

Implementation of Management Control Systems in Public Sector Organizations: The Case of Moroccan Universities

La Mise en Œuvre des Systèmes de Contrôle de Gestion au sein des Organisations Publiques : le Cas des Universités Marocaines

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Abstract:

The purpose of this paper is to investigate how management control, as a management tool imported from the private sphere, can be implemented in a Public Sector Organization. The paper employs non-participant observation and semi-structured interviews to explore the determinants of adoption and implementation of management control systems in Moroccan universities. In addition, we have used a documental analysis to explore and diagnose managerial dysfunctions and reform initiatives of Moroccan higher education institutions. We have identified six determining variables in the implementation of management control in the Moroccan university. We have classified these variables into two sets, representing managerial and cultural determinants. Furthermore, we have proposed a conceptual model for the integration of management control in the organizational structure of the Moroccan university.

The interest of this research paper stems from the topicality of public management issues in the era of the new Moroccan constitution of 2011 and successive reforms of public finance system. The new managerial philosophy highlights the contribution of management instruments previously reserved for private enterprises in the modernization of Public Sector Organizations. This paper sets out a roadmap for a safe importing of management control to the university, considered as a pilot public organization and a knowledge-creator.

Keywords: Management Control; Public Sector Reform; New Public Management; University; Morocco.

Résumé :

L'objet de cet article est d'étudier comment le contrôle de gestion, en tant qu'outil de gestion issu de la sphère privée, peut être mis en œuvre dans une organisation publique. L'article fait appel à l'observation non-participante et aux entretiens semi-directifs pour explorer les déterminants d'adoption et de mise en œuvre des systèmes de contrôle de gestion dans les universités marocaines. En outre, nous avons utilisé une analyse documentaire pour explorer et diagnostiquer les dysfonctionnements managériaux et les initiatives de réforme des établissements d'enseignement supérieur marocains. Nous avons identifié six variables déterminantes pour la mise en œuvre du contrôle de gestion dans l'université marocaine. Nous avons classé ces variables en deux ensembles, représentant les déterminants managériaux et culturels. Par ailleurs, nous avons proposé un modèle conceptuel pour l'intégration du contrôle de gestion dans la structure organisationnelle de l'université marocaine.

L'intérêt de ce travail de recherche découle de l'actualité des problématiques de gestion publique à l'ère de la nouvelle constitution marocaine de 2011 et des réformes successives du système des finances publiques. La nouvelle philosophie managériale met en exergue la contribution des instruments de gestion longtemps réservés aux entreprises privées dans la modernisation des secteurs publics. Cet article présente une feuille de route pour une importation sûre du contrôle de gestion vers l'université, considérée comme une organisation publique pilote et un créateur du savoir.

Mots-clés : Contrôle de Gestion ; Réforme du Secteur Public ; Nouveau Management Public ; Université ; Maroc.

Introduction

Public universities, like other Public Sector Organizations (PSOs), are concerned by the structural and organizational reform programs of public services, which enhance the transition from a logic of administrative action towards a logic of managerial action (Arbaoui and Oubouali, 2018). The transformation of the university management model started in the 2000s with the emergence of new managerial practices stemming from New Public Management (NPM) approach. These public management methods, of an Anglo-Saxon origin, have gradually spread across all OECD countries and their partners (OECD, 2002).

The main idea of the NPM is to infuse a business spirit in public services by integrating market logic into their functioning model. To ensure the PSOs performance, NPM has developed a theoretical framework for the introduction of business management devices in the public sphere and considers, as a priority, the success conditions of public services effectiveness rendered to users-customers-citizens (managerial coherence) without forgetting the public framework they are part of (political coherence) (Pesqueux, 2006).

Since the early 1990s, Morocco has undertaken several actions to overhaul the control and governance system of State Agencies and Enterprises (SAEs). These actions aim to further consolidate the SAEs performance, improve their transparency and strengthen their contribution to national development.

The growing demands to become more competitive, efficient, effective and accountable have aroused increased interest in the implementation of control mechanisms aimed at evaluating the organizational performance of PSOs. As a result, performance management systems (PMS) have been implemented in some universities and several scholars have started to rethink the forms of university organization, governance and management, often shifting from traditional models of participatory management (bureaucratic-collegial model) towards entrepreneurial management models (Harley and *al.*, 2004).

The dysfunctions that characterize the Moroccan university as well as the complexity of its environment negatively affect its performance. The implementation of adequate management control systems adapted to the institutional environment of the university can contribute to improving its performance and strengthening its legitimacy.

In this paper, we will try to study the starting point for the implementation of a management control system (MCS) in a Moroccan public university by answering the following question: what are the determinants of adoption and implementation of management control systems in a Moroccan public university?

Thus, first, we will present the theoretical framework. Second, we will expose the research context and our motivation to make this study. Third, we will briefly describe the research design and methods. Last, we will discuss the determinants of implementation of MCS in the PSO studied and the conceptual model proposal to integrate management control in the organizational structure of the university.

1. Theoretical framework

1.1. Public services and the need for change

In a context of public finance crisis, the public sector is challenged to find new management methods that are more efficient and that satisfy the needs and expectations of citizens-clients-users. The main reasons given for this wind of reforms are as follows:

- The search for a secondary legitimization of public policies: *“Legitimacy of public policies cannot be based solely on the democratic principles and procedures framing their formulation, adoption and implementation [...]. Beyond this primary legitimization, through the inputs and processes of the Rule of law, public policy actors seek secondary legitimacy, through the quality of their services for social actors”* (Knoepfel and Varone, 1999).
- The introduction of an economic referent based on the private sector management methods in the work process of PSOs (Lane, 1997). Important and influential international actors, such as European Union, International Monetary Fund or World Bank, relay this phenomenon.
- Technological changes and the introduction of information and communication technologies which are instruments of work rationalization (Rifkin, 1995) increasingly used in tertiary activities.
- Finally, the changes in managerial thinking and understanding of organizations, as well as in human resource management practices, are also elements that should be integrated in explaining the proliferation of public sector reforms.

Whether it is the “normal” or the “new”, public management pursues an effectiveness objective. It marks the entry of the categories of organizational regulation into public administration, a regulation defined as *“a process by which anti-organizational actions are countered by antagonistic forces ensuring the maintenance of the system or the organization”* (Emery and Giauque, 2003). These antagonistic forces activate the existence of tensions which operate between the institutional dimension of the administration (its vocation to fulfill

indisputable and permanent missions of public service) and the managerial dimension leading to questioning the functioning of public services in the name of flexibility challenges and work conditions (Pesqueux, 2006).

New Public Management has succeeded many reforms and unfinished attempts to modernize the public sector such as the Planning Programming Budgeting System (PPBS) in the United States or the Rationalization of Budget Choices (RCB) in France. These budgetary techniques, implemented in the 1960s, were intended to make better use of public funds. They focused on the evaluation of projects objectives through cost-benefit or cost-effectiveness analysis. Theoretically founded, these mechanisms have faced many obstacles in their application, mainly due to their complexity.

Indeed, the quantitative evaluations had to be objective and fair for enabling real progress. However, the information available and the methodology used have been relatively insufficient to make PPBS and RCB effective. This is the reason why they have been abandoned respectively in 1971 and 1984. However, these experiments have constituted a reference of NPM, which have emerged in the early 1980s.

1.2. The NPM Project: contributions and vocation:

The project of NPM is to infuse “entrepreneurship” into the State apparatus by introducing market logic into its functioning, perspectives of corporate governance included (Hughes, 2003). Nevertheless, NPM is not limited to the substitution of a private model for a public one but rather to the progressive development of a new hybrid model, not yet completed (Pettigrew, 1997). It therefore corresponds to a desire to modernize the public management system, without undermining the fundamental principles of public services. Thus, for Pettigrew (1997): *“NPM constitutes a historical example of the rationalization of a set of practices defined as legitimate for the public sector and which gives rise to an institutionalization of these practices.”*

In general, the contribution of processes and ways of thinking that characterize the private sector refers to the trend of “managerialism” (Gangloff, 2009). The use of so-called rational managerial formulas leads PSOs to a more efficient use of their resources and achievement of their objectives. Then, operating modes of private enterprises are managing PSOs, and in particular through a rationalization of public activities.

2. Research context

2.1. Governance reforms of Moroccan universities

In the wave of modernization of the State apparatus, Morocco has adopted, in October 1999, the National Charter for Education and Training constituting the basis of the reforms initiated in the higher education sector. One of the major steps taken in this direction was the overhaul of the legal arsenal governing the sector. The Higher Education Act no. 01-00 of 2000 has instituted a new mode of governance within the general framework recommended by international institutions (OECD, ISESCO and World Bank). A decentralized architecture of the higher education system was the starting point for a “new managerial design” of the Moroccan university.

Article 1 of the Higher Education Act is decisive and determined with regard to the establishment of the national training and research strategy: *‘It [higher education] is the responsibility of the State which ensures its planning, organization, development, regulation and orientation according to the economic, social and cultural needs of the nation, which defines its national policy with the assistance of the scientific community, the world of work and the economy as well as territorial collectivities and particularly the regions’*. [1]

This new organization of higher education has also created a powerful parallel “managerial infrastructure” which goes beyond the classic academic authority of the Rector/Chancellor (actually the University President), the dean or the head of department (Faculty Council, University Council and Management Council).

The University Council is vested with broad powers and responsibilities for the administration of the university. Its composition is very diverse; it includes a representation of academics, administrative and technical staff, economic and social sectors and local and regional elected officials. Such architecture of a real board of trustees of the university strengthens the corporate character of the reform.

However, the organization of university governance in Morocco is limited at the political level. The Higher Education Act provides that: *‘He [The University President] is assisted by two vice-presidents and a secretary-general’*. The absence of a formal functional organizational chart for the university and its colleges and faculties may hamper autonomous management, as the roles of the actors would therefore be ambiguous. [2]

Article 4 of the Higher Education Act provides that: *‘they [universities] are public agencies endowed with legal personality and administrative and financial autonomy’*. To this end,

they obey the rules of public accounting and fundamental budgetary principles. Thus, the reform of the Moroccan university could not succeed without an upgrade of its financial management system and the assurance of its accounting data reliability.

2.2. Managerial reforms of Moroccan universities

Structural reform of higher education and research in Morocco has necessitated the introduction of new tools for managing and evaluating the performance of universities. In addition to the creation of Moroccan Agency for the Evaluation and Quality Assurance of Higher Education (ANEAQ), the Ministry of Higher Education and Scientific Research introduced managerial techniques stemming from the wave of NPM, in this case: contractualization and public-private partnerships.

In its article 18, State Agencies and Enterprises Financial Control Act no. 69-00 of 2003 has introduced programme contracts: *“Programme contracts are concluded between the Government and State agencies or State-owned enterprises or subsidiaries in which the State or a territorial collectivity has a direct interest, when the importance and the nature of their activity justify it”*.

Programme contracts are explicit and formal reciprocal commitments between the University and The Ministry of Higher Education and Scientific Research. Nevertheless, they are not legally binding on the parties. The constraint and the responsibility linked to this type of contracts are rather ethical and political (Berrivin and Musselin, 1996).

The Ministry of Finance argues that : *“In this regard, the multi-year contractualization of State-SAEs relations offers a privileged, participative and consensual framework for the involvement of all stakeholders in setting objectives, dynamic management of achievements and accountability to the extent that it enable both to lay down the conditions for implementation, by the SAEs concerned, of the strategic orientations and choices of the State and to translate them into strategic objectives by the SAEs concerned, likely to make its economic model viable, into action plans”*.

The promulgation of Public-Private Partnerships Act no. 86-12 of 2015 has constituted a structuring and unified framework aiming to standardize partnerships practices in the Moroccan administration. The development of PPPs in Morocco is an incentive to accelerate the pace of implementation of socio-economic development and infrastructure programs, improve the service quality and strengthen the national economy competitiveness.

The promotion of PPPs in higher education and scientific research sector is of paramount importance in the Moroccan Government innovation policy. This policy aims to strengthen the links between university and its socio-economic environment and to create favorable conditions for the emergence of a lasting, fruitful and two-way relationship between the academic and business spheres. It also aims to foster a win-win partnership creating synergies in terms of innovation and benefit creation as well as the promotion of employment and skills development.

In Morocco, International University of Rabat (UIR) is the first PPP pilot project in higher education. It is the result of a partnership between the Government on the one hand and a consortium of economic and institutional operators on the other.

Thus, and at the end of 2017, we have seven universities and colleges that were created by partnerships between the Moroccan Government, represented by the Ministry of Higher Education and Scientific Research on the one hand, and various organizations on the other hand, these include: International University of Rabat, Mohammed VI University of Health Sciences, Abulcasis International University of Health Sciences, Mohammed VI Polytechnic University of Benguerir, Central School of Casablanca, School of Architecture of Casablanca and Euro-Mediterranean University of Fez.

3. Methods

We have used discipline and professional segmentation of Riviere and Boitier (2013) to draw the sample. The main professional groups in university are presented under the names of: ‘academic’ for professors and researchers, ‘administrative’ for administrative staff and ‘politic’ for academics in a management function (University President, University Vice-President, Heads of faculties, colleges, schools and their assistants as well as project managers officers) (see Table 1). For this study, all the interviewees were staff members of a range of Moroccan public universities, and we made clear to them that our interest was in the examination of what they think are the real determinants of the implementation of management control in the Moroccan university, as a component of a performance management system (PMS).

Table 1. Sample by discipline and professional groups

	Academics	Administratives	Politics	Total
Economy/Management (EM)	4	3	4	11
Law/Political science (LPS)	3	2	3	8

Humanities/Social science (HSS)	0	0	0	0
Science/Engineering (SE)	2	2	4	8
Total	9	7	11	27

Source: Author

We have estimated that face-to-face semi-structured interviews are the most appropriate method for the study. The interviews have lasted from 40 to 70 minutes. We have recorded and then transcribed them in full to ensure optimum reliability and perfect reproduction of the subjects' statements. The main data collection took place in the period from December 2017 to February 2019. Additional interviews took place between October 2019 and March 2020. In this study, we have opted for textual analysis through a thematic approach. For this, we have used the SATO platform, which is developed by the *Université du Québec à Montréal*.

Pilot interviews indicated that it was necessary to press interviewees to be explicit about their perception of PSOs' performance and the appropriate tools to manage it. In the interviews, we sought to identify their understanding of the contribution of a MCS to performance management. We asked how they thought it was necessary to use a private sphere tool, such as management control, in the public academic context of the university. In addition, we asked the interviewees to identify any biases or potential limits of using management control as a performance management system. The interviews tended to begin with broad generalizations about the conception of PSOs' performance, but with encouragement, interviewees made special statements, and gave examples and explanations of what they were looking for in the university performance. Our experience with the interviews of experienced actors of the university indicates that this approach yields useful information relevant to the study aims that would not be available through questionnaires or other types of questioning techniques.

The propositions to verify through the empirical study are as follows:

P1: The introduction of private sector management tools in the organization of the university depends only on the will of the Government.

P2: The implementation of an adequate management control system leads to better management of university performance and strengthening of its legitimacy.

4. Results

What are the determinants of adoption and implementation of management control in a Moroccan public university?

Interviewees mentioned several determining variables. However, these variables do not have the same integration rate or the same degree of priority for all subjects. Two elements can explain these differences:

- The specificity of the position occupied by the subject in the university;
- The culture of the interviewee that influences his perception of control and management tools in general.

Thus, we have chosen to classify these variables into two sets, representing elements relating to the internal and external environments of the university. We have deliberately omitted to prioritize the identified variables from the most to the least influential for three main reasons:

- The hierarchy of variables requires a confirmatory quantitative study on a representative sample of the population, which is not the case for our study;
- The hierarchy of variables would not be of much use for our study since our main objective, through the exploratory approach, is to grasp and understand the perceptions of the three main internal university actors (academic, politic and administrative staff members) in the implementation of a MCS;
- The variables cited by interviewees are not numerous. They are repeated almost often in all interviews with minimal terminological nuances linked to the profile of the subject interviewed.

4.1. Managerial determinants

4.1.1. Political support

Unlike the French regime where the University President is elected by and from among university professors, the University President in Morocco is appointed by a decree, after a deliberation in the Council of Government (High Officials Appointment Act no. 02-12 of 2012 taken in application of articles 49 and 92 of the Constitution). Thus, managerial autonomy of the university remains amputated in fact and in law. The strategic directions of the Government have an implicit impact on the university through the appointment of its President and Heads of colleges. The interviewees affirm that the support of the University President, as a relay between the university and the Ministry of Higher Education and Scientific Research, representative of the legitimate power of the State, and as a key actor of the University Council, is essential for any action aiming to implement a MCS or other modern management tools.

“The implementation of a MCS or any other managerial reform at the university should be included in its development project. This will enable a softer general acceptance and will thus limit resistance to change since the President of the University represents a legitimate power of management” **Administrative/LPS/1**

Academics express certain reservations on the sole will of the President, but they do not deny the importance of his support.

“I think that the President alone cannot decree an implementation or a model of university management control. However, its commitment is essential and constitutes a political support for the administrative staff and the pedagogical managers to cooperate in order to design an effective and useful control system for all internal and external stakeholders.” **Academic/EM/2**

4.1.2. Administrative autonomy

It became clear to us that there is an undeniable link between managerial autonomy and management control. The administrative dependence of the university on the Ministry of Higher Education and Scientific Research slows down the process of implementing modern management tools and pushes towards a simple exploitation of the conclusions of external audits and evaluations to start any reform program. The need for management control is the result of a structural change in the general public management environment that endows the various PSOs with means while setting them performance targets. Thus, the subjects confirm that only a real independence of the university's (administrative and financial) decision can enable it to implement new performance management tools from the strategy formulation phase to the self-assessment of achievements.

“When the university will have all the attributes of an independent public organization transforming the University Council into a real Board of Trustees, we can therefore integrate management tools, in particular management control in the strategy of the university.” **Politic/LPS/1**

“The university's strategic, pedagogical, scientific and managerial decisions should therefore be independent and come from its own governance and management bodies.”

Administrative/SE/1

4.1.3. Information and communication systems

Management control is largely based on data flows control and management between the organization's responsibility centers. The interviewees consider that a powerful and integrated information and communication system would be a prerequisite for the implementation of

management control systems. The multitude of university stakeholders requires an optimal management of information flows in order to ensure their exploitation, analysis and dissemination. In a classic management control approach, budgetary control requires reconciliation *a posteriori* with accounting data in order to deduce, analyze and explain the differences. However, to this day, the Moroccan university is still called upon to respect public accounting principles. The financial accounting system is in an experimental phase following the deployment of the new Budget Act requirements (Budget Act no. 130-13 of 2015).

Indeed, the implementation of financial accounting is constrained by two main elements:

- The legal situation of real estates: the situation of the universities' real estates is not completely cleaned up. The property is diluted between the State (House of Public Domain), the Hubous Administration (buildings or lands on rent), Forestry Administration and territorial collectivities. The assessment of fixed-assets therefore requires a financial and legal engineering effort.
- Fixed-assets management: during the preparation of the financial accounting system implementation, problems related to fixed-assets management were raised such as the acquisition and depreciation date, the original cost, the identification of plants and equipment batches, etc., hence the difficulty in determining the net book value or the accumulated depreciation.

Furthermore, although the culture of project management has emerged in the Moroccan university, no cost accounting has been put in place to determine the cost price of the outputs of each process. The interviewees also confirm that the three accountings: financial, cost and budgetary, are complementary in the management control process and enable the public to have a cross-view of university performance and the evolution of its activity.

‘To talk about management control, we should first have an organization of information flows. [...] This requires a powerful information system integrating all the professions and positions within the university and taking into account the specific nature of the public service organization.’ **Administrative/EM/2**

‘Information systems are essential for an optimal management that respects good governance practices. With a dozen of colleges and faculties, a several hundred of professors and administrative staff members and more than 24,000 students, it is

essential to control the flow of information and develop new canals of communication.”

Politic/SE/1

4.1.4. Quality Management

The subjects interviewed confirm that a quality approach would be a primordial element to set a control system in its broadest sense (management control and internal control). Quality certifications greatly contribute to improving the visibility and influence of the university on both national and international levels, hence the need for “good control devices” of the activity and processes. Let us recall that, in the public sector, the distinction between management control and internal control is relatively ambiguous. According to Gibert (2009), the fundamental distinction relates to the purpose of these two tools:

- Management control aims to control the processes in a quest for performance;
- The aim of internal control is to master procedures in order to avoid all kinds of risks.

“A quality approach is decisive for the implementation of management control. Whether it is before or after certification, we will be called to master all processes, to analyze and explain differences and non-conformities.” **Politic/EM/1**

4.2. Cultural determinants

4.2.1. Staff profiles

We were able to identify a determining variable in the implementation of management control which relates to the profile (or fields of studies) of respondents. Interviewees specialized in economics or management express more motivation and determination to use modern management tools. Otherwise, interviewees from another field of study (in our case, law/political science or science/engineering) express certain reservations about the content of the management control system to be implemented and do not want that a mastery of management processes, by a group of staff, to be transformed into “an illegitimate” control of the other staff members.

We can confirm that university lives continuous changes and contests to ensure the greatest possible influence. Using management models that prioritize the area of competence of a specific category of stakeholders could create resistance to change by orthodox stakeholders of public service (law and political science specialists) and some reservations by a neutral population (humanities, social science, science and engineering specialists).

“Modernization of the university management system should not be undertaken in an academic manner. Certainly, we have to borrow certain tools from literature, but we should not forget the regulatory and legal aspect and the maturity level of the university and its staff through years and years of expertise and reforms.” Academic/LPS/1

“To be honest, we are not all on the same level of competence in terms of management practices. Employees training programs focus mainly on public procurement and public expenditure management, general management tools are rarely present.”

Administrative/SE/1

Therefore, it would be desirable to create a balanced situation and draw up a roadmap for the management of change, which takes into account legal, organizational and cultural constraints of the university.

4.2.2. Organizational culture

We have noted, through facts and interviews, a predominance of public service culture in the Moroccan university characterized in particular by: a highly hierarchical bureaucratic structure, a staggering power of professors' union, an operational logic focused on means and not on results as well as a resistance to change and innovations. Using innovative governance tools, such as contractualization and public-private partnerships (Arbaoui and Oubouali, 2019), would lead to a reduction in the rigidity of the bureaucratic administration and could contribute to establish a common working framework between political (Government), strategic (University) and operational (faculties and colleges) levels. Despite its shortcomings due to several elements, the contractualization accompanying the 2009-2012 emergency program has enabled Moroccan Government to put many aspects of university life in order. However, the subjects emphasize the need to change the culture that reigns within the university from an essential public service guaranteed by national regulation to a service that should meet the quality requirements of customers.

“Management procedures of the university are cumbersome. A staggering bureaucracy, laws and decrees of administrative public services characterize them... Something that is not normal! [...] Thus, we should abandon this public service sphere, the mass production logic and improve scientific quality standards. [...] This is the only way for a real reform of the university.” Academic/EM/4

“ [...] Moroccan university, meanwhile, is still immersed in some classical studying programs which have demonstrated their failure. We should anchor a culture of service

provider in the university: a service provider who is always vigilant and watching over changes in its environment to identify the real needs of its customers with the best conditions of quality, cost and time.” **Politic/EM/2**

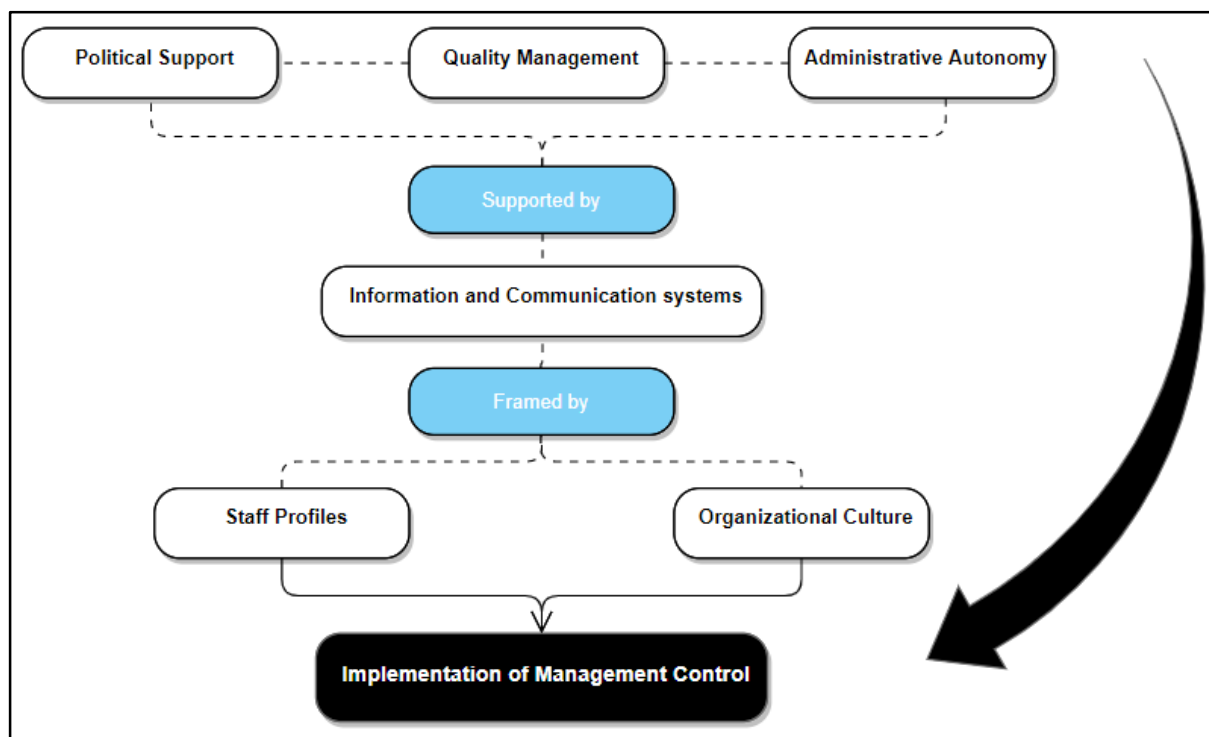
4.3. Discussion and the model proposal:

The model we propose is contingent to Moroccan public universities insofar as they are subject to the same management rules and constraints. It can also extend to other French-speaking universities in the countries previously colonized by France and from which they have inherited the main part of their public service organization. Thiéart and *al.* (2007) present an instrumental definition of modeling: ‘*Models have been defined as abstract representations of real phenomena*’. The purpose of developing a model is to formalize, in a simplified way, a phenomenon by privileging certain aspects of reality (Togodo Azon, 2012). Thus, no one can claim the existence of a single model but as many models as objectives underlying the simplification of the real studied. We have opted for a plural modeling approach taking into account the following elements:

- A deductive approach that integrates literature on management control in both public and private spheres;
- Data from case studies and observation that have enabled us to identify the most influential factors in the process of implementing a university management control system.

The need for management control has been recognized since the early 2000s and it has increased with the rationing of social sector budgets, increasing pressures on public finance and new demands from citizens in terms of quality and efficiency of public services. Reforms of the Budget Act no. 130-13 of 2015 and the general system of governance have concretized these elements. However, this need is not sufficient for the implementation of management control or other management tools borrowed from the private sphere. Key success factors or the emergence conditions of management control should be present, simultaneously, in the university.

Figure 1: A conceptual model for the implementation of management control in the Moroccan university



Source: Author

The growing influence of business management models, as an organizational ideal type, has increased the institutional contextual pressure for changing university governance modes. The idea that the university should be organized and managed as an enterprise and transformed into an “entrepreneurial” university (Clark, 1998) has deeply influenced the normative debate on organization and leadership in higher education.

New government instructions as well as economic, technological and social changes have modified the nature of public services. The absence of managerial attitude and the need to make a person responsible for not having achieved the pre-established organizational objectives or for not being able to control the costs of services provided have led to the transfer of management practices from the private sector to the public sector (Pollitt and Bouckaert, 2000; Doherty and Horne, 2001).

However, the implementation of management control systems in PSOs highlights the question of feasibility and adaptability of management tools initially designed for the private sector: *“a simple importation of “private” methods into these organizations would certainly be doomed to failure”* (Chatelain-Ponroy and Sponem, 2007).

Thus, two essential points can be retained at the end of our study:

- It is clear that university staff members are playing a pioneering and central role in the implementation of any reform program with, nevertheless, a bias toward politics, which are the core of the university's operational management process. Therefore, **we can reject proposition 1.**
- A review of the literature since the 1980s raises questions about the use and usefulness of management control in PSOs. The cases of failure identified as well as the reservations expressed by public servants suggest a lack of interest in using management control in the public sphere. However, this is not the case, it is the simple importation of the private sector management tools into the PSOs, in general, and into the university in particular that would be doomed to failure. Our interviewees recognize the usefulness of management control in performance management and therefore active use of this management tool in university dynamics. In addition, scholars and senior officials consider management control to be adapted to the needs of the various university actors in a multidimensional approach that goes beyond the conventional framework of budgetary control. Thus, management control can be recognized as a tool for performance management and so, **we can confirm proposition 2.**

Conclusion

The implementation of a management control system enables public managers to reconcile PSOs with ethical management practices, opening the way to more transparency in the acquisition, management and use of resources with more accessibility by stakeholders to information concerning their requirements. Responsibilities within the university will be clearer insofar as management control is able to cover the whole of activities in the university and to diagnose its 'genetic failures'. That being the case, the organization of the university is called upon to adapt to new management needs and demands of reform, which, in a public context, attach great importance to control systems. Indeed, internal control and management control in PSOs are often used interchangeably, or even in a complementary fashion. The multiplicity of missions, the large number of stakeholders and the absence of assessment mechanisms within the university can lead to managerial inefficiencies and a loss of resources following the multiplication of activities and operations. As a result, management control is seen as a means of drawing up assessments of achievements and activity reports with a view to optimization and evaluation.

Management control also affects university governance and its strategic roots. Thus, despite the reduced autonomy of the Moroccan university, it is endowed with broad powers of management and administration. The implementation of management control makes it possible, in this context, to bring politically the overall performance approach into the university's strategy. The control process, now very restrictive, will have a clearer political framework and will contribute to commit, in addition to the operational objectives of the university, to managerial objectives whose aim is to optimize the university management processes by opting for good governance practices instilled by the new wave of public finance management.

BIBLIOGRAPHIE

- Arbaoui, S. and Oubouali, Y. (2018), ‘Gouvernance et management de l’Université au Maroc’, *Revue du Contrôle, de la Comptabilité et de l’Audit*, No. 4, pp.45-62.
- Arbaoui, S. and Oubouali, Y. (2019), ‘Les innovations dans la gouvernance publique au Maroc : cas des partenariats public-privé dans l’enseignement supérieur’, *Revue Internationale des Sciences de Gestion*, Vol. 2 No. 4, pp.132-152.
- Berrivin, R. and Musselin, C. (1996), ‘Les politiques de contractualisation entre centralisation et décentralisation : Les cas de l’équipement et de l’enseignement supérieur’, *Sociologie du Travail*, Vol. 38 No. 4, pp.575-596.
- Chatelain-Ponroy, S. and Sponem, S. (2007), ‘Les pratiques des établissements d’enseignement supérieur et de recherche en matière de pilotage et de contrôle de gestion. 2. Les hommes et les structures’, *Revue Française de Comptabilité*, pp.41-45.
- Clark, B. R. (1998), ‘The entrepreneurial university: Demand and response’, *Tertiary Education and Management*, Vol. 4 No. 1, pp.5-16.
- Doherty, T. L. and Horne, T. (2001), *Managing Public Services - Implementing Changes: A thoughtful approach to the practice of management*, Routledge: London.
- Emery, Y. and Giauque, D. (2003), ‘Le dilemme motivationnel des agents publics. Régulations émergentes au sein d’organisations publiques engagées dans des réformes de type «nouvelle gestion publique», et leurs impacts sur la motivation au travail’, T. Duveillier, J.-L. Genard, & A. Piraux (Ed.), *La motivation au travail dans les services publics*, L’Harmattan : Paris, p.77-92.

Gangloff, F. (2009), "Le Nouveau Management Public et la Bureaucratie Professionnelle".

Paper presented at 30ème Congrès de l'Association Francophone de Comptabilité, May 27th - 28th & 29th, Strasbourg, France.

Gibert, P. (2009), *Tableaux de bord pour les organisations publiques*, Dunod : Paris.

Harley, S., Muller-Camen, M. and Collin, A. (2004). "From academic communities to managed organisations: The implications for academic careers in UK and German universities", *Journal of Vocational Behavior*, Vol. 64 No. 2, pp.329-345.

Hughes, O. E. (2003), *Public Management and Administration: An Introduction* (3rd Edition), Palgrave Macmillan : New York.

Knoepfel, P. and Varone, F. (1999), "Mesurer la performance publique : Méfions-nous des terribles simplificateurs", *Politiques et Management Public*, Vol. 17 No. 2, pp.123-145.

Lane, J.-E. (1997), *Public Sector Reform: Rationale, Trends and Problems*, SAGE Publications: London.

OECD. (2002), *Etudes Economiques de l'OCDE : Nouvelle-Zélande 2002*, OECD Publishing: Paris.

Pesqueux, Y. (2006), "Le «nouveau management public»(ou *New Public Management*)", working paper, Conservatoire National des Arts et Métiers de Paris. <https://hal.archives-ouvertes.fr/hal-00510878>

Pettigrew, A. (1997), "Le new public management conduit à un nouveau modèle hybride public-privé", *Entretien Revue Française de Gestion*, No. 115, pp.113-120.

Pollitt, C. and Bouckaert, G. (2000), *Public Sector Reform*, Oxford University Press: Oxford.

Rifkin, J. (1995), *The End of Work : The Decline of the Global Labor Force and the Dawn of the Post-market Era*, G.P. Putnam's Sons : New York.

Riviere, A., and Boitier, M. (2013), "La professionnalisation du contrôle de gestion en question : Confrontation de logiques au sein d'une université française", paper presented at 34ème Congrès de l'Association Francophone de Comptabilité, May 31st – June 1st, Montréal, Canada.

Thiétart, R.-A., Allard-Poesi, F., Angot, J., Baumard, P., Cartier, M., Charreire Petit, S., Donada, C., Drucker-Godard, C., Durieux, F., Ehlinger, S., Forgues, B., Grenier, C., Ibert, J., Josserand, E., Marechal, G., Mbengue, A., Milano, P., Perret, V., Royer, I., ...
Zarlowski, P. (2007), *Méthodes de Recherche en Management* (3rd Ed.), Dunod : Paris.

Togodo Azon, A. (2012), ‘Impact des Facteurs de Contexte sur le Design des Systèmes de Contrôle de Gestion dans les Collectivités Locales Béninoises : Une Approche Contingente’, PhD Thesis, Université de Liège.

NOTES:

[1] Article 135 – Section 1 of the Moroccan Constitution provides that: ‘*The territorial collectivities of the Kingdom are the regions, the prefectures, the provinces and the communes*’. By analogy to the administrative division of the United States of America: Regions correspond to States, prefectures and provinces correspond to counties, and communes correspond to municipalities.

[2] On March 9, 2020, a joint decision of the Minister of Economy, Finance and Administrative Reform and the Minister of Higher Education and Scientific Research set the responsibilities and the administrative organization of universities.

At the date of submission of this paper, the adaptation of universities’ administrative structures is underway.