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Analysis The Business Process Re-Engineering To Support Sustainability

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Abstract

The research aims to identify the impact of process re-engineering on sustainability. The research adopted the inferential approach based on the opinions of a sample of professors in Iraqi universities. A model was built according to structural modeling and was tested using confirmatory factor analysis, correlation analysis, and structural analysis. The research reached a set of conclusions, the most important of which is that re-engineering is A powerful tool that can be used to improve process efficiency, reduce costs, improve process efficiency, enhance social responsibility and optimize resource use, contributing to environmental, economic and social sustainability.

Keywords:

Re-engineering, strategic plan ,management commitment , employee participation , information technology , transformation and change ,sustainability.

Introduction

Concern about preserving the environment and avoiding pollution causes has become of great importance to various segments of society, and the success of small and medium enterprises has become measured by the extent of the institutions' ability to preserve their environment from pollution and all pollution causes in general (Zhang et al., 2019), Thus, interest in the environment became one of the matters by which the development of countries and institutions in various fields is measured. The concept of sustainability has become linked to environmental concepts and is known at the global level through the "Shared Future" report prepared by the United Nations Committee on Environment and Development. Which showed that sustainability is related to environmental safety and social justice, as well as to the economic prosperity of organizations (Diagne, 2013), through the formulation of several terms, including sustainable development (Christofi et al, 2012). Then, the idea of integrating the economy and environment was considered under the concept of environmental development. This concept refers to focusing on development patterns that generate more poverty and environmental damage (Diagne, 2013), and this requires the presence of appropriate strategic tools to deal with sustainability issues.

Under this design, unique processes can be adapted by customers, possessing many technologies and information, and offering modern processes in endless business field. Contemporary feature management evaluates some of the developed business processes, software applications and new technology, while providing many benefits through the use of new methodologies. Through this, the business management system has helped provide efficiencies and system management that enables the effective and economical goals of the organization to be achieved. (Periokaitė & Dobrovolskienė, 2021). Moreover, in order to adapt business management to significant changes in the cost and value of services provided, business processes must be redesigned by creating unique mechanisms. This requires new tools to ensure economic standards for its effective operation, and in essence stability for positive impact. In other words, re-engineering an organization's operations can attract and redeploy resources in logistics, staffing, development of new and improved services, warehousing, repackaging, maintenance of rolling stock, freight, etc. The field of logistics services and order fulfillment. (Krawczyk, 2022).

Accordingly, the research aims to identify the impact of process reengineering on sustainability.

Literature Review

Process Reengineering

Organizational reengineering is a key approach that links an organization's competitive strategy to its internal processes and employees during the process. This connection is created through the use of the latest and most available information and communications technology. The main difference between organizational reengineering compared to other modern management methods is the fundamental transformation and improvement that is obtained from the way in which the activities of the organization are carried out, and its implementation and deployment is much more complex than other management methods. On the one hand, re-engineering has a high potential in increasing productivity by reducing process time and cost, improving quality and increasing customer satisfaction, but on the other hand, it often requires a fundamental change in the dimensions of strategies, processes and technology. and human resources. For this reason, about 70% of reengineering projects usually fail in practice. Based on this fact, process reengineering can be considered a very high-risk process, and in general, the area of influence of reengineering is the main processes of the organization (Jafari et al., 2017) organizing people, processing and using information technology instead of traditional processes to achieve better results. Advocates claim Re-engineering states that if this concept is implemented correctly, the organization will achieve a quantum leap in improving cost, speed, productivity and profitability (Ringim et al., 2012). Today, concepts such as ideas and patterns change over time and must be analyzed taking into account the social conditions that led to their emergence. (González et al., 2013).

Importance Of Process Re-Engineering

The methods and mechanisms that organizations need have changed as a result of re-engineering administrative processes, rapid technical developments, and increased competition. Therefore, these organizations have become in need of administrative processes capable of dealing with radical and comprehensive changes that will achieve improvements in service and quality and thus improve the quality of outputs in order to satisfy the customer (Darmani, A., & Hanafizadeh,2013). The importance of re-engineering administrative processes in an efficient and effective manner enables the survival and continuation of administrative organizations in the face of the new challenges that many organizations have adopted, as it achieves a competitive advantage that depends on the quality and efficiency of administrative processes and workers who have been carefully trained, considering that the importance of re-engineering processes lies in the following: (Abdreda, 2019)

1) A rapid and fundamental improvement approach in aspects of performance, where the improvement includes reducing the stages and costs of operations and increasing their return or added value, as well as setting competitive prices based on an acceptable and rational cost structure.

2) A tool for dealing with varieties of organizations (Abdreda, 2019).

The application of process reengineering brings many benefits to organizations in terms of improving productivity and increasing efficiency and effectiveness, in addition to preserving the survival and continuity of the organization and enhancing its ability to face crises and new challenges. It achieves the following benefits:

1) Business units are transformed from specialized functional departments into operations teams in a way that leads to time-consuming work execution, saving time for customers, saving costs, and avoiding confusion and chaos in providing services.
2) Jobs transform from simple tasks to complex work, after the formation of work teams specialized in performing operations in specific, clear, easy-to-access places with simple procedures.

3) The process of re-engineering administrative processes helps give working individuals more independence while performing their work instead of constant supervision.
4) Re-engineering helps rely on education to increase skills more than relying on training as was the practice in traditional organizations.
5) The focus of reward performance criteria shifts from activities to results
6) Promotion criteria shift from performance to ability
7) Working to change the prevailing organizational culture
8) The organization changes from hierarchical to horizontal
9) In light of this concept, officials transform from observers to leaders.
10) Managers transform from supervisors to mentors (Salman, 2014).

Process Re-Engineering Dimensions

1) Strategic Plan

The process re-engineering program is strategic, because the success of the re-engineering process depends largely on the strategic plan and its implementation in the best possible way. The process re-engineering program must be linked to the organization’s general strategic vision and objectives. There are many organizations that have not succeeded in implementing the process re-engineering program correctly because these organizations do not link process re-engineering in their vision and strategic goals (Chang et al., 2019).

2) Management’s Commitment

The organization's senior management must be committed to implementing the plan it has developed to re-engineer its production processes. The success of process re-engineering depends on the commitment of the organization's senior management to the process re-engineering program. The management's commitment is demonstrated by clarifying the organization's vision of re-engineering to employees and gaining their loyalty, and explaining to them the importance of making a comprehensive change to the components of the existing production system in order to improve the organization's competitive position in the labor market (Falcone,2018).

3) Employee Participation:

The human resource is the most important resource in all organizations. The success of any organization depends on the creativity of the human resource, which continues indefinitely. It is not possible, in any way, to prevent employees from participating in making and implementing decisions. In addition, the human resource is a crucial foundation in the process re-engineering program by authorizing and allowing it to participate in developing and implementing the re-engineering plan in a way that improves the organization’s overall performance.

The participation of employees in re-engineering also has a positive impact on them by achieving job satisfaction and developing themselves to become multi-skilled (Dawoud, 2015).

4) Information Technology

Building new production processes instead of old processes depends primarily on information technology because of its effective role in supporting the implementation of the process re-engineering program by relying on modern electronic models used to re-record all information about the organization’s activities and archive it electronically and on paper. This gives a clear picture of the new operations model for managing the organization, and in light of it, old operations are canceled and new operations are started from scratch, and this contributes to building an ideal model of operations, on the one hand (Zomparelli, el. at, 2018). In addition, communications are one of the most important administrative approaches that achieve organizational stability when starting to implement process reengineering programs. If the organization wants to achieve success in process reengineering, it must provide effective communication channels with all its employees. So that it can convince them of the issue, gain their loyalty, and avoid their resistance to switching from current processes to new production processes (Leung, 2018).

5) Readiness For Change And Transformation

When applying process reengineering, business organizations face a fundamental problem related to the process of preparing for transformation or change. The process of preparing for transformation is an important element for the success of implementing the production process reengineering program. Preparedness for transformation (change) is the radical transformation from current operations to new operations through the organization's dissatisfaction with the current situation, and the transformation to a more developed situation that serves the organization and its goals for which it was created. Also, the readiness for transformation and its success depends on the organization's culture, which includes the principles and values enjoyed by thousands of people working within the organization, where culture has a fundamental role in the organization's ability to adapt to the new system (Leung, 2018).

Sustainability

Over the past decades organizations have felt increasing pressure to include sustainability in their management standards (Jerónimo et al, 2019). Sustainability is defined according to Webster's Dictionary as "of, relating to, or being a method of harvesting or using a resource such that the resource is not permanently exhausted or destroyed."

Sustainability also defined as "the ability to maintain qualities that are valuable in the physical and social environment". It includes preserving human life and preserving the life of humans and other living things by preserving air, water, and atmosphere, and continuing the movement of society despite the depletion of non-renewable resources, and preserving the quality of life that is characterized by renewal. (Mohsen, 2017). Sustainability is a process that simulates the development of all aspects related to people's lives and finding solutions between various competing goals and striving at the same time to achieve economic and environmental prosperity and social justice (Botchwey, 2015). The concept of environmental sustainability is defined by the output base through the ability to contain the gases and waste resulting from A specific project, and the input base, which means the possibility of controlling the process of inputs, measuring them, knowing their quality, controlling their outputs, and not allowing the entry of invalid raw materials (Gimenez et al., 2012). Sustainability is the state of balance between meeting environmental, social, and economic needs at the local and international levels, as the level of fulfillment of those needs increases as the state of balance increases .

Sustainability Components and Elements

The Brundtland report emphasized the close connection between economic and social development and environmental preservation. The report indicated that it is not possible to implement a strategy for sustainable development without observing the requirements of the three aspects (economic, social, and environmental), and that each dimension includes a number of activities that overlap with each other, as in Figure 1 (Al-Jagawi, 2018):

1. Economic Sustainability

Economic sustainability is achieved by providing valuable resources necessary for future generations, that is, implementing the principle of fair and equal distribution between generations, as it can be applied in the optimal use of scarce resources (Mania & Rieber, 2019). Economic sustainability can be achieved through improving resource management and operational efficiency, that is, including improving management, competitive advantage of human resources, and efficiency of human resources. (Sanchez et al, 2020) The commitment of senior management to economic sustainability to create financial value by increasing revenues, reducing costs, and creating job opportunities in order to enhance the sustainability.

2.Social Sustainability:

Social sustainability is concerned with the values, religions, traditions, and situation in which people live, as well as the ways that connect them with each other or with organizations. This demonstrates the company's influence in aspects and areas that directly affect the social environment in which it operates. Therefore, companies must reflect how they influence it. Whether negative or positive, and including this information in sustainability reports (Lisene, 2015).

3. Environmental Sustainability

Organizations must consider a set of procedures and policies for regular management and continuous improvement of environmental performance (Vesal et al, 2020). This type of sustainability is related to some important factors in implementing environmental sustainability for human resources, which is represented by designing green jobs in general. (Roy et al, 2020). It is related to information and the impact of companies on the environment and how to measure and report it (Jankovic & Krivacic, 2017).

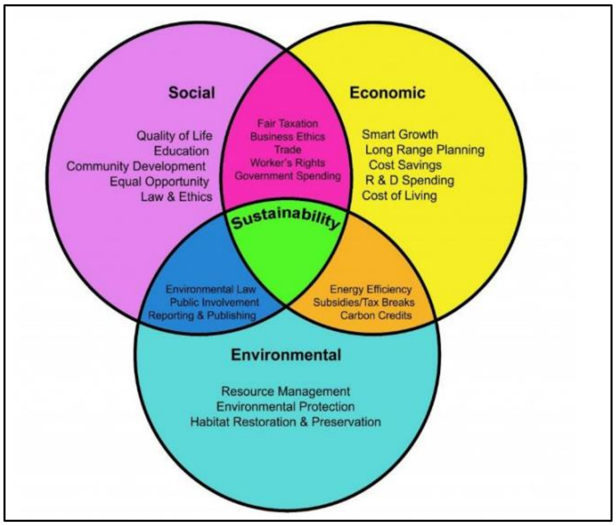

Figure 1: Sustainability Components and Elements

Source: (Santos & Serpa, 2020).

Methodology

Model

The study used a qualitative method in analyzing the data. The data was collected from a sample of professors in Iraqi universities (73), and the hypotheses were tested within the model in Figure 2, which includes two types of variables, the independent variable (re-engineering) (RE) and its dimensions (strategic plan) RE1), management commitment (RE2), employee participation (RE3), information technology (RE4), readiness for transformation and change (RE5), and the adopted variable (sustainability) (SUS) and its dimensions (economic sustainability (SUS1), social sustainability (SUS2), Environmental Sustainability (SUS3)).

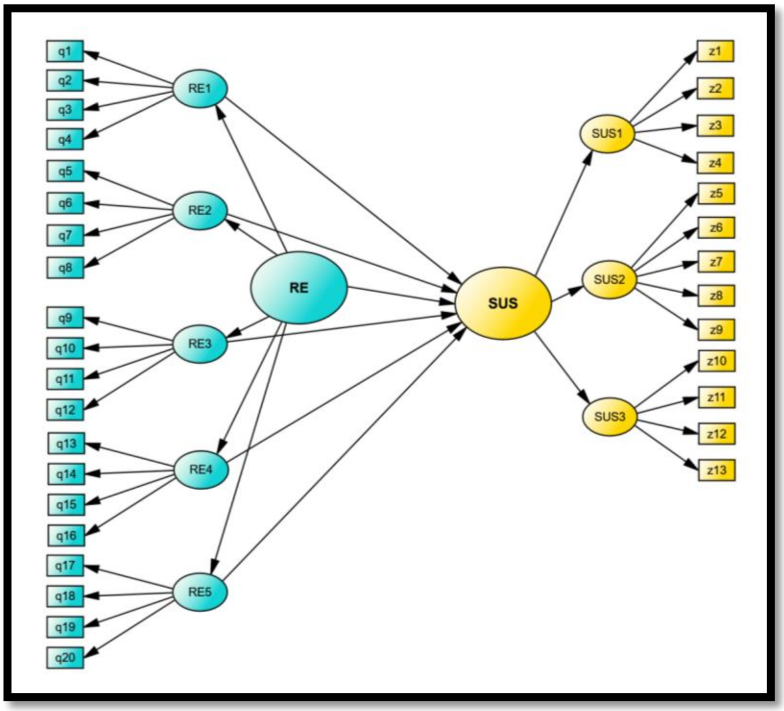

Figure: 2 Study Model

Normality Test

The normal distribution is one of the basic and important steps of multivariate analysis and depends mainly on two factors for proof: the Skewness coefficient, which shows the nature of the symmetry relationship of the distribution, and the Kurtosis coefficient, which is related to the peak of the distribution. Thus, the distribution can either have a high peak or be very flat. If the values of the coefficients of torsion or flatness are close to (±1.96), this means that the data is normally distributed. Table 1 and Figure 3 indicate that the data of the (Kurtosis) and (Skewness) coefficients were within the acceptance range between (-1.96) and (+). 1.96) This indicates that the data follows a normal distribution.

Table 1: Normality Test

Variable	min	max	skew	kurtosis
q20	2.000	5.000	-.337	-.493
q18	3.000	5.000	-.041	-1.076
q18	1.000	5.000	-.683	.004
q17	2.000	5.000	-.115	-.709
q16	2.000	5.000	-.501	-.462
q15	1.000	5.000	-1.106	1.502
q14	2.000	5.000	-.250	-.688
q13	2.000	5.000	-.164	-.999
q12	1.000	5.000	-.414	-.554
q11	1.000	5.000	-.214	-.521
q10	1.000	5.000	-.478	-.295
q9	2.000	5.000	-.094	-1.303
q8	1.000	5.000	-.530	-.023
q7	1.000	5.000	-.644	.657
q6	2.000	5.000	-.465	-.507
q5	2.000	5.000	-.307	-.459
q4	2.000	5.000	-.852	.476
q3	3.000	5.000	-.091	-1.249

POODA
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Vol-14 Issue 02, 2024

q2	3.000	5.000	-.159	-.858
q1	2.000	5.000	.029	-.794
Multivariate				35.422
Variable	min	max	skew	kurtosis
z13	2.000	5.000	-.332	-.724
z12	1.000	5.000	-.473	.154
z11	1.000	5.000	-.515	.067
z10	2.000	5.000	-.322	-.176
z9	1.000	5.000	-.663	.519
z8	2.000	5.000	-.172	-.330
z7	2.000	5.000	-.179	-.616
z6	2.000	5.000	-.493	-.171
z5	2.000	5.000	-.436	.219
z4	2.000	5.000	-.330	-1.022
z3	2.000	5.000	-.173	-.712
z2	1.000	5.000	-.803	.785
z1	3.000	5.000	-.230	-1.033
Multivariate				19.957

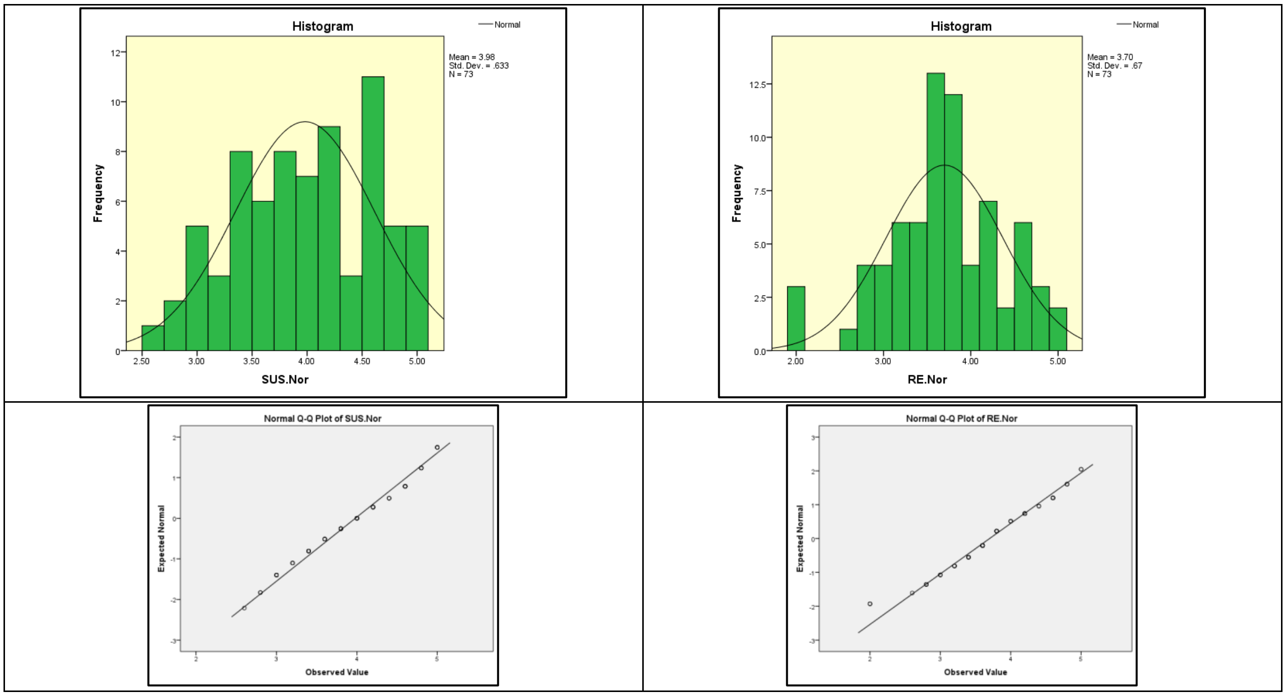

Figure 3: Normality Histogram

Construct validity and factor analysis of models

To verify the quality of the study scale and its construction, the constructive validity of the questionnaire was tested, which represents convergent validity. Convergent validity shows the degree to which independent measures relate accurately to the same variables under study. To analyze the validity of convergence, the researcher used confirmatory factor analysis according to the AMOS program, through factor saturations, which require that its values be greater (0.50) and that it fulfill the conditions of the goodness-of-fit indicators shown in Table 2.

Table 2: Goodness Of Fit Index

Index	Value
Chi-squeare (χ^2)	P > 0.05
χ^2/df	2-5<
Goodness of Fit Index (GFI)	0.90≥
Normative Fit Index (NFI)	0.90≥
Comparative Fit Index (CFI)	0.90≥
Root Mean Square Error of Approximation (RMSEA)	0.08-0.05<

The Table 3 and Figure 4 indicate that the values of the loadings for the items on the variable (RE) were values greater than (0.50), as it is clear that all the items are acceptable and the values of (C.R.) recorded are acceptable and greater than (the critical value) amounting to (1.96). Which means that the convergence validity is acceptable because all factor values are higher than (0.50), except for two items

POODA
Journal of Business Marketing, Finance, Accounting Studies
ISSN: 1214-1054
Vol-14 Issue 02, 2024

that did not meet the conditions of factor analysis, as they recorded weak loading values and lower than (0.50), and the conditions of goodness of fit for the model were not met.

Table 3: Results of RE CFA Model

Item		Estimate	Estimate	S.E.	C.R.	P
q1	<---	0.62	0.71	0.133	5.338	0.000
q2	<---	0.72	0.904	0.142	6.367	0.000
q3	<---	0.619	0.7	0.131	5.327	0.000
q4	<---	0.808	1			
q5	<---	0.17	0.236	0.178	1.323	0.186
q6	<---	0.471	0.645	0.175	3.689	0.000
q7	<---	0.865	1.119	0.235	4.756	0.000
q8	<---	0.808	1			
q9	<---	0.287	0.399	0.182	2.199	0.028
q10	<---	0.463	0.661	0.187	3.527	0.000
q11	<---	0.567	0.833	0.194	4.285	0.000
q12	<---	0.839	1			
q13	<---	0.451	0.653	0.18	3.628	0.000
q14	<---	0.701	1.12	0.198	5.666	0.000
q15	<---	0.92	1.324	0.202	6.561	0.000
q16	<---	0.727	1			
q17	<---	0.726	0.875	0.152	5.764	0.000
q18	<---	0.752	0.889	0.149	5.966	0.000
q19	<---	0.656	1.138	0.218	5.213	0.000
(χ^2)	214.32					
χ^2/df	3.21					
(GFI)	0.924					
(NFI)	0.911					
(CFI)	0.906					
(RMSEA)	0.064					

POODA
Journal of Business Marketing, Finance, Accounting Studies
ISSN: 1214-1054
Vol-14 Issue 02, 2024

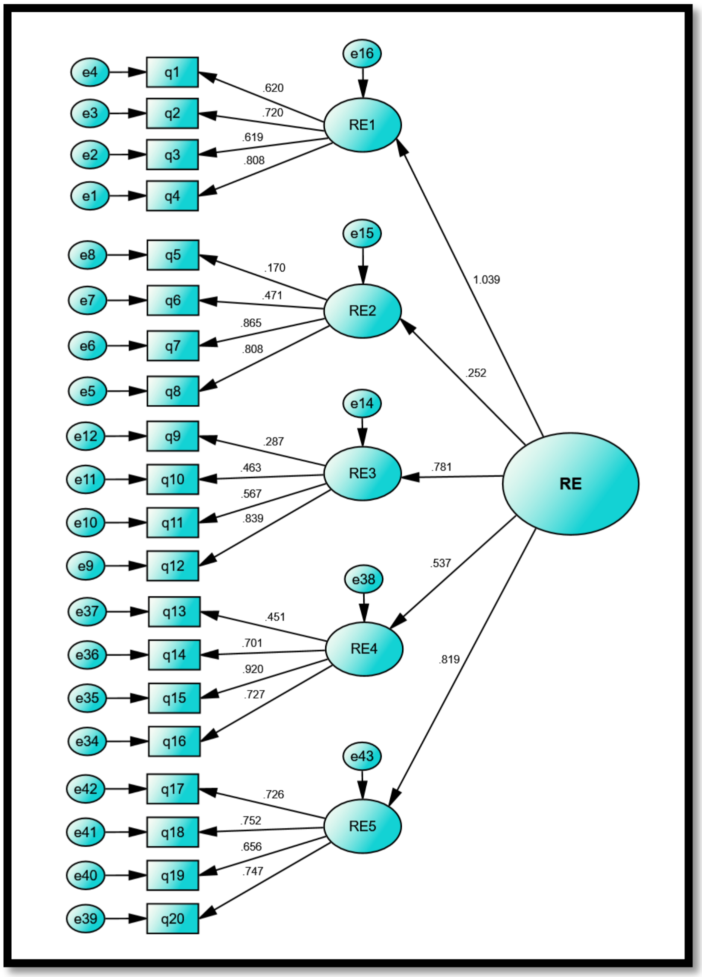

Figure 4: RE Model

As for the (SUS) model, the Table 4 and Figure 5 indicate that the loadings were acceptable and greater than (0.50), as all items were acceptable, and the (C.R.) values were acceptable and greater than (the critical value) of (1.96).

Which means that convergent validity is acceptable because all factor values are higher (0.50).

POODA
Journal of Business Marketing, Finance, Accounting Studies
ISSN: 1214-1054
Vol-14 Issue 02, 2024

Table 4: Results of SUS CFA Model

Item		Estimate	Estimate	S.E.	C.R.	P
z1	<---	0.733	1			
z2	<---	0.565	0.935	0.205	4.556	0.000
z3	<---	0.811	1.159	0.177	6.544	0.000
z4	<---	0.855	1.327	0.194	6.841	0.000
z5	<---	0.642	1			
z6	<---	0.784	1.363	0.246	5.54	0.000
z7	<---	0.845	1.442	0.247	5.843	0.000
z8	<---	0.668	1.073	0.22	4.879	0.000
z9	<---	0.552	1.046	0.252	4.151	0.000
z10	<---	0.704	1			
z11	<---	0.718	1.339	0.237	5.654	0.000
z12	<---	0.847	1.541	0.235	6.561	0.000
z13	<---	0.613	1.07	0.22	4.857	0.000
(χ^2)	197.51					
χ^2/df	2.45					
(GFI)	0.935					
(NFI)	0.918					
(CFI)	0.904					
(RMSEA)	0.057					

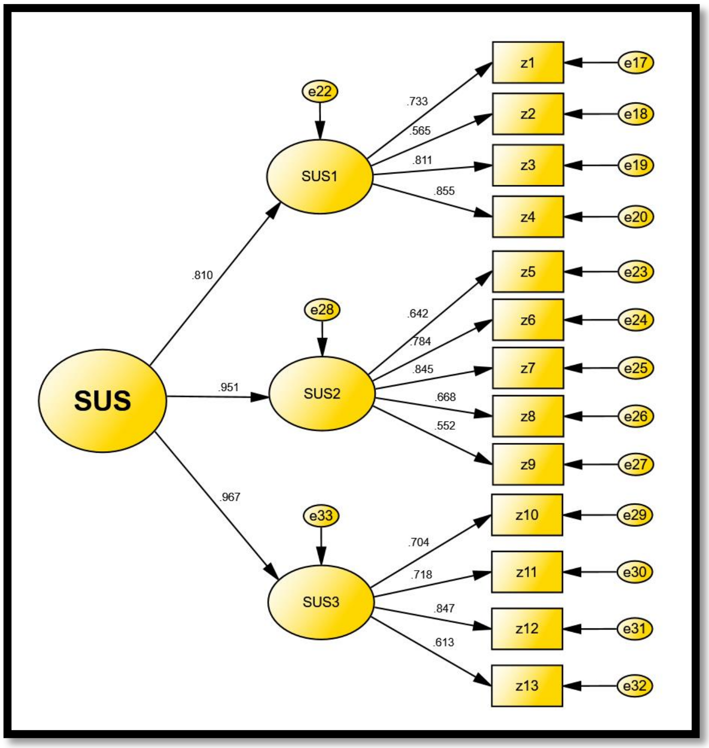

Figure 5: SUS Model

Results

Correlation Hypotheses

Table 5 indicates an analysis of the correlations between variables and dimensions, and that there is a significant correlation between (RE1) and (SUS), and the value of the correlation coefficient (0.661 **), which is a positive and relatively high value, and it is significant because the level of significance (P) is of a low value. And smaller than (0.05), which indicates support for hypothesis (H1-1).

There is also a significant correlation relationship between (RE 2) and (SUS) and the value of the correlation coefficient (0.250 *), which is a positive and relatively high value. It is significant because the significance level (P) is of a low value and smaller than (0.05), which indicates support for the hypothesis. (H1-2).

The results indicate that the relationship between (RE 3) and (SUS) is positive (0.728 **) and is significant, and this supports the hypothesis (H1-3). Also, there is a positive relationship between (RE 4) and (SUS) (0.776 **), which is significant and this supports the hypothesis (H1-4). The relationship between (RE 5) and (SUS) is positive (0.730 **) and is significant, and this supports the hypothesis (H1-5). In general, the relationship between (RE) and (SUS) is positive (0.658 **) and is significant, and this supports the hypothesis (H1).

Table 5: Correlation Results

		RE1	RE2	RE3	RE4	RE5	SUS1	SUS2	SUS3	RE	SUS
RE1	r	1	.306**	.678**	.703**	.721**	.657**	.526**	.503**	.814**	.661**
	P		.008	.000	.000	.000	.000	.000	.000	.000	.000
RE2	r	.306**	1	.328**	.259*	.287*	.185	.117	.181	.715**	.250
	P	.008		.005	.027	.014	.118	.323	.126	.000	.040
RE3	r	.678**	.328**	1	.621**	.593**	.771**	.584**	.530**	.840**	.728**
	P	.000	.005		.000	.000	.000	.000	.000	.000	.000
RE4	r	.703**	.259*	.621**	1	.766**	.680**	.762**	.592**	.654**	.776**
	P	.000	.027	.000		.000	.000	.000	.000	.000	.000
RE5	r	.721**	.287*	.593**	.766**	1	.648**	.664**	.608**	.662**	.730**
	P	.000	.014	.000	.000		.000	.000	.000	.000	.000
RE	r	.814**	.715**	.840**	.654**	.662**	.668**	.506**	.503**	1	.658**
	P	.000	.000	.000	.000	.000	.000	.000	.000		.000
SUS	r	.661**	.200	.728**	.776**	.730**	.854**	.848**	.852**	.658**	1
	P	.000	.090	.000	.000	.000	.000	.000	.000	.000	
"**. Correlation is significant at the 0.01 level (2-tailed)."											
"*. Correlation is significant at the 0.05 level (2-tailed)."											

Structural Effect

Table 6 and Figure 6 indicate the effect at the level of dimensions. The structural modeling method was used to test the relationships because it is more accurate in the case of paragraphs and causal dimensions. The results proved that there is a significant effect of t(RE 1) in (SUS) and that the influence coefficient is (0.131). This supports the hypothesis (H2,1), in addition to that there is a significant effect of (RE 2) on (SUS), and that the influence coefficient is (0.157), and this supports the hypothesis (H2,2), and that there is a significant effect of the variable (RE 3) in (SUS) and that the influence factor is (0.111) and this supports the hypothesis (H2,3), and also that there is a significant effect of (RE 4) in (SUS) and that the influence factor is (0.638) and this supports the hypothesis (H2.4), and finally there is a significant effect of (RE 5) on (SUS) and the influence coefficient is (0.682) and this supports the hypothesis (H2.5),

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POODA
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Vol-14 Issue 02, 2024

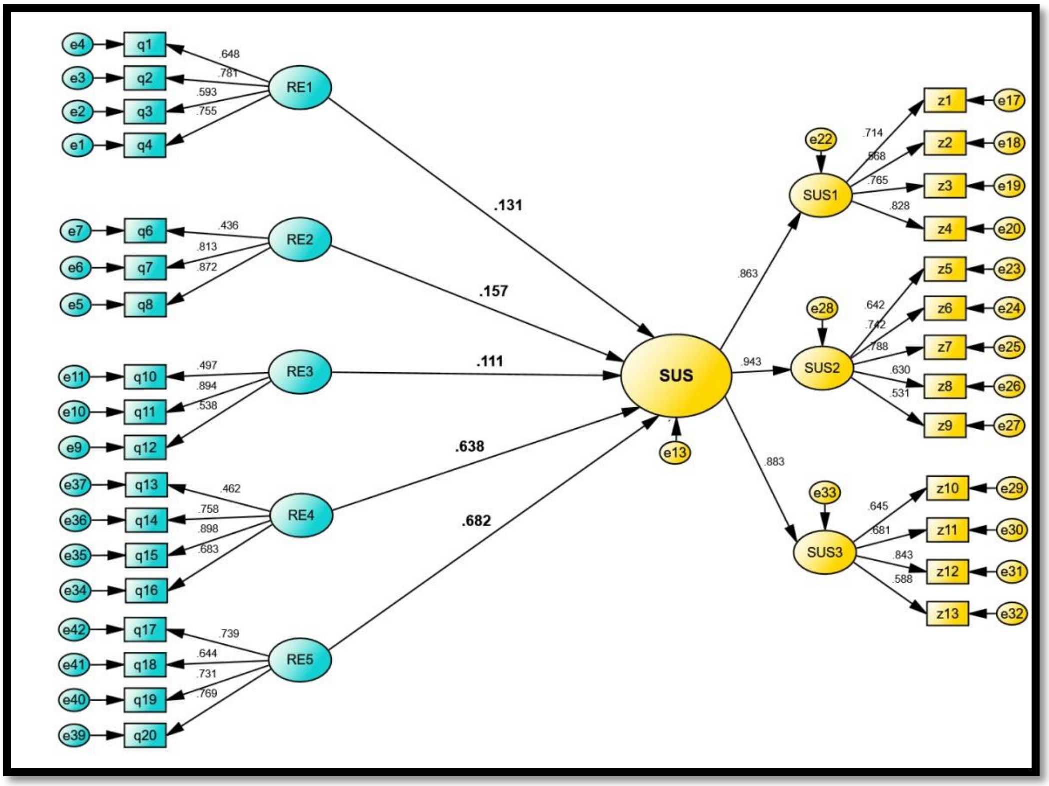

Figure 6: Structural Effect of RE Dimensions on SUS

Table 6 and Figure 7 indicate an analysis of the effect between variables and that there is a significant effect of (RE) on (SUS) and the value of the impact factor (0.721 **), which is a positive and relatively high value, and it is significant because the significance level (P) is of a low value and smaller than (0.05), which indicates support for the hypothesis (H2).

POODA
Journal of Business Marketing, Finance, Accounting Studies
ISSN: 1214-1054
Vol-14 Issue 02, 2024

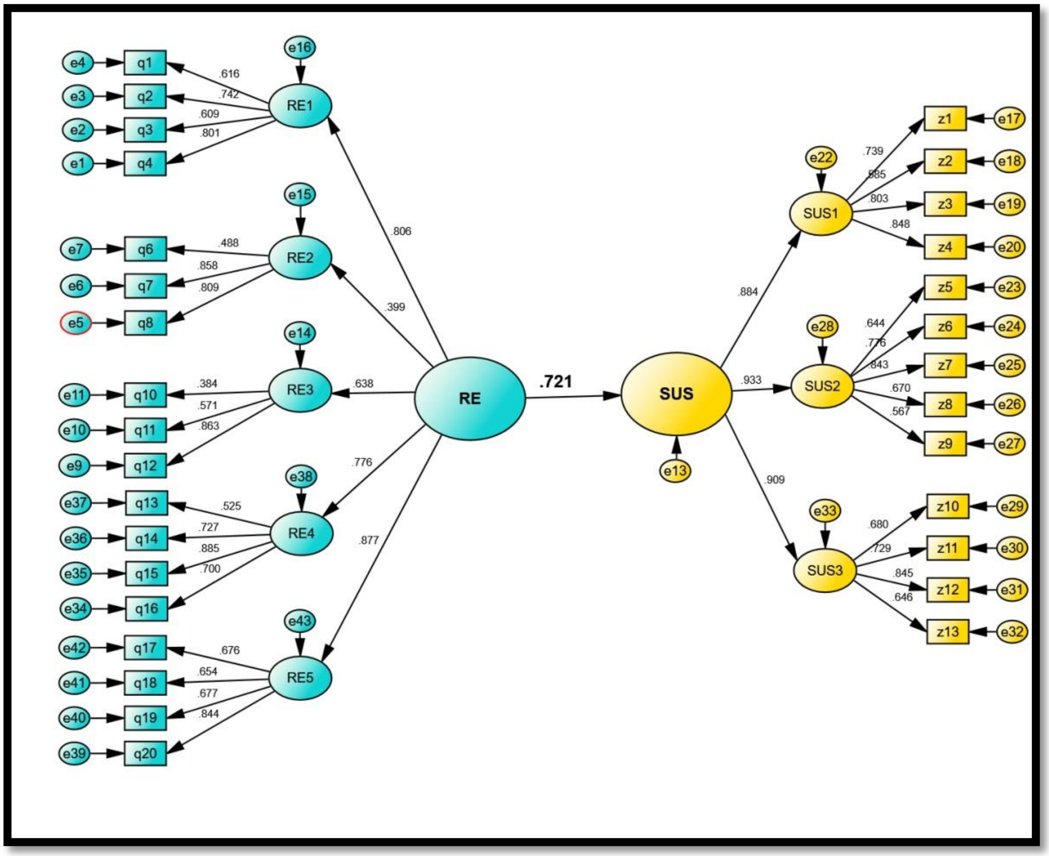

Figure 7: Structural Effect of RE on SUS

Table 6: Structural Effect of RE on SUS

Path			Estimate	S.E.	C.R.	P
SUS	<---	RE	0.721	0.189	4.685	0.000
SUS	<---	RE1	0.131	0.061	-0.228	0.021
SUS	<---	RE2	0.157	0.05	1.851	0.014
SUS	<---	RE3	0.111	0.08	-1.934	0.033
SUS	<---	RE4	0.638	0.113	4.389	0.000
SUS	<---	RE5	0.682	0.097	4.733	0.000

Conclusions & Recommendations

Conclusions

1. Process re-engineering helps remove unnecessary activities and improve the use of resources, which contributes to environmental and economic sustainability.
2. By redesigning processes, organizations are able to adopt innovative solutions and are more responsive to changes, which is vital for long-term sustainability.
3. There is a positive impact of the strategic plan on sustainability, as understanding the organization's sustainability context, including sustainability drivers, identifying the most important opportunities and challenges, and setting strategic goals and indicators contributes to supporting sustainability.
4. The results indicated that management's commitment to implementation positively affects sustainability. When management is committed to adopting sustainable practices, it provides support to employees, which enhances the culture of sustainability within the organization. It enhances employees' commitment to sustainable initiatives
5. Employee participation reflects positively on sustainability opportunities. When employees participate in reengineering processes, they feel a sense of belonging and participation in decision-making, which increases their commitment to the organization and motivates them to work seriously to achieve common goals.
6. Information technology is one of the most important administrative approaches that achieve organizational stability when starting to implement process re-engineering programs and has a direct impact on sustainability.

7. Readiness for transformation and change directly affects sustainability, as the process of preparing for transformation is an important element for the success of implementing the process re-engineering program.

8. Reengineering is a powerful tool for achieving an organization's overall sustainability by improving operational efficiency, resilience, environmental, financial and social performance.

Recommendations

1. The need for re-engineering to be linked to the organization's general strategic vision and goals, where all efforts made are directed towards achieving specific results that are compatible with what the organization seeks to achieve in the long term.

2. The organization's senior management must be committed to implementing the plan it has developed to re-engineer its production processes. The success of process re-engineering depends on the extent of the organization's senior management's commitment to the process re-engineering program.

3. Participation of employees in making decisions and developing strategic plans, and supporting and encouraging them to improve the overall performance of the organization and improve sustainability

4. Ensuring senior leadership's commitment to achieving sustainability goals and their support for the efforts made.

5. Organize workshops and training programs to increase employees' awareness of the importance of sustainability and their role in achieving it, and encourage them to participate actively.

6. Design processes and solutions that take into account the environmental dimension, such as reducing emissions and waste and rationalizing resources.
7. Utilizing digital technologies to increase efficiency and improve transparency.
8. Training and developing employees' skills in the field of re-engineering and sustainability.

References

1) Abdreda Alwan (2019) Re-engineering administrative processes and its impact on achieving institutional excellence - an applied study, Journal of Management and Economics, No. 118.
2) Botchwey, C. O. (2015). Decentralisation and Environmental Sustainability in Ghana The Case of Obuasi Municipal Assembly in The Ashanti Region (Doctoral dissertation, University of Ghana).
3) Chang, S. E., Chen, Y. C., & Lu, M. F. (2019). Supply chain re-engineering using blockchain technology: A case of smart contract based tracking process. Technological Forecasting and Social Change, 144, 1-11.
4) Christofi ,Andreas; Christofi ,Petros; Sisaye ,Seleshi ;(2012); "Corporate sustainability: historical development and reporting practices"; Management Research Management Research Review Vol. 35 No. 2 : pp. 157-172.
5) Daoud, Ghassan Qassem, Khalil, Alia Muhammad, and Daoud, Fadila Salman (2015), The role of business process re-engineering in continuous improvement, an exploratory study, Journal of Accounting Studies, No. 23.

6) Darmani, A., & Hanafizadeh, P. (2013). Business process portfolio selection in re-engineering projects. Business process management journal, 19(6), 892-916.

7) Diagne, Y. A. (2013). Planning for Sustainable Development in Senegal (Doctoral dissertation, Virginia Tech).

8) Dubravka Krivačić, Sandra Janković,(2017)," Managerial Attitudes on Environmental Reporting: Evidence from Croatia ", Journal of Environmental Accounting and Management.

9) Falcone, D., Di Bona, G., Silvestri, A., Forcina, A., Belfiore, G., & Petrillo, A. (2018). An integrated model for an advanced production process-Agile Re-engineering Project Management. IFAC-PapersOnLine, 51(11), 1630-1635.

10) Gimenez, C., Sierra, V., & Rodon, J. (2012). Sustainable operations: Their impact on the triple bottom line. International Journal of Production Economics, 140(1), 149-159.

11) González Rivero, M. D. C., & Santana Arroyo, S. (2013). Reingeniería de procesos y servicios en biblioteca de la Facultad de Ciencias Médicas" Gral. Calixto García Íñiguez". Revista cubana de Información en ciencias de la salud, 24(3), 330-342.

12) Jafari, Seyyed Mohammad Bagher, Jandaghi, & Mohammadi Dorbash. (2017). Investigating the impact of the implementation components of business process reengineering projects on the success of these projects. Productivity Management, 10(4 (39) Winter), 67-90

13) Jerónimo .H., Henriques. P, Lacerda. T. D.,& Vieira .P. R.,(2019) , Going Green And Sustainable: The Influence Of Green Hr Practices On The organizational Rationale For Sustainability, Journal Of Business Research,
14) Krawczyk, A. (2022). Proposal of Redefinition of the Terms Geomatics and Geoinformatics on the Basis of Terminological Postulates. ISPRS International Journal of Geo-Information, 11(11), 557.
15) Kubicova, J. A. N. A. (2014). Reengineering-concept and review of literature. Management: Science and Education, 3, 41-47.
16) Leung, K. H., Choy, K. L., Siu, P. K., Ho, G. T., Lam, H. Y., & Lee, C. K. (2018). A B2C e-commerce intelligent system for re-engineering the e-order fulfilment process. Expert Systems with Applications, 91, 386-401.
17) Lisene, M.,(2015), " Sustainability practices and reporting by the South African banking sector", Master Thesis, School Of Accounting Sciences, North West University.
18) Mania E & Rieber A,(2019), Product Export Diversification And Sustainable Economic Growth In developing Countries , Structural Change And Economic Dynamics (51) 137–151.
19) Mohsen, Abdel Reda (2017), Environmental Sustainability Strategy and its Role in Ensuring Continuous Improvement of the University Institution’s Performance, a Exploratory Study, Gulf Economics Journal, No. 34.
20) Periokaitė, P., & Dobrovolskienė, N. (2021). The impact of COVID-19 on the financial performance: a case study of the Lithuanian transport sector. Insights into Regional Development, 3(4), 34-50.

21) Ringim, K. J., Razalli, M. R., & Hasnan, N. (2012). Critical success factors for business process management for small and medium banks in Nigeria. Business and Management Review, 2(1), 83-91.

22) Roy S, Ali S. Raihan A.S, Paul S.K & Kabir G,(2020), Evaluating Strategies For environmental Sustainability In A Supply Chain Of An Emerging Economy, Journal of cleaner production,

23) Salman Fatima (2014) The impact of re-engineering administrative processes in achieving the entrepreneurial directions of Iraq Telecom, Iraqi Journal of Administrative Sciences, No. 41.

24) Sanchez M, Ochoa M.W.S, Toledo E & Ordonez J,(2020), The Relevance Of Index Of Sustainable Economic Wellbeing. Case Study Of Ecuador", Environmental And Sustainability Indicators.

25) Santos, A. I., & Serpa, S. (2020). Literacy: Promoting sustainability in a digital society. J. Educ. Teach. Soc. Stud, 2(1), p1.

26) Vesal M, Siahtiri V & O'cass A,(2020), Strengthening B2b Brands By Signaling Environmental Sustainability And Managing Customer Relationships, Industrial marketing management,

27) Zhang, Y., Khan, U., Lee, S., & Salik, M. (2019). The influence of management innovation and technological innovation on organization performance. a mediating role of sustainability. Sustainability, 11(2), 495.

28) Zomparelli, F., Petrillo, L., Di Salvo, B., & Petrillo, A. (2018). Re-engineering and relocation of manufacturing process through a simulative and multicriteria decision model. IFAC-Papers Online, 51(11), 1649-1654.