Module 6 – Linking the three levels and linking results back to resources

Overview

The first part of this module explains how to identify and test the causal linkages between different levels of the framework, so that you can link results back to resources. Critical links include:

- **input-output links** (economy, efficiency);
- **output-intermediate outcome and output-outcome links** (effectiveness; distribution); and
- **input-outcome links** (value-for-money).

The second part discusses how the performance story should inform managerial decision-making. This part underpins improvements in strategy, policy design and service delivery. In each major area of activity, your agency needs to know it has used resources prudently (maximised production), and that outputs are impacting on outcomes to the greatest extent possible.

Exploring the linkages

There are multiple means of exploring linkages, but some simple means are outlined below.

**Input-output linkages**

Input-output linkages are relatively easy to demonstrate, provided that you have homogenous outputs (or at least a relatively homogenous output mix), and good price information. Given that both must be reported under either the Public Finance Act or the Crown Entity Act, most agencies should be able to show how the real prices\(^{26}\) of major outputs have changed over time. Increased prices are not justified unless intermediate and end outcomes improve. Similarly, improved quality or capability may drive up costs, but to represent value-for-money they must also improve results. So even when output quantity is uncertain, growth in real prices is expected to have a commensurate, attributable effect on intermediate and end outcomes.

**Output-intermediate outcome and output-outcome linkages**

These linkages can be looked to most simply by plotting against time the quantity and quality of major outputs, and the intermediate outcomes and outcomes that they are supposed to create. Price-per-unit can be a useful proxy, if quality is hard to measure. Allowing for lagged outcomes, you can then see if there is any pattern.

When positive change is occurring, correlation scores, regression or other multivariate methods help you gauge the strength of linkages between outputs, and intermediate and end outcomes. Some methods also test the strength of non-output factors on impacts and outcomes. For instance, do markets or improved services best explain falling numbers of beneficiaries?

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\(^{26}\) Real prices allow for inflation using the most appropriate price index (e.g. CPI, PPI, LPI, etc)
**Focusing on major impacts and linkages**

Linkages can be complex and confusing. It is therefore important that you keep reporting simple and comprehensible results by focusing on the most important linkages within your intervention logic. One way of identifying the linkages to focus on is to ask simple questions like: “Are we investing significant resources to get this result?” and “If this linkage was not strong, would I still invest those resources?”

In many cases, services have one or two first order (direct) impacts, which were used to justify funding. Significant measurement effort is often spent on ensuring delivery of major outputs, and confirming their direct impacts. One or more services may also work together to deliver key impacts. In such cases your analytical focus may be on linking aggregate costs to impacts.

Subsidiary impacts and second order (enabling or indirect) impacts also exist, but either the lesser importance or scale of these impacts, or attribution challenges (especially with second order contributions) may mean that less effort is invested in reporting these.

**Determining the nature of links**

The key to discerning where the links between levels sit is to undertake analysis of the performance data and indicators. The data gathered at each level of the measurement framework should give indications as to where the major linkages lie between outputs and intermediate outcomes, and intermediate and end outcomes. The indications will normally come in the form of correlations. In many areas it may be difficult to judge this link precisely, but it is only necessary to judge the relative importance of the links between the levels so that progress can be monitored.

For example, the Department of Labour has been able to discern the links between its outputs in the area of building international links with the impacts it is having on the development of broader labour policy and the enhancement of New Zealand’s international links, through conducting structured interviews with expert agency staff in this area.

**Determining cost-effectiveness**

Measures of cost effectiveness assess the value-for-money of services, relative to alternate services or previous time periods. It is not a measure of how much money was spent per unit of output – this is efficiency. Links between outputs and impacts must be established before cost-effectiveness can be measured. This is because cost-effectiveness relies on knowing the impact (i.e. effectiveness) of different outputs, and outputs are what we have cost information for. Thus, cost effectiveness is determined by following these steps:

1. **Ascertain the costs apportioned to each output.** This is a matter of determining how much money has been spent on each activity within an output. It should be relatively straightforward to ascertain the level of expenditure for each output. Moreover, this information should be available within the annual Estimates produced by your agency.
2. Define the logic of how these outputs are linked to impacts. This step is about ensuring that causal links are logically defined between the outputs and impacts, as discussed above.

3. Aggregate output costs to impact level. This step uses the links established above to establish how much cost is being pulled through into each impact. Each impact can then be given an approximate costing. The obvious complexity here is that multiple outputs may contribute to multiple impacts. It may be possible to weight relative costing contributions in some cases. Use of primary and secondary links (described above) should help with this process. If this is not possible, it is best to look at the overall picture and try to discern what overall cost effectiveness was achieved through multiple impacts.

4. Define the overall cost effectiveness. In this step a cost-effectiveness measure is established. The measure will be a summary of how much has been spent in order to achieve a particular level of impact. This will be a combination of the aggregated costs and the impact measure.

5. Iterate the process over time in order to track changes in cost-effectiveness. In order to track effectiveness over time, the above process needs to be reiterated in order to identify trends and changes.

Embedding results to inform decision-making

Getting value from measurement

To get value, performance measurement and management processes must be embedded into your institutional planning and management frameworks. Only by doing this can you ensure that performance information gets used in decision making. Figure 1 on page 11 shows how this is done in a generic sense. You need to consider how information will feed the strategy, policy and operational decision-making processes in your agency and sector.

Managing the performance cycle shown in Figure 1 should result in improvements in four key areas:

- the performance and design of major strategies and policies;
- results flowing from major activities and outputs (including economy and efficiency);
- capability building, particularly in managing for performance; and
- more transparent and representative reporting of major achievements.

In summary, performance measurement systems simply allow managers to focus more on improving results.

Good measurement empowers good leaders

Measurement and reporting systems are means to an end, not an end in their own right. Having invested in getting good information, you now need to ensure that information gets used well by decision-makers. This means identifying when, e.g. in the annual or strategic
planning process, key decisions get made. You can then work backwards from these decision points, to decide who needs to receive what information when.

Information packs are typically required to inform:

- strategic planning sessions involving Ministers and/or senior managers;
- the design, revision and monitoring of major strategies;
- decisions on the future direction of the sector as a whole;
- budget decisions, including ex ante reporting;
- annual reports;
- policy, performance and/or pricing reviews; and
- operational decision-making.

As your performance measurement framework becomes well developed, you generally will find that the information base is being updated and reformatted to meet the needs of different users.

Preparing a development plan

You need a development plan to ensure that you have a systematic approach to developing your monitoring system and capabilities, and to establish a baseline against which you can track progress.

In producing information packs and measures, you will learn what decision-makers need and where data and measures need improvement. With experience, you will build confidence that your measurement framework is robust, and work to bring down the costs of data gathering and measurement, for instance via case management and reporting systems. Common development objectives are to provide more (or better) comparative measures, and for better linkage and attribution of intermediate and end outcomes, back to your outputs and resources.

Reporting expectations also tend to change over time. For instance, your agency may have to respond to new requirements. Recent examples include Cabinet-endorsed processes such as the Review of Accountability Documents (RoADs) and the Capital Asset Management (CAM) system changes.

This learning should be captured in a development plan for your performance management system, which identifies the tasks, timelines and resources required to improve over time. This plan provides an agreed path forwards, against which progress can be monitored.

Developing capability to maximise measurement benefits

Three capabilities are needed to run and get benefit from performance monitoring systems. First and foremost, leaders and senior managers need to understand and be able to apply the results in their decision-making.
Second, technical expertise is required to develop useful measurement and monitoring frameworks, produce attributable measures, and report in a simple, comprehensible manner.

Third, the organisation must gather and collate the data required to produce those measures, and acquire comparative statistics where needed.

In all of these areas, systems must be developed to ensure reports are useful, standardise methods, acquire data at least cost, and to reduce the costs of analysis as much as possible. Above all else, governance processes must ensure that performance information gets used well.

Once your agency has established some performance measurement capability, the knowledge and understanding gained from that process need to be used to enhance the direction of the agency and to indicate where internal changes may need to be made to improve performance. Such changes may come through recruitment, reorganisation, changing processes, strategy development, change of governance, changing systems, staff performance, or re-aligning stakeholder relationships. These key areas of capability are outlined in the Central Agencies’ Capability Toolkit. The toolkit also explains how the planning processes used within agencies should focus on outcomes.27

**Iterative development of strategies, policies and plans**

The performance measurement process confirms, on an ongoing basis, that major outputs are delivered well and having the expected impact. Aggregate, iterative measurement tracks how well you are progressing towards your performance goals. Ex-ante performance expectations (e.g. targets or improving on historical results) allow you to build a clear picture of performance in key areas and as a whole. Iterative development relies on leaders having the courage to adapt their strategies and plans as the evidence builds that needs, delivery and results may be different from those first envisaged.

**Decision-makers**

Progress can only be made with the support of your key decision-makers. The best situation is that strong demand exists from Ministers, Boards and/or Chief Executives, because they realise that they need good information to manage well and meet the expectations of those around them. Both RoADs and CAM are designed to lift these expectations, but the main beneficiaries of improved performance information are your managers and your clients.

In the end, any State sector agency needs to be results-oriented so that it can deliver the best results for New Zealanders. Your agency’s primary focus should always be on how its activities benefit its clients. But because budgets are always limited, some form of cost-benefit analysis is always required.

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