

STRATEGIC INFORMATION SYSTEMS AND THEIR IMPACT ON ORGANIZATIONAL PERFORMANCE

Mustafa Maki Khadam

Supervisor: Abd Alrasak Abd Alkareem Alshekle

Baghdad University, Faculty of Management and Economics

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ABSTRACT

The aim of the research is to identify the impact of Strategic information systems in organizational performance, as Strategic information systems and organizational performance represent two cognitive areas that have been the focus of many studies, Center of the Ministry of Planning and Development Cooperation of Iraq was selected as a study site and the analytical descriptive research method was used, also a questionnaire was adopted as a main tool in the collection of in depth data and information, after that it was distributed to a sample of (61) members of the high and middle leadership, The researcher used correlation coefficient (Spearman) and regression analysis for relationship analysis and hypothesis testing.

Key Words: Strategic Information Systems, Organizational Performance

LITERARY REVIEWS

A. Strategic Information Systems

A system that is strategic if it is consistent with business objectives and strategies, and if it has an impact on organizational performance .

The Dimensions of Strategic Information Systems:

- **Information:** Data items that are consistent with the purpose and importance of the decision .
- **Knowledge workers: People** who have the motivation and ability to participate in creating new insights and the ability to communicate, train and facilitate the implementation of new ideas.
- **Information Technology:** All types of technology used to operate, transport, and store information in electronic form, including computer technology, communications, networking, fax and other equipment used in communications.

B. Organizational Performance

Is a measure of the value created by the organization, financial or non-financial results resulting from management decisions and the implementation of those decisions by the members of the organization.

The Dimensions of Organizational Performance:

- **Growth and learning:** The infrastructure needed to achieve the objectives of other perspectives of the Balanced Scorecard. The most important areas of this perspective are rehabilitation, incentives and targeting of staff and information systems.
- **Satisfaction of the Beneficiary:** Attention to customers and how to attract and maintain them.
- **Internal processes:** The main measures include the design and development of services and the efficiency and quality of services.

RESEARCH METHODOLOGY

a) Research Problem

Information systems are no longer just an instrument used by the Department to improve organizational performance but have become a fundamental feature of its ability to meet the multiple and varied challenges posed by the internal and external environment. The role of information systems is even greater due to developments and increased community awareness and the multitude of services organizations need to keep pace with These developments and changes in the environment have been addressed in the strategic information systems in order to help and provide organizations with information about the future. Hence, this study examines the relationship between strategic information systems and their impact on organizational

performance. Organizations can not achieve good organizational performance in the presence of a strategic information system.

b) Research Hypotheses

Based on the research problem and the main objectives, the research hypotheses are developed in a way that explains the problem of research and helps in answering its questions, the hypotheses are as follows:

1. The first main hypothesis: There is significant statistical significance between the strategic information systems and organizational performance.
2. The second main hypothesis: There is a significant impact of strategic information systems in organizational performance.

c) Research Sample and Community

In order to achieve the objectives of the research, the researcher carried out field visits to the Ministry of Planning and Development Cooperation and conducted a comprehensive survey of the views of the senior officials in all of them as a research society (agents, general managers, department heads in the Ministry of Planning) (Ministry center consists of nine departments, two ministry agents, the minister's office). A sample of the top leaders in the ministry's center was composed of 61 people distributed the questionnaire to the sample of the top leaders within a period of time (15/01/2018 -2 / 3/2018). When the questionnaires were submitted to the audit stage, it was found that there were (2) two questionnaires that did not reach the stage of statistical analysis because they were not completed in the correct scientific form. Thus, the size of the research sample was included in the statistical analysis stage 59 respondents, And the results of their answers were statistically analyzed using the statistical program (SPSS). The results were explained in order to test the hypotheses of the research and to draw the conclusions and recommendations of these results.

d) Research Tools

The researcher adopted the questionnaire as one of the means of completing the research as the main source of data and information related to the practical aspect and part of the research. The questions were organized according to the main axes. The first is the strategic information systems, which is included as an independent variable with three dimensions (knowledge workers, , And the second axis is the organizational performance as a three-dimensional variable (growth and learning, operational performance, beneficiary satisfaction). Table (1) shows the number of questionnaires and approved sources used in the drafting of this questionnaire, As qualified, was used Likert scale to deal with the answers to respondents because they are more convenient in a reply to the questionnaire, the alpha Cronbach coefficient was calculated for each axis of the

questionnaire and got an excellent ratio of 94%, which was able to rely on the results of this questionnaire in this stud

Table 1 (Variables, sub-variable, number of paragraphs, the source adopted in the scale)

Variables	Sub-variables	Number of Paragraphs	Source
Strategic Information Systems	Information	5	Al yasre et al: 2016 Model
	Knowledge workers	5	
	Information Technology	6	
Organizational Performance	Growth and learning	7	Kaplan&Norton :1996 Model
	Satisfaction of the Beneficiary	6	
	Internal processes	5	

Table 2 (Options according to the Likert scale)

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5-4.21	4.20-3.41	3.40-2.61	2.60-1.81	1.80-1

Table 3 (Stability Alpha Cronbach coefficient value)

Questionnaire axes	Alpha Cronbach coefficient value
Strategic Information Systems	0.840
Organizational Performance	0.385
All axes	0.875

DATA ANALYSIS

In general, and through the level of answers to the sample of the search for the dimensions of the axis of the strategic information systems, as shown in Table (4), this axis achieved an arithmetic mean of (3.80), which is greater than the value of the satisfactory mean of (3) 5), which gives an indication of the high degree of response expressed by the respondents direction of the dimensions of all axis, that is, the status of the ministry in question has succeeded to a large extent in the application of this axis according to the opinion of those included in the questionnaire, but did not reach the optimum degree, which calls for review of the implementation of paragraphs of those dimensions In which she was aware that the responses were moderately high In the future, the value of the general standard deviation of the strategic information systems (0.37) axis indicates the lack of dispersion in the sample responses. This is a result of the large consensus levels in general and the exclusion in particular, despite the divisions and high levels of neutrality in the opinions of the sample members, Gave a high degree of homogeneity to the sample of the search.

Table 4 (The results of the statistical analysis of sample responses)

Variables and sub-variables	Arithmetic mean	Standard deviation
Strategic Information Systems	3.68	0.51
Information	3.55	0.61
Knowledge workers	3.74	0.50
Information Technology	3.70	0.70
Organizational Performance	3.56	0.52
Growth and learning	3.62	0.59
Satisfaction of the Beneficiary	3.49	0.59
Internal processes	3.57	0.71

RESULTS

• Variables Correlation

In order to make a decision on the first main hypothesis of research, which is related to the study of the relationship between the strategic information systems and the organizational performance, which results in three sub-hypotheses, the relationship between the variables will be determined by calculating the correlation coefficient of Spearman or the so-called correlation coefficient between each dimension of the strategic information systems (Knowledge, information, information technology) and the organizational performance axis in its dimensions (internal processes, growth and learning, user satisfaction), using the SPSS . The value of the knowledge workers was positively correlated with the total organizational performance at a significant level (0.05) with a correlation coefficient of (0.441) which was significant because the value of the t-test (3.709) 2.002), that is, whenever there is a development in the knowledge workers in the center of the ministry under consideration in the sample led to the rise and evolution of organizational performance in them. The data variable was positively correlated with the total organizational performance axis at a significant level (0.05). The correlation coefficient of Spearman (0.524) was significant, and the value of the t-test was 4.644.), And this result means that whenever there is a rise and increase in information in the center of the ministry in question, this led to the rise and evolution of organizational performance .

In general, the IT variable achieved positive positive correlation with the total organizational performance axis at a significant level (0.05) with a correlation coefficient of (0.414). (The researcher observed at the general level that after the information technology was a stronger correlation than other dimensions with organizational performance) Which is a significant function of the value of the t-test associated with it (3.433), which is larger than the scale equivalent of (2.002)? This result means that whenever there is a rise and increase in information technology in the ministry's center under study, In which. *Table 5*

Table 5 (Correlation factors between the dimensions of strategic leadership and the axis of strategic change)

Strategic Information Systems			Research Sample
Organizational Performance	Information	Correlation	0.524**
		Sig.	0.000
	Knowledge workers	Correlation	0.441**
		Sig.	0.000
	Information Technology	Correlation	0.414**
		Sig.	0.000

Table 6 (Regression of variables results)

Strategic Information Systems		Unstandardized Coefficients		Calculated (t) Value	Sig	Coefficient of Determination (R)	Calculated (F) Value	(F) Level	Dependent variable
		a	β						
Knowledge workers	a	1.64	5.11	1.01	0.22	16.22	0.01	Organizational Performance	
	β	0.47							
Information	a	1.81	7.84	0	0.024	17.67	0		
	β	0.49							
Information Technology	a	2.55	6.55	0	0.24	18.15	0		
	β	0.49							

Regression Variables:

On the overall level of the influence of knowledge workers on organizational performance, the table of variance analysis showed the calculated value of (16.22), which is larger than its quadratic counterpart. This means a significant effect of knowledge workers on organizational performance in its general form. ($[R]^2$) has reached (0.22) indicating the knowledge workers'

interpretation of nearly a quarter of deviations in organizational performance. The regression equation can be written for the impact of knowledge workers on organizational performance as follows:

$$\text{Organizational Performance} = 1.64 + (0.47) \text{ Knowledge Workers}$$

The value of (β) which reached (0.47) refers to the effect of knowledge workers in organizational performance, ie, the more knowledge workers increased by one unit, the organizational performance at the ministry's position increased by 47% This result is a clear indication of the acceptance of the first sub-hypothesis, which states that there is a significant effect of knowledge workers in organizational performance

The value of the variable was calculated from the variance analysis table (17.67), greater than the quadratic equivalent of (4). The value of the coefficient of determination ($[R]^2$) of 0.24 refers to Interpretation of information for about a quarter of deviations in the axis of organizational performance, as the regression equation can be written to the impact of information in organizational performance as follows:

$$\text{Organizational Performance} = 1.81 + (0.49) \text{ Information}$$

The value of β (0.49) reflects the amount of the random effect of information in organizational performance. In other words, the greater the information by one unit, the greater the organizational performance in the ministry's position in question. This hypothesis is an indication of the acceptance of the second sub-hypothesis, which states that there is a significant effect of information on organizational performance

The value of (F) calculated from the analysis table of variance (18.15) was greater than the quadratic equation of (4), while the coefficient of selection ($[R]^2$) was about (0.24) The value of the limiting factor refers to the interpretation of information technology for about a quarter of deviations in organizational performance. The regression equation for the impact of information technology in organizational performance can be written as follows:

$$\text{Organizational Performance} = 2.55 + (0.49) \text{ Information Technology}$$

The value of the regression coefficient (β) of (0.49) indicates the amount of the effect of information technology on organizational performance, ie, the more information technology increased by one unit, the higher the organizational performance in the ministry's position in question increased by (49%). The overall level is approximated by the effect of the dimensions of strategic information systems (0.47, 0.49 and 0.49). Information and information technology are the most prominent influence of knowledge workers. Since there are significant effects of all hypotheses proposed within this hypothesis, this implies acceptance of the third sub-hypothesis, Of moral information technology in organizational performance

The independent variable (strategic information systems) accounted for 46% of the total deviations in the values of the approved variable (organizational performance), which was reflected by the value of the limiting factor. Thus, the estimated regression equation for the effect of total strategic information systems Organization as follows:

$$\text{Organizational Performance} = 0.56 + (0.68) \text{ Strategic Information Systems}$$

The regression coefficient value of 0.68 means that the increase in the variable of the strategic information systems by one unit will be accompanied by an increase in the organizational performance variable by 68% and vice versa. The propagation mode shown below also reflects the nature of the linear relationship and the regression line in describing the effect of the variable of total systems Strategic information in total organizational performance.

In general, and as a result of the acceptance of all three sub-hypotheses arising from the second main hypothesis of the research (ie acceptance of 100% of the second main hypothesis), we conclude the acceptance of the second main hypothesis of research, which states that " Organizational "

.CONCLUSIONS

The practical side highlighted the following conclusions:

1. Acceptance of the first main hypothesis of research, which states (there is a significant relationship between the strategic information systems and organizational performance) as a result of acceptance of the three sub-hypotheses emanating from it.
2. Internal processes were the most prominent dimensions that were closely associated with most of the dimensions of the strategic information systems individually and then growth and learning. On the overall level, the information dimension had the strongest relations with the organizational performance axis.
- 3 - Acceptance of the second main hypothesis of research, which provides that there is a significant impact of the strategic information systems in the organizational performance because of the acceptance of the three hypotheses emanating from it

All three dimensions (internal processes, growth and learning, user satisfaction) were highly influenced by the dimensions of strategic information systems individually. At the aggregate level, there was a convergence of the impact of the dimensions of all strategic information systems in organizational performance.

5- The analysis of the averages showed that the degree of response to the strategic information systems axis was high enough to exceed the value of the arithmetic mean of the mean value of the mean. This indicates that there is a great interest for this dimension by the senior leadership according to the opinion of the respondents.

6 - After the knowledge workers more dimensions and acquisition of interest in the application of the senior leadership in the center of the ministry according to the opinion of respondents, while it was noted a significant weakness in the application of information technology, and this calls to focus more on this dimension in order to make it the best form in the future.

7. The analysis of the averages showed that the degree of response to the organizational performance axis was very high due to the superiority of the general arithmetic mean of the axis over the value of the mean medium.

8 - After the growth and learning the most important dimensions and most of the acquisition and attention of the application of the senior leaders in the Ministry of Planning according to the opinion of the respondents.

9 - The majority of male leaders are aware of the nature of the tasks and activities as well as the nature of society, but this did not overlook the role of women in that institution.

10 - The leadership in the center of the ministry is a variety of age and dominated by prominent and prominent groups that have accumulated work experience.

11. The Bachelor's degree was the most prominent certificate obtained by the leadership in the Ministry's center, as well as the diversity of other scientific certificates as a result of the higher certificates.

12- Leaders in the center of the ministry have a variety of work experiences that have accumulated between the accumulated and prominent and the simple and ambitious experiences that will be very mature in the future.

13. More than one third of the leaders in the research have spent years of work in their current position exceeded 16 years, which doubled their leadership experience.

14. There is a variety of titles and titles of the leaders in the research.

15. The vast majority of the senior leaders in the ministry's center use the computer and participated in many training courses which added to their experience additional gains to develop their skills in work.

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