
Diploma and lower	10	3.9	3.9
Associate Degree	30	11.7	15.6
Bachelor	110	43	58.6
MA/ MS	81	31.7	90.3
Doctoral	25	9.7	100
Total	256	100	

Here is a single-variable regression test. Then we examine each of the research hypotheses. The following table summarizes the model of the main research hypothesis. This table shows the values of R and R². The value of R is equal to 0.72, indicating a simple correlation between the two variables, that is, the intensity of the correlation between the two variables. The value of R² shows how much of the dependent variable, good governance, can be explained by the independent variable, organizational architecture. In fact, organizational architecture variable can explain 51% of good governance change.

Table 4: Summary of the main hypothesis model

Model	Correlation Coefficient R	Coefficient of determination R ²	Adjusted coefficient of determination	Standard error
1	0.714 ¹	0.510	0.508	0.42396
	1-Predictor: Organizational Architecture			

This table shows whether the regression model can significantly (and appropriately) predict the variation of the dependent variable. For a meaningful look, we look at the last column of the table (sig). This statistically significant column shows the regression model, which, if obtained, is less than 0.05 we conclude that the used model is a good predictor of the performance variable. The significance level in this study is less than 0.05, which means that the regression model is significant. Therefore, the assumption zero is rejected and the assumption one is accepted.

Table 5: ANOVA for the main hypothesis

Model	Sum of squares	df	Average of squares	f	Sig
Regression	47.526	1	47.526	264.407	0.000
Left over	45655	254	0.180		
Total	93.181	255			

Dependent variable: Good governance; Expectant variable: Organizational architecture

This table gives us information about the predictor variables. This table gives us the essential information for the foreword dependent variable. We see that the fixed and variable organizational architecture values are both in the model is meaningful (meaning significant level). After determining the significance of the constant value and the organizational structure variable, the standardized coefficient column represents the standardized regression coefficient or beta value. The standardized regression coefficient or Beta in the current study is equal to 0.714, which indicates the effect of the independent variable on the dependent. Beta level when we have an independent variable in the model, is exactly equal to Pearson correlation between two variables (R). But when we have more than one independent variable, the Beta value is correlated with the coefficients of the variables Independent and dependent.

Table 6: The coefficients for the main hypothesis

Model	Not standardized coefficients		Standardized coefficients	t	Sig
	Std.Error	B	Beta		
Constant level	0.128	1.363		10.615	0.000
Organizational architecture	0.037	0.604	0.714	16.261	0.000

After the main regression test, the regression tests for sub-hypotheses of the research have been investigated. In this way, the order of the effect of each of the variables of the objective architecture, the information architecture, the Application Architecture, data architecture and technology architecture on the variable of governance. At first, the effect of objective architecture is measured on the variable of governance. Taking into account the above table, the objective architecture can explain and predict 15.4% of good governance change.

Table 7: Summary of the first sub-hypothesis model

Model	Correlation Coefficient R	Coefficient of determination R ²	Adjusted coefficient of determination	Standard error
1	0.392 ¹	0.154	0.150	0.55723
	1- Predictor: Target Architecture			

According to Table 8, the significance level is less than 0.05, which indicates that the regression model is meaningful. Therefore, the assumption zero is rejected and the assumption one is accepted.

Table 8: ANOVA for the first sub-hypothesis

Model	sum of squares	df	average of squares	f	Sig
Regression	14.313	1	14.313	46.097	0.000
Left over	78.868	254	0.311		
Total	93.181	255			

Dependent variable: good governance; variable predictor: objective architecture

Table 9: The coefficients for the first sub hypothesis

Model	Not standardized coefficients		Standardized coefficients	t	Sig
	Std.Error	B	Beta		
Constant level	0.155	2.384		15.421	0.000
Organizational architecture	0.040	0.269	0.392	6.789	0.000

The next H0 hypothesis is that information architecture does not affect good governance. According to the table below, the information architecture can explain and predict 12.2 percent of the changes in good governance.

Table 10: Summary of the second hypothesis model

Model	Correlation Coefficient R	Coefficient of determination R ²	Adjusted coefficient of determination	Standard error
1	0.350 ¹	0.122	0.179	0.56739
	1- Predictor: Information Architecture			

According to Table 11, the significance level is less than 0.05, which indicates that the regression model is meaningful. Therefore, the assumption zero is rejected and the assumption one is accepted.

Table 11: ANOVA for the second sub hypothesis

Model	sum of squares	df	average of squares	f	Sig
Regression	11.410	1	11.410	35.441	0.000
Left over	81.772	254	0.322		
Total	93.181	255			
Dependent variable: good governance; variable predictor: information architecture					

Table 12: The coefficients for the second sub hypothesis

Model	Not standardized coefficients		Standardized coefficients	t	Sig
	Std. Error	B	Beta		
Constant level	0.128	2.672		20826	0.000
Organizational architecture	0.036	0.214	0.350	5.953	0.000

The results of the regression test for the third hypothesis for the application architecture variable are given in the table below. The results showed that application architecture could explain and predict 9.2% of good governance change.

Table 13: Summary of the third hypothesis model

Model	Correlation Coefficient R	Coefficient of determination R ²	Adjusted coefficient of determination	Standard error
1	0.304 ¹	0.092	0.089	0.57702
	2- Predictor: Application Architecture			

According to Table 14, the significance level is less than 0.05, which indicates that the regression model is meaningful. Therefore, the assumption zero is rejected and the assumption one is accepted.

Table 14: ANOVA for the third sub hypothesis

Model	sum of squares	df	average of squares	f	Sig
Regression	8.613	1	8.613	25.868	0.000
Left over	84.569	254	0.333		
Total	93.181	255			
Dependent variable: good governance; variable predictor: application architectures					

Table 15: The coefficients for the third sub hypothesis

Model	Not standardized coefficients		Standardized coefficients	t	Sig
	Std. Error	B	Beta		
Constant level	0.162	2.604		16098	0.000
Organizational architecture	0.042	0.214	0.304	5.086	0.000

The assumption H0 of the fourth test, includes "data architecture does not affect good governance". According to Table 16, data architecture can explain and predict 7.1% of good governance change.

Table 16: Summary of the fourth hypothesis model

Model	Correlation Coefficient R	Coefficient of determination R ²	Adjusted coefficient of determination	standard error
1	0.267 ¹	0.071	0.067	0.58337
	3- Predictor: Data Architecture			

According to the below Table, the significance level is less than 0.05, which indicates that the regression model is meaningful. Therefore, the assumption zero is rejected and the assumption one is accepted.

Table 17: ANOVA for the fourth sub-hypothesis

Model	Sum of squares	df	Average of squares	f	Sig
regression	6.621	1	6.621	19.429	0.000
left over	86.560	254	0.341		
Total	93.181	255			
Dependent variable: good governance; variable predictor: data architecture					

Table 18: The coefficients for the fourth sub hypothesis

Model	Not standardized coefficients		Standardized coefficients	t	Sig
	Std. Error	B	Beta		
Constant level	0.140	2.811		20.109	0.000
Organizational architecture	0.038	0.167	0.267	4.408	0.000

The results of testing the fifth hypothesis are given in the following table. According to the results of this chart, technology architecture can explain and predict 12.1 percent of good governance change.

Table 19: Summary of the fifth sub-hypothesis model

Model	Correlation Coefficient R	Coefficient of determination R ²	Adjusted coefficient of determination	Standard error
1	0.384 ¹	0.121	0.117	0.56789
	4- Predictor: Technology Architecture			

According to Table 20, the significance level is less than 0.05, which indicates that the regression model is meaningful. Therefore, the assumption zero is rejected and the assumption one is accepted.

Table 20: ANOVA for the fifth sub hypothesis

Model	sum of squares	df	average of squares	f	Sig
Regression	11.267	1	11.267	34.938	0.000
Left over	81.914	254	0.322		
Total	93.181	255			

Dependent variable: good governance; variable predictor: technology architecture

Table 21: The coefficients for the fifth sub hypothesis

Model	Not standardized coefficients		Standardized coefficients	t	Sig
	Std. Error	B	Beta		
Constant level	0.119	2.737		23.060	0.000
Organizational architecture	0.033	0.197	0.348	5.911	0.000

Suggestions:

The purpose of this research is to examine the impact of organizational architecture of good governance in the presidential office. The results of the Single variable regression test showed how much of the dependent variable, i.e. good governance, can be determined by an independent variable, the organizational architecture. In fact, organizational architecture variable can explain 51% of good governance change. Also, the ANOVA table showed that with a significant level of 0.000 (less than 0.05) the model used is a good predictor of good governance variables. As it was mentioned in the research results, the first hypothesis of the research on the positive and significant effect of the objective architecture on good governance were accepted, which was accepted by Bizhani and Salahi (2014), O.P.M and CIPFA (2004), are consistent and supported in terms of Variables And their results.

Also, the second hypothesis of the research on the positive and significant impact of information architecture on good governance are accepted which was studied by Bizhani and Salahi (2014), Haron Abadi and Jamshidi (2013), O.P.M and CIPFA (2004) are consistent and supported In terms of research variables and their results. The third hypothesis of the research were also accepted regarding the positive and significant impact of the architecture of applications on good governance, which was consistent with the research variables and their results with the Bizhani and Salahi (2014), O.P.M and CIPFA (2004) studies and supports it.

The fourth hypothesis of the research on the positive and significant impact of data architecture on good governance were accepted by Bizhani and Salahi (2014), Haron Abadi and Jamshidi (2013), O.P.M and CIPFA (2004), are consistent and supported in terms of research variables and their results. Finally, the fifth hypothesis of the research on the positive and significant impact of technology architecture on good governance were accepted by Bizhani and Salahi (2014), Haron Abadi and Jamshidi (2013), O.P.M and CIPFA (2004), Bradley And colleagues (2012), are consistent with and support it in terms of research variables and their results.

Therefore, according to the results obtained from the research, the following suggestions are presented for exploitation: Considering the positive and significant impact of the objective architecture on good governance, it is suggested that: the goals of the organization in the presidential institution be properly identified and described, current activities in the various departments of this institution are properly carried out, proper planning to achieve short-term goals The joint activities between the presidential institutions' processes will be aligned to the

correct functioning of this institution, the presidential institution will establish standards for the establishment and proper implementation of the master plan of organizational architecture and develop appropriate management methods for organizational goals.

Considering the positive and significant impact of information architecture on good governance, it is suggested that: definition of the level access to institutional information resources at the presidential institution is done correctly, information needs when the processes are executed properly, identify and take the necessary steps to eliminate it, the necessary specialist in order to guide and direct the information system, and to determine the precision and accuracy of the information Generated in the processes to be exploited in the next steps.

Considering the positive and significant impact of the architecture of applications on good governance, it is suggested that: The office automation system is designed to provide the required information needed for the presidential institution process Information management systems should be designed for accurate access to information, management systems Knowledge is designed to avoid duplication of mistakes and the organization's resource management system is properly designed And take the necessary steps in this direction.

Considering the positive and significant impact of data architecture on good governance, it is suggested: a database In order to store data in the Presidential Office, it should be designed and implemented in order to prevent the recording of duplicate data, and to design new sources of information stored in this institution.

Considering the positive and significant impact of technology architecture on good governance, it is suggested that: In-house networks should be designed to transfer information and knowledge of the presidential institution, the ability to have different organizational components of the global Internet network, and creating appropriate hardware platforms in application softwares.

References:

- Bizhani, Zahed and Salahi, Javad (2014), "The Effect of Architecture of Organizational Layers on Organizational Agility with Case Study: Central Offices of Agricultural Bank", Master's Thesis, Islamic Azad University, Tehran Branch, Faculty of Management and Accounting.
- Haron abadi, Ali and Jamshidi Barmsabz, Mojtaba (2013), Organizational Architecture Assessment, Master's Thesis. Science and Research Unit Damavand.
- Iyamu, T., & Mphahlele, L. (2014). The impact of organisational structure on enterprise architecture deployment. *Journal of Systems and Information Technology*, 16(1), 2-19.

- Kamali, Yahya and Abdollah Pour, Mohammad (2014), ““Good governance is a mechanism for achieving sustainable development”, National Conference on Future Studies in Management and Development, p. 2-21.
- Khoshnevis, Sedighe (2007), "Investigating the Service Oriented Architecture", Master's Seminar Report, Islamic Azad University, Sciences Branch Research, Faculty of Engineering, Department of Computer Engineering.
- Kimjani, Akbar and Salatin, Pravaneh (2010) "The Impact of Governance on Economic Growth in Iran and Selected Countries Neighbor (Turkey and Pakistan)", Journal of Management Researcher, Volume 7, No. 20, p. 27-41.
- Meidari, Ahmad and KheirKhahi, Jafar (2004), “Good Governance: Development Foundation”, Parliamentary Research Center, Office Economic Reviews, First Printing, Tehran.
- Nobari, Nazok and Rahimi, Mohammad (2010), "Good urban governance is an undeniable necessity," Tehran City Center for Study and Planning, Knowledge City, No. 11, pp. 2-19.
- OPM, C. (2004). Good Governance Standard for Public Services. The Independent Commission on Good Governance in Public Services, Office for Public Management Ltd & The Chartered Institutes of Public Finance and Accountancy. Printed by Hackney Ltd.
- Shams, Fereidon and Razi, Ali (2007), "The Need for Agility Idea in Organizational Architecture", Fourth International Conference on Information and Communication Technology Management, Call for the Economy of the Morning.
- Tabarsa, Gholamali; Ghochani, Farokh and Badin Dahsh, Mehran (2015), "Investigating the Effect of Good Governance on Social Capital", Journal of Social Capital Management, No. 4, pp. 177-198.
- Yousaf, M., Ihsan, F., & Ellahi, A. (2016). Exploring the impact of good governance on citizens' trust in Pakistan. *Government Information Quarterly*, 33(1), 200-209.