

**UNDERSTANDING INFORMATION TECHNOLOGY CONFIGURATION IN
BUSINESS DIVERSIFICATION: A POLITICAL VIEW**

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ABSTRACT

This research investigates how corporate politics affects information technology (IT) configuration decisions in organizational settings of business diversification. We propose that IT configuration in business diversification is a joint function of organizational political forces, modal choices of diversification strategies, and related behavioral reactions of organizational actors. This research contributes to information systems (IS) literature in theoretical deliberation of the organizational imperative in terms of IT configuration in the context of business diversification. Specifically, we advance a set of theory-driven propositions which can serve as a basis for the development of hypotheses to be empirically tested in future studies.

KEYWORDS

Information technology configuration, business diversification, organizational politics.

INTRODUCTION

Business diversification is usually viewed as an intrinsic component of strategic management [21], through which a firm strives into new lines of marketing and/or producing activities via internal business development or mergers and acquisitions [6] [20]. Business diversification entails a series of organizational transformations in administrative structure, resource configuration, and managerial practices [24] [30]. Meanwhile, by nature, information technology (IT) configuration describes and prescribes the interactive process of deployment, intervention, and integration of IT resources into overall organizational properties and practices. In the context of strategic management, IT configuration can be viewed as a structural process, during which featured characteristics and properties of IT infrastructure are produced and reproduced by managerial choices and key organizational actions [18].

Our literature review reveals that research on the interaction between IT configuration and strategic management has been dominantly focusing on (1) impacts of IT on sole industry, firm, or organizational practice, and (2) the deterministic role of IT in strategic decision making. While endeavors exist in theory building on influences of social practices and human actions in developing, appropriating, and configuring IT infrastructure, theory-driven propositions for empirical explorations are scarce. Consistent with our findings, Orlikowski [19, p. 310] calls for research attention on “the central role played by organizational actors, their institutional context, and the processes they enact in adopting and using technology.” This research investigates how corporate politics affects IT configuration decisions in the process of business diversification. Two major research questions are addressed: (1) How do political practices of business diversification influence the configuration modes of IT resources? (2) Are there any specifications of IT configuration in concert with different forms of business diversification?

ORGANIZATIONAL IMPERATIVE ON IT CONFIGURATION

The organizational imperative of IT configuration suggests that IT characteristics and impacts are determined by social contingencies such as organizational configurations, perceptions and cognitions of organizational actors. It emphasizes that the influence of human factors on IT configuration and impacts be fully realized. Under such assumptions, IT configuration is people- or organization-nuanced under indefinite managerial control and choice of human actors. Through the lens of organizational imperative, IT configuration, as manifestation and alignment of organizational properties and practices, is no more “an external object,” but rather “a product of ongoing human action, design, and appropriation, and socially constructed by human actors through the different meanings they attach to it and the various features they emphasize and use” [18, p. 400].

The main stream of the organizational imperative is the political view of IT configuration, which focuses on effects of organizational politics on IT configuration and ultimate specifications of IT artifacts [10] [15]. In organizations, conflicting objectives and interplaying human preferences and interests are a way of life [16]; and relationships and social systems of the organization are characterized by the distribution and utilization of political power [29]. Specifically, IT has long been perceived as an instrumental complex of preferences, interests, and power, facilitating and enabling human capacities of manipulating, controlling, and imposing themselves on social

systems [17]. IT can be constructed to be embedded with value systems of individual actors to establish, maintain, transform, and utilize organizational practices and properties. As such, any configuration of IT may connote the introduction, modification, and implementation of organizational structures as well as properties and practices, leading to changes in and challenges to current balance and construction of sectional interests as well as temporal power distribution [8]. As organizational actors endeavor to pursue and claim sectional interests by manipulating the process of IT configuration, political tensions may arise.

In summary, the organizational imperative views IT configuration as an intervention means of individual actors into the organization, playing significant roles in shaping and defining its underlying practices and properties, which in turn determines modes of IT configuration. The organizational imperative highlights the significance of human actions at both collective and individual levels – their political tensions, interest conflicts, and values and beliefs – on choices and directions of IT configuration.

POLITICS IN BUSINESS DIVERSIFICATION

Business diversification poses as a corporate strategy to gain and utilize economies of scale and scope, and broaden product lines and marketing opportunities for new business entries [30]. Diversifying firms deal with a series of ongoing resource interdependencies, which ultimately initiate a wide range of inter- or intra-organizational resources re-organization, and structural transformation of organizational properties. As business diversification modifies and restructures the current layout and allocation of organizational resources, top management of the organization is required to reassess and renew the relationship systems with the environment, competitors, and partners [22]. In addition, autonomy and corresponding tensions stemming from diversifying businesses usually implicate resource re-allocation and political frictions [5].

The political nuance of business diversification is connoted in different manners at different levels. At the corporate level, organizations are composed of various coalitions of interests. Moreover, the preliminary divergence and information asymmetry between top managers and principal owners may be intensified by the implementation of business diversification [7]. At the individual level, organizational actors may behave out of self-interest [7]. Interest differences among factions of diversifying firms are rather pronounced, suggesting the existence of interest conflicts and political tensions over the goals and means of business diversification [1]. Furthermore, motives for business diversification may come into play independent of organizational resources and incentives. The presence of interest conflicts and personal motives further complicates business diversification as a political process. Thus,

Proposition 1: Business diversification can be approached as a political process, within which power restructure and interest conflicts invariably occur.

POLITICS ON IT CONFIGURATION IN BUSINESS DIVERSIFICATION

In the context of business diversification, the issue of IT configuration is translated into one of building a well-agreed-upon structure of computing resources vesting the authority of IT resource control and allocation within the political system [12]. IT infrastructure has been

constructed in three primary manners: Centralized, decentralized, and federated [25]. Centralization suggests the decision-making point over the deployment of computing resources relies with a small group of corporate top managers; whereas with decentralization, managers of different business units or firms assume more power and duties [12]. The federated mode represents a highly adaptive IT resource governance mode in that it incorporates “cooperative but autonomous” IT components into one single architecture, with which both corporate and business subunits assume distinct but interrelated roles in overall information infrastructure [14] [26].

The political sense of business diversification is fully reflected in mode variations of IT configuration [15] [28]. In the course of business diversification, it is not the featured characteristics of IT applications, but the political tensions that define the nature of IT configuration. The political interactions constitute and initiate a series of formal and informal means to reconstruct corporate properties and behaviors, and redistribute political power and interests of unit coalitions, which organizational actors of different business units and firms respond to and signify in forms and features of IT configuration.

IT Configuration in Related Diversification

Business relatedness is defined as a sort of fit, by which business units or firms establish synergy through commonalities and sharing of resources and technologies to achieve core competencies [3] [11]. Firms in related diversification tend to be powered with a great deal of marketing and/or production consistencies in terms of logistics processes, targeted consumers, and product distribution strategies. Empirical studies indicate that diversifying businesses with resource relatedness are more likely to build synergy without painful incorporation. Business units or firms pursuing related diversification may expect lower interest conflict, and higher goal congruence. Datta et al. [6] suggest that potential interest conflicts in related diversification are assimilated and dissolved in economies of integration. As such, political consensus in related diversification may be easily reached, leading to corporate-wide protocols and standards. Thus, organizational actors may perceive it acceptable to centralize the authority on computing resources [12].

In the context of IT configuration, the consistencies and commonalities of shared goals, marketing and production strategies, and managerial practices within diversifying firms make it a necessity to develop and maintain an overall IT infrastructure to facilitate a comprehensive set of knowledge management capabilities [28]. The organizational objectives of related diversification on the management of computing resources are concerned with “the need to provide computing capability to all organizational units ... to maintain organizational integrity” [12, p. 325]. Consequently, firms under related diversification tend to exhibit such attributes as complementarities, consistencies and commonalities of computing resources across IT infrastructures and applications, which may lead to a centralized IT configuration.

Proposition 2: Due to political consensus, related diversifying firms are more likely to implement the centralized mode of IT configuration.

IT Configuration in Unrelated Diversification

Because unrelated diversification usually cuts across a series of product divisions in order to deal with different customers and marketing strategies, diversifying firms are highly concerned with the issues of corporate-wide interest conflicts and political tensions associated with the process of the re-allocation of organizational resources across diverse business units [2]. Hill and Hoskisson [9] found that, in unrelated diversifying corporations, organizing structures and practice are often decentralized to uphold a competitive environment between business units, which can generate an arena lacking organizational harmony, trust, cooperation, and goal congruence among managers. In addition, in unrelated acquisitions, diversifying businesses often exhibit more pronounced autonomy than in related acquisitions.

As unrelated diversifying corporations have to deal with a diversity of interest societies and power coalitions with distinct organizational tasks and objectives, organizational actors tend to operationalize their IT requirements through customizing IT governance authorities to meet the responsiveness and autonomy of rising interests and power tensions. For business units' influence to be fully realized and sectional interests to be manifested corporate-wide, it is much appreciated for organizational actors of unrelated diversifying firms that the deployment mode of IT resources is able to accommodate sufficient degree of autonomy of differing business interests and allows them to function at the unit level. The decentralized mode of IT configuration provides an opportunity for unrelated diversifying firms to acquire and deploy computing capacities and operations to satisfy distinct interest requirements [12]. Therefore, unrelated diversifying firms may very well adopt the decentralized mode of IT configuration.

Proposition 3: Unrelated diversifying firms are more likely to implement a decentralized mode of IT configuration.

Federated IT Configuration

Basically, corporations function in a joint relationship system of distinct but symbiotic environmental forces. The organizational paradox particularly associated with the introduction and implementation of business diversification leads to the search for a highly adaptive mode of IT configuration.

The federated mode of IT configuration attempts to balance the organizational paradox of business diversification by controlling interest conflicts and power tensions in a well-organized way [23]. The federated mode of IT configuration allows the authority for distinct interest needs of IT activities of diversifying units and firms, and in the meantime, maintains an acceptable level of corporate-wide coordination, collaboration, and cooperation [25].

Technically, the federated IT configuration embeds the centralized IT infrastructure with distributed applications to satisfy the organizational needs for integration and autonomy simultaneously. With the federated IT configuration, networked IT resources can be made sharable and compatible across most organizational functions [27]. That the federated IT mode can support integration and subunit empowerment within business diversification rests on its capacity of “providing a method of defining and supporting orchestration of fine grained services into more coarse-grained business services” [27, Section 4].

While business diversification provides a variety of competitive advantages in terms of organizational coordination and functional autonomy of subunits, IT practitioners believe that the design and deployment of federated IT applications may hold the strategic promise of business diversification. CentraSite [4] reports a series of business cases undergoing business diversification that, through the adoption of federated IT configuration, seamlessly integrated heterogeneous data and systems to satisfy the needs for IT resources transparency across different functional units. Koch [13] suggests that the federated IT configuration will constitute the corporate IT strategy in the age of organizational restructuring.

Proposition 4: Diversifying firms can implement the federated mode of IT configuration to satisfy the simultaneous needs for coordination and autonomy.

Human Behavior of IT Configuration in Business Diversification

As the configuration of IT resources can induce and be embedded within a variety of interest and power reconstruction within organizational settings of business diversification, the political view lends a useful framework to explain and predict the acceptance behavior of organizational members in the course of IT configuration in diversifying organizations. Basically, the political view offers an analytic tool to investigate the relationship between the degree of resistance to or acceptance of a specific IT configuration mode and the degree of power and interest reconstruction. Markus [15] suggests that “resistance to system implementation be viewed as a variable intervening between the degree of change in the intra-organizational balance of power and the degree of power shift actually realized in the organization.” Given the contextual characteristics of diversifying firms and IT configuration modes, we propose:

Proposition 5: The nature and strength of resistance to or acceptance of an IT configuration mode in diversifying firms is strongly related to the extent of the loss/gain of political power and interests of the diversifying business subunit.

CONCLUSION

This paper outlined a research framework of political implications of IT configuration in business diversification. A set of theory-driven propositions was advanced to address political functions of strategic choice and social actions of organizational actors during the course of the configuration of IT resources in diversifying corporations. It is our hope that this work will serve as an impetus and a basis for future research in which specific hypotheses, developed from the research propositions, are empirically assessed and tested.

REFERENCES

References available upon request from Tao Hu at thu@memphis.edu or Xihui Zhang at xihui.zhang@memphis.edu.