PERFORMANCE MEASUREMENT SYSTEM IN LOCAL GOVERNMENTS: A CRITICAL ANALYSIS AND ADVANCEMENTS

Enrico Sorano [*], Paolo Pietro Biancone [*], Guido Giovando [**], Alberto Sardi [*]

* Department of Management, University of Turin, Turin, Italy
** *Corresponding author*, Department of Management, University of Turin, Turin, Italy
Contact details: Department of Management, University of Turin, Corso Unione Sovietica, 218 bis, Turin 10134, Italy

Abstract

The literature highlights the need to develop and utilise a balanced, dynamic, and multi-perspective performance measurement system (PMS) for managing organisations. The system should report the key performance indicators (KPIs) to support decision-making processes. Although the useful approaches for the development of this system are described in the literature, they are not sufficiently applied to public organisations. Hence, this paper aims to identify and apply a useful approach for PMS design in a local government according to national legislation. A qualitative case study method is adopted in this research. It is recognised as the most effective method for obtaining an in-depth understanding of complex environments. To define the steps for developing a PMS, the context and regulation of an Italian municipality are investigated in this research. The result highlights the steps of PMS development suggested by national legislation. It illustrates a local government context, highlighting the considerable complexity of the organisational perspective and numerous controls to carry out to be compliant with the legislation background. The contribution of this study is twofold. First, the study contributes to the performance measurement literature through the approach definition of PMS development in local governments. Second, it contributes to practice by providing a useful case study of PMS development of local governments according to a national legislation background. The research describes a useful approach for designing a PMS in a complex and bureaucratic environment. Moreover, it highlights the main steps to develop a performance measurement system in a local government.

Keywords: Performance Measurement System, Performance Management, Key Performance Indicators (KPIs), Public Sector, Local Government, Municipality

Authors' individual contribution: Conceptualisation — E.S.; Methodology — E.S.; Investigation — E.S.; Resources — E.S.; Writing — Original Draft — E.S.; Writing — Review & Editing — E.S.; Visualization — E.S.; Supervision — P.P.B., G.G., and A.S.; Project Administration — P.P.B., G.G., and A.S.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

A performance measurement system (PMS) is regarded in the literature as a useful tool for monitoring business strategy and supporting the decision-making process (Bourne et al., 2018; Sardi et al., 2022; Smith & Bititci, 2017). It underlines the key role of a balanced, dynamic, and multi-perspective PMS to represent organisational performance (Barbato & Turri, 2017; Bianchi et al., 2017; Bourne et al., 2018; Garengo & Sardi, 2021; Sardi & Sorano, 2019; Taticchi et al., 2015). PMS can be implemented in private and public organisations (Bititci et al., 2012; Cepiku et al., 2017; Garengo & Sardi, 2021). However, public organisations (i.e., local governments, public healthcare facilities, transport companies, and schools) have a challenging context for the design, implementation, and adoption of a PMS (Agostino & Arnaboldi, 2018; Arnaboldi & Azzone, 2010; Björk et al., 2014; Fryer et al., 2009; Giacomelli et al., 2019). Public organisations should include numerous performance measures in their PMS to represent different stakeholders such as citizens, companies, not-for-profit organisations, and other institutions (Kaplan, 1999).

To control business strategy implementation through PMS, each public organisation should identify its critical success factors (CSFs), including skills, activities, and behaviours, which are useful for achieving the mission and strategic objectives of the organisation (Kaplan & Norton, 1992). Each organisation should therefore define a PMS that is suitable for capturing the complexity and transforming the strategic objectives into performance indicators that can effectively represent organisational performance. Numerous case studies on this matter are presented in the literature. However, national governments define the multiple CSFs of public organisations through legislation (DiMascio & Natalini, 2013; Sardi et al., 2020), for instance, the transparency of administrative acts. These CFSs strongly impact the strategies of public organisations. Although scholars recognise the key role of regulations in the development of a public organisation's strategy and consequently PMS design (Garengo & Sardi, 2021), the scientific literature rarely investigates this aspect of PMS development, especially in local governments (Sardi et al., 2020). To fill this research gap, the paper aims to identify the steps of PMS design in a local government imposed by national regulations. The paper addresses the following research question:

RQ1: According to national legislation, what are the main steps of performance measurement system development in local government?

The paper is organised into several sections. Section 2 highlights the literature relating to performance measurement to identify a useful performance measurement approach for a local government according to national regulations. Section 3 describes the method adopted in this research. Section 4 explains the results obtained from the case study. Section 5 bridges the literature background and research findings. Finally, Section 6 reports the contributions, implications, limitations, and future opportunities related to PMS development.

2. LITERATURE REVIEW

Since the 1980s, public reforms have required the performance improvement of public organisations, particularly the enhancement of the efficiency and/or effectiveness of their actions (Hood, 1989, 1991). To obtain these results, public reforms suggest the adoption of management tools (Commonwealth Association for Public Administration and Management [CAPAM], 1995); one of these management tools is the performance measurement system (Modell, 2001, 2005). PMS is a strategic system that helps the decision-making process through performance measurement activities such as collecting, analysing, and reporting key performance information (Garengo & Sardi, 2021; Smith & Bititci, 2017).

Performance measurement approaches that connect planning and strategy execution are underscored in the literature; these approaches relate to organisational governance needs that are shifting from simple profit maximisation to the satisfaction of stakeholder interests (Arnaboldi & Azzone, 2010; Kaplan, 1999; Sardi et al., 2020). Although numerous scholars have proposed innovative performance measurement approaches that are suitable for public organisations (Agostino & Arnaboldi, 2018; Moullin, 2017; Sardi et al., 2020, 2022), the balanced scorecard is still the most commonly adopted model, as recently underlined by Garengo and Sardi (2021). This model is a balanced and multi-perspective performance measurement model; it is characterised by a holistic vision through a limited number of critical success factors and key performance indicators (KPIs) that help with strategic control (Kaplan & Norton, 1992). In the balanced scorecard, organisational strategy is translated into a set of measurable objectives, thereby allowing the verification of the achievement of strategic goals at any time (Kaplan & Norton, 2005).

Organisational strategy is one of the balanced scorecard milestones; it pertains to a set of decisions aimed at defining the position of the organisation in a specific context to favour long-term sustainability. The object of the strategy of public organisations is citizen satisfaction in strategic areas of services (Kaplan, 1999; Mintzberg, 1994). The success of an organisational strategy depends on the ability to formulate actions, which requires a logical path that can connect CSFs and KPIs through a strategic map. It describes this path through 20/30 KPIs (Marr, 2012). Therefore, other milestones are the strategic map, CSFs, and KPIs. The *strategic map* provides a visual representation of an organisation's critical objectives through four perspectives: finance, customer, internal process, and learning and growth (Kaplan & Norton, 1992). Critical success factors represent key drivers for achieving strategic goals (Kaplan & Norton, 1992); they considerably differ between the public and private sectors (Syed et al., 2018). Public organisations focus their strategy on a community's needs, for instance, the needs of a region or a country. By contrast, private organisations direct their strategy towards the needs of an individual or a group. The mission and vision of public organisations are based on public interest elements, societal objectives, and outcomes that can be difficult to quantify; on the contrary, the mission

and vision of private organisations are founded on the maximisation of shareholder return on investment, profitability, and stakeholder value (Tregear & Jenkins, 2007). Public organisations then identify public CSFs and consequently adopt KPIs in line with their mission and vision. A KPI or metric or measure is the qualitative or quantitative assessment of the efficiency and/or the effectiveness of a key action for strategy implementation (Bititci, 2015).

The literature shows the failure of a PMS that is exclusively based on economic or financial KPIs; it also underlines the key role of non-financial measures in supporting the definition of social results obtained by organisational activities (Benington & Moore, 2010; Jarrar & Schiuma, 2007). In this context, the balanced scorecard is the most effective performance measurement model for this purpose. However, to apply this model to public organisations, the literature suggests some changes according to the features of public organisations (Inamdar & Kaplan, 2002; Kaplan, 1999; Kaplan & Norton, 2001; Northcott & Ma'amora Taulapapa, 2012). The main feature of public organisations is their mission orientation, that is, the satisfaction of user needs (Osborne, 2010). Due to this feature,

the economic and financial perspective is not the primary goal of public organisations, even though it provides the resources needed to achieve their mission (Niven, 2008). The typical target of this perspective is a balanced budget, which is recognised as a constraint on the mission of a public organisation (Kaplan, 1999).

As Kaplan and Norton (2001) suggest, the balanced scorecard can be used in the public sector by editing the scorecard via the insertion of customers at the top of the hierarchy (Kaplan, 2006; Kaplan & Norton, 2001; Niven, 2008; Northcott & Ma'amora Taulapapa, 2012).

According to Kaplan (1999), public organisations should identify an overall goal that is related to their mission. To include this consideration, Kaplan (1999) proposed a public balanced scorecard that represents a new approach based on the relevance of the customer perspective, which is extended to all citizens (see Figure 1). This perspective plays a vital role in public organisations as it determines the achievement of their mission; for instance, it can be measured by the citizens' satisfaction.

Figure 1. Balanced scorecard for the public sector: Theoretical model
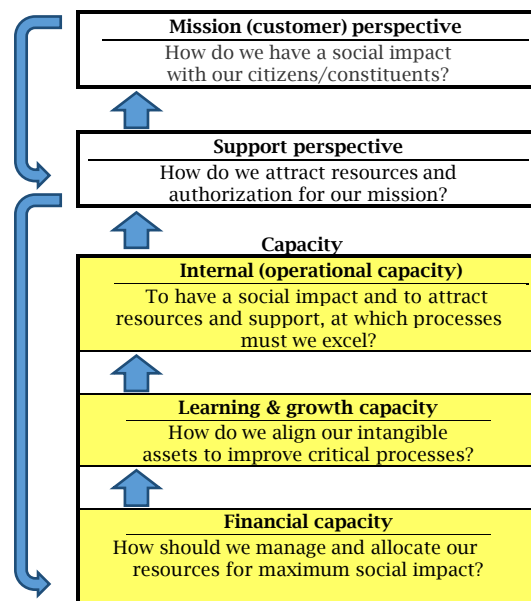
Source: Kaplan (2006)

According to the public balanced scorecard, PMS design is governed by the following perspectives:
- mission perspective;
- support perspective;
- capacity perspective:
  - financial capacity;
  - learning and growth capacity;
  - operational capacity.

Finally, this section highlights the most commonly used performance measurement model, that is, the public balanced scorecard (Garengo & Sardi, 2021). Although the legislation constitutes a key constraint, imposed by public authorities, in strategic development and consequently in PMS design, scholars underscore the need to identify

the steps of PMS design in a local government according to national regulations (Sardi et al., 2021).

3. RESEARCH METHODOLOGY

The case study method was adopted in this research. It is recognised as the most effective approach for obtaining an in-depth understanding of complex environments, as highlighted by numerous researchers (Fosso Wamba et al., 2015; Garengo & Biazzo, 2013; Yin, 2017). It has been used in many disciplines (e.g., social sciences, economics, management, engineering, education and law) and adopted by many studies (Gomes et al., 2010; Jääskeläinen & Laihonen, 2013; Nudurupati et al., 2021; Rizzi et al., 2021). The focus of this method is

on the exploration of complex phenomena within real-life settings; the context is integral to the research and the researcher does not exclude or control for those factors. The method characteristics include multiple sources of evidence, in-depth investigation and context-based study (Yin, 2017). It involves more than one unit of analysis and consequently favours theory development (Eisenhardt, 1989). A case study is considered a relevant research approach when answering research questions such as '*how*' and '*why*' things are done (Yin, 2017). This method is strongly suggested for studies where theories are at their formative stage (Eisenhardt, 1989).

The Italian context was investigated in this research; the context and regulation of the Italian municipality were specifically examined in an in-depth manner to define the steps for developing a PMS. The data were collected from three sources of evidence: 1) documents, 2) semi-structured interviews, and 3) observations. These three sources of evidence enabled the authors to gather documents, information, and reports to identify the context of an Italian municipality and the steps of PMS development according to Italian legislation. The authors gathered the data from January 2022 to June 2022. As recommended by Yin (2017), the information was gathered from the following sources:

1. *Documents:* 15 documents, of which:
- 11 reports with performance measurement information about 6 control typologies:
  – administrative & accounting control;
  – management control;
  – strategic control;
  – financial balance control;
  – control of external management bodies and unlisted investee companies;
  – service quality control (perceived quality & delivered quality).
- 4 covered regulations as amended or added (see Table 1):
  – Legislative Decree 267/2000: Unique text of the laws on the regulation of local bodies;
  – Legislative Decree 150/2009: Provisions for the optimisation of public labour productivity, efficiency, and transparency;
  – Law 118/2011: Provisions for the harmonisation of accounting systems and budget formats of the regions and local authorities;
  – Law 190/2012: Provisions for the prevention and repression of corruption and illegality in public administration.

2. *Interviews:* 12 semi-structured interviews with public managers. The interviews lasted about 1 hour. The authors interviewed the following public manager:
- No. 1 Mayor;
- No. 1 Administrative director;
- No. 1 Chief financial officer;
- No. 2 Legal manager;
- No. 3 Management control managers;
- No. 4 Administrative managers.

3. *Observations:* 10 full job days subdivided into different public functions.

The authors collected the materials on digital and paper supports. The data were entered in predefined forms to facilitate the summarisation

and comparison. They subsequently examined the data through a within-case analysis (Yin, 2017); this analysis allowed the authors to obtain a full understanding of a single case. Furthermore, the focus of this analysis is on the emergence of the unique attributes and patterns of a case before the researcher attempts to locate general patterns and themes that exist across all cases (Mills et al., 2010). A within-case analysis is also beneficial for:

- understanding a local administration context and the factors affecting the main PMS development in a local government, such as organisational context, internal control, and regulations;
- defining the steps of PMS design.

4. RESULTS

4.1. Major changes in the internal control system and legislation

Municipalities, provinces, metropolitan cities, regions, and the state constitute the Italian Republic. Municipalities, provinces, metropolitan cities, and regions are autonomous bodies with their statutes, powers, and functions according to the principles established by the Constitution (Article 114 of the Constitution of Italy). Municipalities, provinces, metropolitan cities, regions, and the state favour the autonomous initiative of citizens, individuals, and associates, to conduct activities of general interest, based on the principle of subsidiarity (Article 118 of the Constitution of Italy).

A municipality is a local government; municipalities have administrative functions according to their respective competencies. In the Constitution of Italy, municipalities are recognised as autonomous entities, with their statutes, powers, and functions that can be exercised in compliance with the key principles derived from the constitution. The municipality is the local authority that represents its community, oversees its interests, and promotes its development.

The internal control of local authorities is based on six controls (Court of Auditors, 2019):

1. *Administrative accounting control* involves the verification of the legality, regularity, and correctness of administrative action through administrative and accounting controls.

2. Management control entails the verification of the effectiveness, efficiency, and cost-effectiveness of the administrative action to optimise the relationship between objectives and actions undertaken and between resources and results.

3. *Strategic control* involves the evaluation of the choices made during the implementation of plans and programs for determining the political direction in terms of consistency between the results achieved and the objectives.

4. *Financial balance control* requires the checking of the financial balance of accrual, residual, and cash management to achieve public finance objectives.

5. *The control of external management bodies and unlisted participated companies* involves the verification of the consolidated financial statements, and the effectiveness, efficiency, and economy of external management bodies and unlisted participated companies.

6. *Services quality control* requires the verification of the quality of services provided, both directly and via external management bodies, by ensuring the satisfaction of the external and internal users of the body.

A national reform was implemented in 2012 to strengthen internal controls (Law Decree 174/2012); its focus is largely on the internal control of financial balances, as well as the effectiveness, efficiency, cost-effectiveness, and quality of services. Management control and strategic control have been integrated with control over financial balances and with investee organisations. This reform introduces the quality control of the services provided, both directly and through external management bodies, via methodologies aimed at measuring customer satisfaction. This reform develops a complex network of internal controls, which verifies the administrative structure of the entity, the achievement of management objectives, and the actions implemented. The new internal control structure also provides for sanctions on directors.

Management control evaluates the public entity, with particular attention to the policies, programs, projects, and services offered by the entity. It uses indicators to monitor the effectiveness (achievement of management objectives), efficiency (ratio between resources used and quantity of activities/services performed), cost-effectiveness, and quantity/quality of services compared to the expected standards. The main outcome of management control is the application of corrective measures in case of wrong decisions of the entity.

Strategic control is a fundamental choice of planning and management of the Council and the Executive. The political bodies indicate the objectives of the planning activity, whereas internal control bodies periodically check the progress of the programming. The reports made by the strategic control body to the political bodies ensure that they draft important resolutions on the implementation of programs.

Strategic control entails the evaluation of projects in view of the results obtained, extending the examination to various sectors. Furthermore, it requires the assessment of the results concerning the predetermined objectives by analysing the performances of administrators, the resources employed, implementation times, operational procedures activated, and user satisfaction. The negative results of the control call into question the choices made and highlight the necessity to remedy them.

Among the KPIs that institutions most commonly use are the indicators of effectiveness (approximately 68%), efficiency (approximately 59%), cost-effectiveness (roughly 49%), results (approximately 45%), context (approximately 34%), and innovation and development (about 29%) (Court of Auditors, 2019). These indicators allow the comparison between objectives and results and between expected times and achievements. On the contrary, the least commonly used KPIs are the ones related to financial statements, and indicators such as financial and equity indicators are the least commonly used indicators. Strategic control not only indicates support for politics but also signifies an administrative activity. It is related to quality control and user satisfaction.

Strategic control requires the ability to plan and program performance. Given the aforementioned reasons, strategic control should be integrated with management control.

Table 1. Within-case study of an Italian municipality

Dimension	Description
Municipality profile	A municipality is a local government. It represents its community, oversees its interests, and promotes its development. It has administrative functions concerning its population and territory. A municipality provides personal and community services, and it is tasked with environmental management and economic development. Furthermore, it performs administrative functions for the services of state competence, for example, electoral services or those of civil status and registry office.
Internal control	The internal controls of local authorities are organised as follows: • administrative & accounting control; • management control; • strategic control; • financial balance control; • control of external management bodies and unlisted investee companies; • service quality control (perceived & delivered quality).
Main legislations*	• Legislative Decree 267/2000: Unique text of the laws on the regulation of local bodies; • Legislative Decree 150/2009: Provisions for the optimisation of public labour productivity, efficiency, and transparency; • Law 118/2011: Provisions for the harmonisation of accounting systems and budget formats of the regions and local authorities; • Law 190/2012: Provisions for the prevention and repression of corruption and illegality in public administration.

*Note: * as amended or added.*

4.2. Stages of development of the PMS

The legislation reported in Table 1 determines the steps for establishing a new administration and consequently also indicates the steps for developing public strategy and a PMS, thereby allowing strategic control (see Figure 2).

*Step 1.* The first step for a municipality is the drafting of *programmatic lines* relating to the actions and projects to be implemented during the political mandate (within a term of 90 days of political establishment).

Step 2. After drafting the programmatic lines, the administration of a municipality should prepare the planning document. A planning document is a tool for defining the strategic and operational activities of local authorities in compliance with the financial statements. The document comprises two sections: 1) the *strategic section*, which includes multi-year planning (equal to the administrative mandate), and 2) the *operational section*, which

covers annual planning (equal to the budget). Furthermore, the strategic section defines the organisational strategic objectives according to the internal and external needs identified through specific analyses. By contrast, the operational section defines the following key planning documents for the local authority:

• the program of public works and the program of purchases of goods and services, including annual updates;
• the plan for the disposal and enhancement of the available real estate assets;
• the program of the assignments; and
• the plans for the rationalisation and requalification of expenditure.

Figure 2. Steps of PMS development within the case study: Practical model
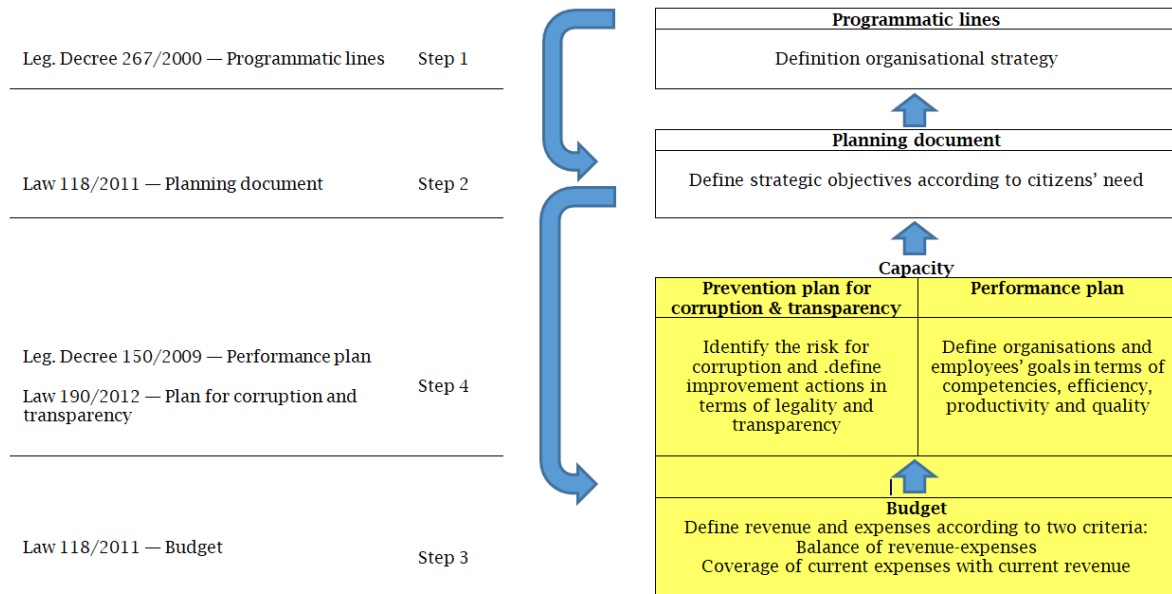
Step 3. The correct approval of the budget is essential because the accrual and cash forecasts of the budget are resolved based on the strategic and operational guidelines of the planning document. Every year on November 15, the municipal council presents the update of the planning document and the draft resolution of the budget.

The budget and balance sheet regulate the economic and financial activities of a municipal administration and determine the income and expenses of a municipality over a year. They cover the planning of municipal public interventions and reporting of income and expenses, thereby allowing the definition of the resources necessary for a public body.

The budget (authorises income and expenses) and the balance sheet (reports on income and expenses) are based on two systems: accrual accounting and cash management. Accrual accounting is concerned with the revenue collected and the expenses incurred during the year, even though the collection and payment are made at different times. The focus of cash management is on the income and expenses that the municipality has collected and paid during the year. The amounts relating to the accruals and cash items are both reported in the budget and the final balance sheet.

The budget is a programmatic document through which the municipal body authorises the expenses that the departments may incur in the subsequent year. These expenses are related to the income that the municipality expects to have to provide fair financial coverage of the expenses. The main CSFs are the balance between the total

revenue and the total expenditure entered into the budget, and the cover of current expenses with current revenues. The budget must be approved by the city council on December 31 of the year preceding the one to which it refers.

The balance sheet reports to citizens the usage of municipal resources during the year and the types of revenues that were collected. It includes three parts: the income and expenditure committed, the income and expenses collected and paid, and the management of residuals. The final balance comprises two main results, namely cash and administration results.

Another document is the executive management plan. It is prepared by the general secretary and by the managers of the local authority within 20 days of the approval of the financial statements. The executive management plan identifies the management objectives and entrusts the resources to the service managers. The executive management plan is a key tool for linking the political and management functions; it also connects the annual budget, the planning document (via the assignment of management objectives and resources to managers), and the organisational structure of the local authority. It also translates the objectives (included in the planning document) and the budget into management activities.

Furthermore, the executive management plan represents a management and reporting tool: it is the operational articulation of the budget. It is an authorisation tool as it constitutes a limit to the expenditure commitments undertaken by the service managers and to the payments relating

to the year. It is formulated on an accrual basis for each of the three years considered in the budget and cash concerning the first year of the three years considered in the budget. The executive management plan is a guiding tool for executives, which allows them to perform their functions with the autonomy required by law and with responsibility for achieving results.

Step 4. The performance plan is a three-year programmatic document defined by the political-administrative steering body in collaboration with the top management. It includes the executive management plan and the objectives plan. The executive management plan assumes the role of an operational programming tool, whereas the objectives plan defines the goals that are assigned. Furthermore, it defines the specific and annual objectives, the KPIs, the expected results and their measurement using adequate performance indicators, the instrumental and financial human resources assigned to the service managers in line with the objectives, the tools for monitoring, and the criteria for measuring organisational and individual performances.

Each public administration measures and evaluates the performance of the entity, organisational units, and employees. The aim of the measurement and evaluation of performance is twofold: to improve the quality of services offered by public administrations and to ensure the growth of professional skills through the enhancement of merit and the disbursement of benefits for the results pursued by individuals and organisational units. The evaluation and consequent enhancement of individual merit play an essential role in guaranteeing management efficiency and productivity.

The Legislative Decree 150/2009 dedicates several articles to the definition of individual benefits and results; it recognises the competition between individual employees as a management lever for improving the performance of public bodies.

As the term suggests, the performance plan transparently defines the blueprint for performance. It includes the following elements:
• implementation of policies and achievement of objectives related to the needs of the community;
• execution of plans and programs and measurement of their implementation concerning timing, efficiency, and qualitative and quantitative standards;
• detection of the degree of satisfaction of the recipients of the activities and services;
• ability to implement plans and programs and the level of professional skills;
• qualitative and quantitative development of relations with citizens, stakeholders, users, and recipients of the services, also through the development of forms of participation and collaboration;
• efficiency in the use of resources, with particular reference to the containment and reduction of costs, as well as to the optimisation of the times of administrative procedures;
• quality and quantity of the services provided;
• achievement of equal opportunity objectives (Scaletta, 2020).

The prevention plan of corruption and transparency identifies the risk of corruption and indicates the organisational interventions aimed at preventing the risk. The risk assessment and improvement actions represent the main activities of the Prevention Plan of Corruption and Transparency (lasting three years). The administrations assess the corruption risk according to the method for risk management, which includes the analysis of the internal and external contexts. Risk management involves the identification, analysis, and weighting of risk and the treatment of risk through preventive actions.

5. DISCUSSION

The results describe the regulation steps of PMS development and the context, internal control, and legislation related to an Italian municipality. The results illustrate a local government context, highlighting the considerable complexity of the organisational perspective and numerous factors affecting the PMS design. However, the main factor is the legislation; it indicates the steps of PMS design, a tool that allows strategic control.

The legislation obliges the production of various programmatic and executive documents that provide the economic, managerial, and organisational tools of public administrations. It also defines some critical success factors of public administrations. For example, from an economic viewpoint, the CSFs are the balance between the total revenue and the total expenditure entered into the budget and the cover of current expenses with current revenues. From an organisational standpoint, the CSFs are productivity and efficiency. These economic-organisational CSFs should entail the control of a public organisation's mission (i.e., represent its community's needs, the so-called '*mission-oriented*').

As highlighted in the literature, legislation plays a key role in defining the organisational strategy. On the one hand, legislation supports the administrations through the definition of regulations indicating the use of economic-organisational tools. On the other hand, it indicates the CSFs of an administration. Given this context, the political function must align governance and organisational strategy with the legislation; otherwise, the risk of non-compliance ensues.

According to this study, the development of a PMS has to follow national regulations. To do so, the preliminary step is the mapping of the legislation to define the stages of performance measurement design. A public administration must subsequently declare the objectives of the political mandate and define its strategies. It allows the communication of short- and long-term goals to internal and external stakeholders, and it must later identify its 'capacities'. First, the budget defined by a public administration becomes a strategic financial document to identify revenues and expenses that a local government may incur during the succeeding year. These expenses are related to the income that expects to have to provide fair financial coverage of the expenses. Second, public administration: a) defines the goals of organisational units and employees' goals in terms of competencies, efficiency, productivity, and quality; and b) identifies

the risk for corruption and improvement actions in terms of legality and transparency. The 'capacities' of a local government enable it to satisfy the needs of citizens and to achieve the strategic objectives of the political function.

As illustrated in Figure 3, the case study approach almost totally follows the balanced scorecard for the public sector proposed by Kaplan (1999).

Figure 3. Steps of PMS development within the case study
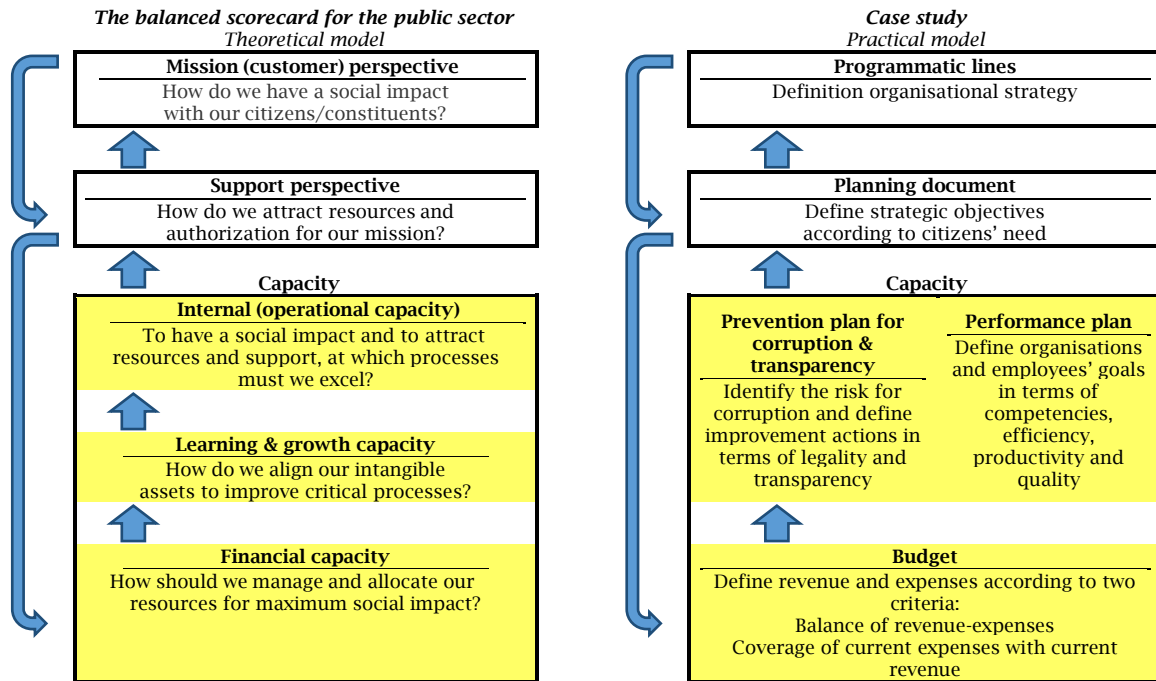
The approach that emerged during the case study responds to the needs of international public reforms that require a new paradigm emphasising the relations between public institutions and citizens; this paradigm is transforming the relationship from bureaucratic relationships focused on strategic choices relating to the general interest, where administrations are in a superior position concerning citizens, to relationships based on administrative legitimacy connected with the community and users' needs (Osborne, 2010). This new paradigm has led to the implementation of a PMS that is capable of managing results rather than rules. Although international reforms are pushing PMS from a performance measurement system to a performance measurement and management system (i.e., the processes that define what to measure and how to use the performance metric), the legislation rarely defines the processes of adopting this information for the improvement of organisational performance and improving the involvement of public employees and the citizens who should become co-protagonists in the development of social and economic policy according to recent internal calls.

6. CONCLUSION

The need for performance measurement systems for the optimal managing public organisations is underscored in this research. The public balanced scorecard is also highlighted as the most effective performance measurement model. As required by the literature background, the paper identifies the steps for developing a PMS according to national regulations. Furthermore, it compares the approach identified with the public balanced scorecard. Through a qualitative case study, the paper underlines how the identified approach follows the public balanced scorecard developed by Kaplan (1999).

The paper contributes to the theory of PMS development in local governments. It also contributes to practice through a useful case study on the approach selected. The research implications are twofold. First, this study provides local governments with insights into a rethinking of their PMS for strategic control. Second, the study contributes to the literature by offering new knowledge for performance measurement development in local bodies.

The main research limitation is the investigation of a unique country context, without any comparison to other public contexts. This aspect deepens the understanding of the distinct context of a country, which cannot be obtained in other ways. Nonetheless, further research should investigate other countries to compare the results of this study and improve the steps related to PMS development.

REFERENCES

1. Agostino, D., & Arnaboldi, M. (2018). Performance measurement systems in public service networks. The what, who, and how of control. *Financial Accountability and Management, 34*(2), 103–116. https://doi.org/10.1111/faam.12147
2. Arnaboldi, M., & Azzone, G. (2010). Constructing performance measurement in the public sector. *Critical Perspectives on Accounting, 21*(4), 266–282. https://doi.org/10.1016/j.cpa.2010.01.016
3. 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
4. Benington, J., & Moore, M. H. (2010). *Public value: Theory and practice.* Red Globe Press.
5. Bianchi, C., Bovaird, T., & Loeffler, E. (2017). Applying a dynamic performance management framework to wicked issues: How coproduction helps to transform young people's services in Surrey County Council, UK. *International Journal of Public Administration, 40*(10), 833–846. https://doi.org/10.1080/01900692.2017.1280822
6. Bititci, U. S., Garengo, P., Dörfler, V., & Nudurupati, S. (2012). Performance measurement: Challenges for tomorrow. *International Journal of Management Reviews, 14*(3), 305–327. https://doi.org/10.1111/j.1468-2370.2011.00318.x
7. Björk, L., Szücs, S., & Härenstam, A. (2014). Measuring capacity to perform across local government services — managers' perceptions. *International Journal of Public Sector Management, 27*(1), 26–38. https://doi.org/10.1108/IJPSM-09-2012-0115
8. Bourne, M., Franco-Santos, M., Micheli, P., & Pavlov, A. (2018). Performance measurement and management: A system of a systems perspective. *International Journal of Production Research, 56*(8), 1–12. https://doi.org/10.1080/00207543.2017.1404159
9. Cepiku, D., Hinna, A., Scarozza, D., & Savignon, A. B. (2017). Performance information used in public administration: An exploratory study of determinants and effects. *Journal of Management & Governance, 21*(4), 963–991. https://doi.org/10.1007/s10997-016-9371-3
10. Commonwealth Association for Public Administration and Management (CAPAM). (1995). *Government in transition.* Commonwealth Secretariat. https://doi.org/10.14217/9781848595286-en
11. Court of Auditors. (2019). *I controlli interni degli enti locali.* https://www.corteconti.it/Download?id=f94c5430-1b71-4bfd-9295-4863e03365a0
12. DiMascio, F., & Natalini, A. (2013). Context and mechanisms in administrative reform processes: Performance management within Italian local government. *International Public Management Journal, 16*(1), 141–166. https://doi.org/10.1080/10967494.2013.796263
13. Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review, 14*(4), 532–550. https://doi.org/10.2307/258557
14. Fosso Wamba, S., Akter, S., Edwards, A., Chopin, G., & Gnanzou, D. (2015). How "big data" can make a big impact: Findings from a systematic review and a longitudinal case study. *International Journal of Production Economics, 165*, 234–246. https://doi.org/10.1016/j.ijpe.2014.12.031
15. Fryer, K., Antony, J., & Ogden, S. (2009). Performance management in the public sector. *International Journal of Public Sector Management, 22*(6), 478–498. https://doi.org/10.1108/09513550910982850
16. Garengo, P., & Biazzo, S. (2013). From ISO quality standards to an integrated management system: An implementation process in SME. *Total Quality Management and Business Excellence, 24*(3–4), 310–335. https://doi.org/10.1080/14783363.2012.704282
17. Garengo, P., & Sardi, A. (2021). Performance measurement and management in the public sector: State of the art and research opportunities. *International Journal of Productivity and Performance Management, 70*(7), 1629–1654. https://doi.org/10.1108/IJPPM-03-2020-0102
18. Giacomelli, G., Annesi, N., Barsanti, S., & Battaglia, M. (2019). Combining ideal types of performance and performance regimes: An integrated framework of analysis of performance management systems for public organizations. *International Journal of Public Sector Management, 32*(7), 721–740. https://doi.org/10.1108/IJPSM-11-2018-0246
19. Gomes, R. C., Liddle, J., & Gomes, L. O. M. (2010). A five-sided model of stakeholder influence: A cross-national analysis of decision making in local government. *Public Management Review, 12*(5), 701–724. https://doi.org/10.1080/14719031003633979
20. Hood, C. (1989). Public administration and public policy: Intellectual challenges for the 1990s. *Australian Journal of Public Administration, 48*(4), 346–358. https://doi.org/10.1111/j.1467-8500.1989.tb02235.x
21. Hood, C. (1991). A public management for all seasons? *Public Administration, 69*(1), 3–19. https://doi.org/10.1111/j.1467-9299.1991.tb00779.x
22. Inamdar, S. N., & Kaplan, R. (2002). Applying the balanced scorecard in healthcare provider organizations. *Journal of Healthcare Management, 47*(3), 179–196. https://doi.org/10.1097/00115514-200205000-00008
23. Jääskeläinen, A., & Laihonen, H. (2013). Overcoming the specific performance measurement challenges of knowledge-intensive organizations. *International Journal of Productivity and Performance Management, 62*(4), 350–363. https://doi.org/10.1108/17410401311329607
24. Jarrar, Y., & Schiuma, G. (2007). Measuring performance in the public sector: Challenges and trends. *Measuring Business Excellence, 11*(4), 4–8. https://doi.org/10.1108/13683040710837883
25. Kaplan, R. (1999). *The balanced scorecard for public-sector organizations* (Article Reprint No. B9911C). Harvard Business Publishing. http://surl.li/gmmef
26. Kaplan, R. (2006, October 10–12). Using the balanced scorecard in the public sector [Conference presentation]. Paper presented at the *Government Summit 2006.* https://pdfs.semanticscholar.org/5559/32ad5b622e84f528309d98399f1e99585a90.pdf
27. Kaplan, R., & Norton, D. (1992). The balanced scorecard — Measures that drive performance. *Harvard Business Review, 70*(1), 71–79. https://steinbeis-bi.de/images/artikel/hbr_1992.pdf or https://hbr.org/1992/01/the-balanced-scorecard-measures-that-drive-performance-2

28. Kaplan, R., & Norton, D. (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part I. *Accounting Horizons, 15*(1), 87–104. https://doi.org/10.2308/acch.2001.15.1.87
29. Marr, B. (2012). *Key performance indicators (KPI): The 75 measures every manager needs to know* (1st ed.). Pearson.
30. Mills, A., Durepos, G., & Wiebe, E. (Eds.) (2010). *Encyclopedia of case study research.* SAGE Publications.
31. Mintzberg, H. (1994). The fall and rise of strategic planning. *Harvard University Review*, 72, 107–114. https://hbr.org/1994/01/the-fall-and-rise-of-strategic-planning
32. Modell, S. (2001). Performance measurement and institutional processes: A study of managerial responses to public sector reform. *Management Accounting Research, 12*(4), 437–464. https://doi.org/10.1006/mare.2001.0164
33. Modell, S. (2005). Performance management in the public sector: Past experiences, current practices, and future challenges. *Australian Accounting Review, 15*(37), 56–66. https://doi.org/10.1111/j.1835-2561.2005.tb00304.x
34. Moullin, M. (2017). Improving and evaluating performance with the public sector scorecard. *International Journal of Productivity and Performance Management, 66*(4), 442–458. https://doi.org/10.1108/IJPPM-06-2015-0092
35. Niven, P. R. (2008). *Balanced scorecard: Step-by-step for government and nonprofit agencies* (2nd ed.). John Wiley & Sons, Inc.
36. Northcott, D., & Ma'amora Taulapapa, T. (2012). Using the balanced scorecard to manage performance in public sector organizations: Issues and challenges. *International Journal of Public Sector Management, 25*(3), 166–191. https://doi.org/10.1108/09513551211224234
37. Nudurupati, S. S., Garengo, P., & Bititci, U. S. (2021). Impact of the changing business environment on performance measurement and management practices. *International Journal of Production Economics, 232,* Article 107942. https://doi.org/10.1016/j.ijpe.2020.107942
38. Osborne, S. P. (2010). *The new public governance? Emerging perspectives on the theory and practice of public governance.* Routledge. https://doi.org/10.4324/9780203861684
39. Rizzi, A., Sorano, E., Cerrato, S. A., Riganti, F., Stiari, A., Macrì, E., & Sardi, A. (2021). Civil liability of regional health services: The case of the Piedmont region. *International Journal of Environmental Research and Public Health, 18*(19), Article 9954. https://doi.org/10.3390/ijerph18199954
40. Sardi, A., & Sorano, E. (2019). Dynamic performance management: An approach for managing the common goods. *Sustainability, 11*(22), Article 6435. https://doi.org/10.3390/su11226435
41. Sardi, A., Sinicropi, S., Sorano, E., & Cantino, V. (2020). A performance measurement system to control investee companies: The case of the Municipality of Turin. *Azienda Pubblica, 4,* 403–418. https://iris.unito.it/retrieve/e27ce431-fe42-2581-e053-d805fe0acbaa/PAPER%202020%20AZIENDA%20PUBBLICA.pdf
42. Sardi, A., Sorano, E., Garengo, P., & Ferraris, A. (2021). The role of HRM in the innovation of performance measurement and management systems: A multiple case study in SMEs. *Employee Relations, 43*(2), 589–606. https://doi.org/10.1108/ER-03-2020-0101
43. Sardi, A., Sorano, E., Giovando, G., & Tradori, V. (2022). Performance measurement and management system 4.0: An action research study in investee NPOs by local government. *International Journal of Productivity and Performance Management, 72*(4), 849–872. https://doi.org/10.1108/IJPPM-10-2021-0607
44. Scaletta, A. (2020). *Valutazione e ciclo delle performance nel settore pubblico: Una guida completa.* https://www.forumpa.it/riforma-pa/valutazione-e-ciclo-delle-performance-nel-settore-pubblico-una-guida-completa/
45. Smith, M., & Bititci, U. S. (2017). Interplay between performance measurement and management, employee engagement and performance. *International Journal of Operations and Production Management, 37*(9), 1207–1228. https://doi.org/10.1108/IJOPM-06-2015-0313
46. Syed, R., Bandara, W., French, E., & Stewart, G. (2018). Getting it right! Critical success factors of BPM in the public sector: A systematic literature review. *Australasian Journal of Information Systems, 22.* https://doi.org/10.3127/ajis.v22i0.1265
47. Taticchi, P., Garengo, P., Nudurupati, S. S., Tonelli, F., & Pasqualino, R. (2015). A review of decision-support tools and performance measurement and sustainable supply chain management. *International Journal of Production Research, 53*(21), 6473–6494. https://doi.org/10.1080/00207543.2014.939239
48. Tregear, R., & Jenkins, T. (2007, October 2). Government process management: A review of key differences between the public and private sectors and their influence on the achievement of public sector process management. *BPTrends.* https://www.bptrends.com/publicationfiles/10-07-ART-Govt.ProcessMgt.-Tregear%20and%20Jenkins-ph.pdf
49. Yin, R. (2017). *Case study research: Design and methods* (6th ed.). SAGE Publications.