Performance measurement in not-for-profit and public-sector organisations

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Abstract Measuring performance is increasingly important in not-for-profit and public sector organisations – from those as large as the US federal government to the smallest volunteer group. Human resource metrics are the most relevant – spanning function, operations and strategy. Function measures include employee efficiency and effectiveness (turnover, sick leave, insurance and recruitment costs, for example). Operational measures include specifics like revenue per employee, as well as broad measures of effectiveness that link management to performance and returns on investment. Future-oriented strategic measures match capability against anticipated need, and are increasingly a key part of core planning activities. Barriers to effective measurement include fear (of retribution, variation and loss of control). Data may be gathered using top-down or bottom-up approaches. Issues to be considered when implementing a metrics methodology include linking outputs to outcomes, data quality, leading vs lagging indicators, indicator maturity, and imperfection.

Keywords Performance measurement, not-for-profit, public sector, human resources, primer

United States Comptroller General David M Walker, in testimony to a US Senate subcommittee on how to improve the federal government’s approach to managing its people (GAO, March 2000), noted that the landmark federal management reforms of the 1990s signalled the arrival of a new era of accountability for results.

Performance management matters, to paraphrase David Walker, because it allows the US federal government to go beyond a zero tolerance for waste, fraud and abuse, to create a government that is better equipped to deliver efficiently, economically and effectively on its promises to the American people.

Effective performance management requires fact-based decision-making; one of the first requirements is relevant and reliable data. Government agencies – data at hand – can show the real-world effects of their efforts, and taxpayers can judge the agencies’ accomplishments across a range of measures and decide whether they are getting an acceptable return for their tax dollars.
At the other end of the public-sector, not-for-profit, spectrum, two Irish academics have proposed an innovative approach to excellence in small, often informal, grass-roots volunteer organisations that includes a healthy dose of measurement. Their step-wise, modular model (in the April, 2001 issue of the American Society for Quality’s magazine *Quality Progress*) begins with basic measures such as membership, bank balance and average attendance, and evolves to sophisticated benchmarking and the tracking of high-level indicators like success in meeting stakeholder expectations.

Organisations in the not-for-profit world approach performance management issues and the collection and use of performance information from a wide variety of perspectives, and for many different reasons. But they all want the same return – better performance. And the key? Measurement.

**Measurement in human resource management**

Attention to human resources (HR) performance is more critical in not-for-profit organisations, whose human costs (payroll, benefits, training and development) can account for more than 75% of overall costs, and whose human assets directly affect performance, compared to capital-based organisations whose human costs may be less than 15% of total costs, with a less direct impact on performance. HR metrics are likely to be your first priority.

Jack Phillips’ book *Accounting in Human Resource Management* lays out three challenges: The HR function should be integrated with strategic planning and operational frameworks; HR staff should build relationships with other key managers, particularly operations (line) managers; and HR practitioners should continuously improve how they measure what they do.

Measurement of human resources falls into three broad areas:

1. **Function measures** include employment efficiency and effectiveness measures like turnover, cost per hire and grievance numbers, and while essential for audit and accounting purposes, do little to improve overall performance.

   Data sets might include sick leave (sometimes a useful proxy for staff dissatisfaction) and outstanding annual leave (a measure of effective use of time, and a contingent liability). Number of reported accidents, costs of employee disability insurance or claims on accident insurance schemes, expenditure on training (and comparisons between training hours or costs and improvements in performance), and staff turnover and recruitment costs are all commonly tracked and reported.

   Larry Morden, writing about measuring human resource effectiveness in Margaret Butteriss’ book *Changing Roles to Create the High-Performance Organization*, recommends tracking just the vital few function metrics, using broad measures, gathering data that are already at hand, and targeting those that allow both internal and external comparisons.
(2) Operational measures which track productivity and profitability (revenue per employee, operating costs per work team), include broad measures like Schuster’s Human Resource Index, and Phillips’ Human Resource Effectiveness Index which purport to link HR management to organisational performance.

Organisational effectiveness measures with an HR component – in local government for example – might include measures of customer service such as nature of customer/client contact with staff (in person, by telephone, by fix-o-gram, email, visits to web pages); call efficiency (the number of abandoned service calls); service wait times; use of core facilities (community pools, museums, libraries – measured by cost per swim, cost per visitor or user, user numbers compared to staff costs), emergency management effectiveness, legal and enforcement and appeal costs and so on.

Return on investment (ROI) is increasingly used as a measure of HR value. The success of a recruiting process, savings from an employment procedure, return on investment in a gain sharing program, reaction to changes in an employee benefits package, the impact of a diversity initiative, effectiveness of a revised orientation process or management development programme, the contribution of an employee suggestion programme, or the financial benefits of a sexual harassment prevention programme are all possible metrics.

And there is an increasing emphasis on treating HR as a profit efficiency centre, by allowing the users of HR services to ‘buy’ them at best price (from either internal or external sources) – although allowing line managers to opt out on a cost basis may undermine HR accountability for operational performance and strategy delivery.

Morden says that every HR program should have its ROI measured, with each measure ‘belonging’ to a group or individual. Data should be widely communicated, relevant and frequently collected, and supported by front-line service providers.

(3) Strategic measures are future-oriented (required vs current skill set, culture, environment, information utilisation, technology utilisation and demographics). At their simplest they match current capability against future needs, but recent developments in the identification and measurement of intellectual capital link HR to advanced notions of knowledge management, and put the HR function centre and up-front in the strategic planning process.

Strategic measures should be part of and come from the planning process, according to Morden; implemented over time; owned by an accountable person or group; and be comparable year-on-year and linked to on-going plans.
Measuring the performance of human services providers
The next few paragraphs draw on unpublished comments by Loren Bawn, Executive Officer for Community Systems, Iowa Department of Human Services.

Work on measures of quality in human services is in its infancy, Loren says. Many of the measures taking hold have to do with administrative efficiency (time to process an application, error rate, number of rings to answer the telephone). The other large area is customer satisfaction, although usually not done well – using poorly designed surveys, with no comparability from year to year.

In the mental health realm in the USA, there are functional assessment tools that attempt to measure quality of life based on what the developers of the instrument define as normalcy. These tend to be not-so-subtly laden with value judgments concerning work, interpersonal relationships and public behavior, and measure progress towards outcomes valued by the funder (or in some cases, the treatment community) rather than those valued by the customer (or client, or patient).

Noting the current emphasis on outcome measurement, Loren Bawn cautions against management by outcomes, and hopes that MBO in this instance does not lead to the sub-optimising just-make-the-numbers-who-cares-how that organisations went through when MBO stood for management by objective.

That said, there is potential in identifying the outcomes customers find important, and determining if the system is capable of producing them consistently.

One outcome gaining currency in mental health, for example, is community tenure (the number of days an individual with a serious, persistent mental illness is able to remain outside an inpatient institution). This is an outcome that may be more highly valued by the funder (inpatient services cost more than outpatient) than the individual experiencing the symptoms.

That aside, it should be possible to run the numbers on service providers to discover whether and where stable systems achieve these outcomes. It may then be possible to answer the by what method question, and to publish the information for benchmark purposes.

In the primary – personal health – area, innovative general practitioners and specialist physicians are beginning to re-think how care is delivered, taking a systems approach and tracking key indicators – both efficiency measures (length of patient visit, days to third available appointment, and so on), and outcome measures (percentage of patients with blood pressure less than 160/95, percent of registered patients with average HbA1c values less than 8%, for example).
A performance indicator primer

So you have decided to begin collecting indicators to inform and drive better performance. Where to start? How do you decide what to measure (and, perhaps more important, what not to measure)? The following is a generic introduction to the use and abuse of indicators – directed at not-for-profit organisations, but relevant to anyone with an interest in performance metrics.

Barriers to the development of performance indicators
Fear is the major barrier – there is a common apprehension that by developing indicators, people in the front line provide whoever they account to (managers, trustees, taxpayers, ‘the hierarchy’) with weapons to be used against them. The worry, Steven Prevette says, is that “higher ups will use it as a ‘hammer’”. There may also be a concern that publishing measures may lead to the arbitrary imposition of inappropriate quotas and targets.

Variation will also be an issue – every process has some natural variation. Publishing an indicator may encourage fruitless (and unnecessary) tampering, in an attempt to ‘do something’ about unavoidable random fluctuation, or invite comment and criticism when performance apparently ‘misses the mark’.

There may also be a perceived loss of control over how performance is portrayed – when there is an indicator everyone can see, there will be a variety of opinions about what it means.

And finally, there is the inclination, especially in risk-averse public-sector organisations, to develop the perfect indicator the first time – an invitation to prevarication.

There are three classes of indicators:
1. facts of life – “if we don't raise or earn this amount of money, we will go out of business”
2. planning, prediction and budget numbers – used for comparison and to drive continuous improvement; and
3. arbitrary numerical targets – generally used to judge workers by.

Avoid the use of the third kind of number (attributed by Steven Prevette to Henry Neave, with principal credit to W Edwards Deming).

Where do not-for-profit indicators come from?
There are three usual information sources: worker and customer/client opinion; expert review; and process measurement. In industrial and commercial environments, process measurements dominate; employee and customer opinion, captured in satisfaction surveys and organisation climate surveys, may be tracked and published, but the link to purpose, process and product is often weak.
In not-for-profits, the reverse tends to be the case - customer/client data exists and is linked to purpose and outputs (and rarely, to outcomes) - but process information is not usually gathered.

Information from expert reviews can be converted to measurement data through grading criteria - although that is not commonly done. This analysis will now focus on process measures.

**Top-down (ideal) vs bottom-up (reactive, but realistic) approaches**

Start the search for your key performance indicators by looking at your mission and vision (purpose). Ask yourself (and others): what are our products and services, who are our customers? What are our desired outcomes? What are the processes that deliver those outcomes?

With the answers in mind - and they may nor be straightforward (who, for example, is the customer in a state-subsidised, fee-charging kindergarten? And what is the product?), decide on your measures, set up the data sources, begin to gather the data.

**Performance indicators for a generic process**

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Process</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dollars, Hours, Materials, Data</td>
<td>Cycle time, in-process inventory</td>
<td>Product, Service, Schedule</td>
</tr>
<tr>
<td>BUDGET</td>
<td>PROCEDURE</td>
<td></td>
</tr>
<tr>
<td>Rework</td>
<td>Waste, Idle time</td>
<td></td>
</tr>
</tbody>
</table>

Indicators (think of them as gauges which measure rates of flow) may be located anywhere in a process - from raw product inputs through outcomes

Credits - Steven Prevette and Phil Monroe

**Making the connection from output to outcome**

Outcomes are only achieved as a result of a process, and while focusing only on outcomes is a sure path to failure, so is ignoring outcomes altogether. Ask: when I provide a product or a service, what is the connection to my desired outcome?

Example - a kindergarten provides safe care and early preparation-for-school to a child. The kindergarten’s output is its daily teaching and training. The better preparation for life and school that its children graduate with is the outcome.

Example - Steven Prevette provides metrics training to a fellow worker. His output is a better educated colleague. His outcome is that colleague applying his or her new knowledge to performance indicator work, which will have a positive impact on the mission of Fluor Hanford and the Department of Energy.
Top-down indicators include rates (units per time – dollars, hours), efficiency (inputs vs budget, input vs idle time), cycle time (time per intervention, procedure, consultation), backlog (inventory), procedure compliance, completion without stoppage, output rates (units per time of product or service), productivity (output divided by inputs), defect rates (waste plus rework vs output) and effectiveness (outcome measures, outcome per patient, percent compliant, output vs schedule).

The **bottom-up** approach is go find what data you currently have. Review existing procedures, requirements and processes, look for compliance issues, read the contract. Choose the vital few measures from the options this search reveals. Advantage – cost effective. Disadvantage – only focuses on visible data.

**Data quality**

Data should be replicable. Operational definitions are essential. Source data must be defined. There is no true value of anything, but precise specification can save much trouble in the future. Anyone should be able to apply the same operational definition to the same source data, and get the same results.

**Leading and lagging indicators**

- **Lagging Indicators** show the final result of an action, usually well after it has been completed. Profitability is a lagging indicator of sales and expenses. Lagging indicators dominate at the higher levels in an organisation and they tend to be standardised and dictated from above.

- **Leading Indicators** are those which reliably foretell or indicate a future event. Employee satisfaction is usually recognised as a leading indicator of customer satisfaction. Leading indicators tend to dominate at lower levels, reflecting processes that achieve outcomes, to be customised, and to be bottom-up.

Example – Steven Prevette provides the following transition from high-level lagging to workplace leading indicators within his ESH radiological compliance work environment.

<table>
<thead>
<tr>
<th>Agent</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Energy</td>
<td>Lost workday case rate</td>
</tr>
<tr>
<td>Contractor</td>
<td>Lost workday case rate</td>
</tr>
<tr>
<td></td>
<td>OSHA recordable case rate</td>
</tr>
<tr>
<td>Project</td>
<td>OSHA recordable case rate</td>
</tr>
<tr>
<td></td>
<td>Facility Evaluation Board OSH results</td>
</tr>
<tr>
<td>Facility</td>
<td>OSHA plus first aid case rate</td>
</tr>
<tr>
<td></td>
<td>Self assessments</td>
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<tr>
<td></td>
<td>Housekeeping inspection results</td>
</tr>
<tr>
<td>Work team</td>
<td>Safety related work package cycle time</td>
</tr>
<tr>
<td></td>
<td>Procedure compliance rates</td>
</tr>
</tbody>
</table>
Performance indicator maturity
As a process matures, the indicators used to track its performance may also mature. For example, an organisation may decide that completing an action or delivering an outcome by a due date is an appropriate measure of performance. As the process matures, the indicator may evolve from:

1. Percent completed by due date in effect at the time of completion
2. Percent completed without missing any due dates during the process
3. Percent completed by the original due date
4. Average days completed ahead of original due date.

The search for the perfect indicator
When committees get together and try to table-top the perfect indicator, paralysis often sets in. Progress may only be made if there is frank acceptance that all data are flawed, there are no absolute values, and that indicators can always be gamed. Creating a culture of trust, cooperation and collegiality minimises the probability of adverse effects.

Epilogue
Gain experience with simple indicators, then move on to more complex indicators if needed. With careful and honest analysis, flaws with existing data can be detected and fixed. If you never look at your numbers, there will never be an incentive to improve them. Remember the basics - how a measure is used is more important than what the measure is. There is no such thing as a bad performance indicator, only bad use of performance indicators.