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## Performance Management in the Prison and Rehabilitation Sector: Suggestion of management tools inspired by the Balanced Scorecard.

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**Abstract**

The present study investigates the creation of a prospective dashboard, known as the Balanced Scorecard (BSC), along with a performance scoring system tailored specifically for the prison and rehabilitation sector, aiming to improve performance management. The necessity for such instruments emerges in a context where current monitoring systems are fragmented and predominantly centered on a limited set of ineffective indicators. The suggested methodology aims to address these deficiencies by creating a structured, balanced, and results-driven framework. The initial tool, based on the BSC methodology and customized to the unique features of the prison context, was developed through an intervention-research approach that incorporated the insights of practitioners in the field. Performance indicators were established across five dimensions: economic efficiency, quality of life for inmates, rehabilitation of inmates, security, and organizational effectiveness. This approach was later solidified through the creation of a scoring system, which facilitates more nuanced and comparative performance evaluations that also consider the specific contexts of each institution. The results affirm both the practicality and significance of the approach, illustrating that the developed tools can effectively act as levers to steer prison policy towards enhanced efficiency and transparency.

**Keywords**

Performance, management, Balanced Scorecard, penitentiary institutions, intervention-research

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## Introduction

The management of penitentiary institutions is inherently linked to the safeguarding of inmates' rights. Foundational international texts, including the Universal Declaration of Human Rights (1948) and the United Nations Standard Minimum Rules for the Treatment of Prisoners (first adopted in 1955 and revised in 2015) affirm that all persons deprived of liberty must retain their fundamental rights and be treated with dignity and respect, free from any violation of their physical or moral integrity.

Assessing how these institutions are managed is therefore crucial for identifying potential breaches of rights and for ensuring that conditions of detention adhere rigorously to international standards. The rationale for evaluating prison performance, however, extends beyond the human rights dimension. It also reflects the integration of accountability, transparency, and good governance into public policy.

In fact, since the emergence of the New Public Management (NPM), performance-based approaches have gained prominence across state services, including prison systems (Wright, 2004; Basse, 2022). As Boin & al. (2006) observe, the prison administrations of England and the Netherlands were among the earliest public sectors to undergo reforms inspired by NPM principles.

This trend has gained momentum in developed countries such as the United States and Canada, where modern tools for managing prison performance have been introduced. For example, the Association of State Correctional Administrators (ASCA) highlighted the value of a proposed national dashboard for U.S. prisons, noting its role in enhancing accountability, establishing measurable outcomes, and promoting quality across correctional institutions (Wright, 2005). In Canada, the measurement and management of correctional system performance rely primarily on key performance indicators (KPIs) to assess the effectiveness of correctional institutions in terms of social programs (contingency programs), risk management, and the associated operational costs (Gendreau & al., 2011).

Despite these advances, evaluating the performance of penitentiary institutions remains a complex undertaking. Raoudi (2003) observed that "the very complexity of the prison mission lies in reconciling these two imperatives: to confine and to educate". This enduring tension between control and humanization often necessitates difficult choices and compromises that shape the overall functioning of prisons (Basse, 2020). The challenge is further complicated by

the fact that prisons constitute a distinctive environment in which multiple stakeholders are required to interact and collaborate (Liguori & Kelly, 2023).

Moreover, prison performance is generally analyzed from multiple perspectives, including security and risk management, quality of life in detention, respect for inmates' rights, rehabilitation, and the efficiency of management processes (Bellas & al., 2022; Rogge & al., 2015; Solomon, 2004). This implies that prisons must meet multidimensional objectives and monitor them through appropriate indicators. The adoption of performance measurement systems therefore promotes the accountability of prison actors (Volokh, 2014).

In Morocco, the implementation of this approach-grounded in the principles of public actors' accountability and responsibility-dates back to 2015 with the adoption of the Organic Law on Finance Laws (LOLF 130.13). The orientations stemming from this legal framework encouraged a redefinition of management modes across public administrations, including the prison administration. Consequently, the prison administration has since been required to report annually on its performance.

A recent study we conducted on performance management practices within Morocco's prison and rehabilitation system highlighted major challenges regarding the effectiveness of the performance management system currently in place, as well as a pressing need to develop an integrated approach capable of ensuring a multidimensional evaluation of performance, both strategic and operational, financial and non-financial. These challenges are notably linked to the reliability of data, the inadequacy of control processes, and the tendency to focus performance evaluation on a limited number of quantitative indicators at the expense of other essential dimensions, particularly in terms of human rights, the quality of interventions, and the social climate within prisons. Additionally, performance management remains highly centralized, which may lead to uneven ownership of objectives across hierarchical levels and limited involvement of local stakeholders in their achievement.

Building on this finding, the present research focuses on performance management within the corrections and rehabilitation sector. Its main objective is to design a Balanced Scorecard (BSC) combined with a scoring system that is specifically tailored to the unique characteristics of this sector. The adopted methodology relies on a collaborative approach that engaged prison stakeholders through interviews and group discussions in order to identify the most relevant dimensions and indicators. It also draws on a systemic approach to capture the interconnections among the different dimensions of performance.

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The study is thus guided by the following research questions: **How can a BSC be constructed that is tailored to the specific features of the Moroccan prison and rehabilitation sector? And how can such a tool serve as the foundation for a performance scoring system for penitentiary institutions?**

To address the issue raised, the present article is divided into two parts. The first part focuses on the theoretical and conceptual framework for performance management in the public sector and the Balanced Scorecard approach. The second part presents the research methodology and the design process for the management tool proposed for the correctional and rehabilitation sector.

## **1. Theoretical framework and literature review**

### **1.1. On the normative approach to the BSC**

The concept of the BSC was introduced by Robert S. Kaplan and David P. Norton following research carried out between 1984 and 1992. Their objective was to define, evaluate, and measure the factors that shape organizational performance.

Traditionally, organizations relied heavily on financial indicators when assessing performance. Kaplan and Norton (1992), however, contended that financial measures alone do not provide an adequate management framework. In their view, "managers should not have to choose between financial and operational measures," since both types of indicators complement one another. While financial metrics highlight the results of past actions, non-financial measures capture the underlying factors that influence future financial outcomes.

Drawing on a "*top-down*" approach, Kaplan and Norton presented the BSC in a 1992 Harvard Business Review article as a cascading management system. The framework designed to translate an organization's mission and vision into a focused set of interrelated and measurable objectives structured around four perspectives.

These perspectives financial, customer, internal business, innovation and learning, are linked through cause-and-effect relationships, with each one addressing a core strategic question, as outlined in table N°1.

**Table N°1 : The four perspectives of Kaplan and Norton's BSC model**

Perspective	Guiding Question
<b>Financial Perspective</b>	<i>How Do We Look to Shareholders?</i> (e.g., financial performance, growth, competitiveness). It emphasizes identifying ways to improve net results by increasing revenues and enhancing productivity.
<b>Customer Perspective</b>	<i>How Do Customers See Us?</i> (e.g., satisfaction, loyalty, value creation).
<b>Internal Business Perspective</b>	<i>What Must We Excel at?</i> (The strategic priorities of the various operational processes that generate satisfaction among both customers and investors).
<b>Innovation and Learning Perspective</b>	<i>Can We Continue to Improve and Create Value?</i> This perspective provides insights into the areas in which the organization must excel and continuously improve.

**Source: Kaplan et Norton (1992)**

As part of their study of field experiences, Kaplan and Norton (1996) further developed the prospective dashboard approach by introducing new elements, which gave rise to second- and third-generation models.

This evolution was marked by the introduction of strategic objectives aligned with the organization's overall strategy. The notion of causality, initially implicit across perspectives, was reinforced by links between objectives and measures, resulting in strategic linkage models. The impact of these changes was described by Kaplan and Norton (1996) as enabling the prospective dashboard to evolve from an "enhanced measurement system to a core management system."

While emphasizing that the Balanced Scorecard was intended to support the management of strategy implementation, Kaplan and Norton (2001) characterized the use of this model as the central element of a "strategic management system," and as an organizational and change framework for what they termed a strategy-focused organization. They argue that integrating the strategic map into the BSC makes it possible to better define the causal links between the four perspectives in order to achieve the organization's desired position in an uncertain environment, and to redefine these links based on observed results.

With the growing complexity of sustainable development challenges, other authors have extended the BSC incorporate corporate social responsibility (CSR) and sustainability dimensions into performance management and measurement systems.

These contributions illustrate how the BSC integrates sustainability objectives through its evolution toward the Sustainability Balanced Scorecard (SBSC) concept (Figge & al., 2002; Schaltegger and Wagner, 2006). More specifically, this involves integrating environmental and social dimensions into the traditional BSC perspectives or, where appropriate, creating a fifth perspective that explicitly accounts for these dimensions. The development of a specifically environmental and/or social BSC has also been recommended by these authors as a third option when the first two approaches cannot be implemented.

According to Kaplan and Norton (1998), the BSC, in its original version, already constituted a tool for implementing a sustainable growth strategy by optimally meeting customer expectations. Germain and Trébucq (2003) support this view, emphasizing that the BSC represents the operational translation of conceptual models of multidimensional performance.

In this context, the adoption of indicators with social and environmental dimensions is essential to translate sustainability commitments into measurable and comparable values (Rhali and Joukhrane, 2025).

## **1.2. Towards a constructivist approach to developing a BSC**

The normative approach of the BSC has been the subject of several criticisms (Ponsard, Saulpic, 2000). Given that the four balanced perspectives are pre-established and standardized, the question of the relevance of their enumeration arises (Lorino,2001).

Although Kaplan and Norton highlighted the flexibility of their model, emphasizing the possibility of incorporating additional components, Wegmann (2000) argued that much of the criticism stems from the standardized design and deployment of strategy implied by the model. Furthermore, the authors did not provide detailed guidance on the construction process, particularly the stage in which objectives are translated into indicators, "a step described as both tedious and crucial in the development of a performance management system" (Benzerafa, 2007).

In response to these limitations, several authors have proposed contemporary approaches based on an interactive and non-normative conception of the BSC (Choffel & Meyssonier, 2005;

Ponssard & Saulpic, 2000). According to Philippe Lorino (2001), the development of a management tool requires a constructivist approach, in the sense that its deployment involves analyzing the key activity processes and their relationship with the organization's strategy.

Adopting this approach gives rise to a dual learning process based on the principle of collective intelligence: learning about the model by those involved in the field, and learning from the field. This requires the researcher to follow an intervention research methodology that allows them to be fully involved in the organization being studied and to interact with those in the field to co-create knowledge and contribute to the transformation of the organization (Le Moigne, 1994).

Thus, unlike the normative Top-Down approach of the BSC, the proposed strategic scorecard would result from a dual Top-Down and Bottom-up approach in line with a constructivist vision.

### **1.3. On the performance of penitentiary institutions**

Performance applied to the prison context represents a significant challenge, as the nature of the missions of penitentiary institutions, considered to be complex organizations (Gaes, 2003), R Steen & al (2021) conceals a paradoxical reality accentuated by the transition between security-focused and humanization-focused phases in the prison system (Carrier, 2009).

Basse (2020) has identified two dominant institutional logics in the management of these institutions: "the relational logic and the protection logic: The relational logic conceives of prison as a place of reform and resocialization, while the protection logic equates prison with a place of punishment".

The immersion in these two logics gives rise to competition between them and a conflict of objectives and means, which means that prison actors are never able to fully meet their expectations. However, these actors are obliged to strike a balance between the need to punish inmates for the crimes they have committed and the need to prepare them for reintegration into society once they have served their sentences. This involves implementing strict security measures while promoting the personal and professional development of inmates. In this sense, Harwich and al (2016) described performance in the prison context as "the administration's ability to develop a safe and decent environment that promotes the rehabilitation of offenders."

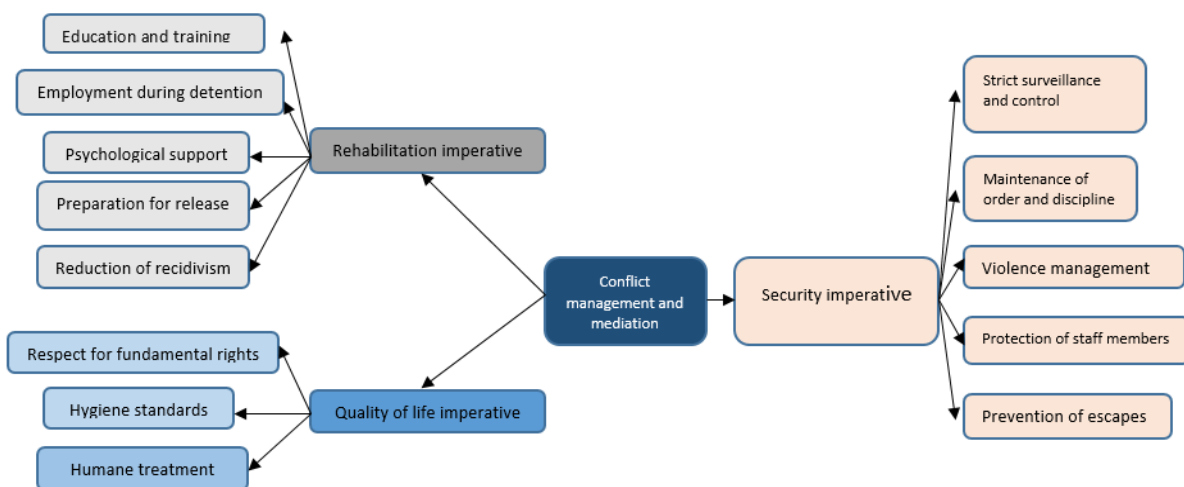
In addition, prisons must constantly adapt to changes in society and new forms of crime, which makes their objectives demanding, especially since they are subject to strict regulations that outline the rights and duties of inmates, as well as the commitments of prison staff. Faced with these challenges, J. Andrew (2006) argues that modern accountability is becoming primarily a technical and instrumental approach, often at the expense of its moral dimension, which remains a crucial element for the management and administration of prisons.

In light of these developments, the performance of the prison system is constrained by three fundamental imperatives: the imperative of quality of life in detention, the imperative of reintegration, and the imperative of security. While these three pillars are often seen as interdependent (Rogge & al, 2015), their implementation relies on a delicate balance, as each imposes priorities that are sometimes contradictory (Figure N°1).

The imperative of quality of life requires a humane approach based on respect for inmates' fundamental rights and compliance with relevant standards regarding hygiene, nutrition and healthcare. The imperative of rehabilitation involves adopting an approach geared towards change, reconciliation and reintegration, whereas the imperative of security focuses on risk prevention and the maintenance of order. It requires strict management and rigorous control of inmates, which can sometimes pose a risk of infringing on inmates' rights and their access to rehabilitation programs.

This trilateral model faces increased challenges in the contemporary context, where pressure on resources further complicates the exercise of this complex responsibility.

**Figure N°1:** The pillars of the performance of penitentiary institutions



Source: authors

#### **1.4. Prisons performance management: a review of international models and practices**

The practices of performance management and measurement in the prison system vary significantly between countries, particularly due to their institutional and political contexts. Each prison system is dominated by national priorities, whether these focus on deterrence, security, or rehabilitation. Furthermore, criminal justice policy, public funding, and national standards have a profound influence on how performance is measured.

In the US, one of the oldest approaches to measuring prison performance is the Correctional Institutions Environment Scale, developed by Rudolph Moos in the late 1960s and frequently used in the 1970s. This scale contains several subscales, including: "Involvement," "Support," "Autonomy," "Order and Organization," and "Staff Control." This approach has been criticized for not being clear enough to distinguish between certain elements, understand the correlation between them, and assess their ability to describe a real phenomenon (Volokh, 2014).

Another approach was presented by Martha Burt in a report published in 1980, in which she describes five perspectives for measuring performance, namely: "security," "inmate's living conditions," "inmate's health," "intermediate outputs of programs and services," and "post-release success." Dilulio (1986) criticized this approach for confusing process indicators with outcome indicators.

In examining a multitude of approaches, Volokh (2014) pointed out that outcome measures and output measures tend to go hand in hand due to the difficulty of measuring certain outcomes. Logan (1992) sought to address this issue by developing the "quality of confinement index," one of the most popular approaches, in which performance is measured on eight axes: security, safety, order, care, activity, justice, conditions, and management. Across these areas, there are around 100 measurement ratios that focus on what the prison can control and achieve, ignoring areas where the prison can only contribute and does not assume full responsibility.

Capitalizing on these experiences, ASCA launched an initiative to establish a national system for measuring the performance of American prisons. This system was designed as a means of evaluating performance across correctional agencies and inter-agency, promoting the use of results-based management, and improving the planning and management capabilities of prisons across the country (Wright & al 2003). The model initially developed was based on eight dimensions of performance, which were gradually reduced to four: "public safety,"

"institutional safety," "treatment and programming," and a contextual dimension relating to the offender profile.

Following a similar approach, England and Wales have adopted a highly centralized and standardized prison performance management system, using shared databases that provide statistics and indicators on prison and probation conditions, and a centralized prison performance management system inspired by the BSC. This system, developed in 2018 and called the Prison Performance Tool (PPT), is based on six main dimensions: safety, security, respect, purposeful activity, preparation for release, and organizational effectiveness<sup>1</sup>.

The approach consists of evaluating performance according to the six dimensions and, based on the scores obtained by each prison, the performance results are made available to the public and form the basis of an annual prison ranking table<sup>2</sup>. This centralization, combined with a concern for public transparency, facilitates comparison between prisons and encourages competition in order to improve oversight and the quality of services provided by these institutions. Nevertheless, Iloga Balep & al. (2024) point out that this approach also has several undesirable effects: increased bureaucratization, with the creation of new administrative structures and information systems that distract managers from their day-to-day management of prisons; a hierarchy of values where indicators related to security or costs are prioritized at the expense of other important dimensions such as rehabilitation; and a focus on the individual performance of prisons rather than on a comprehensive systemic vision.

In Germany, the context is different. Arguing that "federalism raises spatial issues according to axes of segregation and specific territorial inequalities," Salle (2003) points to significant inequalities between prisons, given that each institution has its own rules, codes, and specific practices, a situation he even describes as prison "styles." In this context, the management of the prison system is decentralized. Each federal state has its own measurement systems, which complicates inter-state comparability. In fact, according to Iloga Balep & al. (2024), the diversity of performance measurement methods, combined with a lack of public transparency, can reinforce existing fragmentation, limit the possibility of evaluating the entire system or

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<sup>1</sup> <https://www.gov.uk/government/statistics/prison-performance-ratings-2023-to-2024/annual-prison-performance-ratings-guide-2023/24>

<sup>2</sup> <https://www.gov.uk/government/statistics/prison-performance-ratings-2023-to-2024/annual-prison-performance-ratings-202324>

making meaningful benchmarks, and lead to demotivation among some managers, especially when the measures lack links to concrete incentives (Molleman, & Broek, 2014).

Regardless of the system chosen, it is important to design appropriate tools to avoid disconnecting them from the field and to preserve a holistic view of the prison system as a whole.

Liguori and Kelly (2023) confirm the importance of this vision by arguing that prison performance measurement systems must be flexible and take local priorities into account. Similarly, Auty & Liebling (2024) suggest that a balance between harmony, security, and professionalism is essential to ensure a prison environment that is both safe and legitimate. Faced with the issue of the reliability of data and results presented by prisons, Wright (2004) emphasizes the importance of strengthening the capacity of these institutions in terms of reporting and data sharing and the implementation of an information system to automate data collection processes, thereby limiting human error and the risk of data falsification.

## **2. Designing the performance management tool: methodological aspects and results**

### **2.1. An intervention-research**

According to David (2000b), intervention-research in management sciences aims to produce knowledge that is "both scientific and useful for action." He considers it to be a general framework in which several research practices in management sciences coexist and can be modeled from the field through interaction between the field and theory. As Cappelletti (2010) points out, in management control, intervention-research is part of a collaborative approach since its objective is to co-produce knowledge with the actors of the organization through exchange with them.

Our intervention-research in management control therefore has a dual purpose: to highlight the usefulness of BSC-inspired performance management tools in the Moroccan prison context and to contribute to the creation of knowledge within the framework of scientific research, while closely involving the organization's stakeholders in the construction of this tool. The second objective highlights the difference between intervention-research and research conducted by consultants, the latter providing short-term solutions, while the intervening researcher pursues a more comprehensive approach to models and tools and their validity for the organization in the medium or long term (Perret and Girod-Seville, 2002).

Furthermore, action research involves developing and implementing an intervention mechanism and a knowledge approach in which the researcher is not a mere observer but "stimulates the production of new points of view" (Hatchuel, 1994) and actively participates in the concrete construction of management models and tools (David, 2000b). Unlike action-research, intervention-research aims more assertively to transform the research object by integrating genuine "management engineering" (Lallé,2004).

In our research approach, we do not develop the performance management tool as an end in itself. It will be a stimulator, in the sense of Gilbert (1997), of organizational change and managerial innovation within the organization.

The intervention mechanism we have put in place is based on 3 key stages: perception of the problem, development of the experimental tool which, through successive iterations, helps us to propose an initial version of the BSC, and validation of the final version of this tool by testing it in 4 prisons.

## 2.2. Methodology

Our empirical research was based on cross-referenced data collection techniques. First, we conducted a bibliographic review focusing in particular on performance management systems in the prison sector, followed by a documentary review including official DGAPR's publications and other unpublished internal documents, interviews conducted in 2 steps in 2024, and extended participant observation thanks to our belonging to this field.

All of the proposals resulting from our work were discussed, then adjusted or validated during 4 meetings organized with a working group composed of nine representatives from directorates<sup>3</sup> and support structures<sup>4</sup> and two prison wardens<sup>5</sup> (see table N°2) . Throughout the intervention, it was necessary to move back and forth between theory and practice in order to consolidate the knowledge produced and compare the results.

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<sup>3</sup> Directorates in charge of: security, rehabilitation, and judicial registry.

<sup>4</sup> IT systems, HR, budget, management control.

<sup>5</sup> These two prisons are among the four penitentiary institutions targeted by the performance management tool test

The composition of the working group was carefully considered to ensure a balanced representation of the various stakeholders involved in the functioning of the prison administration.

On the one hand, the 9 representatives from the directorates and support structures were chosen for their in-depth knowledge of operational, management, and support processes. Their participation enabled the integration of complementary expertise on strategic, organizational, human resources, and financial aspects of the management of penitentiary system.

On the other hand, the presence of two prison wardens made it possible to anchor the work in the reality of the field. They brought a practical and concrete vision of the daily challenges, specific constraints, and levers for action within the institutions. This diversity in the composition of the group fostered an approach that was both strategic and operational, which was essential for developing a relevant and realistic BSC.

**Table N°2: Schedule of interviews and meetings**

Activity	Objective	Participants	Period
<b>Semi-structured interviews (first step)</b>	Diagnostic of DGAPR's performance management system	14 central-level participants in the areas of audit, management control, IT systems, budget, programming, and human resources	January–March 2024
<b>Semi-structured interviews (second step)</b>	Collection of proposals	37 prison actors, including central officials, prison directors, and local service heads	September–October 2024
<b>1st group meeting</b>	Presentation of proposals (map/axes)	Working group members	December 2024
<b>2<sup>nd</sup> working group meeting</b>	Validation of the improved version based on discussions from the 1 <sup>st</sup> meeting	Working group members	January 2025
<b>3rd working group meeting</b>	Discussion of field feedback and adjustments	Working group members	March 2025
<b>4th working group meeting</b>	Presentation of the adjusted version and validation	Working group members	May 2025

**Source: Authors**

## **2.3. Designing the performance management tool: starting points and approach**

### **2.3.1. Problem identification: the limitations of the current approach to prison performance management**

In Morocco, prisons fall under the authority of the General Delegation for Prison Administration and Rehabilitation (DGAPR), which is responsible for planning, coordination, monitoring, and evaluation. The latter task covers various aspects of prison management, including performance. The approach adopted in this context is very traditional: each year, these institutions are required to produce data that serves as the basis for calculating indicators that reflect the reality of prison life. This allows the central administration to have an overview of the performance of the prison sector. The areas of evaluation include security and safety, quality of life in detention, preparation for rehabilitation, health care, and supervision.

The results are then consolidated and presented in aggregate form as national averages in a performance report describing the progress made in relation to pre-established annual targets. This review serves both to highlight the positive results achieved and to identify areas for improvement across the prison system.

While these indicators have been deemed relevant to the development of the strategy and performance plans, prison officials frequently point out that the means and resources available to prisons remain insufficient to achieve the pre-set targets. Additionally, the information system established to manage the indicators used is not being properly exploited due to "the lack of designated referents for this task and the validation process, which has not yet been mastered by the users designated for this purpose" (Tichout and Cherqaoui, 2025); this implies a low level of commitment to producing the requested data. To date, only a limited number of indicators are well documented.

Furthermore, quantitative performance data remains limited in scope. For example, there is no breakdown of figures for each institution, making it difficult to see which prisons are performing best or achieving satisfactory results in relation to the objectives set.

Another limitation related to the difficulty of comparing performance between institutions using the current system has also been raised. Indeed, having standard indicators for evaluating the performance of each institution is not sufficient to consider such an approach. This is particularly due to contextual factors that can influence performance. In this regard, Molleman and Heijden (2013) emphasized factors that can skew performance assessments if not taken into

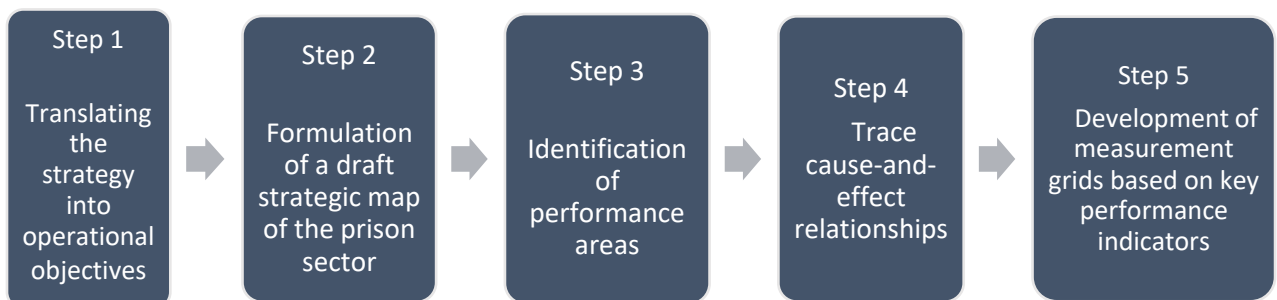
account, such as architectural differences, capacity, number of staff, and resources allocated to the institution. To address these dissimilar circumstances, the authors propose, in a case study of Dutch prisons, modeling performance by including explanatory variables related to the organizational environment, such as cell capacity, regime type, or double occupancy of cells, and then analyzing these elements to obtain a more accurate and comparable assessment of prison performance.

This approach seems relevant in that it allows for an objective assessment of the efforts made by institutions, provided that it is simplified to facilitate adoption by users of the system.

### 2.3.2. Construction of the BSC and the scoring system

Our approach to building the performance management tool is based on a constructivist approach inspired by Kaplan and Norton's model (1996). Given our intervention objective, we adopted the five steps described in Figure N°2 below to guide our case study in designing this tool.

**Figure N° 1: Process for constructing the BSC model adapted to the prison sector**



**Source: Authors**

In practical terms, the first step involves working with stakeholders to define objectives based on the broad strategic guidelines for the prison sector<sup>6</sup>. This step is essential because it fulfills the mission of a BSC, which is to serve as an information tool providing an overview of the organization's priorities and a mechanism for implementing strategy, not developing it.

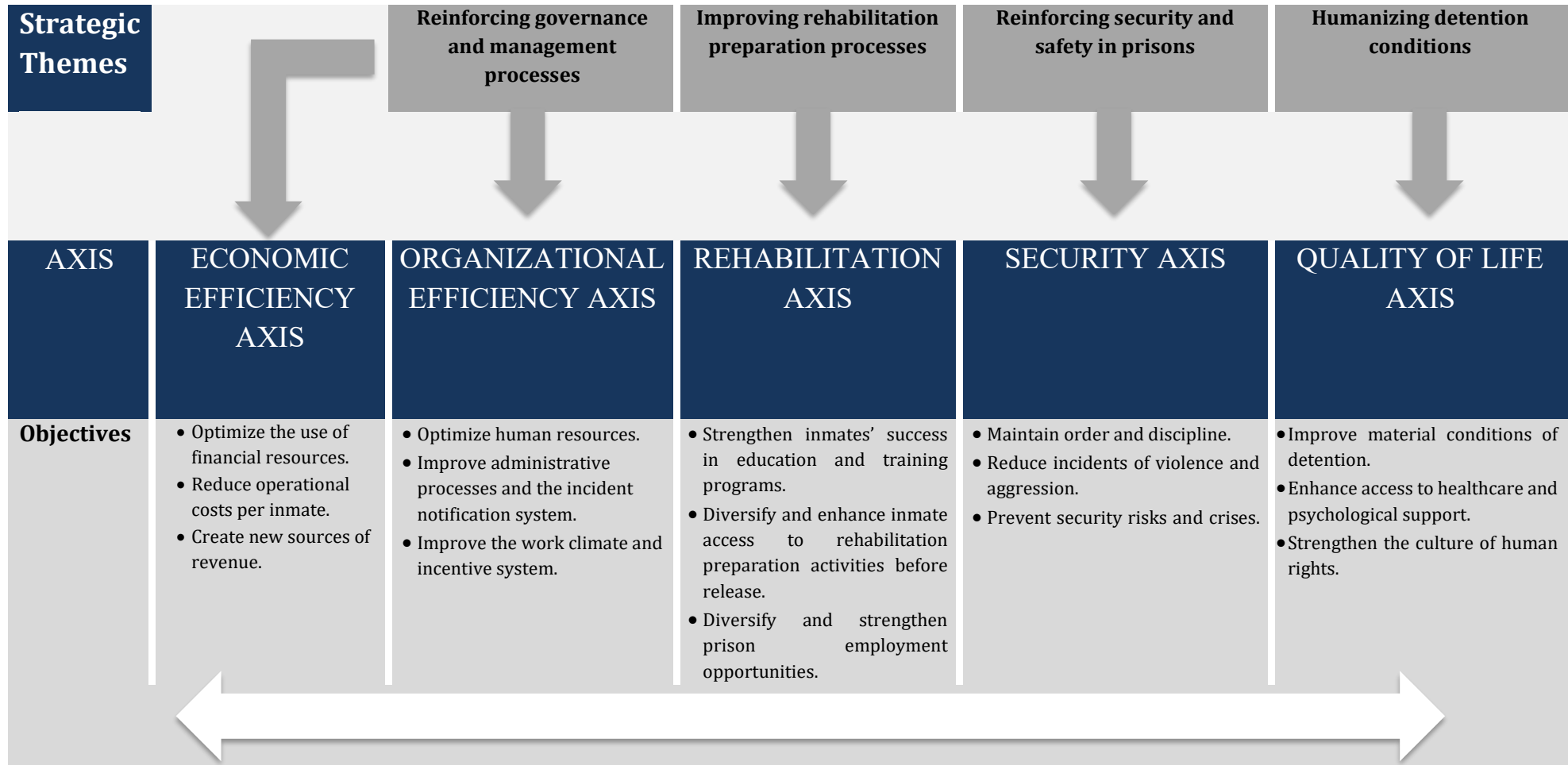
Following our literature review, a proposal for the components of the strategy map was made to the working group. At this stage, we also defined and validated the perspectives of our BSC.

<sup>6</sup> DGAPR's 2022-2026 strategy document.

The strategy map as validated with the members of the working group is presented in figure N°3.

This map was constructed by conducting a vertical analysis of the content of the interviewees' responses to the questions addressed around the BSC perspectives, followed by a cross-sectional analysis of their proposed objectives based on the number of occurrences in order to select the most relevant ones for each of the identified perspectives. The results of this cross-analysis enabled us to select priority strategic themes and categorize the objectives selected by perspective. This approach to categorizing objectives corresponds in research methodology to the qualitative deductive method (Thietart & al., 2007), which reflects the process of modeling concepts and their links without, in principle, resorting to statistical or mathematical methods of quantifying these relationships.

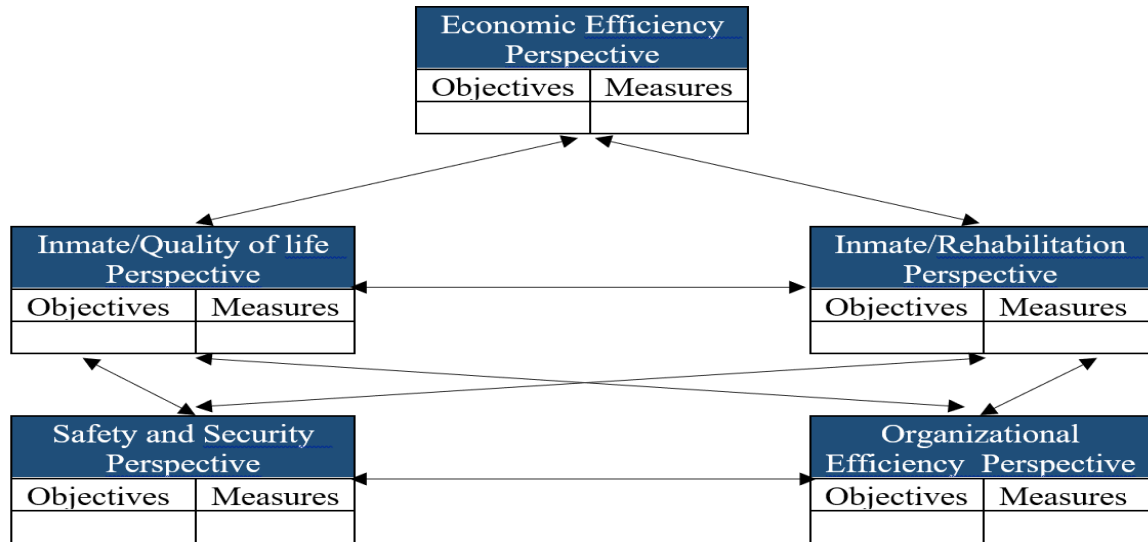
Figure N° 2: Draft of a strategic map of the prison and rehabilitation sector



Source: Authors

In fact, to address the specific characteristics of the prison sector and its strategic objectives, we suggested modifying the standard BSC structure and building it around five axes (see figure N° 4), in line with the idea that "the four perspectives should be considered a template, not a straitjacket" (Niven, 2002).

**Figure N°4: BSC architecture adapted to the prison and rehabilitation sector**



**Source: Authors**

Consequently, the 'customer' perspective (found in the standard BSC model) is replaced by the three key imperatives for prison performance identified in the previous section, giving rise to three focus areas: 'inmate/quality of life', 'inmate/rehabilitation' and 'security and safety'.

The "financial" perspective is replaced by the "economic efficiency" axis to reflect the non-profit nature of prisons and consider the principle of optimizing public funds, according to which the satisfaction of supervisory authorities depends on the proper use of resources.

We have also replaced the two perspectives of "organizational learning" and "internal business" by a single dimension: "organizational efficiency".

This stage of identifying performance priorities led to the definition of causal links.

More specifically, the "economic efficiency" perspective sets out the objectives for optimizing the funds allocated to initiatives under the other four priorities. Better resource allocation thus improves inmates' quality of life and rehabilitation, the efficiency of processes and the social climate, and enables investment in appropriate security measures and staff training. In turn, a good quality of life helps to reduce tensions and costs associated with incidents, and encourages inmates to participate in rehabilitation programs. Thus, successful rehabilitation helps to reduce

recidivism and, consequently, to minimize the associated costs. Furthermore, a more efficient organization limits unnecessary expenditure and facilitates the effective implementation of rehabilitation and security programs. Consequently, maintaining security helps to reduce violence and conflicts, thereby ensuring a more peaceful working environment for staff.

This stage also led to the selection of indicators deemed relevant and meaningful from among those proposed for the first time, as well as those already in use within the DGAPR.

The extended version of the BSC includes methodological details for calculating the adopted indicators, the data sources, frequency, and the designated responsible parties. The table N°3 presents the objectives with the associated indicators for each axis.

**Table N°4: Performance indicators broken down by axis**

Axis	Objectives	Indicators
<b>Economic Efficiency</b>	<ul style="list-style-type: none"> <li>- Optimize the use of financial resources;</li> <li>- Reduce operational costs per inmate;</li> <li>- Create new sources of revenue.</li> </ul>	<ul style="list-style-type: none"> <li>- Rate of execution of the allocated budget;</li> <li>- Average payment deadline for suppliers;</li> <li>- Expenditure-to-inmate ratio;</li> <li>- Internal revenue/budget ratio.</li> </ul>
<b>Inmate / Quality of Life</b>	<ul style="list-style-type: none"> <li>- Improve the material conditions of detention;</li> <li>- Reinforce access to healthcare and psychological support;</li> <li>- Consolidate the culture of human rights.</li> </ul>	<ul style="list-style-type: none"> <li>- Rate of cell compliance with accommodation standards;</li> <li>- Number of complaints filed by inmates regarding accommodation conditions;</li> <li>- Rate of access to healthcare services;</li> <li>- Suicide and self-harm rates;</li> <li>- Rate of inmates receiving treatment for drug addiction</li> </ul>
<b>Inmate / Rehabilitation</b>	<ul style="list-style-type: none"> <li>- Strengthen inmates' success in education and training programs;</li> <li>- Diversify and reinforce inmates' access to pre-release preparation activities;</li> <li>- Diversify and strengthen employment opportunities in prison.</li> </ul>	<ul style="list-style-type: none"> <li>- Participation rate in education and training programs;</li> <li>- Overall success rate in education and training programs;</li> <li>- Proportion of inmates engaged in useful activities;</li> <li>- Proportion of inmates engaged in paid work.</li> </ul>
<b>Security and Safety</b>	<ul style="list-style-type: none"> <li>- Maintain order and discipline;</li> <li>- Reduce incidents of violence and aggression;</li> <li>- Prevent security risks and crises.</li> </ul>	<ul style="list-style-type: none"> <li>- Offences-to-inmate ratio;</li> <li>- Incident rate (assaults, fires, riots, etc.);</li> <li>- Number of seizures of prohibited objects and substances;</li> <li>- Number of escape cases.</li> </ul>
<b>Organizational Efficiency</b>	<ul style="list-style-type: none"> <li>- Optimize human resources;</li> </ul>	<ul style="list-style-type: none"> <li>- Rotation rate between job positions;</li> <li>- Rate of access to continuous training;</li> </ul>

- Improve administrative processes and the incident reporting system;
- Improve the work climate and incentive system.
- Audit of the incident reporting system;
- Resolved conflicts / total conflicts ratio;
- Absenteeism rate.

**Source: Authors**

Seeking to enhance the relevance and operability of the BSC developed, we integrated weightings for the various performance measures. These weightings enable the indicators to be ranked according to their relevance, thereby facilitating the overall assessment of performance by perspective. The allocation of weights was conducted in consultation with the members of the working group and on the basis of objective criteria. As a result, each indicator is assigned a weight, and the sum of the weights of all indicators is equal to 100% for each institution.

An example of weighting for the "Inmate/quality of life" axis is given in Table N° 4.

**Table N°5: Example of weightings relative to indicators for the "Inmate/quality of life" axis**

Axis	Indicator	Weight ( %)
<b>Inmate/quality of life</b>	Rate of cell compliance with accommodation standards	6
	Number of complaints filed by inmates related to accommodation conditions	4
	Rate of access to healthcare services	5
	Number of cases of suicide and self-harm	5
	Rate of inmates receiving treatment for drug addiction	5
<b>Total weightings</b>		<b>25</b>

**Source: Authors**

To calculate the score for each dimension, the indicators were standardized on a unified scale so that they could be assessed using the same unit of measurement. The value obtained for each indicator is then multiplied by its assigned weight to produce the score for each dimension, and subsequently for each institution by combining the scores of all indicators. The overall scores obtained are classified according to a scale indicating four levels of performance, as shown in table N°5.

**Table N° 6: Performance Evaluation Thresholds**

Rating	Excellent performance	Good performance	Average performance	Poor performance
<b>Global score</b>	Over 80%	Between 60 and 80%	Between 50 and 59%	Less than 50%

**Source: Authors**

Furthermore, in order to ensure that performance comparisons between prisons can be made objectively (Issa, 2016), a categorization was proposed based on groups formed by considering contextual variables likely to influence performance.

In this regard, it should be noted that Moroccan prisons are classified into four types under Article 3 of Law 10.23 on the organization and functioning of prisons, namely: central prisons, local prisons, agricultural prisons, and reform and education centers.

Based on the primary function of each type of prison, we have carried out a preliminary categorization based solely on the prison type.

In 2025, there are 74 prisons in Morocco, distributed as follows: 2 central prisons, 2 agricultural prisons, 2 reform and education centers, and 58 local prisons. This distribution led us to focus on the category of local prisons, which includes a large number of institutions and presents more marked contextual variables.

The variables selected for this second phase of analysis are: operational capacity, age of the facility, guard/inmate ratio, existence of educational spaces, prison turnover, and geographical location (within or outside urban areas). Each variable is assigned a coefficient according to its importance, allowing a reference score to be assigned to each institution. Facilities with the closest scores are classified in the same group. As a result, we identified three comparison groups in the local prison category. The other prison categories, due to their limited number, were maintained as independent groups.

## Conclusion

The development of a BSC tailored to the penitentiary and rehabilitation sector is an essential lever for modernizing the management of prisons and optimizing their performance. This strategic management tool makes it possible to integrate and reconcile the multiple dimensions of the prison mission, offering a comprehensive and shared vision, ranging from security to rehabilitation, including organizational efficiency and economic dimensions.

The implementation of a BSC in this context opens up promising horizons by structuring objectives and facilitating decision-making based on reliable indicators. Furthermore, the establishment of comparison groups between prisons allows for local management specificities to be considered, thereby optimizing any proposals for improvement put forward by those responsible for managing these tools.

The quality of the associated information system is a key success factor, ensuring the availability, reliability, and relevance of the data collected. However, it should be noted that some measures require travel and field audits, which require resources and rigorous organization to ensure a comprehensive and objective assessment of the indicators.

Beyond the technical dimension, the success of this approach also depends on the involvement of the prisons themselves. It is essential to create an environment conducive to the adoption of management tools by providing prisons with the appropriate human and technical resources. This support must be designed as genuine assistance for those working in the field, enabling them to strengthen their skills and autonomy in monitoring and analyzing results.

Furthermore, linking the approach to an incentive system, such as the creation of an award for the best prison, could be a powerful motivator and stimulus. Such mechanism would help to recognize the efforts undertaken, foster continuous improvement, and promote the sharing of best practices across institutions.

However, it is important to bear in mind the structural budgetary constraints weighing on the prison system, which are often exacerbated by a complex political context and strong growth in the prison population. These factors require a pragmatic and gradual approach, combining rigor and flexibility, in order to adapt the proposed tools to the realities on the ground and ensure their sustainability.

Finally, the concrete experimentation of this tool will represent a major stage in the intervention research undertaken, providing an opportunity to assess its effectiveness and adjust deployment modalities in line with feedback and the needs of the actors involved. This pilot phase is conceived as a continuation of the present work, with the aim of reinforcing the dynamic of continuous improvement within the penitentiary sector.

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