(RESEARCH ARTICLE)

Check for updates

The role of management control in the improvement of Performance in Public Establishments and Enterprises (PEE) in Morocco

KAWTAR AL MAGHRIBI *

Department of Management Sciences, Faculty of Legal, Economic, and Social Sciences of Rabat-Agdal, Mohammed V University of Rabat, Morocco.

Abstract

In Morocco, the political and economic landscape has been marked by a relative consensus on the necessity of implementing reforms to modernize the public sector as a whole. Particular attention has been given to Moroccan Public Establishments and Enterprises (PEE), which play a crucial role in the national economy and public service delivery. These entities are increasingly encouraged to enhance the profitability of their projects and adopt innovative managerial approaches to overcome inefficiencies and structural constraints associated with traditional management models.

In this context, management control has emerged as a key strategic tool, providing PEE with the necessary mechanisms to improve decision-making, resource allocation, and overall operational efficiency. By integrating management control systems, these public institutions aim to achieve better financial sustainability, enhance transparency, and optimize performance measurement processes. This transition reflects a broader movement toward results-based management, where performance indicators and accountability frameworks play a central role in steering public enterprises toward greater effectiveness.

This study conducts an in-depth analysis of management control practices and their impact on the performance of PEE. It examines the concrete implementation of management control systems within these public organizations and evaluates their measurable effects on efficiency, governance, and long-term sustainability. By exploring these aspects, the research seeks to understand the extent to which management control contributes to public sector modernization and supports EEPM in achieving their strategic objectives.

Keywords: Management control system; Performance improvement; Public establishments and enterprises; Contingency factors; Public management

1. Introduction

The modernization of public management in Morocco is no longer just a trend but a vital necessity. To achieve this transformation, it is essential to move away from traditional, rigid, and bureaucratic management practices and establish a results-oriented framework that emphasizes service quality and measurable outcomes. This new management paradigm is structured around the triad of objectives, resources, and results, granting managers greater flexibility in resource allocation while reinforcing accountability for decisions and performance outcomes.

With the introduction of public administration reforms in Morocco, public organizations have embarked on a long-term restructuring process focused on performance-based management. In this context, the study of management control's

---

*Corresponding author: KAWTAR AL MAGHRIBI.

contribution to organizational performance within the Moroccan public sector is of significant relevance. Management control plays a crucial role in performance monitoring by overseeing key aspects of operations, including resource allocation, activities carried out, and services delivered. Its application extends across all entities, facilitated through directives, dashboards, and performance reports exchanged between hierarchical levels.

To strengthen this transformation, Morocco has undertaken extensive reforms across all areas of public management, with particular emphasis on Moroccan Public Establishments and Enterprises (PEE). These institutions are now expected to maximize project profitability and embrace modern management techniques to break away from outdated administrative models. Among these techniques, management control has emerged as a key function in guiding PEE toward enhanced performance.

The introduction of management control in the public sector varies significantly due to the evolution of the concept, which must be clarified before analyzing its adaptation to the public context. Management control can be defined as a fundamental tool for managerial efficiency in all types of organizations, given its vital role in shaping and implementing strategic objectives. In this regard, its application in the public sector aligns with broader public management modernization efforts.

Management control serves as a performance management tool aimed at improving the efficiency of resource allocation in relation to developed activities and achieved results, in accordance with predefined strategic orientations. It also fosters informed decision-making and facilitates managerial dialogue by highlighting allocated resources and assigned objectives.

Currently, PEE management is undergoing significant transformations. Following privatization and restructuring initiatives, as well as the introduction of partnerships and contractual relationships, public sector leaders have recognized the necessity of implementing management control systems to drive performance improvement.

Therefore, this study adopts a dual conceptual and empirical approach to clearly define the scope and objectives of this multidisciplinary topic and develop an appropriate research methodology for its in-depth exploration. The primary focus is on analyzing management control practices in the public sector, particularly in PEE, and evaluating their impact on performance enhancement.

By identifying key contingency factors, the study aims to compare the performance levels of public establishments and enterprises based on the alignment of their management control systems with these factors. The goal is to propose optimal configurations of management control tools.

The research approach begins with a theoretical analysis of management control to establish theoretical models explaining current practices, incorporating key insights from contingency theory. These models and contingency factors will then be tested empirically to assess their explanatory power.

The article is structured as follows: first, it introduces management control within the framework of the new public management paradigm, defining its role in public sector modernization. It then explores different management control approaches in the public sector, focusing on two main models, financial control and strategic steerin, while examining the various theories underpinning these models and the concept of performance in PEE. Next, the research methodology is presented, outlining the development of an explanatory model for management control practices, formulating hypotheses, designing the survey questionnaire, and utilizing statistical tools to analyze the impact of management control on PEE performance improvement.

2. Theoretical farmwork& methods

2.1. Theory

The improvement of public management is a crucial challenge in the public sector, driving the emergence of new organizational structures. A key transformation lies in the implementation of management control systems within Moroccan public organizations, which has become essential for modernizing public administration.

Initially developed in the private sector, management control was later adopted in the public sector as part of the New Public Management (NPM) framework, aiming to address the inherent shortcomings of traditional public administration.

Public management, as a discipline focused on optimizing the performance of public sector organizations, is built on a strong theoretical foundation. Over time, the evolution of managerial practices has led to the development of essential tools, such as management control, designed to tackle the unique challenges of public sector governance.

2.1.1. The Modernization of the Public Sector and the Emergence of the Management Control System

The public sector has faced significant shortcomings and dysfunctions. It is characterized by excessive, rigid, and costly bureaucracy, as well as an overly centralized hierarchy. These characteristics have led to major disruptions, particularly in terms of debt and deficit.

On one hand, the public sector is frequently criticized due to its organizational nature. On the other hand, citizens—who are also users, taxpayers, beneficiaries, and voters—have growing expectations and demands. They now place increased importance on the quality of public services, which presents new challenges for the public sector. It must respond to increasing demands to meet citizens' expectations and improve the quality of services provided (A. Bartoli, 2009).

Indeed, various weaknesses in the public sector have been identified, manifesting at three fundamental levels: planning, accounting, and control. Public management is perceived as the application of methods and techniques aimed at improving decision-making in the public sector. It is a field of study, experience, and reference that seeks to enhance the performance of public organizations. It plays a crucial role in modernizing and legitimizing these organizations, whose effectiveness has been questioned over the decades.

Optimizing performance and modernizing public sector management are critical challenges. In this context, many countries worldwide have implemented various public management reforms to streamline processes, reduce costs, and respond more effectively to citizens' expectations and demands. These efforts have given rise to a new movement known as "New Public Management" (NPM).

NPM is divided into three models, each with distinct forms of legitimacy: the efficiency or market model, the excellence and quality model, and the flexibility and decentralization model. Each model aims to improve the management and functioning of public organizations in a specific way, considering different legitimacy factors.

The pursuit of performance within public organizations has been extensively studied and explored in academic research. Numerous researchers have sought to understand the unique characteristics of public organizations and determine the feasibility of introducing and successfully implementing private sector management tools in the public sector to enhance overall performance. This gives management control a fundamental role in modernizing the public sector.

R. Anthony defines management control as "the process by which managers ensure that resources are obtained and used effectively and efficiently to achieve the organization's objectives." In 1988, he added another definition: "Management control is the process by which managers influence other members of the organization to implement strategies."

Management control adapts to new public management rules to optimize the implementation of public policies and assess the coherence between available resources and set objectives. This facilitates the operational management of services and enables the realization of strategy within various public administrations. In recent years, numerous reforms have been implemented in public organizations to create modern and efficient services. This managerial approach is distinguished by its adaptability according to the specificities of services, thereby involving the commitment and participation of all stakeholders within public organizations.

It is imperative to recognize that management control can be approached from various perspectives, with a particular emphasis on two predominant approaches: those based on the financial model and those focused on steering.

2.1.2. Management control in PEE and public performance

The dynamics of Public Establishments and Enterprises in Morocco are undergoing significant transformation through the evolution of contractual practices and the implementation of Law 69-00. At the heart of this transformation are the contractual relationships between the State and Moroccan Public Establishments and Enterprises (PEE). These relationships fall within a broader context of contractualization aimed at optimizing management control and addressing the specific challenges faced by these organizations.

New public management has also encouraged the integration of models and professionals from the private sector into the public sector. Contractualization has played a key role in this increased flexibility. Previously, external controls prevailed within Moroccan public institutions. However, structural and organizational deficiencies necessitated the implementation of internal controls specific to public institutions: internal control and management control.

Management control focuses on monitoring quantitative and qualitative data to guide decisions and actions. It complements and strengthens legal financial control. Steering the performance of a public institution involves selecting actions while anticipating their impact, monitoring their progress to ensure they unfold as planned, intervening swiftly in case of deviations, and regularly forecasting expected performance. This ensures that objectives are met and corrective measures are implemented promptly in the event of anticipated difficulties.

Furthermore, the advent of Law 69-00 has introduced major changes in the financial control of Public Establishments and Enterprises (PEE) in Morocco. This legislation extends the scope of financial control and drives reform initiatives to enhance transparency and accountability within EEPM. The impact of Law 69-00 on management control is evident in the emergence of new controls stemming from these entities and in the necessary adaptations in EEPM management control practices.

The performance of a public organization can also be defined as its ability to achieve predefined objectives, whether expressed in terms of socio-economic efficiency, service quality, or managerial efficiency. The pursuit of performance by managers compels them to consider how to measure it. Measuring performance means assessing achieved results, evaluating the quality of services provided to users, and calculating parameters of economy, effectiveness, and efficiency. All these responsibilities fall within the expertise of management control. Leveraging professional competencies, expertise, and specialized tools, management control establishes standard benchmarks, develops measurement systems, and ultimately recommends corrective actions.

In public enterprises, management control plays a crucial role in enhancing performance. It first initiates the definition of concrete and measurable objectives aligned with the missions and specific responsibilities of these entities toward society. By setting precise targets for each area of intervention, management control directs all members of the public organization toward priority actions to meet citizens' needs, ensuring that the actions of public enterprises align with societal expectations.

Moreover, management control ensures the efficient allocation of public resources. It guarantees that human, financial, and material resources are used efficiently to achieve set objectives. This systematic resource management contributes to optimizing public services and ensuring financial accountability by making sure that every expenditure is justified and directed toward fulfilling public missions.

The necessity of establishing a robust management control system within Moroccan public establishments and enterprises stems from a combination of factors aimed at improving their performance. On one hand, these enterprises are often inclined to maintain their traditional operating methods, making them less likely to innovate and adapt independently. On the other hand, societal changes in Morocco and its economic environment play a crucial role. The opening of borders, the need for stricter public financial management, and adjustments in financial control are all factors that have contributed to this need for modernization.

It quickly became apparent that public enterprises had to adapt to substantial and structural changes in budgetary execution conditions. They thus had to integrate a series of more sophisticated tools such as analytical accounting, variance analysis, and dashboards. This transition reflects a firm commitment to modernization and adaptation to the new requirements of their economic and financial environment. This approach aims not only to optimize performance but also to strengthen public enterprises' ability to navigate efficiently and effectively in an ever-evolving economic landscape.

The concept of performance within PEE, precisely defined and measured, positions management control at the core of public performance management. Its role in continuous performance improvement is undeniable, highlighting the need to optimize management control. This revolves around the imperative modeling and effective communication of project-related information, as well as optimized internal coordination and judicious information management.

3. Methods

In this section dedicated to research methodology, we delve into the rigorous construction of our empirical approach aimed at studying the practice of management control and its impact on improving the performance of public institutions and enterprises.

3.1. The Research Model and participants

3.1.1. Our model is positioned at the intersection of several essential elements

The need for management control, illustrated by two theoretical models of management control. Theoretically, it has been proven that management control is a necessity for public institutions and enterprises. However, the mere need for management control is not sufficient to trigger its implementation. Other factors must also be present, such as contingency elements and historical and sociological factors.

Contingency factors include elements such as the industry sector, organizational structure, size of the institution or enterprise, nature of the activity, adopted strategy, as well as technology and internal control mechanisms.

Historical and sociological factors stem from past choices and decisions made by public institutions or enterprises, along with the resulting organizational culture. They are the product of an accumulation of facts, events, and decisions, particularly the willingness of leaders to establish a system of objectives and an organizational structure suited to the organization's needs.

From a methodological perspective, our model integrates various theoretical contributions as well as the models derived from them. The research is positioned at the intersection of paradigms such as measurement, interpretation, and contingency. Furthermore, it takes into account data related to the influence of certain historical and sociological factors, such as the orientation of leaders toward establishing a management control system, organizational culture, and the specificities of the Public Establishments and Enterprises (PEE) sector.

A model must be subjected to testing, which requires the establishment of hypotheses that will be confronted with real-world conditions. The formulation of these research hypotheses stems, on the one hand, from analyses conducted on the historical and sociological factors influencing the development of management control, and on the other hand, from the selection of the most representative contingency variables of these factors.

These research hypotheses highlight the relationships that will be examined in our study by comparing observed facts in the field with the results obtained.

3.1.2. Ultimately, our hypotheses can be presented as follows

Hypothesis 1

As the size of the Public Establishments and Enterprises (PEE) increases, the management control will emerge and develop significantly ».

Hypothesis 2

- Technical and human resources play a crucial role in the emergence and evolution of the management control system.
- This hypothesis will be tested using the following two variables:
- Technical resources have a positive influence on the development of management control.
- Human resources have a positive impact on the development of management control.

Hypothesis 3

The involvement of the management control system has direct positive effects on the performance of the Public Establishments and Enterprises (PEE).

These three hypotheses become the strategic guide for our analysis, directing the data collection and analysis process. This transition from conceptualization to implementation represents the core of the research project, where ideas are subjected to rigorous scrutiny, and the understanding of the subject evolves into a deeper perspective..

There are several approaches to forming a sample, primarily distinguished by the method of selecting elements and the size of the sample.

It is important to note that most management research does not use probabilistic sampling techniques due to material and/or technical constraints.

As a result, the selection of our sample will be done using a non-probabilistic sampling method, combining reasoned selection and quota sampling to form a representative sample while preserving the characteristics of the original population. This choice will be guided by the principle of convenience, allowing us to avoid the strict framework of probabilistic surveys.

Our sample is characterized by heterogeneity in terms of the legal form of the selected institutions and enterprises, and consequently, the type of control to which they are subjected. It includes a diversity of public institutions, state-owned companies, public subsidiaries, and mixed companies.

3.1.3. The structure of our sample is as follows

- 20 public institutions
- 5 state-owned companies
- 4 public subsidiaries
- 3 mixed companies

The population under investigation consists of Public Institutions and Enterprises (EEP). The goal is to provide a comprehensive description of all 32 EEPs that responded to our questionnaire.

The delimitation of the EEP profile is based on their location in Morocco, on the one hand, and concerns the organization of management control, on the other hand.

3.2. Analysis Method

The use of a quantitative study allows for addressing a larger number of public institutions and enterprises (EEPM). As J. Deslauries (1991) points out, "The main advantage of quantitative study, compared to qualitative study, is that it provides quantified results that can lead to statistical analyses. The second advantage is that data analysis can reveal differences between groups. And the third advantage is the ability to reach a large number of respondents in a short time."

The quantitative survey revolves around two main objectives: descriptive and confirmatory. From a first perspective, the descriptive analysis aims to provide a comprehensive overview of public institutions and enterprises, particularly concerning their management control, at a specific point in time. This approach relies on methods derived from descriptive statistics to offer a clear and detailed picture of the situation.

The ultimate goal is to present the results of statistical tests, which aim to verify the validity of the constructed theoretical model. These analyses thus provide crucial insights for understanding the dynamics related to management control in public institutions and enterprises.

The positivist paradigm has its roots in the natural sciences, considering the human being as an organism subject to natural laws. While this paradigm is still preferred by many researchers in administrative sciences, its supremacy has recently been questioned. According to this perspective, there is only one concrete reality, independent of any opinion, awaiting discovery and exploration. Society and organizations are seen as structures made up of observable and measurable elements, with determined and predictable relationships between them.

The approach favored by proponents of this paradigm is the hypothetico-deductive approach. This method involves creating specific hypotheses derived from existing theories or general principles, followed by the collection of empirical data to test the validity of these hypotheses. In other words, it adopts an approach where the researcher formulates hypotheses about the relationship between variables, subjects them to rigorous tests, and then draws conclusions based on the results obtained.

The hypothetico-deductive approach is a methodological framework used in science, particularly in the natural sciences and experimental research. This paradigm is based on the development of specific theories and hypotheses, which are then rigorously tested through empirical observation and experimentation.

This approach adopts a method moving from the general to the specific, meaning that the researcher formulates a research question based on a general theory. They then make hypotheses regarding a specific situation and test these hypotheses to confirm or invalidate them, thus supporting or enriching the initial theory. This method is relevant in that the researcher adheres to the idea that there is a unique reality governed by recurrent and predictable natural laws. They believe that by testing various hypotheses in search of regularities, they will be able to discover this reality.

Generally speaking, the questionnaire is structured around closed questions and a few open-ended questions, each having distinct implications for data collection and analysis. Closed questions present the respondent with a limited set of predetermined responses. This choice was deliberate during the design of our survey, due to the speed with which participants can respond and the simplicity of subsequent analysis.

A crucial step in administering the questionnaire involves sending the questions to the interviewees, followed by the collection of their responses. It is essential not to overlook this phase, as the quality of the information obtained depends partly on how the questionnaire was administered and the care taken during this operation. This often underestimated step contributes significantly to the reliability and validity of the results obtained.

After verifying and coding the questionnaire, the next step is to input the collected data into the computer system. In this context, we used the SPSS Manager Statistics software, known for the quality of its results and statistical features.

4. Results and discussion

4.1. The analysis of management control practices in Public Establishments and Enterprises (PEE)

Within the methodological framework of the hypothetico-deductive approach, which is materialized through the implementation of the quantitative testing method, the definition of the theoretical model and the creation of the research questionnaire are crucial phases in preparing access to the field. The objective of the quantitative survey encompasses both a descriptive and confirmatory dimension. In this context, we will present the results of the quantitative survey on contingency factors, which will be confronted with the hypotheses derived from the theoretical analysis of management control.

The analysis embarks on a thorough exploration of the implementation of management control within Moroccan Public Establishments and Enterprises (MPEE). Initially, we will focus on the analysis of contingency factors related to management control in these institutions and enterprises.

4.1.1. The relationship between size and the existence of management control

In the first step, we will undertake a thorough analysis of the distribution of public institutions and enterprises (EEP) into categories based on the number of employees. Our target population consists of both small-sized and medium-to-large-sized EEPs. Approximately half (50%) of the public institutions and enterprises included in our sample have fewer than 1,000 employees. However, it is important to note that some large EEPs far exceed this number, with staffing levels surpassing 7,000 employees.
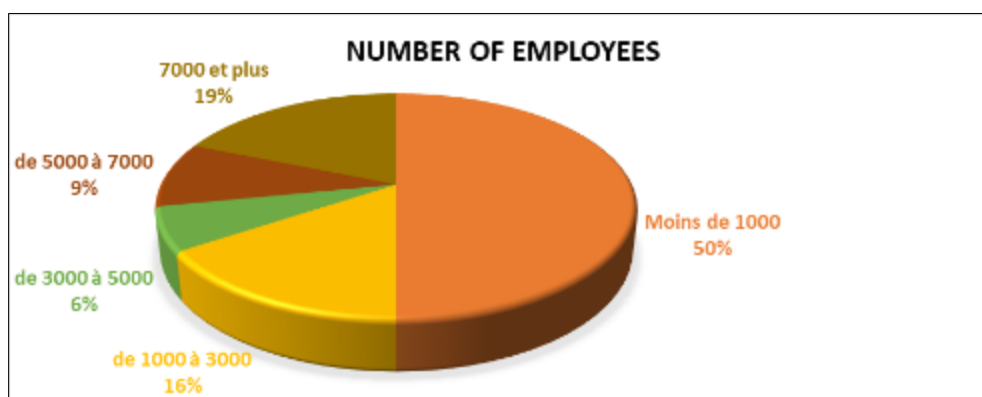

Figure 1 Staff Size of EEPs

The table that quantitatively distributes the staff of the EEPs is as follows:

Table 1 Distribution of EEP staff by number of employees

Number of employees	Less than 1000	1000 to 3000	3000 to 5000	5000 to 7000	7000 and more
staff size	16	5	2	3	6

Due to the significant impact of size in the model, we will proceed with a statistical verification of Hypothesis 1.

To test our hypothesis, we have segmented the companies into three categories based on their size: small (fewer than 100 employees), medium (between 100 and 1000 employees), and large (more than 1000 employees). We then examined the correlation between the existence of the management control department and the size of public institutions and enterprises.

Table 2 Cross-tabulation of the management control system with the size of EEPs

		Existence of the Management Control Department		TOTAL
		With Management control	Without Management control	
Size of EEPs	Small size	2	3	5
	Medium size	9	2	11
	Large size	14	2	16
TOTAL		25	7	32

Among the 32 Moroccan Public Institutions and Enterprises (EEPM), 25 implement management control, including 14 large-sized, 9 medium-sized, and 2 small-sized entities.

It is observed that the primary motivation for EEPs to establish a management control system is closely linked to the size of their organization. It becomes evident that the larger an EEP is, the more relevant the implementation of such a control system appears. This correlation suggests that larger organizations have a greater need to adopt management control mechanisms to ensure more efficient and coordinated management of their activities.

Following these various tests, it is clearly demonstrated that the first hypothesis is validated.

4.1.2. The resources of the management control department

The following graphical representation provides a detailed overview of the various resources and mechanisms available to the management control department. This presentation aims to offer an in-depth perspective on the operational resources at the department's disposal, including tools, human expertise, and technologies deployed for the effective execution of its missions. This visualization serves as a valuable tool for understanding the structure and strength of the management control department within the organization and assessing how these resources are leveraged to achieve defined objectives.
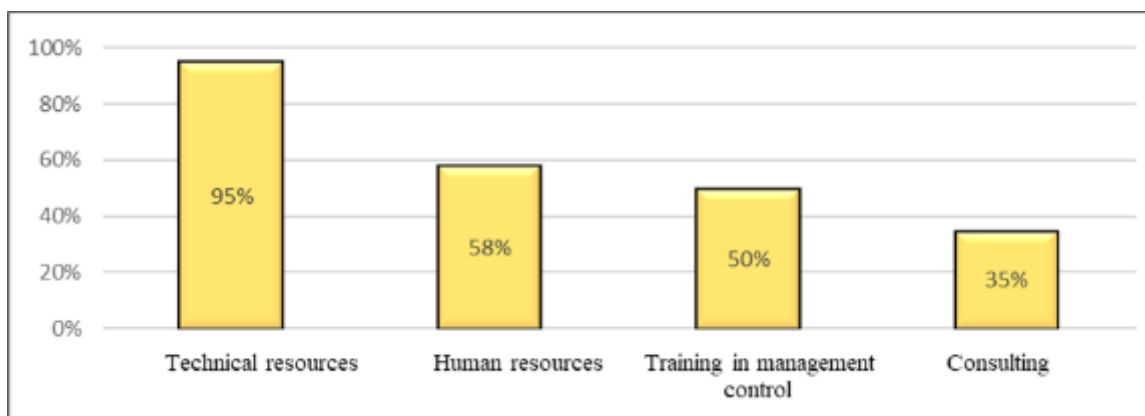
Figure 2 Resources of the management control

The graphical analysis reveals that Public Institutions and Enterprises (EEP) have substantial technical resources (95%), including computers and printers. This provision of technical resources, combined with advancements in new technologies, has led to a true information revolution within these entities, consequently bringing about a significant transformation in the role of management control within Moroccan EEPs.

It is also observed that the management control department, on average, benefits from 58% of the necessary technical resources and 50% in terms of training. However, there is a partial shortfall in consulting services, with only 35% of cases reporting their presence. These findings highlight the emphasis placed on technical resources and training in the context of management control within EEPs while also indicating a certain deficit in advisory support. This analysis suggests potential avenues for improving the effectiveness of management control practices within these organizations.

Typically, management control teams within Moroccan Public Institutions and Enterprises (EEPM) are relatively small in size, generally consisting of 1 to 8 members. In nearly 80% of cases, these departments comprise a team of one to five individuals.
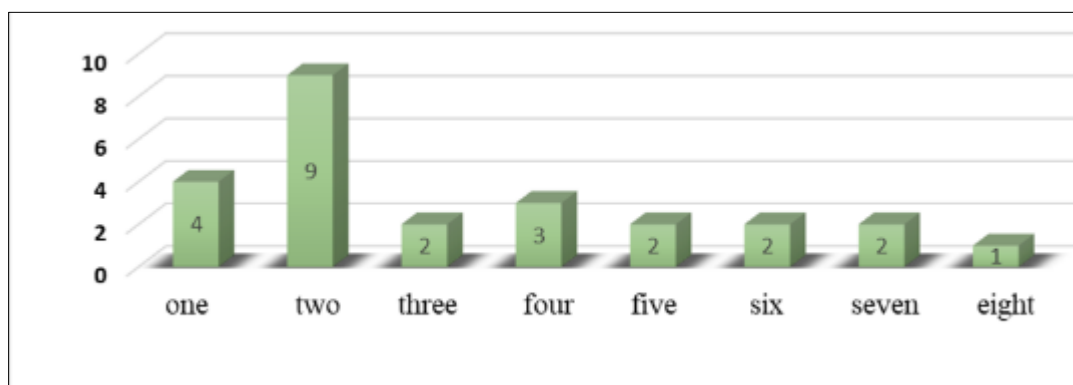

Figure 3 Number of People Working in the Management Control Department

In light of these various results, we believe that: The hypothesis stating that technical resources and new technologies have a positive influence on the evolution of management control is confirmed.

So, the secondhypothesis is validated.

The impact of the management control system on the improvement of the performance of PEE

We will present in detail the statistical data related to the impact of management control on different stakeholders, such as public satisfaction, the achievement of objectives, and overall productivity.

4.1.3. The impact of management control on the achievement of objectives and the improvement of productivity

A detailed analysis of the table reveals that 80% of respondents believe that management control has played a significant role in achieving their organizations' objectives, while only 20% express disagreement. It is therefore evident that the introduction of the management control system has positive implications on goal attainment, as evidenced by the majority of responses in favor of this beneficial impact.

Table 3 Achievement of PEE Objectives

	Achievement of Objectives
Strongly Agree	20%
Mostly Agree	60%
Mostly Disagree	15%
Strongly Disagree	5%
TOTAL	**100%**

This trend suggests that management control is perceived as an effective lever promoting the achievement of organizational objectives. The 20% divergence of negative opinions could be explored in more detail to identify the specific reasons for this disagreement. This could include factors such as staff understanding, necessary adjustments in the implementation of management control, or other factors that could influence the perception of its impact on achieving organizational goals.

Concerning the impact of management control on the improvement of productivity, A thorough evaluation reveals that management control plays a significant role in improving productivity, as indicated by the fact that 67% of Public Establishments and Enterprises (PEE) expressed agreement regarding the positive contribution of management control to this improvement.

Table 4 Productivity Improvement and Management Control

	Productivity Improvement
Strongly Agree	17%
Mostly Agree	50%
Mostly Disagree	23%
Strongly Disagree	10%
TOTAL	**100%**

However, it is important to note that a significant proportion, 33%, does not share this perception and disagrees with the idea that management control contributes to improving productivity. This diversity of opinions highlights the existence of divergent perspectives within the PEE regarding the link between management control and productivity. Indeed, management control, as a management discipline, plays a crucial role in improving productivity within Moroccan Public Establishments and Enterprises (PEE).

4.1.4. The contribution of management control to change the level of PEE performance.

Regarding the impact of the implementation of the management control system on the performance of Moroccan Public Establishments and Enterprises (EEPM), a thorough observation of the data reveals that 90% of EEPMs reported noticing a positive change. This high proportion clearly indicates that the introduction of the management control system has generated significant beneficial effects, thus contributing tangibly to the overall improvement of performance within these entities.
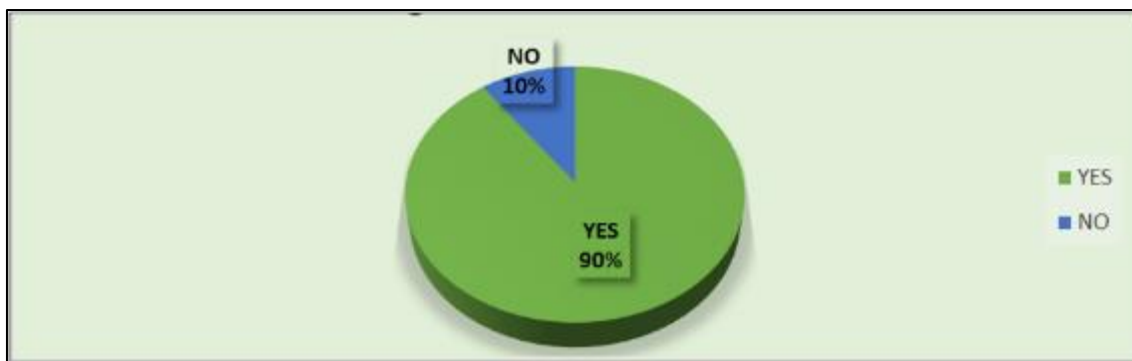
Figure 4 The Contribution of Management Control to Positive Change in the Performance of PEE

This observation highlights the perceived effectiveness of management control as a mechanism conducive to optimizing processes, making informed decisions, and achieving the strategic objectives of EEPM. These encouraging results can be interpreted as a strong indicator of the positive potential of management control as a lever to stimulate performance and organizational success within PEE.
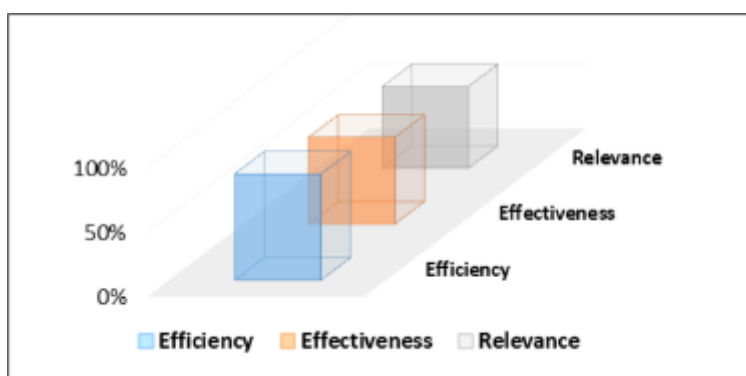

Figure 5 The Positive Effects of Implementing Management Control on EEP Outcomes in Terms of Efficiency, Effectiveness, and Relevance

According to the graphical data, the ntroduction of management control has been associated with notable improvements in the performance of EEPM, particularly in terms of effectiveness (82%), efficiency (67%), and relevance in resource allocation (63%). These findings suggest that management control has indeed contributed to enhancing the performance outcomes of these entities.

By examining these tables, graphs, and analyses, it becomes evident that the last hypothesis is confirmed.

The results obtained provide strong and consistent evidence that the management control system plays a pivotal role in influencing critical areas such as the achievement of organizational objectives and the enhancement of productivity within the Public Establishments and Enterprises (PEE). The impact of this system is not limited to basic operational management; rather, it extends to more strategic aspects, fostering a comprehensive approach to improving performance. This influence manifests itself in the optimization of processes, better decision-making, and the alignment of resources with strategic goals, all of which contribute to the overall success of these entities. The management control system thus serves as a powerful tool for driving continuous improvement, ensuring that EEPM not only meet their immediate objectives but also adapt to changing conditions and enhance their long-term sustainability and performance.

This expanded version emphasizes the broader scope and depth of the management control system's influence on the organizations.

5. Conclusion

In conclusion, it can be stated that the population surveyed in our study consisted of Moroccan Public Establishments and Enterprises (EEPM). We have meticulously outlined the distinctive features of the EEPM respondents, covering both concrete aspects such as the age, size, and number of employees, as well as perceptual dimensions, including the characteristics of the management control system and the performance of these entities. Our goal was to provide a comprehensive description of all 32 EEPM that responded to our questionnaire.

We applied various statistical analyses in line with our research hypotheses, which were then subjected to tests. Our empirical work highlighted key findings that we consider to be crucial. Management control exerts a positive influence on the improvement of performance within Moroccan Public Establishments and Enterprises (EEPM). In fact, management control meetings focus on presenting results, identifying discrepancies, and proactively seeking corrective solutions. Thus, management control stands out for its responsiveness, with adjustments being systematically made to align with the pre-established objectives.

Moreover, the impact of the management control service has generated positive effects on various stakeholders, notably by promoting the achievement of objectives and enhancing productivity. In summary, management control has a positive impact on the overall improvement of performance within EEPM. This comprehensive and effective approach to management control contributes to the long-term success and sustainability of these public establishments and enterprises, ensuring that they meet their goals while continuously improving their operational efficiency.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

This article is based on research and analysis in my doctoral thesis and after an in-depth study and analysis of the results based on the responses of Public Establishments and Enterprises (PEE) in Morocco who use management control.

References

[1]   ANTHONY. R.N. (1988), "The Management Control Function," Harvard Business School Press, Boston.

[2]   BARTOLI. A. (2009), "Management in Public Organizations," 3rd edition. ED, Public Management Collection, Dunod.

[3]   BOISSELIER. P., CHALENCON. L., DORIOL. D., MARD. Y., and MAYRHOFER. U. (2013), "Management Control," VUIBERT.

[4]   BOUIN. X. and SIMON. F.X. (2000), "The New Faces of Management Control: Technical and Behavioral Approaches," Dunod Publishing, Paris.

[5]   BROUSSOLLE. Y. (2019), "Information Sheets: Introduction to Public Law," Information Sheet 42: Public Institutions, page 261.

[6]   DEMEESTERE. R, (2005), "Management Control in the Public Sector," Publisher No. 4049, Paris.

[7]   DESLAURIES, J. P. (1991), "Qualitative Research," McGraw Hill.

[8]   DUMAS, G. and LARUE, D. (2005), "Management Control," Lexis Nexis Litec, Paris.

[9]   ELGHADI, A. (2006), "Performance Auditing and Management Control in the Public Sector," p. 38.

[10]   FAYOL, H. (1999), "Industrial and General Administration," Dunod, Paris, (Original Edition: 1916).

[11]   GASPARD, C. (2019), "Quantitative Study: Definition, Techniques, Stages, and Analysis," article in the French Management Review.

[12]   GIBERT, A. (2019), "Quantitative Study: Definition, Techniques, Stages, and Analysis," article in the French Management Review. P, (2002), "Management Control in State Administrations, Elements of Methodology."

[13] JELLOULI. T, (2011), "Management Control and Steering in the Public Sector: The Case of Moroccan Public Institutions," PhD thesis, FSJES Rabat.

[14] MAGHRAOUI. S, (2018), "Management Control Between Organizational Theories and the Challenges of Current Managerial Trends," article on RCCA.

[15] NAFZAOUI. M.A, (2010), "Management Control in Public Organizations: Foundations, Practices, and Determinants," PhD thesis.

[16] PIGE. B, (2020), "The Cybernetic Model of Management Control," EMS Editions.

[17] SIMON. H.A, (1947), "Administrative Behavior, A Study of Decision-Making Processes in Administrative Organizations," Free Press, New York.

[18] TALBI. A, (2005), "Financial Control and Governance of Public Enterprises in Morocco", Rabat.

[19] VOYER. P, (1994), "Management Dashboard", P.U Québec.

[20] TOUCHAIS. L, "Management Control in a Dynamic of Change: Defining an Analytical Framework", No. 3, RCCA, 2006.