How management innovation allows a real-time performance management system

ST-AIMS 10 : L'innovation managériale

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Abstract :

This paper identifies the main problems and challenges of organizational performance management systems. After analyzing these shortcomings and the complexity of the performance appraisal process, the study provides a detailed presentation of a successful performance management system thanks to a management innovation developed and implemented by Schneider Electric. This management innovation effectively succeeds to introduce a performance management systems which eliminates the problems related with low employee empowerment and motivation, providing a clear definition and measurement of performance, and an organic inter-relation between various organizational functions and hierarchical levels.

Keywords: Performance Management System, Management Innovation, Manufacturing sector,

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INTRODUCTION

The increased competitive pressures that are manifest in many markets have forced companies to reconsider their performance management process, in order to achieve additional gains in productivity, quality and market responsiveness (Buchner, 2007). Unfortunately, most of the existing performance management systems have several important shortcomings (Bourne, Neely and Platts, 2003; Buchner, 2007; Coens and Jenkins, 2000; Gliddon, 2004): (1) lack or delay of feedback, which is often only a review of the performer activity during the last period (usually one year), without a deep analysis of the processes and operations performed by the person, and, consequently, with superficial suggestions regarding specific points of improvement; (2) lack of performer empowerment, as often performance management systems are top-down initiatives that take little in consideration the specific profile, characteristics and knowledge of the performer – which is often considered as a 'standard operator'; (3) lack of a direct correspondence between various performance indicators and measures at various organizational levels; although the performance can be measured a various organizational levels, the lower levels being embedded into the higher, strategic levels of the organization, most performance management systems do not provide a clear and smooth connection between various levels of measurement and improvement, resulting in systemic unbalances even when performance improvement is achieved.

These criticisms are validated by professional surveys (Markus, 2004): a survey conducted in New Zealand indicates that 30% of managers did not have any performance appraisal in the last year, a percentage that is almost double in smaller organizations. Many organizations introduced only recently individual tools of performance appraisal and management, and some of them go through repeated reinventions or restructuring of performance management systems.

In this rather gloomy situation regarding performance evaluation and management, hope comes not only from academics or consultants – who can provide abstract models or lists of steps that should be followed and implemented to achieve effective performance management systems, but also from practitioners, as some organizations have already implemented and refined the functioning of highly efficient performance management systems. We take advantage of one of these instances, by presenting in this paper the case of a effective performance management system introduced by a management innovation developed, implemented and continuously improved by Schneider Electric – a privately-owned French company.

The paper is structured as follows. The introduction presents the topic of performance management systems, highlighting its theoretical and practical importance for modern organizations. Section one presents a literature review of the main criticisms related with the existing performance management systems and the management innovation concept and its link with performance management systems. Section two outlines the research methodology applied to collect and analyze primary and secondary data, providing also a clear justification for the use of a case study approach. Section three presents results obtained on the effective real-time performance management system developed by Schneider Electric thank to the implementation of a management innovation. Section four presents discussion. The section 6 exposes main limitations. The paper is concluded with a summary of the main findings and propositions for future research.

1. LITERATURE REVIEW

1.1. PERFORMANCE MANAGEMENT SYSTEMS

Boswell and Boudreau (2000) identify two specific objectives of performance management systems: evaluative – appraising the specific performance level of each employee; and developmental – providing indications regarding the development potential of every person, in time. On the other hand, Armstrong and Baron (2004) suggests the inevitable existence of a tension between the interests of the employee, and those of the organization – and the performance management systems attempts, often unsuccessfully, to conciliate these two visions.

Unfortunately, both academic researchers and professional consultants outline the failure of personal appraisal systems (Cunneen, 2006; Gratton and Ghoshal, 2002; Markus, 2004), which have become in many organizations rigid rituals, realized for the sake of the regulation, but providing no clear information regarding the potential or the possibilities for future improvement. Overall, we can identify the existence of two distinct systems of performance appraisal – one which is focusing on past events, and a second one which attempts to unveil the future potential of employees. Probably the best approach is a combination of these two perspectives, facilitated by an honest conversation between the supervisor and the employee (Gratton and Ghoshal, 2002), which can integrate both the past and the future into a dynamic, learning perspective, and link it with organizational goals and values (Spangenburg and Theron, 2001).

Armstrong and Baron (2005) consider the shift realized in terminology from performance appraisal to performance management, which they consider a completely different vision and approach to the performance evaluation process. In modern organizations, this process is redefined as a holistic, total approach which engages all the stakeholders of the organization, in a continuous process of improving everyone, and therefore, the overall performance of the whole organization.

In terms of implementation and deployment, performance management systems need to be clearly understood and controlled by line and team managers (Armstrong and Baron, 2004; Rees and Porter, 2003a and b) and fully supported by the senior management (Wolff, 2005). On the other hand, “a trap that organizations can fall into is not recognizing that the implementation of performance management system is a change process. Too often, organizations just look over the fence to what others are doing and do the same” (Colville and Millner, 2011, p.35).

The implementation of a flexible, inclusive performance management system is a challenge for any modern organization. Markus (2004) suggests a twelve steps framework for successfully implementing such a system:
(1) Check that strategy and values are clear.

(2) Outline organizational objectives.

(3) Update job descriptions.

(4) Ensure everyone has a current job description.

(5) Performance planning.

(6) Plan for feedback.

(7) Have a clear methodology to deal with poor performance.

(8) Plan to align the consequences.

(9) Realize personal evaluations.

(10) Define the characteristics of the evaluation process.

(11) Implementation.

(12) Ensuring the integrity and the functionality of the performance management process.

A possible criticism of this, and other similar models, is the excessive concern with the personal evaluation of employees, which, in some respect, puts the personnel into a passive role, as the performance evaluation is done to them.

Ultimately, the performance management systems aim to overcome three important shortcomings.(Bourne, Neely and Platts, 2003; Buchner, 2007; Coens and Jenkins, 2000; Gliddon, 2004) namely, (1) the lack or delay of feedback, such as reviewing the performance during the last period (usually one year), (2) the lack of performer empowerment, since the performance management systems are often top-down initiatives that take little consideration of the performer's (often considered as a 'standard operator') profile, characteristics and skills; and (3) the lack of a direct correspondence between the various performance indicators and measures used at various organizational levels.

1.2. THE CONCEPT OF MANAGEMENT INNOVATION

The concept of management innovation has been labelling by Birkinshaw, Hamel and Mol in 2008 as: "*The invention and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further organizational goals.*" (Birkinshaw et al., 2008, p.825). One year later, Mol and Birkinshaw focused on the performance dimension of this concept defining management innovation as: "*The introduction of management practices and intended to enhance firm performance*" (Mol and Birkinshaw, 2009, p. 1269).

These authors draw also on the ideas of Hamel who claims that this type of innovation lead to

major breakthroughs for the firm's performance. Likewise, Damanpour and Aravind (2012) underline the direct relationship between management innovation and performance: "*Managerial innovations are new organizational structures, administrative systems, management practices, processes, and techniques that could create value for the organization*" (Damanpour et Aravind, 2012, p. 424).

1.3. MANAGEMENT INNOVATION AND PERFORMANCE MANAGEMENT SYSTEMS

The introduction of new management practices in an organization often generates resistances at different hierarchical levels (Damanpour and Schneider 2006, Dubouloz, 2014). Usually, the management is developing a communication legitimizing the implementation of innovative management practices by looking for the improvement of the overall performance (West and Anderson, 1996; Heyden et al., 2015). This goal pushes them to implement an effective performance management system in order to legitimize their communication (Giuliani and Robert, 2016). Indeed, it is a major issue for management to obtain adhesion of all employees. To our knowledge, previous academic works related to management innovation do not refer to the role of management innovation on the establishment of effective performance management systems.

1.4. RESEARCH QUESTION

The literature about performance management systems identifies 3 major shortcomings: lack or delay of feedback; lack of empowerment performer; lack of a direct correspondence between various performance indicators and measures at various organizational levels, without identifying adapted solutions. Moreover, the literature about management innovation implementation underlines the importance of a performance management system in order to increase the acceptation of this management innovation.

Therefore, we may ask: how is the introduction of news management practices associated with an effective performance management system?

2. METHODOLOGY

2.1. GROUNDED THEORY METHOD

Considering the problems highlighted in the literature regarding performance management, we

attempt to present a real-life example of an organizational system that proposes and implements effective solutions for these shortcomings. To achieve this we adopt a grounded theory approach, based on a combination of theoretical information obtained through a comprehensive literature review, and practical observation of a real-life performance management system. This choice is justified by the complexity of the research problem and of its application context, but also by the lack of a complete theory regarding the development/implementation of a management performance system, although we recognize and use a kernel of existing theories and models. Grounded theory is useful in analyzing the contextual, evolving and dynamic nature of the system implementation by focusing on human agency – the actions taken by various level managers to coordinate the implementation a management innovation (named Short Interval Management, SIM), and then the smooth functioning of a performance management system.

The paper addresses the identified issues by presenting and explaining the functioning of a real-time performance management system developed and implemented by Schneider Electric, which solves these three main problems presented above. To reproduce the complexity of the real system in a written case study, we use triangulation (Miles and Huberman, 1983), combining both secondary and primary information collected from various sources, located at different organizational levels, in order to provide a complete picture of the implementation stages - the advantages and the associated challenges of this performance management system. This complex combination of data guarantees a multidimensional view, based on a wide range of research materials: “various sources are highly complementary, and a good case study requires the use of a large number of possible sources" (Yin, 2009, p. 101).

2.2. THE COMPANY

Schneider Electric SE is a French multinational corporation founded in 1836 and incorporated in 1981. The company is specialized in electricity distribution, automation management and installation components for energy management. It is headquartered in Rueil-Malmaison, France, and has a global presence, having operations in more than 100 countries.

2.2.1. The context

At the beginning of the new millennium, as presented in the internal corporate document New

2004, Schneider Electric decided to pursue an aggressive strategy of internationalization, diversifying its production in new units, implemented mostly in developing countries with low labor costs – Central and Eastern Europe, but also in Africa, South America and Asia. This international development was realized through a series of acquisitions – of approximately twenty new companies every year (e.g. Lexel, Digital, TAC, Clipsal, Andover Controls, ESMI, Crouzet) which increased rapidly and significantly its brand and product portfolio, and permitted to the company to enter new market segments (e.g. movement control, security, energy saving, etc.). On the other hand, starting from 2009, the company mitigated the risk of brand and identity dilution, by launching the program One, based on a strong vertical integration of all brands, products and activity under the corporate umbrella brand of Schneider Electric. Today, the group Schneider Electric includes and controls more than 100 different brands.

The idea of introducing a management innovation was determined by all these dramatic changes in the structure, strategy and functioning of the company. The development of new production units in developing countries with low labor costs has created a threat for the survival of the traditional production units located in developed countries, and especially in France. In fact, the initiative of implementing new management practices was taken by a group of business unit or department managers that were suddenly confronted with significant differences in labor productivity between the new production units, and their own production units, and which, on the long term, were in danger of closing their activity. The top management accepted the challenge and decided to support this initiative, by providing the necessary human, financial and organizational resources for the development, implementation, and refinement of the management innovation: "*Our level of labor productivity was between 1 and 3% before the implementation of the new management system. Since our labor costs were significantly higher than those from developing countries, the only solution was to achieve productivity gains of 7% or even more*" (Interview 5).

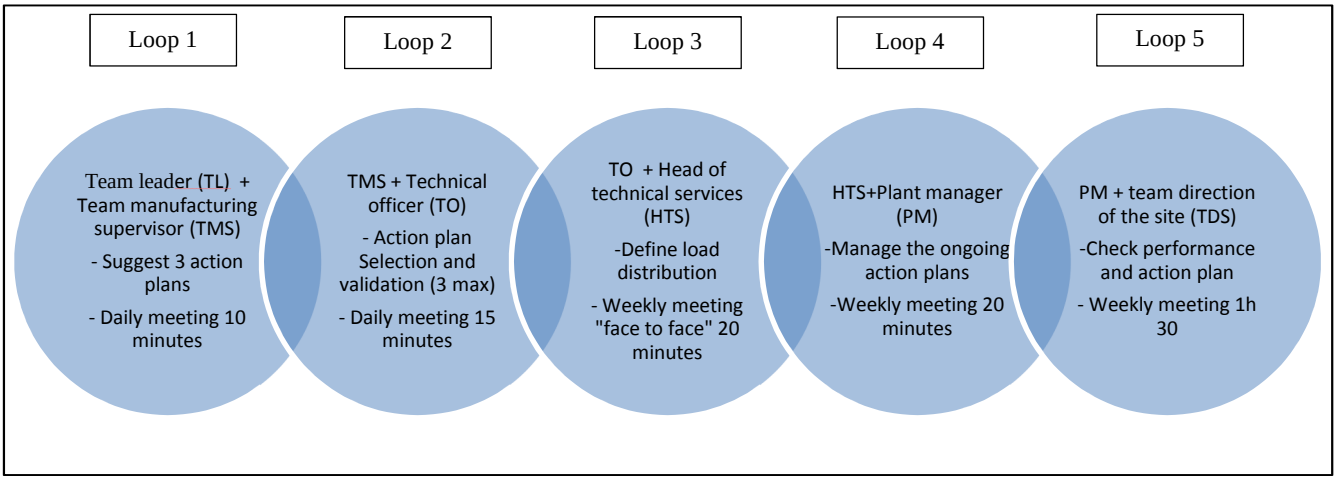
2.2.2. Description of the management innovation (Short management Interval)

Short Interval Management (SIM) is essentially an innovative system of management that is based on recurrent sequences of animation ("SIM loops"). These sequences involve different hierarchical levels in order to measure performance and produce corrective action plans. The goal of these action plans is improvement of the overall performance.

The SIM method starts with loop one and finishes with loop five (cf. figure 5). All identified dysfunctions in loop one must be solved throughout the entire process. At all levels, each manager must look for a solution to the identified problem. If no solution is identified, the dysfunction is elevated to a higher hierarchical level of management. Top and middle management are inextricably linked to the operators who have identified all of the problems that emerge in the organization. SIM allows the solution to all obstacles that emerge.

We represent the core model of the SIM management innovation in figure 5:

Figure 1. Description of SIM



Therefore, we can consider the SIM management method to be an original management innovation. The specificities of SIM are obvious; its main feature lies in the fact that the different loops that create it are closely overlapped which has the effect of linking all hierarchical levels and all stakeholders of the company.

2.2.3. Data collection

Data was collected in three stages. First, in the exploratory stage, we collected secondary information regarding the characteristics, implementation process, and functioning of the SIM performance management system. This data offered us the possibility to develop a general, but rather superficial vision of the SIM system, and provided a basis for developing the tools and methods of primary data collection. In the second stage, we contacted a series of employees and managers of Schneider Electric, and we conducted 30 semi-structured interviews in five different business units at multiple hierarchical levels (see Table 1), obtaining rich verbatim comments from a large range of managers and employees – from seniors to team leaders. Each

interview lasted between one and six hours. The interviews were realized *in situ*, during the 2010-2013 period. Several key respondents were interviewed several times, to refine the understanding of the investigated phenomenon.

Finally, in the third stage, we engaged in participant observation, following *in situ* all the activities realized for implementing the SIM performance management system.

Table 1. Number and functions of respondents

	Number of respondents	**Function of respondent**	**Function of respondent**	**Function of respondent**	**Function of respondent**
Top executive	4	Vice president quality and industrial performance	Corporate chief responsible for industrial performance in charge of SIM deployment in the group	Director for manufacturing, France	Human resources department manager
Business Unit "A"	4	Plant manager supervisor: Low voltage manufacturing supervisor	Team direction (TD): Technical productivity supervisor	Team direction (TD): Supply chain excellence and industrial performance supervisor	Team direction (TD): Business unit human resources supervisor
Business Unit "B"	4	Plant manager (PM): Regional director of industrial automation	Business coordination manager	Business manager	Senior account manager for industrial automation
Business Unit "C"	4	Plant manager (PM)	Team manufacturing supervisor (TMS)	Industrial performance manager	SIM implementation supervisor
Business Unit "D"	4	Industrial performance manager	Team direction (TD): Business unit human	Team leader (TL)	Team leader (TL)

			resources supervisor		
Business Unit "E"	10	Plant manager (PM)	Business unit Human resources supervisor	Team manufacturing supervisor (TMS)	Industrial performance manager
		Technical productivity supervisor	Supply chain supervisor	Head of technical services (HTS)	Technical officer (TO)
		Team manufacturing supervisor (TMS)	Team direction (TD): Head of production services		

2.2.4. Data treatment

To describe, analyze and understand the mechanisms and the outcome of implementing the SIM management innovation, the content of various discourses was divided into units of meaning (Allard-Poesi, 2003) - parts, units or groups of sentences related to the same theme, classified into several categories. Their size was defined using two criteria (Lincoln & Guba, 1985): the selected unit of analysis (1) must contribute to answer research questions, and (2) must be interpretable without additional information. The link between the retained units and categories was realized through a relation of inclusion (unit X is a type of Y. category), which does not involve any interpretation for open (Strauss and Corbin, 1998) or descriptive coding (Miles and Huberman, 2003).

To frame and organize the collected data in relation to the formulated research objective, we applied a two stage procedure, including (1) open and (2) axial coding. Applying the grounded theory framework, in the first phase we identified the main social worlds (i.e., universes of discourse), using four qualifying elements (Strauss, 1978): individual profile, working place, organizational responsibility, and contribution to the implementation and functioning of the SIM management innovation. During the open coding phase, we used these social worlds as semantic anchors for identifying and categorizing the operations and outcomes related with the implementation of the SIM management innovation, and their specific manifestation.

During axial coding, we considered various activities, challenges and outcomes both chronologically and functionally, which were organized in relation to the proposed analytical framework: implementation, correction, improvement, and daily functioning. The cross- tabulation between individual, situational and institutional factors, on the one hand, and specific challenges and outcomes of the SIM implementation and application represent an interpretative matrix developed through the careful analysis of the collected interviews. The next section presents the case study resulted from this matrix. *Measuring productivity*

3. FINDINGS

An essential element for the successful functioning of performance management systems is the clear and transparent definition of the performance indicators applied in the company (Markus, 2004). At Schneider Electric the evaluation of the labor productivity is based on a categorization of the labor time in 'green time' – a positive, useful time which creates the value of the product, and 'red time' - the negative, wasteful time, which does not create value, but augments production costs, and therefore the final price paid by the client. In the production flow "*everything which advances in a proper rhythm is green, while red corresponds to delays or blockages*" (Interview 5)

The principles applied to differentiate amongst various time categories are the following:

- any product realized by the company is composed of two different parts in relation to the production time – the 'green' and the 'red' time;
- the 'green' time corresponds to what the client wants to buy, and includes the following cost elements: raw materials, the consumed energy and the depreciation of machinery, the necessary packaging, as well as all the operations that augment the perceived and the real value of the product, including the compulsory quality controls. The 'green' time – or the useful time - represents the reference for the entire performance management system. For each realized product there is a specific 'green' time, which will represent the base against which all the productivity gains are measured, as "*the Short Interval Management system allows the immediate identification of any 'red' time*" (Interview 2);
- the 'red' time represents the additional costs paid by the client, which do not reflect

> any increase of value of the product, including the following elements: loss of raw materials and packaging, excess inventory of raw materials or final products, delays and/or blockages in the normal production flow, lack of necessary supplies, additional production time, maintenance problems or repairs, etc. The establishment of the 'green' and 'red' parts of the production time and process represented the core of the new performance management systems, and defined as a cultural change at corporate level: "*in our culture, we start with defining and identifying the red and the green*" (Interview 7).

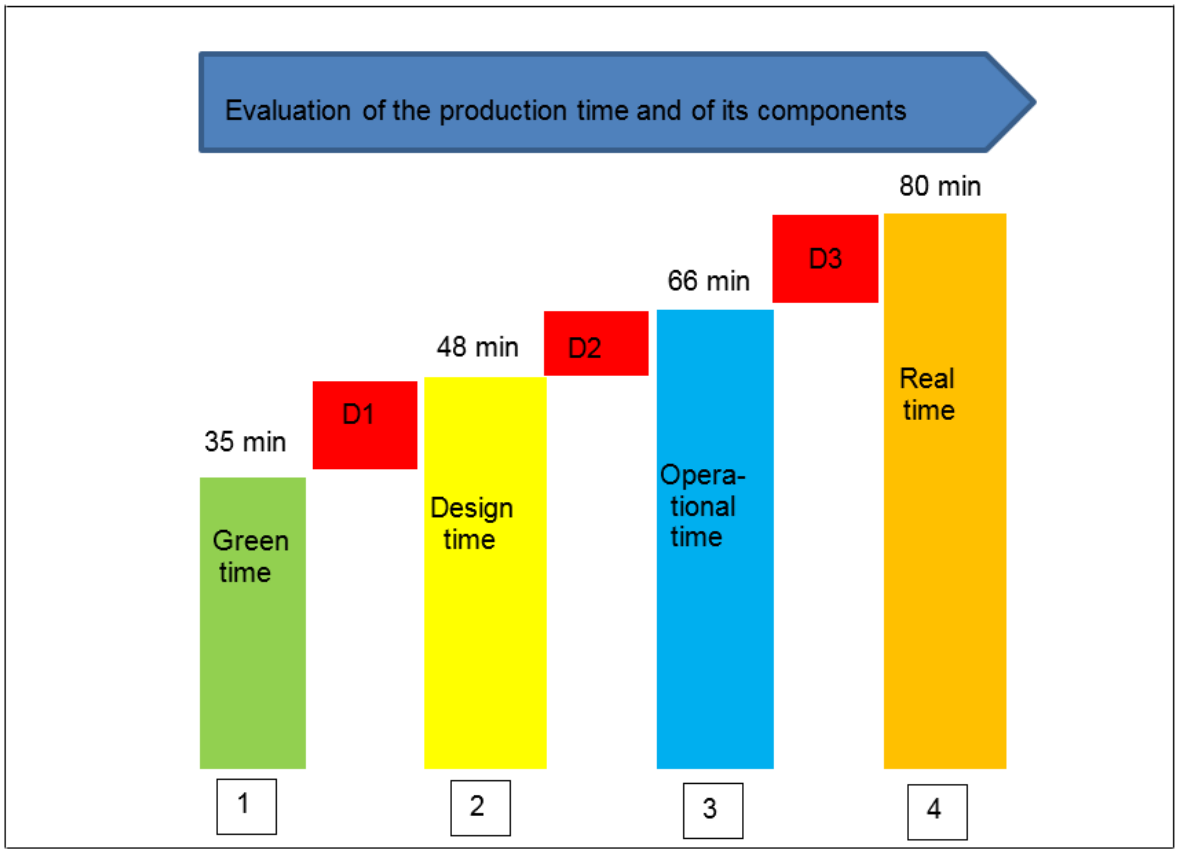
After performing this separation of these two main time categories, the line and team managers define in more detail the main component of the 'red' time, in order to target each component with process improvements. The identification of the 'red' time starts always with the clear definition of the 'green' time required for realizing a specific product, and with a calculation of 'the design time' – the production time which integrates the inevitable losses related with the design and structure of the existing production lines. This time includes therefore all the additional operations which are not useful in absolute terms, but are inevitable in the present state of the production unit design and structure (D1). The elimination of these operations is potentially possible, but requires a large costs and time which prevents the firm to engage in a major production line re-structuring. In addition, because of specific space or flow restrictions, the design of an ideal production flow which eliminates all the unnecessary operations may be, in reality, impossible. Thus, the 'design time' is always larger than 'the green time': "*our methods give to the production a reference time which already incorporates the inevitable losses, in relation to the ideal value that should be paid by the client on the basis of the green time*" (Interview 11).

A third time category is then defined and acknowledged: the 'operational time' (see Figure 1), which is composed of the design time plus a certain number of production operations that are considered inevitable, but which degrade further the level of performance, such as: the batch change, the set up and control of machines, production incidents, defects, lack of sufficient supplies, maintenance and repairs, etc. (D2). In comparison to the 'design time' which takes into account the productivity loss determined by the design and structure of the production line(s) (D2), the operational time takes into account also the delay and loss

determined by the momentary capacity of the machines employed in the production line.

Finally, a fourth category of production time is the 'real manufacturing time', which includes, in addition to the 'operational time', the delays and losses related with the usage of the production line (D3) (see Figure 1). These elements of cost are the ones that will be carefully identified and monitored by the team manufacturing supervisors (TMS) and technical productivity supervisors (TPS), as "*they represent the real possibilities to improving productivity, by applying the appropriate correcting measures*" (Interview 11).

Figure 2. The various elements that permit the evaluation of the real production time, and of its components.



The various categories of production time are important, as they progressively integrate both the positive and the negative side of the labor productivity, but also by taking into account the reality in terms of inevitable delays. Once the various categories of delays are identified (D1, D2 and D3, as represented in Figure 2), it is then important to identify proper actions and

initiatives to reduce or even eliminate, when possible, these delays.

In terms of operational performance management systems, the reduction of time D1 is the mission of the production department and logistics, which has to find the most productive design possible in relation with the location and structure of the production line. Time D2 represents the action area of support services – for example the maintenance and repair of the technical elements of the production flow, which can reduce the delays related with dysfunctional machines or installations. Finally, time D3 is the main target of the SIM management innovation, is also extended to the time D2, as the support services are also included into this particular performance system.

The clear categorization of various delays (D1, D2, D3) and the precise localization of these losses, permits the organization to identify potential corrections and evaluate the productivity gains that represent the effect of the SIM actions: "*The final indicator of productivity, and thus of the performance, is the gap between the time employed by the personnel in the current year, in comparison with the previous one. This operating time has to be 7% shorter than in the previous year, and, by using this simple evaluation criterion, we can look month by month if we are in line with the projected result. The variation of production volume are neutralized by the calculation in the form of percentages, while the variations in the product mix are taking into account in the 'design' time*" (Interview 11).

In terms of operational functioning, "*each team is measuring its own performance daily, using the same standard indicators: safety, product quality, service quality and productivity*" (Interview 1). However, the definition and implementation of these indicators has raised some difficulties from a managerial point of view. The introduction of these measurements represents an additional task for production operations, and, at the beginning of the SIM implementation, the managers had the tendency to define and impose an 'ideal' method for measuring these indicators. This 'top-down' imposition did not lead to good results, as some operators passively resisted these indications. Identifying this problem, the organization changed this rule, giving more responsibility to the first two loops of the system, and applying a method based on repeated trial and error: "*Only when we understood that the implementation should start with the first loop of the system, we succeeded to create a positive feeling and dynamics in the entire enterprise, to the level of the production operators*

who, day by day, are capable to identify the productivity problems and to report them to the higher hierarchical level" (Interview 5). "*At the beginning, we had the tendency to start with the fifth loop of the system, by evaluating the situation of productivity at the level of the entire unit, then we were going to the fourth level, questioning the service managers and their teams, and then continuing top-down, until reaching the first level. In reality, the appropriate movement is the reverse one, as you need to start from a reality of each working place – and therefore with the lop one"* (Interview 5).

Even if the overall strategic implementation of the SIM management innovation has followed a 'top-down' logic, which did not accommodate any dissensions, at operational level, the 'down-top' dynamics proved to be an effective way to federate all the employees around the new performance management system, by using indicators that are relevant for their day-to-day activity and the encountered problems: "*it is necessary to start with the loops one and two. Starting with the fifth loop is a managerial and operational mistake, as we quickly learned ourselves, at the beginning of the implementation process*" (Interview 11).

In the implementation of the SIM management innovation, two managerial principles were consistently applied (Giuliani and Robert, 2016) – (1) the adhesion of all actors and (2) the solidarity of all actors, which lead to the following managerial practices: defining and using transparent performance indicators, evaluate individual and collective performance, increase the initiative and autonomy of the first levels of management, enrich/diversify the tasks, missions and responsibility of the first level of management, shorten and increase the speed of the decision-making circuits, create solidarity and joint responsibility between all hierarchical levels. These managerial practices had the following direct and indirect effects, presented in Table 2.

Table 2. The integrated matrix of the main actions and effects of the SIM management innovation – at the level of the first and the second loop

	Actions with direct effects	**Actions with mega-effects**	**Actions with indirect effects**

Managers Engineers	Implementation of novel management procedures in the entire company	Implementation of transparent performance indicators	Standardization of performance indicators, allowing internal benchmarking
	Increased reactivity in identifying and dealing with problems	Better collaboration between various services and hierarchical levels	Reinforce the autonomy and the decision power of lower managers
	Better prioritization in solving the identified problems	The most costly disruptions are treated with priority	Identification and exchange of best practices regarding the most persistent disruptions
	Implication of all actors in improving performance	Better communication regarding corrective actions	Increased visibility of the realized, and non- realized actions
	Good match between the level of disruption and the level of corrective action	Identification of complex bottlenecks	Increased autonomy and responsibility of operators
	Accelerates the rhythm of management cycles using a daily coordination of action plans	Avoids planning errors though regular control	Standardize the functioning rhythms for all company functions
Team leaders Technical agents	Elaboration of corrective action plans in direct relation to the identified problems	Transparent allocation of action plans for the supporting functions	Capacity to solve problems in the production flow which reinforce the adhesion of operators to the performance system
	Real-time knowledge of the performance levels	Better contribution to the support function to the manufacturing process	Mobilization of all actors regarding manufacturing action plans
	Improvement of communication between various production teams	Quick and clear identification of problems at the level of the work position	Inter-team competition for improving productivity
	Implementation of a management system favoring permanent improvement	Increased importance of work operators	Improvements of the production flow facilitated by the corrective plans developed in loops one and two

The management innovation SIM designed and implemented by Schneider Electric successfully answers the main short-comings of performance management system outlined in the introduction: first, the feedback loops are embedded one in another, depending on the various levels of the organization, which makes the feedback information timely, relevant and context-dependent; second, the performer is empowered to take charge of his/her performance management process, and propose ways to continuously improve his/her performance, or the performance of contiguous/associated operations; third, the performance goals and the performance management system are declined from the top to the lowest levels of the organizations, and considered in their systemic interdependence, in order to maintain a dynamic process of general improvement. The results obtained with this performance management system proved to be so effective when applied in its own manufacturing plants, that Schneider Electric developed a consulting operation aimed in proposing and implementing this solution in other organizations.

4. DISCUSSION

The presented performance management system introduced by management innovation SIM represents a solution to three lacks identified previously in present day performance management system.

The first is the recognition of the importance of the performance evaluation systems based on indisputable indicators known and shared by all the actors in the organization. From this point of view, the notions of “red time” and “green time” produce an effective corporate culture based on common concepts that make sense for operators as well as for management. So our findings complement those of previous studies on the role of performance indicators in performance management system management (Boswell and Boudreau, 2000).

The second is that the SIM management innovation based on very short intervals of performance measurement resolves the question of the feedback and times often too important between reading performance and its analysis. The “red times” that degrade performance will be addressed live on each working shift and analyzed almost in real time by the loops one and two of the device SIM. So our findings complement those of previous studies on the lack or delay of feedback (Cunneen, 2006).

Finally the problem of the lack of empowerment of all the actors of the company in the performance measurement system is solved by the individual interest of first level operators to properly climb performance and especially what have degraded it. Indeed, the SIM system is based also on the problem-solving of the technical and organizational aspects of all orders that generated a bad performance at a given moment. So, by participating actively in the reassembled the performance and analysis of malfunctions that have degraded it, the operators solve the problems they are directly facing, making their production work more tedious. So our findings complement those of previous studies on the conciliation employee satisfaction and performance management system (Colville and Millner, 2011; Buchner, 2007).

It is important to note the correspondence between the suggestions made in the literature regarding the improvement of performance management systems and the strong points of the management innovation presented.

5. MANAGERIAL IMPLICATIONS

From a practice point of view our results contribute to encourage companies to develop a performance management system based on transparent indicators, widely known and shared by all employees. This means taking the time to select truly representative indicators of performance. In the same way it seems essential that these employees who see their performance evaluated by indicators have a real power to influence on them either way direct but also indirect as in the case of SIM by the implementation of the action plans. Advocating a clear focus on the main performance indicators and achieving an integrative combination between the personal interests of various employees, hierarchical levels, company goals and clients' needs.

Second managerial recommendations would be to ensure that the first hierarchical levels have a direct interest to actively participate in the performance management system.

Finally the implementation performance management system must provide a real-time measurement to enable corrections that will ensure the effectiveness of the system.

6. LIMITATIONS

The implementation of this performance management systems raises a series of challenges,

such as the need for strong management support and policies, a pervasive adoption and acceptation of the functioning premises of the new performance system, and an open, ongoing, multi-level communication between performers, supervisors and managers. Unfortunately, the limits of our research project do not permit to present and compare the challenges of implementing and adapting this system to various types of organizations. The academic and managerial implications of this case study indicate the necessity to analyze more the success stories from real life and to understand their specific features and advantages in order to develop better theoretical models and managerial practices for developing and implementing successful and sustainable organizational performance management systems.

CONCLUSION

The main contribution of this paper is to highlight a series of real problems experienced by many modern organizations, but also to present a possible solution – the real-time performance management system developed and implemented by Schneider Electric. The Short Interval Management innovation management – introduced in all the production units, represents a managerial platform of action that coagulates the interest and initiatives of all employees around the essential task of reducing delays and loss, in order to continuously increase the labor productivity. The case study presented in this paper highlights the causes and the context of this system's implementation, the actions taken during its development, introduction, adaptation, and refinement, the philosophy of performance management applied by this system, and the various outcomes of its implementation and functioning.

Future studies should further develop the analysis of such performance management systems, providing the basis for inter-organizational comparisons and the generation of best practices in this controversial area of organizational management.

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