

Performance management from the outside-in: stakeholder engagement and perceived social impact as key drivers for purposeful performance information use

Outside-in performance management: coinvolgimento degli stakeholder e percezione dell'impatto sociale come leve per l'utilizzo delle informazioni di performance

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Summary: 1. Introduction – 2. Theoretical framework – 3. Methodology – 4. Results – 5. Discussion – 6. Conclusion

L'efficacia dei sistemi di performance management dipende da come i dirigenti utilizzano le informazioni disponibili all'interno dei processi decisionali. Ma quali sono i fattori che spingono i dirigenti pubblici ad utilizzare le informazioni di performance per prendere decisioni? Lo studio esamina il ruolo ricoperto da fattori ambientali, organizzativi, lavorativi e individuali all'interno della PA italiana. Attraverso un modello di equazione strutturale (SEM), il coinvolgimento degli stakeholder e l'impatto sociale percepito emergono come principali leve per l'uso delle informazioni di performance. I risultati promuovono una prospettiva "outside-in" sui sistemi di performance management: la pressione esterna degli stakeholder e la consapevolezza dell'impatto sociale generato attraverso il proprio lavoro spingono i dirigenti pubblici a utilizzare le informazioni di performance per raggiungere gli obiettivi.

The effectiveness of performance management systems relies on their use in managerial decision-making processes. However, what factors drive the purposeful use of performance information? The study examines the effects of environmental, organizational, work-related, and individual factors within the Italian local government. Through SEM, stakeholder participation and perceived social impact emerge as key drivers for purposeful performance information use. The findings advocate for an "outside-in" perspective on performance management, highlighting that external pressure from engaged stakeholders and managers' awareness of their work's societal impact motivate the use of performance information in achieving departmental goals.

L'efficacité des systèmes de gestion des performances repose sur leur utilisation dans les processus décisionnels. Mais quels sont les facteurs qui incitent les gestionnaires publics à utiliser les

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informations de performance pour prendre des décisions? L'étude examine le rôle des facteurs environnementaux, organisationnels, liés au travail et individuels au sein de l'administration publique italienne. À travers un modèle d'équation structurelle (SEM), la participation des parties prenantes et l'impact social perçu émergent comme des leviers clés pour l'utilisation des informations de performance. Les résultats favorisent une perspective «outside-in» sur les systèmes de gestion des performances: la pression externe des parties prenantes engagées et la prise de conscience de l'impact social généré par leur travail incitent les gestionnaires publics à utiliser les informations de performance pour atteindre leurs objectifs.

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1. Introduction

Performance management has long been at the heart of public sector reforms, and still today represents a focal point on the agenda of government organizations. Practices related to performance management are now common in many countries at various government levels (Bouckaert and Halligan 2008; Van de Walle and Bovaird 2007). Research shows that these practices are linked to improvements in both the quantity and quality of public organization performance (Verbeeten 2008).

However, the design and implementation of effective performance management systems demands organizational efforts. Merely collecting and integrating data into these systems is not enough to guarantee the success of performance-oriented reforms (Van Dooren et al. 2015). Performance management systems can only enhance outcomes and accountability if performance information is actively used in daily decision-making processes (Van Dooren 2008).

The academic literature has explored the potential antecedents of performance information use by managers in local governments (Melkers and Willoughby 2005; Ammons and Rivenbark 2008; Johansson and Siverbo 2009; Moynihan and Pandey 2010; Zhang et al. 2016; Dimitrijevska-Markoski and French 2019), but relevant gaps need to be further investigated. In this perspective, the present contribution empirically tests drivers of purposeful use of performance information in Italian local government, which represents an interesting research setting since performance information is mostly used in a passive way (Cepiku et al. 2017) and different combinations of conditions might affect the purposeful use of performance information (Vidè et al., 2024).

This study contributes to extant scholarship by measuring the impact of variables belonging to different types of antecedents: environmental, organizational, and individual. As for the environmental factors, one the most important drivers of data use have been analyzed, such as stakeholder participation (Kroll 2015a). From an organizational perspective, the dimension of red tape has been included, aiming to test the under-studied relationship between public-sector specific burdensome procedures and the use of performance information. Furthermore, the individual va-

riables are not limited to the sociodemographic characteristics of public managers, but consider their motivational profile in terms of Public Service Motivation (PSM). Finally, the study adds a fourth dimension of potential antecedents of performance information use, measuring the impact of public managers' perceptions towards their job and its capacity to produce social impacts.

An outline of the remainder of the article is as follows. The first section presents the theoretical background and the resulting hypotheses. In the second section, the methodology and the research design are described. The results of the analysis are presented in the third section. The final sections discuss the main findings and draw conclusions, highlighting the main contribution to public management scholarship and practice.

2. Theoretical framework

Performance management theories in the public sector have recently developed into the life-cycle framework (Matos et al., 2019), which proposes four stages for the adoption of performance management system by a public organization and supports the identification of specific problems within specific stages in the field of public sector performance management research (van Helden et al. 2012). First, the performance management system should be built by defining the type and the goal orientation of performance indicators (*design*). After being constructed, performance management systems are introduced in the organizational context by testing their functioning and engaging their internal users (*implementation*). The outputs of the performance management system are then applied for a broad spectrum of objectives, both internal and external (*use*). The process and the results of performance management are critically appraised to gather information for the redesign of performance indicators (*assessment*).

This theoretical framework resembles the models theorized in previous contributions. For instance, Johnsen (2005) focuses on how public sector performance is measured, how performance measurement models are implemented, how performance measures are used and which are the outcomes produced. Similarly, Likierman (1993) categorizes the lessons learnt about devising, implementing and using performance indicators into four groups: concept, preparation, implementation and use.

The performance management life-cycle generates intended and unintended effects both on individual behaviors (Arnaboldi et al. 2015) and organizational effectiveness (Gerrish 2016), which are influenced by the environment in which the organization operates (van Helden et al. 2012). This means that various factors might impact the four stages of the performance management life-cycle.

In line with these theoretical premises, by adopting a contingency approach (Kroll 2015b), the study explores whether and how environmental, organizational, working and individual conditions might affect a spe-

cific stage of the performance management life-cycle, i.e. the use of performance information.

Purposeful performance information use

The effectiveness of performance management depends on whether the information produced by performance measurement systems is actually used by public managers (Lavertu and Moynihan 2013; Julnes and Holzer 2001). To answer the question posed by Moynihan, Pandey and Wright (2012a), if managers do not use performance data there is not such a thing as performance management, since measuring and reporting performance information does not necessarily lead to its utilization (Ammons et al. 2013).

However, the sole use of performance information is not enough to guarantee the success of performance management systems, since performance information should be meaningfully used for guiding management decisions and improving public services (Micheli and Pavlov 2020). In this sense, Moynihan (2009) theorizes the concept of *purposeful* performance information use, suggesting that the effectiveness of performance management systems depend on whether civil servants utilize data to enhance strategic decision-making, allocate resources more effectively, facilitate learning, and make personnel decisions, including rewards and sanctions, all with the aim of improving performance.

This definition is coherent with other categorizations of performance information use: for instance, the learning, steering and controlling functions identified by Van Dooren, Bouckaert and Halligan (2015) rely within the broader category of purposeful use, as well as most of the activities described by Behn (2003), such as evaluation, control, budget, motivation, celebration, learning, and improvement.

However, purposeful performance information use is not the only option (Moynihan 2009). Public managers can employ performance data for passive purposes, either exclusively or in combination with purposeful uses (Micheli and Pavlov 2020), aiming to comply with formal requirements without actually taking advantage of performance information for improving public services. Moreover, in navigating interests and ambiguous goals, public decision-makers (both at political and managerial levels) may utilize performance information to justify their decisions to stakeholders or advance specific positions (Korac et al. 2020). In this political context, performance data might be employed to advocate for resources, prove programs success, ex-post rationalize actions, or gain external legitimacy (Giacomini et al. 2016; Nitzl et al. 2019), thereby assuming a political and legitimizing function that can supplement or complement purposeful uses. This dynamic between policymakers and public management in the principal-agent relationship may also result in agents misusing performance measures to advocate their own interests (Choi and Park 2023). This could involve perversely manipulating data to maxim-

ze measured performance and hide lower than expected results, “where data are used in ways at odds with actual performance” (Choi and Woo 2022: 2036).

By exploring the factors that explain the use of performance data, the present study specifically focuses on purposeful performance information use, since this type of data utilization has been employed in most empirical studies on public organizations and is largely acknowledged as aligning with the intended outcomes of performance-oriented reforms in the public sector (Kroll 2015a). However, many studies have demonstrated that the relationship between purposeful performance information use and organizational performance is affected by managers’ operating context (Kim et al. 2020) and the maturity of the performance regimes (Han and Moynihan 2022), calling the need for further exploring the contingent drivers of performance data use.

Drivers of purposeful performance information use

The academic literature has studied several antecedents of purposeful performance information use. In his systematic literature review, Kroll (2015a) classifies the drivers of data use into environmental, organizational and individual factors. This framework coheres with previous theoretical models (e.g. Melkers and Willoughby 2005).

Following this categorization, the present study includes variables belonging to all three clusters: the participation of external stakeholders, the red tape of the organization, and the Public Service Motivation (PSM) of individual managers. Furthermore, the study includes the perceived social impact, which is related to individual perceptions about the benefits produced by their jobs, thus exploring a fourth dimension related to the characteristics of the work activities performed by individuals in a specific organizational and institutional context.

Stakeholder participation

External variables relate with internal organizational system resulting in intricate effects on the managerial effectiveness of performance measurement systems. Among the external factors, stakeholder engagement represents a critical enabling condition for the purposeful use of performance information (Yang and Hsieh 2007; Lee 2020). By institutionalizing external stakeholders as part of the performance management lifecycle, they are more likely to support the increased use of performance measurement (Berman and Wang 2000).

Specifically, elected officials and citizens are the most important external stakeholders for performance measurement in the public sector (Fountain et al. 2003). On the one hand, mayor and other city council members’ interest in performance information and benchmarking with other organizations support the integration of performance information in decision-making processes. On the other hand, citizens who are interested in the performance of public services put strong external pressure to hold managers accountable for results and improve the cost-efficiency and effectiveness of program

delivery (Ho 2006). Recent studies show that administrators and elected officials participating in the strategic planning process significantly enhance the use of performance information, while the beneficial impact of engaged citizens hinges on the ability to effectively simplify technical information for their understanding (Chen 2017). In this context, public managers are motivated to treat performance information with importance: they should stay informed about their department's data, performance trends, and explanations for any anomalies (Moynihan and Ingraham 2004). Previous empirical results confirm the positive relationship between performance measurement and stakeholder participation (Julnes and Holzer 2001; Moynihan and Ingraham 2004; Yang and Hsieh 2007), which is classified as an important driver of purposeful performance information use (Kroll 2015a).

H1: Stakeholder participation is positively associated with purposeful performance information use

Red tape

Red tape can be defined as the organizational context in which rules and procedures are burdensome and counterproductive, since they are not perceived to contribute to the fulfilment of their functional objective (Bozeman and Feeney 2011). Many studies confirm the negative impact of red tape on employee motivation (Pandey, Coursey and Moynihan 2007) and organizational performance (Jacobsen and Jakobsen 2017).

In this situation, employees are more willing to apply personal discretion and find ways to bypass formal organizational systems. For instance, they might not seriously consider performance data, or alter those data and increase performance cheating (Kroll and Vogel 2021). This might be due to different reasons. Public managers that face limitations in their ability to implement changes might perceive limited benefits in using performance information, especially when it indicates the necessity for new organizational processes that are unattainable because of red tape (Moynihan, Pandey and Wright 2012b). Also, red tape generates a sense of alienation in work environment, which might further detach individuals from their active involvement in performance management life-cycle.

Recent studies empirically suggest the negative relationship between red tape and the purposeful use of performance information. For example, van Noon and Jakobsen (2022) found that higher levels of red tape are associated with a reduced use of performance information for internal learning and dialogue (while increasing the use for external advocacy). Other studies emerge with inconsistent results, calling for further research on this relationship (Moynihan, Pandey and Wright 2012b).

H2: Red tape is negatively associated with purposeful performance information use

Perceived social impact

Besides environmental and organizational factors, the characteristics inherent to individuals' work and their perceived significance are likely to influence managerial attitudes towards the use of performance informa-

tion. Specifically, public managers who believe that their work can meaningfully affect citizens and generate relevant societal impacts are more motivated to do whatever it takes to improve the effectiveness of public services (Moynihan, Pandey, and Wright 2012b). This phenomenon finds its conceptual grounding in the construct of perceived social impact, which focuses on individuals' subjective perceptions of the outcomes or consequences of their actions (Grant et al 2007). Within this framework, the effects of perceived social impact on performance information use have been studied independently of related concepts such as Public Service Motivation (PSM) that, in contrast, relates to individual's intrinsic motivations and desires to serve the public good (FitzGerald 2020). In other words, managers may inherently have high levels of PSM, yet their use of performance information depends on whether they perceive how their work actually benefit others and satisfy their inner desire to serve the community (Moynihan, Pandey, and Wright 2012b).

In fact, using performance information represents an additional burden on individuals, making decision-making more complex and organizational life more challenging. Also, the purposeful use of performance information is a cognitive process that can be difficultly observed and rewarded. Under these conditions, just those managers that see the broader benefits of this organizational behavior are inclined to engage in extra-role behavior and bear the costs of using performance information for decision-making. From this standpoint, Moynihan and Pandey (2010) initially found that managers with awareness of the prosocial impact of their job are more likely to exert extra effort in utilizing performance information. According to recent theoretical propositions, employees who have a strong sense of perceived social impact and recognize the public benefit of their work, tend to utilize performance information more effectively in pursuit of their valued goals (FitzGerald 2020). Based on these theoretical premises, it is possible to hypothesize that the higher the perceived social impact of managerial work the higher the willingness to purposefully use performance information.

H3: Perceived social impact is positively associated with purposeful performance information use

Public Service Motivation

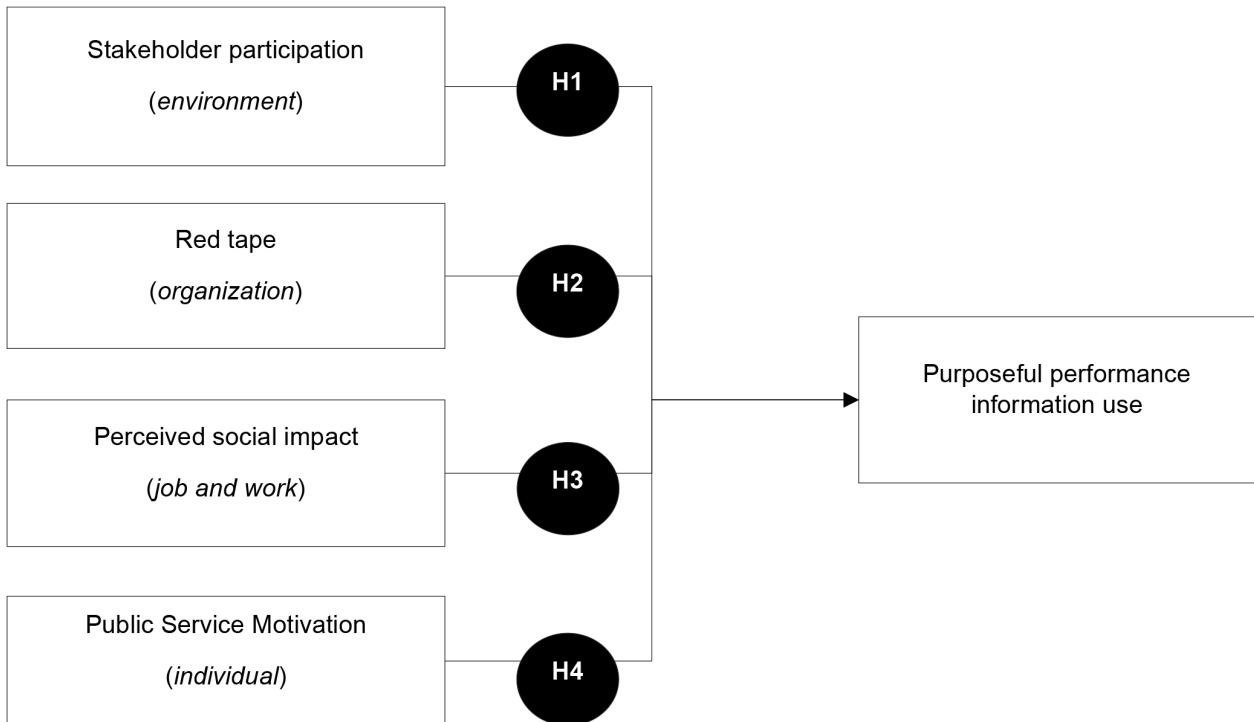
Public Service Motivation (PSM) is an individual characteristic that distinguishes the motivational profile of civil servants, since it regards the "predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry and Wise 1990: 368). Other definitions describe PSM as the motivational force that induce individuals to go beyond self and organizational interests, and to serve the interests of citizens, people, community (Brewer and Selden 1998; Rainey and Steinbauer 1999; Vandenabeele 2007).

PSM has been empirically proven to be positively correlated with purposeful use of performance information (Moynihan and Pandey 2010).

From a theoretical perspective, this relationship can be explained by two reasons. First, only those managers with high PSM are willing to consider performance information and increase the complexity and burden of their decision-making processes without tangible incentives. Second, managers with high PSM care about achieving societal goals and view the use of performance information as a means to enhance organizational performance and create public value. Recently, these motivations have been empirically confirmed by Tantardini (2022), who has found that PSM significantly mediates the relationship between organizational support capital and purposeful performance information use.

H4: Public Service Motivation (PSM) is positively associated with purposeful performance information use

Figure 1 – Conceptual framework and hypotheses



3. Methodology

Participants

In order to test the research hypotheses, an online survey was administered to executives and senior officials of two Italian Regions provided with organizational responsibilities that allow using performance information to make managerial decisions.

To balance confidentiality with maximizing participation, the survey allowed anonymous responses while collecting some control variables for demographics (e.g., sex, age) and working information (e.g., hierar-

chical level, prior experience). While it is acknowledged that anonymity opens room for multiple responses from a single person, this is considered highly unlikely in practice. Respondents' explicit consent was required before completion.

The survey was sent to 891 civil servants and 325 valid responses were collected with a response rate equal to 36,5%. Beyond the response rate, the item completion rate could be considered as a proxy of the survey's effectiveness: no missing data were reported, and the survey was fully completed by all respondents included in the sample.

Data had been collected in different time spans since the survey was directly administered by the organizations. Specifically, the timeframe goes from November 2022 to March 2023. At first, all respondents were given ten days to complete the survey. After checking for the response rate, each organization sent a reminder to non-respondent employees, extending the period to complete the survey for further 7 days. To control for possible response biases, early and late responses were compared by looking at the means of the descriptive variables and the scale-item responses, as well as an ANOVA analysis was performed. No statistically significant differences emerged.

Table 1 presents the demographic profile of the respondent sample, with a predominant representation of women (53,5%) and individuals aged over 45 years old (80,3%), who have been employed by the organization for more than three years (75,1%). Among the respondents, 18,5% are senior managers and 81,5% middle managers, whereas 63,7% possess previous experience in the private sector. Overall, sample data are consistent with the managerial workforce of the selected Regions in terms of gender and age, with the prevalence of women aged between 40 and 54 years old with a long working experience in the same organization.

Table 1 – Sample characteristics

Gender	
Male	120 (36,9%)
Female	174 (53,5%)
N.a.	31 (9,5%)
Age	
34 or less than 34 years old	17 (5,2%)
35-44 years old	47 (14,5%)
45-54 years old	125 (38,5%)
55 or more than 55 years old	136 (41,8%)

Seniority	
<i>Senior manager</i>	60 (18,5%)
<i>Middle manager</i>	265 (81,5%)

Working experience in the organization	
<i>Less than 1 years</i>	6 (1,8%)
<i>1-3 years</i>	75 (23,1%)
<i>More than 3 years</i>	244 (75,1%)

Previous experience in the private sector	
<i>Yes</i>	207 (63,7%)
<i>No</i>	118 (36,3%)

Measures

The study utilized scales validated in previous academic contributions to examine the antecedents of purposeful performance information use. To ensure cultural adaptation, all measures were translated into Italian with the assistance of a professional translator, employing a forward and back-translation process, as recommended by Eremenco et al. (2005). Subsequently, an expert panel refined the text of the questionnaire, adapting the wording to fit the unique administrative and regulatory context of the Italian civil service.

Purposeful performance information use. The purposeful use of performance information, defined as the desirable practice of using the information to improve public services (Moynihan 2009), is measured through two items ($\alpha=0.785$), empirically developed and tested in several academic contributions (e.g.: Moynihan and Pandey 2010; Moynihan, Pandey and Wright 2012a, 2012b). Specifically, the manager of each organizational sector was asked to answer the following questions "I regularly use performance information to make decisions" and "My department regularly compares actual achievement with performance objectives", with the response ranging from 1 (strongly disagree) to 7 (strongly agree). This scale has been recognized as an appropriate indicator of purposeful use of performance data given the development of empirical research.

Stakeholder participation. Stakeholders' involvement in the design and use of the performance management system is measured through the 7-point Likert scale used by Yang and Hsieh (2007). The index is composed of four items ($\alpha=0,875$) designed to gauge respondents' personal experience regarding the extent to which stakeholders (i.e. citizens and elected officials) participate in the formulation of performance indi-

cators, as well as evaluate and are familiar with the organization's performance results.

Red tape. Since red tape can be defined as the perception of rules having a negative impact on performance, the study measures how civil servants perceive the procedures related to their work as detrimental to effective service delivery. Specifically, red tape is measured through the three-item ($\alpha=0,862$) measurement instrument tested by Jacobsen and Jacobsen (2017), focused on how rules and procedures make the work environment more burdensome, time-consuming and impeding the achievement of actual goals. This five-point Likert scale coheres and resembles items with previous red tape scale (Van Loon et al. 2016).

Perceived social impact. Perceived social impact is measured through four items ($\alpha=0,936$) concerning the degree to which public managers feel that their efforts have a beneficial effect on people's lives. Specifically, the 7-point Likert scale on perceived social impact (Moynihan, Pandey and Wright 2012a) ask the respondents whether they feel that their work makes a positive difference in other people's lives, are conscious of this positive impact and of the ways in which their work is benefiting others.

Public Service Motivation. Public Service Motivation, defined as the individual "predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry & Wise 1990: 368), is measured through the 5-items ($\alpha=0,813$) version of the scale developed by Perry (1996). This measurement instrument has been subsequently used by several authors (e.g. Christensen and Wright 2011; Kim 2005; Pandey, Wright and Moynihan 2008; Wright and Pandey 2008) and has been already tested in the Italian public sector by Bellè (2013). All items use a 7-point Likert scale, ranging from 0 (strongly disagree) to 6 (strongly agree).

Scale reliability and validity

After the assessment of factor loading and model fit, the reliability and validity of the constructs were assessed. Construct reliability – the extent to which a set of variables is consistent in what it intends to measure – was tested through Cronbach's alpha and composite reliability coefficients: both the values are above the suggested threshold of 0.70 (Nunnally and Bernstein 1994) for the entire set of scales included in the study.

Regarding construct validity – the measure of how well the items selected for the construct actually measure this construct – two forms were assessed: convergent and discriminant validity. In all the scales, the selected items converge to measure the same underlying construct, since the Average Variance Extracted (AVE) is greater than the recommended threshold of 0.50 (Bagozzi and Yi 1998), meaning that the corresponding latent construct explains more than half of the variance in the belonging indicators.

Regarding discriminant validity, the amount of variance of each con-

struct was compared with the correlations involving the latent variables: applying the Fornell and Larcker criterion, for each construct the square root of the AVE is greater than its correlation with any other latent variable in the model. Data confirmed that the variables employed in the study are actually measuring different constructs, thus confirming discriminant validity.

To support these results, it is worth noting that all the employed scales have been empirically tested by international scholars in previous contributions, thus assuming content validity. Further details concerning the coefficients of construct validity and reliability for each scale are reported within the Appendix, as well as the results of the Exploratory Factor Analysis (EFA).

Data analysis

The items were entered into the SPSS 28 software package. The normality of the responses was assessed through a manual scanning of Q–Q plots; skewness and kurtosis were further checked for each item. Overall, items did not present relevant deviation from normality.

Before assessing the research hypotheses, an exploratory factor analysis (EFA) was performed through SPSS to ensure the reliability and validity of the constructs. Through the EFA, researchers checked that all the items loaded on the appropriate factors and had a correlation coefficient higher than 0.5. Items with coefficients lower than 0.6 were dropped from the analysis.

To assess the presence of common method bias, which could have a relevant confounding influence on empirical results, the Harman's ex-post one-factor test was performed. The results showed that one factor explained 27% of the total variance, suggesting a low chance of common method bias.

Afterward, a Confirmatory Factor Analysis (CFA) was performed. Both the unidimensionality and the discriminant validity of the data were confirmed. Specifically, the model showed an acceptable fit with a GFI index of 0.914, a CFI of 0.953 and NFI of 0.923 (all acceptable over 0.9) and RMSEA at 0.066 (acceptable under 0.08). Furthermore, the CMIN over degrees of freedom (CMIN/DF) was equal to 2.425, below the acceptable level of 3.0. When error covariances were allowed to correlate, as suggested by the modification index, the CMIN/DF dropped to 2.137 and the RMSEA to 0.059, while GFI, CFI and NFI increased respectively to 0.927, 0.964 and 0.935. Descriptive statistics for all variables included in the study are reported in Table 2.

Table 2 – Descriptive statistics

	N	Minimum	Maximum	Mean	Median	Standard Deviation
Performance information use	325	1.00	7.00	3,60	4,00	1,82
Stakeholder participation	325	1.00	7.00	2,94	3,00	1,62
Red tape	325	1.00	5.00	3,50	4,00	1,24
Perceived social impact	325	1.00	7.00	4,77	5,00	1,54
Public Service Motivation	325	1.00	5.00	3,86	4,00	1,05

4. Results

In order to test the hypothesized correlations among variables, a Structural Equation Model (SEM) was employed. Data were analyzed using AMOS 28 software and the main results are graphically represented in Figure 2.

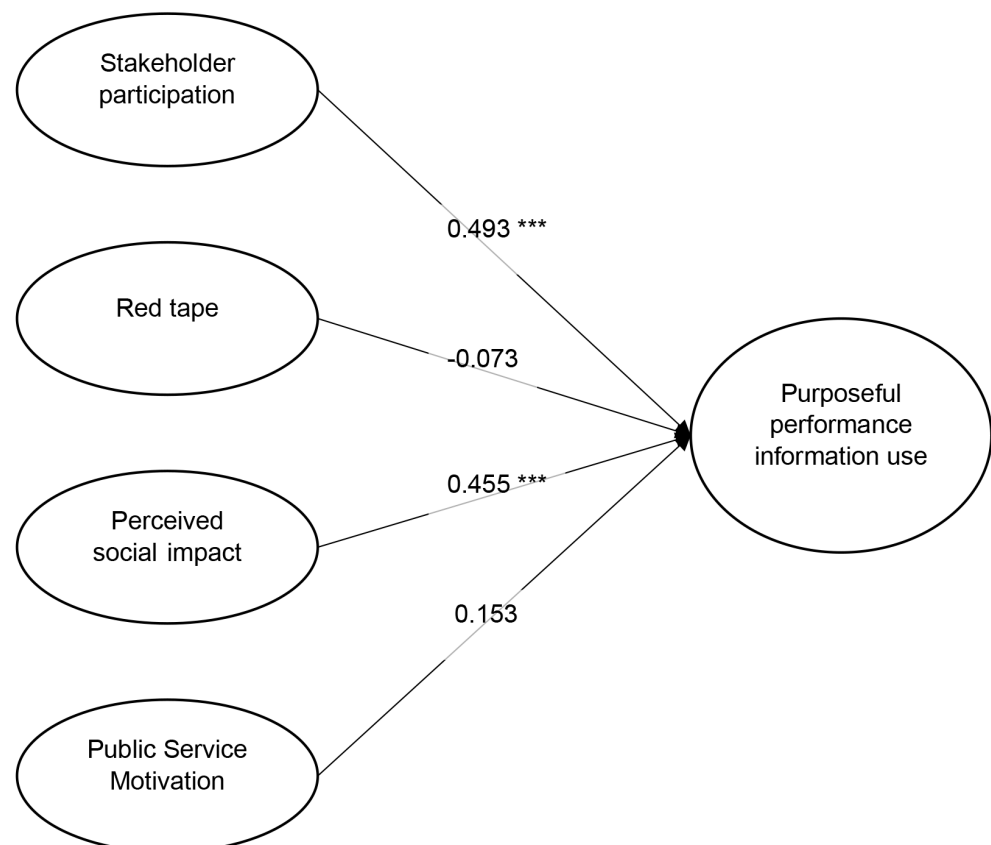
The findings provide evidence in favor of the first hypothesis: the involvement of stakeholders (including both citizens and elected officials) throughout the performance management life-cycle ($\beta=0.493$; $p<0.01$) positively affects the managers' intention to purposefully use performance information. This result underscores the significance of environmental and contextual variables in shaping individual behaviors and guiding decision-making processes.

Furthermore, there is clear support for hypothesis 3: managers who perceive the social impact of their work ($\beta=0.455$; $p<0.01$) are more likely to engage in the purposeful use of performance information. This finding indicates that public organizations have the potential to encourage the use of performance information through relational job design (Grant et al. 2007), by facilitating direct interactions between employees and beneficiaries, or showing the effects of individuals' activities on the ultimate recipients of public services.

Conversely, the gathered evidence fails to fully corroborate the second hypothesis. As expected, red tape has a negative relationship with the purposeful use of performance information, yet this association lacks statistical significance ($\beta= -0.073$; $p>0.10$). This means that the presence of time-consuming and burdensome procedures is not the primary reason for the lack of purposeful performance information use by public mana-

gers: instead, it largely depends on external pressure exerted by active and engaged stakeholders, as well as managers' perceived accountability for delivering public value.

Figure 2 - Results of the Structural Equation Model



Furthermore, the fourth hypothesis of the study is not fully supported by the results of the SEM. While Public Service Motivation (PSM) exhibits a positive relationship with the purposeful use of performance information, this association remains not statistically significant ($\beta = 0.153$; $p > 0.10$). Contrary to expectations, simply having high levels of PSM among public managers is not sufficient, since their purposeful use of performance information depends on whether they perceive the benefits generated by their work and actually fulfill their desire to serve the community. There arises the need to establish the necessary organizational and working conditions that facilitate public officials in expressing and finding practical applications for their prosocial motivational profiles.

In summary, the findings from the Structural Equation Modeling (SEM) analysis reveal several key insights regarding the determinants of purposeful performance information use by public managers. It is evident that stakeholder participation and the perceived social impact play cru-

cial roles as significant drivers influencing the extent to which performance information is purposefully employed. These factors underscore the importance of engaging stakeholders and fostering the awareness of the social consequences of managerial actions in enhancing the effective use of performance data within public sector organizations. Conversely, the analysis indicates that organizational red tape and individual levels of Public Service Motivation (PSM) do not exert direct effects on the outcome variable. This suggests that while bureaucratic hurdles and individual motivational orientations are important considerations, they may not directly influence the purposeful use of performance information by public managers.

5. Discussion

The study aims to unveil a critical phase of the performance management life-cycle in the public sector: the use of performance information (Van Dooren et al. 2015). Despite its relevance for the success of performance management systems, there is still much to explore about how public managers incorporate performance information in their decision-making to improve public services. By exploring the potential antecedents of purposeful performance information use, focusing on the characteristics of the environment and the organization in which public managers work, as well as the nature of their jobs and their individual motivation, the study contributes to the academic literature on the effectiveness of performance management systems.

In line with expectations, when public managers engage citizens in the design and evaluation of performance indicators and make external stakeholders aware of performance results they are more willing to use the information produced by performance management systems (Yang and Hsieh 2007). This finding provides support to previous theoretical and empirical contributions (e.g. Ho 2006; Julnes and Holzer 2001; Moynihan and Ingraham 2004), which identify external stakeholder participation as an important driver for the purposeful use of performance managers by public managers (Yang and Hsieh 2007; Ho 2006; Kroll 2015a). Specifically, both organizations actively involve their political leadership in strategic planning phase, with strategic objectives being annually approved by the Regional Council as part of the "Regional Economics and Financial Document (DEFER)". Working in coordination with political bodies, these strategic directives are further refined within the "Integrated Plan of Organization and Activities (PIAO)" to define impact and performance goals, which are assigned to the Departments responsible for their implementation. Furthermore, citizens are engaged in evaluating the attainment of these objectives through customer satisfaction surveys. For instance, in one Region, each Department annually identifies services associated with specific management structures. Users assess these services based on criteria such as accessibility, timeliness, transparency, em-

pathy, effectiveness, and quality indicators. The outcomes of user surveys determine the organizational performance of each Department, and are communicated to public managers to provide insights for the subsequent performance management life-cycle.

In this context, the active involvement of politicians and citizens in defining and evaluating performance indicators creates a sense of accountability for public officials, compelling them to use all the information at their disposal to make decisions focused on enhancing the services being closely monitored by the citizens. This results also validate the evidence that was previously gathered within the Italian public sector. According to Cepiku and colleagues (2017), the scarce external communication and stakeholder inclusion in the actual performance management systems of the Italian central government establish an environment with minimal or negligible pressure on outcomes and subsequently on the generation and utilization of related data, calling for actions that ensure an appropriate level of engagement and knowledge from external stakeholders.

Besides stakeholder participation, the study contributes to identify a second significant driver of purposeful performance information use: the social impact that public officials perceive regarding their own work. When public managers recognize that their actions and responsibilities have a positive impact on the community, they become more motivated to use performance information to enhance the services they manage, ultimately leading to greater value creation for the public. It is true that incorporating performance information in decision-making represents an extra-role behavior, but understanding how this effort enables public value generation through their own work encourages public managers to use performance information to improve the services they provide to the public (Moynihan, Pandey and Wright 2012b).

According to the results, it is not sufficient to have public officials who, as individuals, possess a high level of PSM, but it is essential to help them recognize and understand the social impact of their work. In fact, PSM proves to be positively but insignificantly related to purposeful performance information use. This specific finding contradicts and advances previous studies, which mostly identified PSM as a relevant antecedent of performance data use but rarely studied this motivational trait along with the perceived social impact of public officials' work. In this sense, the academic literature suggests that the positive effects of PSM on organizational behaviors might rely on the extent to which employees actually perceive their work as offering ample opportunities to fulfil their desire to serve others (Moynihan, Pandey and Wright 2012b; Bright 2007; Steijn 2008; Taylor 2008; Vandenabeele 2009). In other words, people might be motivated by the possibility of creating value for the society (high PSM), but this attitude does not translate into organizational action (i.e. purposeful use of performance information) if they do not perceive that their work contributes to reach this objective and produce social impact. This dyna-

mic can be explained by the expectancy (Vroom 1964) and goal theories of motivation (Wright 2004), which imply that employee behaviors and outcomes are influenced by meeting their own goals and expectations.

The results confirm the expected negative relationship between purposeful performance information use and the organization condition of red tape, which represents a distinctive characteristic of public institutions. However, perceived red tape does not emerge as a significant driver of the purposeful use of performance information, suggesting that it represents a better predictor of other type of data utilization. For instance, Kroll and Vogel (2021) found that public employees perceiving a high level of red tape are more inclined to manipulate performance data, leading to dysfunctional rather than purposeful performance information use. Therefore, more research is needed to disentangle the specific relationship between red tape and purposeful performance information use.

6. Conclusion

The study contributes to both the academic literature and the community of practice in expanding the body of knowledge on the antecedents of purposeful performance information use as a means to improve the effectiveness of performance management systems in the public sector. The analysis aims at filling some research gaps by investigating some understudied antecedents of purposeful performance information use, such as external stakeholder participation, organizational red tape, perceived social impact of work, individual factors focused on motivational forces rather than sociodemographic characteristics (i.e. PSM). The results pave the way for future studies on the significant role played by stakeholder participation and perceived social impact to drive purposeful performance information use. At the same time, the study leaves unresolved questions on the controversial effect of red tape and the link between PSM and perceived social impact in the context of performance information use, which can be further investigated by future academic research.

A primary limitation of the study lies in the composition of the sample, consisting of respondents (including both managers and senior officials) from two Regional institutions in a context, that of Italy, that presents peculiar dynamics in public performance management. With this respect, the findings cannot be generalized, and future studies may replicate the same research design in diverse Regional contexts to improve the external validity of the results.

Moreover, future research could explore alternative antecedents of purposeful performance information use, or enrich the conceptual model by examining the potential mediation or moderation effects of other variables. Furthermore, configurational analyses (such as QCA) could be employed to explore how the combination of these conditions influences managerial behaviors throughout the performance management life-cycle.

As for its contribution to practitioners, the study provides public orga-

nizations with a clear indication of two significant keys to unlock the purposeful use of performance information, suggesting an “outside-in” approach for the effectiveness of performance management. First, performance management systems must be open to external stakeholders at all stages: from goal-setting to reporting the achieved results, including continuous monitoring of their progress. This makes public managers accountable for achieving the set performance indicators and using all the available information to reach this goal. Second, public organizations need to focus their performance indicators on measuring social impact, and effectively engage public managers in perceiving how their actions positively affect external stakeholders and the society as a whole. In other words, the success of performance management in the public sector relies on the organizations’ willingness to open their doors, involving external stakeholders in the performance management life-cycle and showing the impact created for the outside community.

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Appendix

Scale and items	Item loading and relevant coefficients
Performance information use	Cronbach's alpha: 0,785 Composite reliability: 0,826 Average Variance Extracted (AVE): 0,704
I regularly use performance information to make decisions	0,821
My department regularly compares actual achievement with performance objectives	0,857
Stakeholder participation	Cronbach's alpha: 0,875 Composite reliability: 0,906 Average Variance Extracted (AVE): 0,762
Citizens participate in designing this organization's performance indicators	0,891
Elected officials participate in designing this organization's performance indicators	dropped
Citizens help this organization evaluate performance	0,896
Stakeholders are familiar with the results of this organization's performance management	0,831
Red tape	Cronbach's alpha: 0,862 Composite reliability: 0,916 Average Variance Extracted (AVE): 0,784
Rules and procedures make work processes in the organization more troublesome than they need to be	0,909
The rules and procedures I must follow in carrying out my primary work tasks are very time consuming.	0,896
Existing rules make it difficult to fulfill the actual purpose of my work	0,850
Perceived Social Impact	Cronbach's alpha: 0,936 Composite reliability: 0,935 Average Variance Extracted (AVE): 0,783

I feel that my work makes a positive difference in other people's lives	0,881
I am very aware of the ways in which my work is benefiting others	0,886
I am very conscious of the positive impact my work has on others	0,914
I have a positive impact on others in my work on a regular basis	0,858

Public Service Motivation (PSM)	Cronbach's alpha: 0,813 Composite reliability: 0,870 Average Variance Extracted (AVE): 0,627
Meaningful public service is very important to me	0,714
I am often reminded by daily events about how dependent we are on one another	0,802
Making a difference in society means more to me than personal achievements	0,873
I am prepared to make enormous sacrifices for the good of society	0,770
I am not afraid to go to bat for the rights of others even if it means I will be ridiculed	dropped

Note: Varimax rotation method with Kaiser normalization. Convergence was achieved within five interactions