Applying Modern Management Control Mechanisms in Public Hospital Institutions -An Analytical Study at the Public Hospital Institution Mohamed Boudiaf in Ouargla-

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Abstract:

This study aims to highlight the implementation of contemporary management control mechanisms within public institutions. It focuses on identifying the advanced management control systems employed in these organizations to evaluate their efficacy in optimizing resource utilization and synchronizing activities to fulfil+l institutional objectives. This, in turn, enhances the quality of public services and improves overall public sector performance.

 The Public Hospital Institution Mohamed Boudiaf in Ouargla serves as a case study, illustrating the alignment of modern management control tools with the unique demands of such institutions.

Keywords: Modern management control tools, approaches to improving public institution performance, public service, modern public management, public hospital institutions.

Introduction:
Management control has emerged as a pivotal function within organizations, particularly due to the vital oversight it provides, especially in the face of global challenges currently impacting various sectors. Its effectiveness stems from its capability to streamline operations by identifying, analyzing, and addressing discrepancies within the institutional framework.
The efficacy of management control is augmented by a suite of tools and techniques tailored to enhance administrative strategies. Nonetheless, the deployment of these instruments varies significantly across different sectors. Notably, the application of management control in economic sectors differs markedly from its utilization in the public domain.

Public entities encounter numerous challenges in applying management control tools and techniques effectively to manage resources adeptly and align their activities with stated objectives. This alignment is crucial for delivering high-quality public services and elevating public sector performance.

The contemporary arsenal of management control mechanisms includes tools such as dashboards, balanced scorecards, and sustainable balanced scorecards. Simultaneously, strategies for enhancing performance encompass Total Quality Management, administrative engineering, and electronic methodologies.

Research Problem:

Arising from the initial overview, the research question crystallizes as follows:

What modern management control mechanisms are implemented in public institutions, and what are the viable solutions to enhance public service performance through these mechanisms?

This inquiry is structured into three principal themes:

- Modern management control mechanisms in public institutions;

- Modern public management and contemporary public administration theory;

- Examination of the implementation of modern management control mechanisms at the Mohamed Boudiaf Public Hospital.

First Axis: Modern Management Control Mechanisms

Modern management control mechanisms are categorized into tools and approaches aimed at enhancing the performance of institutions. Specifically, these tools include the dashboard, balanced scorecard, and sustainable balanced scorecard, which are utilized across various Algerian public institutions.

Moreover, the methods to augment institutional performance through management control encompass Total Quality Management, administrative engineering, and electronic management. The illustration below delineates these mechanisms:

Figure (01) depicts: Modern Management Control Mechanisms
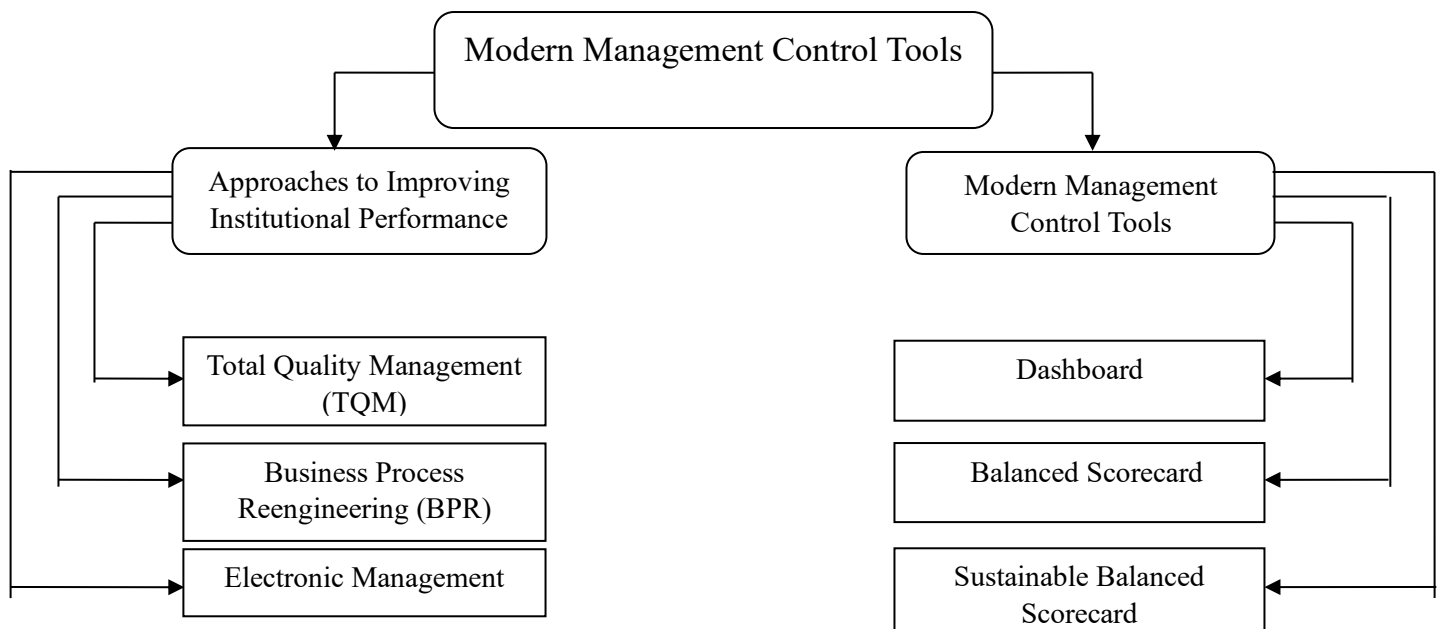
Source: Developed by the researchers, building on prior references.

It is apparent from the figure that institutions employ a range of management control mechanisms aimed at excelling in performance. These are represented by both the modern tools for management control and innovative approaches to boosting overall institutional performance.

I. Modern Management Control Tools:

Modern tools for management control have been developed as enhancements over traditional control tools. These innovative tools facilitate efficient and effective oversight of management operations, notably through their capability to swiftly identify and rectify deviations.

These tools include short-term instruments like the dashboard and long-term frameworks such as the balanced scorecard and sustainable balanced scorecard. We will explore these tools as contemporary instruments of management control in the following discussion:

1. **Dashboard**

The concept and term "dashboard" were first introduced in 1930 to monitor crucial ratios and data that assist a manager or leader in tracking the organization's progress towards its objectives. This involves the comparison of actual ratios against standard benchmarks. The term was adopted in the United States in 1948 by organizations utilizing an estimative management system.

Although the naming of this tool has varied, from management table, control table, to dashboard, all refer to the same concept. Researchers have provided multiple definitions of a dashboard, culminating in this comprehensive description: A dashboard is a management tool that enables the diagnosis of an institution's current situation at any given moment and measures deviations from a projected situation through a set of significant and relevant indicators.

It also collects precise information about the institution's activities to facilitate corrective actions tailored to the institutional environment. Therefore, it represents a comprehensive display of the most crucial and pertinent information used by managers for the optimal utilization of institutional resources.[1]

1-1 Comparison Between the Dashboard and Traditional Control Tools

The dashboard differs from other traditional control tools as it is a modern and effective control instrument in institutional management. This is achieved through the ease of managing and adjusting information. The following table highlights the key differences between the dashboard and other traditional control tools.[2]

Table (01): Difference Between the Dashboard and Traditional Control Tools

Traditional Control Tools	Dashboard
- Pure financial information;	- Includes financial and non-financial (qualitative) information;
- Information sources are internal;	- Possibility of including information from the external environment of the institution;
- Standard content typical for all managers;	- Content tailored to the needs of various managers;
- Information display is at least monthly;	- Information display aligns with the daily activities of managers;
- Slow in acquiring information (Day +10 to Day +25);	- Quick in acquiring information (Day +1 to Day +5);
- Many detailed, comprehensive data;	- Fewer data, focused on essential points that facilitate action;
- Takes time to analyze its information;	- Quick in reading and analysis;
- Data representation is complex or non-existent;	- Data representation is distinctive and clear;
- Difficulty in developing these tools.	- Flexible and adjustable, can be renewed at any time and as needed.

Source: H. Löning and others, Management Control: Organization and Implementation, 2nd ed., Dunod, Paris, 2003, p. 146.

1-2 Types of Dashboards:

A fundamental principle of the dashboard system is that each responsibility center is equipped with its own dashboard, similar to the management of budget systems. Thus, each function within the institution has a dashboard that allows managers to control their activities. The types of dashboards will be displayed in the following figure.[3]

Figure (02): Types of Dashboards
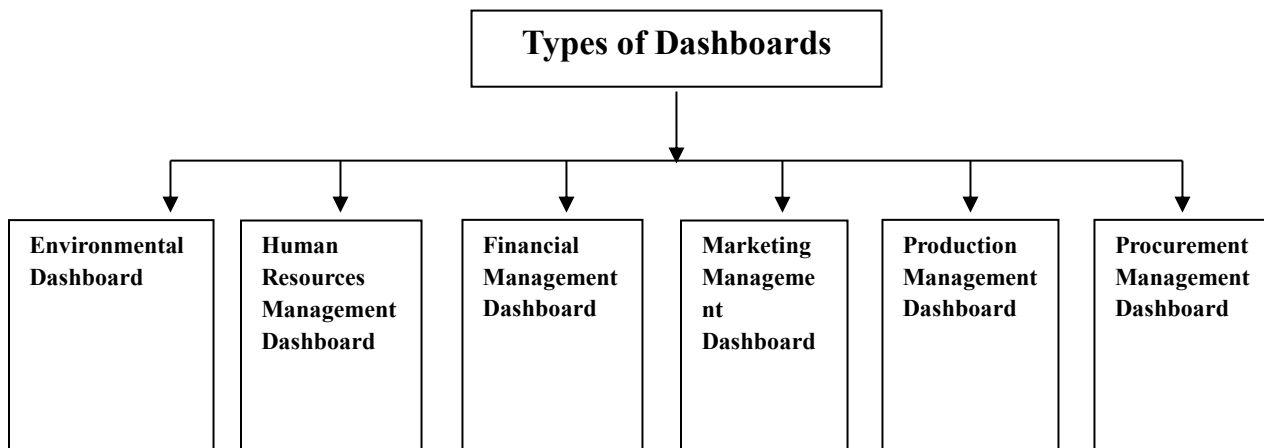
Source: Leroy M., *Le Tableau de Bord au Service de L'entreprise*, Éd: Organisation, Paris, 2001, p:10.
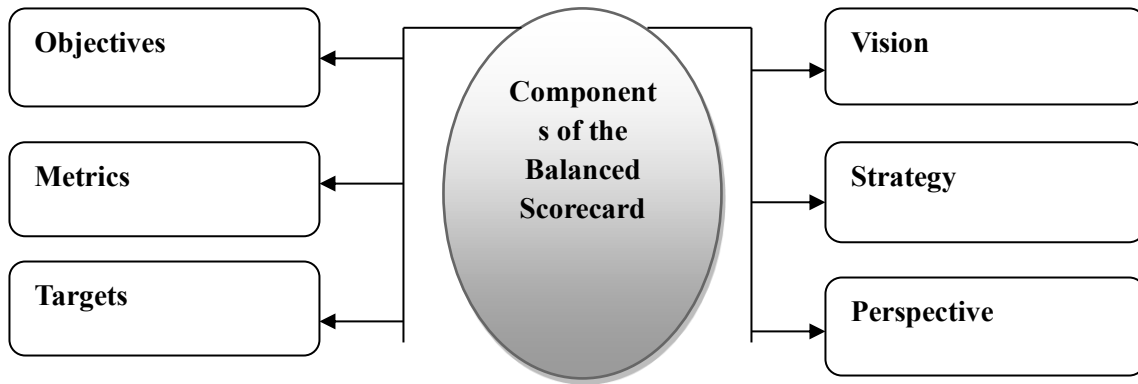
2. Balanced Scorecard:

The Balanced Scorecard, a modern management control tool developed by Kaplan and Norton in 1992, is one of the performance evaluation models that integrates both financial and non-financial aspects to form a more comprehensive system that expresses the actual situation of the institution in the contemporary environment.

Since its inception, it has been the subject of research and focus by many thinkers and writers, leading to multiple definitions that clarify its meaning. Kaplan and Norton, the inventors of the Balanced Scorecard, define it as "a system that translates the mission and strategy of the institution into a set of comprehensive indicators that provide a framework for strategic measurement and management."[4]

2-1 Components of the Balanced Scorecard:

The Balanced Scorecard consists of six fundamental elements introduced by Kaplan and Norton. These elements outline the operational mechanism of the scorecard, illustrated in the following figure.[5]

**Figure (03): Components of the Balanced Scorecard**

Source: Kaplan and Norton, "Having Trouble With Your Strategy? Then Map It," *Harvard Business Review*, Sept/Oct, 2000, p:43.

2-2 Dimensions of the Balanced Scorecard:

The Balanced Scorecard comprises four main dimensions: the financial perspective, the customer perspective, the internal process perspective, and the learning and growth perspective. We will explore these in the next figure.[6]

Figure (04): Dimensions of the Balanced Scorecard
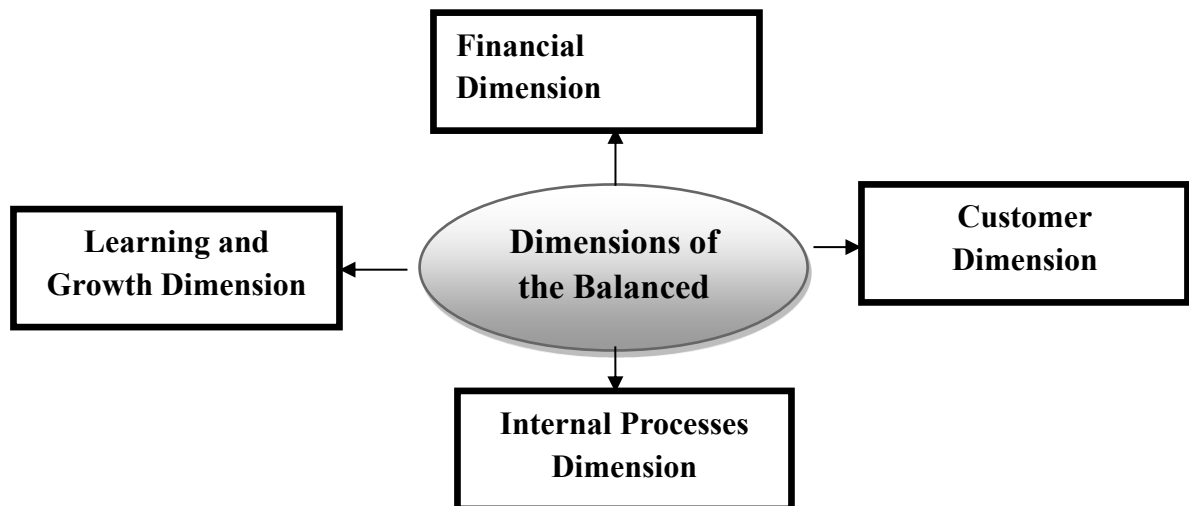
Source: Khaled Rajem, Mohamed Zerqoun, "The Importance of Using the Balanced Scorecard in Activating Strategic Control in Contemporary Organizations," Proceedings of the Fifth International Conference for the Faculty of Economics and Administrative Sciences, April 22-25, 2015, Jordan, p:8.

3. Sustainable Balanced Scorecard

The Sustainable Balanced Scorecard enhances the traditional Balanced Scorecard by integrating environmental and social dimensions alongside the foundational four dimensions. This adaptation makes it a potent instrument for

aligning institutional strategies with sustainable development goals, thereby enabling organizations to foster value sustainably over an extended period.

The Sustainable Balanced Scorecard excels as a performance measurement and management tool, especially in the domain of sustainability. It not only retains the original four dimensions but also incorporates a crucial fifth dimension focused on environmental and social concerns.

Efforts to embed sustainability into the Balanced Scorecard have led to the evolution of this model into what is now known as the Sustainable Balanced Scorecard, which comprehensively covers all environmental and social dimensions in addition to the core four. Approaches to integrating this sustainability dimension vary and include:

- Integrating environmental and social metrics within the existing four dimensions;

- Introducing a separate fifth dimension specifically addressing environmental and social issues;

- Developing an independent scorecard dedicated to environmental and social performance metrics.

Originally, the Balanced Scorecard drew criticism for its omission of social and environmental factors in evaluating performance. To address this, modifications were made in 2001 to include a new community dimension, encapsulating both environmental and social aspects, thus transforming the traditional Balanced Scorecard into what is now termed the Sustainable Balanced Scorecard (SBSC).[7]

II. Approaches to Improving Public Institution Performance

Modern management control mechanisms that focus on enhancing public administration performance serve as fundamental components in comprehensive management control. These strategies are pivotal in elevating institutional performance and enriching the quality of public services. They include Total Quality Management, Business Process Reengineering, and Electronic Management, each of which will be elaborated upon below:

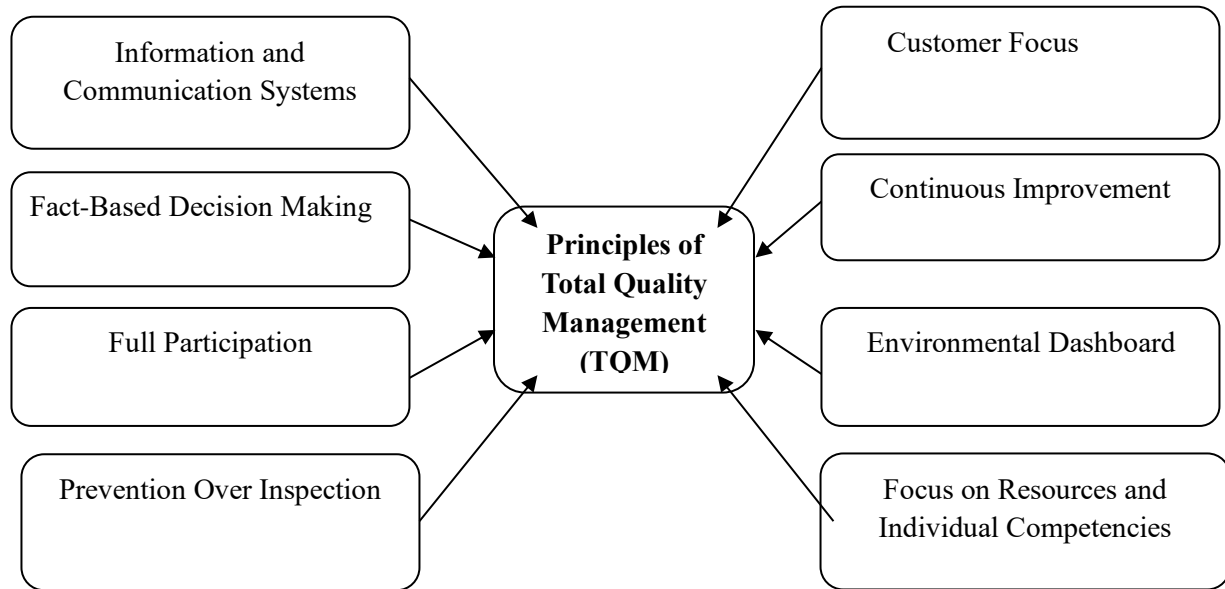1. **Total Quality Management (TQM)**

Total Quality Management, commonly abbreviated as TQM, embodies a contemporary administrative philosophy that has gained prominence since the early 20th century. TQM is considered the fourth evolutionary phase in the quality philosophy continuum, following quality inspection, quality control, and quality assurance, and culminating in Total Quality Management. This approach is characterized by its holistic nature.

TQM has been defined in various ways, with one of the most significant definitions provided by the International Organization for Standardization (ISO). According to the ISO, TQM is a management approach centered on quality, viewed as a collection of characteristics of a good or service that fulfills both stated and implied needs. This approach is predicated on the involvement of all organizational members, aiming for long-term success through customer satisfaction and benefits to all members of the institution and the broader community.[8]

- **Principles of Total Quality Management:**

Total Quality Management (TQM) revolves around several principles essential for its implementation across various administrative structures. These principles will be elaborated in the following figure.[9]

Figure (05): Principles of Total Quality Management

Source: Prepared by the researcher based on:

- Ahmed Bin Aichaoui, "Total Quality Management: The Path to Achieving Exceptional Organizational Performance," Algerian Institutions Performance Journal, Issue 03/2013, University of Ouargla, Algeria.

2. **Business Process Reengineering:**

Referred to as reengineering or "BPR," this term emerged in 1993 with the publication of the pioneering book "Reengineering the Corporation: A Manifesto for Business Revolution" by American researchers James Champy and Michael Hammer.

This book sparked a genuine revolution in the management world, promoting radically new ideas and principles. Reengineering explicitly calls for a fundamental reassessment of the various activities and processes on which institutions operate.[10]

Champy and Hammer define reengineering as "the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical performance measures such as cost, speed, quality, and service."[11]

2-1 Business Process Reengineering Model:

Business process reengineering consists of interacting elements that aim to optimize processes within an institution and deliver superior services to its customers. Hammer and Champy presented the primary model of business process reengineering, illustrated in the following figure.[12]

Figure (06): Business Process Reengineering Model
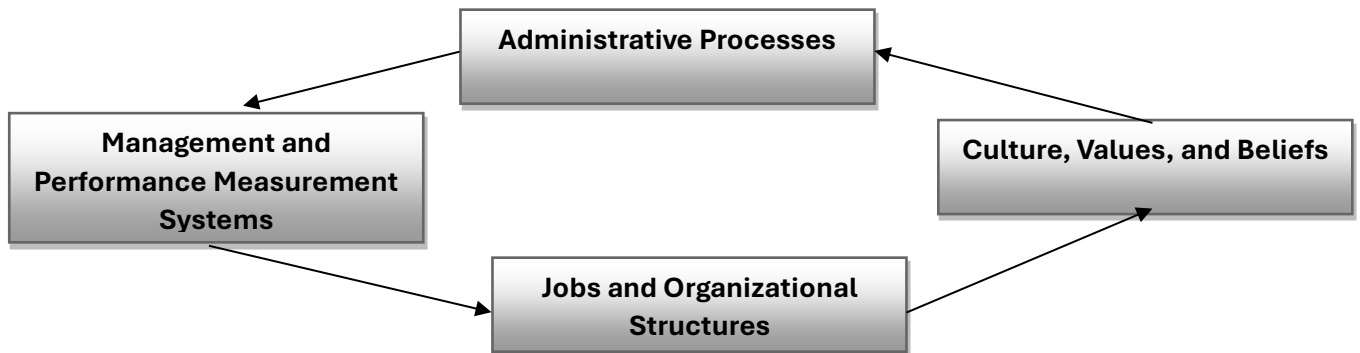
Source: Michael Hammer, James Champy, "Reengineering," Reinvent the Company for a Spectacular Improvement in Performance, Dunod, Paris, 1993, p: 94.

The researchers believe that business process reengineering inevitably leads to changes in everything within the institution, specifically the elements illustrated in the previous figure. These elements include administrative processes, organizational structures, human resources represented by their values and beliefs, and managers represented by management and performance measurement systems. These elements are integrally linked and fundamentally define the nature of the institution's operations, roles, and organizational structures.

2-2 Comparison Between Business Process Reengineering and Total Quality Management

Reengineering is a revolutionary and radical approach to various administrative processes, while Total Quality Management is a method that pursues incremental improvements. The latter aims to enhance work under the current system to the highest extent possible, reducing costs and time needed to perform services. We will discuss the key differences between business process reengineering and Total Quality Management in the following table.

Table (02): Difference Between Business Process Reengineering and Total Quality Management

Comparison Aspect	Total Quality Management	Business Process Reengineering
Type of Change	Evolutionary, A better way to compete	Revolutionary, A new way to perform work
Means	Adds value to current processes	Challenges the fundamentals of the process
Scope	Encompasses the entire organization	Focuses on core processes
Role of Technology	Traditional role	Supportive role
Use Cases	Poor performance, Low quality, Keeping up with changes	Complex administrative procedures, Low productivity, Keeping up with changes, Poor performance
Implementation Requirements	Building teams, Ongoing training, Effective leadership skills, Satisfying employee needs	Innovative thinking, Use of technology, Skills in rethinking and reassessment, Change in values and attitudes
Time Frame	Achieve goals in a short period	Achieve goals slowly

Objective	Achieve new incremental improvements	Induce radical changes gradually

Source: Ahlam Khan, "The Importance of Reengineering Human Resources in Improving Human Performance in Economic Institutions," A survey study of human resources managers' opinions in a group of economic institutions in Biskra, Doctoral thesis in Management Sciences, University of Biskra, Algeria, p: 29.

In essence, there is a synergy between Total Quality Management and Reengineering. Reengineering creates the appropriate environment and conditions for the implementation of Total Quality Management systems because it helps institutions break away from routine and inflexible work methods, empowers individuals by granting more authority, and encourages decentralization of decisions.

Additionally, it achieves high quality in performance and reduces costs, speed, and excellence in services. If we view Total Quality Management as a method to achieve organizational effectiveness through integrated approaches, then Reengineering is a strategy to create suitable conditions that allow the elements of Total Quality Management to perform their tasks effectively.

3. Electronic Management

Electronic Management is an advanced administrative paradigm that encompasses all facets of management, including planning, execution, monitoring, evaluation, and motivation. It is distinguished by its focus on the perpetual creation and application of knowledge to accomplish organizational objectives. Central to this approach is the development of a robust informational infrastructure that fosters a cohesive integration of vision and business performance.

This concept has been described by scholars as "the administrative process that leverages the unique capabilities of the internet and business networks for planning, directing, and controlling the resources and core capabilities of an institution without geographical boundaries, with the aim of fulfilling the institution's objectives." More comprehensively, Electronic Management relies heavily on a blend of information and communication technologies to execute all administrative processes. This strategic use of technology is aimed at enhancing institutional performance and strengthening its competitive stance.[13]

Second Axis: Modern Public Management and the Theory of Modern Public Administration

New Public Management (NPM) represents a transformative approach designed to overhaul traditional public administration in response to changes in state functions and the global demand for effective governance. The concept of NPM has been the subject of considerable debate. Michael Barzelay, in his scholarly review, recognized NPM as a global trend sparked by seminal articles by Peter Aucoin in 1990 and Christopher Hood in 1991.

These authors identified NPM as a succinct term adopted by scholars and practitioners to encapsulate evolving trends in public service delivery and management styles, epitomized by a set of principles aimed at reforming international public administration.[14]

1. **New Public Management**

Various scholars and experts have offered multiple definitions of New Public Management, highlighting its relevance in the realm of public administration. For instance, Bourens describes NPM as "the normative concept of public administration, comprising interconnected components: delivering high-quality services to citizens, enhancing the autonomy of public managers especially from central agency control, evaluating and rewarding performance based

on goal achievement, and providing the necessary human and technological resources for managers to effectively execute their roles."[15]

Comparison between Traditional Management and New Public Management:

The advent of New Public Management has precipitated significant changes at the administrative level, leading to discernible contrasts between traditional management practices and those of New Public Management. The table below delineates the principal distinctions between these two management paradigms.[16]

Table (03): Models of Traditional Management and New Public Management

	Traditional Management	New Public Management
Goals	Adherence to rules and procedures.	Achievement of results and customer satisfaction.
Organization	Centralization (functional, hierarchical).	Decentralization (delegation of authority, network structure, governance).
Responsibility Sharing	Muddled and unclear.	Clear.
Task Execution	Segmentation, fragmentation, specialization.	Autonomy.
Employment	Competitions.	Contracting.
Promotion	Based on seniority without nepotism.	Advancement based on merit, responsibility, and performance.
Control	Monitoring indicators.	Performance indicators.
Budget Model	Focuses on means.	Focuses on objectives.

Source: Anne Amar and Ludovic Berthier, "The New Public Management: Advantages and Limits," (research paper presented at the XVI International RESER Conference on Services Governance and Public Policies, Lisbon, September 28-30, 2006), p: 04.

1-2 Principles of New Public Management

The principles of New Public Management, as delineated by scholars Osborne and Gaebler, focus on revitalizing state functions and the government sector. These researchers articulate ten core principles that form the bedrock of New Public Management, influencing the public sector's role within this framework:[17]

- Introducing competitive principles to the public sector, which necessarily leads to greater efficiency in this sector and allows for innovation, development, and enhancement of public service and customer satisfaction.

- Strengthening management control.

- Evaluating the efficiency of administrations by focusing on results rather than on pre-control resources. Osborne and Gaebler justify this principle by adopting the idea that everything measurable must be achieved as planned.

- Governments or public bodies should strive to achieve their mission and goals through effectively and efficiently ensuring the welfare of the citizen or customer, rather than being strictly tied to the legal framework and regulatory provisions.

- The necessity of changing the administration or agency's view of the service, which should increasingly resemble a customer-first approach.

- These bodies or governments should have prior preparations to face and solve difficulties or problems before they arise.

- Public and governmental bodies should effectively strive to maximize their economic profits.

- Adopting a participatory approach to management and moving away from centralization, which includes many advantages such as flexibility in responding to sudden environmental changes and thereby customer needs, in addition to efficiency, effectiveness, and innovation in management.

- Adopting market mechanisms instead of bureaucratic management.

- Focusing on providing high-quality services to customers.

1-3 Models of New Public Management

The models of New Public Management can be summarized in the following figure.[18]

Figure (07): Models of New Public Management
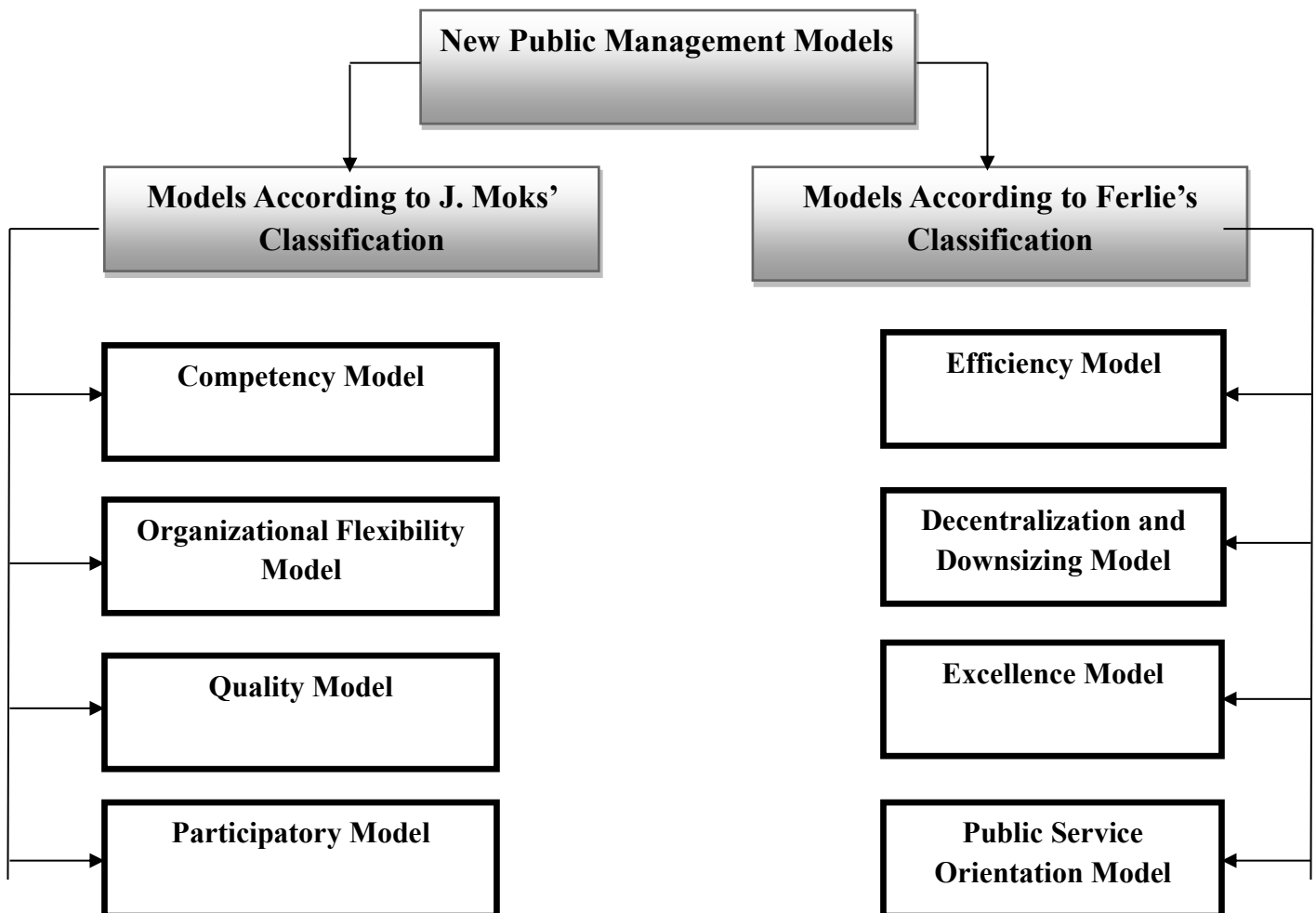
Source: Based on research by Ahlam Foughali, "New Public Management and the Reform of International Bureaucracies: The United Nations and Its Specialized Agencies as a Model," Master's Thesis, Faculty of Law and Political Science, University of Batna, Algeria, 2013, p: 43.

2 Theory of Modern Public Administration

The theory of modern public administration has emerged as a transformative approach designed to revamp the management structures within the public sector and public service management. This theory also aims to modify various policies and administrative programs in public institutions characterized by an administrative nature. The initial changes in public administration introduced competitive tendering as a new element within public services, fostering further developments such as the creation of internal markets.

A significant radical shift in public service management is the move towards explicit privatization, which has become increasingly prevalent in regions such as Eastern Europe and the Soviet Union, although its application has been limited in some countries.

The primary objective of the theory of modern public administration is to instigate reform within public service administrations and to revolutionize the methods by which these administrations are managed. This includes the incorporation of private sector management techniques and the development of market mechanisms within the public service sector.

Studies on modern public administration reform have shown that governments can achieve success in their reform initiatives if these are based on substantial changes in the institutional framework and a shift in the traditional mindset used to address citizen requests and enhance their satisfaction.[19]

- **Models of Modern Public Administration**

Extensive research into the theory of modern public administration has identified several key models that are particularly associated with modern public management, summarized as follows:

- The Effectiveness Model or Market Model;

- The Decentralization and Flexibility Model;

- The Quality Model or the Pursuit of Excellence.

The methods and strategies employed in modern public administration vary based on their adherence to the '3E model' (economy, efficiency, effectiveness) and the '3D model' (devolution, downsizing, defunding), each tailored to the specific demands of public services.[20]

Third Axis: Study of the Reality of Modern Management Control Mechanisms at Mohamed Boudiaf Public Hospital

In conducting a field study at Mohamed Boudiaf Hospital in Ouargla, interviews were conducted with the hospital's officials and administrators. This process collected a wealth of information, which will be explored in this section. The aim is to comprehend the hospital's management practices and to examine the reality of the modern management control mechanisms that are implemented. This involves identifying the variety of tools utilized, both traditional and modern, at Mohamed Boudiaf Public Hospital in Ouargla.

1. Overview of Mohamed Boudiaf Public Hospital Management in Ouargla

Mohamed Boudiaf Hospital is a public health institution committed to providing continuous healthcare services aimed at satisfying the needs of patients seeking treatment and prevention. This hospital, under the Ministry of Health, Population, and Hospital Reform, opened its doors in January 1988 and was officially inaugurated by the former Prime Minister Kasdi Merbah on March 22, 1989.

It spans a total area of 48,000 m² and has a capacity of 501 beds distributed across various departments and units as detailed in the following table.[21]

Table (04): Bed Capacity of Mohamed Boudiaf Hospital

Specialty	Bed Capacity
Internal Medicine	74
Pediatrics	30
General Surgery	60
Gynecology	60
Pediatric Surgery	30
Orthopedic Surgery	40
Pulmonary Diseases	30
Ophthalmology	30
Medical-Surgical Emergency	17
Medical Resuscitation	30
Psychiatry	60
ENT Diseases	20
Infectious Diseases	20
Total	501

Source: Documents from Mohamed Boudiaf Public Hospital

The hospital is divided into administrative and hospital services. In addition to the services listed in the table above, there are other services such as Dental Surgery, Integration, Kidney Dialysis, Physical Therapy, Surgical Department, Pharmacy, Internal Laboratory. Recently, the hospital was enhanced with a Cancer Treatment Center to treat patients within and outside the province to accommodate patients and improve health levels in the region.

As for the census of workers and employees within the hospital, it is included in the following table according to their specialization.

Table (05): Employee Census at Mohamed Boudiaf Hospital

Category	Number
Specialist Doctors	56
General Practitioners	48
Dental Surgeons	02
Clinical Psychologists	07
Paramedical Staff	436
Administrative Staff	70
Technicians and Professionals	294
Total	913

Source: Documents from Mohamed Boudiaf Public Hospital Institution."

2. Management Control Mechanisms Used in the Studied Public Hospitals

Mohamed Boudiaf Public Hospital in Ouargla uses a mix of traditional management control tools and modern management control mechanisms. Below we will present the various mechanisms applied in the hospital.

- **Traditional Tools**:

The public institution uses a range of traditional tools for management control and to efficiently and effectively provide public service, as well as enabling the management control system to play its role in achieving the hospital's goals. Among the traditional management control tools are:

- o **Accounting**: Accounting organizes and records all information related to the institution and is the main tool for practicing management control. The use of modern accounting through computerized media provides significant information for officials, particularly in areas seeking productivity and profitability. The hospital uses various types of accounting, including general accounting, cost accounting, and budgeting.

- o **Statistics**: This tool is used to gain a clear picture of the hospital and assists in forecasting through graphs, serial numbers, and various forecasting methods.

- o **Ratios**: Widely used in financial analysis and various management areas at Mohamed Boudiaf Hospital, ratios are a measurement relationship between two quantities known over a specific period. Ratios allow for assessing rationality and comparing the institution to its peers nationally and globally, such as profitability ratios, turnover ratios, etc.

- o **Budgeting**: Managers at Mohamed Boudiaf Hospital prepare budget estimates, which are sequential and organized estimates in monthly or annual programs and plans translating the policies to be followed within the hospital to achieve its public service objectives. A budget is a quantitative and qualitative plan prepared and approved before a specific period, typically outlining planned revenue or expected expenses for that period and the funds to be used to achieve a specific goal.

- **Modern Management Control Tools:**

Mohamed Boudiaf Hospital in Ouargla utilizes a set of modern mechanisms for management control in order to manage and monitor the institution's system effectively and to obtain up-to-date and diverse information about its performance. These tools also allow for the integration of financial and quality information simultaneously. Among these tools are:

- o **Dashboard:** The dashboard at Mohamed Boudiaf Hospital is prepared by administrators to gather indicators that provide immediate and useful information to the person in charge for leading the institution or unit towards achieving its goals. It serves as a communication tool that enables management controllers to draw the manager's attention to key points in their management for improvement.

- o **Management Accounting Information System:** This is an information system for management accounting that aids in the effective management of public health institutions and supports decision-making processes. Mandated by the Ministry of Health and Population through Executive Decree No. 14 dated March 12, 2014, and a joint ministerial decision dated October 30, 2014, this system allows for real-time work monitoring and expense control at the time expenses are incurred and revenue is collected. It provides indicators related to management concerning financial and non-financial elements. The ministry has established a committee responsible for monitoring and following up on the actual use of the system and ensuring the uniformity of the processed data, which enhances the data at the health structures concerned and compares the results obtained at the regional and national levels. The institutions are also required by the ministry to send monthly reports about validated results to the ministry for potential use. The system focuses on real-time management of the institution and information circulation, including three accounting functions: general accounting, budget accounting, and analytical accounting.

- o **Electronic Management:** Mohamed Boudiaf Hospital in Ouargla applies electronic management within the framework of digitizing the health sector to facilitate and activate the management process. A suite of electronic programs has been used to support electronic management mechanisms, including:

    - **EPIPHARM:** A program for managing pharmaceutical products, it manages the stock of pharmaceutical products;

    - **SIRH:** A human resources information system program that manages an employee's professional life from appointment to promotion;

    - **Patient:** A program for managing patient files, it involves entering patient data including name, surname, date of birth, accompanying person, and recording patient movements such as admission and discharge;

    - **3coh (Triple Hospital Accounting):** An information system for management accounting that performs various administrative operations (registrations, inventory tracking, etc.), financial and accounting operations (cost accounting, revenue recording, etc.), which allows for the upgrading of the institution's database. This program replaces all previous programs as it is an integrated information system specifically designed to monitor all financial and administrative operations.

3. Analysis and Discussion of the Reality of Modern Management Control Mechanisms in Public Hospitals:

The study of management control mechanisms within public administrative institutions has revealed several obstacles and problems that deviate from the paths leading to goal achievement, such as those found with management dashboards. The discussion on the reality of management control in Mohamed Boudiaf Public Hospital has led to the following conclusions:

- Absence of a dedicated management control service within Algerian public healthcare institutions, where there is a function for control but no independent service.

- Lack of employee involvement in preparing dashboards and other control tools, as the general management alone handles them without considering the needs of various departments.

- Difficulties in the management control function in hospitals and the execution of tasks have led to discrepancies and deviations.

- The preparation of control tools according to the allocations provided by the supervising ministry does not allow managers any discretion, complicating the application of modern management mechanisms.

- Monitoring hospital achievements is a primary concern for management control through pre-, during, and post-implementation checks. However, numerous deviations and imbalances hinder control over the application of modern management tools and improvement approaches in public institutions.

- The diversity of tasks and the difficulty of defining goals and measuring public service user satisfaction, coupled with the absence of a planning system due to the nature of public services implemented in various public healthcare institutions.

Conclusion

For the Ministry to effectively oversee and guide hospitals, an intermediary role is essential, as evidenced by practices in developed nations. For example, France has implemented regional hospital agencies as the primary intermediary between the Ministry and hospitals. These agencies are tasked with controlling operating costs within the health system through strategic restructuring and efficient resource distribution.

The unique characteristics of healthcare services influence management control at multiple levels and in various ways, affecting both goal setting and outcomes. The co-production of services adds complexity to accountability due to the involvement of multiple stakeholders in healthcare activities and the non-standard nature of these services. Furthermore, the approximate nature of service provision and estimation plays a crucial role, as does the ambiguity in defining production and conversion processes for healthcare activities.

This ambiguity significantly impacts the management control systems that public health institutions must implement, also complicating the evaluation of services due to direct interactions between patients and providers (doctors, nurses, etc.), thus affecting the depiction of healthcare activities within management control tools.

Based on our findings, the following recommendations are proposed:

- While Mohamed Boudiaf Hospital in Ouargla currently lacks a dedicated management control service, the management accounting system mandated by the Ministry of Public Health incorporates tools that help address organizational issues, particularly financial ones. Each institution should consistently submit periodic reports based on this system, which include both financial and non-financial management

indicators. These reports are crucial for analyzing the institution's financial health and supporting decision-making processes.

- It is imperative to integrate management control within the organizational structure of public hospital institutions.

- The adoption of modern management control tools such as the Balanced Scorecard is critical, as it bridges the gap connecting strategic objectives to operational activities. Additionally, the implementation of performance enhancement approaches like Total Quality Management and Business Process Reengineering should be considered to improve the efficiency of public institutions.

- Management control must be recognized as an ongoing process that requires continuous monitoring and periodic renewal to remain effective.

- Employees, particularly managers, should be encouraged to set diverse objectives within the hospital, providing them with strong incentives to achieve these goals.

- Finally, the essence of hospital activities is most tangibly realized in the treatment units, i.e., the clinics. These units are pivotal as they represent the primary point of interaction between the hospital and the patient concerning the production of treatments, information, and costs, and are thus essential in delivering the best public services.

References:

[1] Alain Fernandez, *The New Dashboards for Managers*, 5th edition, Editions Eyrolles, 2011, p: 08.

[2] H. Löning et al., *Management Control: Organization and Implementation*, 2nd edition, Paris, 2003, p: 146.

[3] Fernandez A., *The New Dashboards for Managers*, Eyrolles, Paris, 4th Edition, 2008, P: 7.

[4] Kaplan and Norton, "The Balanced Scorecard: Measures That Drive Performance," *Harvard Business Review*, 1992, p: 72.

[5] Kaplan and Norton, "Having Trouble With Your Strategy? Then Map It," *Harvard Business Review*, Sept/Oct, 2000, p: 43.

[6] Khaled Rajm, Mohammad Zarqoun, "The Importance of Using the Balanced Scorecard in Activating Strategic Control in Contemporary Organizations," presented at the 5th International Conference for the Faculty of Economics and Administrative Sciences, April 22-25, 2015, Jordan, p: 8.

[7] Nadia Radi Abdel Halim, "Integrating Environmental Performance Indicators in the Balanced Scorecard to Activate the Role of Business Organizations in Sustainable Development," *Journal of Economic and Administrative Sciences*, Cairo University, Volume 21, Issue 2, December 2005, p: 03.

[8] J.P-Huberac, *Guide to Quality Methods*, Maxima, Paris, 1998, p: 113.

[9] Ahmad Ben Aichaoui, "Total Quality Management: The Path to Achieving Exceptional Organizational Performance," *Journal of Algerian Enterprise Performance*, Issue 03/2013, University of Ouargla, Algeria.

[10]Michael Hammer, James Champy, *Reengineering: Reinventing the Company for a Spectacular Improvement in Performance*, Dunod, Paris, 1993, p: 14.

[11] Gui Bouhania, "Reengineering University Performance: A Contemporary Approach," *Researcher Journal*, Issue 05/2007, University of Ouargla, Algeria, p: 138.

[12] Michael Hammer, James Champy, *Reengineering: Reinventing the Company for a Spectacular Improvement in Performance*, Dunod, Paris, 1993, p: 94.

[13] Ahlam Khan, "The Importance of Human Resources Reengineering in Improving Human Performance in the Economic Institution," a survey study of human resources managers' opinions in a group of economic institutions in Biskra, Doctoral Thesis in Management Sciences, University of Biskra, Algeria, p: 29.

[14] Najm Aboud Najm, *Electronic Management (Strategy, Functions, and Problems)*, Dar Al-Mareekh, Saudi Arabia, 2004, p: 127.

[15] Bernrath W, "The New Public Management: (Concept, Situation in Wallonia, Some Thoughts, Visions, and Operational Conclusions)," *Brussels Review*, OSF, 1998, p: 92.

[16] Anne Amar and Ludovic Berthier, *The New Public Management: Advantages and Limits*, (research document presented at XVI International RESER Conference on Services Governance and Public Policies, Lisbon, September 28-30, 2006) p: 04.

[17] M.ST.Germain, "A Consequence of the New Public Management: The Emergence of an Accounting Thought in Education," *Origins and Impacts of New Power Relations in Education Management and Francophonie*, Vol XXIX, Canada, 2001, p: 10.

[18] Ahlam Foughali, "New Public Management and Reform of International Bureaucracies: The United Nations and Its Specialized Agencies as a Model," Master's Thesis, Faculty of Law and Political Science, University of Batna, Algeria, 2013, p: 43.

[19] Sharifa Refa, "Modern Public Management Theory and Its Role in Addressing the Issue of Integrating the Performance Concept in Public Service," *Researcher Journal*, Issue 06/2008, p: 105.

[20] Sharifa Refa, "Towards Integrating the Performance Concept in Public Service in Developing Countries, Towards a New Public Management According to Modern Public Management Theory," Doctoral Thesis in Management Sciences, University of Algiers, 2007/2008, p: 92.

[21] Documents from the Public Hospital Institution Mohamed Boudiaf, Ouargla.