THE BUNDLING OF MANAGEMENT ACCOUNTING INNOVATIONS: AN EXPERIENTIAL LEARNING PERSPECTIVE

ENRICO BRACCI

Professor in Business Economics, Department of Economics and Management - University of Ferrara
E-mail: enrico.bracci@unife.it

Abstract - The paper aims to analyse the learning dynamic involved during the process of bundling of two management accounting innovations: balanced scorecard and EFQM-CAF. An interventionist longitudinal case study was carried out, adopting a triangulation of methods; direct observation/participation, interviews, documents analysis, informal/colloquial talks. The papers adopt the bundling process model theorized by Ax and Bjørnenak (2005) integrated by the experiential learning theory (Kolb, 1983). The bundling process activates a complex learning dynamic by grasping and transforming the knowledge. The managerial knowledge was the result of a continuous process of examination, interrogation and critical analysis of the theoretical abstraction of the management accounting model and the real practice.

Keywords - Interventionist approach, Public sector, BSC, EFQM-CAF, experiential learning theory.

I. INTRODUCTION

Management accounting (MA) innovation in the public sector still represents a relevant topic within the reforming agenda in many countries (Arnaboldi, et al., 2015; Lapsley, 2008; Liguori & Steccolini, 2014). The New Public Management (NPM) ideas and pressures towards innovating managerial practices are far from gone, despite the political rhetoric to go beyond it (Hyndman & Liguori, 2016). MA innovations are consistently used, developed and researched in both public and private organisations (Berry, et al. 2009; Jack & Mundy, 2013). A closely related research topic is how different management accounting innovations come to be bundled (Berry et al., 2009), in total or in part, as innovations evolve (Ax & Bjørnenak, 2005, 2007; Bjørnenak & Olov, 1999; Modell, 2009). Modell (2009: p.83) stressed the need to study the entangled relation between the bundling of different innovations and managerial and organisational learning processes. Indeed, how different continuous unfolding of rationales for the use of the management accounting innovations intertwines with the ability to create new organisational learning and knowledge is not clear. It is, thus, worth studying how socio-technical control artefacts are socially constructed engaging users and researchers in practice, and develop process of learning (Berry et al., 2009). Indeed, many accounting scholars have called for a greater attention to design research agenda with practical relevant aims and outcomes (Bogt & van Helden, 2012; Hopwood, 2008; Kasanen et al., 1993; Scapens, 2008; Swieringa, 1998; Van Helden & Northcott, 2010).

This paper aims at contributing to the above debate by building on research that portrays the bundling of management accounting innovations as an experiential learning process (Kolb & Kolb, 2005; Kolb, 1976). The paper draws evidence from a longitudinal case study of the design and implementation of strategic MA in a public sector organisation. In particular, the paper attempts to explore the managerial learning process activated by the MA innovations, and how such innovations evolve and diffuse by bundling different sources of knowledge (Modell, 2009).

II. THE BUNDLING OF MANAGEMENT ACCOUNTING INNOVATIONS: LITERATURE REVIEW

Public sector organizations are still on the verge of continuing pressure to innovate their managerial practices and systems. Management accounting systems still represent one of the most relevant area of innovation, in order to support public managers in improving the efficiency and effectiveness of public services. The interest of the literature towards management accounting innovations is not recent, and it attracts the attention of scholars (Hoque, 2003; Ittner & Larcker, 2001; Modell, 2009). The concept of bundling is considered as a process through which elements of different innovations are melted or re-organised to adapt to a specific context (Ax & Bjørnenak, 2005; Bjørnenak & Olov, 1999; Modell, 2009). Ax & Bjørnenak (2005) showed how BSC was supplemented with other managerial innovations and adapted to the organizational culture in order to create a more attractive set of tools. The bundling process reinforce the innovation of management accounting techniques by overcoming cultural and organizational barriers. The process of bundling and diffusion of MA innovations can be therefore considered a process of transformation of the original package, melted with existing or additional innovations to overcome potential or existing barriers for their diffusion (Ax & Bjørnenak, 2005).
The diffusion process of MA innovations needs to be considered a continuous occurrence, rather than a discrete point of time (Ax & Bjørnenak, 2005; Westphal, Gulati, & Shortell, 1996). Ax & Bjørnenak

(2005) called for an increased understanding on how the different elements of MA innovations are transformed, incorporated and diffused. There is the need to consider the complexities of change associated with the adaptation of innovatios in a specific organizational context (Jones & Dugdale, 2002; Modell, 2009).

III. THEORETICAL FRAMEWORK

To untangle the learning process involved in the implementation of management accounting innovations, the paper adopts the Experiential Learning Theory (ELT) developed by Kolb (1976; 1983). Experiential learning can be conceived as a four-stage cycle, namely: Concrete Experience (CE), Reflective Observation (RO), Abstract Conceptualisation and generalization (AC) and Active Experimentation (AE). CE is the starting point during which an actor can observe and reflect by experiencing without bias. An individual person starts learning by feeling through experience the tangible, felt qualities of the outside world. RO refers to a moment in which an actor starts to make sense of his/her own experience by watching and reflecting. AC involves the ability to conceptualise his/her observation through referring to concepts, theories, or models. In this phase, thinking about, analysing and systematizing reality are the guide. The selected concepts, theories or model then should be applied developing an active experimentation (AE), creating new experience, and reigniting the learning process.

The creation of knowledge is the result of the combination of grasping experience (prehension) and transforming it with no predefined path (Kolb, 1983). The learning process is effective if all four phases are experienced and some form of prehension and transformation happen (Kolb, 1983).

ELT is considered an useful framework in order to understand the learning process of actors (Chiucchi, 2013a; Jönsson, 1996) and, on this vein, the path of design, implementation and adaptation of management accounting innovations.

IV. METHODOLOGY

To address the research question, the paper adopts an interventionist research (IR) approach. As an empirical basis, the paper employs a longitudinal interventionist case study in a public owned social services organisation (PSE thereafter). The findings in this paper are based on research co-operation between the researcher and the managers and personnel of the case organisation.

PSE has the statutory role of providing, commissioning and governing the different social care services to a population of some 140,000 inhabitants. It employs on average some 160 people within five main departments: finance and administration, residential elderly care, home elderly care, adult social care, children social care.

V. ANALYSIS

The case study shows the learning process through which management accounting systems were bundled and how they evolved in a different form from the theory in something practically relevant. Such a result was the output of a five-year process of learning involving both researcher and practitioners. As table 1 shows, the actors of the case study went through all four forms of mode of learning proposed by the ELT model. The starting point was grasping through comprehension, the concrete experience managers and employees was the base for observation and abstract conceptualisation of the problems to find "theoretical" solutions.

The need to adapt the theoretical model of BSC to the real experimentation of the case led to create knowledge through transforming the BSC to something more meaningful for the organization. Then, the concrete experience of both BSC and EFQM-CAF involved a process of grasping via apprehension relying on the tangible felt qualities of the day-to-day work. The result was both an abstract conceptualisation of the experience, to design the bundled BSC-EFQM-CAF, and a reflective observation of experimentation and transformation of the model.

Phase	Learning process	Learning dynamic
1) EFQM-CAF implementation	From CE to AC	Grasping via Comprehension
2) BSC implementation	From AE to RO	Transformation via Intention
3) BSC + EFQM-CAF implementation	From CE to AC	Grasping via Apprehension
4) BSC & EFQM-CAF bundled	From RO to AE	Grasping via Comprehension & Transformation via Extension

Table 1. The learning process activated a schematic view

The bundling of the MA technologies activated the learning cycle both for the researchers and the practitioners leading to:

- A change in the organisational practices and learning from the active implementation and reflecting in relation to the concrete experience. In this line, the BSC and EFQM-CAF were affected by the concrete experience of the managers, while the latter modified their practices using the management systems.
- The reflective observation of the actual result of the active implementation of the management system, led the project team and the managers to study on how to transform the BSC and the EFQM-CAF after some years of use. This transformation reflection led to a process of learning of the actors, which in turn lead to the conceptualisation of a new management system.

The knowledge resulting from this process of grasping experience and transforming the organisation was a more practical relevant management accounting. The bundled BSC-CAF framework share some of the conceptual elements of the original model, but at the same time they differ substantially, becoming some hybrid practice (Berry et al., 2009).

The interventionist approach followed by the researcher allowed to tune the practices of management accounting (Ahrens & Chapman, 2007) with those of the users of such system providing reciprocal support in the learning process. The researcher had the opportunity to actively participate to the process of sense making of the members of the organisation. At the same time, the paper depicted the process of learning and knowledge creation involved in the bundling of two different managerial innovation (Ax & Bjørnenak, 2005; Modell, 2009). The managerial knowledge that emerged during the case study was gathered and organised, producing a meaningful and accessible frame of reference for the organisation (Jönsson, 2010). As suggested by the literature, the BSC and EFQM-CAF can be bundled (Andersen et al., 2000; Andjelkovic et al., 2013), but little was known about how and through what process. The case study, shows a continuous process of examination, interrogation and critical analysis of the theoretical abstraction of the models and the real practice. The output of the process was one of the almost infinite manner in which the community of practice may end up with, confirming the "diversity and complexity" of accounting in context (Hopwood, 2007).

The bundling process theorized by Ax and Bjørnenak (2005) needs to be extended to consider the organizational learning that the transformation and implementation phases involves (Figure 1). As the case shows, the bundling process is a continuous process during which internal and external actors create knowledge through direct observation, abstract conceptualisation, and active implementation. Furthermore, the transformation of management accounting tools evolves following a nonlinear path, with slowing down and acceleration of the process.

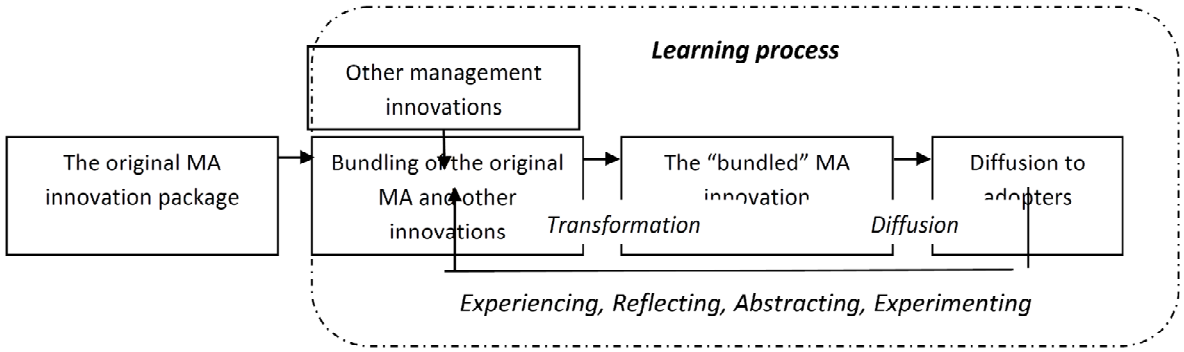


Figure 1. The bundling and diffusion of MA innovations (Ax & Bjørnenak, 2005): an extension

VI. CONCLUDING REFLECTIONS

As the paper shows, the ELT model provides an interesting a useful theoretical lens through which observing the way innovations in management accounting practices are conceptualised, implemented, and mobilised. From a managerial point of view, the ELT showed how managers mobilise management accounting technologies in order to solve their practical problems but required a learning process to adopt and revise both BSC and EFQM-CAF original configuration. Besides, the researcher and the project team were involved in the ELT cycle using particularly the reflective observation and abstract conceptualisation. The project team learned that BSC and EFQM-CAF theoretical model needed to be refined and transformed during the active implementation on the base of the concrete experience of the managers and the rest of the organisation. Besides, the bundling of BSC-CAF was thus the result of a complex learning process transforming the separate BSC and EFQM-CAF by extending their attributes.

Overall, the paper attempts to contribute in different manner to the literature.
On a theoretical point of view, the paper attempted to answer to the call made by Modell (2009), considering how organizational learning is involved in the bundling of MA innovations. We propose an extension of the bundling process theorized by Ax and Bjørnenak (2005), complementing the model with the learning process proposed by Kolb (1983). The revised model also considers the nonlinear path that the bundling process involves. In particular, the case study shows how the bundling of MA innovations activates a learning process which goes back and forth from theory to practice, and creating new practical relevant knowledge (Kolb, 1983; Kolb, 1976). The result is a mutual adjustment process in which different sources of knowledge (theoretical and practical) are involved and can lead to tensions, resistance and struggle in the adaptation process.

On a methodological point of view, the paper supports the relevance of interventionist research not only to disseminate academic knowledge among practitioner, but also to foster the creation of practical relevant management accounting systems (Lukka & Suomala, 2014; Scapens, 2006; van Helden, Aardema, et al., 2010). On this strain the paper contributes to the call for more interventionist research in management accounting (Berry et al., 2009; Jönsson & Lukka, 2005; Suomala et al., 2014; van de Ven & Johnson, 2006), shedding some light in particular on strategic management accounting. The paper supports the notion of engaged scholarship through which new knowledge can be generated through a collaborative process between researchers and practitioners (Bogt & Helden, 2012; Suomala et al., 2014; van de Ven & Johnson, 2006).

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