# Impact of the Use of Monitoring-Evaluation Tools on the Performance of SME-SMI in Mali: Case of the Dashboard

Mohamed Amadou Salia DICKO, Salia Sinaly TRAORE, Abdrahamane KONE, Oumar Diandjo TRAORE Enseignant Chercheur à l'université des sciences sociale et de gestion de BAMAKO

#### Abstract

This article is based on a questionnaire intended for managers of SMEs-SMIs (Small and Medium Enterprise -Small and Medium Industry). Our research aims to study the impact of the use of a monitoring and evaluation system on improving the performance of SMEs and SMIs. More specifically, we focused our research on the use of the dashboard in SMEs and SMIs and its impact on overall performance. However, SMEs-SMIs located in Bamako were chosen during this research. The samples were made up of twenty-one SMEs operating in various sectors. Our results indicate that the use of the dashboard seems to have positive effects on the performance perceived by the respondents.

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#### INTRODUCTION

The global globalization of the economy and competition during the thirty years is marked by a strong growth of companies, the SME had experienced great difficulties (in crafts, agriculture, small trade ...), the 90s have seen a new boom in small businesses. SMEs, through their investments and their jobs, now play an indisputable role in the dynamism and economic development of a region or a country. SMEs generally represent more than 90% of all businesses. They generate more than 55% of GDP and more than 65% of the total number in developed countries. SMEs do not characterize by any single definition. Indeed, this sector is not homogeneous since there are very small businesses, small, medium-sized, self-employed, craftsmen, street corner coffee, cybercafes, etc. The statistical definition of SME varies from country to country. Consideration is generally given to the value of turnover and/or the value of assets or the number of employees employed. Faced with the importance of SMEs and their role in economic development, as well as their specificities, it is however necessary to examine their monitoring and evaluation mechanism. This leads us to focus our research on the contribution of monitoring and evaluation to the achievement of one of the main objectives of SME-SMI managers, which is to improve performance, while focusing on the use of the table on board. By questioning the actors on their perception of the impact of using the tool on the overall performance of the organization, we also aimed at their degree of satisfaction with the process of implementation and use of the dashboard. , questioning their experiences of setting up and activating this tool.

#### I. LITERATURE REVIEW

#### 1.1. Definitions

Several management specialists have proposed different definitions of dashboards; we cite among them:

According to (LEROY, 2001), the dashboard "is a synthetic and periodic presentation of management indicators that allow a manager to monitor the achievement of the objectives of his management unit and to report on them".

For (BOUQUIN, 2001), the dashboard "is a set of few indicators designed to enable managers to become aware of the state and evolution of the systems they control and to identify the trends that will influence them on a horizon consistent with the nature of their functions". While for (ALAZARD. SEPARI, 2010) "A dashboard is a set of indicators organized into a system monitored by the same team or the same manager to help decide, coordinate and control the actions of a service. The dashboard is a communication and decision-making tool that allows the management controller to draw the attention of the manager to the key points of his management in order to improve it".

#### **1.2.** Role and objectives of the management dashboard:

The dashboard is a management support tool, its objective has two distinct components: a component for observation, intended for reporting, and a component for action, intended for s Its reporting side (a vertical vision of the results).

✓ Its reporting side (a vertical vision of the results): The table provides essential, significant and rapid information to facilitate decision-making by managers, in place of new actions or to correct actions already taken. This data makes it possible to monitor the progress of the action plans and the results obtained by them. According to (ANTHONY, 2010), the objective of the dashboard "is to allow the 0

manager to show the evolution of a maximum of indicators so as not to miss a change in the business which could be dramatic. This definition sums up the role and objectives of the dashboard well: "management chart", which is a short-term information, control and decision-making aid instrument. It also makes it possible to diagnose the weak points and to show what is abnormal and has consequences on the results of the company. "Corrective actions can then be implemented"<sup>1</sup>. Thus, the role<sup>2</sup> of the management dashboard can be summarized as follows:

#### • The management dashboard limits the "uncertainty" factor"

By structuring the information, the dashboard manages it and provides its user with a certain leeway, thus limiting the "uncertainty" factor.

#### • Business dashboard manages live information

The dashboard offers information that is not shifted (temporally) with respect to each other. Reduces information instability. By providing a kind of "snapshot" of the situation, thus allowing to see the overall context of a given situation"<sup>3</sup>.

#### • The dashboard, a tool for rationalizing risk-taking

The management dashboard makes it possible to consider the company's strategy by offering an overall view of the situation, which, in the long term, will make it possible to minimize the risk of the decision.

#### The steering board is used for communication and reflection

The dashboard is a tool for constructive exchanges, but also the trigger, for the decision-maker, of a more indepth reflection by putting into perspective the objectives set and the path taken to achieve them. As pointed out (AIM, 2011): "the dashboard should no longer simply be a tool for reporting monitoring information along the hierarchical line. This purely bottom-up vision (reporting) must be replaced by that of a two-way communication axis that also makes it possible to propagate the vision of managers throughout the company<sup>4</sup>". By reporting on his action to the first manager, he allows him to follow the results and the progress of the activities in progress. The dashboard is the backbone of predictive and controlled management.

#### • The dimensions of the management dashboard:

The dashboard allows decision makers to identify deviations as quickly as possible and take corrective action. He promotes continuous learning by constantly seeking to improve the company's performance. For this purpose, we will list these dimensions as follows: The dashboard is a performance measurement instrument. It is the results (financial and non-financial) or the indicators, displayed by the dashboard, which translate the performance of the company achieved, in relation to the objectives assigned.

#### 1.3 Dashboard: instrument for control and comparison and improvement

To manage the performance of the company, the dashboard must offer its user the possibility of permanently monitoring the achievements in relation to the objectives set within the framework of the budgetary process. It is a trigger for investigation and comparison. By drawing attention to the important points of management and their possible deviation from the expected operating standards. It allows the manager to identify deviations and thus take the appropriate corrective actions.

# • Dashboard is an alert and diagnostic tool

The dashboard makes it possible to carry out a diagnosis of the situation of the company; it is an alert and action system. Allow to take the necessary measures when discrepancies are observed. It draws the attention of managers to the most significant or exceptional features identified. Thus alerted, they will seek to choose appropriate corrective actions. Because from this gap, the implementation of solutions is born.

# • Dashboard is a dialogue and communication tool:

The dashboard is a medium for dialogue and communication between managers at different hierarchical levels. At the level of vertical communication, the dashboard ensures dialogue between the different hierarchical levels and plays the role of integrator by allowing to have at a given hierarchical level, a common language with all the same parameters. In the context of horizontal communication, the dashboard being a performance management tool, manages to communicate the performance of an entity to other entities at the same level to encourage them and encourage them to achieve similar performance.

#### • Dashboard is a decision-making and forecasting tool:

The dashboard allows its user to project himself forward and thus obtain information in order to establish forecasts. In this regard (LEROY, 2001), stresses that "the dashboard constitutes the pivot of forward-looking

<sup>&</sup>lt;sup>1</sup> J. PEYRAD ET PEYRADE (2001) : Défectionnaire Lexique Finance 2eme Edition Paris Librairie Vuibert, pp.209-212.

<sup>&</sup>lt;sup>2</sup> <u>www.Petite-Entreprise.net</u> fiche pratique Publier le 26 janvier 2020

<sup>&</sup>lt;sup>3</sup> VORTEX CONSEILS. (Ici la performance en pratique : Mouvement Québécoise de la qualité) : Paru dans l'adresse du Site : https://www.qualite.qc.ca/uploads/files/presentation-tableau-de-bord-et-indicateurs- p.7

<sup>&</sup>lt;sup>4</sup> R. AÏM, (2011) : «100 questions pour comprendre et agir : Indicateurs et tableaux de bord de gestion » Ed : AFNOR, Saint-Denis La Plaine, pp. 42-44.

and controlled management<sup>1</sup>". By constantly attracting managers on important points of their management and after analysis of crucial values (flashing), this tool contributes to the implementation of corrective actions of decisions set by the company and to their achievements.

## • Dashboard is a steering and management tool:

The dashboard is an instrument to aid reflection, which makes it possible to obtain a global approach to a system, since it is basically a reduced representation. It is a management tool because it allows you to constantly monitor your action in order to be able to inform the manager and his team. Detect the strengths and weaknesses and interpret the differences (because knowing your problems also means committing to solving them), and organizing: that is to say; seek the best possible combination of technical and human resources. (Opportunities for improvement.).

#### • Dashboard is an animation and motivation tool:

The dashboard develops a collective and organized reflection which makes it possible to animate a team and to install an animation between the different actors of the same unit. It offers managers the possibility of self-monitoring and thus helps them achieve their strategic objectives. "Many executives in organizations have confirmed that the dashboard system has enabled them to better integrate operational improvements into the overall strategy of the organization<sup>2</sup>".

#### • Dashboard is an organizational tool:

With its mirror effect, the dashboard reflects the level of performance or failure of the company. These indicators (flashing) alert the manager to sensitive or doubtful points. To design the tools and support for action that will make it possible to achieve the objectives set by the company. By having at its disposal the best possible combination of technical and human resources.

# • Dashboard is a means of assessment and delegation of power:

The dashboard allows managers at each hierarchical level (units) to assess the results obtained, at the same time, to report to the delegating party on the situation. It is necessary that the publication time of the dashboard is in line with the (responsiveness time) of the process. For the manager and his entire team, being in the same periodicity and work harmonies with each other, allows regular information collection and synchronic updating. In order management to be effective, and able to meet the real needs of the company and make the right decisions. To conclude, we can say that the dashboard has different but complementary purposes. Indeed, dashboards are not only control tools, but also tools for decision support, management and performance measurement.

#### 1.4 Management of the company's performance by dashboards

Nowadays, we cannot talk about performance without talking about management, both at the organizational level (company) and at the operational level (process). Because the management of a system requires constant control of these processes and the support of a system for measuring, monitoring and evaluating the performance achieved. Also, in order to be able to manage these systems, and ensure overall consistency of the decision-making system, managers must have at their disposal a coherent system of objectives at all decision-making levels, which will allow them to achieve the desired overall performance.

#### 1.5 Business management system:

Piloting is defining, declaring, choosing the information we need to obtain a view of the state of the modeled system<sup>3</sup>. For (LORINO, 1998): piloting means defining and implementing methods that make it possible to learn together: to act together effectively; to act together in an increasingly efficient way<sup>4</sup>". The steering system is defined as being "the aggregation of indicators which makes it possible to identify the information necessary for decision-making<sup>5</sup>". The implementation of a management system is apprehended by collective improvement, which in turn translates into an evaluation of performance and a better collective understanding of the objectives and the factors that contribute to it.

#### 1.6 Dashboard and performance management process:

Indeed, the dashboard, the main tool for managing performance, it is important to integrate it into the very process of measurement-management-performance management and not isolate it from this process. This means

<sup>&</sup>lt;sup>1</sup> M. LEROY 2001 « Le tableau de bord au service de l'entreprise » Edition : Organisation, pp.32-34.

<sup>&</sup>lt;sup>2</sup> S. A. LALAMA, (2006) : « Conception et Mise en place des Tableaux de Bord de gestion : cas d'une Société de confection » Mémoire de Master en contrôle de gestion, Maroc, pp.45-47.

<sup>&</sup>lt;sup>3</sup> PEGUIRON. F & O. THIERY, (2005): Modélisation des acteurs et des ressources: application d'un SIS universitaire, conférence « ISKO-France » ,28-29 Avril 2005, p.1.

<sup>&</sup>lt;sup>4</sup> LORINO PH, (1998): Construire les processus de valeur dans le secteur public, 9eme colloque international de la revue PMP, Aix Provence, Mai 1998, pp.4-5.

<sup>&</sup>lt;sup>5</sup> FONTAINE. K & G. A ZAMBEAUX, (2005) : Bilan social et tableau de bord : des outils de pilotage des ressources humaines, Direction de l'emploi, pp.12-14.

that management no longer concerns separate activities but often overlapping and interdependent activities, which has an impact on the construction and management of dashboards<sup>1</sup>.

#### **II- METHODOLOGY:**

- **2.1 Data:** the data obtained from this work come from the survey by questionnaire addressed to managers of SMEs-SMIs.
- **2.2 Selection of the sample:** Our questionnaire contains fifty-two questions. It is written in French (100% of the questionnaires distributed were in French) and was submitted to the managers of the SMEs-SMIs in our sample. Note that the selection of the sample was made beforehand according to the non-probabilistic method and the objective was to reach twenty-one PME PMI.

#### 2.3 Description of variables:

- Variables to be explained: our variable to be explained in this study is the impact of the use of the dashboard on the performance of SMEs-SMIs.
- Explanatory variables: the first family of independent variables of this study is that resulting from the contingency, we retained: the strategy of implementation and use of the dashboard on the performance of SMEs-SMIs.

#### III- Descriptive analysis, results and discussion:

#### A. Analysis of results

We considered it important to highlight the relationship between the use of monitoring and evaluation tools, in this case the dashboard, and the overall performance of SMEs. The results are as follows:

#### 1. Description and characteristics of the dashboard

The purpose of the first part of the questions was to detect the existence or absence of the dashboard within the organization, the case to note its type and the nature of the indicators it contains. Tables 1 to 4 show the frequency of responses in number and percentage. Table 1 indicates that the management control department exists within SMEs-SMIs in 95% of cases.

Valid	Workforce	Percentage	Valid percentage	Cumulative percentage
No	1	4,8	4,8	4,8
Yes	20	95,2	95,2	100,0
Total	21	100,0	100,0	

#### Table 1. Table of Q2 frequencies, (Q2: Is there a management control department in your company?).

Source: survey data

Table 2. Q5 Frequency Table, (Q5: Do you currently work with a Dashboard?).							
Valid	Workforce	Percentage	Valid percentage	Cumulative percentage			
Yes	20	95,2	100,0	100,0			
No	0	0		0			
Missing 9	1	4,8					
Total	21	100,0					

#### Table 2. Q3 Frequency Table, (Q3: Do you currently work with a Dashboard?).

Source: survey data

In 95% of the cases, the managers surveyed work with a dashboard (of which 86% work with several dashboards). This amounts to saying that there is almost unanimity concerning the use of the dashboard in the twenty-one SME-SMIs. It should be noted that we did not obtain a negative answer but we were able to note the existence of a missing value (we designated it by the number 9 in the calculation software because the question is of the binary type with as answer 1 for yes and 0 for no). It should also be noted that when the question contains several answer choices, each choice constitutes a binary sub-question. This is the case for question 7, for example, the 4 answer choices constitute the sub-questions Q7 1 to Q7 4 and the processing is done in the same way as the other binary questions (1 for yes and 0 for no). The same reasoning for question Q 11 and so on. The type of dashboard used from one company to another. Thus, 90% of respondents indicated that their organization has a financial dashboard, only 57% of companies have a BSC (question 6). Managers work with these different types within their departments. We crossed question Q7 1 (in your department, do you work with a strategic dashboard or Balanced Scorecard?) and question Q7\_2 (in your department, do you work with a financial dashboard?) to determine the importance given to each type. In the same way, to question Q7 1, six participants among the eight respondents with yes answered the same to question Q7 2. This means that 75% of BSC users use a financial dashboard in parallel. Our respondents use, on average, thirty-six indicators including financial and non-financial indicators. As shown in Table 3, financial indicators are used with the same importance as non-financial ones. The value 9 indicates a missing value since the participants' answers are

<sup>&</sup>lt;sup>1</sup> BRULEY M, (2011) : Processus de pilotage des PME, Revue Finance, Contrôle Stratégie Volume 4, pp.6-7.

# between 0 and 100.

Table 3. Table of frequencies Q11 3, (Q11 3: Importance (percentage) of financial indicators?)

Valid	Workforce	Percentage	Valid percentage	Cumulative percentage
15	1	4.8	5.9	5.9
20	1	4.8	5.9	5.9
30	2	9.5	11.8	23.5
33	1	4.8	5.9	29.4
40	3	14.3	17.6	47.1
50	2	9.5	11.8	58.8
60	1	4.8	5.9	64.7
70	1	4.8	5.9	70.6
75	1	4.8	5.9	76.5
80	1	4.8	5.9	82.4
85	1	4.8	5.9	88.2
100	2	9.5	11.8	100.0
Total	17	81.0	100.0	
Missing-9	4	19.0		
Total	21	100.0		

Source: survey data

Thus we found that there are seven managers who use more than 50% of the financial indicators and eight managers who use less than 50% of the financial indicators. As a result, the importance given to one or other of the categories of indicators is more or less equal. We also tested this probability of equal variation by a one-sample nonparametric test. This kind of statistical test is used when the condition of normality of the population is not verified. Which applies to our case, because the sample is not large enough to contain all the skewness of the distribution? First, we created a variable called Q11\_5 which is the difference between Q11\_3 (Percentage importance of financial indicators) and Q11\_4 (Percentage importance of non-financial indicators). If the difference is zero, this indicates that the same percentage (degree of importance) has been assigned to both categories of indicators.

Our null and alternative hypotheses are as follows

 $H0 = Q11 \ 3 - Q11 \ 4 = 0$ 

H1: Q11\_3 - Q11\_4 #0

#### **Table.4 Summary of hypothesis testing**

Null Hypothesis	Test	Sig.	Decision
The distribution of Q11_3 -Q11_4 is normal with a mean of 2.250 and a standard deviation of 49.65.		0,0725	Retain the null hypothesis.

Source: survey data

Asymptotic significances are displayed, the significance level is 0.05. At a risk of 5% the P value or the significance of the test is greater than the chosen risk (the p value is not significant, but the result of the test is significant: 7% > 5%, do not reject HO). We do not reject the null hypothesis. The difference is not different from 0.

In view of the test results, it turns out that managers who use financial and non-financial indicators (regardless of the type of dashboard used) give the same importance to both types of indicators, which seems consistent with our reflections on their complimentarily.

#### 2. Design and implementation

In relation to the design and implementation we focus on the experience of managers who have a relationship with the process of implementation and activation of the dashboard. At this level, 52% of companies have used external expertise. In addition, these same respondents affirm that the identification of needs is an essential step in the successful implementation of the dashboard.

#### 3. Users involvement

To understand users' engagement, we have crafted a question pool consisting of binary questions that were almost all answered. Ninety-five percent of the participants were involved and informed of the implementation project as shown in the cross table below (the missing value concerns question 28).

Valid	Workforce	Percentage	Valid percentage	Cumulative percentage
Yes	20	95,2	95,2	100,0
No	1	4,8	4,8	4,8
Total	21	100,0	100,0	

Table 5. Table of frequencies Q23, (Q23: Were you informed of the Dashboard implementation project?)

Source: survey data

#### Table 6. Table of Q28 frequencies, (Q28 Do you feel involved in this project?).

				1 3	/
Valid		Workforce	Percentage	Valid Percentage	Cumulative Percentage
Yes		20	95,2	100,0	100,0
Missing	9	1	4,8		
Total		21	100,0		
Source: su	rvev da	ita			

# Table 7. Cross-tabulation summarizing the processing of observations (Q23\*Q28).

		Obs	ervat	tions		
	Val	lid	Mis	sing	Total	Total
	Ν	Percent	N	Percentage	Ν	Percentage
Were YOU informed of the Dashboard implementation project? Do you feel involved in this project?	20	95,2 %	1	4,8 %	21	100 %

Source: survey data

We found that 71% of respondents received training on the project. In addition, 85% of managers participated in the development of indicators, of which 81% contributed to the definition of useful objectives for the implementation of the dashboard. These figures tell us about the level of involvement and training of the respondents, which is considerable. From the implementation to the design of the indicators, a large number of managers took part in the project. Here are, respectively, the tables relating to these results (Table 10 to 12). **Table 8. Table of frequencies, (Q24: Have you received training on the subject?)** 

		• • • •	8	• /
Valide	Effectifs	Pourcentage	Pourcentage valide	Pourcentage Cumulé
Oui	15	71,4	71,4	100,0
Non	6	28,6	28,6	28,6
Total	21	100,0	100,0	

Source: survey data

# Table 9. Q29 Frequency Table. (Q29: Did you participate in the development of indicators?)

Valid		Workforce	Percentage	Valid Percentage	Cumulative Percentage
Yes		18	85,7	90,0	100,0
No		2	9,5	10,0	10,0
Total		20	95,2	100,0	
Missing	9	1	4,8		
Total		21	100,0		

Source: survey data

Valid	Workforce	Percentage	Valid Percentage	Cumulative Percentage
Yes	17	81,0	85,0	100,0
No	3	14,3	15,0	15,0
Total	20	95,2	100,0	
Missing 9	1	4,8		
Total	21	100,0		

#### Table 10. Table of Q26 frequencies, (Q26: Did you participate in defining these objectives?).

Source: survey data

#### 4. Using the Dashboard:

In this part, we evaluated the interaction of management controllers with respect to the use of the dashboard. Among the 95% users of the tool, 43% confirmed that they feel difficulties related to its use.

Moreover, only 24% of managers feel that they are under control after the introduction of the dashboard.

As a result, the respondents evolved the usefulness of the dashboard differently. Thus, they judged that this system serves to:

- ✓ Follow up on the action (in 85% of cases),
- ✓ Establish an assessment (in 62% of cases);
- ✓ Make a diagnosis (in 33% of cases);
- ✓ Perform a results check (in 72% of cases);
- ✓ Promote exchange between hierarchical levels (in 67% of cases)}
- ✓ Improve a performance measurement system (in 90% of cases);
- ✓ Reduce costs (in 48% of cases);
- ✓ Other: Steering, rationalization of costs, diversion at the appropriate time, development of dialogue as a means of decision-making assistance, clarification of vision and clarity of the objectives to be achieved (in 29% of cases).

The most important utility seems to be the improvement of the performance measurement system. They also indicated that performance management is a major reason for using the dashboard.

#### 5. Impact of using the dashboard on performance

Measuring the impact of the use of the dashboard on performance was our last question, aimed at directly verifying our main research hypothesis. Almost all managers (95%) noticed a change after the introduction of the dashboard (in terms of performance, effectiveness and efficiency). As shown in Table 13. Ninety percent of them indicate that this change has direct positive effects on business results and internal processes (improved internal process performance).

Valid	Workforce	Percentage	Valid Percentage	Cumulative Percentage
Yes	19	90,5	95,0	100,0
No	1	4,8	5,0	5,0
Total	20	95,2	100,0	
Missing 9	1	4,8		
Total	21	100,0		
Source: curves	data			

# Table 11. Table of frequencies Q38, (Q38: Does this change have direct positive effects on the results of the organization?).

Source: survey data

It appears that the use of the dashboard generates positive repercussions on the results. These impacts are financial and non-financial in nature. According to respondents, the elements of results that seem to have been influenced are:

- ✓ The turnover: the number of account openings in a bank, the number of files processed, the minute price, the improvement in yields, the increase in turnover;
- ✓ Quality: change in the process of closing an account in a bank, acceleration of deadlines, quality of service, rationalization of costs, availability of information, improvement of the final product, improvement of services rendered, the best organization;
- ✓ Performance: the achievement of set objectives or the achievement, the development of resources, the development of commitments, visibility on daily performance and financial results, the creation of value, transparency, clear vision, increase in the precision and control of management, enlightened steering, optimization of decision-making, efficiency and taking of corrective actions, performance measurement,

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guarantee of coordination of all entities short term and performance evaluation.

The use of dashboards also seems to have had an impact on the processes, which was translated by:

- ✓ Better visibility of the activity (cost of operations);
- Process management which is done by measuring key performance indicators; process improvement teams meet at the same frequency to identify malfunctions and propose solutions to them;
- ✓ A change in process management (detect non-payers, fictitious debit, long delay, improvement of processes such as inventory management and the budget process);
- ✓ Involvement of actors (each must contribute according to his function and profession);
- ✓ Simplification of the relationship between decision-making levels (facilitating and simplifying the relationship between the strategic and operational level);
- ✓ Improved management of the entities concerned (fluidity and relevance of information);

 $\checkmark$  Finally, the provision of a monitoring and surveillance tool in terms of overall management of the company. We also found that 82% of dashboard users discuss the performance achieved with their superiors, and share the same vision of this performance together. Tables 14 gives an overview of the results.

Table 12. Table of frequencies Q41, (Q41: Do you, as a user of the Dashboard, discuss the performance achieved with your superiors?).

Valid	Workforce	Percentage	Valid Percentage	Cumulative Percentage
Yes	18	85,7	85,7	100,0
No	3	14,3	14,3	14,3
Total	21	100,0	100,0	

Source: survey data

#### Table 13. Table of Q42 frequencies, (Q42: If yes, do you have the same vision of performance as them?).

Valid	Workforce	Percentage	Valid Percentage	Cumulative Percentage
Yes	15	71,4	78,9	100,0
No	4	19,0	21,1	21,1
Total	19	90,5	100,0	
Missing 9	2	9,5		
Total	21	100,0		

Source: survey data

#### Table 14. Cross-tabulation summarizing the processing of observations (Q41\*Q42).

			If so, do you have the same vision of performance as them?		Total
		-	No	Yes	
	No	Workforce	1	1	2
Do you, as a user of the dashboard, discuss the		% understood when you discuss, as a user of the Dashboard, with your superiors the performance achieved?	50,0 %	50,0 %	100,0 %
performance achieved with	Yes	Workforce	3	14	17
your superiors?		% understood when you discuss, as a user of the Dashboard with your superiors, the performance achieved?	17,6 %	82,4 %	100,0%
		Workforcfe	4	15	19
Total		% understood when chatting, as a Dashboard user. With your performance superiors achieved?	21,1 %	78,9 %	100,0 %

Source: survey data

The dashboard is considered by all respondents as a management tool (100%). The results obtained for question Q46: Do you consider the implementation of the Dashboard a success? (100%) or as a failure? (0%) tend

to confirm that the management accountants in our sample unanimously consider the implementation of the dashboard to be a success.

#### **B.** Discussion of results

The results obtained show that the respondents have a positive perception of the impact of the use of the dashboard on the performance of SMEs-SMIs. This perception of the dashboard manifests itself in the fact that the respondents consider it as an accessible and transversal management tool which makes all hierarchical levels adhere to the strategic objectives. We aimed at their level of satisfaction with the process of setting up and using the dashboard, by questioning their experiences of setting up and activating this tool. This instrument, although it is part of the monitoring and evaluation tools, is considered to be one of the most important tools for managing and improving performance (LORINOT; CHOFFEL and MEYSSONNIER, 2005). In the literature, its close link with performance (measurement, evaluation, management, etc.) is a source of questioning, which prompted us to explore this relationship in order to find out in what way the dashboard can impact the overall performance of SME-SMI.

Indeed, performance management considerations, for years have characterized the roles assigned to management tools such as the BSC or strategic dashboards, this performance management role can be sought in large companies as well as in SMEs. -PMI. Moreover, the pioneers in the field (NORTON and KAPLAN, 1992-2004) affirmed by indicating that their dashboard model (the Balanced Scorecard) can be applied and respond perfectly to the needs of small businesses (NORTON and KAPLAN . 2001).

SIMONS (1990) considers that the dissemination of strategic objectives promotes learning, as well as the discussion and the systematic development of action plans to implement these objectives. The author stated that the interactivity of control systems creates learning. So the dashboard as a control and monitoring and evaluation tool can play this role, the user of the dashboard is imbued with a culture of performance which results in the production and interpretation of relevant indicators.

We also noted that the two categories of indicators (financial and non-financial) are present in SMEs and SMIs and that they have almost the same degree of importance according to the managers. We determined with an almost absolute majority (95%) that all managers interviewed work with a dashboard. In addition, the 21 respondents from the various SMEs-SMIs indicated that they use either a single (14%) or several (86%) dashboards. We also asked respondents to tell us what type of dashboard they use. Thirty-eight percent work with a strategic dashboard or BSC (81%) work in conjunction with a financial dashboard and operational dashboard and (19%) work with another tool that replaces the dashboard or takes another denomination or name (activity, materials, cash, report, consolidated). We notice that the respondents tend to use the financial dashboard, which coincides with our reflections on the fact that SMEs-SMIs are subject to the constraint of profitability. The nature of the indicators contained in the dashboard also supports this hypothesis. There is consensus on the importance of using financial and non-financial indicators included in a financial dashboard or other dashboards.

Eighty-one percent of respondents use financial indicators as part of a financial dashboard. On the other hand, non-financial indicators are also used frequently (85% of managers use them). Ninety-two percent of respondents jobs in a financial scorecard. This is due to the fact that managers work with several types of dashboard (in 85% of cases).

These results seem to indicate that the management needs of SMEs-SMIs encourage managers to use several types of dashboards in order to execute the strategy at all levels. In some cases (depending on the internal organization of the company), they have to manage activities separately, hence the use of several categories of dashboard (88% of users of the operational dashboard work simultaneously with a financial dashboard). We also notice that the BSC type is not very popular (57% of the companies surveyed have it), the use by our respondents is even lower (38%). This observation does not seem to affect the type of indicators used since we obtained a high score for both categories (financial 100%, non-financial 85, especially since within the two categories we have monitoring indicators (81%), result indicators (86%) and performance indicators (95%). We observe that management controllers are required to report on the monitoring of activities and results. We can advance, with caution, that 'Like large companies, SMEs and SMIs are looking for performance. As a result, the managers of these companies are concerned with achieving the best possible results. Moreover, the objectives behind the implementation of the dashboard are consistent with these findings. The monitoring of results to trigger alerts remains a major reason.

The relevance of the information for decision-making purposes, the management of activities and the search for performance are the main objectives linked to the implementation of the dashboard. Motivation represents an objective to be achieved and a condition for the successful implementation of the dashboard. This justifies that before this change, the departments organize information and training sessions for the staff concerned (95% of respondents were informed of the project). We can notice a positive correlation between the rate of staff information and the rate of their involvement (95% of respondents who were informed of the project are involved). Therefore, the information increases the motivation and increases the chances of success of the project.

We note that the experience lived by our respondents is considered a success, the use of the dashboard has shaped the face of performance sought by managers. The perceived change was palpable in performance, effectiveness and efficiency. According to their perception, this change has positive effects on the financial results of these SMEs and SMIs as well as on their internal processes. Managers responded that the performance of internal processes has improved. The perceived effect of these improvements is based on the qualitative assessments of respondents who were not able to argue with numbers. The performance achieved or achieved following the use of the dashboard is the subject of discussions between the managers and their hierarchical superiors.

In most cases, the latter two have the same vision of performance. It should be mentioned that the scorecard is considered a tool for managing and improving performance. A small proportion considers it as a control and monitoring/evaluation tool. By way of conclusion, all our results tend to confirm the perceived positive impact of using the dashboard on organizational or overall performance. Consequently, all the results tend to affirm the perceived positive impact of the use of the dashboard on the overall performance of an SME-SMI, so our main research hypothesis seems to be confirmed.

## **IV-** Conclusion :

Our results indicate that the use of the dashboard seems to have positive effects on the performance perceived by the respondents. This steering and monitoring/evaluation tool plays an important role in achieving the expected objectives. Our results should be of interest to SME-SMI managers concerned with improving the management of their entities. They would allow them to better use the dashboard to achieve the desired performance.

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