Journal of International Management 21 (2015) 249–259

Contents lists available at ScienceDirect

Journal of International Management

Fox School of Business
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Customer Interaction Uncertainty, Knowledge, and Service Firm Internationalization

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ARTICLE INFO

Article history:
Received 28 February 2014
Received in revised form 21 March 2015
Accepted 13 April 2015
Available online 8 July 2015

Keywords:
Customer interaction uncertainty
Internationalization
Knowledge deployment
Services

ABSTRACT

Uncertainty in production processes has proven to be a useful lens through which to explain the international entry mode choices of large manufacturing firms. This paper adapts that approach to suggest that service firms determine their internationalization mode based on the uncertainty arising from their interactions with customers. In our model, service firms counter customer interaction uncertainty by deploying knowledge in two primary forms: in processes and procedures or within workers themselves. We suggest that the location of this knowledge deployment impacts the choice of which mode firms will use when they deploy their services internationally. Also, befitting the greater alternatives available for conducting business internationally for service firms, we explore and model a wider range of modes than traditionally suggested by manufacturing-centric scholarship.

1. Introduction

Researchers have long sought to explain the internationalization of firms. They have done so by employing various theories originally used to explicate entry mode choices of manufacturing firms, including the Resource Based View (Herrmann and Datta, 2005; Hult and Ketchen, 2001), the Uppsala/Stage model (Johanson and Vahlne, 1990), the network model of internationalization (Athanassiou and Nigh, 2002), the Dunning Eclectic Model (Dunning, 1980), and transaction cost economics (Erramilli and Rao, 1993; Hennart, 2010). This scholarship, focused on the location and governance of production, has greatly improved our understanding of the internationalization processes of manufacturing firms.

The literature described above has not, we argue, paid sufficient attention to the specific nature of service production. In particular, international operations of services are driven not by the ownership of physical assets or the distribution of physical goods, but rather by the service process itself. These processes involve the participation of the customer (Normann, 1984) and the uncertainty that stems from that interaction (Gittell, 2002; Skaggs and Huffman, 2003). However, the service internationalization literature ignores two strategic choices made by service firms with regard to their processes: the level of customer interaction uncertainty allowed into the process (Jones, 1987; Larsson and Bowen, 1989) and where and how the service firm chooses to locate critical knowledge resources in order to contend with that uncertainty (Shostack, 1987). Both of these factors are critical to service firm operations, and both are at the center of how service firms perform (Skaggs and Huffman, 2003; Skaggs and Youndt, 2004). Therefore, their omission in the service internationalization literature is a significant one. Moreover, it should be noted that neither of these is of major concern to manufacturers — they are largely only of concern to service firms.

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http://dx.doi.org/10.1016/j.intman.2015.04.003

In addition to paying too little attention to the nature of service transactions, the internationalization of services literature has not fully recognized that services can be internationalized in different ways than manufacturing (Cattaneo et al., 2010). Manufacturing takes place in a fixed location separate and apart from the use of the product, but service production occurs wherever the service provider is located and the customer is involved in the production process. This means that service firms can temporarily transport the firm (in the form of its workers or its codified knowledge) across borders to the customer, or the customer can come across borders to join in the service process.

In what follows, we develop a model of service firm internationalization based on customer interaction uncertainty in the service transaction (Skaggs and Huffman, 2003) and the service firm's deployment of knowledge in the face of that uncertainty. Our model relies on the Resource-based View (Barney, 1991; Herrmann and Datta, 2005) and the Knowledge-based View of the firm (Grant, 1996; Nonaka and Von Krogh, 2009), in that service firms can employ two resources to handle customer interaction uncertainty: they can structure their production process to adjust the risks of disruption from their customer interactions (Skaggs and Huffman, 2003) or they can use human capital to deal with the uncertainty (Pennings et al., 1998; Skaggs and Youndt, 2004). We argue that these two choices are actually two sides of the same coin — with the coin being the firm's knowledge resources. Processes and procedures represent knowledge that has been codified into organizational routines (Kogut and Zander, 1992; Stan and Vermeulen, 2013). It is a form of explicit knowledge that details in advance how the firm is to deal with uncertainty. On the other hand, people possess productive knowledge (Hitt et al., 2001) that they can use to make decisions as to how best deal with the customer uncertainty that confronts them (Skaggs and Youndt, 2004). Employing Shostack's (1987) model for service production we theorize that the method of internationalizing for service firms is driven by a strategic choice about where and how to locate knowledge resources (i.e., in process structures or people), which is in turn driven by the firm's strategic choice about the level of customer interaction uncertainty it wishes to tolerate. The model includes two additional elements that relate to the deployment of knowledge in an internationalization context: the need for a permanent local presence and the uniqueness of host country requirements.

The paper begins with a brief review of the service internationalization literature and our definition of internationalization of services. Then, since one cannot explain a phenomenon without being able to effectively describe that phenomenon, we next construct a typology of service firm internationalization modes, combining the four modes of service internationalization identified by the WTO with the entry modes used in the internationalization literature. We then discuss customer interaction uncertainty, knowledge, and service production literatures. We link these ideas to develop propositions relating to internationalization for service firms.

2. Internationalization of services

The organizational literature examining internationalization of services has largely focused on two areas. One focuses on aspects of services that differentiate them from goods and then describes the commensurate impact of internationalization on those aspects. The second area focuses on the international aspects of global commerce without specifically taking into consideration the characteristics of services. We briefly examine some key exemplars in each stream.

In the first stream, early work by Carman and Langeard (1980) examined the impact of intangibility and simultaneity of consumption on international operations of firms. Lovelock and Yip (1996) went beyond the classic IHIP (Intangibility, Heterogeneity, Inseparable and Perishable) characteristics of services (Fisk et al., 1993) and presented eight characteristics of service firms that distinguish them from pure product firms. They then examined the consequences of these for firms seeking to globalize. Scholars such as Cloninger (2004) then delved more deeply into individual characteristics (such as intangibility) in service firms' value creation internationally. More recently, Liu et al. (2011) examined how service characteristics can help explain location of international outsourcing, and Elango et al. (2013) used service firms as the context to examine the impact of international diversification on risk evaluations of firms.

The second stream has emphasized issues such as comparative advantage, quantum of investment, entry mode (in the form of governance), and distance, rather than the specifics of service firm internationalization, treating services as a context rather than a phenomenon. The Uppsala/Stage model (Johanson and Vahlne, 1990), for example, describes international expansion as a process of organizational learning — as the firm gains experience abroad it changes the way it operates internationally. However, this important work did not specifically address the structure in which service firms apply knowledge, as our model does below. There are other examples as well. Erramilli and Rao (1993) used an adaptation of TCE to explain entry mode of firms and presented a fine-grained analysis of level of control in entry modes (full vs. shared control). This is problematic, though, in that TCE, as conceptualized and applied by Williamson (1985), applied to intermediate market firms, and not service firms. Contractor et al. (2002) indicated that there may be a three stage sigmoidal relationship between entry into international markets and firm performance. Chen (2006) focused on the impact of the different aspects of distance (cultural, economic) on service offerings to examine the impact of creating appropriate value chains to deliver the focal services.

2.1. What is missing?

The considerable body of work has helped deepen our understanding of the issues service firms face when conducting business internationally. However, both streams are limited by their conception (taken largely from the internationalization of manufacturing literature) of how service production processes actually operate and what it means for service firms to internationalize.

An important missing piece, for example, is when capital intensive service firms internationalize by having customers cross national boundaries to come to the home country of the service firm in order to consume a service. This occurs when patients go abroad for