

## A Study on the Relationship between Internationalisation and Competitiveness in Asian Companies

Cross Cultural Team's Efficiency and their Role in Telecommunications Standardisation

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### Abstract

- Research questions:** Do cross-cultural teams working for Chinese MNEs have a significant impact on their R&D and Standards efforts to keep and increase their competitiveness? Are cross-cultural teams beneficial for the Asian companies? In which terms do they find the work with Westerners positive or negative?
- Methods:** Semi-structured interviews were administered to senior staff of mainly Chinese companies that participate in telecommunications standards. For control purposes, the same interviews were administered to Japanese and Korean companies' delegates in order to test for any correlation in the perception among the Asian companies.
- Results:** In order to compete with Western companies in standards organisations, Asian companies can reduce their competitive disadvantages as latecomers by hiring non-Asian nationals that could help in many aspects such as language and with their experience in the standards. Social aspects were found to be the most important for success.
- Structure of the article:** 1. Introduction; 2. Literature Review; 3. Research Questions & Methods; 4. Detailed Empirical Results; 5. Conclusions; 6. About the author; 7. References

## 1. INTRODUCTION

Internationalisation of Multi-National Enterprises (MNE) is a term utilised to describe the push made by companies to sell -- or even produce -- their products in a market other than their own home market; in other words internationalisation is about the involvement of enterprises in international markets.

Internationalisation is a subject that has been extensively studied in the past. However, the theories and models devised were mostly applied to multinational enterprises (MNE) from the West. These early MNEs decided to go into international business and exploit new markets with their company specific strategic advantages. However at the end of the past

century and beginning of the 21st century new companies from emerging economies have taken their internationalisation steps and entered the global economy. The scientific community rushed to devise new methods and theories to explain the reasons and strategies utilised by these new MNEs. However these "latecomer" MNEs enter the global market with a different strategy. They entered the global market not with the advantages of early MNEs, but on the contrary latecomers entered the market to build and/or acquire such advantages. As part of their internationalisation efforts, companies need to keep and improve their advantages that lead to that internationalisation. This was the approach used by early MNEs in the 1950s and 1960s. However as globalisation of commerce and

business increases, companies that may not have a clear advantage that justify internationalisation have nevertheless gone global via different mechanisms than those used by the early MNEs. However, the situation for these latecomer MNEs remain the same as for those early MNEs; they have to keep and increase their competitiveness. Whereas early MNEs established presence abroad to exploit their ownership and skill advantages, emerging country MNEs initially do so to develop and build such advantages. By shifting assets abroad, the latecomers MNEs reduce risk, in effect using foreign direct investment (FDI) as a substitute for portfolio investment constrained by capital and national security controls, as is the case of MNEs from China.

Theoretical models have been devised to explain how companies have in the past executed their internationalisation like the ownership, location, and internalisation advantages (OLI) model and the resource-based view (RBV) among others. Until the end of the 80's, these models were widely accepted to explain the reasons why companies go global. However with the rise of Asian economies the scientific community have seen that these models do not necessary apply to the analysis of Asian MNEs. Because of these divergences, other models such as the link, leverage and learning model (LLL) have been proposed to explain how and why and how latecomers MNEs internationalise.

One aspect to look at in this internationalisation effort is the competitiveness of these companies once they have taken their first steps. Competitiveness is a characteristic that defines whether a company survives in the global arena. The competitiveness of companies depends on the resources that the company has and how it puts these resources to use in a strategic manner.

Asian companies that participate in standards organisations have gone through the process of internationalisation in different time slots and may have different competitive levels.

The LLL model is used here to describe how the companies acquire the necessary human resources, how they link them to their home-based resources, how they leverage these newly acquired resources with their strategy, and what they learn from these interactions.

The work undertaken in this paper attempts to clarify one aspect of the internationalisation of Asian companies. This aspect is their competitiveness in the international standards organisations (SDO).

Following the globalization tendency, the last decade has seen the rapid and sometimes surprising growth of Chinese companies in the telecommunications market to the point of becoming a threat to formerly well-established Western companies.

In the telecommunications market, the economic crisis of the years 2008-2009 saw major Canadian telecom equipment manufacturer Nortel to file for bankruptcy in 2009 and while other Western companies bought most of its assets, many of its employees (especially those in Europe) ended up working for the Chinese company Huawei. The company Huawei has also established itself in Europe and North America by setting up R&D centres with engineers that otherwise would have ended up working in local companies. This represented a different type of acquisition, not of physical assets but of experienced human resources. This aspect of human resources acquisition by Chinese companies and how does this play in terms of their competitiveness in the new global arena (although we focus on the Standards organisations and not on business areas) is the subject matter of this paper. The acquisition of these human resources and their role after the internationalisation of the Chinese enterprises is a topic that has not been thoroughly investigated.

In the telecommunications market, some MNEs from China currently occupy a leadership position. They represent a direct threat to traditional equipment vendors from the West. However it could be said that emerging market MNEs lack the knowledge that comes from decades, and in some cases centuries of experience and learning of how to run a global enterprise. Nevertheless, the latecomers see the world as full of resources to be tapped, provided the appropriate complementary strategies and organizational forms can be devised. It has been observed through the years that more and more Asian companies from the telecommunications sector have begun to participate in these standards organisations. In particular, for the 3GPP Standards Organisation, the number of Asian companies represents currently 23% (90 out of 388) of the total companies participating in this organisation. These Asian companies, big or small, have already taken a big step in their internationalisation efforts and the questions that gave origin to this work can be enumerated as follows: "how do they feel participating in this overwhelming western organisation", is it worth the effort for them to participate, considering the travel expenses? Do they feel they are getting a good ROI?

Are there any other aspects that they benefit from the participation and not only from introducing their patents? Do they feel that their proposals are accepted? Is there any feeling of being rejected only because they are Asians? These questions represent the motivation for this study and the reason to find out how these Asian companies can maintain or improve their competitive edge after internationalisation.

Another motivation for the work undertaken was to analyse the structure of the R&D and Standards departments and to find a correlation between the structure of these departments and the competitiveness of the companies. In addition, it is an attractive proposition for the HR departments to find out whether they are adding the right type of resources to their companies in order to maintain and increase their competitiveness in the global arena.

This work will investigate how these new Asian MNEs work in the world of standardisation and how they maintain their competitiveness in this field. Lessons about what types of resources are needed to stay in the top will be drawn in the following sections after the theoretical background.

## 2. LITERATURE REVIEW

In most of the literature there are many references to work done to analyse the internationalisation of Asian companies and the models they use (Buckley & Casson, 1998; Cardoza & Fornes, 2011; Chen & Athreye, 2009; Chiang, 2005; Child & Rodrigues, 2005; Di Minin, Zhang, & Gammeltoft, 2012; Dietz, Orr, & Xing, 2008; Ge & Ding, 2008; J. Matthews, 2006a; Oded, 2009; Sun, 2009).

The problem observed in the literature researched, is that most of the scholars seem to be satisfied with analysing the mechanisms that Asian companies (latecomers or early-movers) have used to internationalise. However, there seems to be a lack of research on the areas of “what happens afterwards”. The internationalisation of a company is certainly a big step, however it is only so, a step.

It was deemed by the author that there is the need to research the different aspects of a company after the first steps in internationalisation have been made. For example, governance, HR practices, marketing, R&D, etc. Therefore the paper will concentrate on one of these

“afterward” aspects, which is “competition in the global arena”. How companies’ competitiveness is affected by utilising cross-cultural teams in the global arena. It is important to find out which factors such as language, social skills, commitment to the company values, etc. are key to this competitiveness when the teams are composed of Westerners and Asians.

### *Evolution: Internationalisation towards becoming an MNE*

Globalization is widely seen to be the dominant tendency of our time. It is a shorthand expression for a variety of processes encompassing worldwide integration of financial systems, trade liberalization, deregulation and market opening, as well as pressures towards cultural, economic, and social homogeneity. In one sense it refers to the emergence of a single, global business civilization—a remarkable event, but one that is feared as much as it is celebrated (J. Matthews, 2006a).

However, the question is “Why do Chinese companies go international?” According to the literature, there are a number of reasons to explain why Chinese firms are “going global”. Some of the reasons are similar to those driving Western MNEs to invest overseas, but for Chinese firms, there are still some unique features. The first motivation is to secure markets abroad. The second motivation is to gain access to superior technology, management knowledge, and brands. The third motivation is to secure long-term supplies of natural resources (such as crude oil, natural gas, iron ore and other minerals) to meet domestic industrial demands and national security (Ding, Akoorie, & Pavlovich, 2009).

### *MNE Evolution Path*

MNE early-movers mostly came from developed countries and possessed company-specific competitive advantages. This is not usually the case for companies coming from developing countries, including China. It is necessary to provide a description of how Chinese companies in the telecom markets have evolved, prior to discuss the factors that have aided or hindered them in their internationalisation efforts; among them the factor of human resources and how they play a role in their competitiveness afterwards.

According to Cardoza and Fornes, the process of international expansion of Chinese companies has gone through three main stages: a first, mainly experimental

stage up to the 1990s, characterised by a strong supervision from the Government. A second stage followed during the 1990s, which saw a large increase in the number of Chinese subsidiaries abroad. A third stage has started recently as a “number of leading Chinese companies have begun to internationalise with a view to becoming global players in international markets”. (Cardoza & Fornes, 2011)

The early starters in the process of internationalisation came almost exclusively from North America and Europe. The way they evolved into a MNE can be explained using the ownership-location-internalisation (OLI) model (P. P. Li, 2007) (J. Matthews & Zander, 2007). This model became the arguably dominant view in the 1970s and 1980s, and continues to be perhaps the most influential theoretical account of the existence of MNEs as such, and of the sources of their advantages over domestic rivals.

It is also argued more recently that this OLI model cannot explain the internationalisation of the companies coming into the international market relatively late and coming from emerging economies (EE). As the OLI model utilised the company specific advantages to define the internationalisation of MNE from developed countries (mainly Europe and North American), a model that describes the lack of these company specific advantages as the main motive for internationalise was developed by Matthews (J. Matthews, 2006a). This new model is called the “link, leverage, and learn model” or LLL model for short

#### *OLI model*

The Ownership-Location-Internalisation model is also called the eclectic paradigm of international production. It attempts to integrate three general and interrelated concepts to identify and evaluate the significance of factors influencing both the initial act of cross-border production by companies and the growth of such production. The eclectic paradigm affirms that at any given time, the extent and pattern of international production can be determined by a set of three factors which are ownership-specific advantages, location-specific advantage, and internalisation advantage (Wattanasupachoke, 2002).

#### *Ownership*

According to the model, ownership advantages are essential to understand the existence of MNEs. The

most important point is that companies are collections of assets, and that candidate MNEs possess higher-than-average levels of assets having the character of internal public goods (Neary, 2008). The advantage being that these already owned assets can be applied to production at different locations without reducing their effectiveness. Some examples of these types of assets are product development, managerial structures, intellectual property, and marketing skills, the so called “headquarters’ skills”, (Helpman, Melitz, & Yeaple, 2004).

However, it is also observed that for Chinese companies, some of the headquarter services, e.g. managerial structures or HR, mentioned above are actually not transferable to other locations for cultural reasons.

Usually many multinationals have reputations, which are the so called intangible assets, for providing high quality products (something that represents an obstacle for Chinese companies); so they can charge a premium price; or they have access to specific technologies that enable them to produce, at a lower cost than other companies. Therefore they could use these advantages in a factory located abroad that has access to the technology or which is allowed to sell products under their brand name to produce a product that would still sell at a profit in spite of the foreign business costs. This is the main advantage modelled with the ownership aspect of the OLI model (Lynn, 2008).

#### *Location*

Companies looking to expand abroad could use the same technology, etc. to produce their goods locally as well, and avoid the foreign business costs. Then, there must be some advantages related to the location (L) of production to justify those foreign business costs and to generate profit that is bigger than that of producing locally. Possible types of location advantage can be: natural resources are necessary to produce certain products (e.g. rare minerals) and those resources have to be extracted where they are located, and are cheaper to extract there. In addition, some capital or labour inputs may be cheaper in the new location and the production intensively uses those inputs (e.g. the cases of using unskilled-labour; so the product is unskilled-labour intensive and it would be cheaper to produce the product there if unskilled labour was cheaper there; e.g., China, or South East Asia)..

### Internalisation

In 1937, Ronald Coase argued that the optimal scale of the company, or the optimal degree of internalization, reflects a balance between the transactions costs of using the market and the organisational costs of running a company (Coase, 1937).

Embedded in a model of product differentiation and trade, this implies that more efficient companies and companies for which headquarter services are more important should exhibit internalization (the owner contracts with the supplier, who becomes an employee) while less efficient companies should exhibit arm's-length trade (the supplier remains a separate legal entity). Generally this advantage arises if allowing another company to use the asset would increase the probability that the value of the asset to the MNE, would be diminished by the other company acquiring control of use of the asset. Therefore we can say that a company chooses the internalisation strategy where the market does not exist or functions poorly so that transactions expenses of the external route are high (Neary, 2008).

### LLL Model

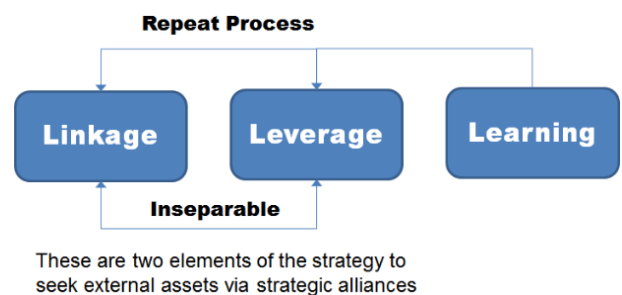
Latecomer firms, like latecomer nations, are able to exploit their late arrival to tap into advanced technologies, rather than having to replicate the entire previous technological trajectory. They can accelerate their uptake and learning efforts utilising various forms of collaborative processes and, in the case of the Chinese, state agencies to assist with the process, and bypassing some of the organisational inertia that holds back their more established competitors. They therefore strategize around the possibilities inherent in their latecomer status. The strategic goal of the latecomer is clear: it is to raise real incomes through catching up with the advanced firms, and to move as quickly as possible from imitation to innovation (J. Matthews, 2006b).

It is particularly important to note that the globally interlinked character (what could be called the worldwide web of intercompany connections) of these companies is what drives their internationalisation. Due to this interlinking of companies around the global economy, the strategies of linkage and leverage are most likely to succeed. Therefore these strategies are the most sought after by the latecomers MNE, especially for those companies that lack enough initial resource bases.

According to Matthews, they are ideal strategies for latecomers and newcomers, and for small and medium-sized firms, rather than for established, large incumbents.

This is what is referred as the LLL model of internationalisation, i.e. strategies based on linkage, leverage and learning accomplished through repeated applications of linkage and leverage. Figure 1 shows graphically, that the linkage of the companies to e.g. existing value chains, together with the leverage of resources at home and abroad are an integral part of their internationalisation efforts. These two aspects come hand in hand and repeat as much as necessary. For every iteration of these two aspects there are always lessons learned and this acquired knowledge is applied in the next iteration. More details about each of these aspects of the LLL model below.

Fig. 1 Block Model of the LLL paradigm



### Linkage

In the context of globalisation, latecomer firms encounter new opportunities for linking up with already established institutions and networks.

Global value chains, for example, are being formed by leading firms in the developed countries, as they seek to cut costs and enhance flexibility through outsourcing (J. Matthews, 2006a). This creates opportunities for latecomers to link up with these global value chains as suppliers. The more the global economy becomes interconnected, the more possibilities there are for such linkage.

Through linkage, the latecomer firm can secure more than just a stream of revenue. It can tap its links with more advanced firms to acquire knowledge, technology, and market access – things that would otherwise be beyond the firm's limited resources.

From the perspective of the latecomers, the strategic issue is how to become inserted in such value chains.

However, the latecomers also pursue the dynamics of shifting production and, more recently, research and development (R&D) activities according to competitive cost and logistics advantages.

The firms seeking to acquire resources and complementary assets in foreign markets have to overcome problems of market knowledge and uncertainty regarding the quality of knowledge potentially available.

According to this, the preferred options to link with companies in foreign markets are joint ventures and other forms of collaborative partnership as these represent a means of gaining entry to the foreign market.

In the case of Chinese telecom manufacturers, they followed the approach of linking themselves to these existing structures of value chains of production, logistics, and R&D. They do so in order to secure revenue-generating activities, but also to leverage from these sources the knowledge, technology and market access that will be needed as the latecomer seeks to climb up the development ladder. However, this situation places these newly internationalised Chinese companies in direct competition with already established major telecommunications equipment vendors from the West.

#### *Leverage*

After linking, the companies will focus on finding out which ways these same links can be established with partners so that resources can be leveraged. The focus will be towards the resources themselves, and their leverage potential. The focus should be on how these resources are accessible to the new company taking into account their imitability, or transferability, or substitutability.

For MNE coming out from developing countries, the obvious step is to leverage their existing cost advantage in production in their home countries (Child & Rodrigues, 2005). Although there are exceptions to this statement - Haier Group for example. The Haier group went the opposite way by setting up factories and R&D centres in the USA despite the higher costs in their push for internationalisation. Haier is in some respects an unusual case among Chinese internationalizing firms.

#### *Learning*

The repetitive application of the linking and leverage strategy by the new MNEs (as described in Fig. 1) lead to an increase learning process that would not only

benefit the companies from increased access to new resources - in terms of supply chains, intellectual property, etc. - but to perform such operations more effectively (organizational learning).

Entire regions or economies may learn the processes involved more effectively, as the likes of Huawei and ZTE have done with cluster development, for example, or formation of more effective R&D alliances.

The latter process may be dubbed “economic learning” (J. A. Matthews, 2003).

#### *Model Application and Latecomers MNEs*

MNE from developed countries utilised the OLI model and applied or exploited the existing internal advantages in foreign markets via a whole or majority equity investment. The international expansion of companies' activities has to be seen within the context of the companies' attempts to maintain or increase their profit in an increasingly competitive, complex, and uncertain global environment

The OLI model cannot describe the way the Chinese major telecommunication companies, especially manufacturers, pursued their internationalisation activities. These companies have pursued accelerated internationalisation over the course of the past decade and acquired global reach in a fraction of the time taken by their predecessors, typically on the basis of leveraging or reconfiguring the value chains of established competitors. (J. Matthews & Zander, 2007). For the late-newcomers the Link, Leverage and Learning model described by (J. Matthews, 2006a) have been used to model the way these late newcomers have entered the international arena. The different strategies utilised by many Chinese companies are explained in detail by (Child & Rodrigues, 2005). Following is a description of the model for these latecomers' expansion.

According to Chen and Athreye, Chinese and other emerging economy companies have to find innovative ways to make space for themselves in markets that were already crowded with giant incumbent competitors (Chen & Athreye, 2009). This may involve finding new ways to “complement” the strategies of the incumbents, such as through licensing new technologies, to forming joint ventures and strategic alliances. It is plausible that it was through the implementation of these “complementary” strategies that latecomers were able to win a place in the emergent global economy, not on the

basis of their existing strengths, but on the basis of their capacity to leverage resources from the strengths of others, and through making international connections that enable them to do so.

It is possible to observe that latecomer MNEs from China have utilised the LLL model in order to make their entry to international standardisation activities. There are additional challenges for the companies when they start their process of internationalisation. These can be in the form of recruiting qualified personnel and how to manage them.

However, in recruiting and retaining foreign managers, Chinese companies face a challenge rooted in their global inexperience. Unlike Chinese employees, who regard company loyalty as a given, Western recruits require more attention from senior management to feel a similar level of commitment: if their local supervisors and peers don't allow them to complete assignments with minimal supervision, for example, they will never be fully integrated into the organization (Dietz et al., 2008).

Western employees also want greater clarity than local ones about issues such as career paths, corporate governance, and the expectations of management.

There are also cultural factors, e.g. Hofstede's four dimensions of culture: uncertainty avoidance, power distance, individualism/collectivism, and masculinity/feminism that need to be taken into consideration. Additionally, factors such as long-term versus short-term time orientation, direct versus indirect communication, ethnocentrism and self-reference criterion and cognitive styles are important for the Chinese management to deal with the non-Asian employees (Narver, 2012). All these factors need to be considered by management, and from observational practice, for the author there is no clear evidence that this is well managed by the Chinese companies. Once MNE companies have internationalised, no matter which strategy they wanted to use; there remains the big question, how to stay competitive, how to grow even more. The following sections will deal with the issue of competitiveness of the latecomer MNEs in the telecommunications market.

#### *Competitiveness of Asian Companies*

A very important characteristic of Chinese international companies discussed in the past was according to Nolan (Nolan, 2001), is that "the competitive capability of

China's large companies after two decades of reform is still painfully weak in relation to the global giants" mainly in the areas of R&D, marketing ability, development of brands, and restriction from the authorities. Nolan continued and suggested that this is probably the result of the government's protection of the domestic market, advantageous funding conditions, protection of distribution channels and procurement from the government.

This was certainly the case in the past, but in the last ten years, major equipment manufacturers from China have established R&D centres in Europe and North America as part of their internationalisation efforts (Di Minin et al., 2012) and now represent a high percentage of the patent filings in the world. In terms of patents overseas, Chinese companies have also been climbing in the rankings, according to data from the World Intellectual Property Office (WIPO).

In 2010, China's No.2 telecommunications equipment maker ZTE Corp was second on the list of applicants, ranking just behind Japan's Panasonic Corp, while China's Huawei Technologies Co Ltd, the world's second-largest telecom gear maker, was fourth, according to WIPO. Chinese companies have been trying to be more innovative as they transform from contract manufacturers to regional and global brand names producing higher end products to improve margins. Patent filings have also increased among Chinese companies due to legal battles that they have had to fight, especially in the telecommunications sector. Sustaining growth in the long run entails strengthening competitive advantages and building new capabilities on the high road to competitiveness

Companies seek skilled workers from labour markets, at least where the local economy has the new skills they need. They similarly seek specialized technical assistance from technology institutions like standards and quality agencies, research and development (R&D) institutes and universities and technical extension bodies (Chang, 2001).

Each company, despite having the same country of origin, has its own culture and way of doing things, with some of them better suited to innovation and learning than others.

This is reflected also on their ways to maintain their competitiveness. Some of them may be better at acquiring or developing the necessary resources to remain competitive in the international market

One more aspect of internationalization that might affect the competitiveness of the Asian companies is the so-called concept of “psychic distance”. This concept indicates that cultural, linguistic, institutional, etc. and other dimensions of a company’s country of origin have an impact on the company’s performance depending on which countries it internationalises. These differences can give a rise in costs associated with a need to adapt to local contexts or with problems of control over foreign affiliates, (Child & Rodrigues, 2005).

Psychic distance may therefore increase the “liability of foreignness”, which Zaheer describes as the costs of doing business abroad that result in a competitive disadvantage for a multinational enterprise (MNE) subunit (Zaheer, 1995).

This concept of “psychic distance” goes not only to the depth of the companies’ business with other companies in the international markets but also is very important in the framework of a company that hires non-Asians to work for them.

China’s distinctive cultural and institutional legacy, including the tendency to rely on close personal relationships in business transactions may be expected to increase the liability of foreignness faced by its firms as they seek to internationalise.

As in the case of work in Standards Organisations (to be described later), the areas of business where Chinese and Westerners need to work together for the benefit of the company, may have a slow start if successful at all, while these close personal relationships are forged. This factor of psychic distance may be a key element in the analysis of the competitiveness of Asian companies that utilise westerners as delegates to these standards organisations.

The fact above implies that even if Chinese companies can attract capable Westerners as engineers with attractive salaries and a nearby location, a liability of foreignness may still jeopardize the effectiveness of how they are put to use. Distinctive Chinese styles of management could thus prove a handicap for the management of overseas affiliates and non-Asian employees. (Warner, 2004)

It has been identified by (Sun, 2009) and (Chen & Athreye, 2009 pp. 19) that despite Chinese companies in the telecom business having a low-cost advantage in R&D based on cheaper intellectual resources and engineers, as international business is playing an ever

bigger role for them, their costs have also increased.

### 3. RESEARCH QUESTIONS & METHODS

In at least one big Chinese MNE, the lack of foreign human resources that deal more effectively with the telecom operators’ business people outside of China may be to blame for the slow pace of internationalisation. In this particular case we could say that the effect of the foreign psychic distance is reversed. One key object that defines the competitiveness of companies in the telecom world is the number of patents they possess. In addition it is very important that these patents are introduced in the standards organisations (SDOs) so the companies can leverage their innovations..

As the business in SDOs is the introduction of the patents into the standards, most of the participants in the SDOs are persons that belong to R&D departments.

Latecomers companies needed to start participating in the SDOs in order to maintain their competitiveness. At their initial participation stages, their SDO delegates were almost exclusively Asians. As the internationalisation process went on, some of these companies also proceeded to go after non-Asian human resources as it was identified that this was needed in order to be more successful in the standards arena. For participation in the SDOs, recruiting is a crucial and strategic tool.

For Asian companies, it is necessary to attract persons that have the right qualifications, not only in the respective technical fields but also with the right social capabilities as we will see further ahead.

However, was there a real benefit to hire non-Asians as standards delegates? Was the cost-benefit ratio positive? This will lead to our hypotheses formulation. From many years of observations, by participating in these SDOs, the author would like to test for the following hypotheses via a qualitative analysis. This hypothesis means to test whether by hiring Western nationals, the Asian companies increase their competitiveness in the standards arena.

The first of such hypotheses is as follows:

***Hypothesis #1:***



***"Asian telecommunications companies are more successful in getting their concepts accepted when they hire non-Asian nationals to work on international organisations (such as standardisation)".***

This hypothesis would be proven true if the managers of these Asian companies perceived that the patents and concepts introduced in the standards by the Asian companies had increased after they had hired westerners as employees to work in the SDOs. The investigation is based on analysing the participation of companies in the 3GPP Standards Organisation. This SDO was founded by six 3GPP Organizational Partners are from Asia, Europe, and North America. It is mostly a European based and dominated organisation and has been like that since the beginning, despite the ever-growing number of Asian delegates participating. Therefore, the author drafts this hypothesis to test if there is in addition any perception of unfairness by the Asian companies in their dealings with the organisation.

The second hypothesis to test for this work is about whether using western nationals as front-end resources for work in SDOs has resulted in the leverage of the cheap R&D resources available on home soil.

#### ***Hypothesis #2:***

***" Overall competitiveness of Asian companies in the Western dominated standards organisations is improved after linking R&D resources (manpower) in e.g. China with the Western nationals representing the companies in the standards."***

This hypothesis will test what are the effects for those companies that have hired non-Asian nationals with regards to the utilisation of their R&D resources at home and whether their work is linked and leveraged with the work done by western employees in the standards organisations.

In order to validate the hypothetical statements of the previous section, an interview was administered to senior staff of mainly Chinese companies that participate in the 3GPP Standards Organisation. A questionnaire based on the guidelines given by Cassell and Symon, (Cassell & Symon, 2004) was prepared and administered to the target group of delegates in the 3GPP standard organisation.

In addition, for control purposes, the same interview was administered to Japanese and Korean companies' delegates in order to test for any correlation in the perception among the Asian companies.

The target companies for these interviews were Chinese companies that have standards delegates from Western countries. The intention is to investigate whether hiring westerners as delegates had any influence in the acceptance of the company proposals. The interview has been mainly administered to these companies; however, as a control measure, the interview has been administered also to some Chinese companies with Chinese-only delegates. In addition, the interview has been administered not only to equipment manufacturers but also to service providers or operators. The reason to ask homogeneous companies and service providers is to see whether there is a correlation with the answers from equipment manufacturers and to see their perception about the receptiveness of the SDOs towards them as well. Another objective is to obtain their opinion about whether they see it positively to have cross-cultural teams working in the standards.

Another key point for the interviews is to ask the right persons. The main focus will be persons with enough experience in the standards arena to have observed (if any) the changes experienced in terms of competitiveness by the Asian companies after hiring non-Asian nationals to work in standards. This change is observed based on the receptiveness of the SDOs towards their proposals

The questionnaire for the interview was structured in four parts and constructed according to the guidelines given by (Cassell & Symon, 2004) and (Dobbelstein, 2011). The questionnaire was structured as follows:

- First part was to find out what is the objective of the company of participating in SDOs.
- Next, it is important to get a glance of the composition of their SDO work force and the timing of hiring.
- Following is an evaluation of the effectiveness of their delegates (Westerners or otherwise only Chinese) and an evaluation of any perceived changes in their performance due to the cross-cultural teams work.
- Finally the questionnaire aims to find out the perceived reasons for the change, if any.

The list of questions asked can be seen in Appendix 1.

#### 4. DETAILED EMPIRICAL RESULTS

As a disclaimer, it is necessary to mention that, the number of companies interviewed for this research was limited. The reason for this is because the intention is to investigate whether hiring westerners as delegates had any influence in the acceptance of the company proposals. The companies targeted for this study need also to be in their process of internationalisation or have already finished and have cross-cultural staff participating in the standards meeting. Preferably the teams would be composed of Western and Asian staff. As the number of Chinese companies that have actually hired westerners, as standards delegates are very few, these were the targets of the interview; these were in total 9 companies in the 3GPP SDO. In order to guarantee avoidance of any type or correlations to the answers of any company that may affect confidential rules or have any negative effect, all of the companies that agreed to participate in the interviews did so with the condition that their answers are to be made anonymous. The target groups were the head of delegations or senior researchers from Asian companies that participate in the standards meetings. The interviews were made in the period of June – August, 2012.

##### *Detailed Results*

The following section presents a compilation of the answers received through the semi-structured interview from the different companies. In order to guarantee the anonymous nature of the answers --to avoid any type or correlations to any company--- all of the companies that agreed to participate in the interviews did so with the condition that their answers are to be made anonymous.

The following is the summary of answers received from the participants and the empirical analysis.

*Question 1: Does your company participate in standards with the aim of introducing concepts and patents?*

All of the interviewed manufacturers of equipment responded affirmatively to this question with only the service providers answering other reasons for participating in the SDO such as to guarantee the outcomes meet their requirements or to introduce concepts, which can help vendors know what they want.

*Question 2: When did your company start to participate actively in standards?*

The answers to this question provided a clear identification of which Asian companies were early-movers, and which ones were latecomers. Thirty three per cent of the companies interviewed started their participation in the 3GPP SDO from the very beginning in 1999 whereas approx. 45 % of the companies started in the first half of the last decade (~2005) and 22% of the companies started relatively late in the second half of the decade (between 2007 and 2010). The latecomers were all Chinese companies.

*Question 3: Is your R&D and Standards department composed of only Asian nationals (or from your country)?*

*if the answer is No, then in what proportion are non-Asian nationals present in your department:*

*i. a. less than 10%*

*ii. b. between 10 and 30%*

*iii. c. more than 30%.*

Are these non-Asian nationals participating in standards?

Sixty six per cent of the companies interviewed answered that their R&D and Standards departments were composed of cross-cultural teams and that these teams also participated in the SDOs. Only the service providers and one manufacturer had homogenous teams composed only of Chinese employees. Nevertheless these homogeneous teams also participated in the SDO.

*Question 4: Since when did your company start to hire non-Asian nationals?*

This question was obviously only answered by the companies that have cross-cultural teams (66 % of the total). The early movers from Asia (i.e. from Japan and Korea) have started to hire non-Asians since their internationalisation moves started well beyond 1999. The late-comer Chinese companies have hired non-Asians since the middle of the last decade (around 2005) concurring with their push for internationalisation.

*Question 5: What was the reason your company decided to hire non-Asian nationals?*

The reasons put forward can be summarised as follows:

- Internationalisation Efforts
- Technical Expertise & Leverage of knowledge
- Work in SDO has multi-regional scope
- To have better communication with Western companies

*Question 6: How much (in percentage) of your proposals would you say have been in general adopted in the standards in recent years?*

This question was not generally well received by the interviewees due to the confidentiality of the information. All but one of the companies abstained from giving a quantitative answer and only one company responded in vague terms such as “many” and depends on the technical areas but without giving any numbers.

*Question 7: From your perspective, has the number of accepted proposals of your company changed since you started to have non-nationals as standards delegates?*

*a. Yes, No? if Yes, is it a positive change or negative change*

Almost 83% of the companies that have hired non-Asians found that there has been a positive change in the number of the accepted proposals. One of the respondents went so far as to answer that: “...native speaker of English help us a lot as far as communication skills in the meetings are concerned”. One company answered that they could not really remember.

*Question 8: What is your perception about how was the receptiveness of the standards organisations with regards to your company proposals before hiring non-Asians: a. Good, b. Fair, c. Bad*

The answers to this question were relatively diverse. Thirty three per cent of the companies replied that their proposals were treated relatively fair. Forty four per cent of the companies answered that their perception was that their proposals’ reception was good before hiring non-Asians with only around 10 per cent of the companies answering that the reception of their proposals was bad (one company abstained from answering). Possible reasons for this divergence will be discussed in the next section.

*Question 9: Do you believe that language may be an issue that could hinder the acceptance of your proposals? Yes – why or No – why*

This question tried to find out whether language or any other reason was perceived as the reason for the obstacles that the Asian companies confront in their work to get their proposals accepted.

The answers provided a view of what is really considered the problem and 67 % of the companies responded that language was not a problem. They responded that cultural aspects were more to blame and more details about this issue will be provided in the next

section on analysis of the answers. Thirty three per cent responded that language is a problem sometimes and they find it difficult trying to express what they really want.

*Question 10: Do you plan (or would you recommend) to hire non-Asians as standards delegates for your company: a. Yes –why or b. No- why*

All the interviewed companies responded to this question that they would recommend hiring Westerners to their HR departments. The reasons are varied but the tendency of the answer lies in the direction of: the experience and knowledge exchange with the non-Asians is productive for the companies. Those who have already cross-cultural teams mentioned that they give a very good evaluation of the work done by the international teams and see more benefits for having than before.

The following section will provide an analysis of the answers given by the companies regarding the four areas described above with the intention to find proof of the hypotheses outlined before

#### *Analysis*

The first objective of the interview was to find out what was the purpose of the companies’ participation in the standards. From the infrastructure manufacturers, the objective is to provide useful technologies, services, or products to the market via these standards activities. This statement matches with the objectives in general that is to enhance the telecommunication systems and provide solutions for existing issues in current systems and provide an enhanced performance to their customers. Basically, this is a way to introduce their patents into the standards. As every company believes that their own technology is better than the competitors they need to find ways on how to convince the other companies that their concepts are better. Operators don’t think patents are so important. The service providers answered that the main objective for participating in the standards meetings is to explain their requirements and encourage vendors to work on solutions to those requirements.

In this context, Chinese telecom operators provide a very much needed market not only for Chinese manufacturers but also for Western companies. From the observations done in the meetings, even with their Chinese-only staff, the Chinese service providers are heard eagerly by vendors from the West and from Asia

at the standards meeting. That is the reason why big Chinese telecom operators do not find that introducing patents is their main objective for participating, as they do not compete with the manufacturers, they are in fact their customers. These answers led to the following conclusions

- Asian manufacturer companies have clearly identified their objectives in the standardisation arena
- Asian Service Providers (Operators) have different objectives than the manufacturers and are not linked to the introduction of patents. However, they also face competition from Western service providers to gain attention to their requirements.

Analysing the answers pertaining the second objective of the interview, which was to find out about the composition of the SDOs and R&D Departments of Asian manufacturers.

Asian companies that have achieved internationalisation in a large scale, identified from the very beginning that the nature of conducting business in 3GPP required that not only Asian delegates conveyed their messages. Therefore they started hiring Western employees to participate in the meetings. According to the answers received, as of today, early MNEs from Asia have between 10 and 30 % percentage of non-Asian staff in their R&D and standards departments spread all over the world. Other Chinese and Taiwanese MNE that started their internationalisation during the second half of the past decade, have less than 10% of non-Asian staff on their standards and R&D department. However it is apparent from the answers that latecomer MNEs have applied the learning of the early Japanese, Korean and early Chinese major manufacturers and have started to hire non-Asians to participate in the 3GPP meetings.

Specifically, with respect to international standardization, it was recognised that this work should take into account diverse requirements and business progress from many regions, thus it was deemed better to share this work among global teams. One more important reason put forward by one of the respondents is that the reason for hiring non-Asians was to have a better communication with companies from Europe and USA. All the Asian companies interviewed expressed the need to “improve communication”. However, the communication refers not only to the language as we will see further ahead.

Regarding the composition and satisfaction levels of Asian companies with their non-Asian staff, we can further summarise the results as in the following:

- All the companies that have hired non-Asian staff are satisfied with their performance
- Asian companies try to link and leverage the resources at home with the non-Asian experts.
- They hired these non-Asian staff because of their drive for internationalisation and to have better communication with Western companies

A very important part of the interview was to evaluate the perceived changes due to the work of cross-cultural teams. In this regard, 33% of the interviewed companies that have hired non-Asians stated that their perceived receptiveness of the 3GPP organisation towards their proposals before they hired non-Asians (i.e. when they were still only Asian members on their delegations) was relatively fair. Another group of the companies replied that their perception was good (approx. 60%) and only 10 % of the respondents considered that the receptiveness towards their concepts was bad when they had only Chinese staff.

Now, with respect to the changes observed after they started to utilise non-Asians as standards delegates, around 80% of companies that have hired non-Asians stated that they have seen a positive change in comparison to the times before they hired non-Asians. Some argue that it depends on the topics or situations when the corresponding discussion took place. Therefore the level of the effect varied on a case by case basis. These answers indicate that after they started to hire non-Asians, their perception of the acceptance of their proposals improved.

Only service providers with homogeneous staff composition perceived no changes to their proposals' acceptance level. Summary,

- The majority of companies (80%) have identified, the change in receptiveness toward their proposals after hiring non-Asians as being positive
- Service Providers did not identify any changes in their perception of the acceptance of their proposals

The final objective of the interview was to identify the perceived reason for change in the receptiveness of their proposals (i.e. their competitiveness).

They were asked whether they believed that language might be an issue that could hinder the acceptance of their proposals?

The data showed that approximately 78% of the companies answered negatively to this question. They clearly stated that language was not a problem when participating in the standard. Some stated that at the beginning it might have been a problem but not soon afterwards and that technical expertise was more important to have.

Asked to elaborate, “if not the language what is your opinion of what hindered the acceptance of your proposals”; **they answered that cultural barriers were to blame.**

Asian companies described the work in the standards organisations as a “social activity” and that it was based on the participant personalities and attitude. It was also pointed out that standards organisations are mostly a social activity and performing this social activity is especially difficult for Asians, i.e. socializing with non-Asians.

They also emphasized that the culture problem is also an issue for Western companies, as it is also difficult for Western companies to understand Asian companies approach. One of the respondents even answered that in order to address this social-cultural problem, there is a need for Asian companies to hire non-Asian employees

This situation of being more “social” is of great importance for the success of the companies in 3GPP as people that are of social nature can feel more comfortable when explaining their ideas to some other delegates that belong in the same social circle; resulting in a high success rate of acceptance. This is one more aspect of the psychic distance concept explained before, and according to the answers, it represents the biggest obstacle faced by Asian companies and especially Asian delegates during the work in SDOs

Asked whether they plan or would consider hiring non-Asian employees, all of the companies answered affirmatively. The reasons given were the value seen in the experience and knowledge exchange with the non-Asians and how productive this exchange for the companies is. The ones that already have cross-cultural teams have identified the positive change brought to their competitiveness in the work in SDOs by hiring Westerners.

As a result from these answers it is possible to extract the following conclusions:

- Language is not identified as a barrier for the work in SDOs.

- Companies have identified that the work in SDO is more of a social activity and that is difficult for Asians to socialize with Westerners.

- As part of their internationalisation effort and based on the LLL process, some companies have identified the need to hire non-Asian delegates to address the “social culture” of the work in standards.

As a final step of the empirical analysis it is necessary to prove the hypotheses stated before. The analysis of the data from questions 3 to 6 and 7 to 9 indicate that:

- 67% of the Asian companies surveyed, and a 100% of those that have hired non-Asians, hired these non-Asian staff because of their drive for internationalisation and to have better communication with Western companies

- And that the majority of the equipment manufacturing companies (85 %) have identified, the change in the receptiveness toward their proposals after hiring non-Asians as positive.

Therefore, it is possible to state that the data results and analysis confirm the hypothesis from section 2 that says:

"Asian telecommunications companies are more successful in getting their concepts accepted when they hire non-Asian nationals to work on international organisations (such as standardisation)".

It is also necessary to analyse the causes for the companies where it did not make a difference. Unfortunately, the reasons were not clearly stated, as the respondents could not recall in statistical terms the difference between the times where the company had only Asian staff and the present times when they already have cross-cultural teams and some preferred not to give an answer as this may also be confidential information.

In order to test the second hypothesis, the interviewer asked the participants about their views on whether it was a positive thing to hire non-Asians and that they worked together with their own nationals.

The results indicate a positive tendency towards this proposition, as 89% of the companies interviewed responded affirmatively to the question of whether they plan or recommend hiring non-Asians. The reasons proved to have a bit of variance and the following factors were enumerated that indicate how they plan to link and leverage the resources:

- We can have more alternatives without restricting to only Asians.
- Using a global team has proven to be a good way to work on standards.
- Normally non-Asians are experienced technical experts and they can be helpful to improve teamwork for Asian companies by introducing their working experience to the Asian engineers

Similarly to the test of hypothesis 1, the analysis of the responses support the acceptance of the Hypothesis #2: “The overall competitiveness of Asian companies in the Western dominated standards organisations is improved after linking R&D resources (manpower) in China with the Western nationals representing the companies in the standards”.

The results of the interviews support the concept that the Asian companies make good use of the LLL model in their transition towards becoming a MNE.

Asian late-comer MNEs look to leverage the knowledge obtained from their “acquired” foreign engineers and try to merge these staff into an effective cross-cultural team to keep and improve their edge in the standards organisations work

## 5. CONCLUSIONS

This paper had the initial objectives of finding whether there is a correlation between the use of Westerners by Asian companies and their competitiveness in the international standards organisations. It aimed at finding an answer to the questions of whether companies with culturally homogeneous staff are equally successful in getting their concept and patents accepted in standards organisations. Another important objective is to address the question on the overall competitiveness of Asian companies in the Western dominated standards organisations, and how and if it is improved after linking R&D resources in the home country with the “foreign” engineers. After analysing the empirical data obtained through the interviews we can conclude that in order to achieve their objectives of introducing patents and concepts in the SDO meetings, the Asian companies need to compete harshly with the traditional Western MNEs in the telecommunications market. One way to reduce their competitive disadvantage is by hiring non-

Asian nationals that could (in theory) help in many aspects such as language and with their experience in the standards (as they possess the know-how). Those companies have a policy of making these cross-cultural teams made of Western staff and their home-based resources, to participate together in the 3GPP meetings. The reason, the author believes, is to continue this linking, leveraging, and learning process for the Asian engineers to enable them to participate more effectively and be better recognised in 3GPP meetings. From observational practice, it is possible to say that Asian companies that have not yet gone through the path of internationalisation have encountered a more difficult path to have their concepts accepted in the standards. One way to address this weakness is by hiring Westerners to work for them. However, recruiting, cultural differences including the psychic distance have to be addressed effectively in order to be successful and achieve this step in the internationalisation path. This factor of psychic distance may be a key element in the analysis of the competitiveness of Asian companies that utilise westerners as delegates to these standards organisations.

The original hypothesis formulation background was that the Asian companies might have trouble formulating their proposals due to the language barrier. However, the results indicated that the language was mostly not a problem for the participants.

The results of the interview identified “social and cultural barriers” as the biggest obstacle for the Asian companies participating in the SDO. The effect is mainly that the Asian companies feel excluded from the social circles that work in 3GPP and some have correctly identified the work in standards as a social activity. Therefore the companies that have the economic resources and the intention to become global, identified this factor and started hiring non-Asian nationals to do the work in standards. With this strategy the Asian companies put a foot in the door of these social circles that can later lead to introducing Asian employees in these social circles.

This is an aspect of the work that Asian companies starting their internationalisation efforts should be very much aware of.

Finally, the aspect of cross-cultural synergy and their effect in competitiveness has been clearly identified by the results of this work. It is a clear indication for the HR department of Asian MNEs, that they must increase their efforts to attract Westerners with not only the right

technical skills, but also with the appropriate social skills and capabilities.

It is probably the right time to re-evaluate the hiring practices of Asian MNEs that are based only on academic excellence and re-focus on personnel that have enough soft skills, as it has been demonstrated by the results of the interviews.

The scope of this study was focused due to reduced resources on only one SDO (3GPP). Therefore the results cannot be extrapolated to other SDOs and to other fields without a more extensive sample size.

Nevertheless, the results presented in this work give a clear picture of how a standard organisation works and what are the principal obstacles encountered by the latecomers in order to maintain and increase their competitiveness.

## 6. ABOUT THE AUTHOR

Dr. Osvaldo Gonsa obtained his Doctorate in Electrical and Computer Engineering from the Yokohama National University in Yokohama, Japan. Since the year 2000, he has been involved in the research and development of mobile telecommunications technologies and participated in different telecommunications standards organisations through the years.

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He joined the MBA programme at Kempten University of Applied Sciences Professional School of Business in 2010 in order to obtain formal training in aspects of management and concluded this programme in September 2012.

## 7. REFERENCES

- Buckley, P., & Casson, M. (1998). Models of the Multinational Enterprise. *Journal of International Business Studies*, 29(1), 21–44.
- Cardoza, G., & Fomes, G. (2011). The internationalisation of SMEs from China: The case of Ningxia Hui Autonomous Region. *Asia Pacific Journal of Management*, 28(4), 737–759.
- Cassell, C., & Symon, G. (2004). *Essential Guide To Qualitative Methods In Organizational Research (Vol. 10)*. Sage Publications Limited.
- Chang, H. (2001). Technology transfer, intellectual property rights and industrial development in developing countries. Background paper prepared for World Industrial Development Report, 2001 of the UNIDO. Retrieved from <http://www.ncbi.nlm.nih.gov>
- Chen, W., & Athreye, S. (2009). Go west for fame and fortune? The role of internationalization in the growth of Chinese telecom firms. 3rd China Goes Global Conference. USA: Harvard University.
- Chiang, F. (2005). A critical examination of Hofstede's thesis and its application to international reward management. *International Journal of Human Resource Management*, 16(9), 1545–1563.
- Child, J., & Rodrigues, S. B. (2005). The internationalization of Chinese firms: A case for theoretical extension? *Management and Organization Review*, 1(3), 381–410.
- Coase, R. H. (1937). The Nature of the Firm. *Economica*, 4, 386–405.
- Di Minin, A., Zhang, J., & Gammeltoft, P. (2012). Chinese foreign direct investment in R&D in Europe: A new model of R&D internationalization? *European Management Journal*, 30(3), 189–203.
- Dietz, M., Orr, G., & Xing, J. (2008). How Chinese companies can succeed abroad. *McKinsey Quarterly*, (3), 22–31.
- Ding, Q., Akoorie, M. E. M., & Pavlovich, K. (2009). Going International: The Experience of Chinese Companies. *International Business Research*, 2(2).
- Dobbelstein, T. (2011). International Market Analysis and Development. Fachhochschule Kempten - Hochschule für Technik und Wirtschaft - MBA V Lecture.
- Ge, G. L., & Ding, D. Z. (2008). A strategic analysis of surging Chinese manufacturers: The case of Galanz. *Asia Pacific Journal of Management*, 25(4), 667–683.
- Helpman, E., Melitz, M., & Yeaple, S. (2004). Exports versus FDI with Heterogeneous companies. *American Economic Review*, 94(1), 300–16.
- Li, P. P. (2007). Toward an integrated theory of multinational evolution: The evidence of Chinese

- multinational enterprises as latecomers. *Journal of International Management*, 13(3), 296–318.
- Lynn, W. (2008). OLI Framework-Econ 3581, Coop Experience in Economics. Retrieved from <http://astro.temple.edu/~pippin/oli.htm>
- Matthews, J. (2006a). Dragon multinationals: New players in 21st century globalization. *Asia Pacific Journal of Management*, 23 DOI - 10.1007/s10490-006-6113-0, 5–27.
- Matthews, J. (2006b). Catch-up strategies and the latecomer effect in industrial development. *New Political Economy*, 11(3).  
doi:10.1080/13563460600840142
- Matthews, J. A. (2003). Competitive dynamics and economic learning: An extended resource-based view. *Industrial and Corporate Change*, 12(1), 115–145.
- Matthews, J., & Zander, I. (2007). International entrepreneurial dynamics of accelerated internationalisation. *Journal of International Business Studies*, 1–17.
- Narver, D. (2012). Developing Effectiveness in Cross-Cultural Teams. Retrieved from <http://www.narvermanagement.ca/documents/InternationalBusiness.pdf>
- Neary, P. (2008). World Economy FDI: The OLI Framework. Retrieved from <http://www.economics.ox.ac.uk/members/peter.neary/papers/pdf/fdiprinceton.pdf>
- Oded, S. (2009). Becoming multinational: challenges for Chinese firms. *Journal of Chinese Economic and Foreign Trade Studies*, 2(3), 149–162.
- Sun, S. L. (2009). Internationalization Strategy of MNEs from Emerging Economies: The Case of Huawei. *Multinational Business Review*, 17(2), 129–156.
- Warner, M. (2004). Human resource management in China revisited: introduction. *International Journal of Human Resource Management*, 15(4), 617–634.
- Wattanasupachoke, T. (2002). Internationalisation: Motives and Consequences. *ABAC Journal*, 22(3).
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38, 341–63.