



## Evaluating the Performance of Non-profit Organizations Using Trend Analysis: The Future Impacts of the Present Performance

**Khalid Yehia Youssef**

Khaled\_youssef2015@feeps.edu.eg

Faculty of Economics and Political Science,  
Cairo University - Egypt

### Abstract

*This paper tries to introduce a new methodology for evaluating the performance of non-profit organizations depending on comparing the actual results of the performance not only with the target results, but also with the performance results of similar organizations, and by the previous results of the organization. Furthermore, the suggested methodology will use the trend analysis as a statistical tool in identifying the direction of the performance results, and how far the direction of the current performance results is correspondent with the target performance results. Using the trend analysis may help also the decision-makers to expect the impacts of the present performance in the future performance, and take appropriate decisions according to this expectation.*

**Keywords:** Non-profit organization, Performance evaluation, Trend analysis.

### Introduction

Many contemporary factors and variables affect the performance of non-profit organizations and make their managers and decision-makers face many different results of their performance.

Any non-profit organization usually evaluates its performance at the end of each period to determine how far its objectives were achieved. The models which are usually used in evaluating the performance of the non-profit organizations do not determine accurately the future impacts of the current performance, most of these models focus on evaluating the outcomes of the organization more than its future impacts, but the non-profit organizations basically work to make positive impacts more in their environment more than just achieving outcomes. The goals of any non-profit organization are usually social or human, it always works to improve and develop the future of its community, so, its performance must be evaluated by models with strong future indicators to measure how far its current performance will affect its future performance.

Trend analysis as a statistical technique is usually used not only in determining the direction of the historical development of any natural phenomena or social activity, but also used in forecasting its future (Youssef 2021).

This study tries to determine how far the trend analysis can help in evaluating the performance of the non-profit organization and help also in making its future decisions by determining the performance direction and in estimating the impacts of the actual performance in the future performance.

### Literature Review

Many methodologies were used in evaluating the performance of the non-profit organizations, most of these methodologies focus on measuring how far the goals of the organization were achieved efficiently (achieving the goals with minimum use of capabilities).

\* This article was submitted in April 2022, and accepted for publishing in May 2022.

© Arab Administrative Development Organization- League of Arab States, 2022, pp 227-238. DOI: 10.21608/aja.2022.131632.1229

Bititci et al (2012) categorized the studies of the institutional performance evaluation historically into four phases:

- First phase (between the 1920s and the 1950s): focus on operational cost and efficiency.
- Second phase (between the 1950s and the 1960s): focus on economic and financial measures, and focus not only on the operations but also on other departments' activities.
- Third phase (between the 1960s and 1980s): other dimensions were added to the performance evaluation process, like quality, time, flexibility, and customer satisfaction.
- Fourth phase (after the 1980s): the evaluation indicators include not only internal indicators, but also external indicators like social and environmental indicators.

Arena & Bengo (2014) categorized the studies of performance measurement systems into two groups:

- 1- **The First Group:** Performance evaluation systems for non-profit organizations as multi-dimensional systems.

This group includes four main types of models:

- Models based on the modified balanced scorecard.
- Contingency models that based on specific characteristics of specific non-profit organizations.
- Approaches that incorporate the ideas of different stakeholders in developing the performance evaluation system.
- Models based on the social return on investment.

- 2- **The Second Group:** Tools and Instruments to deal with multi-stakeholders Systems.

This group of studies refers to tools and instruments that provide the multiple information needs of different stakeholders.

The historical and topic classifications of the performance measurement systems illustrate that the used systems didn't interest in analyzing the historical development of the performance results or identifying the effects of the actual performance results in the expected performance results in the future (Neely & Platts 1995). Measuring how far the organization's goals are achieved may be the main indicator in evaluating the results of the organization's performance, but it is not a sufficient indicator. Any organization can achieve its goals, but its performance results may not be efficient comparing with the results of the other organizations in the same field, or its present results may indicate ineffective results in the future. The negative indicators of the competitive position of the organization or in the historical development of its performance results may indicate deficiencies in the planning process or in goals identification.

Many methodologies are used in evaluating the performance of non-profit organizations, for example, the balanced scorecard model was introduced by Kaplan and Norton (1992) to measure the institutional performance depending on four perspectives: financial perspective, customer perspective, internal business perspective, and learning & growth perspective. The financial perspective is on the top of the hierarchy, but in non-profit organizations, the goal of the organization should be placed at the top of the hierarchy (Kaplan and Norton, 2001).

The balanced scorecard was developed to help in translating the strategy into objectives on the strategy map, where the performance is evaluated through measures that are usually a formulation for strategic objectives of a non-profit organization (Niven, 2008). In the balanced scorecard, the definition of a customer should be expanded to include who receives the service, but also the funders and donors (Kaplan and Norton, 2001). The application of the balanced scorecard in non-profit organizations faces many difficulties. The criteria and general philosophy of the balanced scorecard may not be useful for improving non-profit organizations. The business approach of the balanced scorecard doesn't include important elements of non-profit organizations as value-based programs, volunteer participation, and compensation systems (Bozzo, 2000).

Somers (2005) created the Social Enterprise Balanced Scorecard (SEBC) as a development of the original balanced scorecard model. The social perspective is the main perspective; the financial perspective is more focused on sustainability including environmental and social performances; and the customer perspective includes a large number of stakeholders, either the donors and funders or the consumers.

Benchmarking is a performance evaluation method, it depends on comparing the organization performance by the performance of the competitors, or any external standards. This comparison aims to improve the performance of the organization based on the best performance of competitors (Camp, 1989). Benchmarking can be applied in non-profit organizations as the other organizations. It is effective in identifying goals and objectives, and in achieving the needs of customers and stakeholders (Tyler, 2005).

3E's is another method used in evaluating the performance, 3E's depends on three indicators: efficiency, effectiveness, and economy. Non-profit organizations are usually evaluated by their impacts on the target communities, therefore 3E's method is very useful for evaluating the performance of non-profit organizations, it focuses not only on the economic indicators of the performance, but also focuses on the efficiency and the effectiveness of the performance (Mihaiu, Opreana, Cristescu, 2010), (Otrusanova, Pastuszkova, 2012).

Social Return on Investment (SROI) is a technique that measures the socio-economic and environmental impact of organizations. It is a holistic and realistic cost-benefit analysis, and it can be used for any kind of organization: business, non-profit, or governmental organizations. It is not used only for evaluating the results and impacts of an organization, but also for forecasting how far the organization achieved the target social value.

Arena & Bengo (2014) proposed an evaluation model that is based on three elements: 1) Inputs which refers to the resources used in performing a certain activity; 2) Outputs which refer to the results of the transformation process; 3) Outcomes which refer to the long-term impact of the output on the external environment. Based on the three elements, three performance dimensions were identified: 1) Efficiency refers to the ratio between outputs and inputs; 2) Effectiveness refers to the output characteristics; 3) Impact is a measure of the outcome and refers to the long-term effects of the output in the target community.

Cashwell & Copley (2019) proposed a set of eight financial ratios for evaluating not-for-profit organizations. The eight ratios are in three groups: 1) Liquidity ratios include the "days cash on hand" ratio and the "months of spending" ratio that indicate how far the non-profit organization has sufficient cash to meet its current and future expenses. 2) Operating ratios include the "savings indicator" ratio, which measures the annual surplus or deficit between revenues and expenses, the "contributions & grants" ratio, which measures the organization's reliance on external support, and "Fundraising efficiency" compares the amount of the contributions by what was expended for fundraising. 3) Spending ratios include the "program service expense" ratio, "Management expense", and "Fundraising expense".

All of the discussed models that are commonly used in evaluating the performance of non-profit organizations need an efficient system to gather, organize and analyze information (Cestaria et al., 2018).

Most of the literature refers that the social indicators are the most indicators used in evaluating the performance of non-profit organizations that are usually and basically aim to introduce social services or to achieve a societal development; that is beside the financial and technical indicators which are the main indicators in most of the evaluation models, like the balanced scorecard, cost-benefit analysis, and benchmarking.

The non-profit organization evaluates its performance to improve and develop it to achieve its goals with a high level of efficiency and effectiveness, therefore, it must not only measure how far its goals were achieved or determine its competitive position, but also must analyze the historical development of its performance results, and the impacts of its current performance in its future performance to ensure the

continuity in achieving its goals in the future. Trend analysis as a statistical tool can help in analyzing the historical development of the non-profit organization's performance, and also in determining the impacts of its current performance in its future performance.

## Research Problem

Although there are many models for evaluating the performance of the non-profit organization, these models basically focus on measuring how far the goals were achieved, without analyzing the historical development of the non-profit organization's performance or determining the impacts of its current performance in its future performance, that can help decision-makers to treat with any expected deviation in the future performance.

Based on the previous reasons, how far the trend analysis as a statistical technique can be used in analyzing the historical development of the non-profit organization's performance, and how far it can be used in estimating the impacts of the actual performance in the future performance?

## The Theoretical Framework of the Study

The theoretical framework will depend on the usage of the trend analysis as a statistical technique with the traditional performance evaluation techniques, to add the future dimension to the evaluation process of the non-profit organizations' performance. This relationship is shown in figure 1

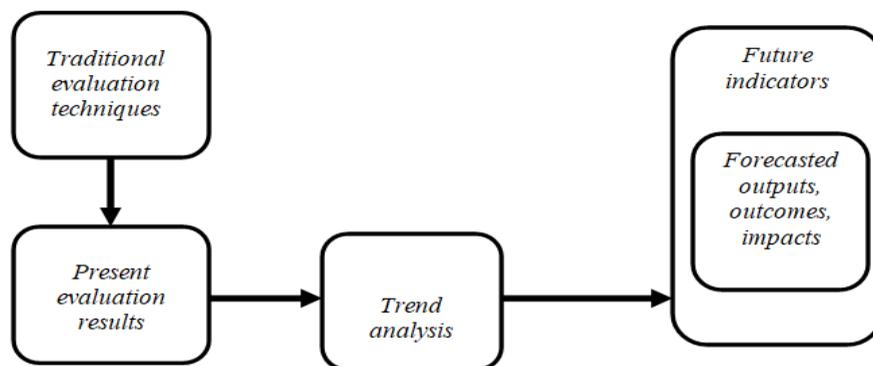


Figure 1. The Theoretical Framework

## The Main Perspectives of Performance Measurement

There are four main performance measurement perspectives:

### *Economic and Financial Efficiency Perspective*

If the business sector basically uses financial and economic measures in evaluating its performance, the non-profit organization usually aims to achieve societal goals, it depends mainly on the societal measures in evaluating its performance, but financial and economic measures are also used in evaluating its performance for many purposes, like accountability, planning, and development.

Many economic measures are used in evaluating the performance of the non-profit organization like Cost-Benefit Analysis (CBA), Outcome Rating Scale (ORS), Single Outcome Agreements (SOAs), Social Audit, Social Accounting and Audit (SAA), and Social Return on Investment (SROI). Economic measures are used also in the determination of the replacement cost, opportunity cost, choosing between alternatives, contingent valuation, choice experiment, and revealed preference (Cnaan and Kang, 2010).

### *Program Perspective*

Program perspectives are based on evaluating the components of the program by measuring how far the efficient inputs and operations can produce efficient outputs, outcomes, and impacts.

Most non-profit organizations have sustainable goals, as the societal development organizations that need to determine how far their current inputs and operations are suitable to achieve the target outputs, outcomes, and impacts in the future.

### ***Strategic Perspective***

These evaluation perspectives depend on measuring how far the performance of the non-profit organization achieved its strategic goals, the evaluation process with this perspective needs techniques that can measure not only how far the interim goals were achieved but also can measure how far the current performance will lead to achieving the strategic goals in the future.

### ***Participatory Perspective***

Societal goals that most non-profit organizations work to achieve, make their performance usually evaluated by participatory methods which enable to measure the impacts of the non-profit organizations in their target communities, therefore, they usually used at the end of the plans or the programs. In the participatory methods, not only the target customers share in evaluating the performance of the non-profit organizations, but also the stakeholders and funders share in the evaluating process.

The participatory methods may determine directly how far the non-profit organization had achieved its goals. If it had achieved its goals in ratios less than 100%, the participatory methods can not determine the reasons for the deficiency without using the financial, economic, and operational analysis.

### **Measures of Non-profit Organization Performance**

There are many measures for evaluating the performance of non-profit organizations, like the social, economic, and operational measures. Non-profit organizations are usually interested in achieving societal goals, therefore, public value is the main measure for evaluating the performance of non-profit organizations.

The Public value is usually used to determine the value that has been added to the target community, and to determine also how far the non-profit organization had achieved its objectives in the planned time. The public value can be measured by the societal goals that the non-profit organization tries to achieve. The capabilities of the non-profit organization determine how far it can achieve its societal goals (Lee & Nowell, 2014). Generally, the public value should be added to the target community efficiently with the best possible economic and operational efficiency.

### **The Future Dimension in Evaluating the Performance of Non-profit Organization**

Most of the models that are used in evaluating the performance of non-profit organizations focus mainly on evaluating the qualitative outcomes and the positive impacts. The outcomes are usually measured by the comparison with objectives, measuring the client or user satisfaction, and the improvement of life prospects. (Bagnoli & Megali, 2009), (Lee & Nowell, 2015), Other models evaluate the performance of the non-profit organization by comparison with competitors (Non-profit organizations that work in the same field).

Nowadays, fast changes in the factors and variables that affect the performance of non-profit organizations make analyzing the historical development of the performance and its impacts on the future performance is a main element in the evaluation process, but this future dimension is not sufficiently considered in most of the used evaluation models, for example, the balanced scorecard is interested only in the future dimension in the learning & growth perspective as a goal for improving the organization's performance in the future; benchmarking is just used in identifying the differences between the organization's performance and the competitors' performance for improving the performance of the organization according to the best performance among the competitors; 3E's as an evaluation model uses just three indicators in evaluating the organization's

performance: efficiency, effectiveness, and economy without any focus on the future dimension; cost-benefit analysis is based on analyzing how far the costs are used efficiently in achieving the organization's goals.

Using the previous models in evaluating the non-profit organizations' performance needs an additional tool that helps in analyzing the historical development of the performance and how far this development affects the future performance.

## **Performance Evaluation Determinants of the Non-profit Organization**

Many determinants in evaluating the performance of non-profit organizations must be discussed:

### ***Goals of The Non-profit Organization***

- Are all the goals have to be achieved together, or they can be achieved separately.
- Are the goals must be achieved in whole the target community at the same time, or can be achieved partially according to a timetable.
- The estimated time for achieving the goals.
- Are the goals continual or temporary?
- Are the goals from the demands of the community, or seek to improve or develop the community?
- Are the goals created or developed by the government, or they are opposite to the government's goals?
- Are the goals consistent with the national and international laws and decisions?
- Are the goals suitable for the ethics of the community, or inconsistent with them?
- Can the organization lonely achieve all the goals efficiently, or it must cooperate with other non-profit organizations to achieve the goals?

### ***Funding***

- Is the non-profit organization funded by individuals, government, international organizations, private sector, or other non-profit organizations, or multi-funded?
- Is the funding complete or partial? Continuous or temporary?

### ***Customers***

- Are the target customers convinced with the goals of the non-profit organization, and they know that they need them?
- What is the expected reaction from customers, may they cooperate with the organization, or may resist it? Is this an expected reaction from all the customers or from a part of them?
- How far the customers are satisfied with what was achieved?

## **The Main Directions of Evaluating the Non-profit Organization Performance**

In the process of evaluating the non-profit organization's performance, most evaluators use many methods that depend on the comparison between the results of the actual performance and one of three main bases: target performance, the performance of competitors, and the performance results of the previous periods. These three comparisons can be illustrated as follows

### ***Comparing the Actual Performance with the Target Performance.***

It is one of the main methods of evaluating non-profit organization performance, that each organization has goals that seek to achieve at a specific time, these goals may be implemented together at the same time, or separately. The goals of non-profit organizations are often qualitative, therefore, they must be formulated quantitatively to be measured.

Any non-profit organization compares its actual performance by its target performance to determine how far it has succeeded to achieve its goals in the planned time.

The actual performance is evaluated compared with the target performance by calculating the following ratio:

$$\frac{\text{Results or rates of the actual performance}}{\text{The target results or rates}}$$

According to this ratio, the success and failure of non-profit organizations are determined. If this ratio is near to 100%, that means that the organization had succeeded in achieving its objectives, and If the ratio is near to zero, that means that the organization had failed in achieving its objectives.

This ratio is applied not only for the total actual performance, but also for the partial and detailed performance, so it is mainly used in most non-profit organization performance evaluation methods, especially balanced scorecards.

Although this comparison introduces the main indicator for non-profit organization's success measurement, this indicator may not be efficient if the target performance is less than the performance results of the similar non-profit organizations, or less than the performance results of the previous periods of the non-profit organization, also if it is not suitable with the financial and human capacity of the organization.

This comparison neglects the trend of the non-profit organization's performance that shows if the non-profit organization's performance is growing or deteriorating.

### ***Comparing the Actual Performance of the Non-profit Organization with the Actual Performance of the Similar Non-profit Organizations.***

This comparison is one of the most important measures used in evaluating the performance of non-profit organizations. In the business world, any organization usually compares its performance with the performance of the competitors to determine the deficiencies in its performance compared to others, but the non-profit organizations are different from the business organizations, that the non-profit organizations may work separately or they cooperate in implementing their goals. If the non-profit organization works separately, it usually compares its performance with the performance of similar non-profit organizations to determine how far its performance is less, better, or equal to the performance of the other organizations. Generally, non-profit organizations don't compete with each other as business organizations, but they can compare their performance with each other for improvement.

The best comparison result is that the performance results of the evaluated organization be better than the performance results of all the other organizations. If the results of the organization are worse than the results of one or more of the other non-profit organizations, evaluators must determine the aspects and the causes of excellence in the best performance; also they must identify the deficiencies in the organization's performance compared to this best performance, reasons of deficiency, and how to treat them.

This comparison may not be useful if the non-profit organization achieved the maximum amount of production by its maximum capacity of resources, that the organization can't achieve more than these results, and it already has achieved its main goal. This comparison also does not focus on the performance trend of the organization.

### ***Comparing the Actual Performance of the Period with the Actual Performance of the Previous Periods.***

It is one of the most popular and usable tools in evaluating the organizations' performance. It depends on measuring how far the results of the organization's performance are growing or deteriorating from a period to the other.

This method of analysis differs from case to case. Some evaluators compare the performance results of the evaluated period with the results of only the last period, other evaluators compare the performance results of the evaluated period with all previous periods or a part of them according to the vision of the evaluators. The best result that can be achieved is that the performance results increase from period to period, also the worst result is that the performance results decrease from one period to period. Between these two cases, there are multiple cases in which the results of previous periods fluctuate with the results of the period under evaluation.

The performance of the period is evaluated according to the evaluators' analysis, which depends on the nature of the activity and the variables which affect the non-profit organization. Evaluators must have a large amount of experience and a wide vision to be able to evaluate and analyze the development of performance results.

This comparison is not sufficient only to evaluate the performance of the non-profit organization, because it does not determine how far the organization succeeded in achieving its goals, illustrates the quality of the organization's performance compared with the quality of similar organizations' performance, or illustrates the trend of the organization's performance (upward or downward).

The discussed three comparisons can be used separately or compatible, using one, two, or all of them, according to the nature of the non-profit organization, its environment, and the vision of evaluators.

### **Trend Analysis as a Tool for Evaluating the Performance of Non-profit Organization:**

Trend analysis is one of the most common and easiest tools used in the administrative and economic analysis, it helps to formulate the performance results into a statistical and graphical format that may help to interpret the performance results and forecast these results in the future. If simple linear regression depends on two components; a dependent variable and one or more independent variables, the trend is an algebraic and descriptive expression of the relationship between regular time units as an independent variable, and a related data of a phenomenon or an activity as a dependent variable, thus, the trend is a special case of simple linear regression, where the independent variable in trend analysis is always a regular time unit.

Since many models of evaluating the performance of non-profit organizations are not interested in analyzing the historical development of the performance and determining the impacts of the actual performance in the future performance, trend analysis may play an important role in evaluating the performance of non-profit organizations, that identifying the direction of the performance may help the evaluators and decision-makers to determine the deviations between the planned performance and the actual performance, also it may help in predicting the future performance.

Either at the organization level, sector level, or state level, the trend analysis may help in determining performance directions at this level, especially during the implementation of public policies and strategic plans which take a long time to be achieved, and it requires a continuous periodic evaluation for the performance enables decision-makers to determine how far the sub-objectives and partial objectives are achieved, as well as it helps in examining how far the future goals are achieving and take the necessary decisions during the implementation according to these future goals.

In evaluating the organizations' performance, trend analysis can help in formulating the performance results in a straight line that shows the direction of performance if it is positive, negative, or stable.

The performance of non-profit organizations is often unstable according to many political, economic, and social factors and variables that affect this performance, therefore, using all the results of the time series in the trend analysis may make the trend line takes an unrealistic direction, because the time series may include some old uncorrelated results that may give the evaluators an unrealistic and deceptive indication, and may make the future performance forecasts far from the actual performance. Performance evaluators must interest in the results of the last periods which have the minimum RMSE (the minimum deviation between the estimated performance and the actual performance) it will make the trend more appropriate and close to reality, and thus can build more accurate and effective predictions about the performance of the organization.

## Proposed Methodology for Evaluating the Performance of Non-profit Organization using Trend Analysis

By reviewing the perspectives, methods, and indicators of evaluating the performance of non-profit organizations, and also the role which the trend analysis can play in determining the direction of the organization's performance, we can introduce a methodology that considers the main evaluation perspectives of the non-profit organizations' performance.

### Methodology Steps:

#### 1- Data Preparation.

The suggested methodology needs the following data:

- The actual performance results of the non-profit organization.
- The target performance results of the non-profit organization.
- The actual performance results of similar non-profit organizations.
- The time series of the actual performance results.

#### 2- The Comparisons

- Comparing the actual performance results with the target performance results, and determining the positive or negative deviations.
  - Comparing the actual performance results of the non-profit organization with the actual performance results of similar non-profit organizations.
  - Comparing the actual performance results of the last period with the actual performance results of previous periods.
- 3- Computing the trend of the actual performance results, and determine the expected performance results in the future.
- 4- Comparing the computed expected performance results with the target performance results, and determining the positive or negative deviations.

The suggested methodology can be shown in figure 2.

This methodology may help in evaluating the performance of the

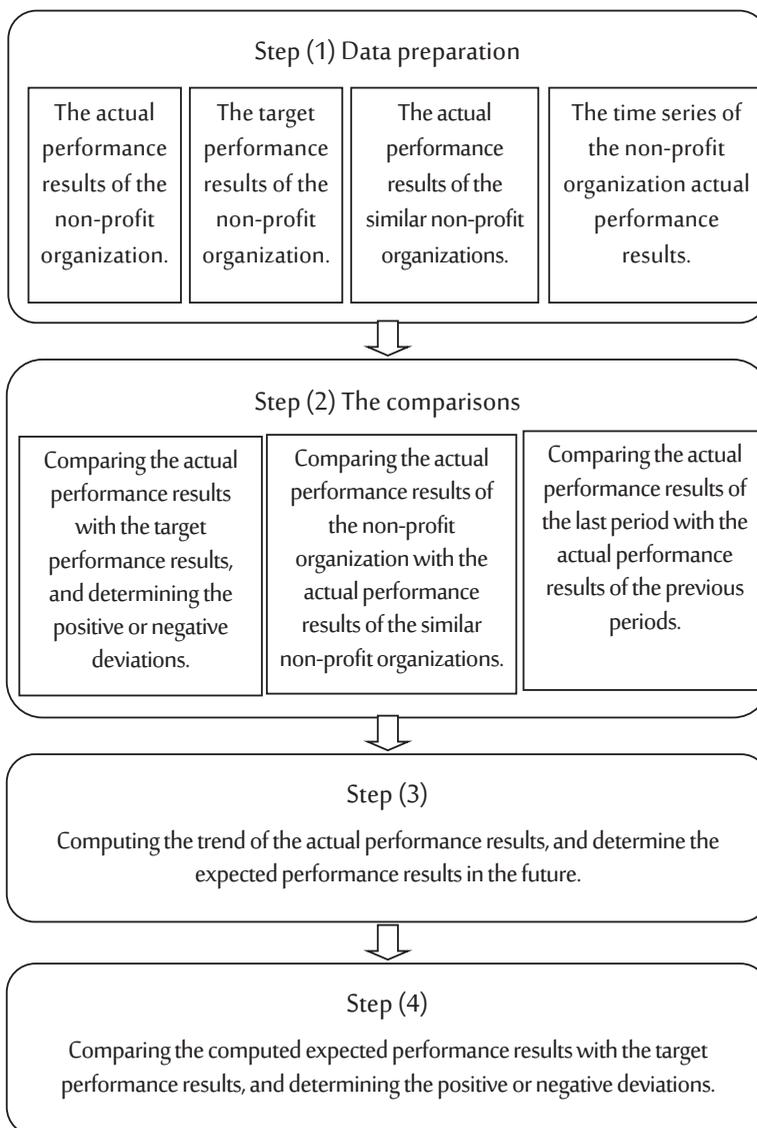


Figure 2. The Proposed Methodology

non-profit organizations, either by measuring how far the present performance achieved the planned performance, the position of the organization performance among the similar organizations, the direction of the organization performance, or the expected performance according to the present performance and how far it is consistent with the planned performance.

### Evaluating the Egyptian Program of Solidarity and Dignity

The Egyptian program of solidarity and dignity is a governmental program started in 2014 to introduce financial support for Egyptian citizens who can not work and don't have any income, like the old and disabled persons. The target number of supported families is all the families that submitted a request to the program to be supported, till 2019 all the deserved families had been supported.

The available data about the program is the annual amounts paid to the deserved families by the program during the period (2015 - 2019) as shown in table 1

The annual growth rate of the amounts paid to the deserved families by the Egyptian program during the period (2015 - 2019) is 217.5 %. It is better than the same annual rate in Kuwait which is 2.3% with a positive deviation of 215.2%. This can be illustrated by in graph 1 and graph 2

Trend analysis of the annual amounts paid to the deserved families by the Egyptian program during the period (2015-2019) illustrates that the trend equation is

$$y = 3263.9x + 1905.9$$

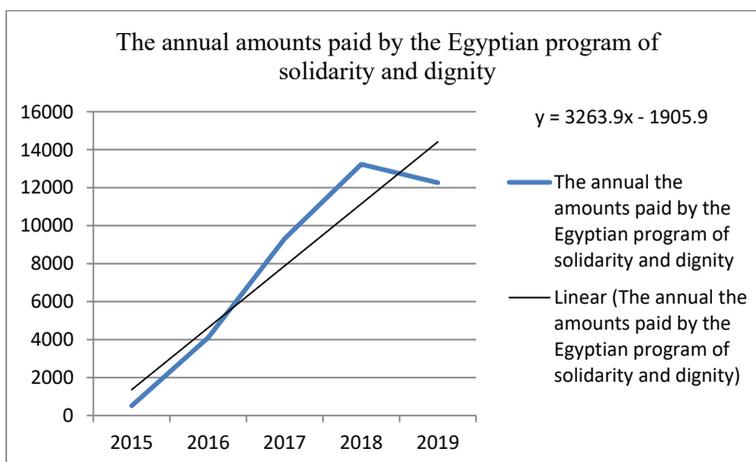
This equation refers that the amounts paid to the deserved families by the Egyptian program during the period (2015 - 2019) grow annually by 3264 million Egyptian pounds.

According to the previous data, the Egyptian program of solidarity and dignity can be evaluated as follows:

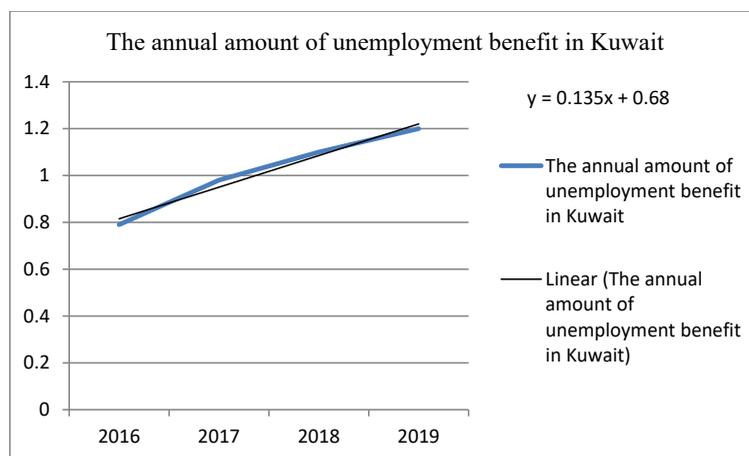
- 1- Goals achievement: Where the program goal is supporting all citizens who submitted support requests, therefore, the program achieved its goal by introducing financial support to 100% of the deserved families.
- 2- The comparison with the other similar programs: The annual growth rate of the paid

**Table 1. The Annual Amounts Paid by the Egyptian Program of Solidarity and Dignity**

Year	Annual Amounts
2015	508
2016	4107
2017	9316
2018	13234
2019	12264



**Graph 1. The Annual Amounts Paid by the Egyptian Program of Solidarity and Dignity**



**Graph 2. The Annual Amount of Unemployment Benefit in Kuwait**

amounts to the deserved families by the Egyptian program of solidarity and dignity is more than the same rate in the Kuwaiti program, where Kuwait is one of the best countries in standard living in the same environment of Egypt.

- 3- Trend of the change rate in the program results: The annual growth rate of the amounts paid to the deserved families by the Egyptian program during the period (2015 - 2019) is 3264 million pounds, which means that the performance results of the program grow from a year to another.

## Practical and Research Implications

Because there are many different variables that affect the performance of non-profit organizations, using the trend analysis in determining the direction of the performance of non-profit organization may help the decision-maker to expect the impacts of the present performance in the future performance, determine the positive and negative deviations between the actual performance and the target performance, and take suitable decisions to treat these deviations efficiently and effectively.

The proposed methodology tried to support the traditional models that are usually used in evaluating the performance of non-profit organization, by using trend analysis in expecting any deviation in the target performance in the future.

Analyzing the impacts of the actual performance of the non-profit organization on its future performance needs more research for improving the models that evaluate and analyze these impacts.

## Conclusion

Reviewing the models that used in evaluating the non-profit organizations' performance refers that most of these models focus basically on measuring how far the organization's goals were achieved, like the balanced scorecard, cost-benefit analysis, and social return on investment (SROI), but these models don't compare the organization performance with of the other non-profit organizations like benchmarking model which focuses on analyzing the competitive position of the non-profit organization. These commonly used models don't consider sufficiently the historical development of the organization's performance results and the effects of this development on the future performance of the organization.

This study suggests an evaluation model that considers three main perspectives in the evaluation process:

- 1) Goals achievement;
- 2) Competitive position;
- 3) The historical development of performance results and their effects on future performance.

Trend analysis is used as a statistical technique to determine how far the past and present performance of the non-profit organization affects its future performance. Identifying the direction of the performance results may help the decision-makers to improve the performance of the non-profit organization in the future by discovering and treating any deviation between the actual performance and the target performance.

## References

- Arena, M. & Bengo, I. (2014). "Performance measurement for social enterprises", *International Journal of Voluntary and Non-profit Organizations*, 26 (2), pp. 649–672.
- Bagnoli, L. & Megali, C. (2011). "Measuring performance in social enterprises", *Non-profit and Voluntary Sector Quarterly*, 40 (1), pp. 149-165.
- Bititci, U. S., Carrie, A. S. & McDevitt, L. (1997). "Integrated performance measurement systems: an audit and development guide", *The TQM Magazine*, 9 (1), pp. 46-53.
- Bozzo, S. L. (2000), "Evaluation resources for non-profit organizations: Usefulness and applicability", *Non-profit Management and Leadership*. 10 (4), pp. 463-472.
- Camp, R.C. (1989), *Benchmarking: The Search for Industry Best practices that Lead to Superior Performance*, ISBN 0- 87389-058- 2, © ASQC quality press.
- Cashwell, K. & Copley, P. (2019). "Using ratio analysis to manage not-for-profit organizations", *The CPA Journal*, MAY 2019 issue.
- Cestaria, J.; Pinheiro de Lima, E.; Deschamps, F.; Akend, E.; Treintaa, F. & Mouraa, L. (2018). "A case study extension methodology for performance measurement diagnosis in nonprofit organizations", *International Journal of Production Economics*, (203) pp. 225-238.
- Cnaan, R. A. & Kang, C. (2010). "Toward valuation in social work and social services", *Research on Social Work Practice*, (4), pp. 388-396.
- Kaplan, R. S. & Norton, D. P. (1992). "The balanced scorecard: Measures that drive Performance", *Harvard Business Review*, January-February 1992 issue, pp. 71- 79.
- Kaplan, R. S. (2009). *Conceptual Foundations of the Balanced Scorecard*, Harvard Business School.
- Kaplan, R. S. and Norton, D. P. (2001). "Transforming the balanced scorecard from performance measurement to strategic management", Part 2, *American Accounting Association, Accounting Horizons*, 15 (2), pp. 147–160.
- Lee, C. & Nowell, B. (2014). "A framework for assessing the performance of non-profit organizations", *American Journal of Evaluation*, 36 (3), pp. 299-319.
- Mihaiu, D. M.; Opreana, A. & Cristescu, M. P. (2010). "Efficiency, effectiveness and performance of the public sector", *Romanian Journal of Economic Forecasting*, (4), pp. 132-147.
- Neely, A.; Gregory, M. and Platts, K. (1995). "Performance measurement system design", *International Journal of Operations & Production Management*, 15 (4), pp. 80–116.
- Niven, P. R. (2008). *Balanced Scorecard: Step-by-Step for Government and Non-profit Agencies*, 2<sup>nd</sup> ed., Wiley, New York, NY.
- Otrusina, M. & Pastuszkova, E. (2012). "Concept of 3 E's and public administration performance", *International Journal of Systems Applications, Engineering & Development*, 6 (2), pp. 171-178.
- Somers, A. B. (2005). "Shaping the balanced scorecard for use in UK social enterprises", *Social Enterprise Journal*, 1 (1), pp. 43–57.
- Tyler, M. C. (2005). "Benchmarking in non-profit sector in Australia", *Benchmarking: An International Journal*, 12 (3), pp. 219-235.
- Youssef, K. Y. (2021). "Evaluating the public institutional performance using trend analysis", *IOSR Journal of Economics and Finance*, 12 (2- 6), pp. 46-60.