Boosting Performance with Data-Driven Dashboards

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Abstract: In the current context of significant challenges faced by businesses, particularly in the pharmaceutical sector, human resources management becomes crucial. This article focuses on the strategic role of the Human Resources Dashboard (HR Dashboard) as a tool for improving performance within a pharmaceutical company. The HR Dashboard is presented as an essential instrument for guiding, coordinating, and monitoring activities related to human resources (Alazard and Separé, 2007). The aim of this research is to delve into various aspects of the HR Dashboard, from its theoretical foundations to practical application, emphasizing its central role in effective human capital management. The adopted methodology relies on a qualitative approach, featuring a single case study within a pharmaceutical company, safeguarding data confidentiality. Information gathering was conducted through semi-structured interviews with key stakeholders. The article is structured into two parts: a theoretical exploration of the HR Dashboard, covering its specific design within the pharmaceutical context, and a practical analysis of results obtained from the case study. The findings of the case study conducted within the pharmaceutical company demonstrate the effectiveness of the HR Dashboard as a decision-making tool, enabling specific corrective actions for continuous performance improvement. This study contributes to understanding the impact of the HR Dashboard on performance in the pharmaceutical sector.

Keywords: Performance, Dashboards, HR.

1. Introduction

The current business environment, and more particularly the pharmaceutical sector, imposes considerable challenges in terms of human resources management. In this dynamic, the use of the Human Resources Dashboard (TB RH) emerges as a strategic lever, offering a clear and synthetic vision of the indicators essential to the management of human capital. As Alazard and Separé (2007) point out, a well-developed dashboard is an essential tool for guiding, coordinating and monitoring human resources activities within an organization.

At the heart of this complex reality, our article addresses a crucial question: How can the use of TB HR serve as a strategic tool for improving performance within a pharmaceutical company?

The objective is to explore the multiple facets of TB HR, from its theoretical foundations to its practical application, highlighting its central role in the effective management of human capital.

Faced with this central question, our reflection focuses on the specific challenges faced by pharmaceutical companies. Strict regulatory requirements, frequent staff movements and the need for proactive human resources management require a special approach. So how can TB HR adapt and help overcome these specific challenges while promoting continuous performance improvement?

Our approach is based on positivism by adopting an epistemological posture aimed at an objective understanding of the facts. The hypothetical-deductive method guides our research, based on a unique case study within a pharmaceutical company. The confidentiality of sensitive information forces us not to disclose the name of the company, thus preserving the confidentiality of the data.

The article is structured in two distinct parts. In the first theoretical part, we explore the theoretical foundations of TB RH and its usefulness, dive into the specific development of TB RH in the pharmaceutical context, and examine the crucial role of the dashboard in the continuous improvement of organizational performance. In the second practical part, we present and analyze the results of our case study, supporting our remarks with concrete data.

Through this exploration, we formulate three research hypotheses. The first suggests that the implementation of an HR TB helps align HR initiatives with the strategic objectives of the pharmaceutical company. The second hypothesis argues that the use of TB HR allows an informed management of human resources, anticipating future needs and improving productivity. Finally, the third hypothesis proposes that the creation of a repository of HR indicators promotes the relevance, reliability, and usefulness of indicators in the decision-making process.

2. Theoretical Foundations of the Scoreboard

A. HR Dashboard: Definition and Importance

The dashboard, as defined by Alazard and Separé (2007), is a clear and synthetic document gathering information organized around selected variables. This strategic tool is essential for guiding, coordinating and controlling the activities of a department, function or team. Kaplan and Norton (2022) point

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out that the scoreboard, widely used in large companies, translates organizational strategy into concrete actions. Structured hierarchically into "business units" or production units, it promotes a process/activity vision to support a continuous improvement approach. The dashboard allows the qualitative and quantitative identification of a chain of causal relationships, linking strategic performance to operational performance.

Deepening our exploration, we focus on the "HR Dashboard", defined by Karim Mignonac and Nathalie Richebé (2009) as a coherent set of synthetic indicators, structured and educational presentation of the essential information of the management of the company. They emphasise the importance of HR dashboards for both management and staff, middle management and all employees. These dashboards can also be available in more specific versions, such as those dedicated to remuneration or training. The relevance of the chosen indicators is crucial, aligned with the specific HR issues facing the company.
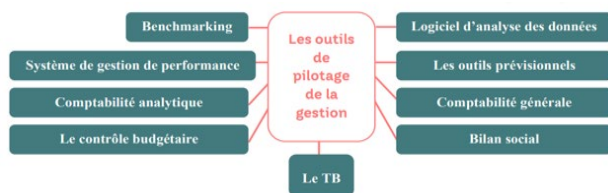

Fig. 1. The position of the dashboard within the different management control tools
(Alazard Claude, Separi Sabine, 2007)

B. Usefulness of the HR Dashboard in Human Resources Management

Barabel and Meier (2017) underline the essential usefulness of the dashboard in human resources management. This must-have tool, used by HR departments and executives, provides a synthetic overview of KPIs related to workforce, personnel management, recruitment, training, compensation, employee satisfaction, diversity, absenteeism, etc. By promoting informed management, it helps anticipate future staffing needs, align HR initiatives with the strategic objectives of the company, and improve employee productivity, efficiency and satisfaction.

3. Development of an HR Dashboard in a Pharmaceutical Company: Theoretical Exploration of Information Sources, Foundations of Essential Pillars, Characteristics and Challenges

A. TB RH Information Sources

The creation of an HR Dashboard (HR TB) requires a variety of sources of information, each offering a particular insight into the organizational dynamics. In this regard, Imbert (2007) argues that these sources can be classified into several categories, namely:

Administrative Documents: These internal documents, such as contracts, payslips, performance evaluations, etc., serve as the basis for HR indicators.

Interviews and Meetings: Interactions with employees, managers and managers provide crucial information, documented in particular through evaluation reports and feedback.

Observations and Audits: Conducting field observations and verifying existing procedures provide a concrete perspective on day-to-day operations and safety standards.

Computerized data: Information extracted from management software (time, payroll, training, etc.) is an essential source for HR indicators.

External references: Standards, regulations, market research, and employee satisfaction surveys feed the overall vision of TB RH.
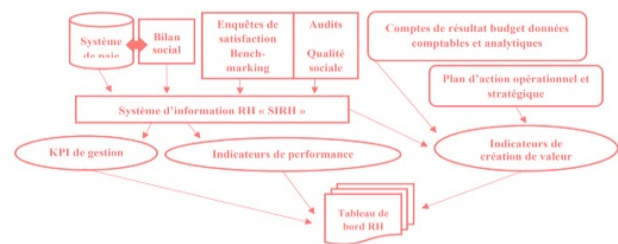

Fig. 2. The different sources of information according to each type of indicator (Joëlle Imbert in 2007)

These sources, structured in the schema established by Joëlle Imbert in 2007, represent only a fraction of the possibilities, highlighting the need for HR managers to adopt an integrated approach by combining various sources for a holistic view of the company.

B. The First Pillars of TB RH

The pillars of the HR Dashboard (HR TB), covering workforce, compensation, health and safety, training, profile and recruitment, constitute the essential foundation of human resources management.

This set, inspired by benchmark work such as Bratton and Gold (2007) and Decuyper and De Winne (2012), offers a holistic approach to assessing and improving organizational performance.

Indeed, the workforce encompasses aspects such as the size of the organization, the breakdown by department and the staff turnover rate, making it possible to understand staff dynamics.

Remuneration, in accordance with the work of Milkovich and Newman (2008), encompasses salary policies, benefits and bonuses, ensuring equitable management of remuneration. Health and safety conditions, aligned with standards and regulations, monitor workplace accidents and ensure a safe environment, as recommended by Heskett et al. (2012). The training, based on the ideas of Tannenbaum and Yukl (1992), evaluates skills development initiatives, thus promoting the effectiveness of training investments. The pillar profile, influenced by the work of Cascio (1991), offers a detailed view of the skills, performance and characteristics of employees, facilitating talent management. Finally, recruitment, in line with the recommendations of Gatewood and Feild (1994), measures the effectiveness of the recruitment process and ensures an adequate response to staffing needs. This structure,

Table 1
Detailed analysis of the human resources dashboard pillars: Essential components

Pillar of TB RH	Description
Staff	Workforce size, breakdown by department and status, turnover and retention rates.
Remuneration and Benefits	Compensation policies, benefits, bonuses, pay equity.
Hygiene and Safety	Measures to ensure the safety and well-being of employees, occupational diseases
Formation	Training initiatives, expenses, training hours, professional development programs.
Profile	Training initiatives, expenses, training hours, professional development programs.
Recruitment	Recruitment process, turnover, recruitment time, cost, quality candidates.

Source: Bratton and Gold (2007) and Decuyper and De Winne (2012)

adaptable to the particularities of each company, emerges as a robust tool for the management and optimization of organizational performance.

This table provides a summary view of the TB HR pillars and their main components.

C. Characteristics of a Good TB RH

The effectiveness of an HR Dashboard (HR TB) is based on key features identified by various authors. An HR TB must be clear, synthetic, constantly updated, and present a chronological view of performance. According to Tremblay (2015), this clarity ensures a quick understanding, while the synthesis ensures the relevance of the data. Regular updating and chronological presentation, according to Robinson (2010), allow real-time evaluation and identification of historical trends.

Clarity, defined as the quality of being understandable and transparent, ensures a quick understanding of the information presented. Indeed, an HR TB must act as a real dashboard, offering an immediate view of the human resources situation within the company. A clear presentation of HR Key Performance Indicators (HR KPIs) is essential for users to quickly understand the organizational situation.

Synthesis, or the ability to present only relevant information, is another fundamental principle identified by Tremblay (2015). Effective HR TB must avoid the overload of unnecessary information that could complicate the understanding of organizational performance. The synthesis results in the rigorous selection of the most relevant KPIs to measure performance effectively. This requires in-depth analysis to determine which indicators best reflect the company's strategic objectives. Quality takes precedence over quantity.

Robinson (2010) highlights the importance of keeping TB HR up to date with the latest available data. HR indicators must reflect the dynamics of the organization in real time. Outdated data can mislead decision-making. Thus, the regular updating of indicators, notably through the integration of human resources management software, guarantees a current and precise vision of organizational performance.

The chronological presentation, an aspect highlighted by Robinson (2010), offers the possibility to visualize the evolution of KPIs over time. This helps to identify trends and changes in organizational performance. A chronological view of TB HR provides an essential historical context for decision-making. For example, tracking changing staffing needs, overtime, or absenteeism can provide valuable guidance for future strategy development.

In summary, clarity, synthesis, regular updating, and chronological presentation emerge as fundamental pillars for a successful HR TB. By integrating these features, HR managers can truly transform their dashboard into a powerful analysis and decision tool, aligned with the company's strategic objectives.

D. Issues related to the implementation of an HR TB

The implementation of a Human Resources Dashboard (TB RH) is a company rich in challenges, as highlighted by various authors in the field.

A major challenge lies in the frequency of movements within the company, requiring regular data updates to ensure their accuracy (Doe, 2018). The transition of data to Excel, often unavoidable, can introduce potential errors such as blank spaces, duplicates or typos (Smith, 2017).

Automation, while powerful, is not without its risks, and a code error can compromise the integrity of TB RH data (Jones, 2019). Data collection faces challenges such as the distribution of data between different HR departments and departments, requiring rigorous coordination (Brown, 2016).

The variety of data formats, a common barrier, can be mitigated by standardizing formats (White, 2020).

Formula management, particularly in the calculation of indicators, must be rigorous to avoid analytical errors (Miller, 2018). Conditional formatting, while a powerful tool, requires absolute clarity to ensure correct interpretation (Taylor, 2019).

Understanding data can be a challenge for non-specialists in data analysis, emphasizing the importance of a clear and concise presentation (Clark, 2021). Finally, data security, including sensitive employee data, requires strict measures to prevent unauthorized access (Johnson, 2020).

Thus, the implementation of an HR TB requires proactive management of these issues to ensure the quality, relevance and security of data used in human resources management decision-making.

E. The Creation of the HR Indicators Repository

As part of the creation of the HR indicator repository, this initiative relies on the comprehensive collection and consolidation of company data, guided by what we call the indicator repository (IR).

According to Doe (2017), the ROI plays an essential role as a guiding document providing guidance and recommendations for the design and measurement of performance indicators within the company. It provides a framework, incorporating quality standards and criteria for data collection, analysis and presentation, providing clear guidance on selecting the most appropriate indicators to assess desired outcomes (Smith, 2018).

Fundamentally, the ROI is built in alignment with the company's strategic objectives, as Johnson (2019) points out,

making this tool a crucial component to ensure relevance, the reliability and usefulness of performance indicators in decision-making.

The six main components of this MOU cover Workforce Indicators, Compensation and Ancillary Expenses, Safety Conditions and Hygiene, Training, Profile, and Recruitment.

These indicators are then classified according to seven main columns, such as the column of indicators, its interpretation, its method of calculation, the need it meets, the elements included and excluded in the calculation of the indicator, with an optional note at the end.

The purpose of this structured table is to effectively meet the needs of managers and to facilitate communication of indicator requirements within the company (Taylor, 2020).

4. Role of the Dashboard in Improving Performance

The dashboard plays a crucial role in improving organizational performance, acting as a strategic tool to guide the decisions and actions of Human Resources Managers (HR). As Kaplan and Norton (1992) point out in their Balanced Scorecard concept, the dashboard goes beyond simply measuring financial performance by incorporating non-financial indicators, thus providing a holistic view of the health of the organization.

The clarity and comprehensibility of the dashboard are fundamental aspects, as Tremblay (2015) points out, because they allow rapid appropriation of information by users.

A clear dashboard ensures informed decision-making by providing an accurate view of the company's performance (Robinson, 2010). Data synthesis, by eliminating the superfluous, helps to maintain the relevance of the scoreboard, as advocated by McNair and Leibfried (1992).

Regular updating of data is an imperative highlighted by Dechamps and Loiodice (2008), as it ensures that indicators reflect reality in real time. This dynamic nature of the dashboard reinforces its ability to serve as a proactive tool in anticipating organizational changes and trends.

By adopting a chronological presentation, the dashboard also allows analysis of changes in performance over time, providing an essential historical perspective for strategic decision-making (Robinson, 2010).

In the particular context of the pharmaceutical company, these characteristics become more important. The specificities of the sector, such as strict regulatory standards, the need for rapid responses to market developments and security requirements, require an HR dashboard that integrates these elements in a contextualized way.

As Davis and Albright (2004) point out, in a sector characterized by frequent staff movements and rigorous data management, an effective dashboard must be both flexible and secure. In short, the dashboard, as a performance improvement tool, acts as a visual guide, it is clear to undertake and ensure that the action is carried out to term, without any explicit prediction as to the nature or level of the result to be achieved (Dlimi 2021).

By adopting key features such as clarity, synthesis, regular updating and chronological presentation, it positions itself as an essential instrument in human resources management, particularly in the pharmaceutical sector.

5. Methodology and Analysis of Results

A. Study Methodology and Application Field

1) Study Methodology

The research methodology adopted in the practical part of this study is based on a qualitative approach focused on a single case, namely a pharmaceutical company. The main objective was to explore in depth the implementation and use of a dashboard in the specific context of this company. Due to the confidential nature of the data collected, the name of the company will not be disclosed, in accordance with established confidentiality agreements.

Data collection was based on semi-structured interviews with managers and key stakeholders within the company. This approach enabled us to obtain detailed, contextualized information on human resources management processes, the challenges encountered, as well as the benefits observed following implementation of the dashboard. The interviews were conducted with particular attention to detail and to the diversity of respondents' perspectives.

The use of a single case study offers the advantage of diving deeply into the specifics of a particular organization, enabling a thorough understanding of the internal dynamics and factors influencing the effectiveness of the HR dashboard. This facilitates contextual analysis and extrapolation of results to other companies in the pharmaceutical sector, while recognizing the uniqueness of each organizational context.

It should be noted that the selection of the pharmaceutical company as a unique case study was motivated by its representativeness of the sector, characterized by particular challenges such as strict regulatory compliance and the need for agile responses to market evolutions.

In conclusion, the methodology adopted enabled an in-depth, contextualized exploration of the use of the dashboard in human resources within a pharmaceutical company. Interviews played a central role in gathering rich data, providing a detailed insight into practices and experiences within the organization, while respecting confidentiality imperatives.

2) Presentation of the Entity Studied

The entity studied in this research is a company with 70 years' experience in the healthcare sector. Founded in 1951 in Morocco. It is a historic player in the pharmaceutical industry, occupying a leading position in its distribution (ranked 71st in the global ranking of the 500 largest Moroccan companies in 2020).

It is committed on a daily basis to ensuring the availability and affordability of medicines. Its partnerships include renowned brands such as Pfizer, AstraZeneca, Aspen and Omega Pharma, among others. Its teams, supported by state-of-the-art production and warehousing infrastructures, as well as an extensive distribution network and international collaborations, cover all therapeutic areas. The company produces over 1,300 products, including the latest pharmaceutical innovations.

Since 2017, it has become a leading pharmaceutical distributor present in 30 countries in Africa, sub-Saharan Africa, the Maghreb, and the DOM TOM (overseas departments and territories administered by France). It is a major player in the fields of mobility, healthcare, consumer goods, infrastructure and energy.

This approach preserves the confidentiality of the company's name, while providing an understanding of the business sector in which it operates.

B. Results

1) Process for Setting Up the Company's HR TB

The implementation of the company's Human Resources Dashboard (HR dashboard) followed a rigorous methodology, involving several key stages.

Here are the relevant results, highlighting the significant aspects of the process:

1. *Receipt of the Indicator Repository*: Each department receives the indicator repository, establishing the basis for collecting the data needed to prepare the indicators.

Fig. 3. Sample of the HR indicator framework
Source: compiled by us on the basis of the benchmark provided by the company

2. *Communicating needs to the HR department*: In the HR department, the manager communicates specific needs to personnel administration to initiate preparation of the required indicators.

3. *Head Count Extraction and Update*: Head Count provides a more comprehensive overview of the company's workforce. It presents a monthly table with an enhanced version that includes additional details, such as the maximum and minimum headcount per month.

   The system's database is extracted to update the head count, enabling the size of the workforce to be measured and tracked over time. This includes detailed information on each employee, such as surname, first name, age, seniority, function, department, etc.

4. The data presented in the image include key elements such as employee ID, first name, last name, gender, nationality, date of birth, age, contract type, hire date, site, cost center, seniority, status, department, position, hierarchy name, base salary, contract start date, and contract end date. These pieces of information are crucial for human resources management and resource planning.

5. *Data Reconciliation*: Reconciliation is performed between the HRIS and an Excel file manually updated by the HR administration. This step aims to detect anomalies and ensure real-time data synchronization.

Fig. 4. Database extraction (*Source: compiled by us*)

6. Additional Data Collection

A. Planning Data Collection Steps According to the Progress of the Work

The data collection process follows the steps outlined earlier:

Table 3

Base de données « SIRH »			RAPPROCHEMENT	Base de données « Excel »		
Matricule	NOM & Pronom	...		Matricule	NOM & Pronom	...
A9851	ABDENAIM HOUARI	...	VRAI	A9851	ABDENAIM HOUARI	...
A9852	AHMED BELGIM	...	VRAI	A9852	AHMED BELGIM	...
Entrée	A9860	ELKHAL BAHIJA	...	FAUX			à Ajouter

Fig. 5. Data reconciliation (*Source: Compiled by us*)

The overall planning of data collection encompasses all stages of the Human Resources Dashboard (HRD) construction project. However, a more precise approach is necessary. It is crucial not only to plan the procedure but also to detail the planning of each indicator individually. In other words, it is important to establish a specific planning procedure for each indicator, also known as the state of indicators.

B. Planning the Data Collection Steps According to Each Indicator

By meticulously planning data collection, the company can ensure reliability, consistency, and traceability, thus promoting accurate analysis of its overall performance. This approach enables the company to effectively identify relevant sources for each indicator, thereby facilitating communication and data collection. As a result, it mitigates the risk of issues during the implementation of a Human Resources Dashboard (HRD).

Additional necessary data, originating from departments such as compensation, health and safety, training, etc., are collected to enrich performance analysis.

1. *Calculation of Indicators*: The indicators are calculated according to the rules defined in the framework, thus providing an accurate measure of performance in various HR areas.

2. *Creation of a Consolidated Excel File*: Once the indicators are calculated, a consolidated Excel file is created, ready to be sent or imported into the reporting platform.

3. *Analysis of Results by the Parent Company*: The executives or the parent company analyze the results of the HRD and propose corrective actions according to the new strategy.

4. *Adherence to Set Deadlines*: Adherence to set

Table 2
Data collection process

Data Collection Stage	Description	Document Manager
Database Extraction:	Receiving the HR Database: The first step involves extracting the human resources database from the HRIS, which includes detailed information about employees, such as their identity, age, gender, department, salary, etc.	HR Manager
First Evaluation of the Quality of Collected Data (Verification):	Database Cleaning: This step involves cleaning the database to ensure that all information is correct. It includes removing duplicates, empty spaces in cells, input errors, and inaccurate information.	By Us
Request for the database outside of the HRIS:	Reception of the manual database: This step involves manual collection, outside of the Human Resources Information System (HRIS).	The HR administrators
2nd Evaluation of the quality of collected data (Verification):	Comparison between databases: Comparing the HRIS database to manual records to detect if there is anyone who has not yet been declared in the HRIS.	By Us
Movement requests.	Reception of monthly movement lists: This step involves requesting the previous year's records of employee movements (entries and exits) for the entire year, which are recorded by HR team members.	The HR administrators
Classification and processing of movements:	Updating: Classifying all the separate months into a single file, and continuing to record movements in real-time until the end of the reporting period.	By Us
3eme Évaluation de la qualité des données collectées (rapprochement) :	La comparaison entre la base de données et la liste des mouvements : Cette étape consiste à comparer les informations contenues dans la base de données avec la liste des mouvements enregistrés pour s'assurer qu'elles correspondent. Cette étape permet également de détecter s'il y a quelque mouvement non déclaré dans la base de données ou tout autres éventuelles erreurs ou omissions dans les deux systèmes	By Us
Processing and Designing Data	Analysis of the collected data and writing the final report: This phase involves processing the data to create a Human Resources Dashboard, as well as producing a concise report summarizing the analysis results and actions taken to improve the company's HR management.	By Us
Sending the report	Send the final report to the manager: Verify the consistency of the data and identify potential areas for improvement, proposing corrective measures if necessary to the manager.	HR Manager

Source: Compiled by us

deadlines, in accordance with the requirements of the parent company.

5. *Response to Anomalies and Errors*: In case anomalies or calculation errors are detected, explanations or corrections may be requested from the responsible parties to ensure the reliability of the results.

These results demonstrate the rigor of the HRD implementation process, emphasizing the importance of each step to ensure quality data and an overall view of the company's performance.

1) Implementation of the Dashboard Carried Out within the Company

By consolidating the elements mentioned into a Human Resources Dashboard (HRD), we have created a powerful tool that will enhance personnel efficiency and management within the company, thereby contributing to its long-term success. We present the result of our work, tailored to the specific needs of the company.

The use of this HRD has also contributed to improving the overall performance of the company.

2) Enhanced Performance: Strategic Outcomes of the HR Dashboard within the Company

The main findings resulting from the use of the Human Resources Dashboard (HR Dashboard) as a strategic tool within the pharmaceutical company significantly address the issue of its use for performance improvement. Here are the highlights:

1. Workforce Optimization and Departmental Distribution:

Catégorie	Indicateur	Source de données	Méthode de collecte	J	H	M	T	S	A	Responsable de la mise à jour des données
Effectif	Répartition des collaborateurs pour mesurer la structure.	SIRH «OptiTime» ou «Odoo».	Extraction des données.			X				
Effectif	Répartition des collaborateurs pour mesurer la stabilité.	SIRH «OptiTime» ou «Odoo».	Extraction des données.			X				Responsable RH
Effectif	Effectif moyen en ETP (Equivalent Temps Plein).	SIRH «Optitime».	Extraction des données.			X			X	
Rémunération	Masse salariale annuelle.	SIRH, service paie.	Demande par mail.						X	
Rémunération	Le coût salarial.	SIRH, service paie.	Demande par mail.						X	Service de la paie
Sécurité	Accidents du travail.	Rapports de sécurité et d'accidents «HSE»	La demande des rapports et l'inspections sur le terrain.			X			X	Responsable HSE
Formation	Formation à la sécurité.	SIRH «Odoo» ou la vérification manuel des dossiers de formations.	Extraction des données par Mme Rajaa responsable RH ou la demande des fiches récapitulatives des formations.						X	Responsable formation
Formation	Formation professionnelle.								X	
Formation	Indice de sécurité-formation.								X	
Formation	Effectif formé								X	
Profil	Répartition des effectifs par tranche d'âge.	SIRH «OptiTime» ou «Odoo».	Extraction des données.			X				Responsable RH
Recrutement	Nombre de départs.	SIRH «Odoo - Ilaykoum», ou grâce à la constatation directe des mouvements.	Extraction des données et la demande des fiches de mouvements.	X	X					Responsable RH.
Recrutement	Nombre d'embauches.			X	X					
Recrutement	Taux de rotation (TurnOver).					X		X		
Recrutement	Besoin de recrutement.			X	X			X		

J : Journalière H : Hebdomadaire M : Mensuelle T : Trimestrielle S : Semestrielle A : Annuelle

Fig. 6. Planning the data collection steps according to the needs of each indicator (*Source: Compiled by us*)

- Analysis revealed a workforce of 522 employees, providing a detailed view of the workforce.
- Une Departmental distribution highlights the crucial role of production, with 229 employees, emphasizing the importance of key departments.

2. Demographic and Functional Understanding:
   - The average age of 38.62 suggests a young workforce potentially adaptable to changes.
   - The average Full-Time Equivalent (FTE) of 1.02 indicates significant full-time contribution, highlighting employee engagement.
3. Compensation Management and Associated Costs:
   - La ventilation Detailed breakdown of the total annual compensation of $34,578,197.75 provides insight into labor-related costs.
   - The wage bill at 5.86% of revenue underscores the need for precise salary cost management to ensure profitability.
4. Workplace Safety:
   - Bien que While accidents have decreased, continuous vigilance is required, particularly in the demanding safety standards of the pharmaceutical industry.
   - In-depth analysis of accident types identifies specific areas requiring targeted improvements.
5. Training and Skill Development:
   - Une Balanced distribution of training is observed, but a thorough evaluation of their impact is necessary.
   - Emphasis on skill development, especially in key departments such as production, logistics, and quality, is recommended.
6. Personnel Management and Turnover:
   - Un A turnover rate of 8.43% emphasizes the importance of retention and professional development.
   - Analysis of departure reasons provides insights to address human resource management issues.
7. Recommended Corrective Actions:
   - Specific measures are suggested for contract management, workforce balancing, attendance management, compensation, workplace safety, skill development, and turnover management.
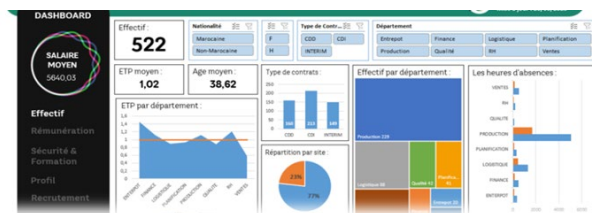

Fig. 7. Sample of the HR dashboard created (*Source: Compiled by us*)

Overall, these results demonstrate that the HRD is an effective decision-making tool, providing crucial information to guide corrective actions and contributing to continuous performance improvement within the company.

Fig. 8. Multisite HR Dashboard summary (*Source: Compiled by us*)

	Effectif			Rémunération				Sécurité			Formation		Profil					Recrutement		
	Effectif	Age moyen	ETP moyen	Masse salariale	Part de la MS dans le CA	Salaire moyen		Accident déclaré	Accident non déclaré	Accident de trajet	Accident mortel	Durée	Coûts	Tx des hommes	Tx des femmes	Taux d'emadrement	Ancien-neté moyen	% de Marocanisation	Turn over	Tx des entrées	Tx des sorties
Site 1	401	36,83	1,08	49,4M	4,51%	3810,11		1	0	2	0	607 h	121 kdh	69%	31%	36%	6,62	99%	10,88%	13,83%	7,96%
Site 2	121	40,42	0,96	14,8M	1,35%	7230,21		0	0	1	0	183 h	37 kdh	57%	43%	14%	12,05	97%	5,98%	7,63%	4,30%
Total	522	38,62	1,02	64,2M	5,86%	5520,15		1	0	3	0	790 h	158kdh	63%	37%	25%	9,33	98%	8,43%	10,73%	6,13%

7. Conclusion

In conclusion, the results of our in-depth study on the use of the Human Resources Dashboard (HRD) within the pharmaceutical company significantly confirm our research hypotheses.

The implementation of the HRD has demonstrated its essential role in aligning HR initiatives with the company's strategic objectives, as evidenced by effective workforce optimization strategies and judicious departmental distribution. Informed human resource management, supported by thorough analyses on various aspects such as average age, average FTE, compensation, workplace safety, training, and turnover, reinforces the notion that the HRD facilitates informed decision-making.

Furthermore, the establishment of a set of indicators has been confirmed to enhance the relevance and reliability of information, as evidenced by the formulation of corrective actions directly derived from rigorous indicator analysis. The results highlight the HRD as a powerful strategic tool, essential for guiding corrective actions and continuously improving organizational performance.

While these conclusions are promising, opportunities for improvement, such as a more thorough evaluation of the impact of training and strengthening skills development, underscore the need for ongoing management to maintain workplace safety.

In summary, this study makes a significant contribution to understanding the impact of the HRD on performance in the pharmaceutical sector, confirming its crucial role in proactive human capital management.

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