### INDIA IT INC GOING GLOBAL: CHOICE OF ENTRY MODE STRATEGY

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#### ABSTRACT

International markets have changed dramatically during the last decade. Despite this, there exist no concrete theories on how Indian IT industries enter new markets, and their choice of entry mode. This study seeks to advance the state of our theoretical as well as empirical understanding of the determinants of entry mode choice and internationalization performance of Indian IT SME global ventures. The suggested model is based upon concepts of prior theories on internationalization. Proposed paper develops an alternative mode for Indian industry internationalization focusing on the role of IT Company's strength potential advantage, the internationalization risk factors and the use of company strength potentials(CSP) know-how for predicting entry mode choice. Propositions were created to test the validity of the model and the presumed entry mode decision. The theoretical and empirical cognitions drawn from this review are then used as the basis for practical implementations for industry internationalization. Empirical results based on a survey of Indian IT companies support the combined relevance of their factors on choice of market entry mode in international market. Finally the conclusions are presented to summarize the work, and some general suggestions for future research.

Keywords: Small and medium enterprises, company strength potential, Internationalization risk factors, choice of entry mode

### INTRODUCTION

Globalization is widely seen as a dominating phenomenon of current century encompassing worldwide integration of financial systems, trade liberalization, and market opening resulting in a global market and patterns of industrial development (Davidson, W. H. 1982). However, entry decisions for international markets are very risky and more difficult than those for domestic markets, due to the wide variety of uncertainties and complexities associated with the international IT domain. In this respect, it is surprising that few researchers have investigated entry mode choices in the context of internationalization (Gerauld Albaum & Strandskov, 2008).

This study of Indian IT industry may well provide new insights regarding the relevance for firm internationalization. Foreign market entry strategies involve decisions on the choice of a target market, entry mode, marketing plan and control system (Root,1994). The decision on which entry mode to use for a foreign market has a major impact on the success of entry and performance of international operations. The four most common modes of foreign market entry are exporting, licensing, equity joint venture (EJV) and wholly owned subsidiary (WOS).

Over the past twenty four months, India Inc has acquired a slew of foreign companies across a spread of sectors in their quest to go global. India is fast dropping its tag of being a foreign direct investment(FDI) destination and is emerging as a major foreign direct investor. There is something inherently exciting about the news of Indian companies, admittedly only the best rated ones, taking over companies with strong traditions in Western Europe and North America. Hindalco's takeover of Novelis and the Tata's acquisition of Corus are spectacular in every sense of the world. Wipro and Infosys

are great brand names globally. The list will expand in days to come.

# Description and Critical Discussion of Established Theories on Internationalization:

When reviewing the topic and explanation of internationalization, many theories and models came across. Some theories are more acknowledged than others, and the majority of the theories have extensions by other authors. In addition, in alignment with our research paper, we have chosen five different models that are well-known and were created some years ago and have had the time to be reviewed, analyzed and tested several times. We will present the models and their key-points and in the end, discuss their some limitations. The theories that we have chosen are:

The Uppsala Internationalization Model: This is a classic internationalization theory. Johanson and Wiedersheim-Paul (1975) proposed the stage of development (SD) model (i.e. known as the "U" model while they were studying the internationalization strategies of SMEs. The model asserts its emphasis on that a company gradually extends its activities . abroad over time and as knowledge develops, with that the physical distance to markets increases (Johanson and Vahlne, 1977). That the internationalization of SMEs is a long, slow, and incremental process in two dimensions: the geographical or cultural expansion and the level of commitment. Brooke (1986) applied this approach to explain market entry. Researchers from this first school prefer that companies enter new markets with a low risk entry mode such as export and with time increase their involvement by choosing an entry mode with commitment (Pan higher 2000). However, this model is not perfect: it provides a set of feasible entry modes but not

the right ones (Young et al. 1989). This is because it is not capable of explaining why a newly established firm starts entry with a wholly owned venture but not export. After many empirical tests related to the Uppsala model, the studies have shown that the internationalization process is not valid for service industries. Further, the firms are expected to enter markets with successively greater psychic distances. Psychic distance is defined in terms of factors such as differences in language, culture, political systems, etc., which disturb the flow of information between the firm and the market. Other studies have shown that firms lately seemed inclined to leapfrog stages on the establishment chain, entering markets with higher psychic distance early in the internationalization process. Another important criticism of the Uppsala model is that it ignores market potential and competitive conditions in the explanation of the model. We note that the SD model does not dominate the existing literature.

Transaction Cost Analysis (TCA): The Transaction Cost Analysis (TCA) originated from Anderson and Gatignon (1986). TCA is based on the TC theory of the firm, which was initiated by Coase (1937) and Williamson (1975 and 1985) as a tool to explain economic problems where asset specificity, uncertainty, and opportunism play a key role. The TCA framework argued that multinational enterprises (MNEs) choose a specific mode of entry that maximizes the long-term riskadjusted efficiency through minimizing of the transaction costs through delivering services in more than one country. The focus is on the costs of a foreign market entry mode comparative to its objective, what is most efficient and economical way of entering international market. Researchers state that companies will internalize operations that it can perform at a low cost and let others perform activities that can be done at lower cost elsewhere (externalize). When a company externalize their activities transaction costs will occur. These costs include amongst other cost of monitoring, controlling and inspecting suppliers and products. The second school's advocates assume that managers consider all entry modes at the same level and that all factors are of equal importance (Pan & Tse 2000). Brouthers (2002) suggested that the firms, which make their entry mode choices by applying this TCA criterion, are performing better than those who do not. Nakos et al. (2002) analyzed both the market entry decisions and the performance of Dutch and Greek SMEs in CEE and suggested that the TCA framework for MNEs tend to apply for SMEs as well. The TCA frameworks have a very limited predictive power in entry mode choice due to the following reasons:

- Transaction costs themselves are ambiguous and difficult to measure, what more important however is that the transaction cost itself has no absolute connection with corporate governance,
- The effect of transaction costs in today's business has fallen dramatically due to technology development and economic integration (Downes and Mui 1998, Krempel and Plümper 2002),
- It has a very limited explanatory power with respect to the complex multinomial choice of market entry mode (Gatignon and Anderson 1988, Klein et al. 1990),
- 4) It neglects many important aspects in terms of firms' boundary decisions: the government regulations (i.e. they generally define the feasible set of entry modes), the production costs (Anderson and Gatignon 1986), the larger strategic and the competitive context within which the firms are operating (Madhok 1998), and non-

profit goal of decision-making5 (Milgrom and Roberts 1992). Moreover, it excludes non-transaction benefits (Anderson and Gatignon 1986).

The Eclectic Paradigm(OLI model): The theory was introduced by Dunning (1977), intending to identify and evaluate the factors influencing both the initial act and the growth of foreign production. In the following decades, the author himself (Dunning 1980, 1988, 1995, and 2000) developed this model further. The theory stated that entry mode decisions are determined by the composition of three sets of advantages as perceived by enterprises:

- Ownership advantages (i.e. advantages that are specific to the nature and the nationality of the owner),
- Internalization advantages (i.e. advantages arising from transferring ownership advantages across national boundaries within the organization), and
- Location advantages (i.e. advantages arising from the fact that different locations feature different resources, institutions, and regulations affecting the revenue and the cost of production).

The more eclectic advantages a firm possesses, the greater the propensity of adopting an entry mode with a high control level such as a wholly owned venture. Later Dunning (1995 and 2000) updated the model and argued that competitive advantages, market failure, collaboration, and dynamic environments should also be integrated into the model, when decisions on international production are made. The eclectic model was widely applied in the past to explain entry mode decisions and its basic ideas were supported by several empirical studies. Agarwal and Ramaswami (1992) supported this theory by empirically examining a sample

of American service firms. Brouthers et al. (1999), and Nakos and Brouthers (2002) adopted this framework to explain MNEs' entry mode decisions when facing a transition economy such as CEE. In spite of its eclecticism, its improved measurability, and its improved explanatory power, the eclectic model is a static one. Despite partial acceptance, the eclectic model does not provide a unified perspective in the explanation and prediction of entry mode choice. The model does not explain why two firms in the same line of business and with similar ownership, internalization, and location advantages would not necessarily choose the same entry mode in the same foreign market. Furthermore, extant eclectic models ignore the impact of broad product characteristics (goods versus services), home country factors, and boundary variables (weight to value ratio of the product, logistics or transportation costs and currency exchange rates between home and host countries) on choice of entry mode.

The OC Model: Aulakh and Kotabe (1997) have discussed organizational capability as an aspect that influences entry mode choice. Madhok (1998) systematically studied the organizational capability and proposed this OG approach. This approach is based on the RB theory of the firm and its offspring, i.e. the KB theory of the firm (Penrose 1959, Conner 1991, Kogut and Zander 1993, and Conner and Prahald 1996). The RB theory regards a firm as a bundle of capabilities and knowledge where individual skills, organization, and technology are inextricably woven together (Nelson and Winter 1982). The model argues that entry mode decision is capability related, and it is made under a framework governed by considerations of the deployment and development of a firm's capabilities rather than the costs of transactions. However, this approach has some limitations:

- There is an over emphasis on the future value rather than the short run profit. Certainly, firms make their strategic decisions with long-run growth or capability deployment and development as a goal, but not the only one,
- The OC theory suffers, when it is used to solve the firm's boundary decisions, from the bad measurability of the OC itself. Because of this bad measurability and impreciseness, the OC theory is therefore less applicable in practice for managers,
- The OC theory ignores explicitly the roles of decision maker as well as the environment in the process of entry mode decisions.

The DMP Model: The DMP models were represented by Young et al. (1989), Root (1994), Kumar and Subramaniam (1997), Pan and Tse (2000), as well as Eicher and Kang (2002). These models are traceable to the BR theory and the behavioral theory of the firm (Simon 1957, Cyert and March 1992, March and Simon 1993), in which the decision-making process has a greater influence on achieving the firm's goals. These models argue that entry mode choice should be treated as a multi-stage decision-making process. In the course of decision-making, various factors, such as the objectives of market entry, the existing environment, as well as the associated risks and costs, have to be taken into account. Focusing more on optimizing the process of decisionmaking rather than on calculating the economic efficiency, these models are more descriptive than normative. However, designing the process of decision-making very easily falls into two false directions, either too specific or too general. The decision-making procedures of choice cannot be designed completely distinct in nature. Additionally, it ignores the role of the organization itself and that of the decision maker during the process of decision-making.

### A New Alternative Approach- The Indian Industry Internationalization Model

The preceding discussion of established theories on internationalization choice of entry mode implies that they provide complementary and overlapping explanations of the market entry strategy. When we were creating our own model, we thought that it was necessary to decide which scientific approach we believed to be most accurate in today's business climate. All theories have good arguments and ideas that describe the complex decision managers have to face when entering new markets. The first school, which regards the internatiolisation process as a risky operation due to political and cultural differences, is still valid but, today the market is more global then it was when the Uppsala(SD) model was created. The access to information is almost unlimited today which affect manager's way of doing business. There are always some aspects in a new market or country that are unknown but managers have so much information to access that markets are rarely completely unknown. The political situation is also more and more countries have democratic societies. That is why we believe that even if a foreign market entry always is connected with some risk, the amount of risk has decreased for some markets. As the eclectic paradigm considers the transaction cost theory, it absorbs some of the important elements that are the third school's key features. As we believe location factors to be very important in the global marketplace and will continue to be so, we are followers of the second school's of thoughts of international business. The proposed paper developed an alternative model, which will help Indian IT companies to enter new international markets with controlled risk and commitment level. The entry modes have been divided as into export,

contractual and investment entry mode. The following part will explain each of the three parts separately and how they affect the entry mode decision. The model has three parts:

- Company strength potentials(CSP)
- How companies use their company strength potentials
- Internationalization Risk Responsiveness

Company Strength Potentials (CSP): All companies have a specific asset. It could be know-how, foreign experience, brand name, unique & patented products and so forth, which is something the company want to control. However, in relation between industries a company's specific asset may not be that important. For instance the healthcare and IT industry could be seen to have a higher specific advantage and knowledge since it demands much know-how, experience and research and development to succeed in the industry. A company in the healthcare and IT sector are much more technologically advanced, demands more resources and is more difficult to set up. A 5-item scale measuring the respondent's perception of CSP factors in IT firm is adapted as shown in table 2. The basis of CSP will be further discussed in the following section.

Firm size: firm size is perhaps one of the most studied variables that relates to internationalization of a firm. The SD model of internationalization assumes that small firms faces severe resource (financial, technological and personnel) constraints. By growing larger, firms will be able to commit greater resources to international activities and gradually increase their international sales.

Product development/Branding capability refers to the extent to which firm can develop and launch new products to satisfy customers needs. Li and Calantone(1998) suggested that

new product development capability helps link external customer needs, competitive intensity and internal research and development strength. It is suggested that, new product attributes enhance brand image and firms ability to meet customer needs and help the firm differentiate its offering from those of competitors.

Technological capability of the firms: international new venture theory focuses on knowledge-based products or assets that have high research and developments inputs. A company that invests in R &D will seek a return on this investment by capturing as large as possible and this accelerates international expansion. It has been observed that high-technology small firms expand the available market through internationalization.

Foreign experience: Practical knowledge gained by doing business in the host country which is also considered an important driver for determining the choice of a specific entry mode. Thus firms having greater foreign experience are able to bear the risk associated with committing substantial resources into the foreign markets and at the same time have developed more sophisticated processes and systems for efficiently managing their international operations.

Management capability: Firms with diverse management know-how may be able to introduce better human resource planning, undertake more promising competitive strategies, and identify more promising market opportunities (i.e. in foreign markets) (Tallman,1991). The internationalizing firms can acquire resources using their management know-how to identify appropriate partners, investors, and advisors, which can help supplying the firms with necessary resources.

Market specific knowledge: The relationship between market specific knowledge, acquired mainly through effective operational experience in a foreign market and firm's internationalization process has been addressed by a number of authors (Reid,1983). Lack of market specific knowledge generates uncertainty, heightens firm's perception of risk, and would tend to choose an equity-entry mode.

Company risk tolerance level: The degree to which the company will accept different international business risks depends on the situation of the company's financial condition, its strategic alternatives, the competitiveness of its competitive atmosphere and its experience. Companies should, however, be aware of that the perception of risks connected to individual market entry modes or countries can influence companies' decisions significantly. The lower degree of risk avoidance the management, the more likely it is for the company to select countries that show higher degree for long-term forecasts and assure to progress the firm's competences as Koch (2001).

Internal /External use of CSP: When a company has specific assets and advantages, it has two options. Firstly the company could use the CSP internally and keep the knowledge within the company, secondly externally let the knowledge be used by others. In turn, when choosing to use the knowledge internally a company has two options. The company could choose an export entry mode and keep the knowledge internally. The option minimizes the risk and also the commitment. The other option is to use an investment entry mode, and choose between Greenfield investment and acquisition. The investment entry mode requires much more financial resources, it involves the highest risk but it gives the company total control and could assumedly lead to higher profits. When choosing to use the knowledge externally the companies use a contractual entry mode. The option is to either license or franchise. When licensing a company has no control of what the licensee does, but it allows the company to enter a new market without risk and still increase profits. Franchising works in a similar way as licensing but involves higher control for the franchiser. The franchisee must follow rules and protocol how to do business, and the franchiser enter a new market with a bit higher risk than licensing but with much more control. When entering a joint venture, a company uses the CSP externally and internally both.

#### Internationalization Risk Factors:

Host Country Risk: Country risk, which refers to the perceived discontinuity or unpredictability of the political and economic environment of a host country. When host country risk is high, existing works indicate that an MNC would do well to limit its exposure to such risk by restricting its resource commitments in that particular national domain. A 5-item scale measuring the respondent's perception of business risk in IT firm is also adapted (Kim and Hwang, 1992). The items are inflation, foreign exchange balance, legal protection of intellectual properties, political uncertainty. This composite scale has reliability greater than .70.

Location Unfamiliarity: Previous studies argue that the greater the perceived distance between the home and host country in terms of culture, economic systems, and business practices, the more likely it is that multi-national enterprises will shy away from direct investment in favour of licensing or joint venture agreements (Vernon, R. 1974). For a firm that has invested in global market, heterogeneity or location unfamiliarity of market is more related to the perceived differences between the home and host country with respect to culture, management mentality and government

bureaucratic system. A 5-item scale measuring the respondent's perception of location uncertainty in IT firm is also adapted.

Demand Uncertainty: The demand in an international market can be defined as the actual demand of existing customers and the potential demand of local market. Therefore, this refers to firms preferring to maintain control over their operations and choose an entry mode with high involvement level and resource commitment. When future host country demand for an MNC's product is uncertain, existing works indicate that an MNC may be unwilling to invest substantial resources in the country to effectively adjust to oscillating conditions and to enhance its ability to exit the market without incurring substantial sunk costs should demand fail to reach a significant level(Yang-Ming Chang, 1990). A 5-item scale measuring the respondent's perception of demand uncertainty in IT firm is also adapted.

Intensity of Competition: When the intensity of competition (Porter M, 1989) is high in a host market, existing works assert that firms would do well to avoid internal organization; as such markets tend to be less profitable and therefore do not justify heavy resource commitments. The intensity of competition was measured by the number of competing players, or firm concentration ratio. A 5-item scale measuring the respondent's perception of intensity of competition in IT firm is also adapted. Thus, the number of players is not an appropriate measure of competition condition.

Other Environmental Factors: A number of exogenous environmental factors impact a firm's choice of entry mode. Foremost among these are the market risk, market growth, environmental awareness and host market infrastructure. The environmental factors influence the choice of entry mode through its impact upon resource commitments and

strategic flexibility. A 5-item scale measuring the respondent's perception of global environmental variable in IT firm is also adapted. There can also be restrictive foreign investment policies, which generally discourage equity investment in favour of other primary modes and may discourage sole ventures in favour of joint ventures or acquisitions in favour of new establishments. Existing empirical study supports this general relationship (Goodnow and Hanz, 1972).

### CONCEPTUAL ENTRY MODE MODEL

Although comprehensive models of international entry mode choice have been proposed in the literature, their treatment of total international risk factors consideration remains inadequate. A conceptual entry mode framework for IT industry explaining entry mode choice among Exporting, Licensing/Franchising, Joint venture, and Sole venture as shown in Figure 1.

The industries are analyzed by using Table 1 below:

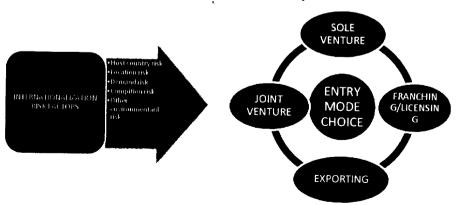
TABLE1
Basics of the Industry
Internationalization

Influences /Mode of Entry	Company strength potentials	Internal / External use of CSP	Internationalization risk Responsiveness
Investment mode	Existing	Internal	High
Export mode	Existing	Internal	Low
Contractual mode	Existing	External	Moderate

Source: Author Estimation

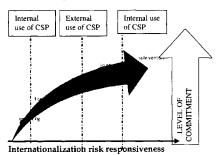
However, companies in the IT sector are often small to medium entrepreneurial companies with high CSP but with small financial resources and often low/moderate international experience. As sole venture often are very expensive but it is assumedly not the

FIGURE 1 Conceptual Framework of Entry



most common entry mode in this industry. Large financial resources are invested in the development of R&D and advanced products. However, they also often have patents on their products which make it possible for them to license it. The industry internationalization model illustrating the inter-dependence between the factors is shown in Figure 2.

FIGURE 2 Company strength potentials



Source: Author Estimation

## RESEARCH METHODOLOGY & OPERATIONALIZATION:

With the help of literature and articles study set out trying to create a new alternative industry internationalization model. The purpose was to create a model that can explain the differences in the India IT, SME choice of entry mode. As mentioned earlier the existing internationalization models chosen were: The Uppsala model the TCA model, the Eclectic paradigm, DMP model and OC model. After going through these models in detail, in order to find what is believed to be the most important factors explaining company's choice of entry mode. In addition, we formed three factors that believed to be influenced by company's choice of entry mode. The factors

chosen in this study when creating a new model were: degree of CSP, internationalization risk responsiveness, and how the companies use the firm strength potential. To test the model through a survey requires limiting the number of factors to those previously mentioned in order to keep it simple and applicable. With the help of the factors we created propositions and a new model. To be able to build a new alternative model an extensive amount of literature was reviewed. Against the backdrop of the above literature, there emerged our research idea to develop Indian IT industry internalization model. Our proposed methodology is deductive in its nature since we developed a theory and proposition and designed a research strategy to test the propositions (Saunders et al, 2007).

### Research Objectives:

Main objective of the study is to build a formalized integrated model for international entry mode choice for Indian IT industry. This study examines IT company strength potentials and internationalization risk factors that influence the choice of international market entry mode. The choices are constrained by the degree of international risk involved and the firm's resource capabilities and outcomes of past history of internationalization. The second objective of this study is to explore the systematic relationship between the factors and the choice of entry mode in International market.In order to achieve this goal, this research focuses on the following pivotal research questions:

- 1. What models or theories are used to explain the choice of foreign market entry mode?
- 2. Which factors are most determinant for IT company's choice of entry mode?
- 3. How do these factors affect companies in IT industries?

### Hypotheses

 H0: Other things being equal, when company's CSP and country risk is high/ low, then company's in the IT sector will favour Internal know-how entry mode that involve relatively choose high risk and commitment.

When a company has a high degree of company strength potential (CSP), it has a incentive to control it carefully in order to protect the CSP from competitors. When companies choose to have high control, the risk will increase as it often involves large financial resources in order to have high control. This discussion is common in this field in business. The SMEs small size have a great influence on what degree of freedom the SMEs have when selecting a foreign market entry mode. The relevant preference that SMEs have in their foreign market entry mode selection is dependent on specific industry resources and therefore the selection of foreign market entry mode for SMEs differs a lot (Koch, 2001). Therefore, a company that enters a new market should not only perform a risk analysis over the market but also over the method that are used to enter the foreign market. When a country's risk is low, IT company that is going into that market will often chooses sole/ acquisition as entry mode since it demands high resource commitment.

2) H0: Other things being equal, when company's CSP and country risk is low/ high, then company's in the IT sector will favour Internal/External know-how entry mode that involve relatively choose low/ moderate level risk and commitment.

Firms entering new foreign markets may be confronted with unstable economic, legal and political systems creating high-investment risk environments thereby discouraging their predisposition towards international commitment (Agarwal & Ramaswani, 1992). In this sense, firms may not tend towards a high-involvement entry mode in risky markets due to the potential for loss of their assets and investments. Furthermore, once a financial commitment has been made, it may be very difficult for a firm to safeguard its investments, particularly in rapidly changing environments. Altogether, this suggests the above proposition.

3) H0: Other things being equal, when company's CSP and location uncertainty is high/low, then company's in the IT sector will favour Internal know-how entry mode that involve relatively choose high risk and commitment.

The industry internalization model refers to the significance for a company to be locally and physically represented in the new market. When looking at the entry modes a distinct difference could be noticed. When firms that are medium and have more financial resources could be assumed to choose an entry mode with higher commitment such as a joint venture or sole venture. When choosing an investment entry mode the company receives a high commitment and high control of the company's assets. This in turn increases the risk, but for some industries, there is no other solution. However, when the need to use their CSP internally is higher, the company will choose an exporting entry mode and the market commitment and representation will decrease. In the works by Ekeledo(2003) and Anders Blostermo(2006), IT companies do not have a great need of being locally represented. As many IT companies are internet based or at least use the internet when serving new markets, they can be based on one specific location and yet serve a wide market. They also often have their customer support on the internet which further reduces the incentives to foreign operations. This means that they do not need to engage in a sole or joint venture.

This minimizes the risk and level of commitment.

4) H0: Other things being equal, when company's CSP and location uncertainty is low/high, then company's in the IT sector will favour Internal/External knowhow entry mode that involve relatively choose low risk and commitment.

The higher the need for a company to be represented in a new market is, the higher the commitment will be, favoring an investment entry mode. The commitment is accompanied with higher risk but also higher control. When smaller firms enter a new market, they could be assumed to strive for an entry mode with a lesser risk, such as franchising. When the need to be represented on a new market is low a contractual or exporting entry mode would be preferred. When companies are, being locally represented on many markets the risk become higher than when using an exporting mode. The industry is primarily an export oriented one related to factors such as the predominance of SME service in the sectors (and therefore limited resources) and the specialist, niche markets served by these producers. The options for the company become to franchise their product and let somebody outside the company set up a store and bare the most risk, or set up a store by joint or sole venture.

5) H0: Other things being equal, when company's CSP and demand uncertainty is high/high, then company's in the IT sector will favour Internal/External knowhow entry mode that involve relatively choose high/Moderate risk and commitment.

When future host country demand for an SME product is uncertain, existing works indicate that an SME may be unwilling to invest substantial resources in the country to effectively adjust to oscillating conditions and

to enhance its ability to exist the market without incurring substantial sunk costs should demand fail to reach a significant level. According to Root (1994) companies with limited resources should choose an entry mode that only demands a small amount of resource commitment. Export as an entry mode is the most suitable way for SMEs to enter a new foreign market. Even though SMEs often desire to have high control over their international operations this might not always be possible since the entering of a new foreign market often demands sustainable amounts of resources, and SMEs often have very limited resources.

6) H0: Other things being equal, when company's CSP and competition intensity is high/ high, then company's in the IT sector will favour external/internal knowhow entry mode that involve relatively choose low/moderate risk and commitment.

To perform a service is often not that complicated and demands not as financial resources or specific asset as to produce for example capital goods. In addition, to start up a company in the IT service industry demands not that much capital. This means that the competition on the service industry might be more though than in other industries. To decrease the accompanied risk of entering a new market the firm could let another company use the know-how. In addition, the actual service can be used externally with low risk since the knowledge is relatively easy to duplicate. With this, a contractual entry mode would be preferred. Hill(2007) state that franchising is most used in the service industry.

7) H0: Other things being equal, when company's CSP and environmental factors is high/ high, then company's in the IT sector will favour external know-how entry mode that involve relatively choose low/ moderate risk and commitment. Foreign market with high growth and little local competition offer more opportunistic conditions, usually resulting in high sales. Such favourable market condition may thus cause firms to turn more of their attention abroad. These variables were thought to be relevant to export marketing performance because they were likely to shape to exporting. The importance of external dimension to the firm's performance is well documented in the economic, management, and organization theory (Pennings, 1993).

Foreign market condition relate to the extent of competition and market barriers in foreign markets. Ayal and zif(1979) demonstrated those firms that perceive a mature market in the domestic market and rapid growth in foreign markets tend to make commitments in foreign markets in order to sustain profitability. Favorable market condition and fewer perceived market barriers in foreign markets will induce the existing exporting firm to consider exporting as an attractive step contributing to the growth of the firm.

### Sample Selection and Response Rate

The proposed research collect secondary data from CMIE source like India trade and industry analysis service has been used for measurement of variables. Apart from these, data for analytical purpose come from a mail survey from company's situated in various major STPI (software technology park of India). The survey was targeted small to medium sized firms in IT sector. In order to

accomplish the desired results we chose 129 companies registered with STPI in 2008-09 as our initial sample. A comprehensive questionnaire was developed and pilot tested before being mailed to a list of 129 firms which constitute of IT firms actively involved in internationalization business. questionnaire was addressed to the company's marketing manager or to the next best person responsible for the firm's business activities in international markets. We sent an e-mail to each of those companies, asking them to participate in our survey. Following the initial mail out and a subsequent follow-up, approximately 3 weeks later, a total of 78 usable questionnaires were retained for the purpose of analysis, giving an effective response rate of 69.6% percent as estimated.

From our survey there were 129 participating companies that belonged to the Information Technology (IT). The IT sector covers a number of businesses and is an extremely technology based industry. Table 3 shows that the mean value of the degree of CSP is statistically high. This motivates IT firm's decision to use the CSP internally. This also confirms our proposition. In addition standard deviation of international risk factors is statistically high that shows high level of commitment from sole venture company's adopting in their entry mode strategy. This motivates the majority's decision to use a high commitment entry mode. We can conclude the analysis of the IT industry by noticing that the industry internationalization model work relatively well in IT companies entry mode.

TABLE 2
Final indicators used to assess the following entry key factors

Factors	Measurement scale	Cronbach's alpha	
Company's strength potentials			
<ul> <li>Firm size</li> </ul>	1 = not flexible and 5 = very flexible	0.745	
<ul> <li>Branding capability</li> </ul>	1 = not flexible and 5 = very flexible	]	
<ul> <li>Foreign experience</li> </ul>	1 = not flexible and 5 = very flexible		
<ul> <li>Management capability</li> </ul>	1 = not flexible and 5 = very flexible		
<ul> <li>Technical capability</li> </ul>	1 = not flexible and 5 = very flexible		
<ul> <li>Market specific knowledge</li> </ul>	1 = not flexible and 5 = very flexible		
<ul> <li>Company risk tolerance level</li> </ul>	1 = not flexible and 5 = very flexible		
Internationalization risk			
<ul> <li>Host Country Risk</li> </ul>	1 = not affected at all and 5 = always affected	0.793	
i) Political Instability	1 = not affected at all and 5 = always affected		
ii) Economic risk	1 = not affected at all and 5 = always affected		
iii) Cultural/legal risk	1 = not affected at all and 5 = always affected		
<ul> <li>Location uncertainty</li> </ul>	1 = not affected at all and 5 = always affected	0.7802	
<ol> <li>Prior experience</li> </ol>	1 = not affected at all and 5 = always affected		
<ul> <li>ii) Perceived difference between host &amp; home</li> </ul>	1 = not affected at all and 5 = always affected		
<ul> <li>Demand uncertainty</li> </ul>	1 = not affected at all and 5 = always affected	0.8149	
<ol> <li>i) Industry growth rate</li> </ol>			
ii) Stage of industry life cycle		1	
<ul> <li>Intensity of competition</li> </ul>	ł	0.7971	
<ol> <li>Instability of market share</li> </ol>		İ	
<li>ii) Number of existing competitor</li>			
<ul> <li>Other Environmental Risk</li> </ul>	1 = not affected at all and 5 = always affected	0.851	
<ul> <li>i) Host country market infra</li> </ul>			
ii) Market growth			
iii) Market risk			
iv) Environmental awareness			

Source: Field survey

TABLE 3
Statistical Analysis of the IT industry

	Degree of company strength potential	International risk responsiveness			
Mean value	4.9	4.6			
Median	3.0	3.5			
Standard deviation	1.81	2.07			

Source: Field survey

TABLE 4
Correlation Matrix and Summary Statistics

VARIABLE	Mean	S.D	Xı	X2	Х3	X4		X5	Yı	Y2	Y3	Y4	Y5	<b>Y</b> 6	¥7	Expected entry Mode
X1: Host Country Risk	4.19	.84	1.00													+
X2: Location Risk	4.17	.84	.02	1.00												+
X3: Demand Risk	4.04	.89	01b	09	1.00											-
X4: Competition Risk	4.40	.76	.02	.13	.13	1.00										+
X5: Other Environmental risk	4.44	.80	.21	07	03	.10	02	1.00								+
Y1: Firm size	4.43	.81	.19	.21	.17	.13	.13	09b	1.00							-
Y2: Branding Capability	4.50	.75	.08	.13	.02	.15	.35	.02	.03	1.00						-
Y3: Foreign Experience	4.36	.78	.16	.10	12b	.17	09	19	12	.29	1.00					+
Y4: Management capability	4.30	.81	.30	.07	.09	.08	.16	.03	.30	.14	.30	1.00				+
Y5: Technical capability	3.92	1.1	.05	09	03	.16	.05	.05	.05	.09	12	13	1.00			-
Y6: Market knowledge	4.07	1.1	.22b	.07	.14b	.12	.00	04	.06	03	04	.11	.09	1.00		+
Y7: Firm Risk tolerance level	4.14	.97	.06	.09	04	07	.21a	.13	.10	07	09	31a	.03	.12	1.00	-

a: b<.05; p<.01 (two-tailed test).

### Analyses and Estimation Results of hypotheses testing

The independent variables, mean, standard deviation, correlation matrix and coefficient of reliability is given in Table 4. A 5-item Likert scale measuring the respondent's perception of factors determining IT firm global entry is adapted. The influence direction of the hypothesized effect is also given in the last column. From the response structure of the variables used in this study, the multi-item scales show reasonable internal consistency, all having reliabilities (coefficient alpha) greater than .70 as shown in table 2. The validity considerations of the twelve independent variables were assessed through a factor analysis. A twelve-factor solution accounts for

approximately 75.8% of the variance. After establishing internal consistency and validity of the multi-item scales, the respective items were summed to create composite scales. The correlation matrix of independent variables gives no indication of major multi-collinearity problems.

Logistic regressions and multiple discriminant analysis are the most often used method in studies on the choice of entry mode. In order to gain a better understanding of the impacts of the antecedent variables on the choice of Exporting, EJV and WOS in international market, two analyses were performed. The results of the logistic regression and multiple discriminant analysis are shown in Table 5. The estimated logistic regression

<sup>+=</sup>Encourages internal use of knowledge; - = Encourages external use of knowledge

coefficients at the initial model and the final model, and the standardized coefficients of discriminant function are shown in the table. The overall initial model is significant ( $x^2$  (12 d.f.) = 41.87, p < .001) and correctly classifies 76% of the observations. Although the variable of the relationship with IT firms are found to be positively related to the choice of EJV in

Indian IT, the negative and positive sign of other independent variables are found to support to the hypothesized direction of influence. Four relationships are supported in the initial model and final model. As hypothesized country risk of target market and company strength potential factors are found to be positively related to the choice of EJV, thus

TABLE 5
Logistic Regression Estimation and Discriminant Analysis Results

VARIABLE	Logistic Regressi	on Estimation	Descriminant Analys Standardized Coefficients			
	Coefficient of Initial Model	Final Model		.309		
X1: Host Country Risk	319	306		.304		
X2: Location Risk	289			.038		
X3: Demand Risk	.254			.258		
X4: Competition Risk	-255	251		185		
X5: Other Environmental risk	.075			.542		
Y1: Firm size	156	162		.112		
Y2: Branding capability	.213	-256		.246		
Y3: Foreign experience	141			.226		
Y4: Management capability	.185			1 <b>7</b> 5		
Y5: Technical capability	.085			251		
Y6: Market specific knowledge	.342			023		
Y7: Firm Risk Tolerance level	081					
Log Likelyhood	-49.42	-52.82	Eigen value	.400		
Goodness of Fit	99.99	114.56	cononical correlation	.535		
Chi-square	41.87	35.03	Wilk's Lambda	.741		
Degrees of freedom	12	4	Chi-square	34.50		
Significance, p<	.001	.001	Degrees of freedom	12		
Correct classification	76%	76.1%	significance<	.01		
N	78	78	N	78		

Source: Field Results

supporting H2, H4 and H5. The standardized coefficients given in Table 5 are found to support the significant relationships of country risk, and the company strength potentials with the choice of EIV, based on the cut-off of 32% for the coefficients. The results suggest that IT firms with a higher level of experience and riskabsorption capability to do business and with a weak relationship with the host government have the option to choose EJV and WOS are found to be positively related to the choice, thus supporting H1and H3. The significant coefficients for country risk and location specific factors supported that the organization capabilities, such as experiential knowledge and market-specific knowledge, have an immense impact on the choice of entry mode. The greater the stock of a firm's experience of doing business and market-specific knowledge, the firm is more likely to choose WOS. The marketspecific resource, such as the good connection or relationship with host government, adapting cultural/language aspects and social/legal factors influences the firm's decision to choose the EJV are found to be positively related to the choice, thus supporting H6 and H7.

TABLE 6
Entry mode classification accuracy level

			Predicted Entry Mode	
Actual group	No of cases	Exports	Joint venture	Sole venture
Exports	61	68.8%	31.2%	0.00%
Equity Joint venture	43	10.5%	81.6%	07.9%
Sole venture	25	0.00%	23.1%	76.9%

Source: Field survey

Table 6 provides the classification accuracy of the discriminate functions for the three distinct entry modes. Overall, average highest ratio was 76.0%. 68.8% of the exports subsidiary group, 81.6% of the joint venturing group, and 76.9% of the sole venture group were correctly classified. The results suggest therefore, that the discriminate functions performed well in classifying the three distinct entry modes.

### CONCLUSION AND SUGGESTIONS FOR FURTHER RESEARCH:

The purpose of this paper is to analyze the most acknowledged theories on internationalization and develop a new model that can be tested on IT industry to see the applicability. However, all theories were a base for the development of our model. The purpose model is to explain industries entry mode decision in international market. We conducted a survey, to test the model and received good support on the model.

Although the results of this study outline a rich agenda for further study, it is of course subject to limitations. Firstly, it should be recalled that an investigation survey is conducted on small and medium-sized companies that might have a different view on the subject to larger companies. At best, the presented results can therefore play a moderate part in an overall attempt to provide an explanation of said industry. Further research is required on larger scale industry. Secondly, proposed research has investigated only Indian IT industry; it would have been interesting to do a survey on companies in other countries. We need to know more about the incremental process of accumulation of market-specific knowledge. Thus, future research is needed to explicitly examine to test the uncertainty absorption capability and risk dispersion mechanisms. Finally, empirical studies are required which shed light on the role of

managerial characteristics as intervening variables.

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