A dynamic methodology and associated tools to assess organizational capabilities

Philippe Rauffet [a,*], Catherine Da Cunha [b], Alain Bernard [b]

[a] Université Bretagne Sud, Lab-STICC, UMR CNRS 6285, Lorient, France
[b] LUNAM Université, Ecole Centrale de Nantes, IRCCyN UMR CNRS 6597, Nantes, France

ABSTRACT

The assessment of organizational capabilities becomes a great challenge in extended and flexible organizations. This assessment is generally independent from the evaluation of operational results and could become isolated from the rest of the global performance system and face validity issues.

This paper aims at creating new control loops by proposing a methodology and a toolbox. These help managers to regulate design and transfer discrepancies and to improve the assessment of organizational capabilities.

These propositions are implemented and tested on the industrial case study of Valeo Group, which adopted the Organizational Capability Approach (OCA) in 2006.

© 2013 Elsevier B.V. All rights reserved.

1. Introduction

In order to improve their performance, firms look to control their process management and their organizational learning. In this framework the Organizational Capabilities Approach (OCA) emerged in the beginning of the 1990s.

Relying on competency engineering and process-oriented quality "standards", good practice guidelines were written and modeled by functional experts. These guidelines are used to encapsulate key knowledge and key resources, i.e. the fundamental performance drivers of firms.

These guidelines therefore provide the bases for an "a priori" performance management system (based on the measurement of performance drivers) aside the traditional "a posteriori" system (based on the measurement of operational results).

Nevertheless this implementation of OCA must be done carefully. One must verify if the assessment of organizational capabilities is correlated to the reality of the performance of the firms' processes. So the questions of the relevance and the validity of practices guidelines must be kept in mind.

This paper aims therefore at rethinking the place of the OCA in the global performance management system, by answering methodologically to these validity issues of the assessment. After a state of the art on the methods for managing and assessing OCA (part 1) a generic assessment model is proposed (part 2). This results in the concrete identification of discrepancies that explain the validity issues. A methodology and a toolbox (with quantitative and qualitative indicators) are then built to refine and improve the assessment of Organizational Capabilities (parts 3 and 4). These elements are applied and tested on the specific case of the Roadmapping method, an OCA method deployed within the Valeo Group since 2006. Finally a discussion is led on this contribution which creates new control loops on the assessment of Organizational Capabilities.

To improve the readability, mathematical formulas are put in the appendix at the end of the paper. They are not essential to the understanding of the methodology, but they can provide indicators to implement the control of discrepancies.

2. Problem data: Organizational Capability Approach methods and limits

After defining the concept of organizational capability and its characteristics, we present assessment methods of the literature, their benefits and their limits.

2.1. Organizational Capability Approach and current methods

Organizational Capability Approach is an emerging theory emanating from management sciences. It is part and parcel of a

* Corresponding author.
E-mail addresses: philippe.rauffet@univ-ubs.fr, rauffet@gmail.com (P. Rauffet),
catherine.da-cunha@irccyn.ec-nantes.fr (C. Da Cunha),
alain.bernard@irccyn.ec-nantes.fr (A. Bernard).

resource based view, which focuses on the internal identification of resources, knowledge and competencies that are considered as strategic, that is to say available for creating a sustainable, competitive advantage for organizations (see [1–3]). Moreover, it is opposed to an "over-elitist" view of resources, which considers only the valuable, rare, inimitable, non-substitutable resources [4,5]. It answered to this criticism through a "managerial" view, and it aims at developing a competitive advantage through the combination of resources that are not strategic when they are taken alone. Proponents of this approach, Saint-Amant, Renard [6] and Fall [7] define organizational capabilities as "the ability to act which results from the combination and the coordination of resources, knowledge and competencies of organization through the value flow, to fulfill strategic objectives".

This definition points out some pregnant characteristics of the Organizational Capability Approach, as emphasized in Fig. 1:

- Organizational capabilities constitute the key aptitudes that a company must develop and assess to gain a competitive advantage and to determine its strengths and its weaknesses [8] [9,10].
- Organizational capabilities emerged from the synergies of organizational resources, which continuously progress thanks to the acquisition of knowledge, and competencies. They are thus related to organizational learning [11].
- Organizational capabilities can be expressed through the value flow. The use of organizational capabilities should indeed generate a performance improvement in the activities of organization [12]. Trends derived from performance indicators can therefore be clues to their development.
- Finally organizational capabilities align all organizational resources to achieve corporate objectives. At a local level organizational capability is the synergy of human, physical and structural resources of an entity around the defined strategic objectives. At upper levels organizational capability is the synergy of entities.

From this definition we distinguish two kinds of OCA assessment:

- a consequential analysis (what does OCA result in?): organizational capabilities are here considered as black boxes. Firms are aware of the "existence" of organizational capabilities, but they do not manage them operationally. To some extent, they only focus on the visible and resulting part of organizational capabilities, considering that financial performance and customer satisfaction (see Balanced Score Card from Kaplan and Norton [13]) are the expression of organizational capabilities. This monitoring led to reactive, corrective strategies and the solving of apparent issues. The hidden assumption was that if they generated good performances for such an activity, then they should have acquired the capabilities associated to this activity. Organizations therefore focused only on the activities where they had some difficulties, considering that the efficient processes were mastered.

- a causal analysis (what is OCA composed of?): organizational capabilities are here managed and developed pragmatically. Firms focus more on the long term dimensions of the Balanced Score Card [13]. They aim at implementing research works on organizational learning [14,15], competency engineering [16] and process-oriented quality standards. So organizations turned their strategies into a systematic preventive mode. They considered it necessary to document and boost learning around all processes (even the unproblematic ones), to prevent them from a performance decline. So they assumed that if they acquired knowledge corpus, then they should be efficient.

This second standpoint for OCA management (the causal analysis) has been enriched by many scientific and industrial works for this last twenty years [17–20]. Industrial groups constitute different good practice guidelines to make their entities progress on particular concerns (production, information system, purchasing, etc.). They clarify and transmit the knowledge pillars through extended structures, where communication can be complex due to the numerous interactions and the distance between interlocutors (at geographical, semantic or cognitive levels). Same efforts are also found in national institutions, like the Canadian electronic administration [6], or in organizations for the development of emerging countries [21,22].

Among them we can identify two different categories for these methods based on the causal analysis of organizational capabilities:

- maturity-based methods, which decompose organizational capabilities development into progressive steps. For instance,
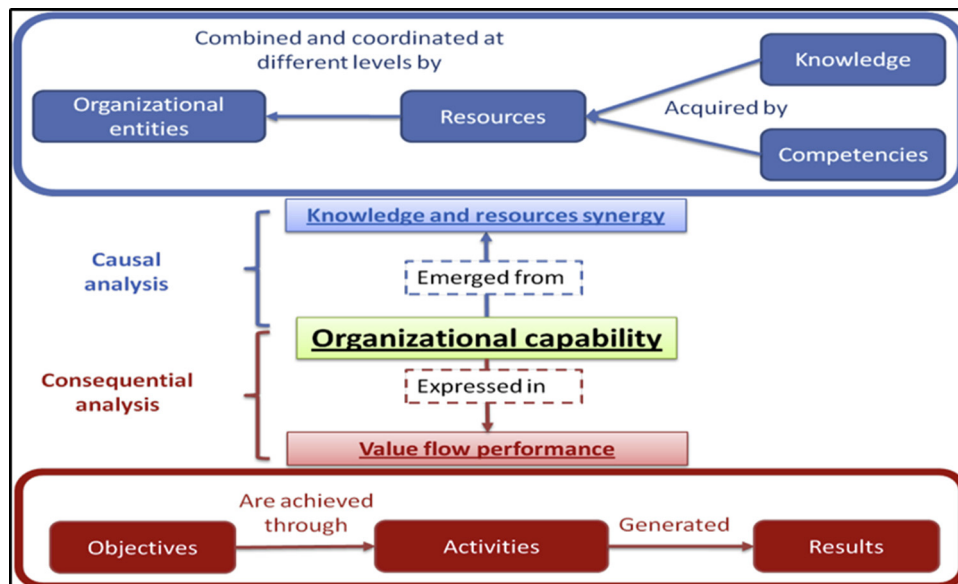

Fig. 1. Organizational capability characteristics.