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A 'time–space odyssey': management control systems in two multinational organisations

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Abstract

This paper analyses the effects of implementing an Enterprise Resource Planning system (ERP) upon management control in two multinational organisations. How ERP was configured in each corporation created different forms of distance and relations between headquarters and the scattered subsidiaries. The construction of spatial and temporal separations (i.e. distance) and how they were understood and managed had profound effects on management control. In one organisation the ERP reproduced existing structures and distance which permitted conventional accounting controls based on action at a distance to be maintained. The second organisation used ERP to collapse distance through real-time information in a matrix structure. This did not increase centralisation but rather produced constantly changing loci of control and managerial feelings of 'minimalist' control.

Introduction

Information technology innovations, especially Enterprise Resource Planning systems (ERPs) are interesting sites for examining relations between distance and management control. ERPs have been defined as "enterprise wide packages that tightly integrate business functions into a single system with a shared database" (Newell, Huang, Galliers, & Pan, 2003, p. 26, drawing on Lee & Lee, 2000). The belief that integration improves visibility and control is often taken-for-granted in the ERP literature (Dechow & Mouritsen, 2003). However, as Bloomfield and Vurdubakis note, information technologies and accounting should "be understood as [...] attempts to institute particular versions of the organisation, its members, and their activities" (1997, p. 641). They are not neutral in defining what is seen. Analogously, how ERP implementations enact integration (Weick, 1979) influences how distances are created, managed,

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and reduced. ERP configurations can dramatically affect accounting controls and how actions are made visible (Quattrone & Hopper, 2001b).

Shared databases, simultaneously accessible from many locations, fulfil the dream of many management controllers—remote and instantaneous control by real-time performance information. Some MNOs adopt ERPs believing that they create a virtual vista of corporate activities that eliminates distance between the controller and controlled, and hence provide quicker, integrated control (Granlund & Malmi, 2002; Quattrone & Hopper, 2001b). This is linked to centralisation vs. decentralisation debates: "When computers first came into common use within organizations there was an expectation shared among many observers that they would centralise organizational power. Information was equated with power and the potent information processing capacity of computers was seen as an extension of managerial control" (Bloomfield & Combs, 1992, p. 459). On the other hand, Bloomfield and Combs observe if: "having a computer was equated with power then the proliferation of computers throughout organizations could indicate a decentralization of power" (p. 460). The effects of new information technologies are contentious.

The centralisation vs. decentralisation debate has preoccupied management accounting research. Two sets of research are pertinent. The first commenced with 'behavioural' works by Argyris (1953) and Simon, Guetzkow, Kozmetsky, and Tyndall (1954), followed by studies such as Hopper (1980) and Sathe (1978). All examine where the locus of control, especially for accounting, should reside. Should accountants situated at HQ, distant from operations, report to senior managers and reinforce central hierarchical control or be situated alongside and accountable to line managers to service their accounting needs?

The second set of research, contingency theory, matches control systems design to features of organisations and their contexts. Perhaps the most consistent and reliable results came from the Aston studies. They found larger organisations were more decentralised and had more formal administrative controls (Child, 1977). This was corroborated by accounting research. Large firms are more decentralised and emphasise formal controls (Bruns & Waterhouse, 1975), and large diverse decentralised firms use more administrative controls (importance of budgets, use of sophisticated budgets, formal patterns of communications, and budget participation, Chenhall, 2003; Merchant, 1981).

These results are consistent with Chandler's analysis (1966, 1977) of divisionalisation. He claimed that management accounting was a major twentieth century innovation making commercial management of conglomerates possible, something which had eluded nineteenth century entrepreneurs (Pollard, 1965). Divisional performance measurements and delegated budgets enable senior management to exercise 'decentralised centralisation' (akin to action at a distance discussed later). General managers at HQ, assisted by staff specialists, can concentrate on strategy whilst retaining central control through periodic accounting representations of scattered units' performance and plans in budgets. Segments are treated as black boxes: line managers make operational decisions with little central intervention providing financial targets are attained.

These studies examine centralisation vs. decentralisation with respect to allocating authority, information processing constraints, representing and quickly making performance visible, and the physical distance of personnel and segments from HQ. However, centralisation and decentralisation is more complex than this.

The first issue is how discretion for tasks is assigned to hierarchical positions and organisational order is created. The centralisation–decentralisation dichotomy implies this is a conscious design decision taken prior to action. This can misrepresent how hierarchies and order are achieved, for power relations and their relation to authority are complex and fraught. As Bloomfield and Combs note, power is not an objective, distributable resource: "We need to avoid the trap of falling into the ascription of real interests, to avoid simple cause and effect, and the idea that power is owned, while seeking to understand the operation of power through the constitution of the categories of organisational life" (1992, p. 466). They argue that power should be viewed as a "mechanism constituted by the multiplicity of power/knowledge relationships between agents" (1992, p. 467). Accounting