

Investigating the Prerequisites of implementing Management Control System tools in Public Sector Institutions

Conditions préalables à l'implémentation d'outils de contrôle de gestion dans le secteur public

Mehrez abdelkadir^{1*}

University of saida Dr. Moulay Tahar (Algeria),

abdelkadir.mehrez@univ-saida.dz

Received: 15/04/2025

Accepted: 14/05/2025

Published:01/06/2025

Abstract:

This paper seeks to determine whether public sector institutions in Algeria have the basic prerequisites required to implement management control system tools. it examines four key types of institutions : education, health, vocational training, and local collectivities. This study employed a descriptive approach, using a researcher-designed questionnaire. The findings indicated that prerequisite were sufficient for implementing control management tools, specifically, cost management and dashboards, as perceived by the surveyed sample.

Keywords: management control system; public management; public control management; public institutions; management accounting.

Jel Classification Codes: I3, M1, M4

Résumé:

Cet article vise à évaluer si les institutions publiques algériennes (notamment dans les domaines de l'éducation, de la santé, de la formation professionnelle et des collectivités locales) disposent des conditions nécessaires à l'implémentation d'outils de contrôle de gestion. Une étude descriptive, basée sur un questionnaire, a révélé que l'échantillon interrogé considère ces conditions comme étant réunies, en particulier pour la gestion des coûts et la mise en place de tableaux de bord.

Mots clés: système de contrôle de gestion ; gestion publique ; contrôle de gestion dans le secteur public ; institutions publiques ; comptabilité de gestion.

Jel Classification Codes: I3, M1,M4

***Corresponding author**

1. INTRODUCTION

Public sector institutions, although they do not operate under the pressure of competition or market rules, must still develop their management systems like other profitable organizations. While public funds are the primary support for these institutions, necessitating protection through all available legal means, public service remains their core purpose. However, failing to oversee management may lead to subpar services and increased resource use, even when legal procedures are followed.

1.2 Problematic

Due to the unique nature of public sector institutions, the concept of management control takes on a distinctive character. These institutions often prioritize legal compliance over managerial efficiency, focusing primarily on the formal aspects of operations. as a result, oversight tends to be confined to financial and accounting controls, emphasizing expenditure management and revenue collection in accordance with legal frameworks such as the Public Accounting Law and the Public Procurement Law. This narrow approach overlooks other critical dimensions of management, limiting the effectiveness of broader control mechanisms without addressing other aspects of management, particularly those related to cost reduction, revenue maximization, and performance improvement in line with modern management control principles.

In modern public control management, Management control tools, particularly the balanced scorecard (BSC) developed by Norton and Kaplan, have been widely adopted in the public sector. As demonstrated in *The Strategy Focused Organization* (kaplan & norton, 2001) The Balanced Scorecard effectively monitors management and improves performance in diverse public, non-profit, and health sector organizations such as the University of California, Duke Children's Hospital, the City of Charlotte, and various US government agencies

A study conducted by (lee, Andrew, & Ruth, 2000) applied to the Hong Kong Vocational Training and Education Commission—which comprises two universities and seven institutes—resulted in a comprehensive model for strategic performance leadership. This model

integrates BSC as control management tool, MBNQA as quality specifications, and SWOT as strategic analysis method..

A study by (Teresa, Antonio, & Ricardo, 2021), titled "Adoption of Management Control Systems and Performance in Public Sector Organizations," analyzed data from 25 Portuguese public sector organizations using fuzzy-set qualitative comparative analysis (fsQCA). The research identified distinct configurations based on the presence or absence of budget control, management and performance evaluation, risk control plans, and client satisfaction surveys. It also examined top manager tenure (as a determinant) and organizational size (as a contingency factor), leading to high levels of effectiveness, efficiency, quality, and overall performance. The study proposed a research model that highlights the variables influencing the adoption of management control systems (MCS) in public sector organizations and how these mechanisms can be structured based on the scope of implementation.

At the local level, numerous studies focus on monitoring management in the public sector, including the study of (Ahmed, kanza, & Ahmed, 2019) published in the *Araa Journal of Economic Studies*, titled **“Management Effectiveness in Algerian Local Collectivities in The Light of The Requirements of New Public Management,”** examines the directives for reforming local communities in Algeria. The study explores the extent to which modern public management principles are applied and their impact on enhancing performance effectiveness. It concludes that a centralized approach continues to dominate various reform efforts, leading to a failure in fully implementing decentralization and integrating the principles of modern public management in the operations of Algerian local communities.

A study by (Omar, 2022) titled **“Diagnosis and Evaluation of the Effectiveness of the Management Control System in territorial collectivities in Algerian Legislation,”** was published in the *Economic Diversification Journal* in 2022. The study aimed to examine the state of management control in local authorities under Algerian legislation by analyzing the roles of three key agents involved in the control process: the **Secretary General, the Public Accountant, and the Financial**

Controller. Through an assessment of their various responsibilities, the study concluded that there is no unified concept of management control as an integrated system for guiding performance in Algerian local communities. Instead, it remains a collection of scattered practices, limiting its ability to effectively achieve its objectives.

Based on prior research, This study examines the prerequisites required to implement management control system tools in public sector institutions in Algeria.

The investigation is structured around the following sub-problems:

2-1 ; Do Public sector institutions have the basic requirements for localizing management control system?

2-2 ; What are challenges that limit establishing management control system in public institutions?

2-3 ; How practical is it to repurpose management control system tools from the private sector for public sector use?

1.3. Hypotheses:

To address the research questions, the study tested the following hypotheses:

1.3.1. H1; Public sector institutions have the basic requirements for localizing management control system tools.

1.3.2. H2; Managers in Public sector institutions face some organizational difficulties that limit management control system performance.

1.3.3. H3; Simulating some of the private sector's management control system tools – cost management and dashboards – and adapting them according to the requirements of the public sector management is practical and applicable.

1.4. Importance of the study

1 The importance of studying public management control systems stems from the importance of developing the management system in public sector institutions overall.

2 most of Studies focused on the analysis of control management system in the private sector but there is still a gap in the literature about the adoption

of MCS in the public sector.

3 The subject of this study reflects the level of seriousness in adopting the concept of modern management methods in public sector institutions.

4 The study highlights the importance of management control systems for public institution managers and emphasizes their role in creating an environment that improves public service quality.

5 This study adds to the theoretical heritage addressing this aspect and emphasizes its importance.

6 Furthermore, the findings of this research can serve as a valuable resource for decision-makers seeking to enhance the effectiveness and efficiency of public sector operations. by identifying key factors influencing the success of management oversight system.

7 In addition, This research contributes to the ongoing dialogue concerning accountability and transparency in public administration. A robust management oversight system fosters a culture of responsibility, ensuring that public resources are utilized judiciously and that decisions are made in the best interests of the citizenry.

8 ultimately, this study seeks to help create a more effective and efficient public sector management environment, thereby enhancing the quality of life for all members of society by promoting sound management practices and fostering a culture of continuous improvement, this research seeks to support the long-term development and prosperity of the nation.

2- study concepts

2.1 management control system definition

Management control system MCS define as the processes by which managers influence other members of the organization to implement the organization's strategies (Robert & Vijay, 2007)by create the necessary conditions for effectively utilizing employed resources to achieve desired outcomes in light of objectives (pierre, philippe, francoise, leville, mendoza, & gerard, 1997)

This definition underlined three sub-components of MCS (Hélène, Véronique, Jérón, Yvon, Eve, & Daniel, 2008)

- ✓ Effectiveness ; The concept of effectiveness is associated with doing what is correct. From management control system

perspective, it is defined as achieving the desired goals, where the purpose is to focus on outputs regardless of inputs.

- ✓ Efficiency; Efficiency is defined as the ability to do things correctly (Doing Things Right). From a management control perspective, it is the ability to achieve results with the least possible resources;
- ✓ Reliability; Reliability measure the extent to which available resources align with the planned objectives.

In other definition; management control system collects and utilizes information to align estimates and decision-making across the organization, ultimately improving the overall decision-making process . (Charles, Alnoor, Srikant, & George, 2003) . So, MCS information is crucial for strategic decision-making, this could manifest as a shift in production technology or in the competitive landscape (Bouquin, 1998).

Control Management involves a variety of activities including (Robert & Vijay, 2007, pp. 17-18)

- ✓ Coordinating the activities of several parts of the organization,
- ✓ Communicating information,
- ✓ Evaluating information,
- ✓ Deciding what; if any ; action should be taken,
- ✓ Influencing people to change their behaviour.

2.2 Public management definition

Public management defines as the application of management principles in the public sector, focusing on efficiency, effectiveness, and performance measurement in government operations (owen, 2012),

(pollitt & Bouckaert, 2017) Define public management as the processes, structures, and strategies used to effectively govern public sector organizations. They stress how managerial approaches can enhance performance, accountability, and responsiveness in government institutions.

Modern public management differs from traditional approaches, which focus on legal aspects of transactions, by adopting and adapting private-sector management tools and methodologies to meet public-sector needs by enhance service delivery, accountability, and governance

responsiveness (owen, 2012).

The New Public Management NPM represents an important framework for thinking about how the machinery of government can serve to achieve societal aims. It emphasizes key functional components of good governance and highlights mechanisms—such as co-production, privatization, and performance management—as well as values like efficiency and citizen responsiveness that can inform public sector effectiveness (derick & jennifer, 2015) .

2-3 Control management system in public sector

(Anthony & Young, 2033) Describe control management as the process ensuring resources are efficiently and effectively obtained and used to achieve organizational objectives. In the public sector, this involves applying financial, operational, and regulatory controls to ensure accountability, transparency, and performance in government operations.

Control management in the public sector ensures efficiency, accountability, and compliance with laws and policies. The process began by establishing performance objectives (Anthony & Young, 2033) and allocating resources strategically, supported by effective planning and budgeting systems (OECD , 2005). In next step managers must Ensuring policies, programs, and services are delivered as planned, while complying with regulations and ethical standards (Broadbent & Guthrie, 2008). Conducting internal and external audits to ensure compliance and effectiveness. In final step managers evaluating efficiency using Key Performance Indicators (KPIs). Ensuring transparency by publishing accountability reports (Bovens, 2007) (INTOSAI, 2013). Addressing inefficiencies and implementing governance reforms. Adjusting policies and strategies based on audit findings (Pollitt & Bouckaert, 2017).

2-4 operational definition

Procedurally, this study evaluates the level of Prerequisite and challenges of management control system in public sector based on scores obtained from a questionnaire developed by the researcher. Through 35 question; The questionnaire addresses the key components of the prerequisites for public management control, specifically those related to efficiency, effectiveness, cost measurement, and performance measurement

systems.

The questionnaire items were organized into three 3 key dimensions:

1. The basic prerequisite of MCS in public sector institutions
2. Simulating MCS Tools
3. MCS Challenges in the public sector

3. Field Study Procedures

3.1 Methodology

This research employed a descriptive approach, as it is particularly effective for understanding and interpreting the subject matter. The descriptive approach provides a systematic method for collecting and analyzing data by classifying, organizing, and presenting information in both quantitative and qualitative forms. This methodology facilitates a comprehensive understanding of the relationships between the various components of the phenomenon under study, allowing for a detailed and nuanced analysis of the subject.

The data for this study was processed using the outputs from the SPSS 21 program, which enabled efficient data analysis, statistical computations, and the identification of patterns and trends within the dataset. This approach ensured the accuracy and reliability of the findings, supporting the overall objectives of the research.

3.2 Sample of the study

The data used in the study were drawn from a sample of 40 participants, administrators and directors, from four distinct categories of public institutions: educational institutions, vocational training institutions, healthcare institutions, and local collectivities, who voluntarily participated in the study by completing the research instrument.

Data collection was conducted during the year 2025.

Sample characteristics according to academic qualification and function are presented in Tables 1 and 2.

Table N°1 : study sample distribution by function

Position	Repetition	% ration
Budget manager In An Educational Institution	7	17.5%
Director	6	15%
SG	1	2.5%
Elected Member	1	2.5%
Administrator /Principal Administrator	15	37.5%
Department Manager	3	7.5%
Administrative Assistant	2	5%
State Engineer Manager	2	5%
IT Worker	2	5%
Other	1	2.5%

Source : author's results obtained from SPSS21 software outputs

Table N°2 : study sample according to academic qualification

Academic qualification	Repetition	% ration
Phd	2	5%
master	22	55%
Bachelors degree	7	17.5%
Applied University Studies Diploma	3	7.5%
Baccalaureate +5years	4	10%
Other	2	5%

Source : author's results obtained from SPSS21 software outputs

3.3 Tools used in the study

3.3.1 Questionnaire description

The scale comprises a set of 35 statements organized into three distinct sub-dimensions. Consequently, the questionnaire is structured into three separate sub-questionnaires, as detailed in Table 3.

Table N°3 : Questionnaire Dimensions

Number of Paragraphs	Dimensions	Number
Q1 + Q2 + Q5 + Q6 + Q7 + Q8 + Q33 + Q34 + Q9 + Q10 + Q11+ Q12 + Q14 + Q15 + Q16+ Q17 + Q18 + Q19 + Q20 + Q21 + Q22 + Q23	The prerequisite of MCS in public sector institutions	1
Q24 + Q25 + Q26 + Q27 + Q28 + Q31 + Q32 + Q35	simulating MCS Tools	2
Q3 + Q4 + Q13 + Q29 + Q30	MCS Challenges in the public sector	3

Source : author's results

Investigating the Prerequisites of implementing Management Control System tools in Public Sector Institutions

This table displays the distribution of paragraphs across the various dimensions of the questionnaire, which focus on the components of control Management within public organization.

The paragraphs of the prerequisite of MCS in public sector dimension measure the following elements:

- ✓ How is control management carried out in the public sector?
- ✓ The extent to which adequate tools are available for monitoring operations in the sector.
- ✓ Effectiveness. by examining the alignment between objectives and results .
- ✓ Reliability, considering the allocated resources and established goals, and the consistency between them.
- ✓ Efficiency, by examining the degree of alignment between outputs and resources, in order to measure the efficiency of resource utilization.
- ✓ The basic requirement for cost management system evaluate the challenges managers encounter in accurately measuring costs and allocating them to the services provided. It also assesses the degree to which the legal requirements of public accounting can be aligned with the analytical demands of managerial accounting. Additionally, examine the consistency, reproducibility, and measurability of services, as well as the precision and reliability of the units of measurement that can be used.
- ✓ Key Performance Indicators - Dashboards KPIs- measures how key performance indicators are prepared, organized, and discussed, the extent to which they cover performance requirements and their diversity, whether they are organized in dashboards, and how reports are prepared and deviations are corrected

Simulating MCS Tools dimension assesses public sector institution managers' perceptions of the importance of simulating management control tools that designed for managing profit organization and their views on key components, such as dashboards, budgeting systems, and cost accounting systems. It also examines the presence of an independent management

control function and how legal and regulatory frameworks govern it. This axis aims to provide insights into the operational efficiency, accountability, and compliance of public sector organizations by examining the tools and mechanisms that support decision-making and governance.

MCS Challenges in the public sector dimension examines the difficulties faced by managers in determining objectives and measuring results, as well as the neglect of managerial aspects in favor of legal ones, particularly the necessity of adhering to public accounting standards and the lack of legal and organizational mechanisms that support the management control function.

The scale phrases were divided evenly between positive and negative forms. The questionnaire featured five response options: strongly disagree, disagree, neutral, agree, and strongly agree. Each option was assigned a specific weight

3.3.2 Validity and reliability

The validity was calculated using the internal consistency method, cronbach's alpha, which is used when the test is administered once in order to calculate the homogeneity coefficient that the test possesses

Table no. (04): represents the stability coefficient using cronbach's alpha equation

Table N°4 : Cronbach's Alpha coefficient

N	N of Items	Cronbach's Alpha
15	35	,762

Source : author's results obtained from SPSS21 software outputs

The tool demonstrated a validity coefficient of 0.762, indicating acceptable level of stability and consistency.

The reliability coefficient of the questionnaire was calculated using, discriminate divergent validity which involves the following steps:

- Arranging the sample members' scores in descending order from highest to lowest.
- The obtained scores were divided into two groups. The first group represents the upper 30% of high scorers, consisting of 10 individuals. The second group represents the lower 30% of low scorers, also consisting of 10 individuals.

Investigating the Prerequisites of implementing Management Control System tools in Public Sector Institutions

- To examine the difference between the mean scores of these two groups, a t-test was conducted. The results of this analysis are presented in Table 05.

Table N°5 : independent test t-test

Group Statistics	Least	Hihet
N	10	10
MEAN	107.9	131.7
Std deviation	5.56677	3.40098
Df	18	
T	-11.537	
Sig	0.000	
statistical significance	0.05	

Source : author’s results obtained from SPSS21 software outputs

It is clear from Table No. (05) that P value significance =0.000 for the “t” test (-11.537) at 18 degrees of freedom is smaller than the level of statistical significance (0.05), so it is statistically significant; This suggests that the differences observed between the two groups are statistically significant. Consequently, the questionnaire has the ability to distinguish between its parties, so it is valid and suitable for use in the study

4- Results & Discussion

4-1 Study results

H1: Public sector institutions have the basic requirements for localizing management control systems tools

To test this hypothesis, a comparison was made between the hypothetical population mean, which was calculated manually, and the calculated mean of the study sample’s scores in the 22 components in the first dimension - The reality of basic prerequisite of MCS in public sector institutions -, The hypothetical mean was determined by taking the middle value of the five alternatives (which is 3) for the questionnaire, multiplying it by the number of questionnaire phrases for the first dimension (22), resulting in a hypothetical mean value 66. To confirm the differences, a one-sample t-test was conducted, and the results are presented below.

Table N°6 : one-Sample Statistics for The First Dimension

N	Mean	Std. Deviation	Std. Error Mean
40	72,5250	9,16512	1,44913

Source : author's results obtained from SPSS21 software outputs

Table N°7 : one-Sample Test For The First Dimension

Test Value = 66					
t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
4,503	39	,000	6,52500	3,5939	9,4561

Source : author's results obtained from SPSS21 software outputs

The results shows that the arithmetic mean of the study sample, consisting of 40 participants, was 72,5250 with a standard deviation of 9,16512. The hypothetical mean was set at 66. The arithmetic mean was found to be significantly higher than the hypothetical mean. A t-test revealed a highly significant difference at the 0.05 level with 39 degrees of freedom, as evidenced by a t-value of 4,503. This indicates a statistically significant difference between the arithmetic and hypothetical means. Consequently, the study's hypothesis was confirmed, suggesting that Public sector institutions have acceptable level of basic requirements to establish MCS according to the surveyed sample

H2: managers in Public sector institutions face some organizational difficulties that limit CMS performance

To test this hypothesis, a comparison was made between the hypothetical population mean, which was calculated manually, and the calculated mean of the study sample's scores in the 5 components in MCS practice Challenges in the public sector dimension. The hypothetical mean was determined by taking the middle value of the five alternatives (which is 3) for the questionnaire, multiplying it by the number of questionnaire phrases for the second dimension (5), resulting in a hypothetical mean value 15. To confirm the differences, a one-sample t-test was conducted, and the results are presented below.

Table N°8 : one-Sample Statistics for The second Dimension

N	Mean	Std. Deviation	Std. Error Mean
40	17,3500	2,54750	,40279

Source : author’s results obtained from SPSS21 software outputs

Table N°9 : one-Sample Test for The second Dimension

Test Value = 15					
t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
5,834	39	,000	2,35000	1,5353	3,1647

Source : author’s results obtained from SPSS21 software outputs

Results shows that the arithmetic mean of the study sample, consisting of 40 participants, was 17,3500 with a standard deviation of 2,54750. The hypothetical mean was set at 15. The arithmetic mean was found to be significantly higher than the hypothetical mean. A t-test revealed a highly significant difference at the 0.05 level with 39 degrees of freedom, as evidenced by a t-value of 5,834. This indicates a statistically significant difference between the arithmetic and hypothetical means. Consequently, the study's hypothesis was confirmed, suggesting that managers in Public sector institutions face some organizational difficulties that limit MCS performance, according to the surveyed sample

H3: Simulating some of the private sector's management control system tools – cost management and dashboards – and adapting them according to the requirements of the public sector management is practical and applicable..

To test this hypothesis, a comparison was made between the hypothetical population mean, which was calculated manually, and the calculated mean of the study sample’s scores in the 8 components in Assessing The Necessity of MCS Tools In Public Sector Management dimension, The hypothetical mean was determined by taking the middle value of the five alternatives (which is 3) for the questionnaire, multiplying it by the number of questionnaire phrases for the third dimension (8),

resulting in a hypothetical mean value 24. To confirm the differences, a one-sample t-test was conducted, and the results are presented below.

Table N°10 : one-Sample Statistics for The third Dimension

N	Mean	Std. Deviation	Std. Error Mean
40	29,4250	3,33503	,52731

Source, author's results obtained from SPSS software outputs

Table N°11 : one-Sample Test For The third Dimension

Test Value = 24					
t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
10,288	39	,000	5,42500	4,3584	6,4916

Source, author's results obtained from SPSS software outputs

Results shows that the arithmetic mean of the study sample, consisting of 40 participants, was 29,4250 with a standard deviation of 3,33503. The hypothetical mean was set at 24. The arithmetic mean was found to be significantly higher than the hypothetical mean. A t-test revealed a highly significant difference at the 0.05 level with 39 degrees of freedom, as evidenced by a t-value of 10,288. This indicates a statistically significant difference between the arithmetic and hypothetical means. Consequently, the study's hypothesis was confirmed, suggesting that simulating some of the private sector's CMS tools and adapting them according to the requirements of management in the public sector is practical and applicable.

4-2 Discussion

H1: Public sector institutions have the basic requirements for localizing management control system tools.

Although there is no independent body specifically dedicated to the control management function in public sector institutions, managers handle this function through various units. The managers surveyed believe they possess the necessary tools to perform this function

The study also revealed inefficiencies and ineffectiveness in these

institutions, evidenced by misalignments between results and resources, indicating inefficiency, and between results and objectives, pointing to ineffectiveness. Additionally, adaptability is hindered by mismatches between allocated resources and set goals, exacerbated by inflexible estimate structuring

Regarding the service measurement system, it is easy to localize tools capable of measuring services and performance, as the surveyed sample believes that the provided services are characterized by repetition and uniformity, making it possible to easily count the number of services provided by the institution and the quantity of resources used. Consequently, monitoring and measurement become feasible

The study found that the management system in the public sector institutions studied supports the development of parallel cost accounting systems, due to the ease of identifying and homogeneous nature of cost measurement units, as well as the ability to assign costs based on a clear cause-effect relationship.

Public sector institutions operate a performance measurement system similar to dashboards applied in profitable organizations. The study showed that there are scheduled data for performance indicators to monitor progress rates in performance, goals, programs, projects, and employees. It also includes detailed reports on performance. During periodic meetings, these indicators are discussed, deviations are analyzed, and corrective actions are taken.

H2: managers in Public sector institutions face some organizational difficulties that limit CMS performance

The study revealed that public sector managers face some difficulties in setting goals and measuring results, lack of support from accounting systems for cost accounting, with the absence of legal and organizational mechanisms that limit the management control function, emphasizing legal aspects at the expense of managerial aspects, according to public accounting rules and regulations and public procurement law.

H3:: Simulating some of the private sector's management control system tools – cost management and dashboards – and adapting them

according to the requirements of the public sector management is practical and applicable.

The sample studied agreed on the necessity of developing dashboards as a tool for leading and measuring performance in public sector institutions, with the required diversity of indicators, in terms of type and nature, considering that the current performance indicators are insufficient.

There is a need for a sub-system for analytical accounting that operates in parallel with the public accounting system. The managers also believe that it is essential to establish cost measurement units for public sector institutions that are accurate and stable, facilitating cost control and comparison between them, as well as granting institutions autonomy in budgeting.

Regarding the management control function, managers believe it is not necessarily required to create a new unit or functional centre for this task. Instead, it can be assigned to one of the existing departments in the institution or specialized committees can be formed. Additionally, there is the possibility of adapting management control tools used in the private sector to meet the needs of public sector management

5. CONCLUSION

The concept of control management in the public sector intersects with the common understanding of control management, particularly in terms of the necessity of clear performance criteria (KPIs). and goals It involves achieving consensus on these standards, opening the door to broad participation in the planning and decision-making process, ensuring the dynamism that underpins the continuous improvement process, and stabilizing the workforce. However, this concept in the public sector retains its specificity due to the particular operational framework that public institutions follow. This specificity is evident in criteria related to public services, their quality irrespective of profitability, and the focus on developing these services to enable citizens to access the best possible quality.

This study revealed that the management control system in the public sector exhibits certain characteristics, though they are not yet fully

Investigating the Prerequisites of implementing Management Control System tools in Public Sector Institutions

developed. This sensitive sector's management monitoring system requires further attention and support, particularly in terms of the tools used, such as cost management and dashboards, to ensure alignment between allocated resources, obtained results, and established objectives. In general, the following recommendations can be drawn from this study.

- Establish clear strategies for developing public institutions performance.
- Developing a cost management system for public sector institutions and integrating it with an information system that defines cost units, measures them, and generates reports, considering the homogeneous and repetitive nature of costs in such institutions
- Decentralize the process of planning, and setting goals
- Linking funding with performance system - Based Funding System -.
- modernizing the public-sector IT infrastructure
- Train managers and directors on control management systems, methods, and modern tools.
- Implement feedback mechanisms to monitor performance ex through online surveys for stakeholders and service users to assess service quality..
- Prioritize the managerial aspect over the legal aspect by easing public accounting constraints in favor of a performance monitoring system.
- Adopt private-sector management tools, including dashboards and budgeting systems.
- Localize MCS function in public sector institutions or at least assign this task to specialized committees to periodically monitor the performance of units and centres, supported by the necessary legal and organizational mechanisms.
- Developing a decentralized budgeting system, based on and integrated with the public budget, for management and control

purposes.

- Develop and customize KPIs for public sector institutions, considering their specific characteristics and context, using tailored performance evaluation models and ensuring alignment with overarching goals.
- Integrate the performance measurement system with regular reporting to analyze performance and conduct evaluations.

5. Bibliography List :

1. Ahmed, B., kanza, b. g., & Ahmed, b. y. (2019). Management effectiveness in algerian local collectivities in the light of the requirement of new public management. *araa journal of economic studies* , 01 (01), 22-109.
2. Anthony, R. N., & Young, D. W. (2033). *management control in nonprofit organization* (éd. 7). McGraw-Hill.
3. Bouquin, H. (1998). *le control de gestion* . paris.
4. Bovens, M. (2007). Analyzing and Assessing Accountability . *European Law Journal* , 4 (13), 447–468.
5. Broadbent, j., & Guthrie, J. (2008). . "Public Sector to Public Services. *Accounting, Auditing & Accountability Journal* , 2 (21), 129–169.
6. Charles, H., Alnoor, B., Srikant, D., & George, F. (2003). *controle de gestion et gestion budgétaire*. (G. L, Trad.) france: pearson education.
7. derick, w. b., & jennifer, m. b. (2015). public sector management reform in developing countries;perspectives beyond NPM orthodoxy. *public administration and development* , 35, 222-237.
8. Hélene, L., Véronique, M., Jéron, M., Yvon, P., Eve, C., & Daniel, M. (2008). *le control de gestion ; organisation; outils et pratique* (éd. 3). paris: dunon.
9. INTOSAI. (2013). *Internal Control: Providing a Foundation for Accountability in Government*.

Investigating the Prerequisites of implementing Management Control System tools in Public Sector Institutions

10. kaplan, r., & norton, d. (2001). *the strategy focused organization ; how balanced scorecard companies thrives in the new business environment*. boston usa: harvard business school press.
11. lee, s., Andrew, L., & Ruth, L. S. (2000). Strategy Formulation Framework For Vocational Education Entegrating Swot Analysis , Balanced Scorecard, QFD Methdology & MBNQA Education Criteria. *Anagerial Auditing Journal* , 15 (8), 407-423.
12. OECD . (2005). *Modernising Government: The Way Forward*. OECD Publishing.
13. Omar, B. (2022). Diagnosis and evaluation of the effectiveness of management control system at territorial collectivities under algerian legislator. *Economic Diversification Journal* , 03 (01), 100-115.
14. owen, h. (2012). *public management and administration; an introduction* (éd. 5). palrave macmilan.
15. pierre, l. b., philippe, d., francoise, g., leville, a., mendoza, m., & gerard, n. (1997). *control de gestion et management* (éd. 4). (LGDJ, Éd.) paris.
16. Pollitt, c., & Bouckaert, G. (2017). *Public Management Reform: A Comparative Analysis*. Oxford University Press.
17. pollitt, C., & Bouckaert, G. (2017). *Public management reform; a comparative analysis -into the age of austerity* (éd. 4). oxford university press.
18. Robert, A., & Vijay, C. (2007). *management control systems* (éd. 12). new delhi: Tata McGraw Hill Publishing Company Limited.
19. Teresa, F., Antonio, S., & Ricardo, R. (2021). adoption of management ccontrol systems and performance in public sector organizations. *journal of business research* , 124, 593-602.