Promoting the utilisation of productivity measures

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The New Zealand Productivity Commission Research Note: Promoting the utilisation of productivity measures
Te Kōmihana Whai Hua o Aotearoa[1]

The Commission – an independent Crown entity – completes in depth inquiry reports on topics selected by the Government, carries out productivity related research and promotes understanding of productivity issues. The Commission aims to provide insightful, well –formed and accessible advice that leads to the best possible improvement in the wellbeing of New Zealanders. The New Zealand Productivity Commission Act 2010 guides and binds the Commission.

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[1] The Commission that pursues abundance for New Zealand

Abstract

Productivity indicators can be an important source of information for state sector managers, providing insights into how well resources are being used and helping managers to identify potential areas of improve.

Yet as with all performance indicators, there can be a gap between the collection of performance information and the use of that information to inform decisions. Drawing on the public administration literature, this paper highlights steps agencies can take to increase the use of productivity indicators in decision-making. The steps include involving staff in the development of productivity indicators; fostering a culture that values performance improvement and problem solving; and establishing a supportive institutional environment.

Abstract

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1   What we know about the use of performance information

1.1   Introduction

Performance regimes are often introduced to increase accountability and improve the quality of information available to decision-makers, thus enabling them to make more informed (and therefore 'better') decisions.

Yet research illustrates decision-makers frequently:

   a)   pay little attention to performance information when making decisions (Pollitt, 2006);

   b)   use information in ways that result in perverse outcomes (Smith, 1995); or

   c)   treat performance processes as a compliance exercise (Radin, 2006).

In short, performance regimes often work very differently to how the standard performance paradigms suggest they should (Van Dooren & Van de Walle, 2008). The use of performance information to inform decisions remains the 'Achilles heel' of many performance frameworks.

Drawing on the public administration literature, this paper highlights steps agencies can take to increase the use of productivity indicators in decision-making. The focus of the paper is on the use of performance information as a learning tool as opposed to an accountability tool.

The clear message from the international research is that *measuring* productivity and *using* productivity estimates are influenced by different things. While factors such as external requirements, capability and available resource assist agencies to *develop productivity measures*, the use of these measures in decision-making is driven largely by factors such as staff motivation, norms of behaviour and the process through which indicators are developed.

1.2   Utilising performance information – a two stage process

The *utilisation* of performance information is a process whereby information is first *generated* and then the *used* to inform decisions. This process involves two distinct stages – an *adoption* stage and an *implementation* stage (Julnes & Holzer, 2001).

The *adoption* stage involves *developing the capacity to measure performance*. That is, developing the systems, capability and methods required to produce useful performance indicators. During the *implementation* stage, performance information is turned into action. That is, during implementation, performance indicators are 'put to work' to inform policy and management decisions.

Encouraging the adoption of a performance measure involves encouraging agencies to develop the capacity and systems needed to collect and analyse performance measures. *Encouraging implementation* involves encouraging agencies to *act* on the knowledge obtained from the analysis of those measures (Figure 1.1).

Figure 1.1   Utilisation of performance information
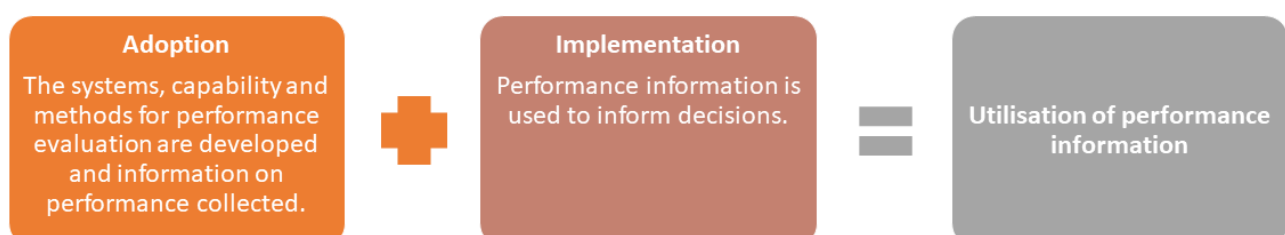
1.3 Utilising performance information – lessons from the literature

There is a growing literature on the factors that facilitate the utilisation of performance information. The literature does not amount to a concrete 'theory' of utilisation, yet it does provide valuable insights into the steps agencies can take to promote the use of performance indicators during decision-making.

This section draws ten lessons from the literature.

Lesson 1: The use of performance information is always at the discretion of managers

State sector managers rarely base a decision on a single piece of information. Rather, multiple pieces of information combine to allow managers to form a judgement on the preferred course of action. Utilisation of performance information therefore relies on the *discretion* of managers (Moynihan & Pandey, 2010). And as such, those seeking to promote utilisation need to focus (among other things) on factors that influence how managers allocate their available discretionary effort. Kroll and Vogel (2014) note.

> Though we can observe how managers read performance reports as well as the consequences of their decisions, incorporating performance information is a mental activity. This is why data use in contrast to data collection or reporting of information cannot be rewarded or sanctioned and must occur voluntarily (p.977).

There is firm empirical evidence that high levels of public sector motivation (PSM)[2] leads to high levels of discretionary effort, and that staff with high PSM are more likely to act in the interest of their organisation (Van Slyke, 2007; Prendergast, 2007). Further, research suggests PSM has a significant impact on the utilisation of performance information (Moynihan & Pandey, 2010).

The inference of this research is public sector managers with high PSM will allocate discretionary effort to the interpretation of performance information only if they believe it will help them achieve the objectives they are motivated to achieve.

Lesson 2: The involvement of staff encourages utilisation

Research shows that active involvement of staff in the development of performance indicators significantly encourages the utilisation of performance information (Berman & Wang, 2000; Bourdeaux & Chickoto, 2008; Moynihan & Pandey, 2010; Yang & Heish, 2007).

Involvement of staff promotes a sense of shared ownership and helps ground indicators in the reality of the organisation's operating environment. Melkers and Willoughby (2005) found that:

> …greater inclusiveness in measurement development and determination is positively related to lasting effects of performance measurement. This supports the view that participatory processes yield more productive and longer-lasting reforms. (p.188)

Kroll (2015) notes the involvement of *managers* in developing performance indicators is particularly important for utilisation. The involvement of managers and staff in setting performance measures has also been found to correlate with honest performance reporting (Yang & Hsieh, 2007).

Lesson 3: No performance indicator is perfect

Calls for greater use of performance information often assume the information is objective, indicative of overall performance and consistently understood. Further it is invariably assumed the indicators are widely accepted as valid and that analysis of the indicator will enable consensus to be reached on how performance can be lifted.

Moynihan (2008) argues such utopian assumptions rarely hold in the complex and contested world of public officialdom. He suggests performance information is most useful when used to stimulate a

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[2] Public sector motivation (PSM) is the "the beliefs, values, and attributes that go beyond self-interest and organizational interest to energize employees to do good for others and contribute to the well-being of . . . society." (Paarlberg & Lavigna, 2010, p.710).

dialogue between relevant staff. Moynihan proposes an "interactive dialogue model" (p.95) that starts with the more realistic assumption that *all performance information* has its limitations. Specifically:

- Performance information is not comprehensive - it does not, and cannot, measure everything an agency does;

- There is generally no definitive explanation for results or what they imply for decisions;

- The meaning of performance information is constructed by those interpreting the information, the same information can support different arguments;

- Performance information is subjective - interpretation of results is coloured by a person's world view, the institutional incentives they face, their strategic goals and so on;

- The interpretation of performance information is open to confirmation bias – once a decision-maker has made up their mind on an issue they will seek out information that confirms their views and discount information that doesn't;

- The existence of performance information does not guarantee use; and

- Institutional affiliation and individual beliefs will impact which performance measure get emphasised.

These factors can make performance information susceptible to 'strategic interpretation' and rent seeking. Gill (2011) notes:

> …whether performance information is used for advocacy and legitimation or for internal learning depends on the motivation of the users, the usefulness of the information and the degree of political competition. This suggests that a variety of internal and external factors, such as goal conflicts within public organisations, and external factors such the degree of political competition, determine the extent to which performance information is used for learning or legitimation. (p.31)

Lesson 4: Perceptions of 'measurability' influence the acceptance of performance measures

Public sector managers tend to resist performance indicators they believe do not capture the complexity of their work (ie, 'what we do can't be measured'). This is particularly true if managers feel the information is being used as a 'report card' rather than a learning tool, or if they believe the indicators will favour some groups and penalise others. That is, if the measures do not provide a level playing field for judging the performance of seemingly similar groups (Ammons & Rivenbark, 2008).

Yet, managers are more willing to use imperfect indicators for *internal learning* than they are for *external accountability* purposes (Van Dooren, 2008).

Concern over the use of imperfect indicators is not universal. Research illustrates some managers operate in cultures more supportive of the use of partial performance indicators (see below). These organisations tend to have learning cultures that look for opportunities to improve performance – even when data is imperfect (Ammons & Rivenbark, 2008).

Kroll (2015) uses Ajzen's theory of planned behaviour to explore the relationship between a manager's attitude towards performance information, prevailing social norms and the utilisation of performance information[3]. The research found that a manager's use of performance data is a function of their 'mind-set' and of the 'social pressures' they experience from their most important peers. Kroll concludes:

> Compared with a technical explanation of performance data use ("data quality matters"), it turns out that the cognitive factors are more important. To improve information use, it seems

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[3] The theory of planned behaviour implies that a person is more likely to undertake a specific action when they have a positive attitude towards the action and when the action is consistent with the prevailing social norms of the person's group or community. The theory recognises that people are also subject to 'controls' that can limit their intention (or ability) to undertake a specific action (Ajzen, 2002).

to be promising to convince managers of the advantages of performance management and to form a critical mass of promoters.

If conscious intention matters and intention is a function of attitude and social norm, then it does not seem to be enough to foster data use through only technical improvements. For public management in practice this means that fine-tuning indicators, regularly updating data bases, and designing more appealing reporting formats will only increase data use to a certain extent. (p.12)

Lesson 5: A receptive culture facilitates utilisation

The positive influence of organisational and professional culture on the utilisation of performance information is well documented (Broadnax and Conway 2001; Moynihan 2005).

Public organisations that lean toward innovative cultures tend to utilise performance information more intensely as they are open to change, and actively seek out information that will help them improve performance (Moynihan, Pandey, & Wright, 2012). Further, innovative cultures tend to emphasise dialogue and discussion (rather than reward and punishment) making performance information less threatening to employees.

There are few empirical studies exploring the link between the adoption of new management approaches and the culture of *public sector* organisations. However, studies of *private sector* organisations emphasise adoption is more likely when the new approach is compatible with the prevailing culture of the organisation. That is, when there is close 'fit' between the culture of the organisation and the values and beliefs underpinning the innovation (Love & Cebon, 2008; Büschgens, Bausch & Balkin (2013); Lau & Ngo (2004).

The use of performance information is impacted by the value agencies place on performance reporting. Organisations that downplay the need for performance measures tend to see performance reporting as a 'chore' that must be fulfilled. In such organisations

> …expenditure of dollars, time, and energy to collect performance measures are a cost of doing business rather than an investment in service improvement, and as such, this cost should be kept at a minimum, if possible. (Ammons & Rivenbark, p.314, 2008)

This view contrasts with organisations that see themselves as stewards of public resources - accountable not only for tracking how money is spent, but also how *well* money is spent. Such organisations understand their obligation to deliver high-quality services comes with an obligation to produce evidence that they deliver services efficiently.

Lesson 6: A clear link between indicator and outcome encourages utilisation

Not surprisingly, utilisation of performance information is highest when staff can make a clear connection between a performance indicator and the goal of their organisation. That is, when staff can make the link between 'mission and measure' (Moyihan 2015; Van Dooren, 2008). Organisations that decouple performance measures from organisational goals are less likely to use that information during decision-making (Van Dooren, 2005).

Lesson 7: Leaders drive utilisation

The importance of leaders on the adoption and utilisation of performance measures is well documented (Askim, Johnsen, & Christophersen 2008; Bourdeaux and Chikoto 2008; Dull 2009; Ho 2006; Melkers & Willoughby 2005; Moynihan & Ingraham 2004; Moynihan, 2015; Kroll, 2013).

The actions of leaders send powerful signals to officials about the importance they should place on performance indicators. For instance, Ammons and Rivernbark (2008), found municipalities that frequently benchmarked their performance had managers who were enthusiastic towards performance comparisons. Ho (2006) surveyed mayors in the American Midwest and found that mayoral interest in performance measurement and benchmarking was one of the most critical factors in determining data usage.

Kroll (2015) notes that:

> Top-level support is a good measure whereby line managers can evaluate whether reforms or initiatives are taken seriously in their organization and whether it is really necessary for them to take on the effort to participate and devote their scarce resources accordingly. (p.475)

Dull (2009) makes a similar point:

> If managers suspect agency leaders are prone or simply will not be around to make good on reform commitments, their attention and effort will gravitate to other problems and priorities. (p.273)

Developing a critical mass of managers supporting the use of performance measures is also important for utilisation (Folz, Abdelrazek & Chung, 2009). Yang & Hseieh (2007) notes:

> For any organizational change, such as the introduction of performance measurement, it is essential to first build high levels of commitment among senior management and then garner support from middle managers and staff (p.863)

The professional background and training of leaders can influence their attitude towards performance information. While managers are commonly familiar with traditional measures of inputs and outputs, they can be less familiar with more complex outcome or productivity measures (Harry 1999). Training can help socialise new performance measures and in so doing promote a more positive attitude towards the use of those measures (Reichers, Wanous & Austin, 1997).

Political support is another important factor influencing the use of performance information (Van Dooren, 2005; Kroll, 2015; Dull, 2009). However, for politicians, performance measurement is often a double-edged sword – providing support for political objectives at times, and fodder for opposition at others (Nielsen & Moynihan, 2017). Van Dooren (2005) explains:

> Performance information does not make politicians win or lose an election. However, the data that the performance measurement system yields may show weak performance. For politicians, everything they measure can be used against them, so they claim the right to remain silent and not to measure. Politicians may indeed have a disincentive to collect data. (p.374)

Van Dooren (2005) goes further, arguing that officials can use a lack of political support as an argument *against* adopting and implementing performance measures (e.g. 'why would we use resources to do something the Minister doesn't want or need?').

Other authors have noted the difficulties that arise when policy recommendations emerging from performance reviews conflict with political priorities (Bourdeaux & Chikoto, 2008). For example, Barrett and Green (2005) note that in some US states, resources available for performance audits were scaled back because legislators did not want to see the results for their favoured programme.

Lesson 8: If performance information is to be utilised it first needs to be resourced

Research shows that the availability of adequate resources and expertise in performance management are key drivers of the use of performance information (Askim, Johnsen, & Christophersen 2008; de Lancer Julnes and Holzer 2001; Moynihan and Landuyt 2009, Bourdeaux and Chikoto 2008; Dull 2009).

Given this research, it may be tempting to think that large, well-resourced organisations are more likely to utilise performance information than smaller organisations. Yet, empirical studies paint an ambiguous picture.

Van Dooren (2005) found that scale is positively correlated with both the *adoption* and *implementation* of performance frameworks. He suggests that small organisations may not have the resources or capacity necessary to develop performance frameworks – particularly where these involve a high level of ICT. Moynihan (2008) reaches a similar conclusion.

However, other research suggests that the size of an organisation has little influence on the acceptance or use of performance information. While larger organisation may have more capability and/or more

sophisticated data systems, other research suggests this will not necessarily increase their *implementation* of data once factors such as organisational culture and leadership are considered (Johannsson & Silerbo, 2009; Bourdeux & Chikoto, 2008; Melkers & Willoughby, 2005; Moynihan & Igranham, 2004).

Based on his review of empirical research, Kroll (2015) concludes:

> While it is possible to hypothesize that larger organisations are more specialised and can devote more resources to performance management practices, it cannot be concluded that they show higher levels of data use once other variables have been controlled for. (p.475)

Similarly, most research suggests that the financial position of a public organisation has little impact on whether performance information is used to inform decision-making (Askim, Johnsen & Christophersen, 2008). While financial stress may result in external pressure to adopt performance measures, it does not necessarily foster the utilisation of performance information (Johannsson & Silerbo, 2009).

Lesson 9: Utilisation requires a supportive institutional setting

Institutional settings also impacts the use of performance information. Several studies show managers in the private sector face greater incentive to use performance information than their public sector counterparts. And that private sector managers face less restrictive internal processes than managers in public sector organisations. Fewer restrictions give private sector managers greater capacity to respond to poor performance (Boyne and Chen, 2007; Hvidman & Anderson, 2014; Moyihan, 2008).

Johansen, Kim and Zhu (2016) studied differences in the use of performance information across private, public and not-for-profit hospitals in the US. They found managers in private hospitals were significantly more likely to use performance information to improve operational efficiency than managers in public hospitals. They concluded that private sector managers have a stronger incentive to focus on service efficiency, and that they are less constrained by internal systems that weaken autonomy over subordinates and resource allocation.

The flexibility of managers to respond to performance information can be critical to improving performance (Moynihan & Landuyt 2009; Moynihan & Pandey 2010). Yet, despite the importance of management flexibility, governments often focus on 'creating increasingly advanced performance information systems while neglecting to increase managerial authority accordingly' (Nielsen, 2013, p.432).

Lesson 10: Rules compelling *adoption* may not lead to *utilisation*

Kroll (2013) argues that rules compelling the collection and reporting of performance information increase the regularity with which such information is collected, making it more likely that managers will use the information when making decisions.

However, Moynihan and Lavertu (2012) find that rules *compelling* managers to collect performance information can result in managers 'passively and not purposefully' using performance data. In their review of the US Government Performance and Results Act (GPRA) and the Bush administration's *Program Assessment Rating Tool (PART)* Moynihan and Lavertu conclude that the programmes largely failed to influence behaviour because they were designed to *create*, rather than *use*, performance data.

Other research suggests that *internal processes* (as opposed to external mandates) have more relevance to the utilisation of performance data (Askim, Johnsen, & Christophersen 2008; Moynihan & Landuyt 2009). Van Dooren (2005) explored the use of performance information across government departments in Belgium. The research found organisations that use performance information to guide decisions have frequent internal meetings to discuss performance results. And that these meetings are attended by not only top-managers, but also middle managers and operational staff (Moynihan & Kroll, 2016).

Other researchers have explored the importance of such internal forums. Moynihan (2008) examines the utilisation of performance information through what he calls the "interactive dialogue model" (p.97).

This model casts performance management as a form of *social interaction* whereby performance information becomes the catalyst for engaging in conversations around improvement. Underpinning this model is the assumption that performance information is ambiguous, subjective and incomplete. In such a context, individual and collective beliefs will influence how the information is interpreted and used.

Moynihan suggests organisations that use performance information most constructively are those where staff regularly come together to discuss performance results and the implications for management. He notes such forums are most successful when:

- they are not confrontational;

- they include a wide array of perspectives from within the organisation;

- there is a sense of collegiality among the participants, and

- they employ a range of different types of information, both quantitative and qualitative. (p.195)

Yet, Moynihan warns that public organisations are not very good at 'slowing down' to consider what data means and they frequently struggle to create the conditions suggested above.

2 Making measures stick

The lessons in Chapter 1 provide useful touchstones for agencies looking to promote the constructive use of productivity measures.

2.1 How can these lessons be used to promote the use of productivity measures?

Applying these lessons to the use of productivity measures we can conclude:

- The utilisation of productivity measures will occur at the discretion of state sector managers. While central agencies can monitor the *development* of performance measures, they cannot regulate the *utilisation* of measures for decision-making. As such, if productivity measures are to be embedded in decision-making, managers must be convinced the measures are worth the time and effort needed to develop them.

- Areas of the state sector with high levels of public sector motivation are likely to display high levels of discretionary effort. When officials believe there is a causal connection between productivity measures and the social objectives that motivate them, they will be more likely to use productivity measures during decision-making. This suggests that when introducing productivity measures, agencies should encourage buy-in by developing a convincing logic (narrative) that links the use of productivity indicators with the achievement of broader social objectives.

- Officials are more likely to undertake productivity measurement if they feel confident in their ability to measure successfully. This relates to *perceptions* of the ease or difficulty of the task. Initially, agencies should undertake simple ratio analysis rather than attempt more technically complex measures of productivity (such as Stochastic Frontier Analysis). Agencies can graduate to more sophisticated approaches as experience and conceptual familiarity develops.

- Officials will be more supportive of the productivity measures if they believe productivity is *within their control*. This suggests it will be important for leaders to demonstrate the link between productivity measures and the work undertaken by the agency (or specific groups within the agency). If results are difficult to attribute, officials will be less supportive of measures.

- Productivity indicators are likely to offer only a partial picture of agency performance. Further, the drivers of productivity results may be open to multiple interpretations. Understandably, state sector managers may resist using such indicators to judge their performance. However, managers are more likely to support the development of productivity indicators if they are confident the indicators will be used as a catalyst for conversations around improving performance, rather than an accountability measure (assuming they perceive the indicator as valuable).

- Officials are more likely to utilise productivity measures when they have been involved in the design of the indicators from the beginning. The involvement of officials can help create a sense of shared ownership and can ensure the indicators: a) focus on outputs that staff see as 'core' to achieving organisational objectives and b) are expressed using familiar language and concepts (thus reducing scope for misinterpretation). Involving staff (particularly operational staff) in developing indicators can also promote a better understanding of the importance of productivity and can help build trust in how measures will be used.

- Officials are more likely to utilise productivity measures when they perceive a close 'fit' between the measure and the culture of the organisation/profession. When introducing productivity measures it will be important to address concerns around the ideological assumptions that underpin the concept of productivity. Involvement of staff in the design of indicators and illustrating a link between indicators and the social objectives of the organisation will help in this regard.

- 'Top-down' rules mandating the collection and reporting of productivity information can increase the *adoption* of performance regimes. Such rules can also provide an important signal that measuring and improving productivity is a high priority for leaders. Signals will be strongest when leaders allocated resources to measurement and are asking their subordinates for productivity information. However, such rules do not necessarily promote the *utilisation* of performance information and therefore risk having little impact on productivity if not accompanied by measures to promote utilisation of the information generated.

- Performance regimes require appropriate resources and capability. Failure to resource productivity measures jeopardise their accuracy and sends a message to staff that productivity is not important.

What actions would help promote utilisation of productivity measures?

Table 2.1 draws on the discussion above and provides examples of actions agencies, ministers and state sector leaders can take to promote the utilisation of productivity measures. The actions are focused on achieving seven (separate but overlapping) 'goals' which if achieved would embed the consideration of productivity into the fabric of the New Zealand state sector. The list of actions is illustrative rather than exhaustive. The aim is to provide a 'feel' for the type of actions that will be required by different parties in the system.

The table suggests that encouraging utilisation requires a mix of formal rules and 'soft skills'. And that a prolonged effort by state sector leaders, including ministers and central agencies, will be required.

The goals are for:

- organisational processes to facilitate, encourage and incentivise productivity measurement and improvement;

- external institutions to be supportive of measurement and the pursuit of state sector productivity;

- organisational and professional cultures to be receptive to the use of productivity measures and efficiency improvements;

- staff to have a positive attitude towards productivity measurement and improvement;

- leaders to be committed to the use of productivity measures;

- ministers to be supportive and encourage the use of productivity measures;

- top-down pressure for productivity improvement to be balanced against bottom-up design of indicators and for managers to have freedom to respond to performance information.

Table 2.1   Actions will help promote the utilisation of efficiency indicators

Goal	Examples of actions that promote the goal
Staff have a positive attitude towards the use of productivity measurement and improvement	Involve officials in selecting and analysing productivity indicators.
	Design indicators that resonate with the motivation of officials – use language familiar to staff.
	Build a common understanding of the link between productivity indicators and the broader objectives of the organisation.
	When designing productivity measures, look to use data already routinely collected.
	Keep additional reporting requirements as low as possible.

Goal	Examples of actions that promote the goal
	Identify staff to champion the concept of productivity measurement.
	Who could implement these actions?
	Chief Executives (CEs), Senior Leadership Teams (SLT), managers and informal leaders within the agency.
Organisational processes facilitate, encourage and incentivise productivity measurement and improvement	Incorporate productivity goals into organisational performance frameworks and strategies.
	Establish (and resource) learning forums for discussing productivity indicators. At these forums, leaders should foster a non-judgemental learning environment where officials feel free to discuss the drivers of poor performance (as well good performance).
	Design systems for sharing and discussing information across similar organisations (and seek solutions to performance problems).
	Identify benchmarks that can be used as learning tools (not as an accountability tools).
	Allocate sufficient resources (time and space) to allow staff to learn from productivity measures.
	Use indicators to create 'shared or agreed goals' that actors within a network can work towards and buy into.
	Who could implement these actions?
	State Services Commissioners (SSCs), CEs and SLTs.
External institutions support the measurement and pursuit of state sector productivity	Link CEs performance to their ability to demonstrate knowledge of organisational/functional productivity.
	Allow sufficient resources within agency budgets to establish the systems and capability needed to measure and analyse productivity information.
	Reform budget processes to place a stronger emphasis on demonstrating the ability to monitor the efficiency of spending.
	Who could implement these actions?
	Central agencies and CEs.
Leaders are committed to the use of productivity indicators	Give leaders a 'common narrative and language' to help them communicate the importance of productivity.
	Link the development of productivity indicators to performance reviews of leaders.
	Ensure leaders have the technical skills needed to develop/interpret productivity measures.
	Tap into the value of peer recognition by rewarding/praising leaders that demonstrate a commitment to productivity measurement and improvement.

Goal	Examples of actions that promote the goal
	Select leaders with performance management skills.
	Who could implement these actions?
	SSC and Treasury at a system level. CEs and SLTs at an agency level.
Organisational and professional cultures are receptive to the use of productivity measures and value learning and efficiency improvements	Leaders demonstrate support for productivity measures by publicising they have allocated resources to productivity measurement.
	Reform performance rewards to better align with the collection and analysis of productivity information.
	Leaders publicly reward and praise officials that can demonstrate (empirically) productivity improvements.
	Leaders use public forums to emphasise the alignment between productivity and organisational values and culture.
	Leaders take every opportunity to reinforce the message that productivity will help the organisation achieve its goals (ie, their intended outcomes).
	Managers promote staff that illustrate a commitment to productivity improvement and measurement (rather than those that promote budget expansion and 'empire building').
	Include reference to productivity improvement in corporate statements and documents.
	Who could implement these actions?
	CEs and SLTs.
Top-down pressure for productivity improvement is balanced against bottom-up design of indicators	Strengthen accountability on CEs to demonstrate knowledge of agency/function productivity.
	Include a specific question around agency understanding of their productivity in PIF reviews.
	Seek ministerial buy-in and public support for the use of productivity measures by linking productivity to political and social objectives.
	Balanced against…
	Greater freedom to manage ie, less restrictions on how outcomes are achieved.
	Low powered incentives connected to productivity measures (eg, employee recognition programmes).
	Productivity indicators that are developed from the bottom-up and that are considered relevant to those being asked to use them.
	Link bottom-up indicators with the 'top-down' aims of the Government.
	Who could implement these actions?
	Ministers, SSC and Treasury at the system level.

Goal	Examples of actions that promote the goal
	CEs, SLTs, managers and informal leaders at the organisational level.
Ministers support and encourage the use of productivity indicators	When designing productivity indicators, agencies consult ministers early in the process with the aim of understanding the information ministers would find most useful (eg, which activities they would like productivity information on). Ministers signal sustained and consistent support for the use of productivity measures and the pursuit of efficiency during performance conversations with CEs. Ministers clearly communicate that while productivity measures are not the only important indicator of performance, they are important enough to warrant ministerial time and attention. **Who would implement these actions?** Ministers, CEs and SLTs.

2.2   Conclusion

Productivity indicators can be an important source of information for state sector managers, providing insights into how well resources are being used and helping managers to identify potential areas of improvement.

The public administration literature suggests there are steps agencies can take to increase the use of productivity measures in decision-making. This paper extracts ten lessons from the literature, including the need to:

- involve staff in the development and analysis of productivity indicators;

- foster a culture that values performance improvement and problem solving;

- establish an institutional environment that supports and encourages the use of productivity measures;

- establish a clear link between productivity indicators and the objectives of the organisation; and

- use productivity indicators as a learning tool rather than an accountability tool.

Embedding productivity measures into decision-making will require a prolonged effort by ministers, central agencies and state sector leaders. This paper suggests that a mix of formal institutions and 'soft skill' will be needed to established productivity measures as a tool that is regularly used by state sector managers.

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