Abstract—The literature includes some knowledge of barriers to internationalization of services in general, however very little knowledge exists of such barriers in the b-to-b-services context. Clearly, there is need to increase the knowledge in this area. The purpose of this paper is to increase the understanding of barriers to the internationalization of b-to-b-services. More precisely, this paper aims at finding and distinguishing general barriers in service industries from those specific to b-to-b-services. This paper is based on extensive literature analysis and empirical data. First, this paper makes an introduction to the nature of international services. Then, it discusses general barriers to internationalization of services. After that, it discusses the barriers to internationalization of b-to-b-services. Then it explains the empirical method. After that, it describes the empirical findings. Next, this article proposes a framework of barriers to internationalization of b-to-b-services. This framework contributes to the literature by showing both the general barriers in service industries as well as the barriers specific to b-to-b-services.

Keywords— B-to-b-services, Internationalization, Trade barriers

I. INTRODUCTION

INTERNATIONAL services are defined in several ways. However, in brief, they are marked by cross-border movement of:
- service related people
- service related information
- service related physical objects, and/or
- services related financial assets.

According to the GATS (General Agreement on Trade in Services), four modes characterize international services, namely cross-border supply, consumption abroad, commercial presence, and presence of natural persons.[1] These modes are defined on the basis of the origin of the service supplier and consumer, and the degree and type of territorial presence which they have at the moment the service is delivered. (a) In the case of cross-border supply, the service supplier is not present within the customer’s country. The service is delivered within the territory of the customer’s country, from the territory of the service provider’s country. For example, international transport as well as the supply of a service through telecommunications is such services. (b) In the case of consumption abroad, the service supplier is not present within the customer’s country. Service is delivered outside the customer’s country, which means that the customer has to go abroad, to the service provider’s location, in order to consume the service. Tourism is an example of such a service. (c) In the case of commercial presence mode, the service supplier is present in the customer’s country. This happens through the commercial presence, for example subsidiaries, joint ventures, and partnerships. (d) Presence of natural persons means that the service is delivered in the customer’s country by natural persons who come from some other country. This covers natural persons who are themselves service suppliers, as well as natural persons who are employees of service suppliers.

According to Clark and Rajaratnam (1999), international services are deeds, performances, efforts, conducted across national boundaries in critical contact with foreign cultures.[2] Drawing on this definition, international services can be categorized into contact-based services, vehicle-based services, asset-based services, and object-based services. (a) International contact-based services are acts, deeds or performances by service producers or consumers, who cross national boundaries to conduct transactions in direct contact with counterpart service actors. Project management and temporary labor are examples of such international services. (b) International vehicle-based services are acts, deeds or performances with location joining properties, thus allowing service producers to create the effects of their presence without being present, transacted across national boundaries via an instrumental framework. Such services may include insurance brokering and computer services. (c) International asset-based services are acts, deeds or performances transacted across national boundaries in the context of physical assets substantially owned or controlled from the home country, critically reflective of home-country commercial service ideas. Retail banking and hotels are example of international asset-based services. (d) International object-based services are contact-based services fixed or embedded in physical objects which cross national boundaries. This type of international services may include, for example video cassettes, computer software, and air transportation.[3][4]

Lovelock and Yip (1996) classify international services into three categories: people-processing services, possession-processing services, and information-based services.[5] (a) People-processing services involve each customer directly in delivery of services targeted at the customer’s physical person. They involve physical interaction with customers and...
necessarily require either that these people travel to the service "factory" or that service providers and equipment come to the customer. In both alternatives, the service provider needs to maintain a local geographic presence, stationing the necessary personnel, buildings, equipment, vehicles and supplies within reasonably easy access of target customers. (b) Possession-processing services are targeted at physical objects belonging to the customer. They may be geographically constrained. A local presence is required when the supplier must come to service objects in a fixed location, such as buildings or large items of installed equipment. However, technology allows certain types of service processes to be administered from a distance through electronic diagnostics and transmission. Such services can be called remote services. Also, small items can be shipped to another location for servicing if there are no excessive customs duties or other restrictions on free movement. (c) Information-based services are targeted either at customers’ minds (mental-stimulus processing) or at their intangible assets (information processing). Information-based services depend on the transmission or manipulation of data in order to create value. Global telecommunications makes it increasingly easy to deliver information-based services around the world. Local presence requirements may be limited to a terminal, which may be a telephone or fax machine, computer, or more specialized equipment like a bank ATM connected to a reliable telecommunications infrastructure.[6] [7] In general, high quality e-services have a clear potential to contribute to the internationalization of service business.[8, 9, 10, 11]

Indeed, the literature on international services includes very little knowledge of barriers to internationalization of services, and particularly b-to-b-services. There is a clear need to increase the knowledge of this phenomenon. The present study responds to this need. The purpose of this paper is to increase the understanding of barriers to the internationalization of b-to-b-services.

The rest of this article is organized as follows. First, this article discusses general barriers to internationalization of services. After that, it discusses the barriers to internationalization of b-to-b-services. Then it explains the empirical method. After that, it describes the empirical findings. Next, this article proposes a framework of barriers to internationalization of b-to-b-services. This framework contributes to the literature by showing both the general barriers in service industries as well as the barriers specific to b-to-b-services.

II. GENERAL BARRIERS TO INTERNATIONALIZATION OF SERVICES

The general barriers and challenges to internationalization of services are discussed next. These barriers are briefly summarized in Table 1.

Javalgi and White (2002) discuss the following challenges for internationalization of services.[12] First, when examining core services by country of origin (COO), customers tend to prefer core services from their own country, from countries with a similar culture to their own, and from economically progressed countries. The challenge is that the service provider must anticipate customers’ concerns regarding a specific COO, especially services originating from less developed economies. Satisfaction guarantees, for example, may help to overcome these concerns. Second, customers’ evaluations of services may be affected by customer ethnocentrism or customer patriotism. This means that customers prefer domestic services because of strong nationalistic beliefs and feelings. Customer patriotism or conservatism may restrain them from buying services of foreign origin. Third, cultural elements, such as religious beliefs, materialism, language, education, the family structure, gender role, manners, customs, and time orientation are closely intertwined with national culture. These cultural elements have a significant impact on the acceptability and adoption pattern of services. Fourth, a strong association exists between information content and social/cultural values. The differences in social/cultural, technological, legal and governmental aspects may necessitate the use of different services for the delivery of information content. Also, some countries regulate information content. According to Javalgi and White (ibid.), a good quality service delivered in a country by a provider who ignores or pays very little attention to cultural sensitivity is destined to fail. Fifth, in the present global economy, service providers are confronted with different entry mode choices that include exporting, licensing, franchising, management contracts, turnkey operations, joint ventures, and wholly owned subsidiaries (acquiring or greenfield ventures). The decision on the entry mode relies on the “serviceness” of the offering and the degree of consumer/producer interaction. Sixth, managing the demand is challenging because services are perishable and when not sold they cannot be stored. Consequently, services require better pricing and distribution structures. Seventh, services cannot be standardized like goods, since they are performances and often involve some level of the human element. Eighth, quality excellence is a cornerstone in building competitive advantage. The challenge is in that the weights of different quality dimensions may vary across different cultures. For example, the various dimensions of service quality should be emphasized differently in developed and developing economies. Ninth, several countries, particularly the less developed ones, are not equipped with the knowledge and experience in managing and handling the market research. In several countries, there is a lack of comprehensive and reliable data, for example. Still, market research is often necessary to uncover customer needs and wants. Tenth, services are tradable on the international market and both developed and developing countries are competing for their market share. The globalization of the service sector has not been restricted to advanced economies alone. New competitors are emerging from less advanced economies, which are also showing signs of growth in the service sector.[13]

Zimmerman (1999) [14] uses two main categories of barriers in the internationalization of services, introduced by Geracimos [15], namely entry restraints and operational barriers. In terms of these categories, Zimmerman (ibid.) puts forward altogether 26 barriers. The ten most significant barriers are summarized in Table 1.
barriers in his (ibid.) study in the insurance industry are: outright prohibition of foreign insurers, unenforceability of insurance contract provisions, foreign firm allowed to insure their nationals or firms only, discriminatory taxation, necessity for “dash” payments, restrictions on foreign firms’ product offerings, regulations of foreign firms’ pricing, discriminatory financial requirements, foreign exchange controls, and equity limits on foreign ownership.

Samiee (1999) brings forward, for example the following barriers to internationalization of services.[16] Often there is a lack of complete and reliable data for various services sectors on a global scale, which constitutes a barrier. Moreover, the natural tendency of governments is to protect domestic firms from foreign sources of competition and to buy only from domestic service suppliers. Also, tax laws may be linked to immigration status and permit unfavourable treatment of service income in host countries and the absence of bilateral tax treaties can make it unprofitable for some service providers to move abroad. Furthermore, an increasing number of services are intertwined with information technology. Such services, for example in the financing industry, they are disproportionately affected by limits placed upon international transmission of data or transnational data flow constraints.

Dahringer (1991) distinguishes tariff and nontariff barriers in the internationalization of services.[17] Following examples enlighten the nature of tariff barriers. Tax imposed on imported advertising, which discriminates against foreign agencies. Tax imposed on computer service contracts, which process international service providers higher than domestic stand alone. Higher fees charged from university students from outside the country, which decreases foreign student enrolment. The following nontariff barriers are put forward in Dahringer’s report. Buy-national policies discriminate against foreign suppliers. Prohibition against employment of foreign nationals may prevent suppliers from going to buyers. Distance forces to evaluate what is most economic, bringing supplier to buyer, buyer to supplier, or both moving to a third location. If the government holds a monopoly in certain service, for example telecommunication service, then market access is blocked to a foreign service company, except through the establishment of strategic partnership with the government. Consequently, the foreign service provider has to market its services to the government. Another problem related to competing with a government is that often governments price their services to domestic users less than cost, and therefore a competing service provider faces market expectations of a below-cost price.

According to Geracimos (1987/1988), barriers to trade in insurance can be grouped into two major categories: entry restraints and operational barriers.[18] The entry barriers relate to the establishment of local presence. They include discrimination in obtaining a license to do business in country, local ownership requirements, excessive financial requirements, and labour restrictions. The operational barriers include discriminatory taxation, currency controls, local investment requirements, government procurement discrimination, required reinsurance with national reinsurers, and refusal of entry to national trade associations.

Skipper (1987) classifies barriers to internationalization of insurance services into three categories.[19] The categories are measures related to establishment, measures related to market access, and measures related to operations. Measures related to establishment include barriers, such as monopolistic markets, licensing requirements, differential deposit/capital requirements, domestication, localization of ownership, localization of service, and local placement of transportation insurance. First, the ultimate in limitation on establishment is flat prohibition, which exists in monopolistic state-owned markets. This exists where one or more state-owned service companies enjoy a monopoly in certain industry. However, the prohibition applies equally to potential domestic, locally-owned service providers, thus it is not unfairly discriminatory. Second, in many countries, in certain industries, service providers coming from abroad cannot operate without appropriate licences. Some countries do not grant such licences to the subsidiaries of foreign service companies at all. Other countries forbid non-resident service providers operation unless their services are unavailable locally or unless their operation is judged by local authorities to result in substantial benefit to the local economy. Third, in some service industries, like insurance, minimum capital and surplus requirements apply for establishing and maintaining the operation. Also, security deposits may be required. However, in some cases, the deposit requirements are higher for subsidiaries of foreign companies. Fourth, in some countries governments prohibit their nationals to buy certain kind of services from other than locally licensed and incorporated service providers. Such domestication is more common in developing countries. Fifth, in some cases a domestication requirement is accompanied by a requirement that the majority of the ownership is in the hands of locals. Localization of ownership refers to this. Sixth, some countries require that imports, and exports in some cases, are insured in local markets.

Measures related to market access cover nationalization, government procurement, as well as license and product limitations. First, the ultimate in limiting market access is nationalization of an already established branch office. Second, governments may require that public procurements of certain kind of services are procured only from local service providers. Third, some countries may delimit the variety of services allowed to be offered by a foreign service provider. Finally, measures related to operations include employment of nationals, reinsurance placement, localization of reserves/assets, and exchange controls. First, in order to promote employment of local citizens, it is common to limit or discourage the employment of non-national within the country. Second, in the case of insurance industry, the insurers operations can be influences greatly by the extent to which insurers are free to place their reinsurance coverage. Restrictions on the placement of reinsurance vary widely, and may in some cases function as a form of trade barrier. Third, it is common that the assets backing local obligations be in national securities or other national investments and be
maintained in the country. Fourth, countries with shortages of foreign exchange usually institute controls on the payment of their scarce foreign exchange reserves. These controls usually apply across all sectors. Fifth, many countries either tax foreign service providers at the higher rate than domestic ones, or use different tax base. Thus, foreign service providers have a higher effective tax rate. Sixth, trade association membership usually enables the service provider to benefit from a common statistical base, from research, and lobbying. Some markets prohibit foreign companies to joining local associations.[20]

<table>
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<th>Author</th>
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| Javalgi and White, 2002 | ● Country of origin COO effect on service consumption  
● Customers' ethnocentrism and patriotism on services evaluation  
● Cross-cultural incongruence  
● International delivery of information content  
● International services delivery/market entry decisions  
● Managing demand  
● Standardization vs. local adaptation/customization  
● Service quality  
● Market research  
● Competitive stance |
| Zimmerman, 1999  | ● Outright prohibition of foreign firms  
● Restricted number of foreign firms admitted  
● Equity limits on foreign ownership  
● Time-consuming/difficult company licensing procedures  
● Licensing of foreign professionals  
● Foreign firms allowed to service their nationals or firms only  
● Requirements to establish local subsidiaries  
● Restrictions on foreign purchase or rental of real estate  
● Local investment requirements  
● Unenforceability of insurance contract provisions  
● Discriminatory financial requirements (i.e. higher capitalization and/or surplus requirements) Operational barriers  
● Tariffs  
● Government subsidies to domestic firms  
● Restrictions on foreign firms’ product offerings  
● Restrictions on foreign firms’ advertising  
● Regulation of foreign firms’ pricing  
● Government buy-national policies  
● Discriminatory taxation (i.e. higher premium taxes for foreign insurers, non-deductibility of foreign insurance premiums as a business expense)  
● Government competition  
● Government controls/restrictions on reinsurance  
● Prohibitions of foreign firms’ membership in national trade associations  
● Foreign exchange controls  
● Prohibition of brokerage activities  
● Necessity for “dash” payments to local government officials  
● Government controls on data or written material transfer  
● State/provincial regulation instead of national regulation |
| Samiee, 1999      | ● Lack of complete and reliable data for various services sectors on a global scale  
● Tendency of governments to protect domestic firms from foreign sources of competition and to buy only from domestic service suppliers  
● Tax laws linked to immigration status  
● Limits placed upon international transmission of data or transnational data flow constraints |
| Dahringer, 1991   | ● Tariff  
● Import taxes  
● Higher prices/fees customers coming from abroad  
Non-tariff  
● Buy national policies  
● Prohibition against employment of foreign nationals  
● Distance  
● Direct competition from government  
● Scarce factors of production  
● Restrictions on service buyer movements |
| Geracimos, 1987/1988 | ● Licence requirements  
● Local ownership requirements  
● Excessive financial requirements  
● Labour restrictions  
Operational barriers  
● Discriminatory taxation  
● Currency controls  
● Local investment requirements  
● Government procurements discrimination  
● Required reinsurers  
● Refusal of entry to national trade associations |
| Skipper, 1987     | Measures related to establishment  
● Monopolistic markets  
● Licensing requirements  
● Differential deposit/capital requirements  
● Domestication  
● Localization of ownership  
● Localization of service  
● Local placement of transportation insurance Measures related to market access  
● Nationalization  
● Government procurement  
● License and product limitations Measures related to operations  
● Employment of nationals  
● Reinsurance placement  
● Localization of reserves/assets  
● Exchange controls  
● Differential tax treatment  
● Trade association membership |

III. BARRIERS TO INTERNATIONALIZATION OF B-TO-B-SERVICES

This section discusses barriers to internationalization specifically in the context of b-to-b-services. These barriers are briefly summarized in Table 2.

According to Reihlen and Apel (2007), for the internationalization of professional service firms, it is necessary to embed itself in knowledge-intensive networks and the institutional structure of the new market. [21] This embedding is done on the one hand with the aim of signaling its own competence within the connections and thus to build
up a reputation and to ensure its own legitimacy in the market, and, on the other, to learn through the feedback thus received from the business partners. Since this is often a challenging task, it can also function as a form of barrier.

CSES Centre for Strategy and Evaluation Services (2001) examined regulatory as well as market and socio-cultural barriers to trade in business services in EU countries, and reported on the following findings.[22] The study found that different barriers are experiences by companies who sell service from home base, compared to those who choose to set up operations in another country. B-to-b-service providers face several regulatory barriers to trade. They include barriers related to the legal systems, like additional complexity of dealing with foreign legal procedures, the absence of transparency in regulations as well as transparency in the implementation of regulations. In many cases these barriers represent a learning curve that the service provider has to overcome in seeking to enter a new market. Even though they form barriers to entry they are not necessarily discriminatory against non-domestic companies seeking to enter a market.

Moreover, a number of market and socio-cultural factors turned out to be relevant barriers to internationalization of b-to-b-services. They cover language, distance related barriers, as well as differences in local traditions. They also include the need to have a local track record and the need to be able to provide after-care services. Other market relate barriers include the difficulty in obtaining information on tenders, the high costs of bidding, and exemption clauses in public procurement, and the existence of subsidised local suppliers.[23]

Alon and McKee (1999) examined internationalization of professional b-to-b-service franchises.[24] According to their (ibid.) study, the size of the franchising system may act as an entry barrier to new firms in international markets. The size of the franchising system is important in establishing new clientele domestically, but even more so internationally. This is because less information is available to prospective clients. The bigger firms may also be able to secure capital in foreign countries more easily. Moreover, b-to-b-service firms must invest considerable resources in building their reputation and enhancing their client’s trust in the professionalism of their service. The establishment of large networks of professional business services becomes necessary to the formation of unique linkages with clients that competitors cannot easily replicate.[25] However, establishing large networks in the international market may also be a major barrier to the b-to-b-service firm.

Coviello and Martin (1998) examined internationalization of engineering consulting services.[26] They (ibid.) found that internationalization is influenced heavily by the firm’s networks of formal and informal relationships. These relationships involve clients, competitors, colleagues, government, and friends. Also, these relationships influence initial market selection and also the entry mode. Their study also acknowledged the existence of psychic distance in the internationalization. However, they found that psychic distance will overcome by leveraging network relationships and recruiting personnel with expertise in psychically distant markets.

IV. METHODOLOGY

The empirical method of this study is based on in-depth interviews and qualitative analysis.[27, 28, 29, 30, 31, 32] The data used for the theory development of the present article is part of a larger empirical material gathered from companies in the machinery and equipment manufacturing industry developing service offerings to their customers. The empirical material deals with several aspects of industrial b-to-b-services, one of them being internationalization of b-to-b-services. The overall data in hand included 37 interviews of senior executives in 30 companies. However, internationalization of b-to-b-services was not discussed in each interview. Interviews in 6 companies included empirical data dealing with internationalization of b-to-b-services. Thus, the empirical findings reported in this article stem from interviews conducted in 9 companies. Each interview was
conducted according to a semi-structured interview protocol. In many interviews, however, several new and interesting themes emerged which were not on the list. The interviews were tape-recorded and transcribed. The data were analyzed in terms of systematic coding and categorization of descriptions and statements given by the interviewees in order to develop a synthesis which grasps these empirical evidences.[33, 34, 35, 36]

V. EMPirical FINDINGS
Four important barriers to internationalization of b-to-b-services emerge from the empirical data. They are:

- need for a new business model in the foreign market
- customers’ unwillingness to pay for product related services
- cultural differences, and
- language barriers.

The data suggests that, in some cases, the same business model for the b-to-b-service that is used in the domestic market cannot simply be used in the target market abroad. Or, the company anticipates that the same business model is likely to cause a failure in the foreign market. For example, methods for establishing customer relationships and enhancing customer commitment may vary significantly. In such a case, the company has to develop a new business model if it wishes to enter to the particular market. Both the development process as well as the implementation of the new business model in the foreign market may be a challenging task. Thus, the need for a new business model in the foreign market may represent a significant barrier for internationalization.

Based on the empirical material, in some countries, customers are very unwilling to pay for services which relate to a physical product. Customers are willing to pay for the physical product itself, but unwilling to pay for the related services, such as maintenance. In such cases, the pricing of the service becomes very difficult. The price of the service should be somehow included in the price of the physical product. However, the life cycle of the product may be even decades. Moreover, the exact amount and nature of the service is also unknown at the time when the product is sold. Thus, including the price of the services into the price of the product is extremely difficult. This can also function as a barrier to internationalization.

The present data suggests that overcoming cultural barriers is clearly a challenge in the internationalization of b-to-b-services. Companies selling physical products in the international market have faced the challenge caused by cultural differences. Thus, they know well this phenomenon. However, when they start selling and providing b-to-b-services, they find that the influence of cultural factors is far stronger. In the case of services, they have to know the local culture much better. Also, the adaptations required by the culture are much greater than in the case of physical products. Consequently, cultural issues constitute a barrier for internationalization of b-to-b-services.

Based on the empirical data, is clear that language is a barrier for internationalization of b-to-b-services. All companies can sell and provide their services in English. However, many customers in the international marketplace expect to be served in their own language, which is often other than English. Particularly, if there are competitors who can sell and provide the service in the customers own mother language, then these competitors have a clear advantage.

VI. A FRAMEWORK OF BARRIERS TO INTERNATIONALIZATION OF B-TO-B-SERVICES
Based on the above literature analysis, a framework of internationalization of b-to-b-services is suggested (Fig. 1). This framework is a revised and extended version of the framework which was introduced earlier by Ojasalo.[37] The former framework was based on literature analysis, while the present is based on literature analysis and empirical material. The framework illustrates both general barriers in services as well as b-to-b-specific barriers. The former consists of entry barriers and operational barriers. The general entry barriers to internationalization of services include licence requirements, monopolistic markets, service limitations, local ownership requirements, excessive financial requirements, and labour restrictions. The general operational barriers to internationalization of services cover discriminatory taxation, government procurements discrimination, refusal of entry to national trade associations, prohibition against employment of foreign nationals, limits placed upon international transmission of data or transnational data flow constraints, government competition, and government subsidies to domestic firms. Specific barriers to internationalization of b-to-b-services include creating formal and informal networks, small firm size, imposition of national standards and testing rules, complexity of foreign legal systems, inability to practice without license from professional body, need to work in local language, overcoming psychic distance, difficulty in supplying service because of distance factors, needs for local track record, excessive costs for setting up a local operation, difficulty in obtaining information on tenders, high administrative costs of bidding, exemption clauses in public procurement, need for local presence to provide after-care services, need for a new business model in the foreign market, customers’ unwillingness to pay for the product related services, and cultural differences.
Fig. 1 Barriers to Internationalization of B-to-B-Services

VII. CONCLUSION

The purpose of this paper was to increase the understanding of barriers to the internationalization of b-to-b-services. This paper was based on literature analysis and empirical data. As a result, this article suggested a framework of barriers to internationalization of b-to-b-services. This framework contributes to the literature by showing both the general barriers in service industries as well as the barriers specific to b-to-b-services. The general barriers are further divided into entry barriers and operational barriers.

Following directions for further research can be suggested. Firstly, the proposed framework could be tested in terms of empirical quantitative research. Secondly, a number of various barriers to internationalization of b-to-b-services were identified. Indeed, more knowledge is needed of various strategies how to overcome these barriers. Thirdly, cross cultural studies are needed to see the cultural effects on barriers. Fourthly, the role of e-services in the internationalization of b-to-b-services should be examined in more detail. So far, the research of e-services and their role in the internationalization has mostly been conducted in the context of consumer services.

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