

**ICBSI 2018**  
**International Conference on Business Sustainability and**  
**Innovation**

**PUBLIC SECTOR PERFORMANCE MANAGEMENT:  
INSIGHTS FROM SELECTED LITERATURE**

Roshni Ann George (a)\*, A.K. Siti-Nabiha (b), Dayana Jalaludin (c)  
\*Corresponding author

- (a) Graduate School of Business, Universiti Sains Malaysia, Penang, Malaysia,  
Email: roshni.ann.george@gmail.com  
(b) Graduate School of Business, Universiti Sains Malaysia, Penang, Malaysia, Email: nabiha@usm.my  
(c) School of Management, Universiti Sains Malaysia, Penang, Malaysia, Email: dayana@usm.my

*Abstract*

Performance management systems are crucial to the achievement of goals, particularly in the public sector, which typically has greater institutional complexity than other sectors. The rise of sustainability in many nations adds to the inherent complexity in government institutions, necessitating the reshaping of performance management systems to balance economic, social and environmental goals. The potential of performance management systems to meet such goals in the public sector is greatly dependent on how they are integrated across vertical and horizontal governmental structures. However, it is unclear whether public sector literature addresses the interconnections between performance management elements. This paper provides an overview of public sector performance management from selected literature published during the period of 2008 to 2017. The review is aimed at capturing practices from empirical studies, and is specifically focused on the interconnectedness of performance management elements. The content analysis approach used in this study is guided by five main performance management elements derived from the frameworks of Otley and Ferreira and Otley. As it was found that most studies concentrate on less than three elements, the paper concludes with a call for researchers to align future studies with the underpinnings of performance management holistically.

© 2019 Published by Future Academy [www.FutureAcademy.org.UK](http://www.FutureAcademy.org.UK)

**Keywords:** Performance management, management accounting, interconnectedness, public sector.



## 1. Introduction

Performance management was developed from the concept of management control by Otley (1999), who realised that the separation of management control from strategic planning and operational control in the 1960s, resulted in the complexity of and interconnections between the three elements, being inadequately captured by management control researchers. Recognising that managers, in practice, were often associated with all three elements to some degree, he developed a more comprehensive framework for management control, focusing on the management of organisational performance (Otley, 1999). The importance of an integrative performance management framework was further supported by Ferreira and Otley (2009), who argued that a broader view of management control would benefit researchers in the field. Considering that performance management systems are central to the achievement of organisational goals (Vieira, O'Dwyer, & Schneider, 2017), they can be designed and used to support any purpose. This alludes to the potential of performance management systems to strengthen sustainability and enhance the ability of organisations to balance economic, social and environmental goals (Vieira et al., 2017). However, research in performance management control continues to be limited, with most studies concentrating on certain control elements rather than a holistic system (Bedford & Malmi, 2015). This is especially true in the public sector, where studies often focus on performance information use. Furthermore, there have not been recent reviews of literature in performance management control, examining how studies address these elements in a holistic manner (see Stringer, (2007) for the last review), undermining efforts to steer away from the piecemeal development of research in this field. Therefore, this study was aimed at discovering whether recent public sector literature in performance management control, integrated performance management elements sufficiently. Two research questions were developed for this purpose:

- 1) What performance management elements are investigated in public sector performance management control literature?
- 2) How is the interconnectedness of these elements studied?

## 2. Guiding Framework

To answer these questions, this paper draws from two closely related performance management frameworks, those of Otley (1999) and Ferreira and Otley (2009). These frameworks, derived from past literature as well as the researchers' knowledge of the field, break away from restrictive depictions of management control. The Otley (1999) framework is structured into five questions while the Ferreira and Otley (2009) framework is extended to twelve. Otley's (1999) framework forms the basis of the guiding framework in this study. His five questions are translated into five distinct performance management categories, which are subsequently conceptualised by incorporating some key ideas from Ferreira and Otley (2009)'s framework. These five categories are then used to analyse the selected literature to answer the research questions of this study. The five categories are as follows:

- 1) **Objectives** – includes mechanisms involved in determining visions, missions, goals and success factors or achievement criteria.
- 2) **Plans** – encompasses strategy formulation, communication, implementation and related organisational structures

- 3) **Measures** – involves mechanisms for indicator and target setting as well as associated performance evaluation criteria
- 4) **Rewards** – entails mechanisms related to rewarding and penalising performance
- 5) **Feedback** – relates to monitoring, reporting, and correcting mechanisms

### **3. Research Method**

The content analysis approach has been used in this paper to analyse the data from selected peer-reviewed papers. Content analysis is a systematic way to code and categorise textual information to identify patterns or common issues (Vaismoradi, Turunen, & Bondas, 2013). The main purpose of content analysis is to conceptualise the phenomenon being studied in a descriptive manner (Elo & Kyngäs, 2008). Although content analysis may begin with a theory or framework about the phenomenon being studied to guide data collection and analysis, there is no obligation to remain tied to the theory or framework used (Sandelowski, 2009). The analysis in this paper involved the search for latent content instead of manifest content, with ‘soft criteria’ used to uncover the underlying significance of terms through interpretation of textual data (Seuring & Gold, 2012). The five-step qualitative content analysis method developed by Taylor-Powell and Renner (2003) was used for this paper.

#### **3.1. Preparation**

The sample documents comprised of peer reviewed articles, published during a period of ten years, from 2008 to 2017. The articles were compiled from a major online database, Emerald Insight ([www.emeraldinsight.com](http://www.emeraldinsight.com)). A search was conducted in the system, using the keywords “performance management control” and “public sector”, located in the abstracts of papers. It was found that 39 articles matched the search criteria. Subsequently, these articles were reviewed to assess their appropriateness to answer the research questions of the study. The final sample consisted of 15 papers from twelve countries, including the United Kingdom, Italy, China, Thailand, Oman and New Zealand.

#### **3.2. Analysis**

A content analysis was conducted on the selected literature using the five steps suggested by Taylor-Powell and Renner (2003). The analysis began with the reading and re-reading of textual data to obtain an in-depth understanding of it. The second step involved focusing the analysis on the purpose of the study. As each study was read, the two research questions were used as guides to focus the analysis on certain portions of the text. The third step was the categorising or coding of the data based on the guiding framework of the study. The main analytical categories, with their predetermined definitions that were derived from performance management frameworks in literature (as explained above), were used to code the data. The explicit as well as implicit occurrence of these concepts were determined in each study. The fourth step involved identifying patterns or connections between the five categories. This was mainly related to the second research question concerning the interconnectedness of the performance management elements. The analysis ended with the interpretation of the coding information. The findings are presented and discussed in the following sections.

## **4. Findings**

The five performance management elements have been grouped into three parts to present the findings in a systematic manner. The first category combines the performance elements of objectives and plans, as these are often discussed together in most of the studies. The second category is also a combination of two performance management elements, measures and feedback, for the same reason. The final category is the performance element of rewards, which is rarely considered in studies.

### **4.1. Objectives and Plans**

A majority of the reviewed studies have examined the elements of objectives and plans, with varying depth (Auber et al., 2014; Deakins, Dillon, Al Namani, & Zhang, 2010; Dormer & Gill, 2010; Esposito, De Nito, Pezzillo Iacono, & Silvestri, 2013; Ferry & Ahrens, 2017; Halkjær & Lueg, 2017; Johnston & Pongatchat, 2008; Silva & Ferreira, 2010; Trondal, 2015). A number of authors have examined the linkage between objectives and plans. Halkjær and Lueg (2017) show that externally imposed structural and strategic changes do not always translate to the achievement of planned objectives. They found that the enforced specialisation in healthcare services, while resulting in service quality improvement, also resulted in decreased efficiency due to insufficient support from strategy implementers. The link between goals and strategy was studied by Trondal (2015), who found that the lack of clear goals in small jazz bands were offset by interactive feedback strategies while goals imposed by external parties in universities were successful in stimulating international research strategies. The activity of goal setting and strategic formulation and implementation was elaborated upon by Auber et al. (2014). Furthermore, both the studies of Deakins et al. (2010) and Ferry and Ahrens (2017) show the connection between objective setting and stakeholder inclusion strategies. One study depicted a negative linkage as the online collaborative strategy was not well received by public sector employees (Deakins et al., 2010). A positive relationship was found in the other study as communication and engagement strategies were successful in incorporating citizens in decision making involving goals, policies, outcomes and plans (Ferry & Ahrens, 2017). Although they do not focus explicitly on strategy, Dormer and Gill (2010) show that objectives are not necessarily cascaded down hierarchical levels. The importance of ensuring that objectives and plans are aligned is clearly seen in most of the studies above.

### **4.2. Measures and Feedback**

A number of studies have also considered the performance management mechanisms associated with measures and feedback (Ancelin-Bourguignon, Saulpic, & Zarlowski, 2013; Anderson & Klaassen, 2012; Auber et al., 2014; Barbato & Turri, 2017; Kroll & Proeller, 2013; Liguori, Sicilia, & Steccolini, 2014; Yuen & Ng, 2012). The study conducted by Ancelin-Bourguignon et al. (2013) showed how three goals, competition, accountability and efficiency were translated into a new performance scorecard and organisational restructuring. The scorecard with its new indicators provided managers with a means to monitor the progress towards these new goals. However, performance meetings did not utilise the information generated from the scorecard, thus indicating a misalignment between the measurement and monitoring process. Similarly, Yuen and Ng (2012) showed that although an integrative scorecard was

developed to align objectives to indicators and monitoring activities, cost control and other easily measurable activities were prioritised in the public hospital studied. This resulted in a lack of health targets and quality indicators or incentives in the organisation. As found by Anderson & Klaassen (2012), the translation of inputs to outputs is sometimes difficult, and measures not easily identified. Thus, information monitoring outputs are not systematic or reliable. However, the complexity of a measure does not always result in negative use of the system. Kroll & Proeller (2013) found that performance information was used more when performance management systems were complex. In these instances, the complexity of the measurements can be countered through simplifying reporting processes and information. Auber et al. (2014) and Barbato and Turri (2017) both explored the learning aspect of the feedback process. Auber et al. (2014) highlighted the importance of the peer review process for improvement while Barbato and Turri (2017) showed the lack of socialising in learning and audit activities. Finally, Liguori et al. (2014) explained the need to include both financial and non-financial performance information in the feedback process. When wide-ranging measures are used in monitoring and reporting, learning is likely to occur and improve decision making.

#### **4.3. Rewards**

Rewards and sanctions were only discussed to some extent by two of the selected studies (Auber et al., 2014; Barbato & Turri, 2017). Auber et al. (2014) briefly considered these concepts, describing the limited use of rewards for groups (collective bonuses), which were ultimately being reconsidered as individuals were expected to have high performance and underperformers were challenged to meet targets. Barbato & Turri (2017) explored these issues at greater length, confirming the effectiveness of rewards and sanctions in performance management systems to drive greater performance. However, they cautioned that performance management systems that were implemented due to rewards or sanctions could result in formal rather than substantive adoption, with little accompanying behavioural or mindset changes. Their study showed that the adoption of legally required performance plans and reports were delayed as these were not prioritised by employees. Thus, understanding the influence of rewards and sanctions is vital for effective performance management.

### **5. Conclusion**

The literature review and analysis has shown that most studies in the public sector often focus on either one or two performance management elements. Therefore, development of the field is fragmented, undermining opportunities to gain richer insights from practical applications of performance management. Even so, a number of studies do incorporate limited aspects of multiple performance management elements. For example, Halkjær and Lueg (2017), although concentrating on objectives and strategic implementation, linked this relationship to certain aspects of monitoring and learning. In a similar manner, Dormer and Gill (2010) discussed how performance monitoring and reporting were used in planning and decision making. Nevertheless, a number of studies have studied the interconnections between performance elements in greater detail (Esposito et al., 2013; Johnston & Pongatchat, 2008; Silva & Ferreira, 2010). Johnston and Pongatchat (2008) describe the alignment of performance measures with strategic implementation. They

found that while strategic formulation was in line with strategic implementation, the alignment of performance measures with strategic implementation was avoided by managers. This resulted in a variety of coping mechanisms used by the managers to manage the tension of misalignment. Esposito et al. (2013) used Simons four typologies of control (belief systems, boundary systems, diagnostic control systems and interactive control systems) to provide a holistic understanding of the connection between performance management and knowledge creation. They found that diagnostic monitoring and corrective mechanisms were adopted widely and closely connected to explicit types of knowledge. Finally, the study by Silva and Ferreira (2010) was the most comprehensive study, incorporating the major elements of performance management. Their use of an integrative framework resulted in better understanding of how the elements were connected to each other. They discovered that the performance management elements of most organisations lacked coherence and were disjointed. Performance management issues included a lack of direction due to low awareness of specific objectives and poor translation of objectives into strategy, plans and appropriate measures and targets. This was compounded by insufficient formal information mechanisms and lack of reward systems. Thus, many opportunities for improvement were found in the case organisations. Future research in this area should strive to have a holistic approach to performance management rather than focus on one or two controls. When researchers begin to move towards the interconnectedness of performance management elements, the management of performance in the public sector will likely advance, enabling government institutions to cope well with multiple objectives and goals.

## Acknowledgment

This work is financially supported by the Malaysian Ministry of Education.

## References

- Ancelin-Bourguignon, A., Saulpic, O., & Zarlowski, P. (2013). Subjectivities and micro-processes of change in accounting practices: a case study. *Journal of Accounting & Organizational Change*, 9(2), 206–236. <https://doi.org/10.1108/18325911311325960>
- Anderson, R., & Klaassen, H. (2012). The fallacy of the context: An empirical study of the influence of the context on the use of performance management in the public sector. *International Journal of Productivity and Performance Management*, 61(5), 483–501. <https://doi.org/10.1108/17410401211232939>
- Auber, E., Chabaud, E., Chabernaude, A., Le Bras-Thomas, C., Longueville, E., & Suzat, E. (2014). Do English Local Authorities Still have the Means of their Performance? A French View on a Local Public Action in Crisis. In J. Diamond & J. Liddle (Eds.), *Critical Perspectives on International Public Sector Management* (Vol. 3, pp. 85–125). Emerald Group Publishing Limited. <https://doi.org/10.1108/S2045-79442014000003015>
- Barbato, G., & Turri, M. (2017). Understanding public performance measurement through theoretical pluralism. *International Journal of Public Sector Management*, 30(1), 15–30. <https://doi.org/10.1108/IJPSM-11-2015-0202>
- Bedford, D. S., & Malmi, T. (2015). Configurations of control: An exploratory analysis. *Management Accounting Research*, 27, 2–26. <https://doi.org/10.1016/j.mar.2015.04.002>
- Deakins, E., Dillon, S., Al Namani, H., & Zhang, C. (Kevin). (2010). Local e-government impact in China, New Zealand, Oman, and the United Kingdom. *International Journal of Public Sector Management*, 23(6), 520–534. <https://doi.org/10.1108/09513551011069004>
- Dormer, R., & Gill, D. (2010). Managing for performance in New Zealand's public service – a loosely coupled framework? *Measuring Business Excellence*, 14(1), 43–59. <https://doi.org/10.1108/13683041011027445>

- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Esposito, V., De Nito, E., Pezzillo Iacono, M., & Silvestri, L. (2013). Dealing with knowledge in the Italian public universities: The role of performance management systems. *Journal of Intellectual Capital*, 14(3), 431–450. <https://doi.org/10.1108/JIC-03-2013-0035>
- Ferreira, A., & Otley, D. (2009). The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research*, 20(4), 263–282. <https://doi.org/10.1016/j.mar.2009.07.003>
- Ferry, L., & Ahrens, T. (2017). Using management control to understand public sector corporate governance changes: Localism, public interest, and enabling control in an English local authority. *Journal of Accounting & Organizational Change*, 13(4), 548–567. <https://doi.org/10.1108/JAOC-12-2016-0092>
- Halkjær, S., & Lueg, R. (2017). The effect of specialization on operational performance: A mixed-methods natural experiment in Danish healthcare services. *International Journal of Operations & Production Management*, 37(7), 822–839. <https://doi.org/10.1108/IJOPM-03-2015-0152>
- Johnston, R., & Pongatichat, P. (2008). Managing the tension between performance measurement and strategy: coping strategies. *International Journal of Operations & Production Management*, 28(10), 941–967. <https://doi.org/10.1108/01443570810903104>
- Kroll, A., & Proeller, I. (2013). Controlling the control system: performance information in the German childcare administration. *International Journal of Public Sector Management*, 26(1), 74–85. <https://doi.org/10.1108/09513551311293435>
- Liguori, M., Sicilia, M., & Steccolini, I. (2014). Public Value as Performance: Politicians' and Managers' Perspectives on the Importance of Budgetary, Accruals and Non-Financial Information. In J. Guthrie, G. Marcon, S. Russo, & F. Farneti (Eds.), *Studies in Public and Non-Profit Governance* (Vol. 3, pp. 85–104). Emerald Group Publishing Limited. <https://doi.org/10.1108/S2051-663020140000003004>
- Otley, D. (1999). Performance management: a framework for management control systems research. *Management Accounting Research*, 10(4), 363–382. <https://doi.org/10.1006/mare.1999.0115>
- Sandelowski, M. (2009). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, n/a-n/a. <https://doi.org/10.1002/nur.20362>
- Seuring, S., & Gold, S. (2012). Conducting content-analysis based literature reviews in supply chain management. *Supply Chain Management: An International Journal*, 17(5), 544–555. <https://doi.org/10.1108/13598541211258609>
- Silva, P., & Ferreira, A. (2010). Performance management in primary healthcare services: evidence from a field study. *Qualitative Research in Accounting & Management*, 7(4), 424–449. <https://doi.org/10.1108/11766091011094527>
- Stringer, C. (2007). Empirical performance management research: observations from AOS and MAR. *Qualitative Research in Accounting & Management*, 4(2), 92–114. <https://doi.org/10.1108/11766090710754187>
- Taylor-Powell, E., & Renner, M. (2003). *Analyzing Qualitative Data* (booklet No. G3658-12) (p. 10). Madison, Wisconsin: University of Wisconsin. Retrieved from <https://learningstore.uwex.edu/assets/pdfs/g3658-12.pdf>
- Trondal, J. (2015). Ambiguities in organizations and the routines of behavior and change. *International Journal of Organizational Analysis*, 23(1), 123–141. <https://doi.org/10.1108/IJOA-04-2013-0654>
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study: Qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398–405. <https://doi.org/10.1111/nhs.12048>
- Vieira, R., O'Dwyer, B., & Schneider, R. (2017). Aligning Strategy and Performance Management Systems: The Case of the Wind-Farm Industry. *Organization & Environment*, 30(1), 3–26. <https://doi.org/10.1177/1086026615623058>
- Yuen, P. P., & Ng, A. W. (2012). Towards a balanced performance measurement system in a public health care organization. *International Journal of Health Care Quality Assurance*, 25(5), 421–430. <https://doi.org/10.1108/09526861211235919>