

EXPLORING THE ORGANIZATIONAL STRUCTURE AND COORDINATION OF MULTI-NATIONAL IT OUTSOURCING VENDORS

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Abstract

This paper explores the organizational structure and coordination mechanisms used by large ITO-vendor organizations. Five global ITO-vendor organizations were studied. The results show that all five use a “front-back hybrid” structure. All five vendors divide their front-end labor pool according to the types of customers that they serve. On the back-end, their labor pools are organized around the functions offered by the company. Such a front-back structure enables them to focus simultaneously on developing distinctive capabilities, capturing scale and nurturing long-lasting relationships with their customers. To deliver each customer’s requirements, resources from the various front and back-end units are coordinated using a hybrid-matrix approach. This structure enables quick response to a client’s shifting requirements. The primary contribution of this paper is its finding that, consistent with the theory proposed by Galbraith et al. (2002) for organizations of this type, all five global ITO vendors had adopted both front-back hybrid and cross-business-team approaches.

Keywords: Information Technology Outsourcing, vendor organization structure, coordination.

1 Introduction

Information Technology Outsourcing (ITO) is a contractual arrangement to source all or part of an organization's IT and/or IS services from one or more external service providers (Goles & Chin, 2005). By 2000, this practice had been widely adopted by most companies in Australia, USA, and UK (Cullen & Willcocks, 2003), and by 2010, XMG Global estimated the global ITO market was USD 370 Billion in 2009 and forecast a growth of 14% for 2010 (XMG Inc., 2010).

Although outsourcing is a much-researched topic (Dibbern et al. 2004), only limited academic research has been conducted to understand how IT outsourcing vendors manage their service provision. The literature has discussed various types of client-vendor interfaces (e.g. Willcocks & Lacity, 2006, pp. 240-242), and various kinds of the vendor capabilities (e.g. Feeny et al., 2005; Hyder et al., 2006; Levina & Ross, 2003), but we can find no papers on the most effective organizational designs for ITO-vendor organizations.

Organization design was selected as the focus of this study because it reflects a company's approach in achieving competitiveness in its particular business context (Brickley et al., 2003; Mintzberg, 1992; Simons, 2005). An understanding of ITO-vendor organizational design should, we argue, provide both client and vendor organizations with insights into the best way to manage relationships between the parties, thereby contributing to higher quality service and, ultimately, ITO success (from both client and vendor points of views).

There is a rich literature on organizational design that can be used to guide the study of ITO-vendor organizational design. Brickley et al. (2003) suggest that a company's strategy will determine the kind of organizational architecture required, which includes authority assignment, compensation system, and performance-measurement system. Galbraith et al. (2002) say that organizational design involves defining the structures, interaction processes, reward systems, and people practices an organization needs to achieve the its strategy. Mintzberg (1992) argues that there are five fundamental organization structures: a simple structure, a machine bureaucracy, a professional bureaucracy, a divisionalized form, and an adhocracy, for organizations to choose from. He also says that organizational structure must be aligned to the organization's situation (e.g. size, age, business environment, etc.). Despite differences in various organizational-design researchers' arguments, there is a consensus that poor choices in organizational design can lead to less than optimal performance, and that strategy has a strong influence on both organizational structure and coordination mechanisms (e.g. Burton et al., 2006; Galbraith et al., 2002; Mintzberg, 1992).

With these insights in mind, this paper seeks to answer the two following research questions:

1. *How are multi-national IT outsourcing vendor organizations structured and coordinated?*
2. *Why are multi-national ITO vendors structured and coordinated the way they are?*

To address these research questions, the remainder of this paper is organized into five sections. First, current knowledge about how an organization can and should be structured is reviewed. Second, the empirical research methodology used in this study is described. Third, results from analysis of five ITO-vendor-organization case studies are discussed. Finally, limitations, possible directions for future research, and conclusions from this study are presented.

2 Organization Design

Organization design is the "deliberate process of configuring structures, processes, reward systems, and people practices and policies to create an effective organization capable of achieving the business strategy" (Galbraith et al., 2002, p. 2). Although there are many models of organization design, e.g., the Star Model (Galbraith et al., 2002), the Three-Legged-Stool Model (Brickley et al., 2003), the Organization in Five (Mintzberg, 1992), and the 2 x 2 Organizational Design Space (Burton et al., 2006), most models present many closely related concepts. Of them, Galbraith et al.'s (2002) Star model (Figure 1) provides a convenient way of organizing the discussion of organizational design for this paper. It is similar in many ways to that of Mintzberg (1992).

Galbraith et al. (2002) argue that good organizational designs achieve fit between the five major design components shown in Figure 1: (a) strategy, (b) structure, (c) lateral capability/coordination (later labelled as “processes”), (d) reward systems, and (e) people practices. Each of these five components is now discussed in turn, with a particular focus on the first three: strategy, structure, and coordination.

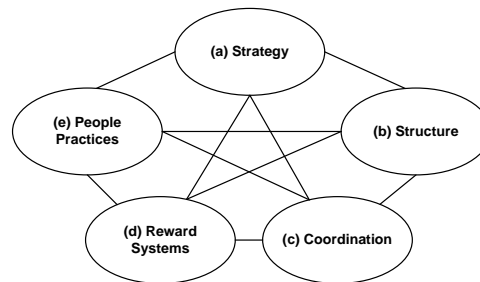


Figure 1. Star Model (adapted from Galbraith, 1995, p. 12; Galbraith et al., 2002, p. 2)

2.1 Strategy

Strategy is the organization’s direction including its vision, mission, and short-term and long-term goals (Galbraith et al., 2002). Strategy also specifies the organization’s source of competitive advantage and how it chooses to position itself in the market place (Porter, 1996). Brickley et al. (2003) add that strategy reflects the “big picture” of an organization’s issues such as what products or services are to be produced and for which customer segments. For those reasons, strategy is considered as a mandatory prerequisite for organizational design. Various researchers have discussed concepts similar to strategy under different headings, for example, Buttle (2004) uses the term “business logic” and Kotler (2000) uses the term “business orientation”.

According to Buttle (2004), Galbraith et al. (2002), Kotler (2000), and Treacy and Wiersema (1997), the following are general kinds of companies based on their core strategy:

- Product-oriented companies attempt to be the best in producing and innovating products or services in the market (Galbraith et al., 2002; Kotler, 2000, Treacy and Wiersema 1997).
- Operational-excellence companies focus on standardizing processes and achieving economies of scale (Galbraith et al., 2002; Kotler, 2000, Treacy and Wiersema 1997).
- Customer-intimacy companies focus on understanding the customer’s needs and delivering tailored solutions to address those needs (Buttle, 2004; Galbraith et al., 2002; Kotler, 2000).

It is important to note that large organizations can have various sub-organizations. Each sub-organization may have a different strategy than its parent organization or counterparts.

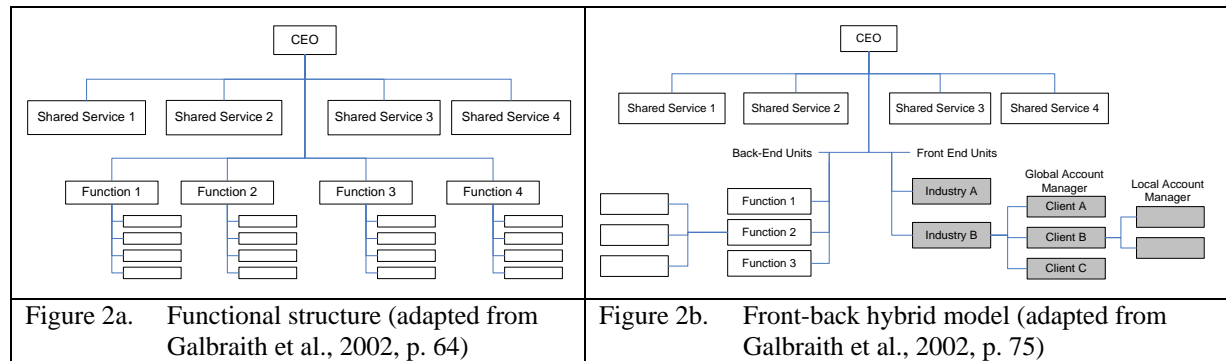
2.2 Structure

Organizational structure defines the location of formal power and authority within an organization (Galbraith et al., 2002). It involves grouping people into various organizational components, defining relationships between each component, and designing the hierarchical structure which integrates all of those groups (Galbraith et al., 2002). In organizational terms, grouping is defined as a “process of successive clustering” where individual positions are grouped into a first-order cluster which will then be grouped into a larger cluster and so on (Mintzberg, 1992, p. 45).

Galbraith et al. (2002) suggest that there are five common ways of structuring an organization, namely grouping by function (Figure 2a), by geography, by product/outcome, by customer or market segment, and the so-called “front-back hybrid” (Figure 2b). The front-back hybrid structure combines the features of product and customer structure to gain the benefits of both structures (Galbraith et al., 2002). Galbraith et al. (2002) argue that the front-back hybrid structure is best for large organizations that have multiple product lines, serve various market segments in a global environment, need to maximize both customer and product excellence, and possess managers who are skilled enough to

manage the complexity. Aligned with Galbraith et al.'s (2002) argument, George and Jones (2008) suggest that the use of multiple structures such as front-back hybrid is likely to occur in large organizations to address various challenges facing the organization. In Figure 2b the customer-facing front-end units (gray boxes) are organized by industry (i.e., customer segment) and the back-end units (white boxes) are structured by function (i.e., product lines).

Mintzberg (1992) model that is closest to Galbraith et al.'s (2002) front-back hybrid is the Adhocracy. An Adhocracy is used to concurrently group a firm's human resources by function and market in a matrix structure. The matrix structure is used as a liaison device to coordinate business units from both front-end (i.e., grouped by market) and back-end units (i.e., grouped by function or product).



2.3 Coordination

After strategy and organizational structure have been defined, Galbraith et al. (2002), George and Jones (2008), and Mintzberg (1992) suggest that the next step in organizational design is to define how members of the organization are to *coordinate* their work. All of them then suggest various fundamental coordinating mechanisms, e.g., direct supervisory control, as well as liaison devices such as task forces (disbanded after the job is done), standing committees, and matrix-structured organizations. It is important to note that no single coordinating mechanism is sufficient to coordinate the whole organization. In practice, many mechanisms are used concurrently in various parts of an organization (Mintzberg, 1992).

2.4 Reward System

A reward system involves defining expected behaviors and encouraging people to follow them (Galbraith et al., 2002). According to Galbraith et al., there are four components of a reward system: performance metrics, desired values and behaviors, compensation (monetary rewards), and recognition (non-monetary rewards). Burton et al. (2006) and Brickley et al. (2003) use the terms "evaluation" and "compensation/incentive" to describe similar reward-system choices.

2.5 People Practices

People practices define the overall human-resource activities. These include assessment and selection, performance feedback, learning development, and rewards and recognition (Galbraith et al., 2002).

2.6 Organizational Design in the remainder of this paper

Although Reward Systems and People Practices are also critical to effective organizational design, the two research questions in this paper address only the first three dimensions: Strategy, Structure, and Coordination mechanisms. Therefore, the remainder this paper focuses only on the strategy, structure, and coordination mechanisms used in global IT outsourcing organizations.

3 Methodology

Purposive sampling as proposed by Neuman (2005) was used to explore the organizational practices of global ITO vendors. As suggested by Neuman, purposive sampling is appropriate for research

targetting a very specialised population that is quite difficult to reach. Using the list of all global ITO vendors with office representation in Australia as the sampling frame, seven interviews were conducted with client-facing managers in five ITO-vendor organizations. Since these are not true case studies (normally one might expect many more interviews per case), they are described in this paper as “mini-cases”. Each mini-case organization is a multi-national ITO provider with revenue ranging from USD 5 billion to USD 50 billion. Table 1 summarizes the five mini-cases. It is important to note that VENDOR_B and VENDOR_E are parts of different larger firms.

	VENDOR_A 2008 Data*	VENDOR_B 2007 Data*	VENDOR_C 2008 Data*	VENDOR_D 2008 Data*	VENDOR_E 2007 Data*
Revenue	USD 20 Billion	USD 20 Billion	USD 5 Billion	USD 5 Billion	USD 50 Billion
Employees	180,000	180,000 ^	90,000	90,000	380,000 ^
Global Presence	50 countries	World wide	30 countries	40 countries	World wide
Interviewee position	Account Manager	Head of Financial Service Sector, and Client Delivery Manager	Engagement Manager, and Senior Engagement Manager	Account Manager	Client Executive

*All figures are approximations, to avoid disclosure of the company’s identity

^ Total number of employees in the whole corporation, not only in the IT outsourcing-related division

Table 1. Summary of the five mini-cases

The seven interviews were conducted during September and October 2008. Each interview was conducted face-to-face with an average of one hour duration using a set of ten open-ended questions. The questions focused on the account management practices in each ITO vendor (Kempeners & van der Hart, 1999). The unit of analysis was the ITO vendor’s operating core (Mintzberg, 1992), which covers all organizational parts directly involved in the account management and service delivery.

Each interview was recorded with the permission of the interviewee, and transcribed to enable better analysis. To further increase internal validity, conclusions from each session were then clarified to the corresponding respondent. Interviewees were promised that all material discussed in the interviews would be kept confidential and would be published anonymously. Thus vendor names are not disclosed, and the figures in Table 1 have been chosen to avoid disclosure of the vendors’ identity.

While five mini-cases can be considered as a small number to represent the whole ITO vendor population, the number is considered sufficient since during the last two interviews, little new knowledge about vendors’ organizational design was acquired. Thus, theoretical saturation had been reached by the end of the seventh interview.

4 Results Q.1: How are multi-national ITO vendors structured and coordinated?

The interviews reveal that all five ITO vendors were organized using front-back hybrid models as shown in Figure 2b. Further, their front-end and back-end units were all coordinated using cross-business-teams. Depending on its size, each account was handled by one or more account teams which comprised members from both front-end and back-end units as depicted in Figure 3. The gray boxes in Figure 3 represent the front-end units’ personnel and the white boxes represent the back-end units’ personnel. While Figure 3 resembles a matrix structure, the dotted lines are intended to show that account managers had less formal authority over resources in their accounts than the resource managers who “owned” the resources. Such practice conforms to what Galbraith et al. (2002) describe as a cross-business team approach (which does not give equal power over shared resources), and which George and Jones (2008) describe as a cross-functional team. According to George and Jones (2008), under such a coordination structure, each team is composed of members from various divisions and reports to the leader of the team.

Despite the similarity in structuring their organizations, it is important to note that each mini-case organization had its own unique industry focus and unique set of specializations. Thus, each vendor had a unique set of front-end units, and also, a unique set of back-end units. Table 2 summarizes the five mini-case organizational designs. Each mini-case is now discussed in turn.

	VENDOR_A	VENDOR_B	VENDOR_C	VENDOR_D	VENDOR_E
Focus	Customer	Customer	Customer	Customer	Customer
Structure	Front-back hybrid <i>Key Roles:</i> Client-Partner, Project Manager, Account Manager, & Resource Manager.	Front-back hybrid <i>Key Roles:</i> Account Manager, Client Delivery Manager, Account Technical Lead & Tower Manager	Front-back hybrid <i>Key Roles:</i> Engagement Manager, & Delivery Manager	Front-back hybrid <i>Key Roles:</i> Account Manager, Delivery Manager, & Business Development Manager	Front-back hybrid <i>Key Roles:</i> Client Executive, Sales, Delivery Manager, & Global Executive Manager
Coordinat. Mechanism	Cross-business team	Cross-business team	Cross-business team	Cross-business team	Cross-business team

Table 2. Summary of organization design in the five mini-cases

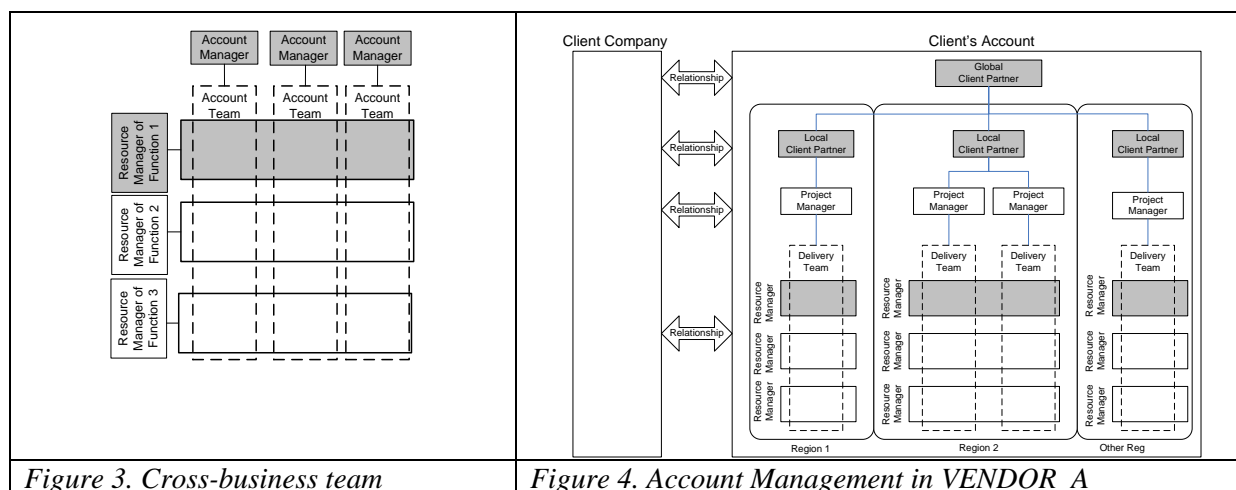


Figure 3. Cross-business team

Figure 4. Account Management in VENDOR_A

4.1 Mini-case One: VENDOR_A

Account management activities in VENDOR_A involve two major groups: OG (Organizational Group) and SITC (Strategic IT Consulting). The OG is divided by customer industry (e.g., resources, financial, etc.) and works at the front-end of the company, i.e., facing the customers. In the back-end, the SITC members are clustered by functions (e.g., strategy, management consulting, etc.). Figure 4 shows how front-end and back-end units are coordinated for a client's account. The gray boxes represent the OG personnel and the white boxes represent the SITC personnel.

A client account in VENDOR_A is managed by one or more Client Partners (part of OG). When the account involves multiple regions, a Global Client Partner is appointed to coordinate the Local Client Partners in all of the involved regions. Interfaces between the local and the global client partner are not in the nature of superior-underlings but one of partnering. The ultimate responsibility of a client partner is to manage the relationship with his/her client. Implicit in that responsibility is the need to understand client needs, offer solutions, and oversee the delivery of solutions.

For each business opportunity with the client, a bidding team is formed to bid for the opportunity. Once the job is won, a project manager is appointed. As shown in Figure 4, the project manager is responsible for leading a delivery team comprised of many people from various SITC groups and a small number of people from OG. Each team member is assigned to work on the project and will be returned to his/her original group once the project is over. Although each delivery-team member has responsibility to report to his/her project manager, the project manager only has a limited formal

authority over his/her project members. Formal authority over each project member is primarily owned by the member's SITC manager.

A key role which does not appear explicitly in Figure 4 is the Account Manager. An Account Manager in **VENDOR_A** acts as a liaison between SITC and OG. He/she sells SITC's services to the Client Partner who needs them. Based on the profit margin offered by the Client Partner, the Resource Manager (who manages a particular SITC group) decides whether he/she would want to support the project or not. If a Resource Manager refuses to support a particular project, then the Account Manager tries to source the required resources from a similar SITC group in other regions. An exception is made for projects which involve Platinum clients who are top-priority clients. For such clients, a Resource Manager must provide the best resources available to support a project regardless of the amount of profit offered by the Client Partner. While claimed to seldom happen, there were times where the Client Partner was unable to find the required resources to support a particular project. In this situation, the Client Partner is forced to forfeit the project. In contrast, there are also times where resources are abundant and jobs are scarce. In this situation, idle resources "sit on the bench", where they are kept busy doing "peripheral" activities such as training.

4.2 Mini-case Two: VENDOR_B

VENDOR_B is part of a larger company which has over 100,000 employees globally. **VENDOR_B** manages its front-end units using a two-dimensional matrix. The first dimension is the client's revenue where clients providing revenue greater than \$2 million per year are handled by the Enterprise group, clients with annual revenue between \$2 million and \$100,000 are managed by the Commercial group, and other smaller clients are managed by the Small-to-medium business (SMB) group. The second dimension segments the front-end units by industry, e.g., financial, public sector, etc. Consequently, each account manager inside the matrix reports to both the head of the revenue group and to the head of the industry group. On the back-end, resources are clustered into various Towers where each Tower represents **VENDOR_B**'s specialization area (e.g. UNIX, Network, etc.). Figure 5 shows how front-end (gray boxes) and back-end (white boxes) units are coordinated to manage a client's account.

VENDOR_B has different delivery approaches for each client-revenue group. Jobs from SMB clients are not directly handled by **VENDOR_B** but are subcontracted to **VENDOR_B**'s business partners. In contrast, Enterprise clients will have full attention from **VENDOR_B**. One Enterprise Account Manager is dedicated to each Enterprise client to oversee the whole client-vendor relationship. Depending on the client requirements, the Enterprise Account Manager may supervise many account teams to deliver various services (see Figure 5). Each account team consists of an Account Manager who is mainly responsible for exploiting business opportunities from the client and a Client Delivery Manager who is mainly responsible for delivering the client's requirements. Since a Client Delivery Manager oversees many accounts at the same time, he/she is supported by an Account Technical Lead who directly manages day-to-day delivery activities. The Account Technical Lead manages a delivery team whose member are drawn from various Towers in many regions. However, the Account Technical Lead and the Client Delivery Manager only have a limited formal authority over the team members. Formal authority over each team member is primarily owned by the Tower Manager who leads the member's base unit.

In **VENDOR_B**, Client Delivery Managers have total cooperation from Tower Managers to support their projects. In other words, a Client Delivery Manager has total control of where he/she prefers to obtain a resource. However, **VENDOR_B** applies a costing guideline for obtaining any kind of resource. Costing guidelines are considered by a Client Delivery Manager prior to requesting a particular resource. The costing guideline is also considered by Account Managers when proposing business to their clients.

4.3 Mini-case Three: VENDOR_C

VENDOR_C is an outsourcing vendor with branches located in around 30 countries around the world. **VENDOR_C** organizes its front-end units based on the types of industry they serve, such as Finance to serve banks and other kinds of financial institutions. On the back-end, its labor is divided based on functions that **VENDOR_C** offers to market such as system integration, testing, enterprise systems,

etc. Figure 6 shows how **VENDOR_C**'s front-end (gray boxes) and back-end (white boxes) personnel are coordinated to manage a customer account.

Unlike the other four organizations, which clearly separate the role of sales and delivery to different positions, **VENDOR_C** merged the two roles and assigned them to an Engagement Manager (see Figure 6). Based on the client's account size, an account could have more than one Engagement Manager led by a Senior Engagement Manager. A large account is divided by service type and/or client location. Each Engagement Manager is responsible for delivering a particular set of services in a particular region. He/she is supported by a dedicated team and several project teams comprised of personnel from various back-end units. The dedicated team work full-time for a long period of time for a particular client's account team. By contrast, project teams have a shorter life time and their personnel can work part-time in various projects simultaneously. Consequently, personnel who have multiple projects will have many superiors: one fixed superior who is their business-unit boss, and one or more superiors in charge of their projects. However, power over personnel used in each project is mostly owned by the Delivery Manager who supervises the corresponding personnel.

Prior to gathering the required resources, the Engagement Manager has to negotiate with the Resource Manager who "owns" the resources of interest. The Engagement Manager has the authority to choose what kinds of resources he/she needs and decide where to source them from, based on the costs and capability offered by each pool of resources in each region. On the other hand, the Delivery Manager (i.e. the resource manager) has the authority to decide whether he/she wants to provide the resources or not, based on the benefit offered by the Engagement Manager. If the Delivery Manager refuses to help, the Engagement Manager has to source the required support from other regions that provide similar services.

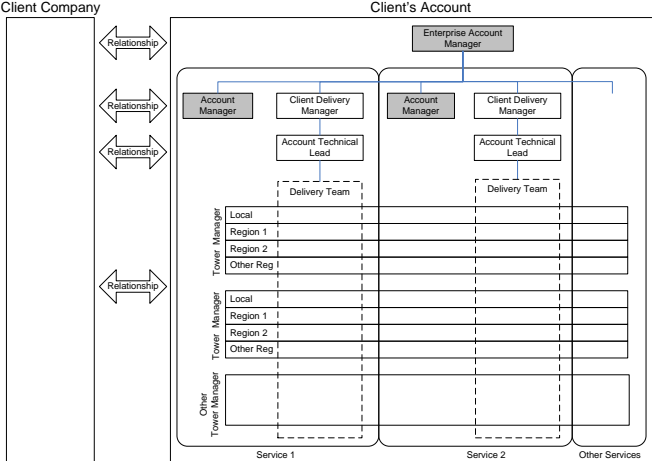


Figure 5. Account Management in **VENDOR_B**

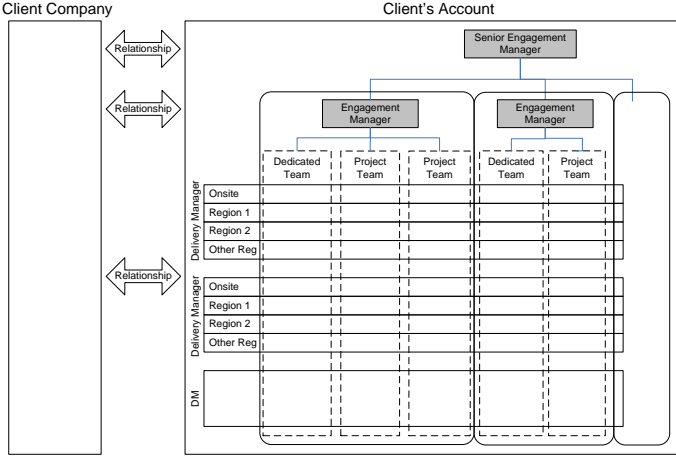


Figure 6. Account Management in **VENDOR_C**

4.4 Mini-case Four: VENDOR_D

VENDOR_D was similar in size to **VENDOR_C**, and its organizational design was similar. Due to space limitations, it is not discussed further in this paper.

4.5 Mini-case Five: VENDOR_E

VENDOR_E is a part of a larger global company and, based on the revenue, is also the largest ITO vendor in this study. As in the other four mini-cases, **VENDOR_E** mainly clustered its front-end units by industry and grouped its back-end units by the types of solutions they offer. Figure 8 shows how **VENDOR_E** coordinates its front-end (gray boxes) and back-end (white boxes) units to manage a client's account.

A client account in **VENDOR_E** is managed by a Client Executive, and in a global account, a Global Managing Director role is introduced to coordinate various regional Client Executives (see Figure 8). The primary responsibilities of a Client Executive are to maximize the account's revenue and profit, induce more relationship signing, and ensure customer satisfaction. To fulfil such responsibilities, a

Client Executive is supported by two distinct roles: a Sales Manager and a Delivery Manager. A Sales Manager is responsible for continuously offering new business solutions to the client; a Delivery Manager is expected to deliver those solutions.

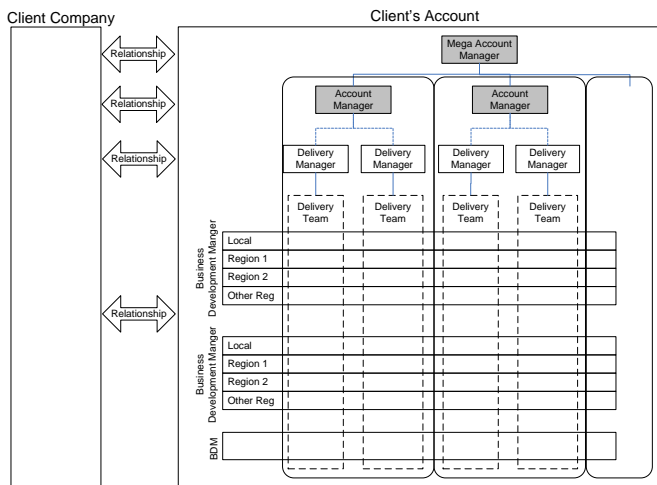


Figure 7. Account Management in VENDOR_D

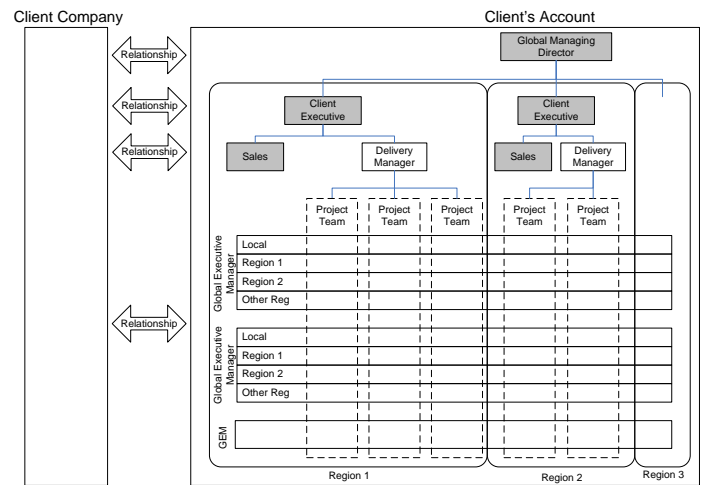


Figure 8. Account Management in VENDOR_E

For each project, a Delivery Manager forms a project team, and based on the project requirements, the project team will have several Silo Leads who will manage resources from the corresponding back-end units. In VENDOR_E, a Client Executive does not have direct authority over the resources. Thus, a Client Executive needs to convince the resource manager who owns the required resources to support his/her project. However, if the resource manager refuses the request, the Client Executive can escalate the request to the resource manager's superior up to the Global Executive Manager who globally manages the corresponding resource. Eventually, the Client Executive will be able to acquire the resources required for his/her project. An exception is made for projects from the top-ten clients, where each back-end unit is mandated to directly give the best resources available to deliver project goals.

4.6 Conclusion on Research Question 1

All five global ITO vendors in this study are organized using the front-back hybrid structure. All divide their front-end labor based on the types of industry/market they serve, and their back-end labor on the kinds of function offered by the company. The two ends are coordinated using a cross-business team to manage a client's account. Based on the account's requirements, one or more account teams is assembled from various business units (both front-end and back-end) with the objective of delivering the client's particular needs. When the objectives have been accomplished, the team is disbanded and the team members return to their original units. Upon return, the personnel are ready to be assigned to another account team. The use of complex multi-dimensional matrix structures as seen in VENDOR_B and VENDOR_D is considered normal. However, these matrix structures are usually applied only to managerial-level positions.

Such matrix-like reporting structures are very similar to the shifting-matrix coordination discussed by Mintzberg (1992), where personnel concurrently have one fixed boss who leads their home business unit, and one or more shifting bosses who lead their project teams. However, Mintzberg's shifting-matrix coordination gives equal formal-authority over the shared resources, whereas in the five mini-cases described above, account managers have less formal authority over resources compared to the corresponding resource managers who "own" the resources.

5 Results Q.2: Why are ITO Vendors Structured and Coordinated the Way They Are?

The previous section identified the use of the front-back hybrid model to *structure* ITO-vendor organizations and the use of cross-business teams for *account-management*. This section seeks to explain why all five ITO vendors studied have chosen to use a similar organization-design approach.

As above, the discussion is organized around the first three factors from Galbraith et al.'s (2002) model of organizational design: Strategy, Structure, and Coordination.

5.1 Strategy

In terms of the strategy types discussed in section 2.1, all five ITO vendors in this study have adopted customer-intimacy strategies (Buttle, 2004; Galbraith et al., 2002; Kotler, 2000). It is likely that such strategies were adopted because the vendors want to build long-term relationships with clients through tailoring their products and services to deliver solutions focused on their customers' requirements (Galbraith, et al., 2002). These relationships are their preferred long-term sources of revenue:

"...there is this ongoing relationship with the client. We have relationships that span decades." (Account Manager, VENDOR_A)

However, each vendor also needs to pursue aspects of both product-oriented and operations-oriented strategies (defined in section 2.1) since (a) each seeks to differentiate itself from competitors, and (b) global ITO vendors are often expected to deliver cost-effective services to their clients.

5.2 Structure

All five ITO vendors appear to have adopted front-back hybrid structures because their front-end structures enable them to focus intently on their customers, as is required for a customer-intimacy strategy, and their back ends enable them to manage efficient provision of skilled resources. The front-end's single view of the customer is important for the vendor to manage and oversee each account's overall performance. From the client's perspective, the single point interface is convenient since it means a single point of accountability for many outsourced services.

However, fit between structure and strategy (in this case, customer intimacy) is only one among many factors that Galbraith et al. (2002) argue should affect the choice of structure. In particular, Galbraith et al. (2002) argue that the front-back hybrid structure is best for a large organization which has multiple product lines, targets various market segments in a global environment, needs to maximize both customer and product excellence, and possesses skilled managers to manage the complexity. While the last criterion is difficult to substantiate, all five vendors in this study fit the other criteria. First, all five are large global organizations (see Table 2) serving both local and global customers. Second, all have multiple product lines which are identifiable by their various kinds of back-end units. Third, all target multiple market segments which can be identified from their various front-end units. Lastly, each vendor is able to overcome or afford the disadvantages of the front-back hybrid structure: contention over resources, disagreement over prices and customer needs, determining the placement of marketing, conflicting metrics, information and accounting complexity (Galbraith et al., 2002). For example, to overcome problems with disagreement over prices, VENDOR_B utilizes a price matrix to specify the price of each kind of resources in each region. Another example is VENDOR_A's ability to overcome the accounting complexity by implementing an advanced accounting system:

Vastly complicated and sophisticated system. Each person has a bill code and a cost code and those bill codes are based on what the market can bear and the cost codes are determined by what your pay is (and other costs you can calculate) which is what is called a CCI, which is control of the client income. Then you have got your whole figures when you put together the team and gives you a total cost over time and then there is capitalisation charges. It's just awesome, and we have got very sophisticated tools to manage this. (Account Manager, VENDOR_A)

Thus, it can be concluded that the front-back hybrid structure has been selected because it is a good fit with the strategic and operational needs of the five vendors (size, market segment, product line, etc.), and has disadvantages that are manageable by each vendor.

5.3 Coordination

In the five mini-cases each organization concurrently utilizes various coordinating mechanisms to integrate the many parts of its organization. For example: VENDOR_A created an integrative role (i.e.

Account Manager) to liaise between its front-end and back-end units, but also uses a cross-business team mechanism to coordinate its account-management activities. Likewise, *VENDOR_B* uses both a cross-business team and a matrix structure to coordinate its business-unit leaders. Such examples are consistent with Mintzberg's (1992) argument that no single coordinating mechanism is sufficient to manage organizational complexity. Therefore, combinations of various coordinating mechanisms are often used concurrently in one organization.

However, as noted above, the cross-business team mechanism is commonly used to manage client account activities. It is likely that this mechanism has been so widely adopted because of its ability to flexibly form account teams from various parts of the vendor organization to deliver particular objectives then disband the team once the objectives are accomplished. Further, the cross-business team also offers a number of advantages that meet an ITO vendor's requirements: integrated package of vendor capabilities, coordinated interface, and decentralized decision making (Galbraith et al., 2002, pp. 157-158). First, each ITO portfolio is expected to deliver various services that are unlikely to be available from one function only. Second, the account team acts as the single point of interface between the client and the vendor which enables easy coordination in client-vendor activities. Last, since each account team contains sufficient capabilities to deliver the client's needs, decisions can be made at the team level. Using a cross-business team, an account manager can add and drop resources in a very flexible manner with little concern for the overhead cost of idle resources.

Therefore, it can be concluded that the cross-business team mechanism has been widely adopted because it enables flexible account-team formation and abandonment, offers various advantages required by ITO vendor (see previous paragraph), and has affordable and manageable disadvantages.

6 Limitations and future study

As suggested by Galbraith et al. (2002) and Brickley et al. (2003), strategy, structure, and coordination alone cannot thoroughly explain the design of an organization. Furthermore, although all representatives of the global firms interviewed in this study seem to agree that front-back hybrid structure and cross-business-team coordination are valuable for their organizations, it is possible that representatives in other parts of the world would have different opinions. Thus, more in-depth and comprehensive case-study research should be considered in future to understand more fully ITO-vendor organizational design. An interesting direction for future study would be to compare the typical ITO-vendor organizational design to the typical in-house IT organizational design. Such comparison might be able to explain why ITO-vendor organizations may be able to deliver value that cannot be delivered by the in-house IT function, or vice versa.

7 Conclusion

The purpose of this paper was to understand how multi-national IT outsourcing vendors are structured and coordinated, and why they are structured and coordinated this way. With respect to the first question, this study of five ITO-vendor mini-cases has discovered that, despite their idiosyncrasies, all five global ITO vendors divide their front-end labor based on the market they serve, and their back-end on the kinds of functions they offer. Such a structure conforms to the front-back hybrid structure model proposed by Galbraith, et al. (2002). Coordination between the two ends is achieved through the use of cross-business or cross-functional teams (Galbraith, et al., 2002; George and Jones, 2008), with team members chosen from the labor pool to deliver specific client requirements.

With respect to the second research question, it appears that the observed approach enables the ITO vendors to develop distinctive IT capabilities and at the same time, nurture long-lasting relationships with their customers. Cross-business team coordination is used due to its ability to flexibly form and disband teams from various business units to meet changing client requirements. The primary contribution of this paper is the identification of the universal use of front-back hybrids in the five mini-case organizations, and explanation of why front-back hybrids and cross-business teams appear to be the most effective approaches for structuring and coordinating global ITO-vendor organizations.

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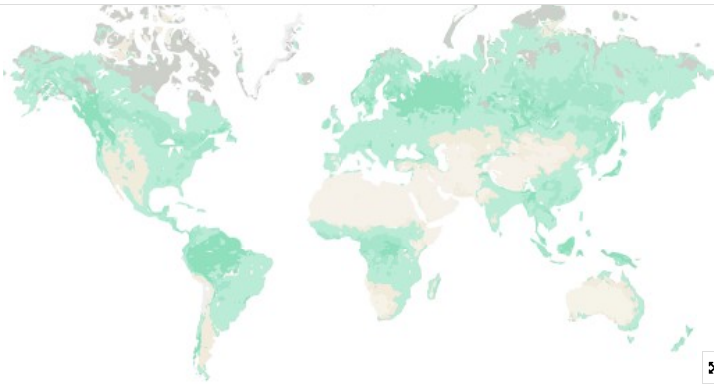
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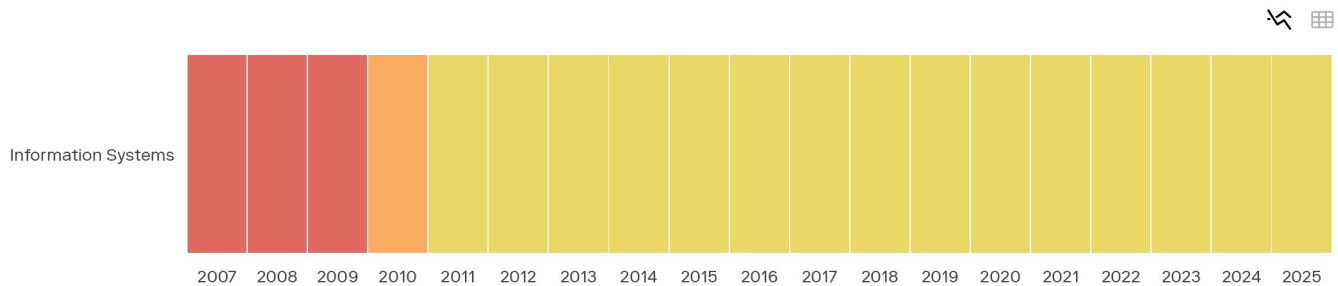
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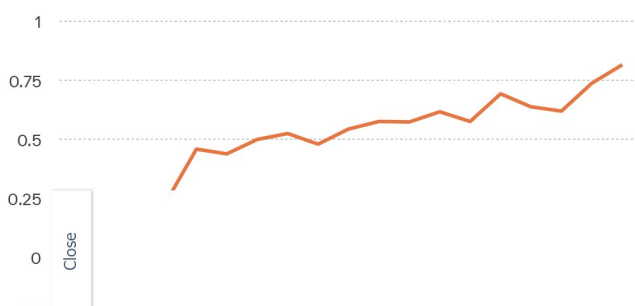
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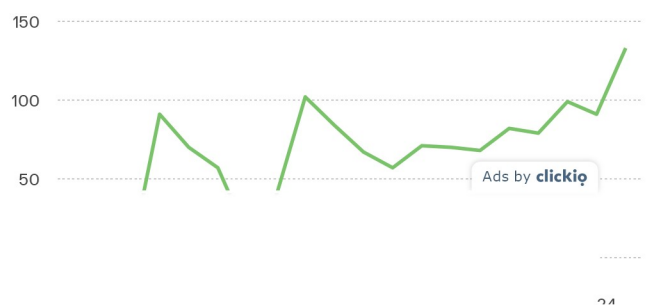
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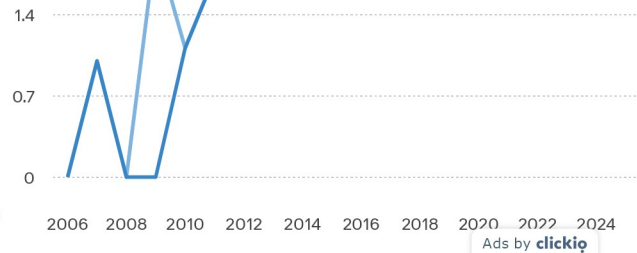
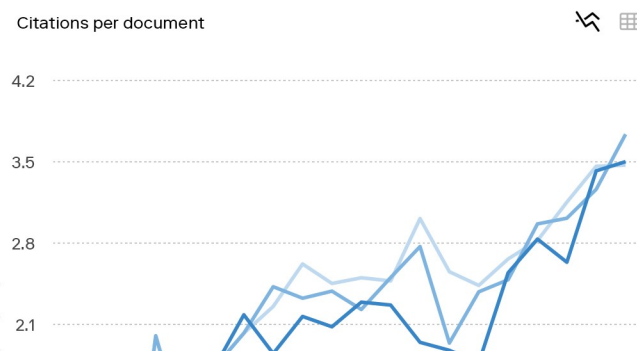
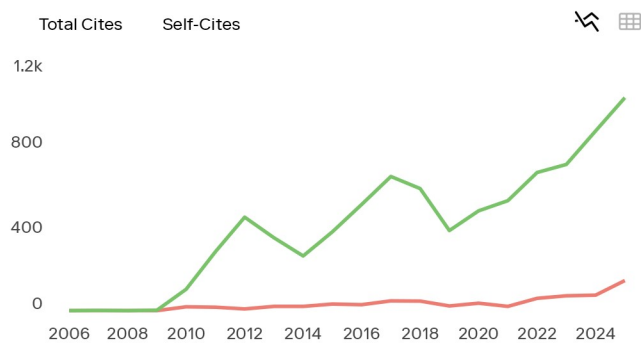
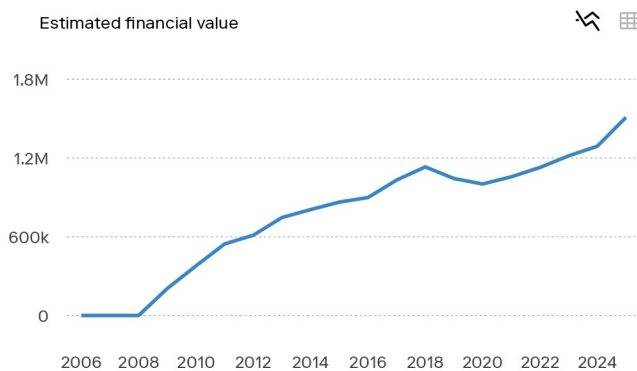
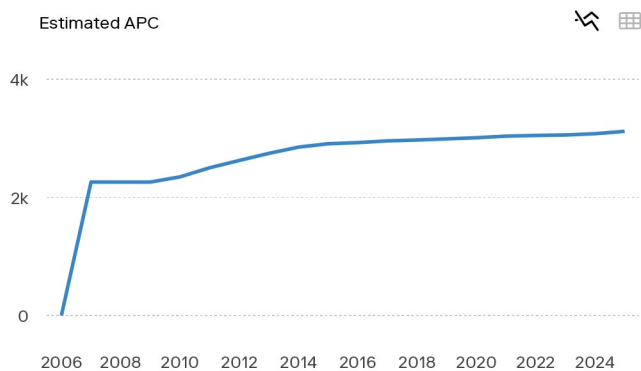
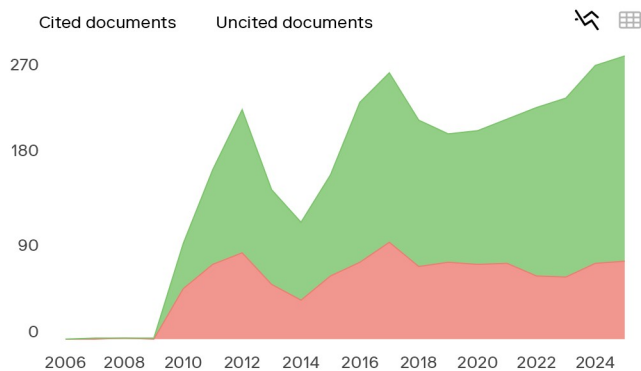
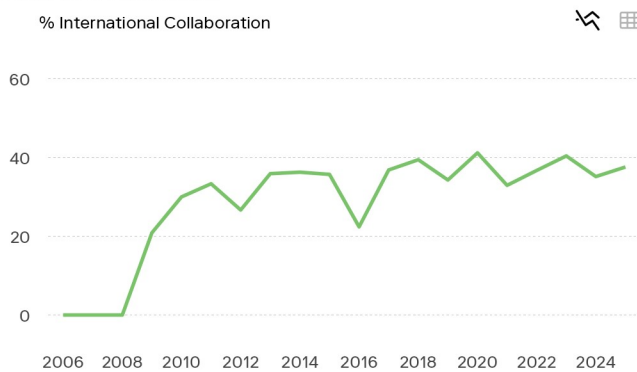
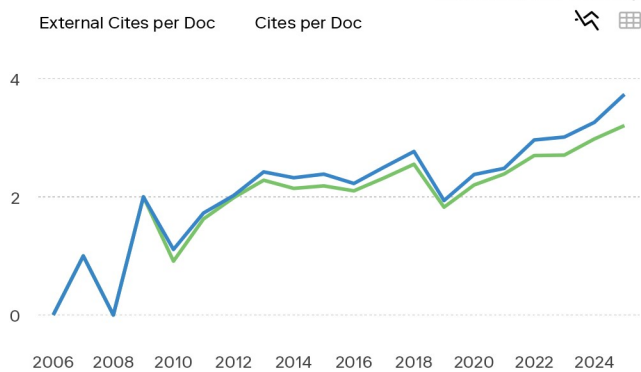
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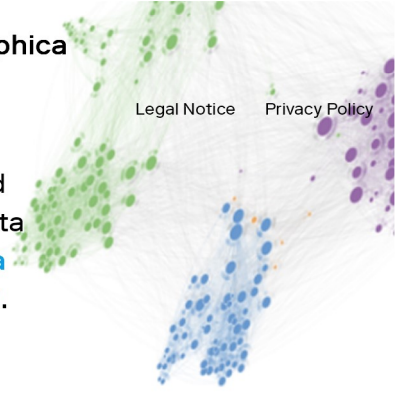
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