Introduction

The New Zealand economy in the early months of 2009 faces challenges of historic magnitude. The size of the public sector in the New Zealand economy makes it arguably the most important single player to manage the current situation. We can expect Keynesian policies designed to stimulate spending by consumers and businesses to be important. The poor economic outlook and policies to stimulate the economy mean that the government is faced with severe constraints on budgets and strong pressures to achieve high value for the money expended on public services.

While the current set of conditions is unique, the need to manage within constrained budgets and achieve high value for money is not a new problem for managers in the public sector. These were issues in the 1980s, and there are lessons that can be learned from that time. In this article we set out a strategic approach to achieving value for money from the delivery of public services under continually constrained budgets and the management of capital investments, including priority setting for new investment. We do not consider the parallel management issues associated with transfer payments. The article draws on the experiences of the authors in top-level
managers and strategic consultancy roles in the public sectors in New Zealand and the United Kingdom in dealing with issues of this kind.

Managing public sector departments from the early 1980s to the late 1990s

A brief overview of the institutional structures within which public sector managers operate in New Zealand introduces our discussion. Government departments are appropriated their annual funding by Parliament to deliver specified outcomes. Departmental performance is monitored by Parliament, and chief executives have responsibility to provide prescribed information for this purpose. Two government agencies are actively involved in the machinery of government: Treasury and the State Services Commission. The Department of the Prime Minister and Cabinet is also involved. Oversight is provided by the controller and auditor-general, an officer of Parliament.

The legislation for the financial and performance management of departments has changed substantially since the mid-1980s. The most important changes to financial management were the introduction of the Public Finance Act in 1989 and its 2004 amendment, which set out the public sector financial management regime. Information on the operation of the act is given in Cabinet circulars and by Treasury instructions, budget guidance and circulars.

Norman (2004) has tracked the changes and emerging trends in administrative doctrines in the New Zealand public sector since the 1980s. He has observed that the period from the mid-1980s to the end of the 1990s was characterised by improvements in accountability for departmental performance and the widespread adoption of managerialism. By 2003 the trends emerging in administrative doctrines were concerned with problems due to the fragmentation of service delivery, and with the need for the development of common standards, practices and infrastructure across the state sector.

Within these institutional arrangements and changes in administrative doctrines, it is our observations from the experience of managing conditions on the ground which forms the basis for the approach to value for money management that we set out in this article. This is a practical method, and in the following paragraphs we summarise the key observations that have informed our ideas. In particular we draw on conditions in one department, the Department of Statistics (later Statistics New Zealand), over the period from 1980 to the end of the 1990s. Our contacts with others in the New Zealand public sector during this time would lead us to believe that the conditions encountered in the Department of Statistics were representative of those in the New Zealand public sector at the time. The experience of the Department of Statistics is particularly relevant as it faced severe funding problems from the early 1980s to the late 1990s. Some of the comments we make relate to what was confronted in resolving those problems. This practitioner’s view adds important insights into deficiencies in the information available to managers to make decisions, deficiencies only visible at a detailed level of analysis.

Over the whole period there were few public sector organisations which had recognised in their strategies the likely long-term nature of the downturn that was faced then.

During the 1980s to the mid-1990s almost all New Zealand public sector organisations faced ongoing expenditure restraint. Irrespective of the agenda which motivated the reform, the fact was that in the early 1980s the New Zealand public sector was in poor shape to answer questions on the value of their outputs. Indeed, for many in the public sector the idea that they were involved in the production of outputs for society was novel. The common view at the time was that people were employed to perform an activity. Departments did not have the information, let alone the skills, to assess and justify the value and impact of their outputs. It was our experience that for many outputs the key uses and their long-term value were not even known. The period of reform revealed the inadequacies in available information. By the turn of the new century departments were much better placed to answer questions about the value contributed by their outputs, and were also more aware of the great difficulty in assessing value for money for some. The Department of Statistics was only able to resolve its then funding problem when it built the necessary information base and undertook a detailed analysis for one of the first output price reviews in 1997: this showed that the funding approach it had operated under since the late 1980s was ill-founded.

Also, by this time there was a better understanding of the limitations of the narrow focus on output reporting and GAAP accounting. A report by the controller and auditor-general to Parliament (Controller and Auditor-General, 1999) sought to ameliorate these problems by focusing on outcomes, the exposition of intervention logic, impact evaluation, reporting against output and capability performance measures, and risk reporting.

Deficiencies in information to support expenditure prioritisation were exacerbated by the setting of the public sector discount rate at an unrealistically high level. Given the volume of public investment proposals or projects that could not meet this rate, analysing investments on the basis of future costs and benefits became secondary to less tangible political judgement in determining resource
Cutting the most immediately accessible inputs can lead to a severe test of service effectiveness if resources are withdrawn to the point at which service quality is compromised, and then sufficient resources are put back to restore desired service levels.

Even where decisions involving direct cuts to service levels were made, reductions in the expenditure base of organisations were often made without clear intentions about the consequences. Reductions in the quality of services, poor management of the obsolescence of assets, and a general loss of innovative capacity were a significant consequence of reductions to departmental baselines. The result was to reduce the capability of the public sector to operate at higher levels when economic prosperity returned. In our experience the accumulated downgrading of some assets far exceeded what was saved in not managing their maintenance. This was most obvious with the building stock, and more pervasive with respect to technology-based processes. This was also the experience we encountered in the United Kingdom.

Maintaining public sector operations became the product of an accumulation of localised, partial solutions which generated a multiplication in components and versions of processes, diminishing the overall coherence of service delivery systems and locking in outdated cost structures. It was not unusual, when new investments were eventually necessary, that these required much more sophisticated competencies to manage, far exceeding the capability that had been necessary to manage in a more piecemeal way.

These investment initiatives also required much more explicit governance arrangements than may exist even now across the public sector. The INCIS failure is an example of these deficiencies. The difficulties of the State Services Commission in its own leadership of particular whole-of-government information technology projects provide a very recent example, although related difficulties had already been experienced by the State Services Commission in the early 1980s with its then computer services division. The continued fragmentation of district health board (DHB) investment (even as the DHB-wide capital base has increased) is another example of inadequate sector-wide governance coupled with piecemeal and disparate investment in systems that manage information about resources, consumers and conditions. This fragmented approach is seriously limiting the potential to benefit from sector-wide investment, which would require integrated governance and a shared investment strategy. One consequence of this fragmentation is an excessive reliance on structural change to align resources with outputs as needs change, along with a much lower return on capital.

The budget problem in summary

Faced with the need to reduce departmental expenditure, an obvious place to start is to cut outputs no longer consistent with government policy. This is a particularly appropriate response when there is a change of administration, as now applies. Outputs that support low-priority policy areas can also be added to this category of candidates for cost cutting.

Experiences from the 1980s point to huge uncertainties about the full benefits and interdependencies associated with many public sector services, whether the benefits are internal to the public sector or delivered directly to businesses and individuals. Managing change given this uncertainty requires a variety of governance arrangements, some of which need to function at a whole-of-government level. Most public sector organisations do not have good information on the uses of their services and have difficulty in identifying services which can be cut. This is why the preferred strategy is often to let the quality of the service deteriorate and see what happens. This approach in our view does not address the key issue of sourcing information on which to make informed decisions about the most appropriate mix of outputs for the available budget.

Rather than making sufficient direct cuts in outputs to bring funding requirements within the available budget, public sector managers usually trade off inputs in order to maintain operating levels. Short term measures of this kind include:

- cutting costs, particularly corporate and easily-terminated costs such as maintenance, travel, consultants and fixed-term contractors;
- stopping or delaying investment decisions;
- hidden rationing by withdrawing services, usually to those stakeholders with the weakest voice to protest (rather than lowest net benefit);
• reducing the scale of monitoring activity and benchmarking activity; and
• scaling back preparation for low-frequency risks, even though these events may have very high impact.

Why the budget-line cutting approach has a high risk of decreasing value for money

Cutting the most immediately accessible inputs can lead to a severe test of service effectiveness if resources are withdrawn to the point at which service quality is compromised, and then sufficient resources are put back to restore desired service levels. This approach is frequently associated with continual organisational restructuring in order to align resources to outputs. Through the overwhelming dominance of the focus on outputs (and outcomes), the public sector has assumed away the fundamental and visible tension faced by traditional commercial organisations between having a production- or a market-based focus in the accountabilities of managers. This diminishes the significance of leadership in the management of input markets and business processes.

One problem with this response to constrained budgets is that it gives little recognition to the disproportionately negative impact reductions in some inputs can have on the quality and quantity of outputs. Short-term saving can have a negative impact on long-term outcomes because of factors such as:
• damage from disrepair of infrastructure;
• lost opportunity costs from no or poor integration of processes;
• irreversible asset disinvestment;
• very long investment cycles, which result in knowledge deterioration (for example, naval ship purchasing);
• loss of momentum and negative impact on organisational culture;
• inability to participate in multi-way partnerships;
• loss of business process knowledge from continued restructuring and poorer links between policy and operational processes;
• a transfer of production costs to the users of services, as they substitute for input elements that could have been provided at lower cost by the service providers.

The financial reporting regime in place in New Zealand does not readily alert managers to these negative impacts (Controller and Auditor-General, 1999). This is, firstly, because conventional accounting reports on tangible and cash assets and not on organisational capability and changes in capability over time. Consequently, under-funding output costs for short-term fiscal reasons ‘mines’ real but unvalued organisational capabilities in a way that is invisible to Parliament, and indeed to departmental managers. This was one of the causes of the funding problems the Department of Statistics faced over the whole period from the early 1980s to the late 1990s.

A real consequence of the erosion of organisational capabilities in this way is that where strategic projects are undertaken, these initiatives frequently fail to deliver the promised net benefits. In addition, at an organisational level in the small New Zealand public service there are problems caused by fragmented responsibility in delivering services to achieve difficult social outcomes. This is because of the difficulties in coordinating services from several agencies.

The important observation here is that in a climate in which management is focused on cutting inputs based on how easy they are to avoid, innovation becomes piecemeal and focused on making do by renovating legacy systems. Without objective benchmarking, organisations often become unaware of how far they have slipped. A culture of process-specific renovation through work group-centric innovation comes at a cost of a diminished capacity to adapt processes to future technology environments, and hence create opportunities from integration that generate cost saving and improved outcomes. The multiplicity of approaches across the public sector in introducing web-based services in the late 1990s exemplified this.

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In New Zealand, the split between policy and operations in many sectors is likely to exacerbate this, as operational centres with low investment resources freeze the core elements of high-volume processes, and policy expertise has a lessened capacity to identify and understand the diversity of operational pressure and opportunities the organisations face. The resulting lack of sector-wide governance means it is rare for there to be sufficient authority in any part of a government sector to lead integration. This is undoubtedly reflected in the poverty of thinking about national infrastructures in New Zealand generally.

Because of their comparatively small size, New Zealand organisations need to fight harder to fully exploit the capabilities and potential of highly integrated services and infrastructures, not only because of the cost savings and international linkages but also because of their impact on the scope of activities that can be undertaken for any given resource base. The public sector has no recognised processes to lead such a fight.

The important observation about the tendency to cut outputs and inputs based on how easy they are to discontinue, in the absence of information on likely consequences, is that this will not be effective in reducing an organisation’s ongoing
funding requirements and will not improve value for money.

We will go on to show that there is a third approach, which is to change the use made of the investment in future shifts in systems, processes and procedures. This option, in our experience, can profoundly reduce funding requirements and lead to improvements in quality and quantity of services. We argue that this option should be used to increase the flexibility in business process management in order to avoid the continuing costs of restructuring that potentially arise, simply because resources and outputs are more likely to need to be regularly realigned in times of continually declining national resources.

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Key considerations influencing the choice of actions to bring about future shifts
The current public sector system places responsibility on departmental or agency chief executives alone for many decisions that have strategic implications for the sector as a whole. Across the public sector, and in specific sectors such as health care, there are insufficient means of bringing the best sector-wide capability to bear on what are essentially whole-of-sector decisions. There are many fields in which the quality of information, insight and challenge that are needed to underpin our continuing international competitiveness are readily available across the public sector or are accessible to it. While many of the experiences of the 1980s have considerable relevance, and need to be drawn on, the increased interdependence among agencies and the reliance on integrated technology systems and processes (public and private) make it much more difficult today to apply a piecemeal approach to managing obsolescence without disproportionately affecting the integrity of services, resulting in the need for high-cost remedial action. Such interdependence is most visible in energy distribution and transmission, but equally common in information- and network-based processes that now underpin most public services.

Reviewing the quality and quantity of outputs is a necessary step. Clarity on the outputs to be delivered is essential when reviewing how to use investment to bring about a significant improvement in value for money. Part of this clarity comes from understanding the uses of the output, and part from understanding the impact of:

- setting and influencing public expectations for service;
- foreseeable trends, such as demographic changes;
- increasing dependence on technology to deliver services; and
- increasing future investment requirements in systems, processes and procedures.

An effective mechanism for sourcing information on these types of issues is through systematic processes which engage domain experts and key stakeholders. Modelling and simulation of alternative conditions are a practical way of leveraging available information in order to develop an understanding of the trade-offs involved and the critical success factors.3

Turning now to the efficiency of output delivery, public sector organisations should take a sector-wide view of the service delivery process. From this perspective, first, there are alternative systems, processes and procedures available for the delivery of most outputs. There is no single optimal solution. Second, for any given set of systems, processes and procedures, massive improvements in the quality of outcomes come about from integration of the high-impact elements of the value chain. While there are cost savings from integration, the main benefit is from better integration with the recipients of the service. Pharmac is an example where effective integration has led to substantial cost savings, through leadership in singly managing the collective face of the New Zealand health service in global pharmaceutical markets. In our view, the greater contribution of increased integration to the improvement of the health system will be seen in the quality and quantity of health services which can be delivered to the community. The establishment of Pharmac is a clear recognition of the economic power of integration, but it also demonstrates the intensity and clarity of focus gained from integrating elements in otherwise fragmented systems. The Tongan medical centre is an example of localised integration of health services provision; while the highly effective cross-DHB collaboration we have in the management of serious burns shows how well a nationally cohesive service can operate despite the autonomy of the 21 DHBs.

Probably the relevant business model to inform thinking about the integration of services is the networked organisation which seeks to manage and coordinate critical elements of the service delivery value chain. In commercial networked organisations, the strategic emphasis on input systems, processes and procedures is as strong as that on the consistency of outputs, regardless of their context. Over the last three decades the focal point of performance assessment in the public sector has shifted from inputs to outputs and then to outcomes, and at each stage there has been a strident denial of any need for future interest in input management. This shows an extraordinary lack of understanding of the nature of commercial networked organisations, and suggests that public sector leadership has much more to learn about contemporary commercial organisation, particularly in information-rich activities. A comparison with networked organisations also highlights why the inadequacy of existing structures is an inevitable consequence of not seriously
considering and identifying the most critical inputs, where sector-wide leadership could shift long-run output costs across the sector.

Having said this, to realise the full benefit of integration, and the resultant value-for-money improvements, can require high domain knowledge and capital investment. It is not easy to realise these pay-offs: they are expensive, risky and might take a long time to show a result. The determinant of what resources are required is the nature of the market. The nature of the market is crucial in determining the boundary of and activities which constitute a value chain, and, therefore, the capital and the nature of the risks involved. For example, the more dynamic the market, the simpler the core resources of public sector organisations can be expected to be, as capital and risk can be allocated to parties best able to manage them.

This is not simply a matter of substituting resources, or even privatisation. The important conclusion is that to improve value for money, it is necessary to integrate and transform the entire sector-wide service delivery value chain. Take the New Zealand health service as an example. For a country with a population of 4 million people it is highly fragmented, with 21 DHBs. Pharmac has demonstrated that integration can deliver substantial net benefit. The form of the integration should capitalise on the nature of the market at different points in the health delivery value chain. An integrated health system depends on both public and private sector organisations, and this mix could be expected to change over time. However, we would add that making structural change now without strengthening DHB-wide governance, and requiring commonality on the organisation and management of information critical to system management, will result in future structural changes as resources and needs will again get out of balance.

The most effective method of reducing costs to provide best value for money is to transform the entire sector-wide service delivery value chain.

A strategic approach to delivering value for money within continually constrained budgets

To summarise, we advocate the following strategic decision-making approach to delivering value for money from public sector processes within continually constrained budgets:

- Where the delivery processes in the value chain are simple and highly integrated:
  - If information exists on the impact of the decision, explicitly cut resources in areas that are low priority or inconsistent with current government policy, or where the negative consequences of withdrawing the service are low.
  - If, as is frequently the case in public sector organisations, there is poor understanding of the use made of services, build processes to engage with stakeholders. It is likely that these processes can be funded from existing resources; however, a change in culture is frequently required to enable these processes to operate effectively. It would be reasonable to expect that, with commitment, sufficient information could be obtained to review the net benefit provided by the output. The strategy under these conditions is to be conservative and cautious where negative consequences are high.
- Where the delivery processes in the value chain are complex or fragmented, then be most innovative about getting the benefits of integration by transforming the entire sector-wide service delivery value chain. The payback for this can be expected to come in the form of improved value for money and a reduced need for capital expenditure. Importantly, to successfully deliver these benefits requires high domain knowledge, high capital investment, and shifts in performance due to the introduction of new systems, processes and procedures.

Secondly, ensure that strong governance processes exist alongside the management of infrastructure developments. Even the most rigid specification testing is no substitute for the continued periodic validation of the initial conditions and key assumptions on which business cases were built. The opportunity for public sector-wide leverage needs to be continually scrutinised from all investments. The New Zealand government has yet to build the incentives for public sector organisations to do this, and there are lessons here from the United Kingdom.

Formulating strategies which deliver value for money from public service processes

Complex and fragmented service delivery value chains exist in a large number of public services, especially health, education, defence and justice. These are areas in which substantial improvements are required. Changing baselines has a very high impact, which could well strongly affect capability for six-to-ten years. As such, the persistence of budget constraints has to be built in. These are also areas where the medium- and long-term fiscal pressures are extraordinarily high, and public pressure is intense.

Improving value for money from the delivery of public services under continually constrained budgets necessitates a combination of:

- policy outcomes to be achieved;
- sector-wide focus on the management of input markets and system investments: delivery systems that do not span the whole service delivery value chain are unlikely to be
capital efficient and cost effective;
• budget parameters, alternatives and appetite for risk; these are formulated from insightful analysis, modelling and simulation of alternative conditions in order to understand the trade-offs involved and to isolate the critical success factors;
• uses of outputs with evidence grounded in stakeholder engagement, and processes for engaging domain experts;
• attitudes to service quality improvement and productivity;
• supporting governance structures and performance monitoring frameworks to deliver benefits and outcomes.

It is important to note that in this strategic approach the concept of value for money has a time dimension: that is to say, desired public sector outcomes are pursued and maintained over time. Differences in value between policy alternatives must be considered in a framework that takes into account the time dimension in assessing the impact of outcomes.

The fundamental constraint on the adoption of this strategic approach is the absence of an effective mechanism to bring about significant value-for-money improvements in sector-wide systems. Lonti and Gregory (2007) found that over the period 1992–2002 output classes and performance indicators from the five departments they studied had shifted in focus so that by the end of the period they ‘had virtually nothing to say about the cost-effectiveness of policy programs’.

Our comment that to apply the strategic approach requires improvements in sector-wide processes could be interpreted as suggesting a move towards more centralisation and standardisation, along the lines of a return to a more centralised bureaucracy as discussed by Norman and Gregory (2003). Instead, what we have in mind is that a systems-wide approach should be taken, consisting of a network of organisations (including private sector and not-for-profit organisations) managed and facilitated by the public sector to deliver the government’s intentions for public services.

Greater centralisation and standardisation will not address some of the intractable failures in service delivery which now characterise the New Zealand public service. To use Norman’s (2004) narrative of waves, the new wave should focus on redesigning the entire service delivery value chain. Adopting such an approach would see some public activities centralised and standardised. This new wave should be another stage in the quest for improved value for money. The innovation required would be no less than that of the reforms of the 1980s. Rethinking the public sector as a network would appear to fit the recent trends identified by Norman. It would also be consistent with the accountability regime institutionalised by the Public Finance Act.

Conclusions
Experience from the management of public sector organisations during the mid-1980s and 1990s, a time characterised by constrained budgets, has shown that input-focused, budget-line cost cutting is an ineffective method of reducing expenditure and reduces value for money for long periods.

Public sector managers can find it difficult to justify cuts in outputs, and in our view a key reason for this is a lack of information on the use of outputs. This type of information is not required to be produced for parliamentary appropriation and monitoring purposes.

The most effective method of reducing costs to provide best value for money is to transform the entire sector-wide service delivery value chain. The public management institutional structure in New Zealand provides no incentive for this. Governance structures currently in use in sectors with a policy/operations split may effectively promote fragmentation and piecemeal solutions.

To realise benefits from transforming the service delivery value chain requires information on the uses of the outputs, the boundary of and activities which constitute the service delivery value chain, the nature of input and output markets, and the quality of the insights on how these markets might evolve. It is these factors that are crucial in determining the approach to how to deliver value for money from public services under continually constrained budgets.

In these challenging economic times, driving hard to achieve best value for money from public services is an imperative that warrants the risks and investment involved.

References

1 A summarised version of this article was published in Public Sector earlier this year – see Cook and Hughes (2009). The authors would like to thank Robert Gregory, Jonathan Boston, James Olson and Megan Bray for providing comments on early drafts of this paper.
2 We note that Newberry (2002) uses the funding problems faced by the Department of Statistics as one of her examples.
3 Having identified these critical factors, it become possible to design monitoring mechanisms to test whether government initiatives have the expected impact on outcomes.