

Organising for complex problems – beyond contracts, hierarchy and markets

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Abstract

The New Zealand model of public management developed through the reforms of the 1980s and 90s reflects a range of core assumptions of management and New Institutional Economic theories, including that public service activity can be managed using a production model and that decision-makers have a binary choice between quasi-contractual hierarchy and market-based governance approaches. While hierarchies and market-based approaches can be effective for output production or the delivery of discrete services, network-type approaches have been shown to be a promising means of organising to address complex issues where a wide range of actors are required to achieve an outcome, the actions or services required to achieve the outcome are difficult to specify ex-ante, and the impact of actions or services are difficult to measure and attribute ex-post. The failure of the New Zealand model to recognise network governance as a formal design choice has perpetuated the limitations of a framework that is geared towards output production. This actively restricts the ability of the public service to successfully establish and maintain network-type governance arrangements – which rely on alternative modes of control, and are most often employed in situations where it is difficult to meet narrow accountability requirements due to difficulties with measurement and attribution. This paper proposes a heuristic device for the selection and use of network forms that begins to illustrate some of the changes to the performance management framework that would be needed to effectively accommodate network-based approaches.

INTRODUCTION

New Zealand's adoption of new public management (NPM) practices in the 1980s and 90s, went much further and were implemented much more quickly than other comparable jurisdictions (Boston et. al. 1996; Schick 1996). The 'New Zealand model', as it became known, was in the vanguard of an international shift involving the adoption of business-like and market based approaches to the delivery of public services (Schick, 1996; Boston et al. 1996). The New Zealand reforms are generally regarded as having improved State sector performance and resulted in significant efficiencies (Review of the Centre, 2001; Boston & Eichbaum, 2007; Better Public Services, 2011). At the same time, as Schick (2001:3) observed, the coherence of New Zealand model would made it difficult to make improvements as taking away a critical element would "strip the system of its magnificent conceptual architecture".

Subsequent assessments of the New Zealand model confirm the prescience of Schick's views; changes to the model have been described as incremental, pragmatic or politically driven adjustments (Chapman & Duncan 2007; Lodge & Gill, 2011). Duncan and Chapman (2010) argue that the accretion of changes since the late 1990s, mean that the New Zealand model

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lacks the overall coherence and market-based focus that it once had. Others have argued that there has been a shift to a post NPM era (Boston & Eichbaum, 2007). In contrast, Lodge and Gill (2011: 160) comment on the remarkable resilience of core NPM 'doctrines' and found "considerable evidence to suggest an entrenchment of ideas that were initially formalized in the 1980s."

Compared to other developed nations, New Zealand has highest proportion of publically funded services delivered through central (rather than local) government (Politt and Bouckaert, 2004). New Zealand's system of delivery through functionally specialised hierarchies at different levels of devolution continue to struggle to coordinate effectively across boundaries (Review of the Centre, 2001; Better Public Services, 2011). The system is described as excessively fragmented, operating in silos and characterised by a culture of 'patch-protection'. Despite a number of attempts to address these issues, sustained improvements for complex cases have proved elusive (Better Public Services, 2011).

Such difficulties are not necessarily a problem unique to New Zealand (Carey and Crammond 2015), nor necessarily attributable to NPM approaches *per se* (Scott and Boyd, 2017b; Scott and Bardach, 2018). Further, while organisation theory would predict that a shift to functionally specialised agencies (as occurred in New Zealand) would increase rigidity and thereby coordination costs (Burns and Stalker, 1966), the difficulties developing effective collaborative responses suggests the problems in New Zealand are potentially more acute. If so, it raises significant questions about the ability of the New Zealand public service to meet the challenges of the twenty-first century where citizens are said to expect "the modern state to grapple with a wider range of complex issues [with implications for]...organising implementation and service delivery (Gill et al., 2011: 33).

This paper is focused on governance of service delivery responses in response to complex problems. It argues that the barriers to developing effective delivery solutions are attributable, in part, to particular design features of the late 1980s New Zealand model. In line with Schick (1996; 2001) and Lodge and Gill (2011), we take the view that the New Institutional Economic (NIE) theory that inspired the uniquely New Zealand version of NPM retains considerable currency. It may be, as Schick (2001) predicted, that improvements to the New Zealand model will prove elusive unless we abandon some of its critical elements. However, if past history is anything to go by, the more likely path is further, pragmatic and incremental adjustments to the model over time.

This paper's contribution proceeds on the basis of the latter assumption and explores the need for a more tailored performance management framework that enables better matching of governance and control modes to the nature of activity undertaken in complex cases. While cross-boundary operation is not explicitly constrained by the formal system, we argue that the barriers are implicit and embedded in a performance management framework underpinned by:

- A conception of organisations that is based on a production model and remains focused on controlling agency problems and managing outputs;
- A positivist approach to funding, measurement and reporting derived from assumptions of (complete) contractibility and high measurability

We use two case studies of collaborative network models (the Social Sector Trials and the South Auckland Investment Board) to illustrate some of the key barriers and how cross-cutting work treated is treated as an add on to the 'real' work of delivery by individual departments. The potential changes needed are further explored with reference to goal-directed whole network literature. We develop a heuristic device to guide the selection and use of such networks in New Zealand and use it to illustrate the potential implications for moving towards a more tailored performance management model.

This paper is in three sections. The first section sets out the influence of transaction cost economics in the design of the New Zealand performance management model, the problems applying the model in practice and the need to adopt a more tailored approach. Section two explores the need to develop effective responses to complex problems. The key barriers are explored with reference to case studies of two deliberately designed network-type responses (the social sector trials and the place-based initiatives). Section three explores the design and use of a goal-directed whole networks and the role of formal guidance in providing legitimacy for the use of such forms. Finally, different modes of control to ensure network effectiveness are canvassed and a heuristic device for selection of different network types is proposed. The implications for a more tailored performance management framework are considered.

This paper is likely to be of interest to public sector managers and academics interested in overcoming barriers to collaboration and the intentional design of networks that deliver public services. This paper is only concerned with the governance of cross-cutting service delivery problems between organisations to address complex cases. It does not consider other forms of collaboration, such as, back office efficiency or digital transformation initiatives. While the paper is focused the New Zealand experience, it provides broader insights for developing the performance management settings needed to better support collaboration. As such, these insights are likely to be of interest to a wider audience interested in collaborative solutions involving parties operating with cultures of strong vertical arrangements at different levels of devolution.

SECTION I

The New Zealand Model

The breadth, pace and scale of the New Zealand NPM reforms have been comprehensively canvassed elsewhere (Boston et. al, 1996; Schick, 1996). However, for those unfamiliar with the main features of the New Zealand reforms, some preliminary remarks are necessary, prior to outlining some of the economic ideas that underpinned the original design.

The New Zealand Treasury identified the low productivity of the New Zealand economy (and the role and scale of Government in the economy) as the critical issue facing the country (Treasury, 1984, Treasury 1987). In response, successive Governments embarked on major structural reforms. Government trading functions were rapidly corporatised (ie into State-Owned Enterprises) and/or privatised. The remaining 'non-commercial' state organisations were made subject to greater contestability and business-like management techniques were introduced (Boston et. Al, 1996).

The core public service was reconfigured with a preference for functional specialisation, clearer (and thus narrower) objectives, and a clear 'line of sight' between managers, the chief executives through to the Minister (Treasury, 1987; Boston et al. 1996). Greater autonomy was given to 'fixed term' chief executives in return for clearer accountability for outputs (Boston et. al. 1996). Financial management, accounting and employment practices also followed business-like practices and adopted analogous financial reporting requirements. Devolution of decision-making and competition was emphasised in the health and education sectors with 'arm's length' bodies and operational decision-making located either regionally (District Health Boards) or locally (School Boards).

New Institutional Economics and the New Zealand Model

The 'New Zealand model' is regarded as one of the most "extensive and intellectually coherent" NPM inspired reforms undertaken (Lodge & Gill 2011,141-142). Two overlapping disciplines influenced the New Zealand approach; management doctrines derived from established organisational theory and the more recent New Institutional Economic (NIE) theory (Schick,

1996). Schick (1996) suggested that most of the positive reform innovations arose from the application of managerial doctrines. However, he attributed the “extraordinary reliance on contracts and the emphasis on specifying outputs... and the persistent difficulty in specifying outcomes” to the application of ‘novel’ concepts drawn from NIE (Schick, 1996:17). It was, therefore, the application of NIE that was a distinguishing feature of the ‘New Zealand model’ of NPM (Schick 1996).

A number of strands of economic theory, broadly within the rubric of NIE, were influential, including the “theory of agency problems in firms” and public choice theory (Scott & Gorringer 1988; Boston et. al. 1996). These theories were underpinned by the view that humans primarily act in their own self-interest (Williamson, 1985, Schick, 1996). As Schick (1996:17) observed, NIE was notable in that extended the analysis of self-interest beyond market transactions to areas where “other values – loyalty, duty, contracts and other obligations – might be thought paramount.”

While economic theories were very influential, judgments were made in the application of such theories to public sector governance (i.e. recognising they were developed in a private sector context) (Scott, 1997). The context and experience of key Treasury advisers in government was therefore an important factor influencing institutional design (Scott and Gorringer, 1988; Scott, 1997). These different considerations resulted in a set of heuristics that guided significant design choices and contributed to the sense of coherence of the model. Some of the most influential heuristics employed are briefly outlined below.

Public services were treated as conceptually analogous to private buyers and sellers of good and services in competitive markets (Schick 1996). A central plank of the reforms was distinction between “the outputs of goods and services the agency produces and the outcomes the government seeks to achieve... [which] highlights the fact that politicians need to buy the services they require from the bureaucracy, and that the government need not be the only customer of the bureaucracy.” (Scott & Gorringer, 1988:6). This was accompanied by the idea of ‘competitive neutrality’, that was intended to promote contestability and counteract the predicted bias of ‘make’ over ‘buy’ decisions, particularly in government departments where performance incentives are weaker (Scott & Gorringer, 1988).

Public choice concerns about ‘provider capture’ influenced the shift to splitting out purchasers (ie Ministers, with “purchase advice” from centralised Ministries) and funding from providers (Scott & Gorringer, 1988). While a dominant doctrine early on, and still evident in structural splits in present-day health and education sectors, it was effectively abandoned as a general design doctrine (and in some cases unwound) by the late 1990s (Campbell & Duncan, 2007; Duncan & Chapman, 2010). As will be discussed with reference to the case studies below, the structural splits in health and education, continue to have a practical impact on the ability of organisations to operate across boundaries at a more localised level.

Matching governance with activity – transaction cost economics

The importance of matching governance to form was heavily influenced by the emergence of transaction cost economics (TCE) (see Chapter 1, Treasury, 1987; Boston et al. 1996). TCE is concerned with the way transactions (the cost incurred in making an economic exchange)² are governed and seeks to explain why particular forms of transacting are preferred over others (Kogut, 1988). Matching (or “discriminating alignment”) between the attributes of transactions and governance arrangements is important in minimising transaction costs and improving performance (Williamson, 1985, 1991). In this context, “governance” selection involves a choice between market, hybrid (e.g. alliances, franchises, joint ventures) or hierarchy (ie a private firm) in governing economic exchanges (Williamson, 1991).

² Transaction costs differ from the actual costs of production. Sources of transaction costs in economic exchange include: bargaining, information, agency, division and enforcement costs.

TCE's base assumption is a world where market exchanges are carried out by independent units without transaction costs (ie exchanges on a spot market, mediated by price). However, market failures (e.g. information failures or human limitations (ie bounded rationality)) result in transaction costs (eg costs in unwinding contracts or finding better partners). There are also exchange hazards arising from opportunism (e.g. acting in self-interest to the disadvantage of others) and maladaptation of contracts (ie changed circumstances where one party refuses to amend a contract or is unable to meet a requirement) (Williamson, 1985).

A core prediction of TCE is that, as transaction costs increase the choice of governance shifts from markets to increasingly vertical forms of integration through hierarchical governance forms (ie hybrids or hierarchy). This is because managers seek to protect their position by increasing authority and control (Williamson, 1985). TCE identified three attributes of transaction as being critical to the selection of governance form: asset specificity, uncertainty (volume, technological or behavioural), and transaction frequency (Williamson, 1985, 1991). The more that transactions exhibit some or all of these attributes influences the extent to which managers will favour integration to manage costs through the control and authority offered via hierarchy (either hybrid or firm) (Williamson 1985, 1991).

Crook et al (2013) tested TCE's core predictions and sought to measure the effect of different attributes on governance selection. General support was found for TCE's core prediction that transaction attributes impact on governance choice (Crook et. al. 2013).³ However, of all the transaction attributes, only behavioural uncertainty (e.g. the inability to monitor and evaluate the tasks undertaken by a partner) had a sizeable effect on manager's preference towards governance via hybrid or hierarchy (Crook et. al. 2013).

Within the New Zealand State sector the main governance choices since the late 1980s have been either market governance (e.g. competitive neutrality) or quasi-contractual forms of hierarchy (Gill et al. 2011). The latter approach was carried over into machinery of government guidance, issued by the State Services Commission, which provided detailed criteria to ensure the appropriate matching of activity with different forms of hierarchy.⁴

The New Zealand performance management framework

This paper contends that some of the barriers to collaborative service delivery are embedded in the formal performance management framework established in the 1980s and 1990s, which continues (largely unaltered) to the present day. The performance framework reflects a TCE-influenced concern to control agency problems in firms. Core components of the performance management framework include:

- clear specification of objectives (desired performance);
- authority to act ("freedom to manage),
- incentives to perform and
- provision of reliable information on results (actual performance) (Ayto, 2011).

Furthermore, due the limited control managers have in relation to achievement of outcomes (e.g. attribution of causality), managers could only be held to account for matters they could reasonably control (ie delivery of outputs) (Ayto, 2011).

³ While significant empirical support for TCE's core predictions has been claimed (e.g. Gibbons, 2010), a number of meta-studies have cast doubt on the extent of TCE's predictive value (Carter & Hodgson, 2006; Crook et al 2013).

⁴ The focus on the selection of the correct type of hierarchy has persisted for thirty years. While some guidance on collaboration was produced in the mid-2000s, the most significant change in emphasis has only recently been signalled with the development of the System Design Toolkit for shared problems issued by the State Services Commission in 2018. (See <http://www.ssc.govt.nz/mog-shared-problems>.)

In response to subsequent criticisms of an excessive focus on “managing for outputs” (Schick, 1996; Norman 2003), work was undertaken (in hindsight unsuccessfully) to shift the model towards a greater outcomes focus and improve strategic management (Ryan, 2011). Managing for outcomes gave rise to the widespread use of the ‘production model’ that enabled agencies to map the ‘intervention logic’ between inputs, outputs and outcomes, thereby completing the accountability chain (Hitchiner and Gill 2011a, 2011; Ayto 2011). As Ryan (2011:466) puts it, the work of departments has been “defined as a production process”.

Underpinning all of this was an implicit ‘one-size fits all’ assumption that activities undertaken by government organisations were sufficiently similar from a control perspective (Hitchiner & Gill, 2011b). A further assumption was that “the world was relatively stable and predictable, and that what the government delivered could be adequately specified in advance in terms of quantity, quality, timeliness, cost and location” (Hitchiner & Gill, 2011b:128). These sentiments are echoed by Dormer (2014:839) who goes on to describe the model as “instrumentally rational... [and] seldom practical in the varying public sector contexts ... in which objectives are frequently multiple, conflicting and vague.”

Despite this, the core elements of the performance framework continue to frame the approach to funding through the budget process (and associated linear intervention logic, business cases and CBAX requirements). This is, in turn, reflected in a continuing output focus (ie appropriations for output classes), and a control emphasis on *ex ante* specification, *ex post* measurement and reporting framework that is embedded in the Public Finance Act 1989.

As a result, New Zealand’s current performance management framework is predicated on a high measurement view of the world; one in which it is possible to clearly specify and measure performance (ie performance clarity). This, in turn, has underpinned control through contract-like output focused mechanisms that have dominated the choice of governance in New Zealand system ever since.

The need for a tailored performance framework

At the time the New Zealand reforms were undertaken, the problems of measurement in economic exchange, and the transaction risks they pose (ie by being hard to assess), were already well known (Alchian and Demsetz, 1972; Barzel, 1982). The challenges of tackling ‘wicked problems’ through rigid public service bureaucracies and the need for more flexible and adaptive approaches had also long been recognised (Rittel and Webber, 1973; Head and Alford, 1993).

A number of authors have since noted the impact of the production view of organisations, for example, on policy management (Ryan, 2011), the ability to manage complexity (Boston and Gill, 2011), and crowding out an ethos of responsibility, potentially increasing corruption (Gregory, 1995). Relevant here is Gregory’s (1995) view that reforms resulted in all tasks being redefined into production tasks, in response to the need to ensure tasks are ‘observable’ and thereby readily monitored by managers. In his view, this ignored the profoundly diverse nature of tasks⁵ undertaken by public service departments, many of which are difficult to observe and not amenable to production type-controls. Instead he suggests the importance of an ethos of responsibility based on shared commitment to norms, values and “above all on maintaining mutual trust and respect” (Gregory, 1995: 65).

Taken together it is perhaps unsurprising that ideal of performance clarity has caused difficulties in effectively managing performance in certain domains of public service activity. Further, the history and experience of applying this model in practice, indicates that intra- and inter-organisational performance is unlikely to be aided by simply trying harder to achieve performance clarity for certain types of activity (and, even if possible, is likely to be outweighed

⁵ Gregory (1995) distinguishes between observable (production) tasks and non-observable tasks (craft, procedural and coping)

by the costs). Ouchi (1982) instead suggests that organisational performance involves optimisation between:

- performance clarity – the ability to clearly specify performance sought and to accurately measure each party’s contribution to the performance achieved
- goal congruence – the extent of the overlap in goals, motives, values etc. between the parties to an enterprise.

Further, there is a reciprocal relationship between these conditions. As performance clarity declines, the need for goal congruence increases. The reverse is also true, the more clearly performance can be specified and demonstrated the less need to compensate via goal congruence (Ouchi, 1982). Different forms of governance provide different levels of optimisation between these conditions. Three main forms economic organisation, market, hierarchy and networks are identified in the literature as set out below in Table 1.

Table 1: Modes of governance

<i>Key Features</i>	<i>Forms</i>		
	<i>Market</i>	<i>Hierarchy</i>	<i>Network(Clan)⁶</i>
Normative basis	Contract Property rights	Employment relationship	Complementary strengths
Means of communication	Prices	Routines	Relational
Mediation of transaction costs	Price	Authority	Trust, shared values and interdependence
Performance clarity (specification and measurement)	High	Medium	Low
Conflict resolution	Haggling Resort to judicial enforcement	Administrative fiat Supervision	Reciprocity norms Reputational concerns
Commitment among parties	Low	Medium to high	Medium to high
Values	Satisfy immediate user needs High productivity Business like Profitability	Serial loyalty Due process Accountability to society Transparency	Balancing interests User democracy Agility Professionalism

Adapted from Ouchi (1982), Powell (1990) and Anderson et al. (2012)

Ouchi (1982) suggests markets are most efficient where prices mediate transactions (ie performance clarity is high) and goal congruence low. Hierarchy is most efficient where managerial authority mediates transactions within a bureaucracy and goal alignment is moderate. Finally, networks/clans are most efficient where performance clarity is low, but goal congruence is high. Trust, shared values and a shared sense of mutual dependence mediate transactions (Ouchi, 1982).

Differences in choice and application of governance mode, essentially hinge on the nature of the activity. The current performance management framework, in effect treats all activity as if it is the same from a control perspective. However, the foregoing discussion suggests the need for a more tailored approach that seeks to better match the nature of the activity with an expanded range of governance choices. This in turn has implications for funding, accountability and reporting arrangements. Prior to discussing what these issues in more detail, it is worth

⁶⁶ Some typologies such as Anderson (2012) identify clans as a separate organisational form. Other’s such as Powell (1993) do not and include clan type organisations (ie including craft and professional occupations) as a subset of networks. For the purpose of this paper we adopt the latter approach.

briefly reflecting on the New Zealand experience of external control via quasi-contractual mechanisms and traditional contracting approaches.

New Zealand's experience – control through quasi-contractual hierarchies

Unlike the traditional bureaucratic mode, New Zealand's public service departments were reconfigured into quasi-contractual hierarchies. By this we mean, rather than mediating transactions within a hierarchy (through relational employment contracts), quasi-contractual mechanisms, called purchase agreements, were used. The agreements involved detailed specification of the quantity, quality and cost of outputs to be purchased (Boston, 1997; Matheson, 1997). These detailed agreements were intended to mediate the relationship between the Minister (as purchaser of services) and a chief executive (as supplier).

A certain amount of measurement uncertainty was acknowledged as “a key reason why certain services were to be produced by government departments, rather than in conventional firms, for example on contract to the government” (Scott and Gorringer 1988:7). However, rather than raising questions about the feasibility of purchase agreements to mediate the relationship between Ministers and chief executives (and their departments), it was thought that they would simply differ “according to the ease with which their department's outputs can be measured and valued” (Scott and Gorringer, 1988:8).

Detailed purchase agreements were difficult to realise in practice. Explanations for their abandonment differ, but some of drivers were pragmatic: the high transaction costs of detailed agreements and problems of measurement (Duncan and Chapman, 2010). Another reason was a view that the relationship between Ministers and chief executives (as advisers) was relational rather than quasi-contractual (Gregory, 1995; Boston, 1997). Regardless, detailed purchase agreements between Ministers and Chief Executives have since been abandoned in favour of fewer and clearer objectives (Chapman and Duncan 2007).

In hindsight, it is difficult to reconcile the introduction of detailed 'quasi-contracts' between Ministers and chief executives with TCE's core predictions as outlined earlier. That is, the transaction attributes (particularly uncertainty) of certain types of departmental activity, together with bounded rationality, would suggest hierarchy (and relational employment contracts) are more suited to managing the incomplete contracts that characterise relationships between Ministers and chief executives.

Contracting for services

Contracting out of public services (or contracting for previously grant-funded provision by NGOs) is an enduring legacy of the New Zealand reforms. The initial approach in New Zealand sought to extend bureaucratic control mechanisms to arrangements with third party providers, as has been the focus of contracting out elsewhere (Fredrickson et al., 2012). In practice, the transition to detailed contracting for outputs proved particularly difficult in relation to social services. The high transaction costs associated with developing and negotiating detailed contracts, underpinned principle-agent dynamics that began to develop (Cribb, 2006).

Research into NGO manager perceptions of the change in relationship with officials evidenced distrust (ie that managers would defraud the system), a paper-based distant monitoring relationship, a focus on outputs and a “take-it or leave it” attitude to contract negotiations (Cribb, 2006). Overall, NGO managers felt like ‘poor cousins’ whose concerns and issues were not taken seriously (Cribb, 2006). A further problem was the large numbers of smaller contracts between NGOs and various government agencies exacerbating a fragmented landscape – the Ministry of Health alone had 16,500 contracts (Stace and Cumming, 2006).

These issues precipitated a move away from traditional (complete) contracting and towards relational and high trust integrated contracting approaches focusing on funding for outcomes in both health and social sectors (Stace and Cumming, 2006; Pomeroy, 2007). However, progress appears to have been slow; a review of social services undertaken by the Productivity Commission found a fragmented landscape of contracts and services (Productivity Commission, 2015b). The majority of NGO submitters to the review argued that the current competitive model had exacerbated problems in the sector and ran counter to the culture and values required to support collaboration and better outcomes (Productivity Commission, 2015a).

It is now recognised that contracts for complex services are often highly incomplete and in New Zealand has been a move towards the adoption of relational and 'high trust' approaches in some areas (Productivity Commission, 2015b). This mirrors the trend in other public administrations where governments continue to contract out for an ever increasing range of complex services (Marques and Berg 2011). As task complexity and task unpredictability increase, the flexibility of contracts also increases (Malatsta & Smith, 2014).

This brief survey illustrates that, while there has been a move away from traditional contracting in the face of uncertainty (and problems and costs of measurement), this has not been matched by changes to the formal performance management model. The broad application of 'contract-like' approaches to public service provision, appears to have come from a judgment that governance through market competition (or competitive neutrality) was needed to address low productivity. This judgement potentially underestimated the practical implications arising from the (considerable) measurement problems that arose (Hitchiner and Gill, 2011b). In our view, it also lost sight of the need to consider nature of activity undertaken within the public service and to tailor the control arrangements accordingly. Managerial accountability remains focused on whether resources are sufficiently within a manager's control (ie output focused) and continues to favour the use of hierarchical mechanisms that ensure an "unbroken" chain of accountability to Ministers and Parliament.

Section II

Tackling complex problems

Policy makers are increasingly recognising the need to understand the complexity of systems with different levels of comprehensibility from easily observable and analysed to highly complex or novel issues requiring a learning approach due to open-ended feedback loops (OECD, 2017). Such systems share common attributes, being self-organising and having internal dynamics emerging from internal structures and interactions. Thus, systems are "governed by feedback, are path-dependent, resistant to change and characterized by non-linear relationships" (OECD, 2017: 15).

Understanding the complexity and nature of the problem being addressed is important as it impacts on the extent to which the mix of services required can be reliably predicted in advance (Boston and Gill, 2011). Complex problems can be characterised as a category of 'wicked problems' requiring non-linear solutions and a decentralised approach employing "tacit knowledge and partnerships" (Boston and Gill, 2011: 234). In contrast, 'known' or 'knowable' problems are less complex, cause and effect can be identified and are more amenable to linear evidence-based policy approaches and the use of "relational or classical contracts to acquire services" (Boston and Gill, 2011: 233).

Where multiple departmental hierarchies are involved in governing joint activity, one solution can be the merger of functions into a single department. The Better Public Services Advisory Group (2011) suggested that collaboration in New Zealand was treated as 'voluntary' activity and in order to deliver better outcomes for complex cases more formal, 'hard-wired', solutions would be needed. A wider range of formal governance models were proposed. While not framed in the language of TCE, it signalled a need to develop the more formalised use of hybrids (e.g.

interdepartmental joint-ventures) to counter the weakness of cross-boundary activity in New Zealand (Better Public Services, 2011).

However, as the number of parties increases collaboration can be used to operate across departmental boundaries along a continuum of inter-governmental integration (from co-existence through to collaboration (Boston and Gill, 2011)). A range of inter-departmental collaborative arrangements are commonly used, however, formal accountability arrangements remain vertically oriented. Most collaborative approaches in the public service tend to be based on a 'lead department' model (Vitalis and Scott, 2015). The lead department acts on behalf of other agencies who are parties to the collaboration and, if necessary, employs staff and administers funding. However, overall control and accountability for the collaboration remains with the individual lead department and, via the chief executive, to the Minister (Vitalis and Scott, 2015).

Addressing complex social problems often requires the interaction of many actors and potentially complex service interventions to achieve shared goals (Bryson et. al. 2015). Integration through hierarchy is not viable as only a certain aspects of a wide range of services delivered individual organisations might be required. Alternatively (or additionally) interventions can be highly individualised (e.g. in duration or intensity) and it can be difficult to know in the appropriate mix in advance. Therefore, delivering of complex services can result in difficulties specifying in advance or measuring performance after the fact, nor do they not fit neatly within the hierarchical control boundaries of a one or more organisation (Boston & Gill, 2011). Hierarchy or contracts are therefore not the only choices and another option is to use networks which "may involve a mix of contractual and more information, trust-based ties and in which a public agency may or may not play a lead role in the flow of resources and information among network participants." (Provan and Lemaire, 2012: 640).

Collaboration across boundaries, case study examples

The perceived limitations of the vertical orientation of formal collaborations resulted in the deliberate exploration of new approaches. Beginning in 2011, the Government began to experiment with more formally established network models. The aim was to test the limits of the current system public management and explore ways to strengthen collaboration and deliver better outcomes in relation to complex social problems. Here we consider two case examples, referred to as the 'Social Sector Trials' and the more recent 'Place-based Initiatives.'

Social Sector Trials

The Social Sector Trials were established in 2011 to test alternative approaches to improving service delivery by reorganising funding and decision-making processes across the social sector, and shifting control to local levels (Ministry of Social Development, 2013). Trials were based in sixteen communities, each with a localised governance arrangement involving a government employed or contracted NGO 'trial lead,' supported by a local advisory group with community representation. Trials worked within a common high-level scope, focusing on outcomes for 12-18 year-olds relating to truancy, offending, drug and alcohol abuse, and participation in education, training or employment. However, trial leads were given significant flexibility within this high-level framework to develop action plans with their respective communities, leading to a variety of different approaches and initiatives in each Trial (Ministry of Social Development, 2013).

The localised governance arrangements for the Trials operated as a Network Administrator-type model (see Section III, below). The trial leads obtained funding from a variety of government and community sources, and worked with a range of agencies and community-level groups and institutions (e.g. schools) across the education, health, justice and social sectors to develop and deliver interventions and programmes. Trial leads were also given responsibility

for managing existing contracts for services to align with their action plan (Productivity Commission 2015c). In addition to direct central government funding, support included in-kind resources for the local administration of the trials (e.g. staff and office space), donations from local businesses to support initiatives, and financial contributions from partner agencies (e.g. District Health Boards) (Audit NZ 2104). Oversight at a national level was ensured through a national governance structure involving a Director for the Trials programme reporting to a cross-agency chief executive governance group, through to the relevant Cabinet Committee (Ministry of Social Development, 2013).

Early evaluation of the Trials detailed a range of achievements based on qualitative assessments and interviews, including improved community collaboration, better community responsiveness to issues faced by young people, and a broader base of services aimed at young people (Ministry of Social Development, 2013). Attempts were also made to quantify the impact that the trials had on the outcomes they aimed to achieve, with some statistics indicating positive changes in intermediate outcomes in specific regions (Audit NZ 2014). However, evaluation reports clearly state that there were significant issues with measurement and attribution. The Ministry of Social Development (2013) evaluation report on the Trials noted a lack of locally relevant baseline outcome indicators so data that might be used to assess the impact of the trial – comparatively or otherwise – could not be obtained. The report also noted that qualitative ground-level reporting did not align with the high-level indicators, making any attempt at attribution difficult.

While measurement issues were the most prominent concern during evaluation, reports also noted some challenges characteristic of cross-agency work, including governance challenges across different agency approaches for devolving decision rights, lack of coherence and coordination with other government initiatives, and challenges in integrating funding when this came from a range of sources and was subject to different decision rights (Ministry of Social Development, 2013). Ministerial announcements on the future of the trials in 2016 left their status unclear (New Zealand Government, 2016), but from Ministry of Social Development's statement that the trials would "cease be funded on 1 July 2016 because they are ready to be managed locally, or performance to date means exit is appropriate" (NZFVC, 2016) indicated that the Network Administration function and hence the core operating model of the trials had been discontinued.

Place-based Initiatives

Three 'Place-based Initiatives' were established in 2016 as part of the previous National government's 'social investment' approach, with an aim to improve outcomes for at-risk children and their families (Manaaki Tairāwhiti, 2017). These initiatives built on previous approaches to cross-agency service delivery, including the Social Sector Trials among others. The approach involves a primary reliance on use of existing resources, leveraging decision rights held by senior regional officials who would form the governance group for the initiative (State Services Commission, 2017) supported in some instances with additional (one-off) funding allocations for purchasing services. The agencies involved differ between initiatives but have in common representation from the Ministries of Social Development, Education and Health, New Zealand Police, the relevant District Health Board and the relevant local government body.

The respective governance groups for the initiatives each report directly to a lead Minister, and each have a dedicated support function to coordinate activities in their work programme as well as access to a national support function (Manaaki Tairāwhiti, 2017). The governance of the initiatives operates within a 'tight-loose-tight' framework, meaning that the relevant Minister retains decision rights over the outcomes that the initiative focuses on and requires assurance that these outcomes are being achieved, but the local governance group has a greater level of freedom to select the initiatives undertaken in pursuit of the outcome (Manaaki Tairāwhiti, 2017). Each of the three initiatives is focused on different target populations, and has identified different

priority actions based on the needs and circumstances of the target population and expertise of the governance group.

Like the Social Sector Trials, outcomes and target populations for the initiatives are highly specified but the governance groups have significant flexibility in the actions they take to achieve the relevant outcomes (Manaaki Tairāwhiti, 2017), and like the Trials the initiatives also involve the central coordination of contracts for services delivered to the target population (State Services Commission, 2017). The establishment of the initiatives also included a commitment to evaluation of the impact of the Board's work by establishing baseline data to support quantitative analysis, as well as the more qualitative assessments of the type used to evaluate the Social Sector Trials (State Services Commission, 2017). There is currently no publicly available material on the performance of the initiatives, but we predict that evaluation will prove difficult due to the complexity of the issues involved and historic challenges with measurement and attribution in such approaches.

Both the Social Sector Trials and the Place-based Initiatives represent novel approaches to the delivery of public services, employing a cross-agency network-based approach. Learnings from the programmes – somewhat unsurprisingly – indicate measurement and attribution problems due to challenges with data collection and an inability to quantitatively demonstrate impact where complex and indirect relationships exist between interventions and outcomes. Relatedly, these case studies also indicate a resistance of the public management system to properly accommodate such alternative operating approaches. Because these approaches operate outside the existing model of singular one-to-one accountability for producing an output that can be specified in advance, the system does not readily allow funding to be specifically allocated to these programmes on an ongoing basis and there is a strong reluctance to delegate decision rights over funding use without strong assurances of its effective use. This means that, despite a veneer of autonomy, decision-makers are required to engage in a significant amount of administrative justification for their decisions and evidence of their effectiveness. This is difficult to provide given the aforementioned attribution and measurement problems – often using very limited resources and relying on contributions from individuals outside their substantive roles. All of this contributes to a lack of long-term legitimacy for such approaches, which potentially explains the limited longevity and success that they have experienced in the New Zealand context to date.

Section III

Designing and using delivery networks to address complex problems

Just as markets and hierarchies can be deliberately designed and deployed as a governance mechanism, cross-sector collaboration (including networks) can also be deliberately designed (Bryson et al. 2015). New Zealand literature tends to highlight that the development of collaboration (including the emergence of networks) as a spontaneous, voluntary response to real world issues (Gill et al. 2007).

The Better Public Services Advisory Group report found that collaboration tended to be viewed as voluntary activity, somewhat peripheral to agencies' core business (Better Public Services, 2011). Further, the voluntary nature of collaboration impacted on its sustainability and stability (Better Public Services, 2011). Collaboration literature, too, has tended to emphasise culture, behaviour, and interpersonal relationships as critical to success (Ansell and Gash, 2008; Emerson and Nabatchi, 2015; Bryson et al., 2015). Furthermore, O'Leary, (2014) found the cultural and behavioural factors that are needed to support effective collaboration in New Zealand were not well developed within the public service.

At the same time, there is evidence of front-line collaborations in New Zealand that operate 'under the radar' and out of sight of the formal governance system (Gill et al, 2007). Such front-

line collaborations are said to operate in spite of the formal public management system, without the support of organisations or sectors they operate in and in the absence of a learning culture (Ryan et al. 2008). However, deliberate design of networks is uncommon, with the most recent examples being the case studies outlined above.

Given the breadth and complexity of different types of collaboration, the next section focuses on the design and use of a specific form of goal-directed whole delivery networks (of which the two case studies are examples). This is not to preclude a much wider range of possible approaches. However, goal-directed whole network literature is relevant as it is based on the notion of deliberate application of networks to tackle collective problems, rather than a result of spontaneous emergence. Further, exploring a specific network models provides a tangible way of assessing the associated changes to the current performance management model that might be needed to overcome some of the existing barriers.

Goal directed whole networks

Whole networks are groups of three or more organisations that work together to achieve a shared goal (and their own individual goals) (Provan et. al 2007). Goal directed whole-networks are deliberately established and set up with a specific purpose “rather than occurring serendipitously” (Provan et al. 2007). Establishment is undertaken either by those who participate in the network or through external mandate and the network evolves through deliberate and conscious efforts to build coordination (Provan et al. 2007).

Relationships between network members are generally non-hierarchical and participants tend to have substantial operating autonomy and multilateral relationships. In sum: “addressing complex issues that demand multilateral coordination, as is often the case in the public and non-profit sectors... requires more than achieving the goals of individual organisations. It requires collective action and governance of these activities” (Provan and Kenis, 2008: 231). Three main types of goal-directed network model are discernible and set out in Table 2.

Table 2: Main forms of Goal Directed Whole Networks

Type	Key features	Best when
Lead organisation model (LOM)	<ul style="list-style-type: none"> • Dominant actor (LOM) and smaller actors • LOM coordinates, administers and facilitates the network • Asymmetrical power • More efficient, less collective commitment • Needs of LOM can dominate 	<ul style="list-style-type: none"> • Trust (moderate density) • Moderate numbers • Moderate goal congruence • Moderate need for network competencies (ie coordination, conflict resolution quality monitoring)
Network administrative organisation	<ul style="list-style-type: none"> • An external entity (NAO) acts as a broker for the network (can be an individual or formal organisation) • Can be externally mandated or created by members • NAO creates, coordinates and manage the network • Compromise between efficiency and collaboration 	<ul style="list-style-type: none"> • Trust (moderate density) • Moderate to many members • High goal congruence • High need for network competencies
Participant governed model	<ul style="list-style-type: none"> • Members are the network and make decisions collectively • Equal power • High autonomy • Highly collaborative, resource intensive 	<ul style="list-style-type: none"> • Trust (high density) • Few members • High goal congruence • Low need for network competencies

Adapted from Provan and Kenis (2008).

Formalising networks as a governance choice

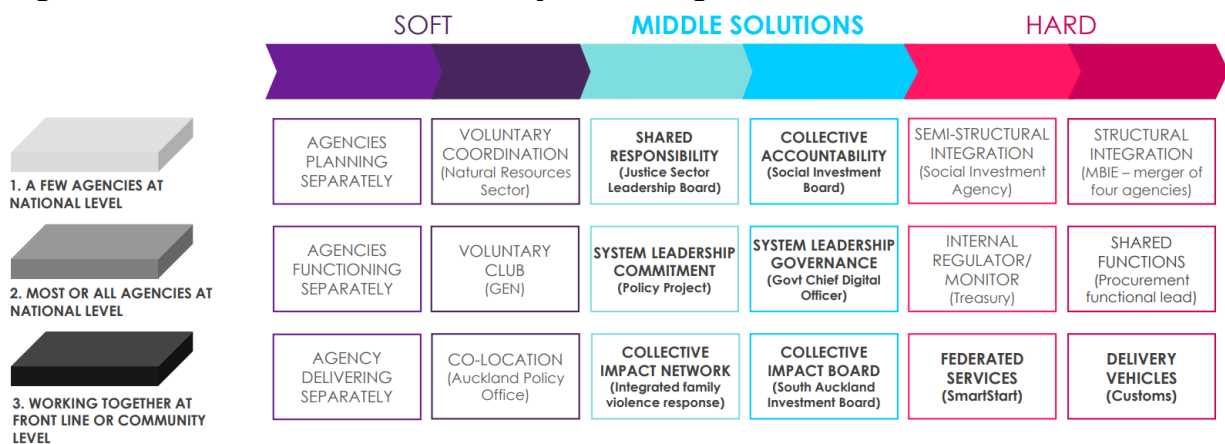
The legislative framework for the public service divides functions and resources into specialised departments, each of which has a single chief executive as its administrative head. This complements the framework’s emphasis on strong vertical accountabilities, as discussed earlier, by ensuring a one-to-one accountability relationship between the chief executive and relevant Minister for any function carried out or resource used by the public service.

Over time the need for the public service to respond to complex issues or ‘wicked problems’ that cross organisational boundaries has led to the use of various alternative approaches to arranging and governing resources within the constraints of this overarching legislative framework – including cross-agency governance groups, and more recently goal-directed whole network approaches (also called “collective impact” models). However, because these approaches have historically had no formal basis, they have typically been applied in an ad-hoc manner and have often struggled to remain sustainable as key individuals move on or individual departmental accountabilities are prioritised in the face of resource scarcity.

Because cross-agency work is treated as secondary to individual departmental responsibilities, approaches to applying and evaluating the various alternative working approaches had not historically been documented in as rigorous a manner as the structural aspects of New Zealand’s machinery of government (i.e. departments and other public organisational forms). However, recently the State Services Commission has begun to more formally collate guidance on the application of the different approaches to organising and governing public resources that have been trialled and experienced some success in New Zealand.

The key resource for supporting informed and evidence-backed design of cross-agency initiatives is the ‘System Design Toolkit’ that has been recently published on its website (State Services Commission 2018). The toolkit sets out a spectrum of solutions to enable cross-agency working, ranging from ‘soft’ (voluntary) to ‘hard’ (structural reorganisation). In the ‘middle’ are various solutions that involve greater commitment or mandated engagement without formal structural changes. The models are grouped according to the features of the problem that they should be used to address; whether the problem requires collaboration between agencies at the national (strategic planning) level or the front-line (delivery) level, and the number of agencies that must work together to address the issue.

Figure: State Services Commission ‘System Design Toolkit’



For each of these models, the guidance published by the Commission provides information on where the model should be applied, and key features including how goals or outcomes are

agreed, the type of governance arrangements the model employs, how Ministers are involved, the agency incentives that are required for the model to be effective, and the recommended approach to resourcing. The guidance also includes detailed case studies for each model, providing with agencies with examples of where the models have been applied with some success in the past.

While the toolkit makes learnings from previous applications of the models more accessible, with the exception of the models involving structural change these models still lack a formal legislative basis. Current reform proposals for the legislation governing New Zealand's public service involve consideration of new legislative tools which could be used to formalise and strengthen the models at the harder end of the toolkit, including collective accountability arrangements and networks (ie collective impact vehicles) to support frontline delivery.

Networks – modes of control

In the context of the delivery of public goods, the question of control of networks arises in relation to ensuring network performance. The case studies illustrate the experience of the design and use of both the Lead Organisation Model (South Auckland Investment Board) and a form of Network Administrative Organisation (the Social Sector Trials). Both models were imposed 'top down' with mandates directly from Ministers and senior public servants. The main method for controlling the network was been focused on output control. Given the dominance of output control in New Zealand it is worth reflecting on the different types of organisational control that exist in relation to networks. Four modes of control are relevant in this context.

Output control

The first, which is well established in New Zealand. is centred on external control through outputs. The control focus is on holding members of a network to account to network level outputs (Kenis and Provan, 2008). This approach was adopted in both of the case studies.

Bureaucratic control

A second form of control of networks is bureaucratic control. This primarily occurs through detailed rules, procedures and regulations. This may also include the use of standardise procedures and manualised processes to ensure consistency of service provision. Behaviour may be governed by detailed prescription of the types of action that may be taken (Ouchi 1977).

Cultural control

The third form of control and is centred on cultural or clan-based mechanisms. It is focused the norms and values that foster cooperation. This is often through socialisation processes that foster a common identity or values that support in-group cooperation (Ouchi, 1982; Scott, 2018). For example, common professional values can serve to guides network actions. Control avoids external costly (and intrusive) monitoring in place of cultural control and therefore top-down quasi-contractual controls can be relaxed.

Reputational control

A further form of control is through relationships and reputations. Reputational control within a network based is based on the view that the flow of information and resources in networks are grounded on personal interactions. Furthermore, actors in a network are incentivised (as behaviours in the network are revealed to others in the network) to act in a way that maintains or improves their reputations (Kenis and Provan, 2008). Relationships that exhibit high levels of mutuality or reciprocity have been shown to reduce opportunism and improve cooperation due to the predictability that arises from repeated exchanges (Granovetter, 1985). The research evidence also suggests that mutual relationships establish credibility and reduce transaction costs (Koppenjan & Klijn, 2004). Trust and mutuality have also been shown to reduce the risk of non-trustworthy behaviour due to reputational impacts of breaking mutual trust (Poppo and Zenger, 2002).

Task interdependency and goal congruence

Task interdependency can be broadly described as either: pooled, sequential or reciprocal.⁷ Kenis and Provan 2008, suggest that as tasks become more interdependent, higher levels goal congruence can be expected. As a consequence, the effective control mechanisms shift from an emphasis on output control towards a mixture of bureaucratic, cultural and relational control modes. The level of task interdependency therefore is relevant for selecting the nature of control, as it indicates what is likely to be required (ie intensity of interactions) from other participants to deliver on shared goals. It therefore provides a proxy for determining the extent of goal congruence and measurability (ie to monitor behaviour or output) (Kennis and Provan, 2008).

Networks – considerations for performance management

In the case studies outlined above, existing formal processes were adapted to accommodate the new models and these adaptations worked to a point. A range of difficulties arose, particularly problems measuring success meant that the models struggled to retain the support of critical stakeholders over time. Both these cases needed to conform to the requirements of control based on outputs and increasing requirements to demonstrate success within this framework.

A new performance management framework that could better support network models, would enable a more tailored approach. As a starting point we propose a heuristic device, bringing together relevant insights from research and the case studies canvassed above, to help guide selection of network form, funding approach and mode of control (see table 3).

Table 3 – Heuristic for selection of network form, funding and control mode

Network Model	Indication for use	Task inter-dependence	Funding	Control modes
Lead Organization	<ul style="list-style-type: none"> Moderate goal congruence (LOM goals dominant) Complexity of network delivery moderate (due to LOM and moderate number of other agencies) Moderate levels of specification and measurement of outputs possible Trust moderate (based on past collaborative relationships) 	Sequential	Traditional budget process Club funded or separate track enables collective bid	Bureaucratic formalised Output Cultural
Network Administrative Organisation	<ul style="list-style-type: none"> Goal congruence high, goal is equally shared across members External authority mandate (Minister, Cabinet) High trust based on established personal relationships (eg regional or local officials/professionals) Moderate levels of specification and measurement possible NAO enables large membership 	Sequential and/or reciprocal	Grant funding Outcome (purpose) focused	Cultural Reputational
Participant governed	<ul style="list-style-type: none"> High trust established relationships, embedded in the network Low membership with history of successful collaboration bi-lateral or multi-lateral exchange relationships High complexity low specification and measurability 	Reciprocal	Seed funding and grant funding Outcome (purpose) focused	Cultural Reputational

⁷ Pooled interdependencies involves tasks being accomplished in parallel through the combination of separate efforts. Sequential interdependencies involve tasks where the output of one activity becomes the input for another in a more or less predictable sequence. Finally, reciprocal interdependencies are sequential but work goes back and forth with some level of unpredictability.

	<ul style="list-style-type: none"> High goal congruence across network members and goal(s) established by members 			
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Table 3 above indicates how matching might work in practice and is used to illustrate what a more tailored performance management framework might entail. It suggests a shift in emphasis on control through quasi-contractual (hierarchical) accountability mechanisms based on outputs towards managing performance uncertainties through goal congruence and cultural and reputational control modes. Drawing on relevant research, it also suggests the conditions under which each network model might be used.

In practice, this might mean altering budget processes from an individualised ‘production model’ (with an emphasis on intervention logic and output specification) to include (or be replaced by) an assessment of contingent features of the network. This would require an assessment of the quality of pre-existing relationships, the extent of common professional values and past history of successful collaboration. In this way, control elements based on cultural and reputational modes would be explicitly considered in order to offset low performance clarity. This aligns with the findings of Scott and Bardach (2018), arising from the New Zealand Better Public Services Results programme, who suggest a collaboration maturity continuum; that is, previous experience and success in easier forms of collaboration appears to support likelihood of success in more complex forms.

The use of criteria for determining whether to fund networks was suggested in a review of governance and accountability arrangements, undertaken as part of the previous government’s social investment approach (see Scott, 2016: 31-32). While the report’s language was couched in terms of a (now abandoned) social investment approach, similar criticisms were levelled at the existing performance management model:

.... [such] criteria indicate how the Government can reframe its funding and accountability relationships away from the micro-managed contracting practices of the present, to an investment concept in which the investor is deciding whether to increase, hold or reduce its exposure on the basis of proven performance and trust in the vehicle - rather than trying to specify performance requirements in detail in advance. (Scott, 2016: 32).

Adopting a contingent criteria approach would provide an additional way of assessing proposals and reduce reliance on a single method (ie output-impact measurement) of control. The case studies indicate that much focus and effort was placed on defining the defining ‘target populations’ and the outcomes to be delivered. However, there appears to have been little explicit assessment of capability in the areas where these networks were established, nor consideration of the nature and extent of existing local relationships and levels of inter-organisational and interpersonal trust. Further, while much focus was on identifying the outcomes that the government wanted to achieve, there seems to have been little investigation of indicators of goal congruence to assess the extent of the task interdependencies (i.e. as a proxy for goal congruence) and the credibility and capacity of organisations involved.

Funding for network governance models would likely need to be incorporated as a separate ‘track’ cross-portfolio track in formal budget process. This would ensure a break from the past and avoid continuation of such forms of collaboration being treated as an ‘add on’ (ie club funded by individual agencies after budgets had been set or dependent on ‘in-kind’ contributions). Greater flexibility would be needed to support ‘test and learn’ approaches. This might require low compliance funding options for promising proposals that could be funded in stages or simply grant funded. In the latter cases cultural and reputational control would be emphasised.

More deliberate use of networks would necessitate increased focus on shared goals and ways to assess network level effectiveness on delivering outcomes. New Zealand's recent experience in the use of interagency performance targets provides one possible method that could be adapted to networks. The use of a small number of strongly mandated interagency targets, was shown to have increased goal orientation and improved collaboration and performance of public service departments (Scott and Boyd, 2017a; 2017b). In other instances, where performance clarity is low, qualitative stories can be an important source of outcome information. These qualitative project stories "only count if together they comprise significant change" that signals progress towards outcomes (Sparrow, 2008: 134). However, qualitative stories tend to be viewed with suspicion, if not combined with 'harder' measures (cf. the experience of Whānau Ora indicated in Dormer, 2014). These methods can be combined, as they were for the Better Public Service Results Programme, where tracking of progress against impact measures was supplemented by qualitative success stories and made publicly available (Scott and Boyd, 2017a). The focus on portraying the success stories in this way was intended to have a strong signalling effect to encourage officials undertaking collaboration more generally (Scott and Boyd, 2017a).

This type of progress and performance reporting is of a very different nature to that currently envisaged as 'non-financial' reporting within the Public Finance Act. A shift in this direction, could be complemented with appropriation mechanisms that were more clearly enabled the funding of activity for a shared outcome rather than classes of outputs. Some progress in this direction was made in the 2013 amendments to the Public Finance Act, for example, section 34(2)(a) now requires chief executives to account for the purpose or "what was achieved" by a department incurring expenses under an appropriation. However, administration of appropriations remains with individual departments, which also includes defining the outputs to be delivered, and underpins the use of the 'lead department' model to support collaboration.

Conclusion

It is well established in the literature that the New Zealand model of public management developed through the reforms of the 1980s reflects a range of core assumptions of management and New Institutional Economic theories, including that the activity of the public service can be characterised using a production model and that decision-makers have a binary choice between quasi-contractual hierarchy and market-based approaches for governing the use of public resources. This has resulted in a public management framework that emphasises the use of output controls, requires ex-ante specification of activities and outputs, and employs a strict conception of accountability that assumes measurability and attributability of impact.

Governance literature, however, recognises alternative approaches to governance beyond hierarchies and markets, often described as networks or clans. Where hierarchies and market-based approaches are highly effective for output production or the delivery of discrete services, network-type models have been shown to be more effective means of organising to address complex issues where a wide range of actors are required to achieve an outcome, the actions or services required to achieve the outcome are difficult to specify ex-ante, and the impact of actions or services are difficult to measure and attribute ex-post. Coincidentally, these types of complex issues have become an increasing focus of the public service both in New Zealand and internationally in the thirty years since the reforms of the 80s, and the public service has in that time struggled to find effective and lasting responses to these issues within the constraints of the current framework.

In establishing a clear hierarchy-market dichotomy, the public management framework fails to formally recognise network or clan approaches to governance, which in the New Zealand context are commonly perceived as spontaneous and serendipitous ventures between the public service's enduring hierarchical institutions rather than a governance model in their own

right. Further, the aspects of the framework that are geared towards output production actively restrict the ability of the public service to successfully establish and maintain network-type governance arrangements – which rely on alternative modes of control such as cultural or reputational, and are most often employed in situations where it is difficult to meet strict accountability requirements due to problems with measurement and attribution (i.e. in response to the aforementioned ‘complex issues’).

Unsurprisingly, the public service has been unable to achieve sustained success with network type approaches, though attempts have been made to employ them in response to complex social issues. Case studies show that the current framework limits the funding and resources that can be allocated to such approaches in the absence of a clear ability to specify outcomes ex-ante and measure impacts ex-post. This means that attempts at network governance rely primarily on small amounts of time-limited funding and committed individuals operating at the margins of their substantive roles. The model’s lack of foundation in the formal public management architecture has also limited the accrual of institutional knowledge regarding these approaches, with formal guidance and documentation on governance and organisational approaches provided by the State Services Commission historically focusing only on the available structural (hierarchical) options for organisation.

In order to successfully respond to the complex social issues that are becoming increasingly pronounced and challenging, the public service must be able to deliberately deploy network-based governance approaches to service provision alongside the already formally recognised hierarchical and market-based approaches. New guidance on public service organisation in New Zealand has begun to formally recognise network approaches as an effective means of addressing problems that cross agency boundaries and require collaboration. However, these approaches are unlikely to be sufficiently effective or achieve real longevity until changes are made to the underlying legislative framework to address the barriers discussed in this paper regarding modes of control and funding requirements relating to ex-ante specification, measurement and accountability.

This paper proposed a heuristic device for the selection and use of network forms that begins to illustrate some of the changes to the performance management framework that would be needed to achieve this shift. Future work could expand on these issues, drawing on literature relating to alternative funding models (e.g. funding models for research and development), management theory concerning alternative governance (i.e. crafts, clans etc.) and criteria-based approaches to assessment employing concepts such as trust.

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