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USING MCKINSEY 7S MODEL TO MEASURE PERFORMANCE OF THE BANKS, CASE STUDY: BANKS IN OUARGLA PROVINCE

*Khouildat Salah*¹, *Bachir Benchouiha*²

¹Department of Commerce, University of Ouargla, Algeria.

² Department of Management, University of Ouargla, Algeria

Email: ¹<u>s.khouildat@yahoo.fr</u> ²<u>bachirbenchouiha@yahoo.fr</u>

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ABSTRACT :

Measurement of performance is important to the financial sector as an additional way of improving and sustaining competitiveness in the long-term. Most large financial institutions and banks worldwide practice performance measurement models because they believe it affects their business positively in the longer-term. Performance measurement models is thus, recognized as an important way of keeping banks on track in achieving its strategic objectives. The aim of this paper is to examine the hard and soft variables of McKinsey 7S model and its impact on success and banks performance. To achieve this objective, data were collected through surveys using a structured questionnaire administered to 52 Employees from 5 banks in ouargla province in algeria-, The data obtained was computed electronically by the use SPSS.23, were analysed statistically using analysis of Pearson Correlation, and X 2, The results of the analysis revealed that There is no significant relationship between McKinsey 7S hard and soft variables and the performance of the 4 banks, but there is a Strong correlation between hard and Soft variables.

INTRODUCTION:

According to many industrial and service enterprises; the process of evaluating performance is an important element in the effective governance, and it is playing an increasing role in managing the internal and external activities of these enterprises. There is general agreement in the management literature and performance evaluating that organizational performance relates to building multi service model. This model based on the measurement of input, activities and output, as well as to measure the intended productivity. The measurement performance of the enterprises has evolved from its traditional form that based

on comparing findings with efforts; to its modern form based mainly on autonomous and integrated processes, which start with measurement the plans and ends with measurement these processes and controlling them. Therefore, the enterprises can control its function's behavior in an environment that has many variables. That is why the enterprises developed new model to measure performance. These measures based on the quality and quantity ways, and they related to financial and non-financial as well as to measure the quality of the general strategy, the message and the vision. There are many models to measure the private and public, commercial and industrial enterprises 'performance including EFQM; the European Foundation for quality Management; BSC: the Balanced scorecard, VC: Value Chain; FPA: framework performance appraisal, and Mckinsey 7S. This study will focus on MCKinsey 7S, to measure the activities of enterprises, this model includes seven measurable variables: the structure, strategy, system, abilities, style, employees and common values. The aim of this paper is to examine the hard and soft variables of McKinsey 7S model and its impact on success and banks performance. To achieve this objective, data were collected through surveys using a structured questionnaire administered to 52 Employees from 5 banks in ouargla province in Algeria.

PART ONE: THEORETICAL BACKGROUND

The Measurement of Performance

The organizational performance relates to the survival of the enterprise. The performance term used as exchangeable term with effectiveness in the conceptual side, and there was no autonomy between the two terms. A survey study was conducted over 35 years ago on four leading management journals showed that there is no autonomy between the two terms, After that, the term performance became more dominant and used to express the competency; the effectiveness and productivity of the enterprises. (Henri, 2004)

Researchers and academic experts disagree in the definition of performance which is recognized as a central outcome variable of interest, ranging from such disparate areas as HR and marketing to operations management, international business, strategy and information systems (Satwinder el al., 2016) Richard et al.(2009) defined performance on the side of internal variables as'' a set of both financial and non-financial indicators capable of assessing the degree to which organizational goals and objectives have been accomplished. (Richard el al., 2009) Performance measurement is a process by which an organization monitors important aspects of its programs, systems, and processes. In this context, performance measurement includes the operational processes used to collect data necessary for the performance measures. (RBP, 2008; OFM, 2009; Anca et al, 2013)

Performance measurement is defined also as a set of processes that compare the goals and objectives. Moreover, it provides data and information on the status of the enterprise and how its resources to optimize the programs' efficiencies, effectiveness, programs and strategies. The process of performance measurement depends on an integrated vision that includes: (David el al., 2013; Boyle, 2000; Ki-Young & Don T, 2001)

Economic measurement: it depends on economy indicators, which are primarily concerned with inputs and show the cost of acquiring services such as staff, premises and it controls the needs and requests of posts. If the needs of some posts seem to be more purchasing than others, what will happen to this post?

Efficiency measurement: an indicator concerns the relationship between output and input.

Effectiveness measurement: this indicator depends on showing the outcome and the result of enterprise's activities like: the percentage of the recycled waste or the percentage of pollution.

Equity measurement: an indicator relates to the administrative justice, which effect the general performance of the posts and employees.

Services quality measurement: this indicator based on attracting the clients and keeping them. The enterprise tries to provide the best services and the high quality may affect any other elements of performance.

According to David et al 2001, the importance of performance measurement relates to providing information that helps in improving the quality of products and services provided then determining the degree of achievement of the set objectives. Lebas (1995) pointed out that by the process of performance measurement the managers and directors try to answer two main questions: why do we want to measure? What do we want to measure?. The researcher adds many other questions that reflect the importance of the process of performance measurement: (Paige , 2013)

Where we have been?: this question relates the scorecard and about the past to understand how we got to where we are.

Where are we now?: the answer of this question is about the status of updating the systems that define the status of the enterprise and to determine the assessment of the possibility of the achievement in the future.

Where do we want to go?(the accepted goals and objectives): the need to support the achievement of goals .

How are we going to get there?(assessment of the results and output of the activities): the measures must support the budgeting and planning activities How will we know we got there? the measures must feedback information about whether objectives and targets have been achieved.

In addition to the above, Kaplan and Norton indicate that the importance of the organizational performance measurement can be summarized as follows: (Nikos, Georgia, & John, 2013)

- By diagnosing the internal and external environment and the formulation of plans, the strategy of the enterprise will be improved.

- Performance measurement relates to the enterprise's goals strategies and functions. The process of measurement provides data and information that contribute to make the best decisions and measure its performance.

- The process of measurement creates compatibility between individual and private objectives of the functions and the general strategy of the enterprise that is why performance measurement is a part of the information system at the micro job levels.

- In general, performance measurement focuses on organization in terms of basic laws that the enterprise needs to create a creative level of performance and it helps to integrate backward programs in the enterprise.

Performance Measurement Orientation:

To determine which functions, activities, plans and strategies achieve the enterprise's goals, the process of performance measurement is used. Many performance measurement orientations identified by a group of researchers. The enterprise can apply one orientation or all of them in the same time. See table 1

Table	(1):	The	Main	Orientations	to	Performance	Measurement	in	The
Enterp	rise								

orientation	The orientation of the enterprise	The scope of performance measurement	The author of the orientation
The goal	A rationally oriented enterprise and the targeted objectives.	The degree to which objectives are achieved.	Etzioni 1960
The system	The enterprise is an open system (input, processes, output and the result.	Input, the need to resource	Yuchtaman and Seashore 1967
The strategic circle	The enterprise deals with internal and external variables.	The response to the stakeholders, agents, suppliers and enterprise.	Connolly et al.1980
Competitive values	The enterprise is a set of Competitive values and it creates competitive struggles.	Performance focuses on the internal and external variables, control, flexibility, result and tools.	Quinn and Rohrbaugh 1983
Effectiveness	The enterprise is a set of problems and mistakes.	To study the factors that are preventing performance measurement's success.	Cameron 1984

Source: (Henri, 2004)

The table (01) concludes that performance orientation may related to the goal. Through performance, the enterprise focuses on the degree to which goals are achieved. Which reflects in the outcome of the activity, benefits, increase in sales, and the quality and market share. In general, Performance may related to the system. Inputs are measured and quality in improving processes and thus obtaining quality outputs. Performance measurement that is related to competitive values, this Performance concerns the determination and measurement features and advantages of the competitiveness, which distinguishes the enterprise from any other enterprises active in the market.

Mckinsey 7s Model to Measure Performance:

Currently, the financial indicators are not reliable to explain the market position of the enterprise. Therefore, should go towards measuring intangible elements. These intangible elements have a great effect in achieving the goal of survival, continuation and sustainability. One of these models that use the non-financial is MCKINSEY 7S model.

Definition Of Mckinsey 7s Model:

Manage (2007) defines the McKinsey 7S model as a model of organizational effectiveness used in organizations to analyze the environment to investigate if it is achieving its intended objectives. (Mustafa & Dogu , 2018) The McKinsey 7S model is a holistic approach to company organization, which collectively determines how the company will operate. (Shaqrah, 2018)

The McKinsey 7S Model was created by Tom Peters and Robert Waterman while they were working for McKinsey & Company and by Richard Pascale and Anthony Athos at a meeting in 1978. (Gechkova, T & Kaleeva, 2020) They had been looking at how the Japanese industry had been so successful; at around the same time that Peters and Waterman were exploring what made a company excellent. The Seven S model was born at a meeting of the four authors in 1978. It went on to appear in "In Search of Excellence" by Peters and Waterman, and was taken up as a basic tool by the management consultancy McKinsey. Meckinsey 7s model depends on: (Maru, 2015)

- Problems are not always problems.
- Build model of plans according to M.E.C.E
- A continuing effort to renewal and development.
- Each agent is unique.
- Do not make the facts fit with the solution that you are looking for.
- Make sure that the solutions that suit your agent.
- Sometimes, let the solutions come to you.
- There is no unsolved problems.

Elements Of Mckinsey 7S:

According to the model, the managers must take into consideration the seven main factors to ensure the successful implementation of the strategy. These factors include the structure, the system, the style, staff, shared values and skills. These factors are interrelated with each other and effect each other. Barney 1991 said that the Mckinsey 7s assumes the success of enterprises when they integrate the seven factors. These factors are divided into hard and soft elements. Strategy, structure and systems are hard elements, on the other hand, style, staff, skills and shared values are soft elements. Those elements can be explained as follows: (Ravanfar, 2015; Gechkova, T & Kaleeva, 2020; Baishya, 2015; Gyepi-Garbrah & Binfor, 2013)

- **Strategy :** actions an enterprise plans in response to achieve its goals and vision. It explains also its way of coping with opportunities and threats in its environment. In the other hand, it a plan developed by an enterprise to achieve sustained competitive advantage and successfully compete in the market positioning. There is another strategy called well aligned strategy which is strategy is articulated, is long-term, helps to achieve competitive advantage and value.

- **Structure:** structure is the organizational chart of the enterprise. It includes positions, information of who is accountable to whom. It includes also the units and the employers within the scope of dependency and excellence .

- **System:** Mallya 2007 found that system is formal and informal measures. These measures helps in correcting the daily activities of the enterprise like communication, control and transportation or information sharing. According to MCKinsey 7s, System is how business is done and how it should deal with organizational change.

- **Style:** it expresses the orientation of the management, and how it should deal with daily problems. Style determines the difference between the formal and informal ways of the management. In Mckinsey 7s model, the management style expresses the role of the managers and what they do than how do they spend their time?

- **Staff:** it refers to the human resources of the enterprise, the relation between them ,motivation management and their loyalty as well as their behaviors towards the enterprise. The numbers of employees will be assessed, how are they hired, trained and motivated?.

- **Skills:** it includes all the professional skills, comprehensive knowledge to the enterprise and how management style and organizational work affect them. The type of skills the institution needs to support its strategies is determined in Mckinsey 7s model.

- **Shared values:** the concepts and the values that the enterprise is pursuing in to express its vision. Shared values are the main element in Mckinsey model. There are many standards that direct employees 'behavior and the activities of the enterprise. These values will be measured by changing the values of the enterprises.

As conclusion, we can say that the managers should understand the seven elements of MCKinsey 7s model and try to improve and develop these elements in line with the objectives of the enterprise. This model is used to know strengths and weaknesses in the environment, which creates a balance of the enterprise's activities and improves overall performance of this enterprise. The Mckinsey 7s model helps in clarifying the status of industrial and service enterprises through its proper application to access the right findings.

PART TWO: THE PRACTICAL ASPECT

1- The study population: it includes all the employees in the five banks. These banks are: Agricultural and Rural Development Bank 'BARD', Local Development Bank ''LDB'', the Algerian International Bank 'AIB', the Algerian National Bank 'ANB', and the Algerian Popular Credit 'APC' in the city of Ouargla. The sample are 70 employees (men and women). The study was conducted in form of questionnaire and by using direct distribution and collect data directly or by e-mail. About 52 questionnaire was recovered . 2- Survey instrument: it consisted of a questionnaire which includes:

First part: personal information about the sample such as gender, old, job and educational level. **Second part:** it includes 4 paragraphs measure the general performance of the bank. **Third part:** it includes 9 paragraphs measure the hard variables. **fourth part:** it includes 8 paragraphs measure the soft variables.

To know the degree of acceptance, the Likert five scale was adopted and the SPSS.23 program was used to analyse the respondents.

The Analyzing of The Respondents:

Analyzing The Personal Information:

Information	The repetitive	
gender	Males(37),	
	females(15)	
Age	30 years old and less(6),	
	30-40 years old(11)	
	40-50 years old (23).	
	50 and more (12)	
Educational Level	Higher education diplomas(6),	
	license or master (31),	
	vocational training(7),	
	Bac diploma and less(7)	
Experience	3years and less (11),	
	3-7 y(23),	
	seven years and more (18)	

Table (2): The Distribution of The Variables of Personal Information.

Source: prepared by the researchers based on the respondents of the population.

According to the above table, we see that 71.15./. of the population are males. 44.23./. of the sample population are between 40-50 years old and 59.61./. have master and license diplomas as well as ./.44.23 have experience between 3-7 years old.

Cronbach's Alpha:

According to the study, the value of Cronbach equal 0.9018, which is calculated through 21 questions. That is, staff stability ratios in the employees' responses is 90.18, this percent is very high and it helps in analyzing.

Variables Of Performance Measurement:

Table (3): the arithmetic mean and the standard deviation of the population's responses about the performance measurement.

Questions of the first	the arithmetic	the	Trends
theme: performance	mean	standard	
measurement		deviation	
1. Performance			
measurement relates to	3.5	1.006	agree
the financial indicators			
like: profit, return on			
assets and value added			
2. Performance			
measurement contributes	3.62	1.132	neutral
to determining market			
outcome such as: stock			
prices, interest rate,			
dividend			
3. Performance			
measurement relates	3.74	1.170	neutral
directly to the			
organizational activities			
which reflected in the			
quality of the Bank			
services			
4. The process of			
measuring human	3.56	1.023	agree
resource outcomes affects			
the quality of the service			
and the reputation of the			
Bank like: job			
satisfaction.			
The total of the	3.605	1.082	agree
first theme			

Source: prepared by the researchers based on SPSS.23.

According to the above table, that shows the variables of performance measurement in banks, we note that the studied sample agreed to the third question with an arithmetic mean of 3.74. the researcher thinks that the employees of the banks consensus about performance measurement, because of their knowledge of job integration and its processes in achieving quality banking service and competitive advantages. In the other side, the least

question agreed by employees is the first question with an arithmetic mean of 3.5. according to the researcher, the studied sample know that the financial indicators are not enough to assess the performance of banks.

The total arithmetic in the first theme, which represents performance measurement, was 3.605 (3.40-4.19) in lickert scale. This means that banks' employees think that there is an integration in performance evaluation between financial and non-financial indicators.

Analyzing The Hard Variables Of 7s Model:

Table (4): the arithmetic mean and the standard deviation of the population's responses about the measurement of the hard variables of 7s model

Questions Of the Second Theme: The Hard Variables Of	The Arithmetic	The Standard	Trends
7s Model	Mean	Deviation	
The strategy			
1. The strategy is the			
achievement of the medium and	3.20	1.297	
long-term objectives that relate			Neutral
only to profit.			
2. The strategic vision of the			
banks serves the stakeholder like:			
agents, employees and local	3.69	1.186	
community.			agree
3. The strategic message of			
the banks aims to achieve the	3.44	1.31	
duality of internal consent.			agree
The structure			
4. The type of the			
organizational structure effects the	3.68	1.199	
banks activities and the quality of			agree
service.			
5. The interdependence of			
jobs and departments in banks	3.32	1.156	
affects the quality and reliability			Neutral
of the service			
6. The structure contributes			
in determine the type of decisions	3.32	1.156	
taken in the bank (central and non-			Neutral
central).			
The system			
7. The financial indicators			
determine the type of the system	3.18	1.288	
applied in the bank.			Neutral
8. The management of human			
resources, information and the	3.78	1.231	
technology effect the functioning			agree
of the system.			

9. The process of control the system helps in achieving the quality of bank service.	3.65	1.189	agree
Total of the second theme	3.472	1.223	Neutral

Source: Prepared by the researchers based on SPSS.23.

According to the above table that shows the measurement of the hard variables, it seemed that the studied sample have agreed on the second question with an arithmetic mean of 3.69. The researcher sees staff consensus on the strategic vision, because it aimed at serving all parties, especially those with an impact on the profitability of the Bank. About the structure, the studied sample have agreed on the 4 question with an arithmetic mean of 3.68. as for the system in the bank, the individuals have agreed on the 8 question with an arithmetic mean of 3.78. Minimum values showing disapproval of the sample to questions associated with the hard variables of 7s model. In the side of strategy, the sample have not agreed on 3 question and the average arithmetic was estimated at 3.44. with regard to the structure, the sample have not agreed on 5 and 6 question with an arithmetic mean of 3.32. as for the variable of system, the sample have not agreed on 7 question with an arithmetic mean of 3.18.

The total arithmetic of the second theme was 3.472(3.40-4.19) in Lickert scale, which means there is an approval of the bank's employees with the effect of the hard variables on the quality, efficiency and reliability of the provided service. This effect is specific for its market competitiveness.

Analyzing The Soft Variables Of 7s Model:

Table (5): the arithmetic mean and the standard deviation of the population's responses about the measurement of the soft variables of 7s model

Questions Of The Second Theme:	The	The	Trends
The Soft Variables Of 7s Model	Arithmetic	Standard	
	Mean	Deviation	
The style			
1. The leadership style is			
reflected in the performance of			
Bank activities. It necessarily			
reflects acceptance or refusal of	3.93	1.111	
service by agents.			agree
			U
2. There is style of			
collaborative team of the	2.62	1.151	
individuals to do the activities that			Neutral
help to improve the quality of			
service.			
The skills			
3. There is a gap between the			

skills and capacities of the bank employees and the quality of their	3.59		agree
organizational performance.		2.1.040	U
4. The personal individual			
skills are more important than the			
skills acquired by the bank	2.90	1.165	Neutral
employees such as training or			
formation.			
Staff (employees)			
5. The higher education			
diplomas are very important to			
determine the responsibility of the	3.18	1.228	Neutral
position in the bank.			
6. There is kind of employees			
that their mental and behavioral			
attitude can effect performance of	3.78	1.531	agree
the activities and the quality of			_
services.			
Shared values			
7. The bank aims to achieve			
shared values of the employees,	3.07	0.952	
agents and bank.			Neutral
8. The culture of the bank and			
the managers effect directly the	3.45	1.113	
service delivery methods and its			agree
quality.			
The total of the third theme	3.351	1.168	
			Neutral

Source: Prepared by the researchers based on SPSS.23.

According to the above table of measurement the soft variables, the studied sample are agreed to accept 1 question with 3.93. the researcher thinks that the opinions of bank's employees are agreed on the leadership. As for the skills, the studied sample have agreed on 2 question with the arithmetic mean of 3.59. this is due to the quality of the bank service that affected by the skills of service providers. As for the staff in the bank, the individuals have agreed on 6 question with an arithmetic mean of 3.78. in their view, the psychological and behavioral attitudes effect the quality of the services. Minimum values showing disapproval of the sample to questions associated with the soft variables of 7s model, in the side of style, the sample have not agreed on 2 question and the average arithmetic was estimated at 2.62. with regard to the skills, the sample have not agreed on 4 question with an arithmetic mean of 2.90. as for the variable of the staff, the sample have not agreed on 7 and 8 question with an arithmetic mean of 3.07 and 3.45.

The total arithmetic of the third theme was 3.351(3.40-4.19) in Lickert scale, which .means there is a refusal of the bank's employees that there is no effect of the soft variables on the quality, efficiency and reliability of the provided

service.

Testing the hypotheses and Discussion:

The researcher determines three hypotheses in this study these hypotheses were analyzed by SPSS.23 program, and the following results were reached:

4-1- first hypotheses: H1 There is a moral relationship between understanding performance measurement and hard variables.

According to chi-squared test (x^2) , we find that T has no statistically significant at the level of morale 0.05, so, we will accept the null hypotheses H0 and we refuse the alternative hypotheses H1, this means there is no moral relationship between performance measurement and the hard variables.

Table (6): the results of Chi-squared test of the first hypotheses.

	Sample	Chi test	The degrees of freedom	The level if indication
The first hypotheses	52	2.486	220	0.90

Source: Prepared by the researchers based on SPSS.23.

4-2- second hypotheses: H2 There is a moral relationship between understanding performance measurement and soft variables.

According to chi-squared test (x2), we find that T has no statistically significant at the level of morale 0.05, so, we will accept the null hypotheses H0 and we refuse the alternative hypotheses H1, this means there is no moral relationship between performance measurement and the soft variables.

Table (7): the results of Chi-squared test of the second hypotheses.

	Sample	Chi test	The degrees of freedom	The level if indication
The	52	2.097	198	0.271
second				
hypotheses				

Source: Prepared by the researchers based on SPSS.23.

4-2- third hypotheses: H3 There is a strong correlation between hard and soft variables of the MCKinsey 7S model in the banks of Ouargla.

According to Pearson Correlation its value 0.164 on the level of indication 0.05, so, we will accept the null hypotheses H0 and we refuse the alternative hypotheses H1, this means there is a strong correlation between hard and soft variables of the MCKinsey 7S model

	Sample	Pearson	The degrees	The level if indication
		Correlation	of freedom	
The third	52	0.164	2-tailed	0.05
hypotheses				

Table (8): the results of Pearson Correlation of the third hypotheses.

Source: Prepared by the researchers based on SPSS.23.

PART THREE: CONCLUSIONS AND RECOMMENDATIONS

As a conclusion of this study, I found that the processes of performance measurement in enterprises or banks has become very important because it provides data and information that contributes to improve the quality of activities and this is reflected in the quality of goods and services. Because enterprises are active in a competitive environment, they had to analyze their internal environment by identifying strengths and weaknesses and analyzing the external environment to exploit opportunities and reduce or avoid threats. This analysis cannot be applied without measuring the performance of the plans, strategies, visions and messages, and because banks can't apply independent or new models, it had to analyze the adoption of performance measurement methods. The study concluded that Mckinsey 7s model is primarily based on measuring and determining the weight of the internal variables like: the hard variables(the strategy, structure, system) and the soft variables(the style, skills, staff, shared values), which have an effect in improving the quality of the services provided in the banks. Several conclusions can be drawn :

- Performance measurement is an important element in banks; this is due to the nature of the intangible services they provide and the gap must be measured by determining the expected and perceived quality.

- The adoption of measurement models helps managers understand the importance of determining the degree of performance, which are not only determined by financial indicators, but also by indicators of customer satisfaction, competitive advantage and level of acceptance, all are non-financial indicators.

- Mckinsey 7s model has been developed to measure the internal environment variables in banks, these variables have an important role in designing the service and supporting the efforts of in-house offices that are developing new services or improving available services.

- Despite functional specialization, there is a lack of understanding of the hard and soft variables of a model by the study sample. The results showed that these sample don't accept the application or the use of the model's variables to improve the service.

- In general, some banks apply some hard and soft variables without understanding them, this is not enough to achieve an effective process of performance measurement that contributes to produce market-competitive bank services.

- The central role and nature of the Algerian banks (public banks) contributed to the non-application of the Mckinsey 7s model or even other models, because the services in question are required even if they are of poor quality.

- The culture of the manager at the bank level is to apply planned and unplanned decisions, because he sees himself as part of the implementation of ready-made plans. Therefore, there is no innovative culture that would build performance measurement models.

- Local banks are required to provide services, achieve financial results and support the local market, and measuring their performance is related only to sustainability in service and is not concerned with their quality, efficiency and its delivery time.

REFERENCES:

- Anca , D., Anca-Diana , P., & Luminita, M. (2013). A Proposed Model for Monitoring Organizational Performance. Social and Behavioral Sciences, 544 – 551.
- Baishya, B. (2015). McKinsey 7S framework in corporate planning and policy. *International Journal of Interdisciplinary Research in Science Society and Culture (IJIRSSC), 1*(1), 165-168.
- Boyle, R. (2000). Performance measurement in local government. *CPMR*, 1-44.
- David, G. G. (2013). Economic measurement of medical errors using a hospital claims database. *Value in Health*, *16*(2), 305-310.
- Gechkova, T, & Kaleeva, T. (2020). The mckinsey 7s model in the airport system protection. *KNOWLEDGE-International Journal*, 42 (5), 843-848.
- Gyepi-Garbrah, T. F., & Binfor, F. (2013). An analysis of internal environment of a commercial-oriented research organization: Using mckinsey 7S framework in a ghanaian context. *International Journal* of Academic Research in Business and Social Sciences, 9(3).
- Henri, J. (2004). Performance measurement and organizational effectiveness: bridging the gap . *Managerial Finance*, *30*(6), 93-123.
- Ki-Young, J., & Don T, P. (2001). Operational efficiency and effectiveness measurement. International Journal of Operations & Production Management, 21(11), 1404-1416.
- Maru, B. W. (2015). Application Of The Mckinsey 7s Model In Strategy Implementation At The Kenya Revenue Authority. Kenya, The University Of Nairobi.
- Mustafa, S. S., & Dogu, K. (2018). An Analysis of McKinsey 7-S Model and Its Application on Organizational Efficiency. *International Journal of Scientific and Technological Research*, 4(7), 103-111.
- Nikos , K., Georgia , B., & John , V. (2013). Balance Scorecard and Performance Measurement in a Greek Industry. *Procedia Economics and Finance*, 5, 413-422.
- OFM. (2009). *Performance Measure Guide*. USA: Washington State Office Of Financial Management.
- Paige , C. E. (2013). Business Performance Measurement Use In A Small-to-Medium Enterprise: A Case Study. newzealand, massey university, newzealand.
- Ravanfar, M. M. (2015). Analyzing Organizational Structure Based On 7s Model Of Mckinsey, *Global Journal of Management and Business Research: A Administration and Management*, 15(10), 6-12.

- RBP. (2008). Performance Measurement System. In R. B. Practice. ScienceDirect.
- Richard, P. J. (2009). Measuring organizational performance:towards methodological best practice. *Journal of Management*, *35*(3), 718-804.
- Satwinder, S., Tamer, K., & Kristina, P. (2016). Measuring Organizational Performance: A Case for Subjective Measures. *British Journal of Management*, 214-224.
- Shaqrah, A. A. (2018). Analyzing business intelligence systems based on 7S model of McKinsey. *International Journal of Business Intelligence Research (IJBIR)*, 9(1), 53-63.