

# The Role of Cultural Factors on Intra-Firm Technology Transfer Performance and Corporate Sustainability: A Conceptual Study

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## Abstract

Technological innovations have emerged as crucially significant factor for sustaining market competition and achieving sustainable competitive advantage in the 21st century. The Multinational Corporations (MNCs) as celebrities of innovation play significant role in diffusing technological knowledge throughout firms both nationally and internationally. Although numerous studies exist on technology transfer the majority of existing literature addresses the issues related to inter-firm transfer of technology only while the area related to intra-firm transfer of technology has been largely underexposed; study of which is believed to be ideal for fruitful exploration of profitability in technology transfer projects. By exploring the existing relevant literature, the current study would attempt to posit a new model in regards to the effect of host-country cultural environment on the performance of technology transferred by the MNCs to their subsidiaries in Malaysia and its subsequent impact on the corporate sustainability of the firm. In the present study the relative influence of two cultural environment factors, namely national cultural distance and organizational cultural distance have been addressed and the study is expected to contribute both theoretically in the body of knowledge and also in terms of practical implication for policy makers of the host-country and the involved MNCs and hence enriching the existing intra-firm technology transfer literature simultaneously.

**Keywords:** host-country, cultural factors, multinational, intra-firm, technology transfer, corporate sustainability

## 1. Introduction

Technological innovations have emerged as significantly important in order to sustain market competition and acquiring competitive advantage. On the other hand gaining optimum benefits from Technology Transfer processes has been the burning issue in developing countries (Al-Abed et al., 2014). MNCs as wholesalers of innovation play significant role in diffusing technological knowledge throughout firms both nationally and internationally (William, 2014). For nations such as Malaysia technology transfer plays significant role in the overall economic growth and development of states (Abu Hassan et al., 2012) and it is argued that the external environment of the host-country has strong linkage with firms' strategic profile within the strategy paradigm (Astley & Van de Ven, 1983). In such regards where international technology transfer is involved the effect of hereditary knowledge from parent company on the sustainability of its subsidiaries is vital important both for the MNC (Cui et al., 2006) and for the nation hosting the subsidiary. This study is in response to the fact that not enough research has been done on intra-firm transfer of technology by MNCs especially in Malaysian context among international literatures of management.

This current study is an effort to restore balance in literature by focusing on the impact of host-country cultural traits on the performance of the technology transfer process in context of intra-company technology transfer by MNCs in Malaysia within the boundaries of Organizational Contingency Theory and Resource Based View where the effectiveness of the transfer process is strongly related with the performance of technology transferred to the MNC subsidiaries which in turn is expected to influence the corporate sustainability of the technology receiving unit.

### 1.1 The Problem Statement

Articulating a clear and concise description of the issues that would be addressed in the study is the basis of any research. Although being complicated to define the problem statement of the current study, in general could be described as the gap between the expected and the actual technological performance of Malaysia and the unenthusiastic approach of the MNCs to transfer key technologies in this country that would be addressed in this study. The study argues that the cultural environment of the host country influences MNCs' lack of interest to transfer key technologies to its subsidiary located in a particular host state.

According to Cui et al. (2006) the nature and intensity of competition, the mechanism of organizational transactions, and the input-output motion of local industries are all determined by country-specific environments. Malaysia has been ranked 12th position by the IMD World Competitiveness Scoreboard 2014 in overall performance out of 60 economies in contrast to previous year's 15th position (IMD World Competitiveness Rankings, 2014). The report seemed to be complimenting Malaysia's claims to be a fully developed nation by 2020. But according to the World Economic Forum (WEF, 2014) Malaysia is still behind other developed nations like Singapore and Korea in terms of technical performance. According to the Malaysian International Chamber of Commerce and Industry Malaysia is 19 years behind South Korea in terms of productivity (MICCI, 2014). The Malaysia Productivity and Investment Climate Survey Report (PICS) also contended that lower levels of capacity of the firms in Malaysia are linked to the lower technical performance by Malaysia (World Bank, 2009). Additionally empirical evidence exists that brought forward that MNCs are unenthusiastic to share the key technological knowledge to Malaysia (Zaidah et al., 2007).

So Malaysia's claim to be developed a nation by 2020 and the aforesaid facts logically create a gap in expected verses actually results. In other words clearly a problem exists that seeks attention. By means of this study it is proposed that the mentioned gap can be minimized and the issue can be addressed by means of maximizing technology transfer as we attempt to expose the relationship between host-country cultural traits and technology transfer supported by logic and numerous existing literatures.

### 1.2 Objectives of the Present Study

The general objective of this study is to explore the effects of host country cultural traits on the performance of technology transferred and on corporate sustainability. The specific objectives of the study include the following:

- 1). Exploring the relationships between host-country cultural traits and their dimensions with performance of intra-firm technology transfer.
- 2). Investigating the associations involving host-country cultural traits and their dimensions with corporate sustainability.
- 3). Assessing the relationships linking performance of intra-firm technology transfer and receiving unit's corporate sustainability.

## 2. Cultural Factors and Technology Transfer

A review of the literature for the current study came with the opportunity of not only summarizing the existing studies but critically understanding the variables, findings and methodologies used by previous researchers whereby several shortcomings came to light that is responsible in limiting the understanding of the effect of environment on strategies of firms that operates within it. According to Cui *et al.* (2006) the nature and intensity of competition, the mechanism of organizational transactions, and the input-output motion of local industries are all determined by country-specific environments. Furthermore the strategic initiatives of a firm directly results from the context of the environment within which it operates and the environmental factors form fundamental ingredients while firms formulate strategic decisions. Moreover empirically in Luo and Park (2001) it was found the external environment in which a firm operates directly influences its selection of strategic orientation and by means of synchronizing certain general strategies with the external environment conditions the firm could optimize performance and therefore it is could be held that failing to scrutinize the influence of environmental factors on strategies inhibit the understanding of strategic decisions relevant to international transfer of technology by firms.

Cultural factors for the purpose of this study comprise the cultural environment within which any firm operates. Culture could be defined as the pattern of deeply rooted values and beliefs that are explicit in behaviours, practices, and artifacts of a certain group, class, or society of people that differentiates them from others. Culture is an actor not only at organizational but also at national levels (Trice & Beyer, 1993; Hofstede, 1980; Garsten, 1993; Hamada, 1989). Since the study is all about international transfers within an organization it would be most relevant to discuss the cultural environment within the parameters of cultural distance. Cultural distance could be

defined as the differences between cultures of the home and the host country, and such difference that demonstrate influence on the information and communication sharing between organizations (Cui, Griffith, Cavusgil, & Dabic, 2006), which in case of the current study could be applied to the transfer of technology between a parent MNC and its subsidiary.

Since the current study bothers about the cultural factors of the host-country we are keen to focus on the national aspect of culture first, that effect organizational operations and strategic decision such as technology transfer. Shenkar (2001) defined national cultural distance as the fundamental differences in national cultures between the home and the host country. Culture as we know of is distinct in different people, class, or society, making basic cultural differences between countries throughout the world obvious. In such regard where organizational transactions involve two countries, understanding both similarities and differences between national cultures remains extremely significant from a management standpoint as they dwell their operations and strategic decisions based on such similarities or relative cultural distance of the two countries (Brouthers & Brouthers, 2001; Cui et al., 2006). Rationally it could be deduced that greater cultural difference between home and host country reciprocate increased cultural distance between MNC and their subsidiaries, which in turn would mean greater difference of values, norms, and institutions that determine the exchange between the parent company and its subsidiary. As a result the complexity of operations would increase while the effectiveness of communications would decrease. A greater cultural distance causes communicational challenges and difficulties and potentially influences every nail of collaboration including the processes related to the transfer of technology (Inkpen & Dinur, 1998). Lyles and Salk (2007) argued that greater national cultural distance increases misunderstandings causing conflicts that decrease the flow of information leading to lower learning thereby forming a barrier to technology transfer between the parent company and their local subsidiaries.

The other cultural factor that MNC and their subsidiaries are subject to apart from different national cultures is the distance between organizational cultures. The organizational cultural distance could be worded as the underlying differences in organizational cultures between two organizations. Garsten, (1993) held that organizational cultural distance effect the performance of inter-firm interactions. According to (Cui et al., 2006) where two or more firms are involved, the relative level of consistency of core elements between organizational cultures directly impacts the success of their communication. According to Jablin, Putnam, Roberts, & Porter, (1987) when two or more organizations communicate, their diverse organizational cultures could result mismatch and expectation differences in the processes of communication (Harvey & Griffith, 2002). As transfer of technology require numerous individual exchanges it relies highly on effective communication. Therefore an increased organizational cultural distance between the parent company and its subsidiary could hinder the exchange of information by increasing misunderstandings leading to conflicts. As a result organizational cultural distance could potentially damage joint efforts of the sender and receiver of the technology required for successful technology transfer (Fey & Beamish, 2001; Simonin, 1999).

### *2.1 The Concept of Technology Transfer*

The technology transfer process may be as simple as shifting codified information from one organization to another or may be complex because of the fact that the ability to understand and use information varies. According to Farizah (2012) technology transfer is process consisting three basis stages, specifically, planning or strategy building followed by negotiation and implementation which would result in successful transfer of technology and not just exchanging information between parties. According to Rahimi et al. (2013) technology transfer is a substitute method for developing and adopting technology from others while research (Chiranjibi, Bishwa, & Kabya, 2005) considered technology transfer as diffusion of information, synchronizing technology with the needs and creatively adapting innovations for novel uses. According to Minbaeva et al. (2003) Technology Transfer is a process that initiates when the technology receiving unit begins utilizing the transferred technology. The key element in technology transfer is not the actual knowledge, but instead it's the extent of receiver's potential to utilize the new knowledge in their own operations. Technology transfer is a vital factor that not only affects cross-country income in the long run, but also supports economic growth and union of countries for mutual benefits (Hovhannisyan, 2012).

Al-Abed et al. (2014) recognised technology transfer as an extensive and complicated process mutually for the sender and the receiver of technology whereby the recipient must be the able to utilize, reproduce, improvise and, re-sell the innovation at the end of the process. The complex process of technology transfer is more specialized and complicated in contrast to transferring general goods because we can only label the delivery as successful when the technology transferred is utilized and adds value to the receiver's competencies (Teasley et al., 2005). Summarized based on literature we put forward the operational definition of Technology transfer for the purpose of the current study as an extensive and complicated process between autonomous entities where both sender and

receiver of new technology exists mutually whereby the process is complete and effective only if the recipient is able to utilize, reproduce, improvise, re-sell and add value to its competencies by means of the innovation at the end of the process (Minbaeva et al., 2003; Teasley et al., 2005; Al-Abed et al., 2014).

### *2.2 MNC and Technology Transfer*

MNCs are established not only as major manufacturers of technology but also as channel for bulk transferring technology. Transfer of technology by multinational organizations are considered as intra-firm transfer in nature because the property rights are not shared with any external party. Hovhannisyan (2012) stated that MNCs can transmit its technology to foreign associates in both tangible and intangible forms. Royalties and license fees paid to MNCs can be termed as evidence for the intangible technologies transferred whereas exported goods for further processing from the MNCs can be established as proof of tangible technologies.

Gunnar (1996) attributed MNCs for the creation and attribution of intangible assets like technological knowledge, managerial know-how, marketing expertise, and patents and brand development and therefore considered them major players in international technology diffusion. According to Gunter and Philipp (2014) MNCs are very dynamic in making innovative technologies accessible both by purchasing spin-offs or employing them as service providers. On the contrary of the stated Irogbe (2013) argued that unchecked operations of the MNCs globally destabilizes the sovereignty of underdeveloped nations by exploiting their natural and human resources and do not support in the transfer of technology as other studies claim.

### *2.3 The Process of Technology Transfer in Multinational Corporation*

MNC are responsible to transfer innovative knowledge to various interrelated units, departments or subsidiaries (Minbaeva et al., 2003). Almeida, Song and Grant (2003) defined technology transfer within the MNC as a process of creating, transferring, application and subsequently developing through combinations of transferred knowledge along with the receivers' existing knowledge. According to Jordaan (2013) MNCs mainly transfer technologies to most developing and developed countries by means of foreign direct investment mechanism. Gunnar (1996) on the other hand stated that a firm may either export technology embodied goods, or license the technology to foreign firms or it may set up a foreign affiliate to manufacture the goods locally in order to exploit its technological assets in foreign market. Firms availing the third option become a multinational enterprise. Although a firm may use more than one channel to take advantage in foreign lands but intra-firm technology transfers remains favorite in case of most advanced technologies to avoid leakage to competitors in foreign countries.

According to Rogers (1995) innovations are diffused through two different channels in an MNC, namely centralized and decentralized channels of diffusion. In centralized channel the technology is created by dedicated R&D experts and transferred by a central administration who dictates as to how much technology would be transferred and to whom; whereas in case of decentralized diffusion technology is created by non-experts for their own usage which comes from their on-job learning through a trial and error method and is dispersed. In regards to intra-firm technology transfer by multinational issues such as motivation deficiency; insufficient absorbing capability; inadequate retaining ability of beneficiaries; formal systems and structures; less frequent individual interactions, strenuous relationship between the transfer partners (Szulanski, 1996) along with the size of MNC, its country of origin (Sazali et al., 2009), the age of the subsidiary (Foss & Pedersen, 2002), the location of the subsidiary and the cooperative or competitive relationship between subsidiaries (Dan Li et al., 2007) play important roles in terms of technology transfer performance.

### *2.4 Performance of Technology Transfer*

Waroonkun (2007) defined the performance technology transfer as a result achieved for local counterparts by means of employing technology transfer projects with the foreign affiliates. From an organizational perspective Jian and Li-Hua (2006) stated that the ability of a firm to achieve goals or objectives is an indicator of successful technology transfer. Rose et al., (2009) stated that technology transfer performance comprises the learning, acquiring, absorbing and utilizing capabilities of innovative external knowledge and technologies deeply rooted within the materials of product, tangible assets, production and procedures, and management skills and are not just limited to possessing the capacity of operating, maintaining or repairing the machineries in the level of production.

According to previous scholars Technology Transfer Performance is based on four stages (Bradley et al., 1995; Narayanan & Lai, 1993; Santikarn, 1981). The first step initiates when the transferred technology is applied by the technology recipient and hence the process can be stated as transferred. In the second stage the local workforce should be enabled to grasp the technology, which means employing the transferred technology

skillfully. The third concept specifies that technology can be considered as transferred only when it gets dispersed among the different units of the recipient by means of dynamic distribution activities. And lastly the fourth stage specifies that when workers are able to acclimatize the transferred technology in order to accommodate the needs of their particular business environment, transfer of technology can be said to be successful.

### *2.5 Technology Transfer and Corporate Sustainability*

According to the Brundtland's report (WCED, 1987), sustainable businesses are the one that endeavor constantly to improve their environmental, social and economic performance, providing the possibility that future generations will be able to meet their needs. According to Turkish Ministry of Development (DPT, 2007) science, technology and innovative skills are among the major factors determining sustainability. The one intersection where both external or host-country characteristics and sustainability meet is the unit of the present study, the organization. According to a recent study environmental and social issue are not only significant in firm level but also play prominent roles in national levels in industrialized countries (Bask et al., 2013). Not only scholars have established that social and economic sustainability lead to positive returns (Molina-Azorin et al., 2009; Pullman et al., 2009), recent studies also indicated social and economic dimensions emerging as competitive priorities for sustainable businesses (Pagell & Wu, 2009).

To be more specific in conceptualizing the relationship between technology and sustainability study (Staub, Kaynak, & Gok, 2015) stated innovative technologies as one of the most effective methods of providing sustainability for institutional strategies. Previously Nidumolu et al. (2009) also argued that sustainability is presently perceived as a source of competitive advantage and plays backbone in the innovation processes. Moreover Senge et al. (1999) quoted in their work that sustainable development cannot be achieved without innovation. Based on literature it would not be illogical to state that technology transfer and sustainability are interrelated concepts. Furthermore rationally it could be believed that technology transfer promotes global awareness of sustainability concepts such as acid rain, greenhouse phenomenon, clean energy, and social conscience and provides innovative remedies to neutralize such environmental and social threats globally.

### *2.6 Malaysian Overview of Technology Transfer*

Malaysia, as a rapidly growing economy is believed to be much more involved in transfer of technology especially in regards to the adaptation of new emerging technologies. In recent observations it is noticed that the issue involving technology transfer in Malaysia has been the talk of the town in almost every technological conference taking place locally by both public and private stakeholders. Lim (2000) confirmed that, as Malaysia is aware that time and expenses does not allow it the opportunity to develop and produce all the technologies required; therefore, Malaysia has opts for importing technology which is inexpensive and relatively faster gears of accelerating the utilization of science and technology. In terms of Asian developing countries like Malaysia, China, Myanmar, Sri Lanka, Thailand, Ghana, etc, who are experiencing speedy development International Technology Transfer continues to play as a key catalyst for economic growth (Abu Hassan & Muhammad Asim, 2012). Moreover, according to Siti Aisha et al., (2009) the areas of technology transfer and knowledge management contribute significantly to the productivity and organizational efficiency along with economic development that influences nations like Malaysia to concern deeply to manage knowledge and adopt innovative technology as determining factors for the processes related to technology transfer. The aim of Malaysia to leverage its existing strengths and resources for enhancing its competitiveness and flexibility to accomplish global excellence is reflected in its Third Industrial Master Plan 2006-2020. The Tenth Malaysian Plan 2011-2015 has also stressed on the importance of supporting innovation-led growth, developing a first-world talent base in terms of human assets, and application of high technology in fields of biotechnology, nanotechnology, high-end engineering, green technology and Technology Parks by acquisitions and utilizations through Government established bodies like the Malaysian Technology Development Corporation and Malaysian Venture Capital (The Tenth Malaysian Plan, 2010).

The Malaysian approach seem to be synchronized with the Second National Science and Technology Policy that opted for increased investments in research and development, increase indigenous technology producing capability, establishing new major research and technology development institutions, building long-term bridges between universities and industries for technology transfer and training, financing support for technology development and techno-entrepreneurship in collaboration with Malaysian Technology Venture Association, establishing Malaysian Technology Credit Guarantee Scheme, enhancing management of technology intelligence and information system and development of innovative technology-based companies involved in the endorsement and marketing of technological innovations (The Second National Science and Technology Policy,

Ministry of Science, Technology and Innovation). Simultaneously the Ministry of International Trade and Industry (MITI) has also been actively playing its role in enhancing technological capabilities of Malaysia by focusing on promoting investments in high technology and knowledge-based industries. It thus contributes towards Malaysia's efforts in creating a high income economy which would be knowledge-driven, high technology industry-based, industrially knowledge-intensive and higher in value, and Research and Development active, falling in line with the objectives of the New Economic Model (NEM) in order to transform Malaysia into a high income nation by 2020 (The Malaysia International Trade and Industry Report, 2013).

On the contrary to the facts above, studies do exist that found technology absorbing capabilities of Malaysia as inadequate. According to Zaidah et al. (2007) the MNCs are unenthusiastic to share key technological know-how to Malaysia. Additionally, Suhaimi and Yusof (2006) pointed out that Malaysia was not able to produce technology indigenously. Studies like Jegathesan et al. (1997) and Lall (2002) recommended that the Malaysian workforce were not able to infuse and carry out complicated repairs because of inadequate academic knowledge that does not allow the local human assets to conduct operations independently. Narayan and Lai (1993) and Zainal (2004), indicated Malaysians are still stuck at lower levels of technological exercises. In a separate study Burhanuddin et al., (2009) pointed out inadequate capital investment and managerial skills, inaccurate information or data, insufficient skilled workforce, limited capability for managing technology and acquiring knowledge, difficult access to industrial experts, and limited human resource to perform R&D task as reasons that constrain adopting new technology by SMEs in Malaysia.

### *2.7 Multinational Companies and Related Policies in Malaysia*

For Malaysia, Foreign Direct Investment (FDI) specifically MNCs has always been a foremost factor in developing the industrial sector (Halim, 2000) and the employment trend of its citizens. According to World Investment Report, 2014, Malaysia is ranked 19<sup>th</sup> among the world's 21 attractive countries for foreign investments and 15<sup>th</sup> out of 17 countries for prospective host economies (2014-2016). It is one of the largest FDI recipients in the ASEAN amounting to \$12 Billion. According to another report by the Ministry of International Trade and Industry (MITI) it is stated that Malaysia hosts 400 MNCs (MITI, 2012). Intel's design centre for microprocessor for its hand held equipments, Motorola's R&D centre in Malaysia, world's largest producer of thin-film disks Komag USA (M), Matsushita R&D centre for air-conditioners, are few of the many MNCs in Malaysia (FMM Directory, 2014, Bursa Malaysia).

Foreign Investments like the MNCs are screened by the MIDA (Malaysian Industrial Development Authority) to ensure that the FDI is consistent with the strategic and social policies of Malaysia. Exceptions like establishing Representative Office for foreign banks do require Central Bank (Bank Negara) approvals as well. Acquisitions, of assets, mergers, or take-overs on the other hand (of such Multinationals) are overseen by the FIC (Foreign Investment Committee) in Malaysia. Multinational Companies have the option of either setting up a representative office, or registering an office branch, or setting up a Joint Venture with a local entity, or grant patent or franchising licenses to local affiliates in order to start business in Malaysia.

### **3. Theoretical Perspective and Conceptual Framework**

The current issue attempts to establish the effect of the host-country cultural factors on the performance of technology transferred by MNCs to their subsidiaries in Malaysia and its relationship with subsidiary's sustainable corporate performance. To do justice considering the internal environment of the firm and its traits are just not enough, the external environment where the firm operates, the host country, its traits, its policies regarding the operations of the firm and protecting the interest of businesses need to be scrutinized thoroughly. This impels to follow a theory that can accommodate the different dimensions of the current endeavour.

Considering the above the present study leans on the Organizational Contingency Theory that can be deployed to illuminate the dependency and relationship between internal environments of the subsidiaries with the external environment of the host country where it operates. According to a recent study (Boyd et al., 2012) the development of contingency hypotheses is fundamental to strategic management and it is an approach prominently used by researchers of strategic management in areas considering internal and external environments which is the case in the current study as well. According to Teasley et al., (2005) Contingency theory hypothesizes that organizations and their external environment are interdependent and organizations are expected to perform optimum when they are in alignment with the contextual environment. Therefore connecting logically the issue related to the relationship between host country traits and the performance of technology transferred effecting subsidiary performance is governed by the Organizational Contingency Theory to serve the purpose of this study.

On the other hand the issue on how transferred technologies ensure corporate sustainability is completely an

issue that could be posed by the RBV (Lin, 2003). The prime focus of the RBV perspective is to demonstrate the capability of organizations to develop and achieve competitive advantage from replicable knowledge and resources and as derived from the RBV, knowledge is the major source that leads to build up competitive advantage (Barney, 1991) and thereby sustainability. Based on the RBV perspective, it can also be deduced that technology transfer improves knowledge, work practices locally and technological adaption capabilities, which in turn contributes to the sustainable corporate performance of the subsidiary (Lin, 2003; Barney, 1991).

### 3.1 Conceptual Framework

The conceptual framework has been adapted from existing related literature to suit the context of current study.

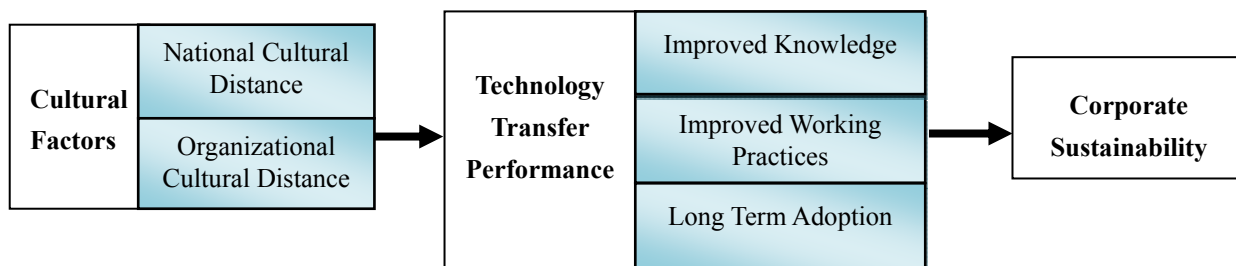


Figure1. Conceptual framework of present study

### 3.2 Variables and Measures

#### 3.2.1 Dependent Variable: Performance of Technology Transfer

The current study would adapt a multi-dimension measuring approach for this variable adapted from Waroonkun (2007) and Al-Abed et al. (2014). Deriving from Resource Based View the current endeavor defines performance of technology transfer as the outcome acquired from the processes of technology transfer in terms of three particular dimensions as follows: (1) improved knowledge in terms of technology, management techniques, business management, and Technology Transfer implementation, (2) improved work practices in terms of knowledge integration, resources allocation, transformation and applications, and (3) long-term adoption of technology transferred in terms of adapting innovative approaches in methods, management, advanced technologies, and innovative skills.

#### 3.2.2 Dependent Variable: Corporate Sustainability

Sustainable corporate performance would be measured in the present study by means of a multi-dimensional measuring approach employing eight items, seven-points likert scale adopted from Staub et al., (2015) as follows: market share, sales, premium, turnover profit, capital stock profit, return of the assets, return of the investments, and increase in total assets.

#### 3.2.3 Independent Variable: National Culture Distance

National culture distance has been conceptualized in this study as the fundamental differences in national cultures between the home and host country this variable could be measured using two items: (1) the national culture of the parent company greatly differs from the subsidiary, and (2) the language difference is a major obstacle in communication with parent company (Simonin's, 1999).

#### 3.2.4 Independent Variable: Organizational Culture Distance

Organizational cultural distance has been conceptualized as the basic differences in organizational culture between the parent company and its subsidiary. Organizational cultural distance could be measured using two-item scale: (1) the business practices and operational mechanisms of our parent company are very similar to ours, and (2) the corporate culture and management style of our parent company are very similar to ours (Simonin's, 1999).

### 3.3 Research Hypotheses

The hypotheses of the current study are as follows:

**Hypothesis 1:** There is a significant relationship between Host-Country Cultural Factors and Performance of Intra-Firm Technology Transfer.

**Hypothesis 2:** There is a significant relationship between Host-Country Cultural Factors and Sustainable

Corporate Performance of the Subsidiary.

**Hypothesis 3:** There is significant relationship between the performance of Intra-Firm technology transfer and receiving unit's sustainable corporate performance.

#### 4. Conclusion and Expected Contributions

Converting technology into competitive advantage is an art developing nations need to master. However, for Malaysia there is still much to be achieved and not much of time left in order to adopt technological advancements and acquire fully developed and industrialized status by 2020 in the light of globalizations. As for the MNCs technology transfer is a costly affair and understanding the relative influence of environmental factors could help them make more effective decisions that ultimately ensure sustainability. Quality research can be translated as a process whereby significant research questions are transformed into answers that contribute to the existing theory. Studies need to provide an extension of an existing theory or a refinement of it. Technology Transfer is a concept blessed with voluminous literature but unfortunately not well explored. This study attempted to study the effect of host-country cultural factors on intra-firm technology transfer performance and simultaneously the impact of intra-firm technology transfer performance on corporate sustainability in Malaysian Context based on existing literature within the frame of Organizational Contingency Theory and Resource Based View. The study fills gap in literature by positing a new model in context of the study for the very first time as no study on intra-firm technology transfer examining the relationship between the cultural traits of host-country and technology transfer performance and the corporate sustainability in a single model was found and thereby contributing in the body of knowledge.

Insights of this study are expected to contribute theoretically by refining the scope of the theory by considering the effect of host-country variables on technology transfer performance and subsidiary sustainability. Simultaneously in terms of practical implications the study would benefit Malaysian policy makers in enhancing or restructuring existing policies and formulating new policies in order to attract further technology transfer from the MNCs and at an organizational level the MNCs can use the study for technology transfer related decision making. Specifically the present study is expected to have significant managerial implications for organizations aiming to augment the competitive advantage of their business units. Lastly the study is expected to enrich the existing intra-firm technology transfer literature in Malaysian context. In any research, all existing constructs from the literature cannot be included in a model. As for this study, only certain selected constructs have been used in regards to the issue of the study. Thus, future researchers are encouraged to add more constructs in this model in order to reveal more angles of determinants affecting corporate sustainability. Moreover the conceptual model of this study could also be adapted or adopted for empirical studies in relevant research areas, especially in Malaysian context which could provide further insights on corporate sustainability which carries immense significance both theoretically and practically in the 21<sup>st</sup> century.

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