

# THE ROLES OF MANAGEMENT CONTROL SYSTEMS TO IMPLEMENT STRATEGIC CHANGE: THE CASE OF INDUSTRIAL SERVICE OPERATIONS

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## ABSTRACT

*A number of authors have investigated the actual use and the related benefit of interactive control system in strategy emergence, strategy implementation, innovation, organizational learning, and company performance (e.g. Obsorn, 1998; Abernethy, 1999; Bisbe and Otley, 2004; Davila, 2000). However, some drawbacks have also been identified. Simons (1995, 2000) points out that without due care, participants in the interactive control process may feel threatened by the active interest and participation of senior managers; hence the threat of embarrassment can ruin learning. And such involvement requires the important investment (both in cost and time). Simons (1987) proposed the top management “not to usurp the decision rights of subordinates.*

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## INTRODUCTION

A number of authors have investigated the actual use and the related benefit of interactive control system in strategy emergence, strategy implementation, innovation, organizational learning, and company performance (e.g. Obsorn, 1998; Abernethy, 1999; Bisbe and Otley, 2004; Davila, 2000). However, some drawbacks have also been identified. Simons (1995, 2000) points out that without due care, participants in the interactive control process may feel threatened by the active interest and participation of senior managers; hence the threat of embarrassment can ruin learning. And such involvement requires the important investment (both in cost and time). Simons (1987) proposed the top management “not to usurp the decision rights of subordinates. Similar to Simons, Bibse et al (2007) put forth the need of “non-invasive, facilitating and inspirational involvement” to reduce the threat of embarrassment. In fact, although a number of debates on the impacts of top managers’ involvement on organization performance have been initiated a long time ago, the results are often contradictory (Besson et al. 2004). B Let’s take the budget2 as an example. Otley (1978) “found positive relations between emphasis [on pressure of managers] and managers’ budgetary performance” (Hartmann, 2000:454).While Hopwood (1972:161) argued that “too

much budget emphasis would not only cause disagreement and conflict, but would also be ineffective". Effectively, "organizational and environmental variables make the measurement of performance relationship extremely difficult" (Simons, 1994:184).

It is worthwhile to observe that most empirical studies follow Simons (1995, 2000) on the separate use of control systems: either interactive control or diagnostic control. Such a dichotomy may prevent a necessary enrichment. A joint use of control system<sup>3</sup>, if used in a balanced manner, may provide a potential solution in reducing the drawbacks of interactive control. A joint and balanced use of interactive and diagnostic control systems tends to have a positive impact on company's performance in the high level of strategic change (Adebayo, 2007; Henri, 2006a). A diagnostic use of control system facilitates the application of interactive use (e.g. facilitation of strategic dialogue throughout organization) (Haas & Kleingeld, 1999). A joint use provides a possibility for trade-off between contradictory tensions (Marginson, 2002).

## **REVIEW OF LITERATURE**

Henri (2006a) proposed some following hypotheses. The positive effects of interactive use may vanish due to insufficient use of diagnostic control to set boundaries and to highlight effectiveness issues, or due to excessive diagnostic use which constrains innovation and risk taking. A balanced use can create a dynamic tension which ensure and intensify positive effects of interactive control on capabilities such as innovativeness, organizational learning, entrepreneurship, market orientation. Such a use also fosters organizational dialogue, enhances creativity, and focuses organizational attention, thus becomes an important lever of strategic change. The result of Henri (2006a)'s quantitative study confirms his hypothesis only for firms in high environmental uncertainty. But once again he did not provide a pattern of a balanced use of control system in strategic change. Other authors have indeed argued in that direction, but their arguments are often elusive in terms of what is actually meant by "balanced" use (Adebayo, 2007; Haas & Kleingeld, 1999; Henri, 2006 a, b; Marginson, 2002).

To foster a more articulate definition of balanced use we shall explore the literature on project management. Project management, and in particular the management of project portfolio, has gone through an internal revolution that shares the same starting point of the management control literature: the inadequacy of traditional accounting systems (Johnson and Kaplan, 1987). The specificities of the industrial service sector make this detour particularly attractive. It will provide substance for the roles of organizational design and how the managers (from top to middle) and interface actor involve themselves into the process. Our case studies will then demonstrate the validity of this enriched framework.

## **IMPLEMENT STRATEGIC CHANGE**

We chose to conduct a case study even before having defined the research question because we believe this methodology is relevant to study the existing questions about the use of management control for which the knowledge has not yet structured. This choice is in line with the calls of Hopwood (1983), Kaplan (1986) and Otley (2001) for a greater commitment to more in-depth (case-based) research. On the basis of Yin (1984, 2003)'s and Eisenhardt (1989)'s propositions<sup>117</sup>, we follow a sixstep process to carry out our research: 1° getting started, 2° selecting cases, 3° crafting instruments and protocols, 4° entering the field, 5° analyzing data and reporting case studies, 6° reaching closure. And the final section is reserved for the cooperation problems of case studies. A research focus is important to avoid becoming overwhelmed by the volume of data. The definition of a research question within a broad topic enables to specify the organization to be approached and the kind of data to be gathered (Eisenhardt, 1989).

The case study strategy is most suitable for "how" and "why" questions (Yin, 1984, 1994, 2003). We decided to work on the question of "How do managers use their management control systems as levers of strategic changes?" because of three main reasons. Firstly, the works of Simons (1994, 1995, 2000) on the use of management control systems in strategic turnaround situation seemed both stimulating from an academic point of view and had some echoes with our correspondents in the company. Secondly, the need to study further on this subject is clearly pointed out in academic papers (Atkinson, 1997; Simons, 1994; Langfield-Smith, 1997). And thirdly, this question seemed to fit with the methodology we had chosen because only the case study research, according to Langfield-Smith (1997) and Shields (1997), offers the potential for the study of the dynamic interactions between management control and strategy, and for that of dynamics of change, which cannot be inferred in quantitative research.

We tried to gain as much feedbacks as possible on our research question and our findings during our research by attending to the doctoral seminars of Essec, Ecole Polytechnique, and Nanterre University, and by presenting our research at Management Center of Ecole Polytechnique and indifferent international conferences. Our four main sources of evidence are interviews, direct observations, archival records, and documents. In addition, the informal exchanges with my colleagues and observations of daily life in INEO Suez also provide me an important source of evidence. All of them are interdependent and complementary. More concretely, the first source comes from 79 interviews. Five main types of interviews were: 1° business discovery (9 interviews), 2° selection of case study (9), 3° Hi-Tech case (20), 4° Electra case (21), and 5° report on thesis advancement (20). Four types of informants are: top managers (8), middle managers (27), front-line (15), and management controllers (29). And the final sources of evidence are archival records and documents (2.5 Go123).

They include the analyses of the company's situation at the moment of strategic change, organizational charts, budgets, medium term planning, presentation of annual meetings, financial results of realized or realizing projects and description of functional departments. The analyses of these sources were used to have the preliminary comprehension on informants' entities before the interviews. Data analysis is one of the most important process, but the least developed and the most difficult (Yin, 1984, 1994, 2003; Eisenhardt, 1989). A case study database was created, including case study notes (minutes of interviews and analyses), case study documents (such as its budget presentation or financial analyses, annual reports, balance sheet, minutes of observation meetings), and recorded interviews. We used this database to carry out within-case analysis and cross-case analysis.

### **INDUSTRIAL SERVICE OPERATIONS**

The main object and aim is specific tool is created. The 3K Scorecard was a customer-oriented performance measurement system. The latter search for improving delivery reliability and customer satisfaction expected as two main determinants of residual income and growth of activities<sup>78</sup>. The update of the tool is annually done (through formal discussions) after the update of business strategy.

3K Scorecard is communicated to employees via TV monitors on the factory floor and Lotus Notes via the Intranet. Ex: "[N]ew kinds of information would be needed to further improve the control of strategic uncertainties. The measurement team decided to start developing a coherent system for anticipating changes in the market place (i.e. early warnings system). The ultimate aim of this new development exercise was to construct a collection of market indicators that would capture significant changes in the national and international economy, as well as in particular market segments".

### **SIGNIFICANCE**

We tried to overcome the problem of their scarce time by convincing our key interlocutors in INEO Suez of the relevance of our research question for the company. This was not an easy task since, in addition to the barrier of culture and of language; the company is large (13.000 employees, 220 profit centers in France), has heterogeneous activities, had recently experienced a number of fusions or splits resulting in multiple hierarchical authorities. For that purpose, the first two years (one year of internship and first year of the PhD) during which we worked full-time inside the company were crucial.

They allowed us to discover the various business of the company, study its management control systems that provided us a general comprehension on the company and on the classical evolution of management. They also help us gain credibility by being recognized as efficient and reliable

and to create a relation strong enough with many entities of the companies to access the different silos. It appeared that one of the best ways (if not the best) was to work directly with these managers. The operational works of management control (like consolidation), which did not have much value for my thesis, actively helped me to create and develop the relation with all management controllers.

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