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Grounding Practice in Theory: The Development of a Literature-based Performance Framework in New Zealand Local Government

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Abstract

Performance measurement is a subject of some importance within the public sector. This study examines the design and development of a performance measurement framework within a local government department. It used a narrative case study approach to follow the process used by the design team involved. The design team began by examining the performance literature at a number of levels, and from this distilled eight design principles, from which they built a performance measurement framework. The design team encountered a number of challenges during this process; challenges they expected based on the literature. From the experiences of the design team, a number of hypotheses suitable for further testing have been derived. This study provides useful advice for performance measurement professionals within the public sector in developing frameworks grounded in theory, whether at the central or local government level.

INTRODUCTION

Perhaps surprisingly, there are relatively few published examples of public sector practices consciously grounded in, or reflective of, theory. This may be because practitioners are too busy to reflect on and publish their experience, or because academic recommendations are too difficult to make operational. While some examples exist, they are dwarfed in number by those that simply critique practices not necessarily derived from theory, or propose specific recommendations without testing them in practice.

One public sector practice of interest is performance measurement. In the past three decades, this field has received a substantial amount of academic attention, growing from its emergence in the 1980s as part of broader trends of New Public Management (Boston, 1996; Butterfield, Edwards, & Woodall, 2004; Carter, Klein, & Day, 1992; McLendon, Hearn, & Deaton, 2008; Orr, Jaeger, & Schwarzenberger, 2007; Sanderson, 2001). The majority of this work has focused on central government, with a sizeable minority devoted to local government (Bernstein, 2001; Boyne & Chen, 2006; Broad, Goddard, & Von Alberti, 2007; Harris, 2005; Johnsen, 1999; Kuhlmann, 2010; McAdam, Walker, & Hazlett, 2011; McLean, Haubrich, & Gutierrez-Romero, 2007; Melkers & Willoughby, 2005; Northcott & Taulapapa, 2012; Poister & Streib, 1999; Sanderson, 2001; Sanger, 2008; Umashev & Willett, 2008; Wang, 2002). Multiple studies have been published from both descriptive and normative perspectives, some examining the mechanisms for deployment and implementation, some focusing on the benefits and costs of performance measurement, and others providing recommendations for the implementation of performance measurement frameworks. As noted above, however, very few studies have 'closed the loop' in taking those recommendations, applying them in practice, and seeing what occurs. The few that have done so have usually taken an 'off the rack' approach in implementing a template method, such as the Balanced Scorecard, and noting its successes and failures (Brown, 2012; Edwards & Clayton Thomas, 2005; Mills, Richards, Neely, Gregory, & Bourne, 2000).

This is a detailed case study of the design and implementation of a comprehensive performance measurement framework in a single local government department, Licensing and Compliance Services (LCS) within Auckland Council. As such, it answers several questions: how the design team developed the framework, what their influences were, how these influences affected the design, and what challenges they faced during the design process and subsequent implementation. In answering these questions, this study provides unique insight into a complex public sector process, and provides new knowledge for practice.

The author was a member of the design team, and consequently this study is an example of participant research. Readers should be cognisant of this relationship; while all efforts have been made to remove bias, traces may remain.

METHODOLOGY

Structurally, this paper mirrors the process utilised by the design team, allowing the reader to follow along with their thoughts and considerations. First, it sets out the context facing the team, including the key challenge. It then examines the literature considered by the design team, grouping this into both descriptive and normative categories, with the former group being further subdivided into three main types: global, local government and New Zealand-specific. The study then shows how this literature review was synthesised into eight design principles and how those design principles were turned into practice. Challenges with implementation are then briefly considered, with links to the literature highlighted. The study concludes by summarising several hypotheses noted by the design team during the design and implementation phases and considered worthy of further research.

This study uses a descriptive case study approach; an effort to "offer understanding presented from another's horizon of meaning" (Thomas, 2010, p. 579). It might be categorised as an instrumental case study in that the focus is providing insight into a specific issue (Stake, 1995). Some effort is made in the conclusion to abductively develop hypotheses for further testing (Thomas, 2010). No formal effort is made to deductively test specific hypotheses, but some of the commentary on issues and challenges does address these issues, if only summarily.

The author was a member of the framework design team.

Therefore, much of the information incorporated comes from the author's recollections, notes and documents produced at the time. The literature summarised was derived directly from the author's electronic reference library. No formal interviews were conducted for the purpose of this study, as it was not initially intended to externally publish the results of the framework design. Some effort is made in the text to simplify a more complex and less coherent real-world process into a more focused narrative. This approach can be best categorised as participant, rather than action, research.

The reader should be careful not to confuse two methodological issues: (1) the method used to develop the framework, and (2) the method used to document that development in this study. Care is taken in the paper to explicitly separate these issues where relevant. This is particularly important in relation to the literature review: this review is not designed to identify where this study fits within the broader literature and the gap it fills, but rather to indicate the conceptual context within which the design team worked.

A key caveat on sources should be noted here. Only those sources utilised by the design team in their work are cited in the literature review section. Because of this, some more recent works are not present. To incorporate them post facto would give an incorrect indication of the influences bearing upon the design team at the time (early 2014).

ORGANISATIONAL CONTEXT

Licensing and Compliance Services (LCS) is a department of approximately 250 staff within Auckland Council, a local government authority with approximately 8,000 staff that is responsible for the administration of Auckland, New Zealand's largest city with 1.5 million inhabitants (Licensing and Compliance Services, 2014c).

Auckland Council is a relatively new organisation, and was formed in October 2010 as an amalgamation of eight councils. LCS was formed at the same time, initially as a simple conglomeration of existing geographical structures. In 2013, LCS restructured along functional lines, implementing four primary service delivery units:

- Environmental Health Unit: Primarily responsible for the licensing and inspection of retail food premises in Auckland. Also responsible for noise control and response to contamination events.

- Alcohol Licensing Unit: Primarily responsible for the licensing and inspection of premises selling and supplying alcohol.
- Animal Management Unit: Primarily responsible for animal control activities under the Dog Control Act, including registration and response to animal events such as attacks or excessive barking.
- Bylaws and Compliance Unit: Responsible for registration of street traders, as well as responding to a range of bylaws issues, such as illegal signs, illegal street trading and public nuisance.

The initial impetus for the development of the framework was the arrival of a new departmental manager, alongside the aforementioned restructure, in 2013. The new manager and his lead team were not fully satisfied with the quantity and quality of the management intelligence provided them, and established a new business performance team (henceforth referred to as the design team) with the primary function of developing a new performance framework and associated products.

The sole piece of specific guidance available to the team at the time was Auckland Council's Integrated Performance Framework, described as "a cascading system of performance management that aligns achievement of community outcomes with groups of activities within the long term plan" (Auckland Council, 2012c). The framework provided little explicit guidance and detail, and in practice largely involved unstructured monthly reporting via a corporate system, and a set of specific "level of service measures". The design team regarded this as insufficient and set about creating a framework based on first principles. A simplified version of this process is shown in the following diagram:

CONCEPTS SHAPING THE DESIGN

The first step for the design team was to better understand best practice in the field. This involved a literature review of both new and previously considered sources. Findings from this review could then be grouped into two primary categories: (1) descriptive and critical, and (2) specifically normative and recommendatory. The first category could in turn be subdivided into three types: (a) global issues, (b) local government, and (c) New Zealand-specific.

While the majority of findings from the literature are summarised in the following contextual sections, some are noted in the sections that examine the design principles in detail. This positioning is largely determined by whether the finding provided general context and insight, or more specific technical guidance. Another factor is whether or not a particular finding was incorporated into the framework, or was ignored; that is, if it was noted but ignored, it could not be mentioned in relation to a specific design principle. Not all of the literature examined influenced the final design, but is included here to ensure a comprehensive understanding of the various conceptual issues considered by the design team. Perceptive readers may note unconscious carryings-over from the literature to the final design principles that have escaped the notice of the author.

Global Issues

Public sector performance measurement became an increasingly important issue in the Western world in the 1980s and 1990s (Carter et al., 1992; Fleming & Lafferty, 2000; Poister & Streib, 1999; Propper & Wilson, 2003; Schick, 1996). Advocates of a new style of public service – sometimes termed New Public Management or NPM – hoped to push what were seen as slow-moving, inefficient and overly bureaucratic organisations closer to a private-sector, corporate model, which would hopefully deliver better services for less money (Heinrich, 2002; McAdam
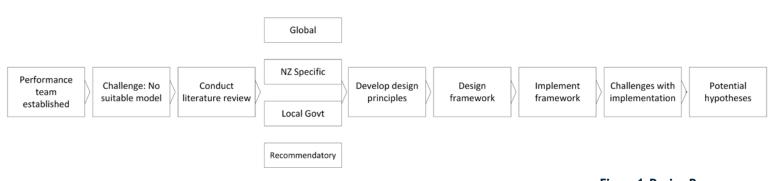

Figure 1. Design Process

et al., 2011; van Sluis, Cachet, & Ringeling, 2008). A key theoretical underpinning of NPM was public choice theory, which focused on utility maximisation by individuals and the impact of this on political actions (Buchanan, 2003). Key emphases of NPM included value for money and efficiency (Carter et al., 1992), a focus on results rather than process (Cope, Leishman, & Starie, 1997), and "management by contract" (Sanderson, 2001; Schick, 1996), where public agencies would have the services to be delivered specified and paid for in advance. Under NPM, public sector agencies would more closely resemble their private sector counterparts, with increased contestability for services, a separation of policy and provision (often known as 'steering' and 'rowing'), and greater decentralisation. Performance measurement, in providing a quantitative and rigorous lens for organisational activities, soon became an essential tool in enabling this evolution.

Multiple benefits of performance measurement have been identified, from improving value for money, improving managerial competence and increasing accountability (Collier, 2006); to enhancing communications with stakeholders, improving monitoring of tactical and strategic actions, and better resource allocation (Wang, 2002). However, performance measurement can also have costs, and not merely in terms of the resources required to undertake measurement. Kravchuk and Schack (1996) have noted that "performance measures can misinform as much as they inform, if users are unaware of the subtle limitations of measurement systems" (p. 348). Flynn (1986) has put it bluntly:
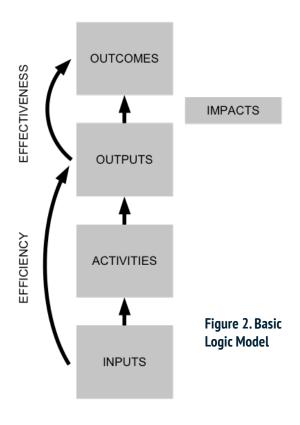
> "At its worst, performance measurement has led to a concentration both on what is easily measured and what is susceptible to narrowly defined efficiency changes" (p. 389).

If targets are poorly defined and lack detail, problems reminiscent of those encountered in command economies can emerge (Smith, 1990). Where there are too many indicators, however, there may be criticisms of unreliability, inflexibility and time wasting (Carter et al., 1992). There is thus a need to carefully balance detail and prescription with freedom and flexibility. There may be many indicators, but little understanding – a situation referred to as "DRIP" by some – "data rich, information poor" (Poister & Streib, 1999, p. 326).

Often, public sector activities are difficult to distinguish from one another, have multiple principals, are produced in conjunction with other organisations, and unfold over a lengthy period (Ghobadian & Ashworth, 1994; Propper & Wilson, 2003; Smith, 1995a). Public sector performance is thus a particularly elusive concept (Bititci, Mendibil, Nudurupati, Garengo, & Turner, 2006; Carter et al., 1992; Smith, 1995a; Wisniewski & Olafsson, 2004).

There have been multiple efforts to clarify and systematise performance measurement concepts. One standard performance classification scheme is the logic model (sometimes termed an 'outcomes framework'), which usually considers four elements: inputs, processes, outputs and outcomes (Flynn, 1986; NZ Office of the Auditor General, 2002, 2010, 2011, 2012, 2013, 2014; NZ State Services Commission and Treasury, 2008; Smith, 1995e). Often, a layer of intermediate outcomes, or impacts, is added between outputs and outcomes to indicate the first-order, rather than ultimate, effects of the delivery of goods and services. While this model has its roots in the economic literature, it has evolved into something somewhat different.

Figure 2. Basic Logic Model

Local Government Issues

The English-language literature on local government performance measurement is dominated by large-N survey studies in the United States and United Kingdom, although

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there are some useful studies analysing other countries (Carmeli & Tishler, 2004; Johnsen, 2005).

Melkers and Willoughby (2005) surveyed 300 organisations, and found that while most local governments had adopted performance measurement, few had implemented it meaningfully. Berman and Wang's 2000 study showed an even lower level of progress, with fewer than one third of surveyed counties, and less than a quarter of respondents, seeing performance information making a meaningful contribution to planning. Wang's 2002 study questioned the impact of performance measurement, noting that "a relationship between funding levels and performance is not always clear" (p. 35). Poister and Streib's 1999 study surveyed 1200 jurisdictions in the United States, and found that the majority measured output performance measures, but few tracked efficiency. Sanger's 2008 study of United States local government showed that cities and counties had embraced performance measurement more than states had. Other research indicates that United States local governments continue to focus on financial performance (Kloot & Martin, 2000).

In the United Kingdom, there has been a recent emphasis by central government on measuring the work of local government (McAdam et al., 2011; McLean et al., 2007). Comprehensive Performance Assessments (CPA) were conducted by central agencies, evaluating local government service delivery in six broad areas. CPA were replaced by Comprehensive Area Assessments in 2009, which were then discontinued in 2010 and replaced with less elaborate auditing procedures (Audit Commission, 2013a, 2013c). Broad and Goddard's 2007 case studies of several local governments showed highly centralised planning and hierarchical reporting procedures for performance information.

Much of the research has shown that local governments are still undeveloped in their approach to performance, with process and financial data remaining pre-eminent, and little linkage between performance information and deliberate action (Ammons, 1995; Berman & Wang, 2000; Broad et al., 2007; Kloot & Martin, 2000; Melkers & Willoughby, 2005; Wang, 2002). There is relatively little clarity as to what determines the deployment and meaningful implementation of performance measurement frameworks, with both internal (managerial) and external (political) factors important at

different times and in different localities (Ammons, 1995; de Lancer Julnes & Holzer, 2001; Johnsen, 2005; Propper & Wilson, 2003).

New Zealand-Specific Issues

In the 1980s, New Zealand's public sector underwent a revolution, driven by New Public Management and other theoretical considerations (Boston, 1996; Schick, 1996; Scott, 2001; Scott, Bushnell, & Sallee, 1990). As a result, performance measurement, especially in terms of output measures, became central to the operations of public sector organisations (Griffiths, 2003; Hood, 2007; Lord, Shanahan, & Gage, 2005; Schick, 1996).

Every central government agency now produces, at minimum, a relatively comprehensive annual report that shows progress towards key outcome and impact targets, and detailed information about output performance (NZ Office of the Auditor General, 2002, 2014). Some efficiency information is provided through the use of output-based costing.

Local government in New Zealand consists of 78 local, regional, and unitary councils (Department of Internal Affairs, 2014; Local Government New Zealand, 2014). It is less advanced than central government in its approach to performance measurement (Northcott & Taulapapa, 2012; NZ Office of the Auditor General, 2010). What performance measurement does occur is largely driven by the requirements of the Local Government Act 2002 (LGA2002).

LGA2002 does not use standard performance measurement terminology. It states in relation to a local authority's long-term plan (a ten year strategic document) that it must "include a statement of the intended levels of service provision" as well as performance measures and targets that enable the public to assess the level of service provided (2002). For specific groups of activities (which using standard terminology would be called output classes), some compulsory performance measures are set by the Department of Internal Affairs (Chief Executive of the Department of Internal Affairs, 2013).

The New Zealand Office of the Auditor General (OAG) is involved in the review of local government performance measurement. Their 2010 report Local government: Examples of better practice in setting local authorities' performance measures states that "better performance

information and reporting can help us understand and address the public sector's current and ongoing challenges" (p. 5). OAG has also recently published guidance on local government annual reports, focusing on performance reporting. One of the key elements of this guidance is the concept of considering "to what quality standard" to provide services (NZ Office of the Auditor General, 2011, p. 5), using performance targets as an ex ante pricing mechanism, rather than simply using performance results to reward or punish managers. This approach to linking performance and funding is one that seldom appears in the international literature, but is relatively common in New Zealand.

Specifically Recommendatory

Many performance measurement authors have gone beyond descriptive and critical analysis of existing phenomena and made specific recommendations for enhanced performance measurement. Streib and Poister (1999) have suggested that a framework should be designed to improve managerial accountability, increase employee focus on organisational goals and improve service quality. Similarly, it has been suggested that performance measurement systems should facilitate a hands-off, autonomous style of management (Sanger, 2008). Performance measurement systems should also enable effective actions, rather than serve purely as control mechanisms (Broad et al., 2007). The design team identified three pairs of authors in particular who provided what were felt to be rigorous, logical, comprehensive and nuanced sets of recommendations: Kloot and Martin (2000), Ghobadian and Ashworth (1994), and Kravchuk and Schack (1996).

At a more technical level, Kloot and Martin identify five key elements of a good performance framework:

1. A strategic, collaborative development of a performance management system involving all stakeholders.
2. In-house development of valid, council-specific measures to be used for organisational improvement and benchmarking with like councils.
3. Real-time, up-to-date performance information for all stakeholders to monitor progress, demonstrate accountability, and manage outcomes.
4. Integrated performance management system across the organisation focused on value-for-money, service delivery, and organizational improvement.
5. A focus on both financial and non-financial measures

(Kloot & Martin, 2000, p. 248).

Ghobadian and Ashworth have four recommendations:

1. Create measures that meet the requirements of different organisational levels.
2. Capture the essence of both efficiency and effectiveness dimensions.
3. Provide a means of identifying trade-offs between various dimensions of performance.
4. Include qualitative as well as quantitative measures. (Ghobadian & Ashworth, 1994, p. 50).

Kravchuk and Schack give ten core design principles aimed at alleviating common performance measurement challenges they have identified in the literature:

1. Formulate a clear and coherent mission, strategy, and objectives.
2. Develop an explicit measurement strategy covering categories of measures, specific measures, and data definitions.
3. Involve key users and customers in design and development.
4. Rationalise programmatic structure as a prelude to management.
5. Develop multiple sets of measures for multiple users
6. Consider the customer(s) of programmes and systems throughout the process.
7. Provide each user with sufficient detail for a clear picture of performance.
8. Periodically review and revise the measurement system
9. Take account of upstream, downstream, and lateral complexities.
10. Avoid excessive aggregation of information, as "more detail, in many instances, actually is preferable to less" (Kravchuk & Schack, 1996, pp. 350-357).

Comparison of these sets of recommendations illustrates several commonalities: collaborative development of frameworks and measures, focusing on the utility of performance measures, the examination of multiple facets of performance, balancing financial and non-financial perspectives, and linking measures through multiple levels (e.g. strategy to tactics).

DEVELOPING FRAMEWORK DESIGN PRINCIPLES

Performance measurement frameworks are not relatively standard goods (Johnsen, 1999; Northcott & Taulapapa, 2012). They should not be simply implemented "off the rack", but rather require adaptation to their specific environment. The challenge for the design team was thus to synthesise this mass of literature into a set of useful design principles. Specific recommendations were relatively easy to consider; useful knowledge was more difficult to extract from the more descriptive and critical sources. After consideration and analysis, focused on ensuring a parsimonious but comprehensive set, eight principles were identified (Licensing and Compliance Services, 2014a). In developing these eight principles, much of the material gathered from the literature review was discarded, because it was felt to be either unnecessary or harmful.

The following sections list the design principles and provide additional information to show how each was derived from the literature and the particular shape it took within the performance framework.

1. Use a classical logic model (outcomes, outputs, inputs) as the primary structure

The first, and most important design principle utilised by the design team in setting up the framework was to structure it around a classical logic model, as summarised earlier, linking outcomes, outputs, activities and inputs.

This was done for several reasons. First, the logic model is well regarded internationally, commonly used in the New Zealand public sector and explicitly recommended by the Office of the Auditor General (Collier, 2006; Flynn, 1986; NZ Office of the Auditor General, 2011; NZ State Services Commission, 2003). Second, members of the design team were familiar with this approach from their prior research and experience. Third, and most importantly, the model was felt to be the most rational means of identifying relevant performance.

Organisations exist for a purpose (or range of purposes). Developing performance measures that are not explicitly linked to those purposes may be irrational (McAdam et al., 2011). While Johnsen (1999) has recommended a "decoupled" approach that develops indicators in isolation from overarching organisational goals, such an approach
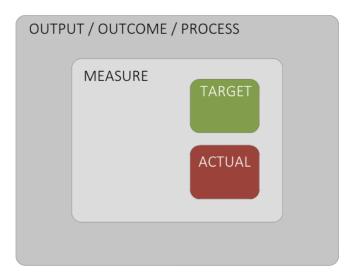

Figure 3. Relationship Between Logic Model Elements and Measures/Targets

seems pointless. While such measures may be willingly adopted, if they are not aligned to organisational goals they are of limited if not zero relevance.

Using a logic model also makes it easy to clarify the difference between the elements of the model – such as outcomes, outputs and inputs – and their associated measures and targets. The two are often conflated. This can lead to confusion between the substantive service or effect – the what – and the indicators used to monitor this – the how well.

Linking outcomes, outputs and impacts also facilitates enhanced management. Every level of the model has vertical links. The model makes interrelationships explicit and allows for the testing of hypotheses. Low value activities and outputs can be identified when a limited correlation with outcome goals is shown. Understanding which inputs contribute to which services is invaluable (Brignall & Modell, 2000).

A logic model can also help achieve Kravchuk and Schack's (1996) recommendations in terms of rationalising programmatic structure, without actually requiring an organisational restructure. A logic model, existing "on paper", can reflect any of a myriad of actual organisational forms. This allows for the performance framework to be rational and logical even if the underlying organisational structure is chaotic.

By developing a logic model as a first step, all the other elements of a good performance framework could be added

on. Had this underlying structure not been developed, it would have been difficult to achieve other design goals.

2. Ensure clarity of mission from the Auckland Plan

Logic models are agnostic; what is entered into the various levels of outcome, output and input depends on the particular context involved. As noted earlier, the public sector can be chaotic, with a range of goals, objectives and stakeholders, and little clarity as to how best to balance that complexity (Carter et al., 1992; Kravchuk & Schack, 1996). Customers and administrators may have quite different perceptions of desired goals, with politicians differing further (Kelly & Swindell, 2002). Behn (2003) has said that "before choosing a performance measure, public managers must first choose their purpose" (p. 589), and Vinzant and Vinzant are even more explicit: "performance measures derived directly from strategic goals and objectives, and links between strategic plans and budgets, (are)... critical elements of the strategic management process" (as cited in Poister & Streib, 2005, p. 46). Where there is no clear linkage between specific goals and performance measures, performance information may be used inappropriately to hold managers accountable for results they are not pursuing (Behn, 2003; Kloot & Martin, 2000).

The Auckland Plan provided the vital tool in clarifying the mission, goals and objectives to feed into the top level of the framework. The Auckland Plan is a strategic masterplan, developed through a consultative political process, covering a thirty year period for Auckland, and setting out an overarching objective of creating "the world's most liveable city" (Auckland Council, 2012a). Underneath this primary objective is a set of outcomes, one of which, a fair, safe and healthy Auckland, was deemed to be the most appropriate for LCS's work.

This outcome was then deconstructed to identify six appropriate subordinate impacts:

1. An Auckland free of public nuisance.
2. Aucklanders safe from animal-related harm and nuisance.

3. Aucklanders undisturbed by noise pollution.
4. Safe food premises.
5. Safe health and hygiene premises.
6. A reduction in alcohol-related harm.

These six impacts, alongside the outcome noted earlier, formed the top level of the logic model, thus turning it from

A fair, safe, and healthy Auckland

Auckland Plan Outcome
Figure 4. Six Impacts

An Auckland free of public nuisance | Aucklanders safe from animal-related harm and nuisance | Aucklanders undisturbed by noise pollution | Safe food premises | Safe health and hygiene premises | A reduction in alcohol-related harm

an agnostic, theoretical construct into one founded in its local environment. Analysis of the impacts then allowed for the identification of relevant output classes and outputs, as well as the identification of a set of processes and inputs. By ensuring clarity of mission, and combining this with a logic model, a rational structure for LCS activities could be developed. This structure was then populated with measures.

3. Keep financial information of secondary importance

One of the most common concerns cited in the performance literature is an overemphasis on financial performance measures to the detriment of other types (Ammons, 2002; Ghobadian & Ashworth, 1994; Kloot & Martin, 2000; Palmer, 1993). Modell (2004, p.47) notes the key issue: "Much performance information may be compiled for seemingly symbolic use, whilst the real concern of senior management is still directed towards financial performance measures." This can have negative effects for strategic direction and as such its avoidance was regarded as an important design principle.

This focus on financial information has traditionally been an issue not only for Auckland Council, but all local authorities in New Zealand. Indeed, a major third-party 'performance report' on local authorities focuses exclusively on financial information (Mitchell, 2014; Taxpayers' Union, 2014). Many planning processes are budget-driven rather than strategy-led. There is little focus on outcome or even output performance indicators.

In implementing this design principle, the design team took a pragmatic approach and focused on how financial information was presented. Existing performance reports within Auckland Council often presented financial information in prime position. In the framework, financial information was relegated to the bottom-right quadrant of single-page reports, or to the end of longer reports.

Success in incorporating this design principle was mixed. While internal departmental customers were largely satisfied with the focus on service delivery, some customers outside the department still emphasised financial information. Managers were still more likely to be questioned on financial performance than on service delivery performance.

4. Link performance information to the budgetary process

The literature illustrates an interesting correlation: when financial information is the primary type of performance information examined, other performance information has little or no effect on budgeting processes (Berman & Wang, 2000; Melkers & Willoughby, 2005; Poister & Streib, 2005). This creates two negative effects. First, if budgets are not based on all performance information, then they are unlikely to be rational and logical attempts to achieve organisational goals, and are thus likely to be merely the product of internal and external political processes. Secondly, if staff believe that non-financial performance information does not affect budgeting processes, they will lack the incentive to provide and use performance information (Melkers & Willoughby, 2005), thus harming organisational performance at the tactical, non-budgetary level. As such, the design team regarded linking performance information (other than financial) and budgeting as vital.

As noted, Auckland Council's planning and budgeting processes are only tenuously linked to the performance measurement system. This is interesting given the emphasis in governmental guidance on identifying a specific level of service (output class target) and the cost required to deliver that service (2002; NZ Office of the Auditor General, 2010).

Within the LCS framework, efforts were made to link performance to budgets. Primarily, this was done at the output level. Efforts were relatively coarse, with difficulties including the problem of costing the quality of outputs – as so much of this is determined by staff, and staff costs are relatively constant independent of quality, costing different output qualities was almost impossible. Success was limited. During a major strategic planning process, central attention remained firmly fixed on financial elements.

5. Collaboratively design the framework

The literature has identified the value of involving staff in the development of performance measurement frameworks (Bititci et al., 2006; Carter et al., 1992; Kloot & Martin, 2000). Where staff are involved, performance frameworks are more legitimate (Streib & Poister, 1999). Incorporating the views of service users, citizens and front-line staff can also ensure that measures reflect all aspects of a service (Sanderson, 2001). Kloot and Martin (2000) have noted that "culture is crucial in performance measurement" (p.246) and Sanger (2008) has called it a "hearts and minds" battle (p.S80); external imposition of performance measures is likely to lead to opposition rather than support (Fleming & Lafferty, 2000). Despite this, some surveys have shown that low-level employees are seldom involved in the development of performance measures (Streib & Poister, 1999).

This principle was wholeheartedly embraced in the design of the framework. Elements were built from the bottom up by consulting with staff across the department to identify key outputs, processes, inputs and associated measures (Carter et al., 1992; van Sluis et al., 2008). There was a specific focus on the operating supervisor level, building on suggestions that it is at this level that the best results for performance measurement can be achieved (Ammons, 2002).

One shortcoming of the approach taken was a lack of involvement by participants outside the department, most specifically politicians and citizens, which might be seen as reducing legitimacy, direction and support (Wang & Berman, 2000). It was consciously decided not to incorporate such perspectives as it was felt that the Auckland Plan, a product of a major political process that included consultation with citizens, provided sufficient guidance.

6. Carefully select measures

Substantial care was devoted to the selection of measures. Rather than relying solely on availability of data, there was a focus on identifying those metrics that would be most meaningful (Braga & Moore, 2003; Flynn, 1986; Loveday, 2006; Smith, 1995a). Efficiency and effectiveness measures were identified (Ammons, 2002). The majority of measures chosen were output measures, as these were the most able to be controlled by staff, and the most amenable to frequent (monthly) measurement (Behn, 2003). It is hoped to evolve from an output-based framework to one that includes more substantial treatment of impact measures (Melkers &

Willoughby, 2005), but care must be taken to account for likely random variation at that level (Jacobs & Goddard, 2007), which is outside managerial control. It was decided to avoid aggregation measures, based on findings that developing such measures can be difficult in highly complex environments such as the public sector (Jacobs & Goddard, 2007; Kravchuk & Schack, 1996).

It was decided to include a target for each measure where possible. Without a target, measures exist only in the abstract, and while change can be observed, the quality of that change is invisible (Ammons, 1995; Behn, 2003; Palmer, 1993). Targets were collaboratively developed (Bovaird & Martin, 2003; Loeffler, 2001).

There was a deliberate emphasis on including measures where existing data were imperfect, relying on Heinrich's (2002) finding that "imperfect data can still generate information that might effectively guide program managers in improving agency performance" (p. 721). In many cases, imperfect data were the result of gaps in time series, making Grizzle's 1982 statement that "a time series not perceived as useful by today's users might be perceived as useful by future users" still relevant today (p. 133).

Within the overarching logic model structure, measures and targets were seen as flexible elements. While outcomes, impacts, output classes, outputs, activities and inputs remain stable for the most part, the underlying measures are conceptualised as being in a state of flux. Different measures can be reported at different times, and new measures can be added on without fuss. This ensures that the framework can evolve and avoid ossification (Grizzle, 1982; Palmer, 1993; Sanger, 2008; Smith, 1995a).

The final factor involved in selecting measures was based on Kravchuk and Schack's 1996 recommendation of an explicit measurement strategy. This was implemented through the development of a Planning and Performance Dictionary that described and explained each element of the model, and that incorporated calculation formulae where relevant.

7. Design the framework in a way that minimises gaming
Performance measurement is by its very nature not a purely technical matter, so it is important to develop measures that affect behaviour positively (Grizzle, 1982). Given the incentives associated with many performance measurement systems, perverse behaviour is entirely understandable and logical (Carter et al., 1992; Heinrich, 2002; Loveday,

2005; Pidd, 2005; van Sluis et al., 2008; Vollaard, 2006). Analysis of Comprehensive Performance Assessment results in the United Kingdom indicates gaming (the deliberate manipulation of performance results) in local government performance does occur (McLean et al., 2007), as do occasional scandals in the press about manipulation of crime statistics by police forces across the world (Barrett, 2013).

Several approaches were taken to minimise gaming. At the impact level, this largely involved finding independent sources that were "not corruptible" (Propper & Wilson, 2003, p. 20), such as other government agencies. For example, one of the desired outcomes of inspections of food premises is improved quality, and thus higher inspection grades. However, by setting a target for increasing average inspection grades, while also being responsible for setting those grades, one would be creating an opportunity for gaming; staff could deliberately overinflate the grades provided to give the impression of improving quality in premises. In the absence of an external auditor to review grades, the next best option was to obtain data relating to the incidence of food poisoning linked to retail food premises. This data cannot be affected by staff, but is linked to the average quality of food premises.

8. Compile and distribute performance information in a timely manner
Performance information is worthless, or even a cost, if it is not utilised (Kravchuk & Schack, 1996). As such, the distribution of performance information in a timely manner was regarded as an important design principle. The framework was partly limited by Auckland Council performance reporting requirements, which imposed a monthly reporting cycle for most measures. This was problematic when assessing processing times (as applications may span reporting periods) or response times when the event and response may span reporting periods.

The framework focused on enriching the compulsory elements of the Auckland Council performance system with more in-depth monthly and ad-hoc reports. The former took the form of a modified Balanced Scorecard, (Braga & Moore, 2003; Brignall & Modell, 2000; Carmona & Gronlund, 2003; Kloot & Martin, 2000; Wisniewski & Olafsson, 2004) with approximately sixteen measures reported for the department as a whole and for each of the major functional units. Enriching the quantitative information provided was a qualitative report on major highlights and achievements. An

annual report was also produced.

The key challenge going forward for the framework will be aligning the production and dissemination of performance information with key strategic planning processes. As Auckland Council largely determines its financial year budget six months ahead of time (i.e. for 2014/15, in December 2013), performance information is required early in the cycle.

Challenges in Deployment

Designing the framework overcame the first challenge noted: the lack of a suitable model for use. However, several additional challenges were encountered when the framework was first deployed. These are summarised below, and a follow-up paper will examine them in greater detail.

The first deployment challenge was staff engagement. Some writers have concerns that performance management can deprofessionalise and commodify staff (Adcroft & Willis, 2005). As such, the design team was aware of potential negative repercussions resulting from rollout of the framework. Efforts to alleviate this focused on taking a collaborative approach to the overall development of the framework, as well as clarifying logic model elements (e.g. outcomes, outputs) before specifying measures and targets. This latter aspect ensured that "what" was clarified, which enabled staff to better understand the "how much" and "to what quality" aspects. For the most part, there was little staff opposition to the framework, although this might have been due to the fact that it was not initially linked to individuals' own personal performance reviews and thus remuneration. There was some staff criticism of the validity or accuracy of specific measures, which led the design team to undertake several cycles of data improvement.

A second deployment challenge was using impact and outcome measures in a meaningful way (this was both a design and a deployment challenge). While there were some very attractive impact measures, many were not usable due to the potential for perverse incentives where monitoring and enforcement roles were combined. The design team also found that for many staff, their role was perceived as restricted to creating outputs, rather than impacts and outcomes. For example, setting targets for reducing the number of dog attacks (based on the philosophy of reducing harm) was not fully accepted, whereas setting targets for the timeliness of response to dog-related calls for service

was. This speaks to a more fundamental issue than merely performance measurement, namely the mission and function of specific public sector agencies.

A third deployment challenge was converting performance information into meaningful tactical and strategic actions. As noted, efforts to influence strategic planning processes were not particularly successful. At the tactical level, the issue was aligning the provision of information with opportunities for improvement; this was reflected in prioritising ad-hoc requests, but to attain a greater level of success will need to expand to more in-depth evaluation of practice and recommendations for improvement (Behn, 2003; Sanderson, 2001).

A fourth deployment challenge was changing mindsets about financial performance information, particularly when discussing issues with the broader Council. The design team was well aware of the potential for this issue to develop, given the frequency of this problem being noted in the literature, but proved unable to convey this adequately to other stakeholders. This was particularly noticeable during discussions on budgeting, when efforts to link desired outputs to funding were often misunderstood.

DISCUSSION

The above study has traced how LCS developed and implemented a performance framework, basing that design on the relevant literature. In doing so, the design team attempted to ground practice in theory. Along the way, it identified several hypotheses worthy of further testing.

In using a formal logic model/outcomes framework, the design team was initially guided solely by its logical coherence and pre-eminence in the literature. However, they found during deployment that this tool was particularly useful in explaining linkages between actions and results, and in developing hierarchies of measures. As such, this suggests:

> H1: Performance measurement is enhanced by the use of a formal logic model linked to stated organisational goals.

The design team encountered relatively little opposition to the framework, despite there being clear evidence in the literature that such might emerge. They considered that this

might be due to the collaborative approach taken, or because the framework was not linked to personal remuneration systems. As such, this suggests:

> H2: Acceptance of performance measurement practices by staff is enhanced by the use of collaborative approaches to the development of performance measures.

> H3: Acceptance of performance measurement practices by staff is inversely related to the use of performance measurement to set personal remuneration.

However, the above poses an interesting conundrum: if there is no link between performance measurement and remuneration, how can it influence behaviour and thus organisational performance? There may thus be a complex relationship between the acceptance of a framework and its meaningfulness.

In relation to this, no gaming behaviour was discovered during the deployment of the framework. This might be linked to the way in which the framework was developed and its lack of links to individual remuneration. As such, this suggests:

> H4: The prevalence of gaming behaviour is correlated to the degree to which performance measures are imposed by an external party.

> H5: The prevalence of gaming behaviour is correlated to the degree to which performance indicators affect individual remuneration.

Lastly, the design team noted during discussions within the organisation that, for the most part, there was both little interest in and little belief that performance was inadequate in non-financial activities, that is, core service delivery such as alcohol inspections or responding to noise complaints. This was almost a case of treating non-financial performance as a fixed quantity and quality, and financial measures as variable. As such, this suggests:

> H6: Financial performance information is prioritised because the value of other activities is taken as a given.

> H7: The use of non-financial performance measures is inversely related to the importance placed on financial performance measures by an organisation.

Alongside these hypotheses, it might be worthwhile to evaluate the impact of theoretically grounded performance frameworks on organisational performance, whether compared to the preceding situation or non-theoretically grounded frameworks in similar organisations. This would require a clear distinction between "performance" and "performance measurement" but could be illuminating. If, for example, the evidence suggests that either all performance frameworks, or merely those founded on the literature, have minimal effects on actual performance, it might suggest that perceptions of performance measurement that emphasise its symbolic value are accurate (Brignall & Modell, 2000; Modell, 2004; Roy & Segun, 2000).

Lastly, the author humbly suggests that the design principles utilised in developing the LCS framework might be utilised for the development of performance frameworks in similar organisational units. This would enable the hard-won learnings of the team to be disseminated more broadly in the hope of improving practice.

CONCLUSION

This study has shown how the LCS team confronted their primary challenge, namely the lack of a suitable model, by examining the public sector performance literature, separating it into descriptive/critical and normative/recommendatory groupings.

From this review, the LCS team distilled eight design principles:

1. Use a classical logic model (outcomes, outputs, inputs) as the primary structure.
2. Ensure clarity of mission from the Auckland Plan.
3. Keep financial information of secondary importance
4. Link performance information to the budgetary process
5. Collaborative design of the framework.
6. Careful selection of measures.
7. Design the framework in a way that minimises gaming
8. Compile and distribute performance information in a timely manner.

Each of these principles was then applied in varying ways and to varying extents. The logic model was used to rationally link goals and actions. Alignment to the strategic plan ensured clarity of mission and thus the rationale for actions. Financial information was given a physically less imposing position in published reports. Some minor efforts

were made to link performance information to budgeting processes, primarily through output costing.

A collaborative approach, including staff consultation, was used to develop the logic model, specific measures and targets, and was successful in increasing staff acceptance. Measures were selected that encompassed multiple levels of the logic model (outcomes, outputs, inputs). Efforts to minimise gaming were successful, but as time passes and performance information is more closely linked to remuneration, this may change. The framework was successful in compiling and distributing performance information in a timely manner, despite challenges posed by the calculation formulae of specific time-bound measures.

The experiences of the design team enabled it to identify a range of hypotheses linking the use and benefits of performance measurement with specific antecedents. One potentially intriguing relationship identified is that between the acceptance of a framework and its meaningfulness.

In developing this framework, the design team found themselves in a seemingly contradictory space, existing simultaneously in both the unknown territory of developing a theory-grounded framework, and yet also on familiar ground in terms of the literature within which they worked. It is hoped that this particular approach might be more broadly applicable, and that this study provides some small increase in knowledge for practice.

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