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PERFORMANCE EVALUATION OF ORGANISATIONS

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Abstract

An index is developed to evaluate the performance of an organization based on the premises of what it gives to the society as against what it receives from it. The model of a little plant growing into a fruit-yielding tree is presented as an analogy. Some factors relevant for the model are listed. A hypothetical illustration is provided.

Introduction

Performance assessment is a natural requirement to provide a retrospective view, check on current status as well as to indicate modifications for improved efficiency in future. Evaluating an organisation is a complex exercise. This has to deal with a mix of quantitative and qualitative characteristics. Also a time dimension may be added by considering performance over a span of time as against a given time point. The present article attempts to develop a performance index via a ratio W , reflecting a comparison between what a Voluntary Organisation (VO) gives (G) to

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the society and what it receives (R). A few relevant components of G and R are identified. The model of a fruit-bearing tree is described to provide a perfect backdrop corresponding to an ideal organization.

Index of Performance

Evaluating the performance of an organisation is often necessary and always desirable as it serves several purposes ranging from introspection to field advancement. It can satisfy the accountability criterion and also help in profile building. It is also an audit tool. The assessment may be in four modes as follows:

- a) By the unit itself as self-appraisal.
- b) By a committee of experts.
- c) By beneficiaries or public
- d) By researchers

In practice, a combination of modes (a) to (d) may be used, depending on the purpose and need. Mode (a) serves introspection. It allows the unit to know where its performance stands, so that the past can be evaluated, the present can be understood and the future can be suitably planned. Mode (b) is generally for sanction or renewal of grants, or as part of investigative fact finding or some recognition (like awards). Mode (c), based on pooled views of a sample group, can help in judging effectiveness of programs or identifying gaps needing attention. Finally, mode (d) can give an objective view and also allow comparisons across institutions or time.

An evaluation is straightforward when the characteristics are all quantitative like age or acres of land. Dealing with a mix of quantitative and qualitative characteristics is an intricate job, often needing use of scaling techniques for handling qualitative characters like beneficiary satisfaction. In the following section we make an effort to develop a performance index for a VO, beginning with an outline of a procedure reported in literature.

Shripathi (1995) has used a three-component break up to evaluate the performance of voluntary agencies as outlined below :

Table 1: Indices of Performance

Component	Variables
Organisational Efficiency (OE ₁)	Rates of change in Number of objectives, Effective staff strength, Activities.
Operational Efficiency (OE ₂)	Income-asset ratio, Income expenditure ratio, Expenditure per activity.
Coordination Efficiency (CE)	Borrowings and grants, Field contacts, Coverage of beneficiaries, Usefulness of implemented activities

The associated evaluation presupposes that OE_1 leads to CE and vice-versa. This in turn leads to OE_2 . These three efficiencies are expected to result in a better performance by the agency.

A simple aggregate of the three indices defined by

$$PI_1 = OE_1 + OE_2 + CE \quad (1)$$

is taken as a performance index to reflect the effectiveness of a given organisation. The component indices reflect the working of voluntary agencies with reference to organization, delivery system and coordination respectively. We develop below a more general performance index for a voluntary organization.

The Tree Model

The genesis, birth and growth of an ideal VO can be likened to that of a fruit bearing tree, whose potential is latent in a seed, which sprouts under suitable conditions, grows into a yielding tree under protection and supply of nutrients, branches out and starts giving much more than what it receives. A large tree provides shade, yields fruits, adds to greenery and more importantly, in contemporary priority, contributes to healthy environment. The tree has no selfishness or egoism too! In an analogous description, a good VO has its genesis in a well motivated concept (seed), it becomes operative under suitable conditions, grows into an efficient organization under proper support and management (vision), expands (branches) and provides service to the society, its worth being far greater than what it received during the formative stage. Thus the worth of an organisation may be viewed as the ratio of what it gives to the society (G) to what it receives (R). Formally, the worth may be defined in terms of the ratio

$$W = G/R \quad (2)$$

A value of W greater than one puts the unit in favourable light and as in the tree model, W should be ideally much larger. In the unfortunate case of W being less than one, the organisation has only a near parasitical existence. It is a liability to the society instead of being an asset. It is in this sense that the "appear-disappear" type of organisations figure, having W close to zero and accounting for a bane of the voluntary sector in India.

The G Set

There is a close relation between VO and the set of its beneficiaries. Let us call this the G set, implying that the VO provides (gives) a service and the set benefits from the same. The set may be in the form of a geographical region where all the beneficiaries reside or a subsection of the society. Examples for this are respectively the set of all residents in a city extension and the set of all neglected children in Karnataka. In the former case the G set corresponds to a physical region and in the latter it refers to a category of children. The size of the G set may be taken as either the geographical area or the number of beneficiaries in the set. The G set may also be just a physical region like the Western Ghats.

Evaluation of W

Though the definition of W as in (2) appears to be simple, the evaluation of G and R are understandably complex since they involve measurement of several factors, which may or may not be tangible. Added to this is the need for considering both the short and long run aspects before an evaluation is completed.

A practical question is how to evaluate the G and R components for an organisation. Let us start with G. It is convenient to delineate this component as associated with a few specific characteristics of the organisation as enumerated in the following table.

Table 2. Constituents of G

Feature	Some possible factors
A) Structure	Statutory requirements met; Transparency of work and administration, Number of committed workers; Stability and infrastructure of organisation, Growth stage.
B) Performance	Adherence to stated purpose, Size of G set, Strategy adopted to achieve objectives; Number of programmes carried out.
C) Relevance of Service	Seriousness of cause, Location of G set, Timeliness, Human touch, Popularity, Beneficiary satisfaction, Awards, Recognitions.
D) Future Potential	Projected role, Direction and rate of growth.

Quantification of G

The next step in the evaluation of G is the quantification of the constituents. Logically, we have to assign numerical scores (eg. in the range 0 to 100) for each factor and sum over the factors. Let X_{Ai} denote the score for factor i under feature A and n_1 be the number of factors. Then the mean score for factors of A is given by

$$G_A = \frac{\sum_{i=1}^{n_1} X_{Ai}}{n_1} \quad (3)$$

Using similar notation the mean score under feature B becomes

$$G_B = \frac{\sum_{i=1}^{n_2} X_{Bi}}{n_2} \quad (4)$$

On the same lines we define G_C and G_D for features C and D respectively.

Finally, G may be taken as the simple or weighted mean of the scores for the four features. In the former case

$$G = (G_A + G_B + G_C + G_D)/4 \quad (5)$$

And in the latter case

$$G^* = (W_A G_A + W_B G_B + W_C G_C + W_D G_D) / (W_A + W_B + W_C + W_D) \quad (6)$$

where W_A to W_D are weights indicating relative importance of the features A to D.

In the special case of equal weights we have $W_A = W_B = W_C = W_D$ and G^* reduces to G. Otherwise G^* has the provision for accommodating unequal weights for the features.

Remarks

1. The averaging involved in the computation of scores G_A to G_D is necessary to make them comparable among themselves, since the number of factors n_i under the four features may not be equal.

2. A range of 0 to 100 for rating a feature is preferable to a range like 0 to 10. The tendency is to assign an integer score rather than fractional score. Hence 0 to 100 allows 101 scoring points while 0 to 10 effectively allows only 11 scoring points. Thus the former facilitates a finer spread of feature scores. This is desirable.
3. If the range of 0 to 100 is used for each score, it follows that each average is at most 100. So is the case with G^* . The maximum score of 100 is attained by an organisation, which has a perfect score for each factor.
4. A similar procedure for evaluating R, which is outlined next, makes G and R also directly comparable and the ratio $W = G/R$ may be interpreted as the factor indicating the worth of the organization to the society.

Evaluation of R

For the R part, the VO may receive contributions from

- a) a few visionaries
- b) members of the voluntary organization
- c) donor institutions or individuals and
- d) the State

The table below provides an outline.

Table 3. Constituents of R

Component due to	Some possible factors
a) Visionaries	Concepts, ideology
b) Members of Voluntary organisation	Free service, Financial help, gifts
c) Donor Institutions, individuals	Grants, funds, gifts
d) The State	Land, Project support, Exemptions, grants

The R part is generally prominent during the initial settling period of a Voluntary Organisation. In the parlance of the tree model, this is like the tree needing nutrients and support in the pre-yield period. Later the G part is expected to dominate which implies that the ratio $W = G/R$ exceeds unity. Larger is the value of W, higher the worth of the Voluntary Organisation to the society.

For any organisation, R may be evaluated in two stages (as in the case of G).

Assign numerical scores in the range 0 to 100 for each component and sum over the factors. For example, let X_{aj} denote the score for factor j under component a and let there be m_1 such factors. Then the mean score for factors of a is

$$R_a = \frac{\sum_{j=1}^{m_1} X_{aj}}{m_1} \quad (7)$$

On similar lines we compute mean scores R_b , R_c and R_d . Finally R may be taken as the simple or weighted mean of the component scores. This leads to

$$R = (R_o + R_b + R_c + R_d) / 4 \quad (\text{simple average}) \quad (8)$$

and
$$R^* = (W_o R_o + W_b R_b + W_c R_c + W_d R_d) / (W_o + W_b + W_c + W_d) \quad (9)$$

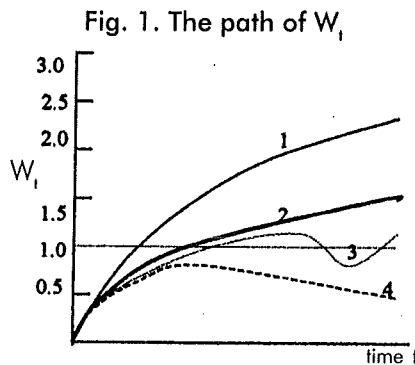
where W_o to W_d are weights indicating relative importance of the components a to d . Finally, we can take the ratio

$$W = G/R \quad \text{or} \quad W^* = G^*/R^*$$

as the performance index of the organisation.

The Time Dimension

It is to be mentioned that the indicator ratio W discussed above may be evaluated for a given short time interval (say, one year). Alternatively, we may examine its value over a span of time in the growth process of a VO. W may be less than unity in the formative stage, but later exceed unity substantially so that the VO has a worthy profile in the long run. Thus treating W as time dependent (W_t), we may examine the path of W_t over time t . This may be conveniently done through a plot of W_t against time t as shown next:



The time factor t denotes the age of VO. The dotted line at $W_t = 1$ represents a performance by the VO where $G = R$ (break-even level for society).

Cases (1) to (4) indicated in the figure deserve some discussion. Case (1) is that of an ideal VO (like that in the tree-model) where the worth keeps rising fast after the formative stage. Case (2) is similar, but W increases less quickly as compared to case (1). The next case (3) displays an uncertain performance with ups and downs as time passes. Finally, in case (4), the VO never attains the $W = 1$ level, let alone crossing it upwards. This is the situation of a VO giving less than what it receives from the society.

The Cumulative Scenario

Taking a clue from case (3) where a VO has both ups and downs over time, it may be interesting to examine the G and R parts cumulatively; this leads us to compare the aggregate

$$AG(t_0) = \sum_{t=1}^{t_0} G_t \quad (10)$$

$$AR(t_0) = \sum_{t=1}^{t_0} R_t \quad (11)$$

$AG(t_0)$ represents the total worth of all that the VO has given upto time t_0 since its inception. Similarly $AR(t_0)$ denotes what all the VO has received upto time t_0 . Accordingly the ratio

$$AW(t_0) = AG(t_0) / AR(t_0) \quad (12)$$

indicates the worth of the VO cumulatively. It follows that in cases (1) and (2) mentioned above AW will exceed unity after a lapse of time following inception of the VO. It also follows that in case (4) this will never be the situation. But in the marginal case (3) AW can stay above unity after a certain time, irrespective of the downs provided the 'up parts' outweigh the 'down parts'. When this happens it is reasonable to infer that the VO is worthy, as evaluated over the span of time. In contrast, case (4) corresponds to the unfortunate situation where the VO is a liability to the society which supports it. The concept of AW is handy for a long term evaluation of a unit. We may also cumulate weighted averages G^* and R^* for assessing the total worth of an organisation.

A Hypothetical Example

To get an idea of the arithmetic involved and also the interpretation of W we provide a hypothetical example below :

Table 4. Computation of W Part

G Part		R Part	
Features	Mean Score	Component from	Mean Score
A) Structure	$G_A = 68$	a) Visionaries	$R_a = 70$
B) Performance	$G_b = 72$	b) Members	$R_b = 40$
C) Relevance of Service	$G_c = 70$	c) Donors	$R_c = 45$
D) Future Potential	$G_d = 80$	d) State	$R_d = 35$
	$G = 72.5$		$R = 47.5$ $W = G/R = 1.53$

This value of W indicates worth of the organisation as about 53% more than what it receives.

Discussion

The ratio W defined and developed above compares what a VO gives to the society with what it receives. Two viewpoints are accommodated; the first limits the comparison to a given short period like a year. The other takes a cumulative view, so that the performance is evaluated for a broader period, for instance a decade or the entire span of existence of a VO. The crux of the problem is assignment of numerical scores to qualitative factors. The standard scaling techniques are handy for this purpose. For instance, beneficiary satisfaction may be judged on a five point Likert Scale; highly satisfactory (81-100), satisfactory (61-80), no comments (41-60), unsatisfactory (21-40), and highly unsatisfactory (0-20). These scores are to be averaged over the respondents and then over the factors.

The constituent factors in a score will depend on the type of organisation. For instance, in evaluating an organisation concerned with skill development of rural youth beneficiary satisfaction has a logical place while for a unit helping the AIDS patients, compassion and human touch are also to be included. The appropriateness

of the index proposed above depends on the choice of the factors to be included as well as the quantification achieved by the procedure.

Reference

Shripathi (1995), "Performance of Rural Development Projects by Voluntary Agencies", *Journal of Rural Development*, Vol. 14 (4), pp 431–441, NIRD, Hyderabad.