
47 Performance indicators

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Introduction

The use of performance indicators in the arts is quite widespread nowadays. The basic reason for the development of this practice is that the scope for commercial profit-oriented activity is very limited in most sectors of arts production, and the size of public and private contributions can be large. The different stakeholders cannot refer to any market signal, however imperfect it may be, to evaluate different aspects of arts production. Therefore there is a need to define 'virtual' measures of arts organizations' performance so as to provide some empirical support to the judgement on the value of arts production.

Different issues can be considered when analysing performance indicators. The first issue, discussed in the next section, is related to the design of performance indicators. The literature deals with different sets of indicators. The basic questions addressed in all this work are two: what to measure and which methodology is to be used? The second issue, discussed in the third section, refers to the actual use of performance indicators. If these measures respond to the general need for some form of 'objective' reference in the evaluation of the activity of arts organizations, in the absence of other signals like those originating in a market, they are then used for specific purposes and in different contexts. For instance, some indicators are used to monitor the performance of individual organizations, others are employed to determine the size of individual subsidies and still others are implemented to develop rational policies by funding organizations. There are at least three different problems to be examined. First of all, there needs to be consistency between the purpose of measurement and the choice of indicators to be used. A second important question to be addressed is how to use indicators, with respect to the specific issue of cross-section and temporal comparisons. Finally, there is surely a problem of interpretation of the numerical values of indicators, to make pertinent judgements.

The design of performance indicators

Different sets of indicators are available in the field of arts. Usually, these indicators have been developed within the analysis of the performance of a given sub-sector of arts and culture, to take account of its specific features.

Museums (Ames, 1994; Jackson, 1994) and performing arts (Towse, 2001) are probably among the fields that have been mostly considered for the design of performance indicators. More generally, there are micro indicators that have been developed to measure the performance of individual arts organizations and macro indicators (Brosio, 1994) that refer to entire sectors or sub-sectors of arts.¹ There are indicators that are common to all fields of arts (for example, attendance) and others which have been specifically designed to capture some peculiar aspect of a given field of arts (for example, collection use in museums). However, the basic questions addressed in all the works on the design of performance indicators are: what to measure and which methodology is to be used?

As for the first question, we need to make clear what is to be intended by the word 'performance'. Under the heading of performance indicators, it is possible to find many measures of very different elements of the performance of organizations and sectors. Even if the different elements of performance are not totally unrelated, it is possible to identify separate ranges of analysis and empirical application of the different indicators.

First of all, there are measures that are a mere quantitative 'description' of some characteristics of arts production and consumption. Examples of this type of indicators are the number of staff in an organization, the costs of service, the number of attendances, the days open per year and so on. There are other indicators, which are instead used as a tool for the 'evaluation' of different aspects of the performance of arts organizations or of the functioning of the cultural sector or of its segments. Examples of these other indicators are costs per visitor or attendee, the ratio of public to total income and public subsidy per attendance. The difference between these two classes of indicators² lies in the object of measurement. The former indicators measure a single 'real' dimension of arts production and consumption within an institution or a sector and, therefore, they require the identification of this dimension (for example, supply) and of the best way to measure it (for example, number of performances, number of days open per year). It must be noted that, when using these indicators, one must be aware of the fact that they represent a single dimension of a phenomenon and possibly a partial view of this dimension. The second class of indicators includes 'constructed' measures and they are based on the definition of an aspect of performance, which is to be evaluated (efficiency, economy, effectiveness and so on). The main issue here is consistency between the elaborated measure and the object of evaluation, also with respect to the aims pursued in carrying out evaluation (a topic explored in the next section).

Secondly, the object of measurement indicators is different also with respect to the distinction between the output and the outcome of arts activities. The output is the direct product of the activity of cultural institutions,

which is obtained through the combination of the resources available to those institutions. The outcome is represented by the ultimate goals of arts production, usually in terms of impact on its beneficiaries. For instance, the output of a theatre company subsidized for performing in schools is represented by its performances, while the outcome may be children and young people learning in and through the arts.³ This example shows that outputs of arts are quite easily identified since they are the specific products of each art production. They are generally measured in volume and they can also be related to other variables, to build indicators that evaluate how much is produced in relation to the amount of resources employed, the number of attendances and so on. As for the outcomes, their identification is not so straightforward, since they are not connected with the characteristics of each artistic product but with the specific objectives pursued in carrying out arts production. It is not unusual for rather different outcomes to be pursued with the same output. The design of indicators for outcomes is, then, quite complex.

Since most of the conceivable outcomes reflect qualitative aspects of cultural production, it may prove particularly difficult to find measures that can quantify these outcomes. An example again comes from the NEA Guidelines for grants. One of the expected outcomes of subsidized projects is that children and young people will use the arts to express their ideas and feelings. A simple descriptive indicator in this case is a measure that quantifies how much use of arts children, attending a project, make to express their feelings. It is quite clear that quantification is a rather difficult task in this case, and that the only way to describe or evaluate the impact of arts production on the identified outcomes is to ask the beneficiaries how satisfied they feel about the realization of a project. This raises a further problem. While indicators for outputs are computed from data that are generally collected by any organization in a more or less identical way (costs, attendance, number of performances and so on), the source of data for outcome indicators may be rather 'subjective' since they tend to reflect the subjective perceptions of individuals. This may be a problem because of the well-known information problems existing in the cultural sector. Individual perceptions are in fact idiosyncratic and therefore the outcome indicators will then be computed from data, which reflect different ways of measuring the same phenomenon.

The second question related to the design of performance indicators regards the methodology to be employed to compute these indicators. Both the theory and the practice of indicators generally represent them just as simple numbers which measure a phenomenon (number of attendances, number of performances and so on) or, more often, as ratios (cost per attendance, number of custodians per visitor and so on). This type of indicator

provides information on single aspects of arts production and consumption. However, when we consider, for instance, the output of many arts organizations, we can observe that their production process is generally multidimensional, both from the input and the output side. A general evaluation of the efficiency of production can, then, be obtained only through a multiplicity of indicators,⁴ which does not allow a clear-cut evaluation of the efficiency of an organization. Moreover, when comparing the values of the same indicator for different organizations, the relevance of the comparison is limited by the fact that quantities of output, multiples or sub-multiples of that achieved by any given organization, are not necessarily technically attainable employing multiples or sub-multiples of the inputs used by that organization. There is a need, therefore, to use more advanced techniques that take into account the multidimensional nature of arts production and consumption.

There have been a few attempts (Mairesse and Vanden Eeckaut, 2002; Pignataro, 2002), dealing with the efficiency of museums, to employ the method of efficiency frontiers, using non-parametric techniques.⁵ Efficiency frontiers or, as sometimes they are called, *best practice* frontiers, are the sets of the best production units. The particular contribution of this methodology, with respect to simple productivity indicators, is to establish a sort of 'best' reference, those museums which are on the efficiency frontier (that is, they are 100 per cent efficient), taking simultaneously into account all the relevant inputs and outputs of the production process. A single efficiency index is then computed, measuring the 'distance' of each observation from the frontier.

The use of performance indicators

As already pointed out in the introductory section, performance indicators are designed not only to satisfy a generic demand of statistical knowledge but also because they provide valuable information for those supporting the arts sector. The information needs that can be satisfied by the use of indicators, however, are heterogeneous and, therefore, there is no 'universal' set of indicators that is consistent with any of these needs. Indicators can be used for the purpose of managerial control and, in this case, one would probably concentrate on those measuring the use of the different resources under the control of organizations' managers to produce the different outputs. Another important objective can be accountability for the use of public and private contributions, which mostly requires indicators of outcome. Indicators are also employed within a process of organizational learning, to improve organizations' efficiency and their capacity to achieve their goals. The use of performance indicators thus requires their selection, which is a rather delicate task that can put at risk the usefulness

of their application. Schuster (1997) has already argued that 'in the arts and culture the tensions that arise in implementing such indicators have been rooted less in the *theory* than in the *practice* of performance indicators . . . opposition has come not from disagreement in theory but from actual issues arising out of practice' (p.255, original emphasis). At least three issues arising out of practice need to be mentioned.

A first issue is consistency between the purpose of measurement and the choice of indicators to be used. As already noted in the previous section, the object of measurement must be identified in such a way as to convey information consistent with the objective of measurement. If, for instance, one wants to evaluate the efficiency of the restoration activity of a museum, one has to select those indicators that relate to the specific inputs and outputs of this activity. Consistency, however, must be interpreted in a broader sense. When used, indicators inevitably affect the behaviour of cultural organizations.⁶ Again citing Schuster, 'in the best of all possible worlds, that response would be exactly the behaviour that one wanted to engender' (ibid., p.257), but he provides evidence that the use of some indicators has eventually achieved results opposite to those aimed at. The implication here is that indicators must be selected not only on the basis of the appropriateness of the object of measurement, but also predicting the incentives that their use can convey within an institution.

A second important problem is how to use the measures arising from the application of performance indicators. Is it enough for valuing the performance of a cultural institution to collect the relevant measures just for this institution? And how to judge these numbers? The answer comes clearly from Jackson (1994): 'The information content of indicators is only realized if the latter are compared with something' (p.165). The performance of arts organizations cannot be valued in absolute terms or with reference to some sort of objective or universal standard. This valuation, in other words, is always contingent on the performance of all other institutions operating in similar circumstances, at the same time. Arts organizations should, therefore, try to build up partnerships for the implementation of their performance-monitoring systems.⁷ As pointed out in the previous section, when we compared simple productivity indicators with efficiency frontiers, the different methodologies for the computation of performance indicators may vary in their significance in providing relative measures of performance.

Finally, there is a problem of interpretation of the numerical values of indicators, to make pertinent judgements and to derive sound policy implications. The analysis of the scores resulting from the application of performance indicators requires additional information on the factors that may affect the different aspects of performance. This is particularly important

when a comparison is carried out among different institutions or countries, to avoid the temptation of a trivial ranking according to the indicators' values. The problem is also relevant for the outcome indicators, since the impact on the ultimate goals of arts production is connected not only with arts outputs but also with a variety of factors which are outside the control of cultural institutions.

Conclusions

A few remarks can be drawn from this brief survey of the main issues arising from the design and use of performance indicators.

1. There is no such thing as 'the performance' of cultural institutions, or of the whole sector. There are different aspects of performance that can be evaluated also with the help of numerical indicators, but none of these can provide an exhaustive representation of the functioning of arts organizations.
2. Indicators are a way of organizing information on the different aspects of performance and they are characterized by quantification. One must be aware that the significance of this quantification may vary according to the different objects of measurement, and also because of the different 'quality' of data that are used to compute them.
3. Performance indicators need to be used with great caution, and the actual implementation of a system of indicators must be carefully designed. The quantification allowed by indicators should not induce us to use them in a direct and uncontrolled prescriptive way, as they would be, for instance, if one employed the scores to rank institutions from the best to the worst. Indicators provide only a piece of information, which must be accompanied by other relevant information useful for interpreting the determinants of performance.
4. Once used, indicators are not merely a computation exercise, since they tend to affect the behaviour of institutions according to the incentives arising from the prediction about their possible utilization.

Notes

1. Schuster (1997) presents the historical development of the design of performance indicators, also with respect to micro and macro indicators.
2. Jackson (1994), addressing the issue of what is measured by performance indicators, makes a distinction between performance measures and performance indicators. The former are precise and unambiguous (p.163), for example economy, efficiency and effectiveness, while the latter 'are statistics, ratios, costs and other forms of information that illuminate or measure progress in achieving the aims and objectives of an organization' (p.163) for which it is not possible to obtain a precise measure. The basis of this distinction, that is measurability, appears, however, to be a bit too vague for many indicators and it does not convey clear implications for the different problems posed by the different indicators.

3. This is actually one of the five Arts Endowment goals for which funds are available through the National Endowment for Arts in the USA. This general outcome is then categorized in 14 more specific outcomes, such as children and youth will increase and/or strengthen their knowledge and skills in the arts, they will use the arts to express their ideas and feelings, and so on. A complete description of these outcomes is contained in the Grants to Organizations Guidelines provided by NEA on its website (<http://www.arts.gov>).
4. The potential number of indicators measuring factors' productivity, for instance, is equal to the number of inputs multiplied by the number of outputs.
5. Mairesse and Vanden Eeckaut (2002) use the Free Disposal Hull technique while Pignataro (2002) employs Data Envelopment Analysis. Differently from the traditional parametric techniques like regression, non-parametric methods do not need to impose any assumption on the shape of the frontier.
6. Evans (2000) represents some possible ways in which the use of performance indicators may affect the behaviour of cultural institutions: manipulation of data on which performance indicators are computed and attention focused on the selected performance indicators' inputs and outputs.
7. There are already experiences in this direction. The Arts Council in England is working in cooperation with other institutions to build up a bank of arts performance indicators. At a more general level, there are resolutions of the EU Council promoting the development of comparable cultural statistics and their alignment within the EU, inviting the member states to exchange information and statistics voluntarily.

See also:

Chapter 17: Costs of production; Chapter 41: Museums; Chapter 50: Public support.

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