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Headquarters' Control Over Subsidiary IS Management in Multinational Corporations: An Examination of the Impact of Strategic Role on the Control of the IS Function in Two British Subsidiaries

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Introduction

Information Technology (IT) has often been viewed as the vehicle that facilitates the global transformation of business (Deans and Karwan, 1994). Indeed, leading global companies such as ABB Asea Brown Boveri Ltd., Nike Inc., and the Ford Motor Company have unhesitatingly invested millions in new IT infrastructures, networks, computer systems and software in an attempt to stay ahead in global markets (Maglitta, 1995).

This burgeoning of offshore trade and global integration has not, however, been without concomitant difficulties. The crossing of geographic, legal, cultural, and temporal borders has posed complex challenges for IS managers (Doctor, 1995; LaPlante, 1995).

This paper examines one of those challenges. Specifically, the research presented here aims at examining the relationship between the strategic role of subsidiaries and control and coordination mechanisms utilized in the management of the IS function in multinational corporations (MNCs).

Control and Coordination Mechanisms in MNCs

The integration of subunits in large organizations is dependent on the manipulation of two processes: control and coordination (Cray, 1984). Broadly, control may be viewed as the process of bringing about adherence to a stated goal or policy through the exercise of power or authority (Etzioni, 1965). Whereas control is more a direct intervention into the activities of a sub-unit's activities, coordination is seen as an "enabling process" which allows for linkages between sub-units (Van de Ven, Delbecq and Koenig, 1976).

Managers in MNCs must continually face one central issue: the strategic integration of their operations in a variety of different host county environments (Prahalad and Doz, 1984). Though this integration is often achieved through the use of IT, there is a critical need to control and coordinate IT-related activities themselves. Among the many technological barriers impeding the progress of global networks is the difficulty of integrating isolated and often incompatible systems existing in MNC subsidiaries around the world (Chismar, 1994).

A mechanism of integration is any administrative device used to achieve integration among different units within an organization (Martinez and Jarillo, 1989). The term "mechanisms of integration" is used broadly and covers both control and coordination devices.

Perhaps the most comprehensive framework of control and coordination mechanisms is one proposed by Martinez and Jarillo (1989). Table 1 outlines the main features of their framework.

Strategic Role and IS Management Control

The MNC is an enormously complex entity. Dispersed resources located in the backdrop of multiple countries create a web of widely differing task environments (Ghoshal, Korine and Szulanski, 1994). Due to these differences MNCs are said to be "internally differentiated" (Ghoshal and Nohria, 1989; Gupta and Govindarajan, 1991; Ghoshal, Korine and Szulanski, 1994). Simply stated, MNCs assign different strategic roles to subsidiaries worldwide.
Gupta and Govindarajan (1991) suggest that control structures may be differentiated across subsidiaries based on the intracorporate knowledge flows ("transfer of either expertise or external market data of strategic value": pg. 773) to and from the subsidiary units. Specifically, the authors propose that substantial differences will exist between subsidiaries in the same MNC due to differences in the magnitude (high and low) and directionality (to and from the subsidiary) of subsidiary transactions with other units. Based on combinations of these two factors the authors define four strategic contexts for subsidiaries: Global Innovator (high outflow/low inflow), Integrated Player (high outflow/high inflow), Local Innovator (low outflow/low inflow), and Implementor (low outflows/high inflows).

This research proposes that subsidiaries whose strategic roles are characterized by high outflows (global innovators and integrated players) will experience greater levels of control exerted upon them by MNC headquarters.

The rationale for the above proposition is that those subsidiaries which the MNC management perceives as being more critical to the functioning of the MNC as a whole through their linkages with other units are likely to exhibit greater levels of IS controls than subsidiaries which operate more or less autonomously. In order to examine the validity of such a proposition, a case study of two British subsidiaries of a US-based MNC was conducted.

The Case Study

A. Methodology: An exploratory case study (Yin, 1994) of two British subsidiaries (referred to as Sub. A and Sub. B) of a large manufacturing MNC based in the midwest was conducted over a two-week period. Data was collected through semi-structured interviews with members of the respective IS departments. Interviewees were identified through a snowball sampling technique in which the IS heads would identify a set of prospective IS executives to interview who, in turn, would identify the next set of employees to interview. All interviews were tape-recorded and later transcribed.

The choice of two British subsidiaries was based on the need to isolate the influence of strategic role and control from other possible exogenous factors. A number of other factors have been argued to be critical in determining the forms and level of control that MNCs use to integrate their subsidiary operations. These factors range from the age and size of the subsidiary (Youssef, 1975) to the global strategy of the MNC as a whole (Roth, Schweiger and Morrison, 1991). By choosing two subsidiaries within the same country, control was achieved over factors such as environmental uncertainty and other host country factors.

B. The Company (ABC Inc.): As noted earlier, the MNC (which will be referred to as ABC Inc.) is a large manufacturing company that prides itself on being a "global company". Over 40% of its sales are outside the United States with nearly 25,000 employees spread across 130 countries. Subsidiary A is a recently acquired wholly-owned unit which supplied Subsidiary B with parts but had little interaction with any of the other units in the company. In this context, subsidiary A may be considered to be a Local Innovator (Gupta and Govindarajan, 1991) characterized by low inflows and low outflows of intracorporate knowledge. Subsidiary B, on the other hand, was the main coordination node for all other sites in the UK as well as units as far north as Russia and as far south as South Africa. In this context, subsidiary B may be considered to be a Global Innovator (Gupta and Govindarajan, 1991) characterized by high inflows and high outflows of intracorporate knowledge.

It was expected that Subsidiary B would exhibit greater levels of control exerted over their IS operation by the MNC headquarters than would subsidiary A given the greater level of knowledge outflows.

C. The Findings: Table 2 summarizes the main findings of the case study. Interestingly both subsidiaries exhibited approximately the same levels of control through "formal mechanisms" such as the use of centralized information architecture guidelines and other similar rules and procedures ordered by ABC Inc.'s headquarters. This was unexpected given the strategic role of Subsidiary A.
The results of the case study were more according to expectations with regard to the "informal mechanisms". While Subsidiary B (the Global Innovator) was expected to participate in monthly global tele-conferences (lateral relations), participate in yearly worldwide training sessions (organizational culture), and send representatives to company sponsored global integration conferences (informal communications) Subsidiary A (the Local Innovator) was not extensively involved in such cross-national interactions.

**Main Conclusions**

While strategic role of the subsidiary does seem to be an important factor, it appears the form of control must also be considered in any study examining the issue of IS control and coordination. Formal mechanisms such as standards and procedures are common to both subsidiaries regardless of their strategic role. Informal mechanisms, however, are apparently enforced only for the subsidiaries exhibiting greater levels of knowledge outflows.

Another possibility is the issue of "enforcement" of controls. While both Subsidiary A and Subsidiary B did have guidelines from headquarters on certain procedures and standards (formal mechanisms), Subsidiary A tended to treat them as suggestions rather than strict rules. Subsidiary B, on the other hand, saw them as orders from headquarters and followed them more stringently. This suggests that it may be possible that the existence of controls does not necessarily imply compliance. Further, headquarters may be adamant about compliance only in the more critical subsidiaries (i.e., those exhibiting higher knowledge outflows).

In conclusion, it should be noted that it is not possible to generalize the results from this single case study. This research does however, provide a direction for future research in this area.

**References**: Available upon request from first author.

**Table 2**: A comparison of IS function control mechanisms in two British subsidiaries of a US-based MNC. Checkmarks ("/") indicate the presence of a particular mechanism.