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**Knowing your boundaries: integration opportunities in
international professional service firms**

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**KNOWING YOUR BOUNDARIES:
INTEGRATION OPPORTUNITIES IN
INTERNATIONAL PROFESSIONAL SERVICE FIRMS**

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Abstract

This study presents three different business models (continuous, repetitive, and unique) identified in international professional service firms that pursue a transnational strategy. These business models have varying opportunities for global integration. We extend the integration-responsiveness framework by offering a framework for analyzing how to balance global integration with local responsiveness when pursuing a transnational strategy. By identifying the content, structure, and governance transactions of the three business models, we can determine when to pursue headquarters-initiated global integration and when to choose strategies that ensure local responsiveness and subsidiary competitiveness in local markets.

Key words

Business models, global integration, international professional service firms, local responsiveness, transnational strategy, value creation processes.

Introduction

Knowing what and when to integrate activities have occupied organization researchers since Lawrence and Lorsch (1967). This paper extends knowledge on the organizational forms and linkages that exist in international business operations, by examining business models in international professional service firms (IPSFs) that pursue a transnational strategy. The global integration-local responsiveness (IR) framework purports that multinational firms attempt to integrate their international activities across geographical borders to respond to the needs of various foreign locations (Bartlett & Ghoshal, 1989; Doz, 2006; Harzing, 2000; Jarillo & Martínez, 1990; Rugman & Verbeke, 2001). Multinational firms face both global and local pressures (Grøgaard, 2012). Their ability to pursue both integration and responsiveness requires careful strategic coordination, labeled ‘transnational strategy’ (Bartlett & Ghoshal, 1989). However, existing literature has been unable to identify the elements that constitute the duality of this coordination. How much integration must be sacrificed to obtain responsiveness, and vice versa, remain unclear (Asmussen, 2007).

We argue that the inconclusive empirical results for pursuing a transnational strategy may be a result of applying an inappropriate unit of analysis. Previous research has questioned the mere presence of these firms in the marketplace (Leong & Tan, 1993). Furthermore, studies seeking to understand how these firms balance global integration with local responsiveness have focused on

organizational-level items, such as the network structure, intersubsidiary flows, local R&D, adaptation to marketing, and level of HQ dependence (Harzing, 2000) and factors of international strategy determinants (e.g. Fan, Zhu, & Nyland, 2012). Kim, Park, and Prescott (2003) instead focus on varying integration modes between functions within the firm. This is in line with Devinney, Midgley, and Venaik (2000) arguing that multinational firms can configure themselves in various ways, rather than prescribing the transnational form as optimal. Similarly, we believe that important insights will be gained by investigating the various business models that exist within firms. Global integration can be achieved through standardized business models that provide efficiency and economics of scale, while responsiveness can be achieved through business models customized for local markets.

A business model is defined as ‘the structure, content, and governance of transactions between the focal firm and its exchange partners’ (Amit & Zott, 2001, p. 511). It is the way firms capture value in the marketplace. Business models are characterized by their design themes, which capture the common threads that orchestrate and connect the focal firm’s transaction with external partners (Zott & Amit, 2008). Decisions to coordinate globally or decentralize collective knowledge influence innovativeness and competitiveness in local markets (Williams & van Triest, 2009). In IPSFs, knowledge is the major source of value creation (Løwendahl, 1997; Maister, 1993). IPSFs are described as pursuing a transnational strategy due to the ‘tug of war’ between

standardization (where favorable) and adaptation (when appropriate). Hence, we ask: *What kinds of business models do we observe in IPSFs?* and *How do these business models enable the firm to benefit from scale advantages of global integration, while remaining locally responsive?*

We claim that IPSFs provide a particularly appropriate context to explore intrafirm balancing between integration and responsiveness. Professional services are generally considered to be difficult to standardize (Løwendahl, 1997; Maister, 1993) since knowledgeable individual local experts are central to what these firms offer. Nevertheless, an increasing number of professional service firms (PSFs) are internationalizing and, thereby, gaining scale advantages (Boussebaa, 2009; Brock, 2006; Brock & Powell, 2005; Faulconbridge, Beaverstock, Muzio, & Taylor, 2008; Greenwood & Empson, 2003; Hitt, Bierman, Uhlenbruck, & Shimizu, 2006; Segal-Horn & Dean, 2009, 2007). Our empirical investigations involve different business models in two mature IPSFs that serve both local and global markets. Service customization is still important for these ISPFs, even though they are delivering globally integrated services (Brock & Powell, 2005; Faulconbridge, 2008; Segal-Horn & Dean, 2009). Our study provides insight into how IPSFs balance local responsiveness and global integration in the focal firm (Segal-Horn & Dean, 2011).

We begin by presenting some theoretical foundations of the IR framework and value-creation processes in IPSFs, with a particular focus on business models. The understanding of business models guides the analysis with regard to how value is created and captured. We then present the research methods applied in the empirical investigation of identifying business models in IPSFs. Finally, we present the results from the data analysis, discuss the findings, and suggest a framework for global integration in IPSFs. We demonstrate the appropriateness of business models as a unit of analysis for how firms can balance global integration with local responsiveness.

Global integration and local responsiveness

In international business theory the IR framework describes the degree of subsidiary autonomy (local responsiveness) compared with central HQ-driven standardization (global integration) (e.g. Bartlett & Ghoshal, 1992; Birkinshaw & Morrison, 1995; Birkinshaw, Morrison, & Hulland, 1995; Devinney, et al., 2000; Doz & Prahalad, 1991; Grein, Craig, & Takada, 2001; Roth & Morrison, 1992; Taggart, 1997). According to this framework, the tension between pressures to integrate globally and to be responsive locally is highest when a firm is pursuing a *transnational* strategy. Integration is conventionally defined as resource flows within the firm facilitated by technology (Kobrin, 1991) and involving coordination within the multinational corporation at the firm level (e.g. Martinez & Jarillo, 1991; Roth & Morrison, 1992; Taggart, 1997). Determinants of international strategy

(Birkinshaw, et al., 1995; Fan, et al., 2012; Luo, 2001; Luo, 2002) include various organizational factors (e.g. resource flow, manufacturing scale), industrial factors (e.g. cost pressure, resource distinctiveness), and environmental factors (e.g. extent of global competition, transnationality) (Fan et al., 2012). Hence, multiple environmental and organizational conditions influence the degree of global integration in the focal firm.

However, there is little consensus on the domain of the IR framework (Venaik, Midgley, & Devinney, 2004). For example Kim, et al. (2003) emphasize the internal coordination of integration and describe integration modes at functional levels (e.g. marketing and R&D), whereas Devinney, et al. (2000) address how structural and technological factors are organizational determinants of strategy. The challenge is that fundamentally different logics must coexist within the organization to achieve a transnational strategy. Hence, neither the factor nor the functional perspective can successfully explain the consequences for organizing and managing these processes (that require global versus local attention) across functions, subsidiaries, and HQ to contribute to the firm's competitiveness.

The IR framework also does not adequately incorporate the transactional pressures of the firm's value chain, since firms operating in the same industry may follow quite different strategies (Devinney, et al., 2000). Based on these observations, Devinney et al. (2000) suggest that the IR framework must

incorporate the concept of ‘transactional completeness’, which they define as the condition when ‘all the characteristics of the transaction can be priced as if on an open market’ (Devinney et al., 2000, p. 682). This concept is similar to the understanding of a business model, which concerns how value is captured in a market (Zott, Amit, & Massa, 2011).

To overcome these challenges, we suggest applying *business models* as an alternative unit of analysis to understand how firms can balance high global integration with high local responsiveness. By examining business models in a context where high pressure to integrate coincides with high pressure to be locally responsive, we may obtain new knowledge for balancing the transnational challenge. Devinney et al. (2000) identified interfirm variations in transactional completeness. Here, we identify such variation *within* firms that, we argue, may explain differing opportunities for global integration versus local responsiveness in the focal firm. We suggest that a business model approach can potentially bridge organizational and competitive factors (e.g. industrial and environmental) (Fan, et al., 2012; Luo, 2001; Luo, 2002) with integration modes across functions (Grein, et al., 2001; Kim, et al., 2003).

Value creation in IPSFs

PSFs are firms ‘whose primary assets are a highly educated (professional) workforce and whose outputs are intangible services encoded with complex knowledge’ (Greenwood, Li, Prakash, & Deephouse, 2005, p. 661).

Reputation is the most important value driver in PSFs (Greenwood, Li, Prakash, & Deephouse, 2005; Stabell & Fjeldstad, 1998; von Nordenflycht, 2010). Their service deliveries are often provided in close cooperation with clients (Greenwood, et al., 2005; Hitt, et al., 2006; Løwendahl, 1997; Maister, 1993; Robertson, Scarbrough, & Swan, 2003). The value-creation process of professional services can be described as a ‘value shop’ (Stabell & Fjeldstad, 1998) because the goal is to solve specific client problems (Bettencourt, Ostrom, Brown, & Roundtree, 2002; Løwendahl, Revang, & Fosstenløykken, 2001; von Nordenflycht, 2010).

The value shop is a problem-solving process in which value is created through initiation, execution, and delivery phases (Stabell & Fjeldstad, 1998). During the *initiation phase*, efforts are rendered to sell, plan, staff, and budget the service. During the *execution phase*, the service offering is produced. During the delivery phase, the service is adopted by or rendered to the client. Some service researchers argue that the two last phases occur simultaneously: for instance, a play is produced, delivered, and consumed simultaneously (e.g. Normann, 1984; Ramírez, 1999). Professional services are considered to be difficult to standardize (Løwendahl, 1997; Maister, 1993) since individual experts are central to what these firms offer. However, we claim that the question of simultaneous production and consumption will vary according to the type of business model.

Although some of the characteristics connected to professional services limit opportunities for global integration, institutional forces (e.g. industry deregulation, technological developments, and increased globalization) have led to an internationalization of PSFs (Brock, Powell, & Hinings, 1999; Flood, 1995; Greenwood & Lachman, 1996; Segal-Horn & Dean, 2007). IPSFs are able to integrate some of their service offerings globally (Boussebaa, 2009; Faulconbridge, et al., 2008; Segal-Horn & Dean, 2009). Their multidisciplinary practices often lead to a portfolio of services with different underlying business models and, thus, opportunities for global integration to achieve economies of scale.

A major driving force in the internationalization of PSFs is that service providers pursue their expanding international customers and aim to provide a 'one-stop-shop' for customers (Brock & Powell, 2005; Faulconbridge, et al., 2008; Spar, 1997). Seeking to exploit its human capital in new markets, the firm becomes international (Hitt, et al., 2006), leading to increased internal differentiation in the business models delivered by the PSF. Clients also require an 'effortless experience' of professional services across multiple locations worldwide, which increases the need for the global integration of international professional services (Segal-Horn & Dean, 2009).

The business models employed by an IPSF depend on the characteristics of its projects, such as their organization, use of supporting technology, and the

people and collaboration schemes involved in problem solving (Wikström, Artto, Kujala, & Söderlund, 2010). Business models range from customized and novelty-centered to standardized and efficiency-centered (Hansen, Nohria, & Tierney, 1999; Lovelock & Yip, 1996; Løwendahl, 1997; Maister, 1993; Schmenner, 1986; Segal-Horn & Dean, 2011; Wikström, et al., 2010; Zott & Amit, 2008). Standardized, efficiency-centered business models likely offer the most opportunities for global integration, as standardization reduces or even eliminates customized and unique processes that introduce variability. It also potentially increases costs and causes problems regarding consistency. Global integration in IPSFs results from the uniformity of practices, such as common technology platforms, systems, and HR management practices, building of professional trust, and strong intrafirm working relationships (Løwendahl, 2000; Segal-Horn & Dean, 2007). Further, experts are often replaced by juniors who perform the service delivery process with the support of routines, methods, and expert systems (Maister, 1993). In contrast, customization means that the service provision meets a specific client's needs and local requirements.

Lovelock and Yip (1996) emphasize that the most elementary aspect of a global service strategy is to deliver global standardized services, which requires some level of global integration and service standardization. Segal-Horn and Dean (2009) find that global law firms invest heavily in the development of systems and processes that achieve consistency in meeting

clients' expectations. These systems provide an 'effortless experience' that contributes to competitive advantage by enabling the firms to respond closely and rapidly to requirements, in a manner that is difficult for competitors to emulate. To achieve economies of scope, large and complex service firms use a multiunit skill system to organize this multidisciplinary professional practice (Miozzo, Lehrer, DeFillippi, Grimshaw, & Ordanini, 2012). The multidisciplinary practices are organized by interunit coordination and resource sharing, and attract business independently. IPSFs develop formal organizational routines to involve multiple business units in client projects and have cross-unit strategic 'insight' agents for coordination.

Still, opportunities for global integration in IPSFs may be limited. Many services are coproduced with local clients. Local trends, laws and regulations may require high local responsiveness in the service delivery (Spar, 1997). Certain types of services require unique competence from the representatives of the service provider that, in many instances, are location-specific (Lovelock & Yip, 1996). Some clients may prefer to cooperate with specific employees because they have established relationships over time involving high degrees of trust (Løwendahl, 1997). To satisfy these different needs, IPSFs have developed multiple coexisting business models (Amit & Zott, 2001; Morris, Schindehutte, & Allen, 2005; Osterwalder, 2004; Osterwalder & Pigneur, 2009; Osterwalder, Pigneur, & Tucci, 2005; Zott & Amit, 2007; Zott & Amit, 2008; Zott, et al., 2011).

The focus of this paper is to elaborate on the opportunities for global integration in IPSFs that offer different business models (i.e. provide multidisciplinary professional practices). Previous research on IPSFs show which managerial and organizational measures firms take to integrate their business globally. However, little is known about how different business models contribute to the balance between high levels of global integration and high levels of local responsiveness in the focal firm.

Methods

Research design

In this study, we employ a comparative inductive case study design to explore the coexistence of multiple business models and its effect on integration-responsiveness in a transnational setting. Little is known about the various business models employed by IPSFs; hence, an exploratory research design is appropriate (Eisenhardt, 1989; Graebner, Martin, & Roundy, 2012; Yin, 2003). The use of this design allows us to maintain flexibility and to obtain deep context knowledge. This design facilitates theory-building in close interaction with various types of methods that are triangulated (e.g. interviews, observations, surveys, and secondary data) (Jick, 1979).

Case selection and research setting

We conducted theoretical sampling (Eisenhardt & Graebner, 2007; Flyvbjerg, 2011) with IPSFs as the research setting. Apart from the general characteristic of IPSFs, which provide an appropriate research context to explore the tensions between integration and responsiveness, we particularly aimed at identifying case firms offering a portfolio of different types of services in an international setting. In addition, factors concerning maturity, industry and size also influenced our selection since integration opportunity can be affected by differences in global experience, firm size and/or the industry the IPSF cater to.

The two IPSFs investigated in this study can be classified as classical PSF/neo-PSF (von Nordenflycht, 2010). The case firms are knowledge-intensive, have relatively low capital intensity, and rely on a professionalized workforce. Both case firms operate in mature industries and, thus, can be characterized as following the strategic modes of Consolidators and Concept learners (Lei & Slocum, 2009). The two selected firms both offer a portfolio of different third-party engineering services globally, yet they differ in terms of industry and size. These differences are assumed to highlight variations in integration opportunities between the two firms.

Verico is a global engineering services firm with 300 offices in 100 countries. Verico provides global third-party classification services to energy and

maritime industries, and consultancy services in energy, oil and gas, health care, and maritime industries. The knowledge base in the organization consists mostly of highly qualified engineers and technical personnel. Its goals are to provide quality and comparability in globally distributed services, while maintaining uniform quality and expertise worldwide. We followed one business unit that provides systems support services to the rest of Verico and to some external clients. The in-depth study of this business unit is particularly suitable for observing variations in business models in Verico itself and gauging how these variations affect global integration issues.

Servco, which has 18 offices in 11 different countries, also provides global third-party engineering services. Servco tests, inspects, and certifies electrical products, machinery, installations, and systems. One service delivery can be performed to one client by different experts at different places, depending on their knowledge, experience, availability, and costs. To offer these services worldwide, client product prototypes are sent to component experts, who test them in accordance with the corresponding international or national standards for the product's intended market. In this industry, standards are documents that describe the procedures for tests and the acceptable intervals for different measures. Compliance with such standards ensures that certain safety requirements are met. The international market for these services is highly competitive with respect to price sensitivity, speed of delivery, and expertise.

Data collection and analysis

We employed a mixed-methods approach (Denzin, 1970) consisting of interviews, document and report studies, and participant observations in the two firms. The data collection progressed in three stages (Table I).

Please Insert Table I about here

To reflect different experiences with pressure for global integration and local responsiveness, we collected data from informants with different roles (managers, engineers, sales personnel and clients/end-users). Data were collected with the aim to capture variations in integration opportunities between stakeholders at HQs and at different dispersed subsidiaries. All interviews followed a semi-structured interviewing convention (Robson, 2002, p. 228), each lasting from 1 to 2.5 hours. The questions aimed to gain insight into the daily work in these organizations: how the interviewees interact with clients and international colleagues, how they govern client relationships, how they learn and use systems and tools to routinize activities, to what extent they improvise and innovate, and the extent of HQ control over different business operations.

The interviews were taped, transcribed, and supplemented beyond the interview context with document studies (i.e. financial reports, top management minutes of meeting, project plans, and organizational and global biannual surveys) and observations (i.e. visits to laboratories and managerial meetings, workshops, and training). Other secondary data sources (e.g. project management procedures, standards, and reports to clients observed through custom-made ICT systems) were especially beneficial, because they provided knowledge on how the client relationships were formally handled. To mitigate the risks of proximity to the data (Johnson, Langley, & Whittington, 2007), we focused on multiple data sources, multiple researchers, multiple methods, and reflexivity (Alvesson & Sköldbberg, 2000). There were always two researchers who conducted the interviews and collected documents or observed meetings. Other related researchers who were not conducting the primary data collection provided an “outsider’s view” on the findings.

To make sense of the data, the data analysis progressed in three distinct stages (Table II) and involved a blend of inductive and deductive processes (Graebner, et al., 2012).

Please Insert Table II about here

Table III presents the findings related to the utilization of the transaction content, structure, and governance of the business models. First, we observed opportunities for global integration across different phases of value-creating activities in the value shop's value-creation process (initiation/ sales, production/ execution, and delivery) (Stabell & Fjeldstad, 1998). Then, we combined this information with data on each of the identified business models (Table IV).

Findings

In the two case firms, we identified three distinct business models which are described and analyzed below: Continuous, Repetitious, and Unique.

Continuous business model

The continuous business model is integrated and embedded in everyday work activities, such that clients are only aware of its existence when systems fail. Services in this business model are available to clients at all times, and they are amenable to a pricing strategy of license or subscription design. Contracts are often detailed, with technical descriptions of service support and substantial involvement from the service provider. This type of business model requires foremost attention to and investment in client relations, systems, and effective ICT utilization. Client satisfaction is dependent on the availability of the service when in need. The technological system is the fundamental resource for continuous services, and investments are channeled

to improve this vital resource. The following two examples from the case firms illustrate the continuous business model.

In Verico, we observed services intended for internal end users by a Global Service Desk (GSD), an integrated support service that ensures that all relevant applications are available at all times to all users, regardless of location. To ensure such availability, the company operates 8-hour shifts from three sites in the organization (Norway, Houston, and Shanghai), thereby servicing its global clients around the clock. The GSD has experts in business processes situated in various locations. Highly specialized expert groups are centrally located, and each group has in-depth expertise per IT application. Services are negotiated with the relevant business units, or divisions, according to a service-level agreement (SLA) that regulates the price and quality of services internally, across different international locations.

One GSD process provides and maintains the servers and work process systems that are specially tailored for the work performance of technical engineers worldwide. This service process is best observed when it fails. Therefore, we consider a scenario wherein a technical engineer in Brazil uses a work process in such a way that the central (HQ-located) system is shut down. If the central system fails, then the technical engineers cannot perform their tasks because this system contains all of the information required to do the job. It also contains all of the necessary information to conduct the

complex task of planned service performance for the global client. The central system is critical for tracking previous service provision aspects and for ensuring the global quality of the service delivery. A central system error will have implications for clients in North and South America as well as Asia.

The malfunctioning system sends an automated warning signal to the GSD in the relevant time zone (in the case of Brazil, the signal is sent to Houston). Engineers in Houston may solve the problem within half an hour, but the server needs to be verified centrally at HQ. The GSD sends an incident message through the IT work flow system (ITIL) to the expert group working with the servers at HQ, who in turn receives the message 10 hours later (8 am Central European time), when maintenance on the server is performed. A few users and their clients may experience a 'hiccup' in service for a few minutes at 3:00 pm Rio time because much of the labor required to provide continuous service happens 'back office'.

In Servco, a service called Test by Manufacturer represents an example of the continuous business model. Servco provides services for product safety testing. Along with other companies of its kind, Servco conducts in-house product testing for large manufacturers of electronic products and components. A Servco representative visits the client to evaluate and assess their products (i.e. equipment used in testing, different testing procedures, clients' expertise and knowledge of relevant standards). Once approved, a manufacturer is

licensed to test products and components itself. Thereafter, the test report is verified by a Servco representative, who checks the test results according to the corresponding standards. The verification representative contacts the client directly if the testing needs to be performed differently or if the applicable standard has not been interpreted correctly.

Repetitious business model

Services in the repetitious business model are tailored to solve recurring problems. This model addresses known problems, where a solution can be predetermined (due to expert knowledge and analysis) so that prices and deliveries can be prespecified. These services may be subject to standardization and even ‘industrialization’, because methods and procedures largely facilitate service provision. Standardization implies less dependency on individuals and context. The methods and tools applied in the analysis and provision of a service are the fundamental resources for repetitious services. Consequently, this type of business model requires attention to and investments in methods, processes, procedures, and best practices, as well as ICT. What determines the quality from a client perspective is that predetermined terms and conditions for delivery are met (e.g. ‘deliver X by date Y for the negotiated prize Z’).

An example of a repetitious business model in Verico is the provision of help-desk ICT support to end users. This is a global help desk that can be found in

many ICT service companies. When a surveyor (e.g. inspecting a tank vessel 8 hours from the office) faces a problem with the service system, he may not know whether the system failure is ICT- or work process-related. To solve the problem swiftly, he calls the local 'super user' for assistance. The super user understands that the problem is ICT-related and forwards the request to the local help desk through ITIL for assistance. The local help desk unblocks the content related to that particular client assignment but, as he discovers that the problem is more complex than anticipated and requires authority to access servers centrally, the rest of the assignment is forwarded through ITIL to GSD.

In some circumstances, the magnitude or complexity of a problem is so severe that parts of the problem are passed on further to the expert group located at corporate HQ. There are over 150 requests daily to GSD, and 20% of these are solved by the expert groups. Local help-desks and GSD assist with frequently recurring problems, for which standardized solutions can be provided according to assigned tasks related to expertise, time zones, and access authority to critical servers and systems. All of the ICT support personnel use the ITIL system, a common language, processes, and templates. These are established procedures that ensure that the tasks are performed the same way in all offices across all time zones.

An example of the repetitious business model in Servco is their safety testing and certification services. For example, if a PC monitor manufacturer wants to

introduce a new product to the European and North American markets, the client will be in direct dialogue with a Servco salesperson or make a request through the Servco website. The service is offered by a salesperson, with a contract specifying the applicable standards, tests required, a time estimate, and documentation needs. The contract and content are registered in the Servco work flow system. Prototypes of the PC monitor are sent by DHL to a Servco lab, where qualified personnel are assigned to testing. Qualified Servco testing engineers perform all of the safety testing according to relevant national or international safety standards. This process takes a couple of weeks and requires the use of many instruments, manuals, PCs, templates, and work flow systems, together with the professionals' expert knowledge. The test results are inserted into the work flow system according to defined templates. A verifier reviews all of the technical testing results, checking the standards and the product documentation. Once the testing is complete, the results are transferred to the certification department. A certifier checks all of the documentation and procedures and issues the certification papers, which are sent to the client by mail or uploaded to a client site using the Servco extranet. The shift between testing, verifying, and certifying is coordinated by a middle manager using the workflow system.

Unique business model

Services in the unique business model address novel and unknown problems. Value-creation processes are conducted in close cooperation with clients and

are difficult to standardize because individual qualities and relationships are determining factors in client satisfaction. Although not ad hoc, as the ability to provide a competent service is closely linked to the experts' previous project experiences, the value-creation processes involve a high degree of customization. This complex service type comprises advice and consultancy services that require highly specialized expertise, sound judgment, and tacit knowledge. Service delivery is often the identification of the problem; thus, a solution cannot be predetermined and is often difficult to explicate. The output from unique services is largely interaction and coproduction with clients. Pricing is often based on hourly rates with estimated time frames.

Unique services require attention to and investment in building competence and trust in client relations, which are accomplished by developing the organization's human resources. Thus, *people* are the fundamental resources in the production of unique services. Solving the client's problem is the main indicator of client satisfaction. Failure to provide innovative and competent solutions to a problem can lead to severe consequences for client satisfaction and the IPSF's reputation.

An example of a unique business model in Verico is when a client requires help in developing a new ICT support application for a work process. The project could be the development of new software, modules, or ICT tools for solving service challenges. A development project, lasting between a few

weeks and a few months, is formed to meet the demand. The project team consists of ICT specialists and technical engineers with experience in performing tasks that involve the use of the tool that they plan to develop. One ICT specialist is assigned as chief developer and assumes the programming. The team meets regularly to assess problems and progress. Before launching the new software, it will be subject to several pilot tests and adjustments.

Another example of a unique business model taken from Servco is called 'precompliance services'. A client may contact Servco for a new product that the client wants to develop and sell. The product may be complex and relate to several standards (e.g. military radio device, medical equipment, etc.). The Servco sales representative connects the client with a technical engineer who has long in-depth experience and a broad knowledge of several different standards. A precompliance expert checks the product in question, including its possible functionalities and range of use, and specifies a contract based on the anticipated time it will take to accomplish the task. The outcome of the service is advice regarding which standards the product needs to comply with and the technical requirements specified within those standards. A Servco expert analyzes the product and consults with various colleagues. After talking to verifiers and certifiers in different fields, the expert has clear advice to offer, which is normally communicated to the client in a meeting, and related documentation is handed over.

The typical characteristics of the continuous, repetitious, and unique business models are presented in Table III.

Insert Table III here

Opportunities for global integration in the IPSF business models

We observed variations between the continuous, repetitious, and unique business models when balancing global and local responsiveness in all three phases of the value-creation process.

Initiation phase

In the initiation phase, the *continuous business model* is predominantly local. Services are linked to a contract that takes time to sell and involves substantial local effort (e.g. negotiations of terms and conditions for pricing, acceptable response time, and level of support). In the case firms, the responsibility for the agreement was located at HQ, but the person responsible for negotiating the agreement operated locally. The *repetitive business model* is predominantly global. These offerings are established and clearly defined; the sales effort is formalized and standardized or even outsourced. Agreements are made by post or via the web and involve little mandatory local presence or responsiveness. The *unique business model* is both global and local in nature.

These services are not specified in advance. Much of the sales effort entails the need to specify the scope of work and define the problem and terms for the project (i.e. hours it will take). Negotiation is based on trust. In the initiation process, firm can capitalize on size and global presence by having more reference projects and available expertise, but local client context and understanding are still required to obtain the necessary trust.

Execution phase

In the execution phase, the *continuous business model* is predominantly global. The production of continuous services focuses on guaranteeing that the service is performed. The core of this service is not to deliver a specified item, but to deliver a value proposition guaranteeing service when required. Producing continuous services involves many routines and procedures to ensure that the service is provided efficiently. This kind of service can be independent of client interaction and responsiveness. As such, it is location-independent. The *repetitious business model* is both global and local, as it has standard procedures for the provision and sequence of tasks. The *unique business model* is predominantly local in nature in this phase. The prerequisite expertise to perform the service can be recruited globally, while the experts need to interact directly (locally) with clients to develop trust.

Delivery phase

In the delivery phase, the *continuous business model* is both global and local. The expert providing the service delivery does not have to be locally present, but needs to know the specific client context. The *repetitious business model* is predominantly global. The nature of repetitious services is the ability to have predefined deliverables, which are predictable and can be planned for with globally applicable routines for service delivery processes. The *unique business model* is predominantly local. This type of service process aims to identify problems and provide solutions. The actual solution is more important than the shape or form of the delivery. The solution to the problem will, in many cases, be best communicated through interactions with clients, where learning and tacit insights are co-generatively produced and retained. The essence of this delivery is difficult to capture in a report.

In summary, dividing business models into phases according to the value-shop characteristics allowed us to distinguish between aspects of the business models that offer opportunities for global integration, and other aspects that focus on local responsiveness. This process leads to a conceptualization of global integration and local responsiveness in IPSFs, as shown in Table IV.

Insert Table IV here

Discussion

We find that the different business models of IPSFs exhibit a combination of standardized and customized elements at the micro level, which have consequences concerning the firms' strategic management of processes that require global versus local attention. Some elements of the business models are distinctly global, some are distinctly local, and some elements are both global and local in nature, which we label as *glocal*.

Based on the presented framework, it is possible to assess the balance between global integration and local responsiveness in IPSFs. All of the identified types of business models can be performed across borders. The *continuous* and *repetitious* business models have moderate and high global integration potentials, respectively. In contrast, the *unique* business model provides limited opportunities for global integration, and internationalization often refers to people traveling to perform tasks in coproduction with clients. We suggest the following propositions to describe the integration opportunities of the three identified business models:

Proposition 1: *Continuous business models have moderate global integration opportunities with little integration possibilities in the initiation phase, high integration possibilities in the execution phase, and some integration possibilities in the delivery phase.*

Proposition 2: *Repetitious business models have high global integration opportunities with high integration possibilities in the initiation phase, some*

integration possibilities in the execution phase, and high integration possibilities in the delivery phase.

Proposition 3: *Unique business models have limited global integration opportunities with some integration possibilities in the initiation phase, but low integration possibilities in the execution and delivery phases.*

Managerial relevance

Understanding the nature of different business models, which identify the value proposition of the firm and how the firm captures value in the marketplace (Zott & Amit, 2008), might help the firm to balance the ‘tug of war’ when pursuing a transnational strategy. In Table III, we specify central characteristics of business models and apply these to IPSFs. Although we have specifically studied IPSFs, the characteristics of these business models may be recognizable in different types of firms. Managers may be able to use this framework to identify opportunities for global integration in their focal firm.

Many IPSFs follow a transnational strategy (Brock, 2006; Faulconbridge, 2008; Miozzo, et al., 2012; Segal-Horn & Dean, 2009, 2007). However, we have scant knowledge on how these firms can balance the quest for global integration and local responsiveness. This study provides concrete advice on how to achieve this goal by assessing opportunities for global integration in different business models identified in IPSFs. We also assess opportunities for global integration in the different phases of the service delivery process of the

three identified business models (Table IV). This analysis provides managers with knowledge on when to standardize and when to adapt to local needs in the different phases of the service delivery process of various business models.

Conclusion

This study addresses two research questions: *What kinds of business models do we observe in IPSFs?* and *How do these business models enable the firm to benefit from scale advantages of global integration, while remaining locally responsive?* We explored business models and the internal variations in the service delivery processes of two IPSFs. By observing the nature of different value-creation processes, we identified three distinct business models (continuous, repetitious, and unique) that coexist in the firm and have different opportunities for global integration. The results of the study support the claim made by Lovelock and Yip (1996) and Spar (1997) that IPSFs need to balance standardization and customization in a transnational mode. To allow for both HQ-driven control (i.e. attempts to standardize) and local autonomy (i.e. responsiveness to local client needs), IPSFs develop multiple business models in the focal firm.

The three identified business models can be performed internationally, but with different potentials for global integration. By dividing the service process into the phases of initiation, execution, and delivery, we find that the *repetitious* business model and the *unique* business model have the greatest

potential and least potential, respectively, for global integration. Based on our findings, we offer three propositions for global integration opportunities for the three identified business models. We employed the value-shop characteristics (initiation/ execution/ delivery) as an analytical tool in our research. This choice corresponds well with the theoretically sampled mature IPSF cases. However, we cannot claim generalizability to firms dominated by other value configurations. Nevertheless, PSFs have been suggested as role models of firms with high knowledge intensity (Brock, Powell, & Hinings, 2007; Lorsch & Tierney, 2002; Løwendahl & Revang, 1998; Pettigrew, Thomas, & Whittington, 2002). Thus, our findings might be relevant for other firm types where knowledge is the major value-creating resource.

This is a theory-building study focusing on identifying important characteristics connected to business models in IPSFs, and their subsequent global integration opportunities. Future research should test the developed propositions on a larger sample of IPSFs, to generalize the findings to other organizations. We have studied IPSFs that operate in relatively stable industries and pursued the strategic mode of *Consolidators* and *Concept Learners* (Lei & Slocum, 2009). An opportunity for future research is to explore whether the same business models are present in IPSFs that are characterized by the strategic modes of *Concept drivers* and *Pioneers* (Lei & Slocum, 2009).

We also demonstrate how business models, rather than firms (Devinney, et al., 2000; Fan, et al., 2012; Kobrin, 1991; Martinez & Jarillo, 1991; Roth & Morrison, 1992; Taggart, 1997) and functions (Kim, et al., 2003), can be applied as the unit of analysis to understand how firms may balance global integration and local responsiveness when pursuing a transnational strategy. We argue that a business model-level analysis can benefit future research on transnational strategy. This argument is in line with researchers who identify a need to focus on transactional completeness in the IR framework research (Devinney, et al., 2000). However, because our business model framework was developed studying IPSFs, future research should investigate to what extent the same framework (Table III) can be applied in other types of international firms.

Finally, the findings of the study suggest that multiple business models coexist in IPSFs. This situation creates substantial organizational and managerial challenges for the focal firm in relation to multiple value configurations (Stabell & Fjeldstad, 1998). The issues of how to organize and manage the existence of multiple business models are beyond the scope of this paper, but they indicate opportunities for future research. In this process, future research could investigate the fit between organizational technologies and organizational structure (e.g. Perrow, 1967; Thompson, 1967; Woodward, 1965) in relation to our findings.

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TABLES

Table I: Data collection

FIRM	DATA	STAGE 1 Data were collected at the two respective HQs. These data explored the nature of the firms' various service offerings, the deployment of a transnational strategy entailing cooperation between internationally distributed experts, and the provision of systems providing integration.	STAGE 2 Data collection was extended to the international subsidiaries, to investigate the pressure for local responsiveness.	STAGE 3 Data collection was further extended to confirm the emerging recurring patterns.
Servco	Interviews	5 interviews at HQ in Norway, 1 interview in Houston, USA	6 interviews in Milan, Italy, 4 interviews in Glasgow, UK, 2 interviews in London, UK, 11 interviews in Shanghai, China	11 interviews at HQ in Norway
	Other data sources	Observations of participants; video conferences; training; discussions with management and project managers; and document studies.	Observation of participants at 2-day internal workshops in Milan, Shanghai, and London, and at a 2-day regional seminar involving 30 Asian employees in Shanghai.	Discussions with management, IT engineers, and project managers, employees; and document studies.
Verico	Interviews	8 interviews at HQ in Norway, and 2 interviews with customers in Norway.	5 interviews in Oslo, Norway, 10 interviews in Milan, Italy, 5 interviews in Hong Kong, 4 interviews in Shanghai, and 9	5 interviews at HQ in Norway, 10 interviews in Milan, Italy, 6 interviews in Hong Kong, China, 9 interviews in Ottawa, Canada,

			interviews in Shenzhen, China	and 9 interviews in Dallas, USA
	Other data sources	Guided tour at HQ; participant observations at a workshop and at a top management meeting in Helsinki, Finland; discussions with management; document studies.	Guided tour of laboratories in Milano, Italy, Hong Kong, and Shenzhen, China; participant observations at a top management meeting at HQ; regular discussions with management; and document studies.	Guided tour of laboratories in Oslo, Norway, Ottawa, Canada, and Dallas, USA; participant observations at a top management meeting in Hong Kong; regular discussions with management; and document studies.
Total		16 interviews , and multiple meetings, guided tours, discussions, and documents reviewed.	56 interviews , and multiple meetings, guided tours, discussions, and documents reviewed.	50 interviews , and multiple meetings, guided tours, discussions, and documents reviewed.
122 interviews conducted in 7 countries				

Table II: Data analysis

	STAGE 1	STAGE 2	STAGE 3
Aim	<p>The aim of this stage was two-fold: 1) to obtain a broad understanding of the nature of the various service offerings of the firms, and 2) to present the initial findings to selected employees and managers in a workshop, to validate the veracity of the data and enhance the trustworthiness of the analysis (Lincoln & Guba, 1985).</p>	<p>Data were analyzed in light of the value shop characteristics (initiation, execution, and delivery; Stabell & Fjeldstad, 1998) relevant for the value-creation process in IPSFs, to reveal different integration opportunities in different phases of the service production and delivery processes.</p>	<p>Data were analyzed in light of the business model categories. In particular, we looked for the <i>transaction content</i>, <i>transaction structure</i>, and <i>governance of transactions</i> in the business models to capture how value was created and captured in the different business models (Zott, Amit, & Massa, 2011). <i>Transaction content</i> refers to ‘the goods or information that are being exchanged, and the resources and capabilities that are required to enable the exchange’ (Amit & Zott, 2001, p. 511). This variable was conceptualized as the types of services provided and critical resources applied in the value creation process. <i>Transaction structure</i> relates to ‘the parties that participate in the exchange, and the ways in which these parties are linked’ (Amit & Zott, 2001, p. 511). This variable was conceptualized as contracts and market issues. <i>Governance of transactions</i> refers to ‘the ways in which flows of information, resources, and goods are controlled by the relevant parties’ in the</p>

			business models (Amit & Zott, 2001, p. 511). This variable was conceptualized as the cost driver, value driver, and efficiency gains from the transaction.
Activities	One researcher performed the initial coding, which was verified by a second researcher. Coding was validated by other research team members for each stage and for each of the two cases. Subsequently, findings were summarized in PowerPoint format and presented to members in each of the two case firms, to validate the reliability and veracity of the data, as well as to provide opportunity for feedback on our findings.	Activities in this stage included coding and verifying, as well as comparing and contrasting findings between the two firms.	Activities in this stage included coding and verifying. Findings were compared and contrasted between the firms and with extant theory, to extend knowledge on integration opportunities in IPSFs.
Outcome	Categories of different integration opportunities emerged when we compared the data from subsidiaries and HQ.	Multiple value creation logics were identified in each firm. All three phases of the value-shop process displayed simultaneous pressure for integration and local responsiveness. The same patterns occurred in both case firms, and the idea that there could be multiple coexisting business models emerged.	The analysis revealed greater similarities between findings in the two firms than initially expected, suggesting the robustness of our findings.

Table III: Characteristics of observed business models in IPSFs

*BUSINESS MODEL ELEMENTS	ITEMS OBSERVED	CONTINUOUS	REPETITIOUS	UNIQUE
Transaction content	Service types	Availability of ICT application services, test by manufacturer services.	Global help desk services, testing and certification services.	ICT development project services, precompliance services.
	Resources	Technology	Methods	People
Governance of transactions	Contracts	Subscription	Fixed price	Hour-based
	Cost drivers	High initial investments automating processes	Investment attention to the ability to explicate and transfer best practice.	Investment attention on long-term capability development, HR management, and communication transfer of best people
	Value drivers	Availability of service, quick and efficient response to system failure	Delivery of requested and defined service	Provision of solution to presented problem
	Efficiency gains	Utilization of cost geography and process improvements	Best practice transfer and development of tools and methods	Fostering and recruiting talents
Transaction structure	Market issues	Independent of locality of operations, globally initiated but local sales	Independent of locality of operations	Dependent on locality, local sales.

*Based on (Amit & Zott, 2001)

Table IV: Global integration versus local responsiveness in IPSFs

Service Phase	Types of business models		
	CONTINUOUS	REPETITIOUS	UNIQUE
INITIATION	Local	Global	Glocal
EXECUTION	Global	Glocal	Local
DELIVERY	Glocal	Global	Local