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Enablers Elements and Employees Results Casual Relation in the EFQM Excellence Model Study on Banking Sector in Sudan

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Abstract:- This paper explores the causal structure of the EFQM Excellence Model, hence attention around the model as an approach to further improvement has increased in the last two decades. The objective of this paper is to examine the causal relation between the EFQM enablers which are leadership, strategy, people, partnerships and resources and processes and the employees' results by evaluating the causal relation between the enablers set and the employees' result of the EFQM model through an empirical study on the Banking Sector in Sudan. The approach, methodology and design of the study Present deep understanding of the associations between the EFQM enablers and employees result. By examining this hypothetical causal relationship, a survey via questionnaire conducted on 30 Banks in Sudan, which provide the dada of the research examination. The Findings reflect The EFQM model enablers that influence positively the employees' results are Leadership, People and Processes while strategy and partnerships didn't support the positive influence on employees' perception or employees' results in this study.

This results based only on the data collected from Sudanese firms (Banks), and this constitute the limitation of this study. The logical extension to this research is to examine the casual relation between the rest of the enablers' elements and the results elements sides of the EFQM model in different environments, where others sectors in Sudan or others countries represent an opportunity for such kind of Business research.

Understanding the casual relation between the enabler side of the model which contained five elements and the Employees results which on results side of the model, will provide a guide for proper implementation for the model and possibly facilitating the application of TQM systems. Employees' improvement according to many researchers rely on proper implementation of the management model in practice. The EFQM model suggest causal relation between enablers and results side of the model, where employees play vital role in continues development of the organization through their presentation of Initiatives in order to meet the continues and accelerating expectations of their customers.

Initiatives came as a result of customers satisfaction and customer satisfaction came as a result of many factors among which is the positive causal relation between the enablers and employees results on the results side of the EFQM model. This study add additional value for understanding organizations employees results causal relation in terms of presenting deep insight for the causal relation of the organization as represented in the EFQM model at the enabler Side of the model and the employees results on the results side of the model. Taking banking sector in Sudan as an empirical examination environment for this study.

Keywords:- *Employees Perception, People.*

I. INTRODUCTION

The structured relation between the EFQM excellence model is one of the assumption among which the EFQM Excellence Model is built upon. That's the enablers' results causal relation, where leadership leads policy and strategy, people and partnerships and resources, and these four elements influence the results side [1].Others theories and empirical studies explained the causal relations between the enablers' side and the results side of the EFQM model. The casual Relationship between enablers and results in the EFQM Excellence Model could be conceptualized in different perspectives that's interrelation between the components in each side of the model, as well as the positive influence of the enablers on the results. The direction of enabler's performance influence the direction of results. That's, as long as performance of enabler's side is excellence, this will cause superior results, and this is the fundamental concept of EFQM [2], [3]. Looking at this concept from holistic point of view can draw the assumption that organizations are systematically intended to improve results which can't be achieved unless their structure emphasizes on improved enablers [4]. This principle is a part of the definition of the model: "excellent results with respect to enablers related to key business results, customers, people and society results, which are achieved through leadership policy and strategy, partnerships and resources, and processes" [1]. The causal relationship between enabling factors and outcome constitutes the strength of the EFQM model [5]. The need to provide evidence of empirical causation between enabling factors and outcomes, forms the

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basis for incorporating a new stream into research on the EFQM excellence model.

II. THE HYPOTHESIS

Hypothesis of this paper developed to test the casual relation between the five criteria in the enablers side of the EFQM model which are Leadership, Strategy, People, partnerships and resources and processes against employees' results, whereas enablers are the independent variable and employees result is the dependent variable.

III. THE OBJECTIVES

This research is intending to develop a business assumption that can help in conceptualizing results to develop the banking industry in Sudan. The result of examining the hypothesis can help in better understanding of the research problem, in addition to that hypothesis development can contribute in clear understanding of the application of the EFQM implementation. Government of Sudan in 2004 declared the adoption of EFQM excellence model as a frame for institutional development for the country's civil services. Bank of Sudan accordingly issued in 2011 a decision for all Sudanese Banking sector units to participate in an excellent award Based on levels of EFQM model implementation, and this represent the justification behind this study .This study contribute to the body of knowledge of EFQM theories and practice, deep understanding of the causal relationship between the enablers side and the employees results side, especially in Sudan macroeconomic environment. This objective could be expressed via the research question, which is: "Is there a significant relationship between the enablers and employees' results in the EFQM model?" deep understanding on the role played by the five enablers in achieving the employees' results, could be achieved by answering this question.

IV. LITERATURE REVIEW

The EFQM excellence model is a non-mandatory framework based on nine criteria as shown in Figure (1), five of these elements are "enabling factors" and four are "results". The 'Enabler' criteria cover what an organization does. 'Results' criteria cover what an organization achieves.

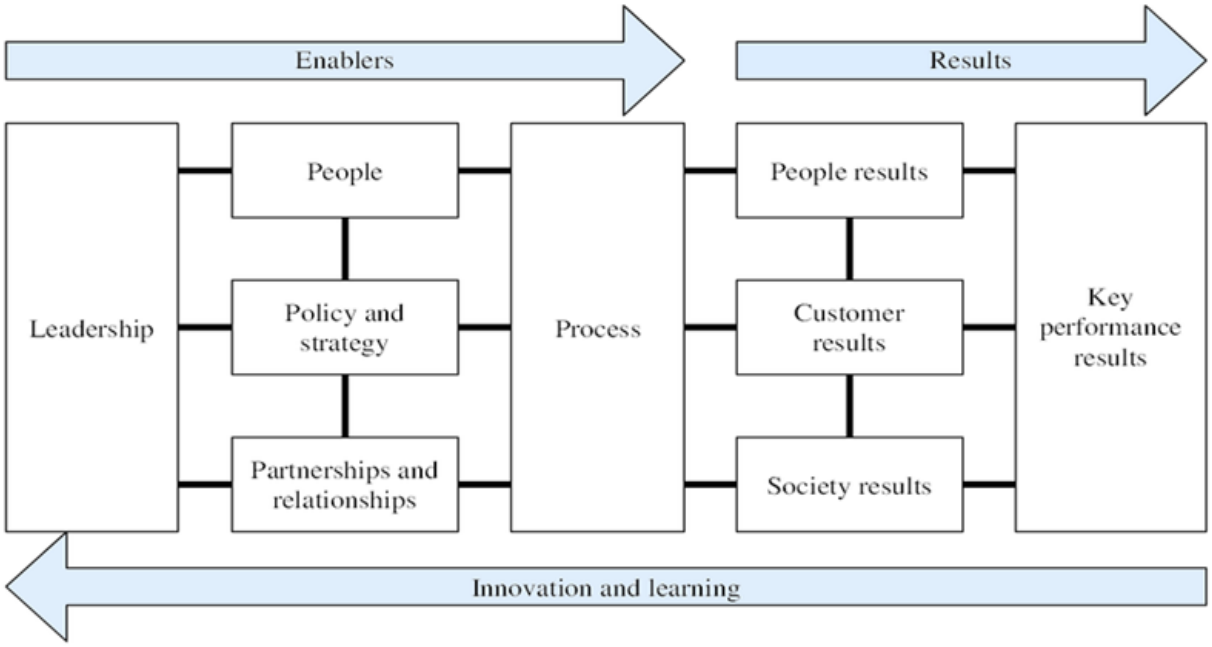

Figure (1): EFQM Excellence Model

'Results' are caused by 'Enablers' and feedback from 'Results' helps to improve 'Enablers' [1].

The FQM model is defined as a non-mandatory framework that recognizes a number of methods for achieving sustainable excellence. Within this description, there are some basic concepts associated with the EFQM model, which are, firstly "Results Orientation" where Excellence is achieving results that joy all the organization's stakeholders. Secondly "Customer Focus" where Excellence is creating sustainable customer value. Thirdly "Leadership & Constancy of Purpose" where Excellence is visionary and inspirational leadership, coupled with constancy of purpose. ". Fourthly Management by Processes & Facts" where Excellence means managing the organization through a set of interrelated systems, processes and facts, fifth "People Development & Involvement" where Excellence means maximizing the contribution of employees through their development and involvement, Sixth "Continuous Learning through Innovation & Improvement" where Excellence is effecting change by using learning to create innovation and improvement opportunities. Seventh "Partnership Development" where developing and maintaining

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value - adding partnerships. Eighth "Corporate Social Responsibility" where Excellence is exceeding the regulatory framework in which the organization operates and strive to understand and respond to the expectations of their stakeholders and the society.

The Optimal utilization of EFQM model is highly related to paying balanced attention and support to the elements of the model at the enabler side, this attitude lead to balance results at the level of results element of the model , the debate of EFQM optimal utilization among researchers and theorists raised by Dow and others [6] , Dijkstra [7] , Naylor [5], Esquildsen and others [8], Eskildsen and others [9], Mc Gee 3 [10], Sjoblom [11] and Dale [12]. Hence they were all debating on the significant of equilibrium balance of the efforts being played at the level of the enablers' elements of the EFQM model, although the practice of TQM reflects different results [6]. Employee satisfaction and loyalty takes a critical position in today's economy, where Companies are always seek to build positive attitude towards job satisfaction, the thing which leads to high levels of employees performance [13]. Many empirical studies have shown that employee satisfaction has a positive influence on the organizational capability and loyalty [14]. Based on the theoretical considerations of the EFQM excellence model people (employees) results could be measured in different ways among which are their perceptions and performance indicators.

V. RESEARCH QUESTION

Enablers' drive the results is the Maine assumption of the EFQM model casual relations direction. The highest benefit of using this model could be attained when the organization develop the enablers in a manner that excellent results could be achieved. Many Researchers concluded to the fact that, balancing the effort on the enablers side lead to balance result on the result side of the model [7], [5], [8]. The justification of this view based on the interaction between the enablers criteria, since it affect each other, where a weakness in one criterion can decrease the power of the others criteria [15]. The balance development of the enablers' criteria reflects the internal consistency of the enablers side of the EFQM model, that's excellent results achieved only, when the contribution of each element of the enablers criteria is equal. The purpose of this research question is to examine the casual relation between the enablers side of the model which include five enablers and employees result on the results side of the model in term of the question (what is the casual relation between Enablers elements set and the Employees Results of the EFQM model?).

VI. METHOD (SAMPLE SIZE)

In statistics Population size in most cases determine the sample size. Larger sample size gives more precision. The population size in this research is (21,340) which is the Banking sector of Sudan total employees [16]. The sample size which is selected is expected to specify the precession desired that is liable to represent the population of the study.

In order to get no difference in confidence level the sample size selected based on quantitative sample size formula which is Steven Thompson formula [17] as shown below:

$$n = \frac{N \times p(1-p)}{\left[\left[N-1\times\left(d^2 \div z^2\right)\right] + p(1-p)\right]}$$

(n) Represent the size of population. Accordingly the population of the study in this equation is the Banking sector of Sudan employees by the end of the year 2018 which represent the independent factor (n) in the left side of the formula ,then the sample size which can represent the banking sector employees is calculated on the right side of the formula , and this construct 95% confidence interval with a Margin Error of about ±.05% .The total number of employees in the banking sector of Sudan as mentioned before is (21,377) which represent the population size (n) in the equation. There for the right side of the equation is calculated as (377) employees, which refers to the sample size of this study, where the construction of 95% confidence interval with error margin about ±.05% could be achieved accordingly.

VII. MEASUREMENT

In order to gain credible findings, standardize design of data collection methods insured by using proper technique that enhance accuracy. Data collected in this research is from different sources, the primary data source is the Banking sector employees. Scientific journals, books, records, previous researches, documents, are the secondary source of data, where existing data related to this study summarized from these different sources. The medium of communication between the researcher and the population is the questionnaire in this study, hence the objective is to present standardize response for all targeted samples or subjects which could be achieved via questionnaire [18]. The objective of questionnaire design is to provide a base for testing the hypothesis of the study. The basis for the research parameters formulated from the answers of the respondents where the same questions being asked to different respondents. The information in the EFQM sub-criteria used to help in setting the questionnaire data sets, since it is appropriate for measuring the scale of the nine criteria of the EFQM model [9], [19].

VIII. RESPONSE RATE

The population of this study is the employees of the banking sector in Sudan. The researcher employed convenient sample where 526 as self-administrated survey questionnaires was distributed to 30 Banks which represent 81% of all Banks operating in Sudan, the overall response rate is 76 % this was considered as high rate due to questionnaires given one by one by one to respondents and in researches used a

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self–administrated survey [20]. Total questionnaires received from respondents' are 464. Valid questionnaires received from respondents are 351. Invalid questionnaires are 113. Useable response rate is 88%.

IX. STATISTICAL PROCEDURES

SmartPLS (PLS) statistical analysis application is used for the data analysis. The objective of PLS is to find the causality relation between the set of enablers and Employees perception results. Statistically PLS shows the different pattern of the casual relation between each of the five enablers' elements and the Employees perception results.

A. Data analysis and Measurement model

In order to determine the validity of the model , which aims to ensure degree to which multiple items measuring the same concept are in agreement suggested by [21] and also the factor loadings, composite reliability and (AVE) average variance extracted to assess convergence validity. However which depict the degree to which the construct indicators indicate the latent construct ranged from 0.765 to 0.867 which exceeded the recommended value of 0.7 [21] as in table (1).

	Employees	Leadership	Partnership	Perceptions	Processes	Strategy
Employees1	.816					
Employees2	.810					
Employees3	.867					
Employees4	.871					
Employees5	.837					
Leadership1		.765				
Leadership2		.784				
Leadership3		.829				
Leadership4		.807				
Leadership5		.793				
Leadership6		.819				
Partnership1			.743			
Partnership2			.781			
Partnership6			.799			
Partnership7			.848			
Perceptions1				.727		
Perceptions10				.855		
Perceptions2				.796		
Perceptions3				.798		
Perceptions4				.814		
Perceptions5				.817		
Perceptions6				.789		
Perceptions7				.775		
Perceptions8				.750		
Perceptions9				.856		
Processes2					.799	
Processes3					.851	
Processes4					.853	
Processes5					.818	
Strategy1						.771
Strategy2						.785
Strategy3						.748
Strategy4						.771
Strategy5						.759
Strategy6						.797
Strategy7						.793

Table 1:- factor loading.

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However the loading for all items also exceed the recommended value of 0.7 [21]. As Composite reliability values, also (AVE) which reflects the overall amount of variance in the indicators accounted for by the latent construct, were in the range of 0.872 and 0.946 which exceeded the recommended value of 0.7 [21] it is appearing table (2).

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Employees	.896	.896	.923	.706
Leadership	.887	.891	.914	.640
Partnership	.804	.812	.872	.630
Perceptions	.936	.938	.946	.638
Processes	.850	.851	.899	.690
Strategy	.889	.891	.913	.601

Table 2:- Internal consistency

B. Discriminant validity

In order proceeded to test the discriminant validity. It is the extent to which the measures is not a reflection of some other variables and is indicated by the low correlations between the measure of interest and the measures of other constructs. As a remedy, J. Henseler [22] propose assessing the heterotrait-monotrait ratio (HTMT) of the correlations. It is appearing in table (3).

	Employees	Leadership	Partnership	Perceptions	Processes
Employees					
Leadership	.745				
Partnership	.736	.687			
Perceptions	.765	.742	.660		
Processes	.713	.691	.677	.746	
Strategy	.764	.776	.737	.646	.615

Table 3:- Discriminant validity (HTMT)

C. Structural model

To evaluated the structural model in order to test the hypotheses. We use smart PLS, however the model as shown in Figure 2 and Table (4), show out the result of hypotheses test.

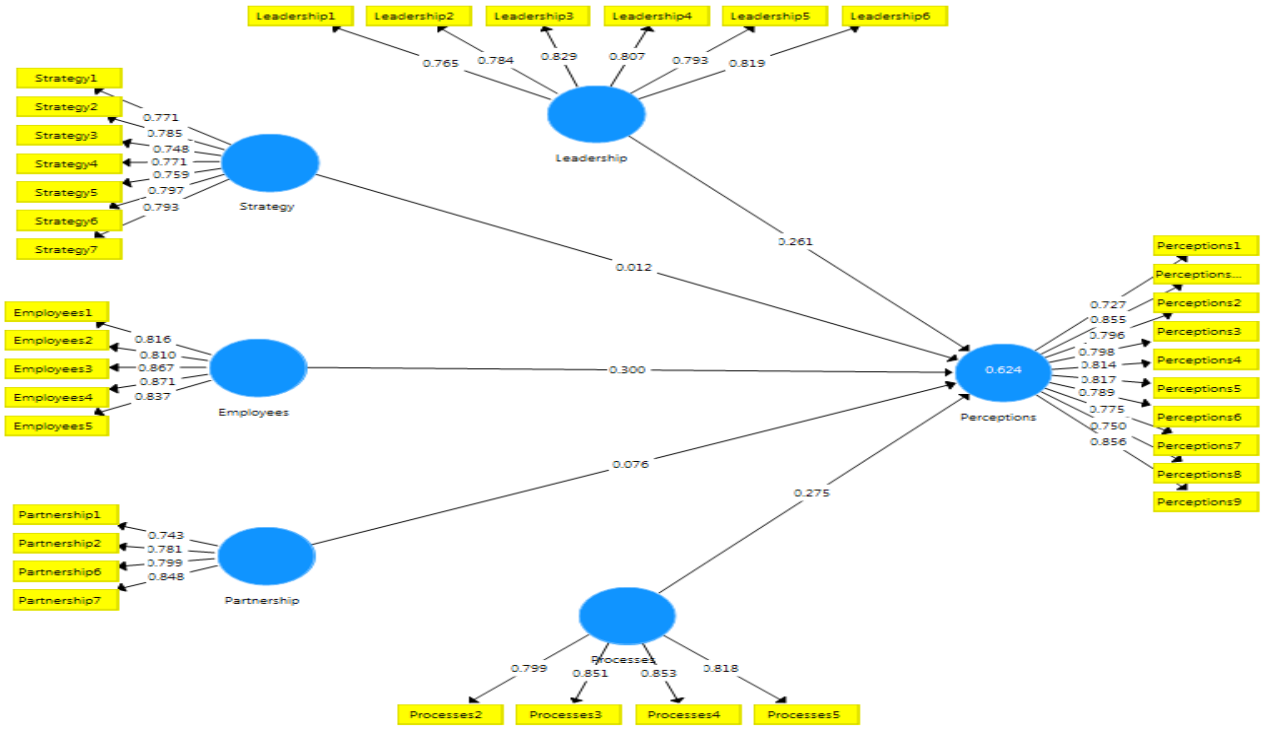

Fig 2:- Structural model

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	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Employees -> Perceptions	.300	.300	.069	4.321	.000
Leadership -> Perceptions	.261	.263	.081	3.222	.001
Partnership -> Perceptions	.076	.079	.057	1.333	.183
Processes -> Perceptions	.275	.276	.049	5.581	.000
Strategy -> Perceptions	.012	.009	.089	.133	.894

Table 4:- hypotheses result.

X. DISCUSSION AND CONCLUSIONS

Applying SmartPLS (PLS) in the analysis of this research concluded to a result shows a positive influence of three enablers on the employees results (People result) while two enablers don't support the assumption of positive influence on employees' results. The enablers that influence positively the employees' results are Leadership, People and Processes while strategy and partnerships and resources didn't support the positive influence on employees' perception or employees' results. This is so according to the result of SmartPLS (PLS) analysis that indicate the P values of the three enablers (Leadership, employees and processes) that positively influence the employees results was less than (0.05) , while the P value of the other two enablers (Strategy and Partnerships) which don't support the positive influence on employees results or perception was greater that (0.05).

The statistical causal formula rely on the logic that , as long as P value less than (0.05) then the independent variable (enablers) influence the dependent variable (employees results) positively , also the same logic explain the non-supportive causal relation between the Independent variables (enablers) and dependent variable (employees) when P value is greater than (0.05). The results of the analysis match conceptually other researchers' results such as the research findings of Dow and others [6], hence their studies reach to many conclusions among which is obtaining different results when linking them to the practice of Total Quality Management. Other studies by Dijkstra [7], Naylor [5] and Esquildsen and others [8]. Reach to the same area of results which shows that, in order to reach excellence it is not sufficient to interrelate or concentrate on certain criteria (Isolated areas) in the excellence model. Considering the EFQM model as one unit and establishing appositive casual relation between all enablers and all results allow organizations to benefit fully at the implementation level of the model as concluded by the researches of Eskildsen and Dahlgaard [9], that's when describing the causal structure of the model Companies should not concentrate on certain part of the model specially at the enablers level , they should pay attention to all the enablers elements , and look at the model with holistic view. The concept of full utilization of the EFQM also discussed by McGee [10] , Sjoblom [11] and Dale [12],they explained that the power of influencing results side by the enablers side came from the equilibrium pattern of the attention paid to the enablers elements, by viewing the enablers as integrated parts that complement each other's. This study conducted in the Banking sector of Sudan and this constitute the limitation of the study. Opportunities for further research in the application of excellence models could be seen in other sectors whether inside Sudan or in other countries. Examining the application of the EFQM model casual relations of its enablers and results elements in different environments constitute the rational extension of this research.

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