

Re-Engineering the Stage of Preparing the State's General Budget by Applying It to Some Investment Projects in Nineveh Governorate – Iraq

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Abstract - Identifying the nature of process re-engineering and its dimensions, the study used the analytical descriptive approach, and used the questionnaire as a data collection tool consisting of (30) questions, which were distributed to a sample of financial managers and accountants in the control departments in Nineveh Governorate, whose number is (390), in addition to (25) managers in that department, and the responses were analyzed using the (SPSS) program. The study concluded that there is a weakness in the oversight of state agencies, and that the corruption of society results from the corruption of power and interest in re-engineering operations in a comprehensive manner that makes operations clear, logical, and capable of achieving Objectives, and that the organizational dimension enables the transition from hierarchical structures to flat structures, and that the technological dimension contributes to monitoring and controlling the functioning of the state's general budget.

Keywords: Re-Engineering, Stage of Preparing, State's General Budget, Investment Projects, Nineveh Governorate.

I. Introduction

Process re-engineering, or what is called by the term (engineering) in computer science and management, where the concept of re-engineering operations appeared for the first time in 1990 when the Massachusetts Corporation conducted a research entitled Management. Raising the efficiency and effectiveness of the processes used within the institutions. The process of business re-engineering is also called (a review of business methods, redesigning business processes, business transformation, business change management, restructuring or arrangement) is a radical rethinking and radical redesign of business processes to achieve significant cost improvements, quality, speed, and service, as the concept of re-engineering has spread widely in the field of American management thought, and it combines the review of business methods between a strategy to encourage innovation in business with a strategy to bring about significant improvements in operations

so that any organization can become a much stronger competitor.

The general budget is no longer just revenues and public expenditures, but has become a reflective mirror for the implementation of government work such as projects and investments, and in Iraq, reliance is made on balancing items that many problems and criticisms face. In the year 2022, the budget of Nineveh Governorate alone exceeded forty billion Iraqi dinars, distributed over several sectors. Including the public sector, rural, municipal, water, roads and bridges, education and electricity, and the general budget did not address what is an urgent necessity such as the health sector and hospitals, for example, and the allocations for the education sector did not receive commensurate with the size of the population of the province. Therefore, it was necessary to shift to one of the modern budget methods, including balancing programs and performance, as there are many researches and studies that request and urge financial institutions to shift from balancing items towards balancing programs and performance in Iraq, and to change the budget from one method to another, it needs a radical and comprehensive change as well To a change in technology and its inclusion in the budget, and this is what the process re-engineering method achieves.

There are a group of factors that lead to the failure of the operations engineering preparation projects in the general budget, which are not consistent with developments and changes in the volume of resources and spending, as estimates are developed according to non-scientific criteria and standards. Operations Engineering on the General Budget" and the following questions branch out from it:

- 1) What is the role of the structural dimension of process re-engineering in increasing the effectiveness of the public budget?
- 2) What is the role of the organizational dimension of process re-engineering in increasing the effectiveness of the public budget?

3) What is the role of the technological dimension of process re-engineering in increasing the effectiveness of the public budget?

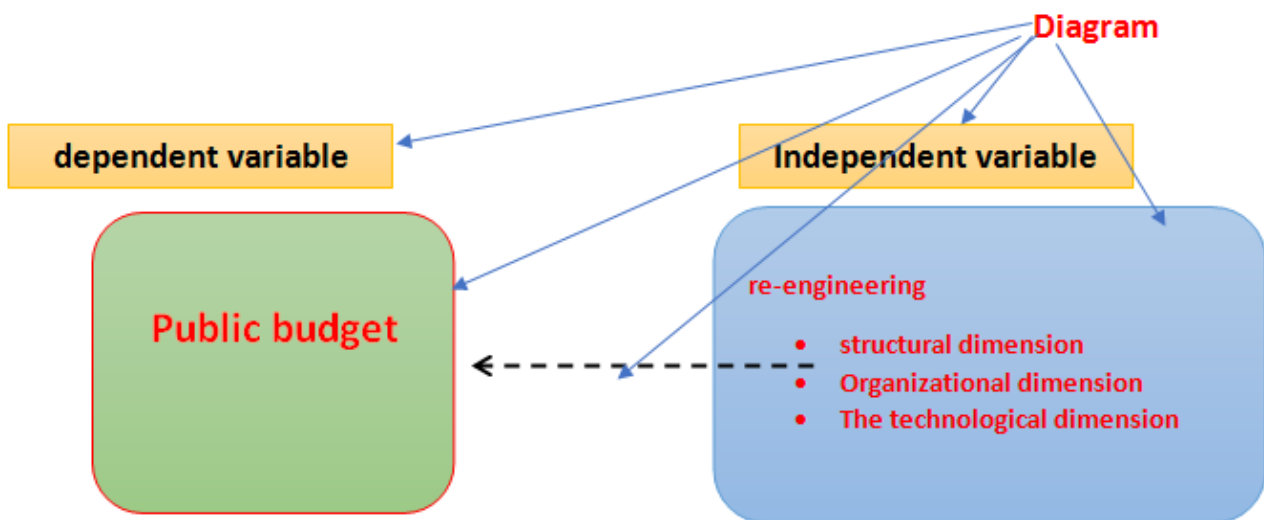
Through the problem of the study, the researcher relied on achieving the objectives of the study and answering its questions. The following hypotheses were formulated in preparation for testing their validity statistically.

- 1) There is a statistically significant relationship between the structural dimension of process reengineering and the performance of the general budget.
- 2) There is a statistically significant relationship between the organizational dimensions of process re-engineering in the performance of the general budget.
- 3) There is a statistically significant relationship between the technological dimensions of process re-engineering in the performance of the general budget.

The importance of re-engineering operations in the general budget is due to the advantages achieved by this method, including the simplification of processes and systems, the encouragement of creativity and learning, the removal of barriers to creativity, and the participation of workers in decision-making without monopolizing it over officials and personalities who have authority and power.

The importance of integrating the dimensions of process re-engineering as a modern administrative approach to developing operations.

To achieve the purpose of the researcher and reach its goals, the researcher will rely on a model of its own, to define if there is an effect on the results between the independent variables and the dependent variables. The relationships of these variables. Re-engineering the stage of preparing the state's general budget. The following figure (1) shows the relationships of these variables.



II. Literature Review

To achieve the purpose of the study and reach its objectives, the researcher will rely on a model of its own, to define if there is an effect on the results between the independent variables and the dependent variables, the relationships of these variables ((the independent variable)) Re-engineering the stage of preparing the state's general budget.

- Structural dimension
- Organizational dimension
- The technological dimension

2.1 Reengineering

The concept of re-engineering between (Davenport, 1993, 322) the concept of re-engineering of administrative processes as “changing and modifying administrative procedures and

making them in a unified form that enables those dealing with the work system to view the form of the flow of operations procedures.” Traditionally, he sees (Furey, 1993, 20 -23) Re-engineering is a combination of two terms, management and engineering within what is termed (engineering), which is the application of administrative functions with the aim of making them standard and according to specific conditions, the aim of which is to prevent chaos, reduce waste and address the lack of understanding of work procedures. And if we trace the origin of this term in terms of application in the modern era, we find that it began with the studies of Fredrick Tylor and Alton Mayo within the principles that they set in the Hawthorne factories, which is re-engineering and setting up a system of work program, whose goal was improvement and its automatic base and reducing waste in movements during work by setting symbols for each movement It is supposed to be done by the worker in the factory.

Process re-engineering is a result and a means to reduce the waste of time. When the organization falters, employee productivity decreases, and indicates low results in the overall and detailed performance of the organization's work, and leads to dissatisfaction of the beneficiaries of the services and work it provides. It includes existing or old institutions more than the ones that exist for the first time. Once, and it is also the result of weak administrative development in the executive process, so re-engineering is done in order to develop the performance of executive operations, and re-engineering is used in order to benefit from the latent creativity of workers in developing a plan for preparing the general budget by creating a fixed algorithm that achieves the highest benefit from ideas (Croxtan, 2003, 20-29).

2.2 Process Reengineering Phases

After determining the appropriate strategy for the re-engineering of administrative processes, it is applied in sequential stages, except for the balancing and transfer strategy, as it is a program that includes an algorithm or a sequential plan by itself. Many researchers in the field of re-engineering presented studies that dealt with the problems of stagnation, lack of development, and regression that many institutions suffer from, promising that process re-engineering is the ideal solution and an effective tool in the field of development and modernization, including studies (Al-Akhras, 2017, 34) and (Al-Khatib, 2013, 156) and (Al-Buhairi, 2015, 37-39), and these studies suggested that there are stages that the institution is required to adopt in re-engineering its operations, noting that these studies, no matter how different they are in the names of those stages, are similar in meaning and application. These stages include the following:

2.2.1 Initialization and setup phase

This stage includes recognition of the existence of a problem by senior management in the organization, and at the same time by every unit or department in the organization that will be covered by re-engineering. Recognition includes defining all the causes of the problem and monitoring every process or activity that impedes the management development process. Many tools are used in this phase. Preparation in order to clarify, define and analyze the current procedures, including clarifying the powers and responsibilities at each administrative level and job title.

2.2.2 The stage of developing a plan for re-engineering

The process of re-engineering administrative processes is like a plan that needs sequential steps to implement it, as it begins with defining the main goal of re-engineering, and it is important that the goal is characterized by a set of criteria,

including the quantitative and temporal criteria, as it is assumed that the goal of re-engineering includes the size of the change in jobs measured With a specific size and with appropriate and known measurement methods to ensure uniformity and measurement in the goal, and the possibility of evaluation at the end of re-engineering on the extent to which the main and subsidiary goals of re-engineering are achieved, and the goals of re-engineering differ according to the quality or nature of the work of the institutions, as there are service institutions and institutions.

2.2.3 Analysis & Stereotyping Stage

In this stage, the jobs are analyzed by forming a work team that has powers and is granted resources to analyze the work carried out by the institution. Among the foundations, including: the size and quality of business, the number of times to refer to those departments in making decisions, and the importance of decisions on the work of the institution.

2.2.4 Integration & Linkage Stage

In this stage, the actual organizational structure of the organization is drawn up, which is reconsidered based on prioritizing jobs according to their importance in serving the beneficiaries, defining relationships between administrative formations, linking and coordinating between them, and defining forms of communication between levels re-engineered organization.

2.2.5 Control Stage

This stage includes the development of specific control methods that ensure the continuation of the improvement achieved by re-engineering, as well as monitoring the progress of the tasks performed by the various administrative formations in order to identify problems and obstacles in performance after re-engineering.

2.3 The stage of preparing the state budget

2.3.1 The concept of the general budget

The general budget is of great importance to governments in all countries, and this is evident through its items, through which it seeks to achieve its general goals at all economic, social and political levels. These resources in order to achieve public needs, has been associated with the concept of budget.

The general budget is closely linked to the development of the role of the state. When the concept of the guardian state prevailed under the classical thought, the role of the general budget was limited to stating the state's revenues and expenditures and the need to achieve a balance between them, so that the role of the state shifted from the guardian to the

interventionist. In modern thought, the importance of the general budget increased and became an important tool. In the process of economic and social development, and its role is no longer necessarily limited to achieving financial balance, but rather goes beyond that to reach the search for achieving economic balance. Accordingly, the budget went through several stages in which it was known by different definitions, and it took multiple forms, in addition to its multiple roles (Amara, 2022, 19).

The general budget was defined as “the digital translation of the fiscal policy for the coming year set by the state to achieve economic and social goals and within the framework of its general plan” (Dardouri and Al-Akhdar, 2018, 13).

The general budget was also known in the contemporary time as "a necessity for every country in the world, whatever its political system and prevailing economic philosophy, and without it the state cannot conduct the work and interests of its ministries and government institutions in an orderly manner and carry out the functions entrusted to it, just as it is difficult to manage the national economy and direct it in the right direction." Therefore, the general budget is the axis around which all the state's actions and activities revolve in all fields, regardless of their conditions” (Hassiba, 2017, 15).

2.3.2 Components of the general budget

1- Public Revenues: The function of public revenues is no longer confined to the process of financing public expenditures, but rather has become a distinct and effective tool for organizing the economic and social activities of the whole state, in a way that leads to achieving the greatest possible benefit and return for society at the lowest costs, in addition to that, revenues have become a tool of guidance Economic and social, it has become a tool to prevent unwanted aspects of economic activities, or a tool to direct investment and fight inflation by absorbing part of the purchasing power from the market to redistribute income and wealth (Barakat, 2018, 170).

There are many channels of public revenues and their methods varied and their nature differed according to the type of public service performed by the state. Among these revenues are private and public domains, taxes and fees, public loans, cash issuance, local and foreign donations, fines, and compensation that occurs to state property by others.

2.3.3 Public Expenditure

It is a monetary amount that comes out of the financial disclosure of the state or one of its constituent authorities in order to satisfy one of the public needs. The basic population and the efficiency of public expenditures are related to the

extent of the state's ability to determine the areas in which its participation is necessary, on the other hand, how to spend the limited resources with the greatest efficiency and effectiveness in those areas, as all funds have alternative uses, but some aspects of public expenditures are justified, Military expenditures are represented in a large number of state budgets as one of the most prominent items of public expenditures, and their importance may differ from one country to another according to its special circumstances (geographical, political, and historical) (Barakat, 169, 2018).

III. Methodology of the Study

After the process of collecting information and data necessary for this study was analyzed using appropriate statistical methods within the Statistical Package for Social Sciences (SPSS) program, as the researcher used statistical methods where descriptive statistics methods were studied, for the variables of the study, where arithmetic means and standard deviations were found Frequency distribution and percentages, in order to identify employee evaluations for each of the phrases included in the study questionnaire.

This study consists of the applied side. The researcher relied on the descriptive and analytical approach, through which he aims to identify the re-engineering of the stage of preparing the state's general budget, using the applied method. The researcher will also follow the descriptive analytical approach in order to collect and analyze data and test hypotheses.

3.1 Research tools and sources of information

For the purpose of obtaining data and information to implement the purposes of the study, the following tools were adopted:

- 1) Information related to the theoretical side of studies, articles, theses, and foreign and Arabic scientific books specialized in the subject of the study.
- 2) The questionnaire, which is a measurement tool whose design relied on the opinions of a group of writers and researchers in the field of the subject to obtain the primary and secondary data necessary to complete the applied side of the study, and it was taken into account to make the follower aware of its purpose, components, accuracy, clarity, homogeneity, and the unity of the movement direction of the scale And its type in the form and method that serves the objectives and hypotheses of the study, and for the purpose of achieving the objectives of the study, two questionnaires were developed, the first was allocated to managers and the concerned department, while the second was to finance managers and

accountants. It included multiple-choice questions related to oversight managers in two parts, namely:

(I) The first section showed variables related to the demographic characteristics of the study sample through (5) paragraphs, which included (sex, degree, specialization, age, and number of years of service).

(Secondly) The second section clarified the questions related to the re-engineering of operations and the state's general budget through (3) main dimensions to be measured and (12) questions.

As for the questionnaire intended for financial managers and accountants, it also consisted of two parts, the first of which was related to demographic characteristics through (gender, degree, exact specialization, age, and number of years of service) in the Nineveh Governorate Office.

The hypotheses were measured using the five-point Likert scale in the following table:

| | | | | |
|-------------------|----------|-----------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly disagree | Disagree | undecided | Agree | Strongly agree |

3.2 The statistical treatment used

To answer the study questions and test its hypotheses, the researchers will use the following statistical methods:

- Cronbach Alpha internal consistency test to verify the stability of the resolution.
- Arithmetic means and standard deviations in order to answer the study questions and know the relative importance.
- T test for two independent unrelated samples.

3.3 Description and diagnosis of the independent variable

3.3.1 Description and diagnosis

Structural dimension

Table No. (1)

| coefficient of difference | response rate | standard deviation | Arithmetic mean | Items |
|---------------------------|---------------|--------------------|-----------------|-------|
| 18.45% | 82.43% | 0.76037 | 4.1217 | X1 |
| 18.94% | 80.81% | 0.76522 | 4.0406 | X2 |

| | | | | |
|--------|--------|---------|--------|---------|
| 23.23% | 78.03% | 0.90645 | 3.9014 | X3 |
| 19.69% | 80.29% | 0.79044 | 4.0145 | X4 |
| 21.19% | 78.78% | 0.83478 | 3.9391 | X5 |
| 21.39% | 77.68% | 0.83067 | 3.8841 | X6 |
| 20.45% | 79.67% | 0.81465 | 3.9836 | Average |

Based on the statistical data presented in Table (1), the arithmetic mean, which came with a value of (3.9836), as it came with a value greater than the value of the hypothetical arithmetic mean of (3), and what reinforces this is the standard deviation value of (0.81465), along with The response rate was (79.67%), as well as the coefficient of difference rate (20.45%). With regard to the most prominent paragraphs that reinforced this dimension and supported it positively, it is represented by paragraph (X1), which came with the highest agreement with a rate of (82%). It came with an arithmetic mean of (4.1217), a standard deviation of (0.76037), a response rate of (82.43%), as well as a coefficient of variation of (18.45%). The severity of corruption in investment projects).

(The organization's organizational structure conflicts with the application of process re-engineering, the general budget).

3.3.2 The organizational dimension

Table No. (2)

| coefficient of difference | response rate | standard deviation | Arithmetic mean | Items |
|---------------------------|---------------|--------------------|-----------------|---------|
| 19.31% | 79.77% | 0.76999 | 3.9884 | X1 |
| 20.22% | 79.42% | 0.80281 | 3.9710 | X2 |
| 22.96% | 76.64% | 0.87976 | 3.8319 | X3 |
| 21.99% | 78.20% | 0.85965 | 3.9101 | X4 |
| 22.53% | 76.29% | 0.85950 | 3.8145 | X5 |
| 21.71% | 77.62% | 0.84242 | 3.8812 | X6 |
| 21.43% | 77.99% | 0.83569 | 3.8995 | Average |

Table No. (3)

| coefficient of difference | response rate | standard deviation | Arithmetic mean | Items |
|---------------------------|---------------|--------------------|-----------------|---------|
| 18.81% | 78.72% | 0.74044 | 3.9362 | X1 |
| 21.21% | 78.09% | 0.82800 | 3.9043 | X2 |
| 21.09% | 77.91% | 0.82166 | 3.8957 | X3 |
| 20.50% | 78.26% | 0.80223 | 3.9130 | X4 |
| 21.72% | 76.17% | 0.82718 | 3.8087 | X5 |
| 22.29% | 77.45% | 0.86332 | 3.8725 | X6 |
| 20.93% | 77.77% | 0.81381 | 3.8884 | Average |

Based on the statistical data stated in Table (2), the arithmetic mean, which came with a value of (3.8995), as it came with a value greater than the value of the hypothetical arithmetic mean of (3), and what reinforces this is the standard deviation value of (0.83569), along with The response rate was (77.99%), as well as the coefficient of difference rate (21.43%). With regard to the most prominent paragraphs that reinforced this dimension and supported it positively, it is represented by paragraph (X1), which came with the highest agreement at a rate of (79%). It came with an arithmetic mean of (3.9884), a standard deviation of (0.76999), a response rate of (79.77%), as well as a coefficient of difference ratio of (19.31%). investment projects in order to reduce corruption in them).

(The Corporation is working to cancel all activities that do not add any productive value in investment projects).

3.3.3 Technological dimension

According to table (3) of the statistical data of the arithmetic mean, which came with a value of (3.8884), as it came with a value greater than the value of the hypothetical arithmetic mean of (3), and what reinforces this is the value of the standard deviation of (0.81381), along with the percentage of The response that came with an amount of (77.77%), as well as the percentage of the coefficient of difference represented by (20.93%), and with regard to the most prominent paragraphs that reinforced this dimension and supported it positively, it is represented by paragraph (X1), which came with the highest agreement with a rate of (76%), as it came With an arithmetic mean of (3.9362), a standard deviation of (0.74044), a response rate of (78.72%), as well as a coefficient of variation of (18.81%), this paragraph stipulates (the institution's capabilities have increased to coordinate its

operations in applying re-engineering of operations in the general budget Due to the availability of technology, which led to a reduction in corruption in investment projects).

(The institution's capabilities to coordinate its operations in applying process re-engineering in the general budget have increased due to the availability of technology).

IV. Results and Discussion

- The first main hypothesis: There is a statistically significant correlation between the structural dimension.

The results of the correlation between the structural dimension.

Table No. (4) Results of the correlation between the structural dimension

| Moral level | T | | correlation coefficient | Structural dimension |
|-------------|---------|------------|-------------------------|----------------------|
| | Tabular | calculated | | |
| 0.000** | 1.960 | 6.299 | 0.322 | |

$P \leq 0.05$, $N = 345$, $df = 343$

Source: Prepared by the researcher based on the outputs of the SPSS statistical program.

There is a significant correlation between the structural dimension at a significant level (0.000), and this was according to the calculated t-value of (6.299), whose value exceeds the tabular t-value of (1.960), while the correlation coefficient between them came with a value of (0.322), at the level of Significant (0.05) and a degree of freedom (343), and on the basis of the statistical data received, the first sub-hypothesis of the first main hypothesis is accepted, which states (there is a statistically significant correlation between the structural dimension).

- The second main hypothesis: There is a statistically significant correlation between the organizational dimension.

The results of the correlation between the organizational dimension.

Table No. (5) Results of the correlation between the organizational dimension

| Moral level | T | | correlation coefficient | Structural dimension |
|-------------|---------|------------|-------------------------|----------------------|
| | Tabular | calculated | | |
| 0.000** | 1.960 | 9.332 | 0.450 | |

$P \leq 0.05$, $N = 345$, $df = 343$

Source: Prepared by the researcher based on the outputs of the SPSS statistical program.

There is a significant correlation between the organizational dimension at a significant level (0.000), and this was according to the calculated t-value of (9.332), whose value exceeds the tabular t-value of (1.960), while the correlation coefficient between them came with a value of (0.450), at the level of Significance (0.05) and a degree of freedom (343), and on the basis of the statistical data provided, the second sub-hypothesis is accepted for the first main hypothesis, which states (there is a statistically significant correlation between the organizational dimension).

- The third main hypothesis: There is a statistically significant correlation between the technological dimension.

The results of the correlation between the technological dimension and the mitigation of corruption

Table No. (6) Results of the correlation between the technological dimension

| Moral level | T | | correlation coefficient | Structural dimension |
|-------------|---------|------------|-------------------------|----------------------|
| | Tabular | calculated | | |
| 0.000** | 1.960 | 8.973 | 0.436 | |

$P \leq 0.05$, $N = 345$, $df = 343$

Source: Prepared by the researcher based on the outputs of the SPSS statistical program.

There is a significant correlation between the technological dimension at a significant level (0.000), and this was according to the calculated t-value of (8.973), whose value exceeds the tabular t-value of (1.960), while the correlation coefficient between them came with a value of (0.436), at the level of Significance (0.05) and a degree of freedom (343), and on the basis of the statistical data provided, the third sub-hypothesis of the first main hypothesis is accepted, which states (there is a statistically significant correlation between the technological dimension).

V. Conclusion

- 1) Interest in re-engineering operations has been increasing in the current era, due to the increasing deficit in the general budget for most countries of the world, as it has become one of the strongest economic policies and has the most impact on economic and social development through its contribution to reducing income differences, providing job opportunities and increasing the purchasing power of individuals the society.

- 2) Increasing the general budget deficit of countries, as it costs countries billions of dollars annually, and leads to an increase in the cost of services that they need, in addition to impeding economic development, reducing opportunities for domestic and foreign investment, wasting public money, and increasing expenditures at the expense of revenues.
- 3) Paying attention to a comprehensive re-engineering of operations that makes operations clear and logical and capable of achieving goals, and that the organizational dimension enables the transformation from hierarchical structures to flat ones, and that the technological dimension contributes to monitoring and controlling the functioning of the state's general budget.

VI. Recommendations

- 1) Forming special committees to develop an integrated system for the performance of employees, which conduct periodic inspections between departments and ministries and prepare relevant reports.
- 2) Work to establish a comprehensive and integrated financial system so that the budget provides complete and comprehensive data on past, financial and future financial activity, and gives details of all financial operations, which leads to an increase in the efficiency of the financial management of the budget.

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