

LEVERAGING CULTURAL INTELLIGENCE TO ADDRESS TALENT SHORTAGES: A COMPARATIVE STUDY BETWEEN TAIWAN AND VIETNAM

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Abstract:

This study, inspired by the perspectives of former German Chancellor Angela Merkel, delves into the symbiotic relationship between multiculturalism and certain innovations associated with Industry 4.0, positing their collective impact on fostering economic growth. Merkel's insights serve as a theoretical foundation, guiding an exploration into the intersections of cultural diversity and technological advancements in the contemporary global landscape. While Merkel's assertion aligns multiculturalism and Industry 4.0 with economic prosperity, the focus shifts to the unique case of Taiwan. Despite the steadfast rejection by the Taiwanese President of Beijing's assertion of the island as part of 'One China,' Taiwan faces a significant talent deficit, positioning itself among the nations with the most considerable skill shortages worldwide. This incongruity raises intriguing questions about the influence of geopolitical dynamics, the advent of Industry 4.0, and the challenges posed by the era of smartphones, social networks, the ongoing COVID pandemic, and isolated conflicts. The study navigates through the complexities of Taiwan's talent deficit, examining how it intersects with the broader global landscape characterized by political tensions, technological advancements, and the socio-economic impact of recent global events. It probes the paradox of a talent shortage in a region marked by technological innovation and geopolitical uncertainties, shedding light on the multifaceted factors contributing to Taiwan's unique circumstances. As we await insights from this exploration, the study ponders the potential implications of Taiwan's talent deficit on its socio-economic and political future, especially in the context of global shifts accelerated by the digital age, the pandemic, and geopolitical realities. By amalgamating Merkel's insights with the specific case of Taiwan, this study offers a nuanced understanding of the intricate interplay between multiculturalism, technological innovation, and the challenges faced by a nation navigating complex geopolitical landscapes.

Keywords: Multiculturalism, Industry 4.0, Economic Growth, Talent Deficit, Global Geopolitics

INTRODUCTION

In line with the ex-chancellor of Germany, Angela Merkel, this work found that the multiculturalism, along with some innovations of Industry 4.0, leads to economic growth.

However, even though Taiwanese President refuses to accept Beijing 's policy that the island is part of 'One China,' Taiwan has one of the biggest talent deficits in the world, opening more doors for the communism in the era of smartphones, social networks, COVID, and isolated wars.

Ku (1999) found that since the early 1990s, both sides, Taiwan and Vietnam have improved their political and economic relations. Economists contend that Taiwan's expanding investments in Vietnam play a key role behind this change. Authors argue that Taiwan authorities are using the island's economic resources in exchange for political gains from Vietnam.

The brain drain in Taiwan is bringing additional problems and is motivating the parents and professors to change the culture and perhaps let the genius students be intelligent (application of knowledge) by dealing with complexity of knowing other cultures through academic exchange programs.

Given the fact that the only way of young people from Taiwan to see through attempts of China to politically manipulate them is by the development of cultural intelligence, this study demonstrates that the perception of parents and professors from Taiwan, who consider the super protection of the students as a solution to the pressure for unification from China, is not the most reasonable one and it is the main reason for the ongoing threats from China (Diaspora).

According to the International Institute for Management Development (IMD), Taiwan faces various challenges, including enhancing its international cooperation as well as needs to cultivate, retain and recruit digital talent. It also needs to foster social cohesion and social inclusion.

In the 2023 edition of the QS World University Rankings, it is possible to observe in the list of 100 best universities of some institutions from Asia: National University of Singapore (NUS) in position 11^o; Peking University, China, in 12^o; followed by Tsinghua University (China) in position 14^o. The National Taiwan University (NTU) is in the 77th position.

The metrics taken into consideration in the QS ranking are the following: internationalization; International Faculty Ratio; International Student Ratio; Inbound Exchange Students; and Outbound Exchange Students.

As a consequence, striving for collaborative entrepreneurship education is more than a material endeavor for universities and industries in Taiwan. It represents the integration and deep alignment of different capacities: technical, managerial, intellectual and emotional. In particular, qualities such as patience, self-awareness, emotional resilience, motivation, enthusiasm, and sensitivity to others are paramount to developing a collaborative entrepreneurship program between university and industry using, at the University level, Knowledge Management (KM) practices, in particular mentoring, best practices and lessons learned.

This program encompasses, at the industry level, the advantages of Industry 4.0, based on high-quality education with high digital literacy, in changing how human beings work, live, communicate, thrive, and survive. In other words, Industry 4.0 disrupts societies.

Improvements in environmental sustainability, profit margin, higher innovation capacity, higher production control, labor productivity, reduced time-to-market for products, reduced waste, improved energy consumption, and avoiding harmful emissions are examples of benefits under the Industry 4.0 label (Oztemel and Gursev, 2020; Zheng et al., 2021).

The challenge is in preparing people for the era of Industry 4.0 and, therefore, the level of maturity of the students plays a very important role.

In this regard, it is paramount to change the relationships in Taiwan: students-students, students parents, students-professors, and universities government.

According to Ito et al. (1998), the ability to sense what other people are feeling is an important factor in allowing us to connect or communicate effectively with others and depends to a great extent on the establishment of a spontaneous entrainment between individuals.

Entrainment is considered as one of the fundamental processes providing an intimate connection between individuals, others, and their environment (Childre and Martin, 1999).

Awad and Chaziri (2004) have found that knowledge is human understanding of a specialized field of interest that has been acquired through study and experience.

The difficulty of Taiwanese industries in accessing the academic knowledge and the lack of practical experience of Taiwanese students shows the importance of a student exchange program with other countries with more experience, such as Vietnam and Germany. Cultural intelligence impacts Knowledge Management and Organizational Intelligence by encouraging knowledge to be created, shared, learned, enhanced, organized, and applied for the benefit of both, universities and industries.

As Taiwanese students are not likely to share knowledge without a strong personal motivation, which comes from the opportunity to understand the world (cultural intelligence), the goal of this study is to show the importance of

the balance between knowledge (Taiwan) and experience (Vietnam) to facilitate the process of creation and application of Knowledge in both Universities and Industries.

Even though examples of entrepreneurship education through university–industry collaboration can be seen in several universities in diverse countries (Etzkowitz and Leydesdorff, 2000; Barr et al., 2009; Janssen et al., 2007; Meyer et al., 2011; Lundqvist and Williams-Middleton, 2013), collaborative education between universities and industries has not been sufficiently studied to offer clear models and practices to foster effective knowledge exchange and then the creation and application of the new knowledge between these two groups.

Therefore, this article proposes the Culture – Knowledge – Intelligence model (CKI) to understand the high impact of Cultural Intelligence on Knowledge Management and Organizational Intelligence, and, as a consequence, the importance of the right balances of knowledge (Taiwan) and experience (Vietnam).

This impact depends on the personality factors. While Taiwanese are traditional and attached to their families, Vietnamese are more flexible and open to new experiences. In contrast to Vietnam, the frame of orientation for Taiwanese is not religion or personal philosophies, but government rules and professors' control, along with the fact that Taiwan belongs to Confucian Asia (a long period of creation of knowledge without necessary application). This is the reason that they are well known as genius kids with low levels of cultural intelligence (they learn with from other cultures), which in the long term provokes in the middle term a high level of brain drain.

The weak points of Taiwan are their expressive ties with people of other nationalities (cultural diversity) and the ability to understand the internal and external environment (cultural intelligence) of foreign companies.

Some parents and professors were unable to understand and explain to Taiwan's younger generation of the Chinese plan to offer attractive study and work opportunities to Taiwanese local leaders and youth groups every year through invitations to mainland camps and cultural activities. Since the Taiwanese are overprotected by their families, schools, and universities, as a defense mechanism against the Chinese government, they end up not being able to develop other types of relationships, such as business, and engage in undergraduate, master's, and doctorate programs in other countries, which would give them the necessary maturity to start their own companies.

Because of the shame of relating to people with more experience, or even without access to them, they end up spending many hours on the internet, and to try to relax from the high pressure of the university, they spend many hours on social networks, where they end up adapting to and believing in fake news.

Due to the over-protection of parents and teachers, the Taiwanese usually live a virtual life, which takes them away from intelligence (application of knowledge) and frustrates the students by moving (backward) from knowledge to an avalanche of information (social networks), much of it false and/or with no use even to add in their knowledge.

This article is structured as follows: In addition to this introduction and the conclusions, Section 1 explains the juxtaposition between Knowledge Management and Organizational Intelligence. The Section 2 describes cultural intelligence as a tool to reduce the brain drain in Taiwan. Section 3 presents the model of Cultural Intelligence, Knowledge Management and, Organizational Intelligence, combining the various theoretical elements gathered throughout the previous sections.

The integration of knowledge management and organizational intelligence

Davenport and Pruzak (1998) conducted an important study about the differences among data, information and knowledge.

Data is a set of discrete, objective facts about events. In an organizational context, data are most usefully described as structured records of transactions.

Like many researchers who have studied information, we will describe it as a message, usually in the form of a document or an audible or visible communication. As with any message, it has a sender and a receiver. Information is meant to change the way the receiver perceives something, and to have an impact on his judgment and behavior. Most people have an intuitive sense that knowledge is broader, deeper, and richer than data or information.

Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the

minds of knowers. What this definition immediately makes clear is that knowledge is not neat or simple. It is a mixture of various elements; it is fluid as well as formally structured; it is intuitive and, therefore, hard to capture in words or understand completely in logical terms (Davenport and Prusak, 1998).

The transformation of knowledge into intelligence is an operation accomplished by the human capacity to interpret, analyze, integrate, predict, and act (De Angelis, 2016).

The information is analyzed in the context of the personal standards, criteria, and expectations of the decision-maker to become knowledgeable. Finally, the decision-maker applies this knowledge to a particular situation to create intelligence.

Rothberg and Erickson (2004) clarify that knowledge is socially constructed through collaborative activities, but access to this knowledge does not mean success in decision-making, since knowledge without application is innocuous. In summary, knowledge is the foundation for intelligence, since intelligence is knowledge in action to solve problems.

Bali et al. (2009) define Knowledge Management (KM) as a set of tools, techniques, tactics, and technologies designed to leverage the intangible assets of the organization by extracting data, pertinent information, and relevant knowledge to facilitate decision-making. KM is a set of practices aimed at the interaction between tacit and explicit knowledge to acquire and create new competencies (knowledge + skills + attitudes) to enable an organization to act intelligently (transform complexity into meaningful simplicity) in different environments (De Angelis, 2016).

Knowledge management has raised expectations. In the OECD (2003) survey, the following widely perceived expectations have been cited:

1. Releasing information more rapidly and making it available more widely to the public;
2. Improving working relationships and knowledge sharing with other organizations;
3. Improving work efficiency and/or productivity by producing and sharing knowledge;
4. Minimizing or eliminating duplication of efforts between divisions;
5. Compensating for knowledge loss (due to shorter staff turnover, future retirement, etc.); and 6. Promoting life-long learning.

Knowledge management practices are grouped into three dimensions as proposed by Misra (2007): people, processes, and systems. The practices selected to reduce the brain drain are: Mentoring, best practices, and lessons learned.

In general, scholars suggest that governments need to ensure that science is at the forefront of their strategy for economic recovery and economic growth. For them, science produces knowledge and therefore produces innovation, which improves the quality of life, democracy, economic growth, and the ability to solve larger problems. However, it seems that the passage from knowledge to innovation is not so fast. Rothberg and Erickson (2004) hold that knowledge is static and, ultimately, it only has value if people use it.

Knowledge implies that learning and experience have been applied to information, but it does not imply an action. The transformation of knowledge into intelligence can be said to be an operation accomplished by the human capacity to interpret, analyze, integrate, predict, and act.

Choo (2002) defines Organizational Intelligence (OI) as a continuous cycle of activities that includes sensing the environment, developing insights, and creating meaning through interpretation, using the memory of the experience to act on the developed interpretations. OI refers to a process of turning data into knowledge and knowledge into action for organizational gain (Cronquist, 2011).

De Angelis (2013) considers OI as the ability of an organization to adapt, learn, and change in response to environmental conditions through the use of relevant knowledge.

OI appears to be used to refer to the organization's ability to process, interpret, handle, and access information in an intentional and directed way to the organizational objectives, thus increasing its adaptability in the environment (Glynn, 1996: Istudor et al., 2016). In this sense, OI results from a systematic processing of information and

knowledge available internally in the organization and in its external environment and is used to improve the organization's ability to predict the future and adapt to changes in the environment (Istudor et al., 2016).

OI is an organization's ability to develop efficient behavior in response to the adequate reaction to the dynamics and uncertainties of the environment, thus determining their capacity to create and time knowledge in a strategic way to adapt to the market environment (Istudor et al., 2016).

This definition considers that the OI is adaptive and a social result (Glynn, 1996: Yaghoubi et al., 2011), that is, it is modified according to environmental conditions (internal and external), in order to solve the problems, meeting the defined objectives, and responding appropriately to environmental challenges (Glynn, 1996)||. OI influences some behaviors considered socially accepted, such as the good relations of the individual with their work colleagues and family, and therefore are considered as an important capacity for the work environment.

The Organizational Intelligence (OI) practices are used to improve the interpretation and synthesis of the knowledge generated by expert analysis, intelligent systems, and advanced techniques, such as competitive hypothesis and modeling using structural equations. OI tools combine a mix of socio-technical elements from (a) subjective assessments of the online discussion led by facilitators and subject matter experts with (b) real-time feedback from data mining and semantic analysis of the online discussion. OI tools contribute to deep structural changes and transformations in the social climate, the collaborative culture, and the role of internal collective intelligence (Chauvel et al., 2012). The idea behind OI tools is to transform crowdsourcing models that apply the –wisdom of crowds|| into the –wisdom of experts|| to solve complex problems.

Despite the intuitive appeal that the concepts of KM and OI are complementary and interdependent, this relationship has received relatively little attention in the literature. For Halal and Kull (1998), OI is a function of five cognitive subsystems: organizational structure; organizational culture; stakeholder relationships; strategic processes; and KM. Liebowitz (1999) emphasizes that active knowledge management is critical to enable organizational performance improvement, problem-solving, and decisionmaking. Based on these perspectives, it can be concluded that KM provides methods for identifying, storing, sharing, and creating knowledge, while OI integrates, analyzes, and interprets this knowledge for decision-making and problem-solving. Bourgon (2009) holds that governments do not have sufficient resources, internal skills, and intelligence to effectively respond to the needs of citizens in a rapidly changing environment. Therefore, the public value is not provided only by the government but by collaboration. Sharing power, opening up the decision-making process, forging new relationships, and partnering on service delivery are the foundations of 21st-century government (Bourgon, 2009). This involves dealing with complex issues, many of which, according to Ho (2008), have the characteristics of –wicked problems|| in the unpredictable context of a modern global economy and corporate network, where several players are acting simultaneously. As can be seen in Figure 1, in the –new synthesis of public administration,|| intelligence and resilience are the foundation for meeting the challenges of the future. In a world increasingly unpredictable and complex (crises, pandemics, wars), a profound cultural change in the Taiwanese society is necessary—from people-to-phones to a person-to-person approach—taking advantage of personal intelligence in different cultures. A strong example of cultural change can be considered as Russia. Chimenson et al. (2022) after Perestroika, group orientation were increasingly replaced with a focus on individualism. The rise in wealth of the –New Russians(Balzer, 2003) and the emergence of the first oligarchs may have motivated some people to pursue wealth by any means, including engaging in criminal activities, such as drug trafficking and prostitution. Many traditional connections between relatives and friends were broken, resulting in a weakening of familial ties. Perestroika and market reforms contributed to dramatic shifts towards individualism.



Figure 1. A New Synthesis of public administration (adapted from Bourgon, 2009).

Source: Bourgon, 2009.

Cultural intelligence as a tool to reduce the brain drain

Geertz (2000) was particularly interested in the different aspects of collective action towards social problems and therefore both revived and transformed the anthropological concept of culture in such a way as to make evident its relevance to a range of humanistic disciplines. He changed the direction of thinking in many fields by pointing to the importance and complexity of culture and the need for its interpretation.

Geertz (2000) also investigated the impact of the concept of culture on the concept of man, the growth of culture, the evolution of the mind, and the religion as a cultural system. His work goes in the direction of the fact that culture impacts more than genetic and personality in the decision-making process.

Schein (1985) defines —culture|| as a pattern of shared basic assumptions that the group has learned to use in solving its problems of external adaptation and internal integration. This pattern has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think, and feel about these problems (Schein, 1985).

Yang et al. (2022) consider that the world needs wisdom that transcends cultural boundaries—wisdom that not only benefits the members of one's own culture, but also those of other cultures.

Bouchard et al. (1990) conducted studies on monozygotic twins reared separately, which showed that 70% of the variance in IQ was found to be associated with genetic variation.

However, Kroeber and Kluckhohn (1952) points out that the contribution of Kroeber and Kluckhohn (1952) to expanding the concept of culture is based on two facts: Because the human instincts were partially offset by a long evolutionary process, culture, rather than genetic inheritance, determines human behavior and justifies their achievements.

Nowadays, it is outdated to think of one thing over another or propose that genes are more important than culture or vice versa. Furthermore, the vision of —instinct|| (the 40s) has already been outdated for some time and certainly no longer fits this deterministic and dichotomous statement in the biological and medical sciences of the twenty-first century. It is ever day more clear that culture impact many more decisions than genetics and personality, because during turbulent times (crises + pandemics + wars), the impact of culture on knowledge and knowledge on intelligence is visible in the actions of people (by comparison).

Cultural intelligence, unlike emotional intelligence, considers cultural context, and therefore focuses on collaboration, and on internal and external participants to learn from other values, beliefs, assumptions, and traditions.

Cultural intelligence refers to a general set of capabilities with relevance to situations characterized by cultural diversity. Emotional intelligence, therefore, differs from cultural intelligence because it focuses on the general ability to perceive and manage emotions without regard to cultural context (Ang et al., 2007).

Lückmann and Färber (2016) assert that a third global projects fail due to miscommunication resulting from a lack of cultural understanding and awareness. It seems that while leaders have historically relied on technical project management structures, insufficient attention has been paid to the management of different cultures in project teams. This deficit needs to be addressed

Bucher (2007) concludes that CI is about awareness of our values and those of others, and the relationships between people's values, behaviors, and cultural backgrounds, and Rockstuhl et al. (2011) contends that theory and research suggest that CI facilitates expressive bonding and shows the value of cultural intelligence as a critical leadership competency in today's globalized world.

Kilduff and Cormican (2022) found that Cultural intelligence can be learned and developed over time. Therefore, project leaders working in global environments that are open to learning are more likely to develop their cultural intelligence. Research suggests that expatriates that are more culturally adjusted are open to the host country's norms and behaviors has also shown that openness is positively related to cultural intelligence and has been recognized as a key personality trait for cultural intelligence.

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Alexandra et al. (2021) found evidence that individuals' Cultural Intelligence predicts their perceived inclusion in their workgroup. Moreover, individuals' perceived inclusion is associated with further development of Cultural Intelligence, especially for individuals who perceive greater cultural diversity in their workgroup. By looking beyond commonly suggested antecedents of Cultural Intelligence such as international travel and work experience (Fang et al., 2018).

Theoretical arguments suggest that senior executives who are more culturally intelligent are better able to scan their environments for relevant and accurate information and use this higher-quality information to make better decisions and take better-calculated risks (Ang et al., 2007).

One reason CI increases job performance is that it results in better judgment and decision making. An important cognitive outcome is cultural judgment and decision-making, which refers to the quality of decisions regarding intercultural interactions (Ang et al., 2007). Indeed, the meaning-making process manifests itself and is mediated by cultural contexts (Rockstuhl et al., 2011).

Cultural intelligence is related to the formation of expressive bonds with people of other nationalities, leadership competence, and the ability to understand the internal and external environment, thus having the capacity to better judge what has happened, what is happening and what may happen.

Cultural intelligence also has been linked to positive individual-level outcomes in culturally diverse contexts, including performance (Lisak and Erez, 2015), interaction quality (Charas, 2015), interpersonal trust, work engagement, and innovation (Afsar et al., 2020).

Global projects and teams have led to an increasing need for leaders who can operate effectively across multiple cultures. Research has suggested that leaders' personality plays a significant role in determining their effectiveness working across cultures (Rothacker and Hauer, 2014). Project leaders who have predisposing characteristics such as extraversion, experiences in other countries and cultures are considered to be good candidates for global leadership roles.

Taiwanese professors with the strategy of protecting their students from the complexity, of China's treats, and the development of cultural intelligence (learning by comparison with other cultures), has decreased their capacity to open companies in Taiwan.

Cultural intelligence has a strong impact on the processes of knowledge creation and application. This occurs because, by being connected to other cultures, it is also connected to other ways of thinking and acting, which increases the ability to create relevant knowledge and apply it collectively, given the greater integration in the new community when the first cultural barriers are overcome.

Learning with other assumptions, beliefs and values brings maturity to transform complexity into simplicity, as in the case of Germans, who know several languages and cultures before starting university and therefore develop a high capacity to start businesses and today is one of the countries that receives more people due to the phenomena known as —brain drain|| due to lack of opportunities in the country of origin and diaspora due to conflicts of various kinds, mainly wars.

Taiwanese students are extremely protected by families, teachers and government. Therefore, Taiwanese students are not motivated to study abroad; their level of experience is too low, and also their self-awareness. Even though they appear to pay attention to a visitor's views, they reject ideas that require them to leave their comfort zone in Taiwan. Their higher level of uncertainty avoidance can be seen in their reluctance to explore foreign cultures, a form of risk-taking and cross-cultural adjustment.

They like to receive from other nationalities, but they do not want to leave the country to really learn with them. This welcome approach is a naturally reaction against the Ming Dynasty (military base) restored by Zheng Chenggong, (Koxinga) after 38 years of Dutch rule on Taiwan.

According to Vietnam Chamber of Commerce and Industry (VCCI) President, Vu Tien Loc, Vietnam has become an attractive business and investment destination for many foreign companies from Taiwan, thanks to its notable advantages, including a high economic growth rate, political stability, and its strategic geographic location.

As of the end of 2017, Taiwan has invested a total amount of 30 billion USD into 2.500 projects in Vietnam, which makes it the 4th biggest foreign direct investor. In Binh Duong province, where the VGU is located, Taiwanese companies invested into 772 projects with a capital volume of nearly 6 billion USD. Even they had to suffer certain difficulties and damages during the short period with the anti-Chinese attitude in 2014 in Vietnam, Taiwanese companies still find great potential in investing in the long term.

The challenge for Taiwan is developing the capacity to apply knowledge, given the fact that other countries are taking the knowledge of Taiwanese employees to fire them afterwards. Curricula for teacher training should incorporate and promote factors such as openness to intercultural interaction and intercultural learning; readiness to recognize and utilize multiculturalism and cultural diversity as a learning resource and also create international teachers_ exchange programs (Petrović,

2011) before students_ exchange programs, such as ERASMUS PROGRAM in Europe. One solution to reduce the high brain drain and economic crises in Taiwan should be the interference of the government and university's leaders by changing the process of selection and development of professors.

Taiwan can learn with Vietnam and create a partnership with the German Academic Exchange Service (DAAD) (medium-term stays, Master and Doctor Programs) or even talk with other countries in Asia to create a program similar to ERASMUS (short-term stays, part of the Bachelor program).

Endes (2015) holds that Erasmus Program is a student exchange program carried out within the frame of the agreements between higher education institutions of European Union countries and the candidate countries to provide the outgoing students with new abilities and different experiences.

By encouraging the higher education institutions to cooperate with each other, Erasmus Exchange Program aims to allow students to study abroad and to recognize European countries and cultures; contribute to the strengthening of communication and cooperation between countries; develop and popularize of European standards in education; improve the quality of higher education. The programme also aims to raise the equipped individuals who will fulfill the expectations of business world and the universities that provide qualified higher education services.

One of the meetings to collect relevant knowledge for this article was with Ms. Huynh Dinh Thai Linh, Regional Manager of the Hinrich Foundation in Vietnam, about opportunities for the Vietnamese students to get scholarships for exchange programs in Germany and other foreign countries. Students are highly motivated to participate into contests for innovation and entrepreneurship, with awards like the Best Innovator Prize.

Dr. Bernd Tilp, Director of DAAD office in Ho Chi Minh City, pointed out that over last year until now; Vietnamese students are very keen on the opportunities to study abroad at German universities. To meet the high demand of those students, the DAAD opened two offices instead of only one, as in many other South East Asian countries.

Master's study program at VGU in Vietnam, approximately 20% of students at this university travel to Germany each year to complete their master's thesis under the supervision of a German professor.

Mr. Henning Hilbert, the Vice Director of the Goethe Institute in Vietnam, confirmed that the demand for students to learn German language and prepare for their undergraduate studies in Germany has increased dramatically, and as a result, the Goethe Institute has recently been mostly overburdened.

Taiwan is also experiencing a high brain drain due to its flawed educational system. The system focuses too much on grades, which is a huge problem in itself because, somehow, it limits creativity and diversity.

Exchange academic Programs, such as those established by China and Germany to bring outside knowledge into the country, can also contribute to Taiwan's becoming a more collaborative and intelligent country.

Based on the program of academic exchange and the attraction of many workers, China is the country that has changed the most in culture in recent years. They also received several universities, in particular from the UK, France and Germany, the most international countries in Europe. This is also the reason why China is growing at 7% per year while Taiwan is only at 2%. The third alternative is a program of startups in association with Universities, Government and the private sector.

Clopton (2011) made a content analysis of a U.S. social entrepreneurship (SE)-focused graduate management program that examined the intersection of SE key competencies and SE practices. Results show that social capital is manifest in SE practices that work both internally and externally to define the SE field and foster meaningful SE education.

Four patterns of practice are crucial to creating accessibility and engaging social capital exchanges: institutional practices that instill an active and outwardfacing institutional presence; practice of a studentcentered organization that bridge and link entrepreneurs; valuation practices incorporating sustainability; and persistent external engagements (Clopton, 2011).

These initiatives should be made in parallel to the other three improvements in the education system of Taiwan: 1) embrace diversity and interdisciplinary, 2) develop managerial competence, 3) create foresighted thinking (foster foresight).

According to Clopton (2011), universities, as the entities that educate future actors and stakeholders, can also affect change that extends beyond their own doors. Education for sustainable development (ESD) is an attempt to empower today's students with attitudes, abilities, and the responsibility for creating a sustainable future (Clopton, 2011). UNESCO Bangkok (2018) holds that all levels and types of learning to provide quality education and foster sustainable human development should be in place in the intersection of education and business – learning to know, learning to be, learning to live together, learning to do and learning to transform oneself and society.

A model of cultural intelligence, knowledge management and organizational intelligence

In line with the previous literature, the results of this study suggest that the development of an organizational culture (National Culture in a macro level) supports the application of KM practices (Davenport and Prusak, 2000; Nonaka and Takeuchi, 1995; Gold et al., 2001; Janz and Prasarnphanic, 2003; Lee and Choi, 2003; Donate and Guadamillas, 2010). Selvi and Murthy (2021) confirm that organizational culture is a vital business framework for interaction. How things are done and how people behave and act (culture) directly influences the goals, mission, vision, processes, responsibilities, design, communication, learning, technology, and so on. The statement –culture eats strategy for breakfast||, attributed to Peter Ducker, highlights the importance of culture in providing the context for the formulation and implementation of strategies (Ireland et al., 2002; Farjoun, 2002). Culture also has an important role in creating conditions for learning with internal and external environments. Taiwan's cultural context has been shaped by the decisions and actions of its people. Beginning in the 1980s, Taiwan underwent rapid industrialization, economic growth, and political reform (Hwang, 2015). As Weller (1999) noted, –The really stunning recent political change has been Taiwan's move from authoritarian control to true democracy beginning in the late 1980s|| (1). Contemporary Taiwan is considered to be –the first and only democracy yet to be installed in a culturally Chinese society|| (Chu, 2012:42). Taiwan belongs to Confucian Asia, form also by Singapore, Hong Kong, South Korea, China, Japan (House et al., 2004). This is one of the reasons that Taiwan received completely different scores in comparison to Vietnam in two important Hofstede's Cultural Dimensions (Hofstede, 2001): uncertainty avoidance (Taiwan 69, Vietnam 30) and long-term orientation (Taiwan 93, Vietnam 57). These countries are also different in terms of performance orientation, institutional collectivism and in-group collectivism as demonstrated in Table I. This research empirically tests three hypotheses (Table 2).

RESEARCH METHODOLOGY

In this study, the relationships between the variables (hypotheses) were empirically tested using structural equation modeling (SEM). SEM is a technique combining elements of both multiple regression and factor analysis that enables the researcher not only to assess quite complex interrelated dependence relationships but also to incorporate the effects of measurement error on the structural coefficients at the same time.

There are two approaches to estimating the parameters of a SEM (types of SEM techniques): the covariance-based approach (CEB-SEM) (e.g., LISREL) and the variance-based approach (PLSSEM) (e.g., partial least square path modeling).

Because of its prediction orientation, PLS-SEM is the preferred method when the research objective is theory development and prediction (Hair et al., 2005). Furthermore, Henseler et al. (2009) hold that the sample required (to reach the same statistical power) for the CFA-PLS is lower than for the CB-SEM, and in the PLS-PM, there is no assumption of normality of the variables. PLS is a family of alternating least squares algorithms that extend principal component and canonical correlation analysis (Henseler and Sarstedt, 2012). According to Schreiber et al. (2006), SEM, in comparison with confirmatory factor analysis (CFA), extends the possibility of relationships among the latent variables and encompasses two components:

- (1) A measurement model (essentially the CFA); and
- (2) A structural model.

Data collection

After a wide range reviews of theoretical and empirical research and survey methods, this research adopted a web survey to obtain input from targeted respondents and achieve the objectives of this research project. The use of key informants from organizations for

Table 1. National culture dimensions in Taiwan and Vietnam (Globe, 2004).

National Culture Dimensions	Taiwan	Vietnam
Uncertainty avoidance	high	low
Performance orientation	high	low
Institutional collectivism	high	low
In-group collectivism	high	high

Source: Hofstede (2001) and House et al (2004).

Table 2. Hypotheses in the CKI model.

Hypotheses	Sources	Results and gaps to be filled
H1) CI influences KM positively	De Vita (2001), Kennedy (2002) and Tweed and Ledman (2002) suggested that by influencing the way individuals perceive, organize and process information, the way they communicate with others and the way they understand, organize and generate knowledge and solve problems, culture is inextricably limited to learning approaches and preferences.	Supported
H2) CI influences OI positively	Akgun et al. (2007) argue that OI is an everyday activity that is cognitively distributed and demonstrated by people's behavior, their culture and their organizational routines.	Supported
H3) KM influences OI positively	The active management of knowledge is critical to enabling organizational performance enhancements, problem-solving and decision-making (Liebowitz, 2001)	Supported

Source:

Author data collection has been a popular method in many research contexts (Huber and Power, 1985).

A pilot version of the questionnaire with 35 questions across 3 dimensions (Cultural Intelligence, Knowledge Management and Organizational Intelligence) was developed and sent to 53 students from Taiwanese and Vietnamese universities. Exploratory factor analysis (EFA) of the results indicated that 20 questions across 2 dimensions explained a majority of the variance. To give strength by confirming the results obtained in the quantitative research, the interview was the second data-gathering criteria.

According to Miller and Glassner (2004), interviews are designed and executed to understand and give voice to participants' experiences, behaviors and attitudes in a non-threatening, confidential and non-evaluative manner. Interviews are particularly useful for getting the story behind a participant's experiences. The interviewer can pursue in-depth information around the topic (McNamara, 1999).

Interviews were conducted on one-on-one basis and the results were compared and contrasted, avoiding focus groups due to their elevated potential for acquiescence bias (Schaffer and Riordan, 2003). This research relies on a study performed on six universities in Taiwan (4) and Vietnam (2), conducting semi-structured interviews with students and professors. In total, 35 interviews were conducted with the following participants: 17 students and 3 professors from 1) Tamkang 2) Fu Jen Catholic, 3) Asia, 4) Chinese Culture Universities in Taiwan, and 13 students and 2 professors from 5) RMIT International and 6) Vietnamese-German Universities in Vietnam.

The refinement of the research construct was done through four tests of validity (content, discriminant, convergent and nomological) and two tests of reliability (composite reliability and Cronbach's alpha). At the second stage,

for every round of factor analysis, the reliability of the scales was checked. Based on the results of the second version of the web survey, at the third stage, the evaluation of the measurement model (validity and reliability) was accomplished by removing items that had low factor loading. Responses were quantitatively analyzed using a structural model with partial least squares estimation (PLS-PM) to test the research model and research hypotheses. All quantitative data analyses are done by using SmartPLS 2.0.M3 (Ringle et al., 2005) and IBM SPSS statistics version 20.0 software packages.

This research empirically tests three hypotheses (Table II) related to the following research questions:

RQ1. To what extend does CI impact KM?

RQ2. To what extend does KM impacts OI?

RQ3. To what extend does CI impact OI?

The culture – knowledge – intelligence model (CKI) is presented in Figure 2. The CKI model shows that Cultural Intelligence impacts KM and Organizational Intelligence (OI). Furthermore, KM impacts OI.

Data analysis

The evaluation of the reflective measurement model has the following elements:

- Internal consistency reliability: Composite reliability should be higher than 0.701 (in exploratory research, 0.60 to 0.70 is considered acceptable).

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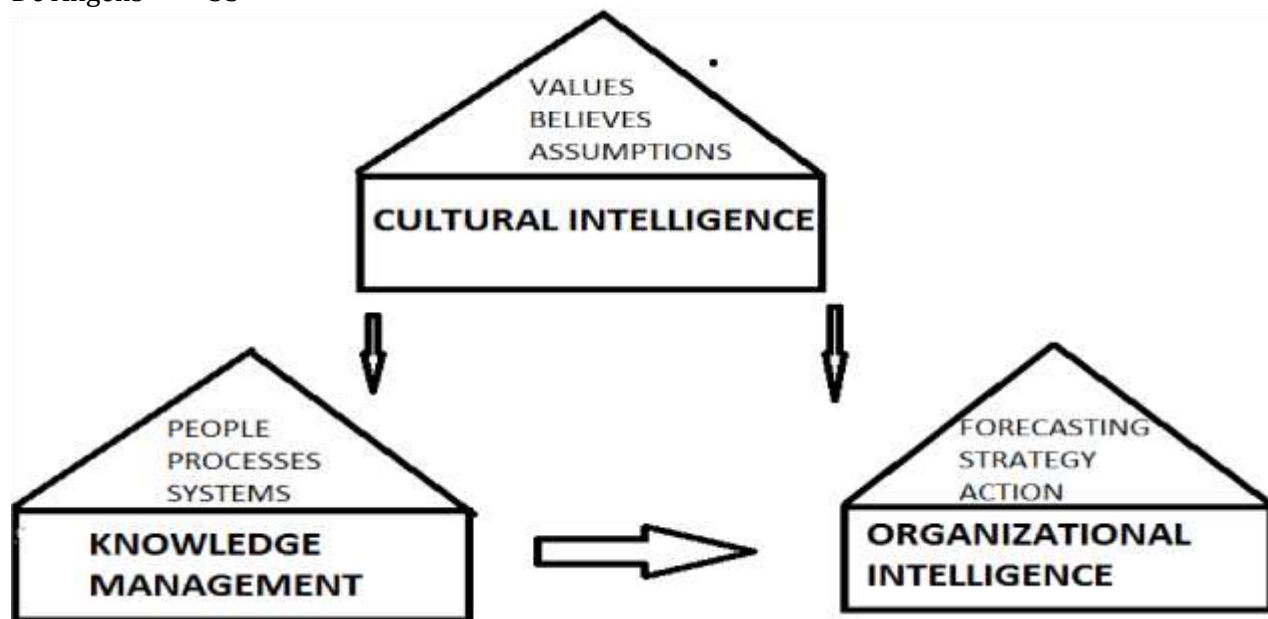


Figure 2. The CKI model (own elaboration).

Source: Author

Table 3. Composite reliability and alpha in the CKI model.

	CI	KM	OI
Composite reliability	0.88	0.84	0.81
Cronbach's alpha	0.72	0.87	0.69

Source: Author

Table 4. Average variance extracted (AVE).

	CI	OI	KM
KM		0.78	
CI	0.53		0.77
OI	0.72	0.65	0.83

Source: Author

• Convergent validity: The average variance extracted (AVE) should be higher than 0.50 (Chin, 1998; Hair et al., 2005).

• Discriminant validity: Indicators with high loads (less than 0.7) in their latent variables (LV) and low loads in other LV (cross-load) indicate discriminant validity (Chin, 1998); Correlations between the latent variables are smaller than the square root of AVE (Fornell and Larcker, 1981). Table 3 show the composite reliability and alpha values for the three dimensions of CKI model. The detailed analysis of convergent validity can be found in Table 4. All VIs (first and second orders) showed AVE greater than 50%, which meets the criteria of Chin (1998) and Hair et al. (2005) for the indication of convergent validity.

The second criteria states that an indicator's loading with its associated latent construct should be higher than its loadings with all the remaining constructs (that is, the cross-loadings). Indicators with high loads (less than 0.7) in their LV and low loads in other LV (cross-load) indicate discriminant validity (Chin, 1998). The crossloading are presented in Table 5.

The discriminant validity analysis revealed that most indicators show adequate discriminant validity, indicating that the concepts are evaluated by respondents as representing different aspects of the phenomenon.

Figures 3 and 4 present the relationships among the model's constructs (path coefficients) of the structural model for Taiwan and Vietnam, respectively.

By analyzing Figures 3 (Taiwan-T) and 4 (Vietnam - V), it is possible to conclude that: In Taiwan and Vietnam, CI has a positive influence on KM (T=0, 65 and V=0, 47) and OI (T=0, 43 and V=0, 28), while KM has a positive influence on OI (T=0, 47 and V=0, 77).

Cultural Intelligence are fundamental to explaining changes in practices of KM (R² Taiwan: 0.34 and R² Vietnam: 0.45) and in OI (R² Taiwan: 0.65 and R² Vietnam: 0.68).

If the influence of CI on OI is removed, then it is possible to conclude, analyzing Figures 7 (Taiwan) and 8 (Vietnam), that:

- 1) In Taiwan, CI is responsible for 36% of changes in KM, and KM is responsible for 49% of changes in OI.
- 2) In Vietnam, CI is responsible for 46% of changes in KM, and KM is responsible for 63% of changes in OI.

Table 5. Cross loadings.

	CI	KM	OI
CI1	0.876	0.319	0.280
CI2	0.739	0.332	0.360
CI3	0.798	0.409	0.530
CI4	0.753	0.278	0.460
KM1	0.473	0.798	0.521
KM2	0.504	0.786	0.642
KM3	0.319	0.663	0.440
KM4	0.435	0.715	0.470
KM5	0.433	0.766	0.511
KM6	0.543	0.804	0.233
KM7	0.474	0.720	0.448

KM8	0.339	0.841	0.581
OI1	0.493	0.354	0.889
OI2	0.553	0.459	0.681
OI3	0.385	0.266	0.797
OI4	0.443	0.384	0.780
OI5	0.421	0.398	0.717
OI6	0.295	0.479	0.786
OI7	0.372	0.565	0.932
OI8	0.531	0.507	0.791

Source: Author

RESULTS AND DISCUSSION

Situated between Northeast and Southeast Asia, Taiwan exemplifies such a cross-cultural nexus. The population of Taiwan is 98% Han Chinese ancestry. Prior to the 17th century, Taiwan was inhabited mainly by indigenous peoples. It became first a Dutch and then a Spanish colony between 1622 and 1662. It was a Chinese territory between 1662 and 1895, and then became a Japanese colony between 1895 and 1945. Since 1945, Taiwan has been a territory of the Republic of China (ROC) and distinct politically from the People's Republic of China (PRC) since 1949 (Zhisheng, 2018).

Hence, although Taiwan represents one of the major Chinese communities in the world, it has been influenced by many cultures.

Currently, Taiwan's political status is ambiguous. China currently claims it is a province of the People's Republic of China, whereas the current Tsai Ing-wen administration of Taiwan maintains that Taiwan is already an independent country as the Republic of China (ROC) and thus does not have to push for any sort of formal independence (Nachmann, 2020). As such, the ROC, consisting of Taiwan and other islands under its control, already conducts official diplomatic relations with and is recognized by 13 United Nations-recognized countries (Foreign affairs Ministry of Taiwan, 2019). Vietnam's culture has developed over the centuries from indigenous ancient Đông Sơn culture with wet rice cultivation as its economic base (Higham, 1972). Some elements of the nation's culture have Chinese origins, drawing on elements of Confucianism, Mahāyāna Buddhism and Taoism in its traditional political system and philosophy (Tung Hieu, 2015; Nguyen, 2016). In recent centuries, Western cultures have become popular among recent generations of Vietnamese (Nguyen, 2016).

The impact of culture on intelligence is much higher in Taiwan (0, 73) than in Vietnam (0, 28). This is related to the fact that Taiwanese culture, in opposition to Vietnam, is future- and performance-orientated, getting information from facts, books and statistics, instead of being people-oriented, getting the first-hand (oral) information as in Vietnam. Besides that, the high level of uncertainty avoidance of Taiwanese people impacts their intelligence without considering the interference of the intermediate variable (Knowledge).

Analyzing Figures 3 and 4, while the relationship between culture and knowledge has a direct effect with a higher structural load in both countries (Taiwan: 0.65 and Vietnam: 0.47), the relationship between CI and OI was much higher in Taiwan (0.73) than in Vietnam (0.28), indicating that CI has a lower impact on OI in Vietnam than in Taiwan. This means that, in opposition to Vietnam, in Taiwan, the OI is more influenced by culture (0, 73) than by knowledge (0, 37), since the Taiwanese have several difficulties to applying knowledge based on fears about the Chinese communist system. This is even clearer when the direct influence of culture on intelligence is eliminated of from the analysis (Figures 5 and 6).

Analyzing the Figures 5 and 6, in Taiwan KM is responsible for 23% of changes in OI, while in Vietnam, KM is responsible for 89% of changes in OI.

Chiang et al., (2022) found that regardless of industry, enterprises with better corporate governance performance and a strong tie with stakeholders have a more positive effect on brand value. The Corporate governance can be improved by a practice of KM known as Corporate University. The relationship between the stakeholders is better

when the use of Communities of Practices (another practice of KM), organized and facilitated by experts in the different discussed topics (a practice of OI). All these three practices leads to a better brand value (the intelligence of the company).

In line with the previous literature, the results of this study suggest that the development of an organizational culture supports the application of KM practices (Davenport and Prusak, 2000; Nonaka and Takeuchi, 1995; Gold et al., 2001; Janz and Prasarnphanic, 2003; Lee and Choi, 2003; Donate and Guadamillas, 2010). Caloghirou et al. (2004) support this conclusion when affirming that the availability of knowledge will increase the ability of people to search, recognize, and present a problem as well as assimilate and use new knowledge for problem-solving.

In the interview about cultural intelligence, great

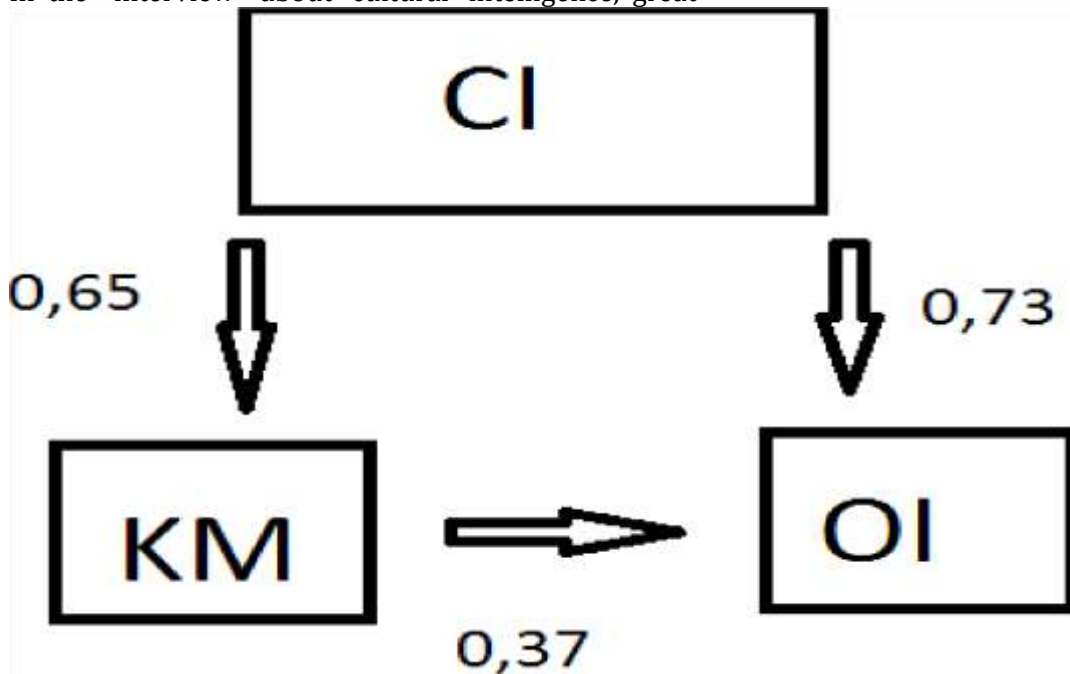


Figure 3. Path coefficients for Taiwan.

Source: Author

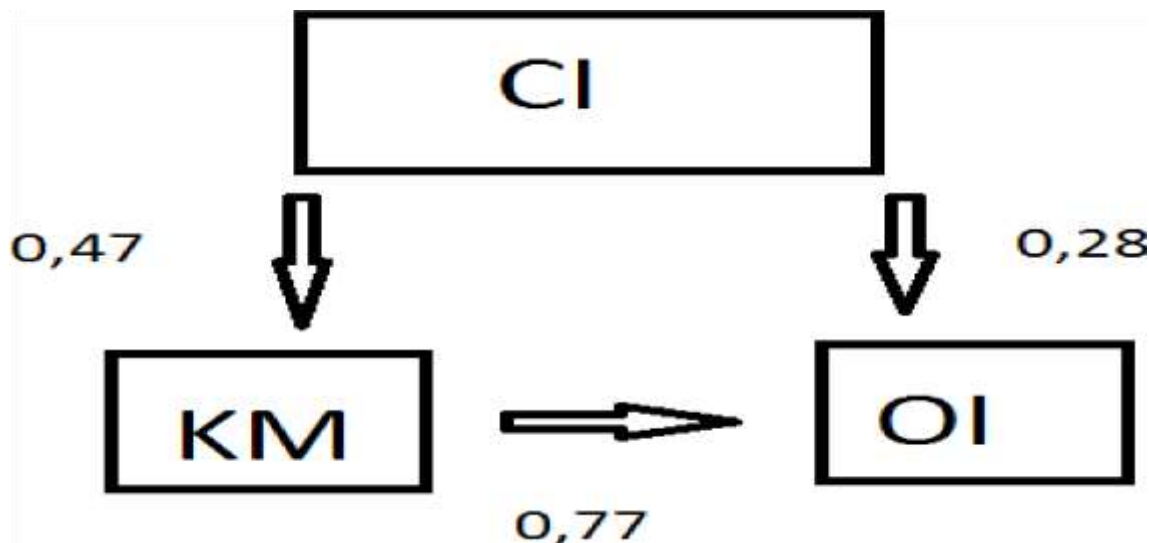
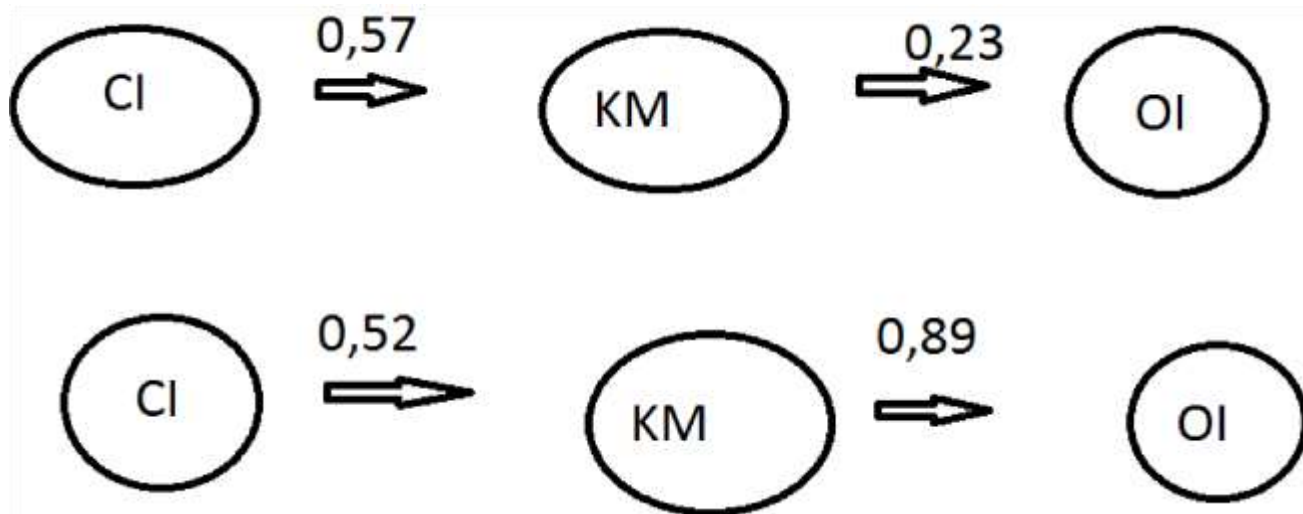


Figure 4. Path coefficients for Vietnam.

Source: Author



Figures 5 and 6. Path coefficients without the influence of CI on OI (Taiwan and Vietnam respectively).

Source: Author

Majority of Vietnamese students answered that they share feelings and problems with friends in face-to-face conversations, indicating the impact of culture on the implicit knowledge. They take the easiest path to enjoying life in the present and helping others to do the same. They have patience to listen and the motivation to study and work abroad. On the other hand, Taiwanese students are extremely protected by families, teachers and government, and only share feelings through social networks during the activities of the University. Therefore Taiwanese students are not motivated to study abroad; their level of experience is too low, and so is their selfawareness. Even though they appear to pay attention to a visitor's views, they reject ideas that require them to leave their comfort zone in Taiwan. Most of Taiwanese, students and professors, chose the option –Neither agree nor disagree|| in the survey about knowledge Management and Cultural Intelligence, because they do not understand the importance of learning process with other cultures to develop the capacity to apply knowledge.

Their higher level of uncertainty avoidance can be seen in their reluctance to explore foreign cultures, a form of risk-taking and cross-cultural adjustment. In turn, this impacts the knowledge management (the capacity to create knowledge), thus Hypothesis 1 is supported.

Even though the Vietnamese are family collectivist (Hofstede, 2001; House, 2004), they have much less experience compared to the Vietnamese in developing their own personality and individual independence. Interview participants demonstrated that the Taiwanese have more knowledge of technical matters to share, while the Vietnamese participants emphasized their experiences of other cultures as critical to their decisions and thus affirming Hypothesis 2.

Finally, an exploration of KM and OI in the interviews conducted in Taiwanese universities leads to the conclusion that they are not motivated to change the university culture and so the norms guide them and remain fixed.

The levels of English language skills are higher in comparison to students of Vietnamese universities, which help them to understand international literature without going to other countries.

In contrast, there are several international universities in Vietnam who welcome foreign staff and students, and thus are motivated to develop a culture of sharing. The culture of sharing is enhanced by mentoring and the active development of students and staff in both universities researched in Vietnam. There are also formal meetings with industry representatives and government bodies from Vietnam, Australia, and Germany. This indicates that Knowledge Management positively supports the government's strategy and actions, thus lending support to Hypothesis 3.

One of the meetings is with Ms. Huynh Dinh Thai Linh, Regional Manager of the Hinrich Foundation, about opportunities for the Vietnamese students to get scholarships for exchange programs in Germany and other foreign countries. Students are highly motivated to participate into contests for innovation and entrepreneurship, with awards like the Best Innovator Prize or a mentoring program sponsored by Israeli government.

Dr. Bernd Tilp, Director of DAAD office in Ho Chi Minh City, pointed out that over the last year until now currently; Vietnamese students have been very keen on the opportunities to studying abroad at German universities. In order To meet the high demand of those students, the DAAD opened 2 two offices instead of only one office, as in many other Southeast Asian countries.

According to Dr. Dinh Hai Dung, Coordinator of a Master study program at VGU, each year there are about 20% of students at this university who go to Germany for the master's thesis with a German professor who acts as the thesis supervisor.

Mr. Henning Hilbert, the Vice Director of Goethe Institute in Ho Chi Minh City, confirmed to us that the need of students to learn German language and prepare for their undergraduate studies in Germany has increased dramatically, as a sequence; the Goethe Institute has recently been mostly overloaded recently.

Another important point is that the Taiwanese want to make the rules and regulations very clear when any discussion occurs, while Vietnamese prefer to let the workflow without interruptions be uninterrupted

These findings are easier to understand when compared with the interview about Cultural Intelligence and Knowledge Management. Since Vietnamese, in opposition to Taiwanese, have a low level of uncertainty avoidance, they enjoy and are confident in interacting with people from different cultures abroad. Taiwanese prefer to stay in their comfort zone to avoid the stresses of adjusting to a culture that is new to them. Taiwanese are not confident that they can get accustomed to the shopping conditions in a different culture, since their culture is isolated from the rest of the world, even though they are very welcome to foreigners, except professors to keep the status quo of —control their genius kids|. They like to receiving from other nationalities, but they do not want to leave the country to really learn with them. This welcome approach is a naturally reaction against Ming Dynasty (military base) restored by Zheng Chenggong, (Koxinga) after 38 years of Dutch rule on Taiwan.

In the interview about knowledge management with professors from both countries, it was clear that in Vietnam, in opposition to Taiwan, there is a constant use of multidisciplinary teams that cut across the formal, traditional, and hierarchical structures. In fact, in Vietnam, the formal collaborative networks are strategic and go beyond the

university itself, involving other universities, partners, customers, suppliers. There is also a positive, proactive, and fast attitude to sharing knowledge and solutions with students from other departments of the university and also with other universities in Vietnam and abroad.

For example, in interaction with German professors who fly from German partner universities to VGU to teach certain courses, Vietnamese students very often organize themselves in study groups and ask for project work where their teamwork can be practiced, demonstrated, and assessed by the professor. The examination modus will be designed in a way such that a group presentation about a research topic will be given and discussion between different groups will enhance the knowledge and solution transfer.

Between students and the university departments, there are certain connections and interactions, in the form of surveys and evaluations of teaching services. Furthermore, the research management department of VGU is set up with one of the major tasks to support students in research projects so that they can get up-to-date in an international environment.

In contrast to the four universities in Taiwan, in both Universities in Vietnam, there is a formal and disciplined process for —environment exam|. This is a systematic review of the university environment to identify key trends, opportunities, and threats. Because of these competences, both universities are successful in using the knowledge to make predictions.

In both countries, there is a heightened sense of trust within the university and the students are motivated by the university's culture. However, in Vietnam, the students have classes with foreign professors from the beginning, while in Taiwan; the universities are very close to professors from other countries, which help to keep the students close to them with fewer demands to be accomplished by Taiwanese professors. This is the strategy of Taiwan's government that benefits the China's government.

The motivation and patience of students from Vietnam contribute to developing the culture of sharing, what is paramount for a KM plan. However, Taiwanese students need support from professors and the universities' leaders, based on a change in the government's strategy, to create practices of knowledge sharing in the universities, which is not common in Taiwan. When the students identify the sense of community and effectiveness of a Knowledge Management program between the university and industry, they are much more motivated to contribute by exchanging their knowledge and experience.

The learning of new beliefs, values, assumptions, traditions, and resilience (cultural intelligence) impacts the culture of sharing, which helps in the process of creation of knowledge. The creation of knowledge is higher in Taiwan than in Vietnam, but the application is higher in Vietnam.

According to Vietnam Chamber of Commerce and Industry (VCCI) President, Vu Tien Loc, Vietnam has become an attractive business and investment destination for many foreign companies from Taiwan thanks to its notable advantages, including a high economic growth rate, political stability and its strategic geographic location.

As of the end of 2017, Taiwan has invested a total amount of 30 billion USD into 2.500 projects in Vietnam, which makes it the 4th biggest foreign direct investor. In Binh Duong province, where the VGU is located, Taiwanese companies invested into 772 projects with a capital volume of nearly 6 billion USD. Even though they had to suffer certain difficulties and damages during the short period with the anti-Chinese attitude in 2014 in Vietnam, Taiwanese companies still find great potential in investing in the long term.

The challenge for Taiwan is developing the capacity to apply knowledge, given the fact that other countries are taking the knowledge of Taiwanese employees to fire them afterwards. The curricula for teacher training should incorporate and promote factors such as openness to intercultural interaction and intercultural learning; readiness to recognize and use multiculturalism and cultural diversity as a learning resource and also create international teachers exchange programmes (Petrović, 2011) before students exchange programs, such as ERASMUS PROGRAM in Europe. One solution to reduce the high brain drain and economic crises in Taiwan should be the interference of the government and university's leaders by changing the process of selection and development of professors

(Organizational Intelligence). In Vietnam, the government should open new public universities and promote campaigns to incentive people to study.

This study attempts to motivate Taiwanese parents, professors, and the government to recognize the importance of cultural differences in reaching maturity. Cultural differences should be acknowledged and addressed in creativity training where participants from different cultures have an equal chance to share their perspectives and experiences on creativity and innovation (Tang and Werner, 2017).

A student with a high level of experience and resilience is more willing to apply what he/she learned in another culture (experience) and afterward back to his/her home country with cultural skills and intelligence (knowledge in action) to make the difference. By the time the students leave abroad, they can participate in mentoring activities and also best practices the lessons learned to help Taiwan reduce the brain drain and enhance the agriculture sector.

In conclusion, Cultural Intelligence influences intention is to contribute knowledge and experience into one KM program positively. This KM program is based on three practices: lessons learned; best practices and mentoring.

Conclusions

Past studies have indicated that university-industry collaboration is an effective approach to entrepreneurial training because it can realize the benefits of combining university theory with practical experience. There are barriers to industries in gaining academic knowledge and for students to gain practical experience. The objectives of this study were to: I) to propose a model that can capture the relationship between culture, knowledge, and intelligence; and ii) to provide qualitative evidence of its effectiveness in reducing brain drain and improving agriculture in Taiwan. Thus, the cultural model based on Knowledge and Intelligence (CKI) provides a framework for universities and industries to develop their plans for exchanging knowledge and experience, along with motivating and entrainment among students.

The study concludes that the investment in academic exchange programs (cultural intelligence) and practices of Knowledge Management (mentoring, best practices and lessons learned) can overcome the China's strategy of dependence on Taiwan economic growth and block the China's political ambitions to destroy Taiwanese democracy, economy, identity and culture.

The authors recommend further research on a larger scale to gain a deeper understanding of the interactions between the variables of the CKI Model, especially the relationship between culture and knowledge in enhancing intelligence.

RECOMMENDATIONS FOR FUTURE RESEARCH

The impact of culture and knowledge on intelligence is paramount to help governments make decisions. The perspectives and analyses offer a new way of thinking, useful analytical model as well tools around which novel ways of knowledge management of cultural intelligence can be useful in shaping organizational intelligence.

However, further investigation of these relationships is paramount to better understand how to flourish Organizational Intelligence and therefore reduce the brain drain.

A clear limitation of this study is the number of interviews to understanding the phenomenon. Further investigation with students from Taiwan and Vietnam can add good findings in the future.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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