Analysis of ISO 9001 Paradox of Knowledge Codification Using the Activity System Model: Tensions in Practices and Expansive Learning

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ABSTRACT

This article analyses the ISO 9001 standard as a generic management tool grounded on three interdependent elements: an artefact of abstract requirements to implement (ostensive routines); a management philosophy that instruments its implementation; and a simplified vision of the organization’s relations and knowledge (performative routines). Its two functions are paradoxically oriented to exploitation of codified good practices and to exploration of new knowledge to innovate, create tensions during its implementation in the organization. By applying the activity system model on the French multinational food Groupe (Danone), this research analyses the tensions, learning and innovation outcomes that emerge during the implementation of the knowledge codification requirement in the company. The objective of this article is to illustrate how Danone used the paradox of knowledge codification to create distinctive innovations. It argues that the management of paradoxes depends on the manager’s philosophy and competencies to manage cognitive and emotional tensions in organizations.

KEYWORDS
Codification of Good Practices, Expansive Learning, Innovation, ISO 9001 Standard, Paradox Management, Tensions

INTRODUCTION

After the industrialization and the standardization of production, the human relations theory of management proved the importance of social relationships in companies to motivate employees and develop their capabilities and those of the organization. Since then, the organizational system has been shaped by several management theories, tools and methodologies stemming from several disciplines (psychology, sociology, economy and management) to explain that productivity and creativity can be achieved when the goals of an organization and the needs of employees are met. These goals can be met through a mutual learning (between the top management and the employees) managed by a supportive and participative management, that does not see employees as merely more cogs in the...
company’s wheel, but much more as an inseparable part of the global strategy: employees can (and need) to be shared the big objectives to help, empowered to innovate, and recognized by their hierarchy to exist and feel belonging and useful to their company in which they evolve. By this participative management framework, companies tend to become learning and knowledge-based organizations: they learn, use and innovate out of their employees’ knowledge and know–how (Argyris & Schön, 1976; Nonaka & Takeuchi, 1995; Grant, 1996), to enhance organizational learning that leverage the organization’s core competencies (Prahalad & Hamel, 1990).

This evolution in management is the symptom of modern and mature companies which seek achieving two apparently paradoxical goals (Handy, 1995): efficiency through stabilization (by exploitation of internal good practices) and innovation through the exploration of new knowledge and opportunities. These paradoxes create contradictions that are visible in organizational procedures and tensions and conflicts that emerge between employees.

These organizational paradoxes and their contradictions represent the focal point of this research. Through this paper, we will analyse the contradictions in procedures (organization paradox) and the tensions between employees and management that emerge during the implementation of a management tool oriented to both exploitation and exploration (learning paradox): the ISO 9001 standard.

**The Paradox of Organizations: Stability and Creativity**

In his famous book, *The empty raincoat*, Charles Handy says: “Paradox I now see to be inevitable, endemic and perpetual. The more turbulent the times, the more complex the world, the more the paradoxes. (...) Paradoxes are like the weather, something to be lived with, not solved, the worst aspect mitigated, the best enjoyed and used as clues to the way forward. Paradoxes have to be accepted, coped with and made sense of, in life, in work, in community and among the nations” (Handy, 1995). Handy adds that organizations evolve with paradoxes. To understand the changes in their environment, companies are driven to manage the tensions that emerge from their environment and in the work place: these companies must be local and global; they must keep exploiting professional expertise and yet develop new knowledge that will create new value; employees must be autonomous but capable of working in different teams. Managers must be “Masters of Paradox” (Hampden-Turner, 1994) to monitor and delegate; they need to decentralise, all the while staying integrated; they must satisfy mass consumers while discovering niche markets. They must introduce new technology that allows workers to be the masters of their own destiny; they must find ways to get variety and quality, and all at low cost. They have, in short, to find a way to reconcile what used to be opposite, instead of choosing between them. Managers must explore new tangibles and intangibles resources and exploit their good practices and specialized skills. To manage the paradoxes of a perpetual changing environment, the challenge of managers is to identify the company’s critical knowledge assets (Saulais & Ermine, 2012) or organization’s core competencies (what distinguish an organization from its competitors, difficult to imitate and codified in its routines) and to search through the disturbances the company faces, the opportunities that can reconfigure these competencies with new values.

To meet this challenge and remain competitive, a company engages change programs and reflects on its practices, knowledge, skills and relationships to develop new flexible and reactive structures. New managerial tools and ideas are then introduced into practices to support these programs. Among the diverse management tools, we focus in this paper on ISO 9001 standard of quality management systems.

**The Paradoxes of ISO 9001 Standard: Conformity and Innovation**

ISO 9001 generic standard is based on a number of quality management principles including a strong customer focus, the motivation and implication of the top management, the process approach and continual improvement (www.iso.org). Since its first publication in 1987, ISO 9001 standard has undergone four revisions. The 1994 version “quality assurance” focused on the compliance of product/service quality features to the customers’ needs. The 2000 version, introduced the process
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