Development of strategic performance information at the National Library of Scotland

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Abstract

The paper explores the development of strategic performance indicators at the National Library of Scotland over the past two years in response to the introduction of a new corporate strategy and the introduction of an outcome-based public performance framework by the Scottish Government. The paper describes how NLS has developed and improved management of performance information and the cultural, management and implementation issues involved. At the same time, NLS has sought to align Key Performance Indicators with the political agenda of the Scottish Government and the paper looks to future developments, particularly in developing outcome indicators which meet both government and NLS needs.

Keywords

Key Performance Indicators, KPIs, outcomes, national libraries, scorecards, Scotland

Introduction

The National Library of Scotland (NLS) has developed its performance information systems considerably over the past five years. This paper describes how NLS has built on this experience in response to two particular recent influences:

- The revision of the corporate strategy for the organisation;
- The introduction, by the devolved Scottish Government, of an “outcome-based” performance framework.

The National Library of Scotland is one of five Legal Deposit Libraries in the UK and Ireland, in addition to the British Library. It was founded in 1925, but is based on the collection of the Library of the Faculty of Advocates, the principal law library of Scotland which dates from 1689. NLS has some 14 million printed items covering all fields as well as significant digital and manuscript collections. The Scottish Screen Archive merged into NLS in 2007. Over 95% of NLS funds are supplied by the Scottish Government. NLS turnover is around £14 million per annum, and staffing stands at 320. Legislation determines that NLS has a Board of 32 Trustees, with a mixture of people appointed by key partner groups, the Government and ‘ex officio’ members.

The NLS Board appointed a new Chief Executive in 2002 with a remit to reform and modernise the organisation and to develop its first overall corporate strategy. Although NLS has long had a reputation for quality of service and collections, the new strategy marked a significant change in approach for the organisation, with an emphasis on widening access, communications with customers and increased professionalisation of both customer-facing and back-office services.

Development of Performance Information

Until quite recently, reporting of performance in NLS had been carried out through a small number of largely-unconnected channels. Annual Reports going back to 1926 contained remarkably consistent reports on certain key information, including ‘accessions’ (items added to the collections) and basic reader data. By the 1990s, the Annual Report had been supplemented by an annual Corporate Plan, setting out the key objectives for the Library in the year ahead, but also containing six or seven pages of performance information covering in addition, subjects such as cataloguing, conservation, staff training and buildings management. Much of this information continues to appear in Corporate Plans today.¹

A critical problem in managing performance information lay in its dispersal throughout the organisation. There was no single place where performance information was kept (electronically or physically) which

¹ Recent corporate plans can be seen at [http://www.nls.uk/about/policy/index.html#corporate](http://www.nls.uk/about/policy/index.html#corporate)
had a number of consequences. Firstly, it meant that no one knew what was happening across the organisation. Information was ‘owned’ by a number of individuals so that it was not possible to find out about Map Division enquiries, for example, without asking the manager of that section for that information. Another effect of this dispersal of information was that methodological differences in collecting data were not easy to detect. Different sections collected data in different ways, so that there was little consistency, or transparency in methodologies.

In order to overcome these problems, the Corporate Statistics Spreadsheet was established in 2004 on a central drive accessible to all staff. This consists of about 10 worksheets aggregating data on readers, collection use, digital metrics, enquiries and so on. Each unit completes a row for their data, and in many cases, cells are automatically linked to the locally-maintained spreadsheets that divisions have long used to record their data. Although not pretty, the Corporate Statistics Spreadsheet was a necessary step towards ensuring that performance information can be recorded more consistently, aggregated, shared and used by staff across NLS.

At the strategic level, it was not until the 2005-06 year that NLS first made a systematic effort to provide performance information on key objectives on a routine basis by introducing a formal set of Key Performance Indicators (KPIs). Some KPI 20 measures were reported to the NLS Senior Management Team on a quarterly basis. These broadly reflected the chief goals outlined in the new 2004 strategy Breaking through the Walls and were grouped under the six strategic headings of Access, Collections, Consultation, Partnerships, Organisational Development and Infrastructure. Each Director assumed responsibility for a number of KPIs and reported on measures quarterly, every six months or annually as appropriate.

In addition to the statistical reports, a qualitative KPI report for each strategic heading provided a platform for each director to communicate performance issues that cannot easily quantified, such as the quality of collections received, or the effectiveness of partnership working. The KPIs were largely maintained on this basis, with minor annual adjustments which typically included one or two new measures and discarded others until 2009.

Although the KPI system had introduced an important new element of strategic reporting which had not existed previously, there were a number of shortcomings with these arrangements. Firstly, there are still significant data quality problems. The variation in the methods for recording certain key activities persists, particularly where they are dispersed through a number of different work units. As a result, the data for enquiries, or collection use for example, is not collected consistently and the total figure therefore lacks precision.

Aggregation of data is also problematic. For example, it is difficult to meaningfully add together different types of user data, such as visitors attending events and exhibitions or participating in educational activities. This also applies to many aspects of digital services, such as users accessing the websites and digital resources.

In terms of usability, the KPI reports began to look unappealing and boring. They were originally designed in order to ensure that they provided a robust and clear definition of each measure, with technical notes on data definition and collection, as well as the figures themselves. However, the resulting format does not provide the intuitive access to the key messages contained in the data; this usability is essential for busy managers who must be able to assimilate important performance messages quickly, especially where corrective action is required.

The KPIs do not have a high visibility in the organisation outside the Senior Management Team. Although the full reports are accessible to all staff on NLS computers, staff are not generally aware of the KPIs or their relevance. In addition, Trustees have traditionally had a weak role in providing strategic scrutiny and oversight. KPIs were reported to Trustees for the first time in 2007; previously performance reporting was confined to annual reports and corporate plans, as well as a regular National Librarian’s report, which tends to highlight good news stories and other topical items.

NLS introduced a refreshed corporate strategy Expanding our Horizons in 2008, which redefined the goals of the library around four Core Themes of:

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Developing the Collections
Developing the Organisation
Building Relationships
Widening Access to Knowledge

Under each Theme are five Strategic Objectives (making twenty Strategic Objectives in all). This has provided a suitable framework for reorganising the KPIs into a form of balanced scorecard for the 2009/10 year. At present, the ‘balance’ is provided by the distribution of the KPIs around the four strategic Core Themes. This is some way removed from the classic Balanced Scorecard model with quadrants of Customer, Financial, Business process and Learning and growth, but brings immediate benefits of a single ‘at-a-glance’ scorecard, with traffic light indicators to show if measures are on track or not (see Figure 1).

At the same time, trend data has been introduced so that the latest figures can be seen graphically in the context of the last three years. Until recently, the latest figures were reported with the only comparison being the figure for the same period the previous year, and in some cases, also against a set target. This did not allow the significance of the latest performance to be grasped quickly or easily.

Feedback from senior managers suggested that the value of the qualitative reports which provide ‘soft’ performance reporting every six months was diminishing. Compiling them was perceived as unproductive effort. These reports are therefore being removed, so that the KPIs will be entirely statistical. (The need to review performance in the round, including non-statistical assessments of performance, will be performed through other means as part of the annual planning process.)

The Trustees’ annual review of KPIs is being supplemented through the introduction of an annual strategic planning day for Trustees to consider strategic direction and performance. From March 2009, the Audit Committee, which meets four times a year, also began to review quarterly KPI reports, providing a new platform for Trustees to look at strategic performance in greater detail.

Data quality problems with performance information have long been recognised within the Library. Historically, much information about manuscripts (a core part of NLS collections) has been excluded from corporate reporting ever since the Library was formed in 1925. Double-counting (eg of readers) has been common. And it is only recently that collection use data has begun to included our licensed digital resources, in addition to print material, contributing to the low visibility of these digital resources, even amongst NLS Trustees.

Many of these data quality issues can only be solved by automation of manual processes. To take a simple example, NLS work on organising education, outreach and events is led by the Education and Interpretative Services division, whose staff record the number of events held and the number of attendees, using certain general categories such as public talks, school workshops and so on. However, similar work by curatorial staff is unrecorded at the corporate level, so the total NLS activity in this field is under-recorded. Work is in hand to enable collections staff to ensure that their work is also recorded on a spreadsheet, although this is no more than a stop-gap solution. Effective recording, with the ability to report patterns and trends and interrogate data will only be achieved with the introduction of a user-friendly IT system which is integral to the planning and organisation of the events themselves and which has also the functionality to produce routine and ad hoc reporting which meets performance information needs. The demand for improved data quality can therefore be a driver for reform of business processes at a more fundamental level, and therefore for organisational change.

Many business processes within NLS, from corporate services (financial transactions, recruitment) to public services (reader registration, event booking) have clear scope to benefit from automation, and a number of projects are currently underway, or in development, to achieve this. However the capacity of the NLS Information Systems department is limited and there are insufficient resources to modernise all the outdated manual systems in the Library. At present, wider consideration is therefore being given to

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4 See, for example Bernard Marr, Strategic Performance Management 2006 part III
more fundamental strategic reform of the NLS IT infrastructure, with a view to evaluating the potential for introducing more integrated Enterprise Resource Planning (ERP)\(^5\) IT systems.

Whether or not this strategic investment in IT takes place, we intend to introduce Business Intelligence software, to improve the presentation and availability of performance information, not only to senior managers, but to all managers and indeed all staff. Such software can take data from a number of sources, and present it in an appropriately-designed context to multiple business users, relevant to their specific needs. Any system which is solely reliant on Excel spreadsheets can only command limited use by and loyalty of staff.

Organisational culture is another dimension that must be taken account of in developing effective performance information. In March 2009, a staff workshop of senior staff from the Library’s Corporate Services Department considered the topic of target-setting in NLS. Participants’ comments are interesting to note, many showing a considerable mistrust of targets and of performance data more broadly, suggesting an environment which is not naturally conducive for performance culture to flourish:

**People know what they have to do without targets**

*Targets focus on small things to the detriment of large things*

**Targets are destructive -**

- Too controlling
- Misplaces the focus
- *Aim is on statistics rather than on service delivery*
- Inhibiting
- Don’t allow for innovation or flexibility
- Death by measurement\(^6\)

While other participants were more accepting of the need for performance measures, in the context of this paper, the central point is that the improvement of data processes and data quality are not themselves sufficient to bring about a performance-oriented culture. The organisation needs to learn, collectively and individually, how to value performance information, to trust it and to use it effectively. This brings us into much broader themes of organisational development, change management and leadership.

**The Scottish Government’s National Performance Framework**

In May 2007, elections to the Scottish Parliament in Edinburgh led to the Scottish National Party taking office as a minority government. This change in political administration quickly led to a significant shift in the way that all public bodies are held accountable. The Scottish Government defined a single overarching Purpose for the Government, along with five strategic objectives. Associated with these Strategic Objectives, 15 key ‘National Outcomes’ were defined, together with 45 National Indicators, covering all aspects of society. This framework is based on the ‘Virginia Model’ experience in the US\(^7\) and is branded as *Scotland Performs*\(^8\). The Government expects all public bodies, from local councils to national cultural bodies, to contribute to these outcomes.


\(^6\) NLS staff workshop March 2009


\(^8\) [http://www.scotland.gov.uk/About/scotPerforms](http://www.scotland.gov.uk/About/scotPerforms)
Scottish Government National Performance Framework

Purpose

To focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.

Strategic Objectives

- **WEALTHIER & FAIRER** – Enable businesses and people to increase their wealth and more people to share fairly in that wealth
- **SMARTER** – Expand opportunities for people in Scotland to succeed from nurture through to lifelong learning, ensuring higher and more widely shared achievements
- **HEALTHIER** – Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care
- **SAFER & STRONGER** – Help local communities to flourish, becoming stronger, safer places to live, offering improved opportunities and a better quality of life
- **GREENER** – Improve Scotland’s natural and built environment and the sustainable use and enjoyment of it

In many respects, this approach has been widely welcomed in the Scottish public sector as it signals a move away from detailed target-setting and micro-management which many public bodies felt was a characteristic of previous government approaches. It makes government priorities clear to and helps public bodies to understand how they are expected to demonstrate accountability to their funder and to the tax-payer.

However, the approach also presents public bodies with a number of challenges. For the National Library and other cultural bodies, it is somewhat problematic that none of the national outcomes or indicators are concerned with ‘culture’ as such. On the other hand, there are a number of objectives associated with education and research, providing NLS with an opportunity to communicate the importance of a national library as a national resource ‘underpinning’ research in all fields of knowledge.

In responding to this new environment, NLS has essentially taken two approaches. Firstly, NLS needs to demonstrate in corporate documentation our awareness of the Government’s priorities and secondly, we need to review our KPIs to ensure that there is alignment (in the topical jargon) between our objectives and those of the Scottish Government. NLS needs to move from ad hoc reporting on our contribution to governmental strategic priorities to embedding the Scottish Government framework within NLS’ own performance reporting activity - and vice versa. It is therefore important for NLS to identify metrics which have direct relevance to government, so that as and when NLS reviews and reports on its performance, the relevance to the Government priorities is at the same time readily apparent.

NLS has therefore selected three of the Scottish Government’s national outcomes as particularly relevant to our work:

- We are better educated, more skilled and successful, renowned for our research and innovation
- Our young people are successful learners, confident individuals, effective contributors and responsible citizens
- We take pride in a strong, fair and inclusive national identity

Several of the Government outcomes concern ‘cross-cutting’ themes, such as equality, environmental sustainability and efficiency; NLS has therefore adopted a KPI for each of these, or is planning to do so. However, data to inform these kind of measures have not historically been captured effectively across the organisation, and present certain challenges.

With regard to equalities, although information has been collected for five years on reader profiles by gender, age, disability and race, under developing UK equality law, NLS must also monitor the impact on disability, gender and race on other services (not only readers) and on staff. Although we aim for high accessibility standards, at present, we have no effective way of measuring equality dimensions in the use of digital services such as of websites, online catalogues and licensed resources.
In terms of environmental sustainability, data issues are somewhat more straightforward. NLS has good data on two key components of an aggregated sustainability measure - energy consumption and waste management. Furthermore, NLS is able to benchmark data, as other public bodies, also increasingly need to demonstrate their environmental performance (including calculation of the carbon footprint).

NLS is examining effective ways to record ‘efficiency’. Scottish public bodies are currently expected to make ‘efficiency savings’ of 2% each year. We need to not only monitor whether we are on track to achieve this (so that we can report this to the Scottish Government), but also to be sure that we have effective processes in place to record routine efficiencies, so that when they are introduced, they count towards the total savings figure. As these are not yet in place, we have not adopted a KPI for ‘efficiency’ but would like to do so and expect that this may be possible within the year ahead. It may be noted that the issue of efficiency introduces an element of financial performance, which is not the central focus of this paper. However, It is inescapable that assessment of performance must take some account of the resources invested in these activities. This is necessary so that the impact of management decisions on the distribution of limited funding can be anticipated.

One problem of the move to outcomes is the question of ‘attributability’. The Government national outcomes are expressed in very high-level terms as can be seen above. Therefore, even if we can demonstrate that (for example) there is an increase in perception of Scotland having a “fair and strong national identity”, it is very challenging to demonstrate that such an increase can be attributed to action taken by the National Library. By their nature, these outcomes depend on a wide range of influences and actions by a number of agencies; providing evidence to attribute outcomes to any one organisation is inherently difficult.

One way to try and manage this process is to look for what might be called intermediate outcomes. With respect to national identity, for example, NLS already has some KPIs which measure outcomes - ‘public awareness of NLS’ and ‘positive media profile of NLS’. These are both measured externally, using an annual national market survey and a media monitoring agency respectively, providing relatively hard, objective data. We can suggest that these outcomes make a contribution to the overall perception of national identity, given that enhanced awareness of NLS and a positive critical reputation contribute, in their own small way, to positive perceptions on national identity. We might therefore suggest that the NLS journey in developing our KPIs involves moving from more traditional output measures, to intermediate outcome measures, to inferred contributions to national outcomes:

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<th>Output</th>
<th>Intermediate outcome</th>
<th>Inferred outcome</th>
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<tr>
<td>Press releases issued</td>
<td>Increased public awareness of NLS</td>
<td>Strong national identity</td>
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<tr>
<td>Customer numbers</td>
<td>Positive media profile</td>
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**Conclusions**

To conclude, we can firstly note that the development of improved performance information at NLS has required the improvement of data quality through consistent and accurate collecting processes. This often requires automation of data collection processes and may lead to more fundamental change in business processes. Strategic performance information must be well-presented and organised if it is to be effectively used, and the involvement of and communication with staff is essential for a performance culture to take root.

Moving finally to the ‘outcome agenda’, part of the challenge for NLS lies in developing performance measures which on the one hand meet our specific internal (management) needs, while at the same time meeting external (explicitly political) objectives. If we can reconcile these successfully, it may offer new opportunities to demonstrate relevance of national libraries and to move them from the periphery of central government agendas.

Thinking about the *outcomes* that we want to see as a result of our mission as a national library is more challenging - and interesting - than recording standard traditional information about *outputs* such as the number of reader visits received, enquiries dealt with or hits on the website. It requires us to think about what our users do with the resources they access at NLS (users being, readers, exhibition visitors, remote digital users etc). Do they use these resources to create new valuable knowledge? Or is their interaction with NLS resources and services superficial? Of course, we really don’t know the answer to these
questions. We do know that many users are creating valuable new knowledge - and we can probably also assume that for other users, much interaction with our resources is indeed superficial.

So how might we answer these questions more precisely? One solution may lie in exploring the scope to capture and use bibliometric data. Many newly-published books and journals include references to NLS in citations or other acknowledgements to staff who have assisted with research. Increasingly, it should be possible to identify such references electronically through resources such as Google Books and Google Scholar. This would generate hard data on the extent to which NLS has contributed to publications, through the research and productivity of our users.

Ultimately, a key outcome that national libraries want to achieve may be phrased as ‘generating knowledge and understanding’. Whilst this bibliometric measure would not address the quality of publications produced using NLS resources, it may be one of the best possible proxy measures in the near future. We would be interested to discuss with other research libraries - especially national libraries whose customer base is not easily defined or identified - if it is possible to develop such a measure and to put it into practice.

This metric may therefore be worth considering in the context of the developing interest in defining measures for outcomes ISO standards for national libraries. At present, the description of these standards notes that it ”does not include performance indicators for evaluating the outcomes or impact of library services either on individuals, on the communities that libraries serve, or on society at this time. Since this is an evolving area of performance measurement for libraries, such performance indicators can be added at a later date.”

References


9 Cf for example, Poll, te Boekhorst, 2007, Measuring Quality, pp 31-38
10 ISOISO/TR 28118:2009
Figure 1: NLS Scorecard (indicative)

### Access

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### Collections

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### Organisational Development

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### Building relationships

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