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The antecedents of process integration in business process outsourcing and its effect on firm performance

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ABSTRACT

As service processes become candidates for outsourcing, interest in the global business process outsourcing (BPO) industry has grown considerably. In this study, drawing on information processing theory, we examine the role of integration in BPO and its effect on BPO firm performance. BPO Integration is concerned with the overall coordination of business processes and activities across different units within the outsourced environment. It involves both internal process integration – effective integration of task execution within the BPO and external process integration – effective integration between the BPO and their clients. Using survey data gathered from 205 Indian BPO service providers, we analyze the antecedents of process integration and its impact on BPO performance. The antecedents we examine are task complexity, task security, end customer orientation of the client and IT capability of the BPO. Among other results, we find that both internal and external process integration partially mediate the impact of the antecedents on performance. We draw managerial implications of our research to practicing BPO and client managers on how BPO outsourcing can be made successful.

1. Introduction

Continuous improvements in telecommunications and information technology (IT), along with the availability of a skilled global workforce and reduction in international trade barriers have spurred the breakdown of service delivery value chains (Apte and Mason, 1995; Metters, 2008; Mithas and Whitaker, 2007). Many firms have now shifted from a strategy of ownership of assets to a strategy of outsourcing some or all the components of a service to offshore locations to reduce cost, improve cycle times and to gain innovation capabilities (Kulkarni, 2008). These services, given their reliance on information technology for delivery, are labeled information technology enabled services (ITES). In particular, the offshoring of service work from developed countries to emerging market economies has gained significant public attention (Metters and Verma, 2008). This trend is part of a larger emerging phenomenon of business processes outsourcing (BPO) to a third party service provider. These BPO organizations play an important role in a buying firm's strategy by allowing clients (outsourcer) to specialize in their core competencies and serve as the client's extended enterprise (Aron and Singh, 2005).[1] The BPO market over the past few years has grown significantly and the spending for IT–BPO services is estimated to be about $976 billion (NASSCOM, 2009). Further, the BPO component of this spending grew the highest at 12% in 2008 underscoring the importance of this sector (NASSCOM, 2009).

Notwithstanding any substantial potential savings, a number of firms are unable to realize the benefits of offshoring. Some practitioners have noted that BPO problems are related to "dark underbelly of integration failures" (Cioni, 2007, p. 1). For example: (a) Alster (2005) predicted that during 2005–2008, 60% of organizations outsourcing customer facing services would face customer defections and incur hidden costs that may nullify savings; (b) Aron and Singh (2005) indicated that half the firms that shifted processes offshore failed to generate expected financial benefits; and (c) Robinson et al. (2008) indicated that more than 75% of

[1] Consistent with Sako (2006), outsourcing occurs when a firm opts to "buy" rather than make things "in-house." Further, *Offshoring* occurs when the firm moves any of its activities overseas that are then conducted by third party service providers or by their wholly owned subsidiaries. Therefore *offshore outsourcing* occurs when a firm does both.

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service providers they interviewed felt that clients were ill prepared for the outsourcing initiative and lacked a well-developed strategy and understanding of how outsourcing would work. These anecdotal findings suggest that the BPO firm's performance may not be aligned with the expectations of the client. Past literature suggests that an important reason for this problem could be the inability of the service providers and their clients to manage the interdependencies of the processes, thus leading to their failure in offshore environments (Mani et al., 2007; Aron and Singh, 2005; Cioni, 2007). Effective process integration, both within the service provider and with their client, may alleviate poor performance.

While researchers have long articulated the requirement for a close, integrated relationship between supply chain partners (e.g., Armistead and Mapes, 1993), only recently has there been a call for a systematic approach to study supply chain integration. Increasingly, global competition has caused several firms to rethink the need for cooperative, mutually beneficial partnerships and the joint improvement of inter-organizational processes has become a high priority (Zhao et al., 2008). In particular, as BPO firms (also referred to as service providers) work on diverse processes, effective process integration could become an important prerequisite to executing complex tasks (Espinosa et al., 2007). The ability to integrate processes from multiple contexts can provide the BPO firm with unique capabilities that are non-imitable and non-substitutable, enable them to transition processes quicker, reduce risks of process failure, improve customer service levels and consequently performance.

Our paper differs from past work in the BPO environment and in the area of supply chain integration in multiple ways. First, integration in the context of supply chain management has been examined in the past by multiple researchers (e.g. Frohlich and Westbrook, 2001; Mitra and Singhal, 2008; Narasimhan and Kim, 2002). However, research on integration in the context of services is scarce. Roth and Menor (2003) in setting the agenda for research on service operations suggest integration as an important and critical issue. BPO operations are characterized by additional complexities that go beyond traditional services making integration more important. The contents of BPO services (e.g., technical advice, legal services, consulting reports, market research, etc.) are hard to define. Further, organizations that outsource cannot just supply service providers with specifications and expect them to perform well (Aron and Singh, 2005). Until service providers can manage these tasks well, they may make more errors and execute tasks inefficiently when compared to onshore employees. Additionally, a BPO operation may often require a quick turn-around time from the offshore employees. Further, associated risks of failure for BPO firms may be higher as they are bound by contractual obligations to their clients. Effective integration may dispel these problems. This is an important area to explore because failure to effectively integrate in a service environment may lead to poor performance. Our paper contributes broadly by investigating the issue of both external and internal process integration in BPO service operations.

Second, many of the BPO functions require embedded, complex knowledge components (Youngdahl and Ramaswamy, 2008). Therefore, tasks may vary in their range of complexity and consequent execution. The quality of these services may often depend on the coordination between each process and sub-process shipped offshore (Aron and Singh, 2005). We contribute to the understanding of BPO performance drivers by arguing that integration within the service provider and between the client and service provider are important elements in service execution that improve performance.

Third, recent work in the BPO domain has examined various issues underlying BPO operations and management (e.g. Levina and Vaast, 2008; Youngdahl and Ramaswamy, 2008; Ellram et al., 2008; Tanriverdi et al., 2007). However, this literature has not examined the role of process integration in driving performance of a BPO firm. We examine the drivers of BPO firm performance by taking the service provider's perspective. As the BPO industry becomes more prominent, examining the drivers of BPO performance may enable clients to take more informed decisions on managing offshore processes.

Finally, we contribute to the relatively scarce but emerging area of research in international service operations. While most of the international work in the context of services (e.g. McLaughlin and Fitzsimmons, 1996; Voss et al., 2004; Roth et al., 1997) focus on the individual consumer effects, our research focuses on the "production of services" (Metters, 2008, p. 199) in business to business settings where the role of integration may assume greater prominence. Against the backdrop of the above discussion, we answer the following research question: *What are the key antecedents to BPO internal and external process integration and how does process integration affect BPO firm performance?* We present a theoretical framework anchored on information processing theory (IPT) and analyze survey data collected from 205 India-based BPO service providers. Based on our analysis, we draw insights on drivers of BPO performance and BPO process integration. The rest of the paper is organized as follows. In Section 2, we discuss the conceptual model and present our hypotheses. In Section 3, we describe the research design, sample and scale validation. In Section 4, we present our analysis and results. In Section 5, we discuss the managerial implications of the research findings. Finally, in Section 6, we conclude with the research limitations and future opportunities.

2. Theoretical framework and research hypotheses

2.1. Information processing theory

The conceptual model that we develop and test in this paper draws upon information processing theory (Galbraith, 1973). The basic function of any organization is to create an appropriate configuration of processes, structure and information technology to facilitate the collection, processing, exchange and distribution of information (Galbraith, 1973). Information processing in organizations is defined as the gathering of data, the transformation of data into information, and the communication and storage of information (Galbraith, 1973; Tushman and Nadler, 1978). Further, for effective control leading to successful firm performance, information processing requirements should be aligned with information processing capabilities of both internal and external process control mechanisms (Galbraith, 1973; Daft and Lengel, 1986). IPT suggests that the most effective organizational design strategies are those that recognize an appropriate fit between an organization's ability to handle information and the required information (Egelhoff, 1982; Huber, 1990). While IPT shares with the transaction cost economics the importance of cost saving in information processing, more importantly, it sheds light on the information processing mechanisms and capabilities furnished by inter-organizational design and relationships.

2.1.1. BPO process integration

BPO process integration is concerned with the overall coordination of business processes and activities in the outsourced environment. This involves effective division of tasks across units and consequent coordination to execute the tasks within the organization and with the client (Van de Ven et al., 1976). Further, when uncertainties are high, considerable amount of mutual adjustments are accommodated by the diverse groups (Van de Ven and Delbecq, 1974). The literature suggests that greater the extent to which work is distributed, the larger the effort that is required to coordinate and integrate these tasks (Hui et al., 2008; Espinosa et al., 2007). Integration can be both external and internal to the firm (Rosenzweig