Social ties as key knowledge transfer agents between Indonesian and Australian universities: Perspectives from an Indonesian university

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As two neighbouring countries, the number of transnational programs between Indonesian and Australian universities is significant. However, little is known about how transnational programs can facilitate knowledge transfer between the partner universities, which is often assumed by the Indonesian universities. Based on a case study regarding a dual degree program between an Indonesian and an Australian university, this paper outlines preliminary findings concerning the role of social ties between the staff of the two partner universities in creating positive inter-university dynamics that is vital for successful knowledge transfer. Using an inter-organisational knowledge transfer theoretical framework, social ties between the staff of the two universities are viewed as an important agent in facilitating knowledge transfer by building trust between the partners, moderating the perception about risk in the partnership, and creating a more equal power relation between the universities. Based on this study, Australian lecturers of Indonesian background and Indonesian lecturers who are alumni of Australian universities are important to initially establish these social ties. While face-to-face contact is still perceived as the ideal means of transferring knowledge and building trust among the Indonesian university staff, those who have stronger social ties with their Australian counterparts tend to use ICT-based communication to acquire knowledge from the Australian university compared to those who have more limited social ties with their Australian counterparts. This paper concludes with some implications for building positive social ties between Indonesian and Australian university staff to strengthen the knowledge transfer process.

Keywords: Knowledge transfer, social ties, transnational higher education programs

Introduction: Global trends, Bilateral context

Throughout the world, the higher education (HE) landscape is changing. Various international agencies, such as World Trade Organization and The World Bank, underpinned by their view about the role of free trade and competition for the creation of prosperity, have propagated the neo-liberal economy. The ensuing free trade agreements have made HE a service commodity (Mok, 2005). Globalisation, fuelled by neo-liberalism, has a very strong market-expansion orientation. Every sector of the society, including HE, is viewed as a market that can be
expanded and commoditised. The General Agreement on Trade in Services (GATS) and the ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA) include HE as an area of service trade to be liberalised (Department of Foreign Affairs and Trade, 2009). As signatories of GATS and AANZFTA, both Indonesia and Australia are influenced by these global changes.

Against the above global changes, in particular, changes in the HE sector and the resulting bilateral partnerships between universities in Indonesia and Australia, there is an opportunity for the growth of transnational programs. As two neighbouring countries, Indonesia and Australia have a significant number of dual degree programs (DDPs) between their universities. DDPs allow students to obtain degrees from both Australian and Indonesian universities for a single program of study, hence the name dual degree. They typically study the initial part of their study in Indonesia (home country) and then the final part in Australia (host country) (Asgary & Robbert, 2010). Transnational programs are often advocated as an ideal means for developing country universities to improve their quality by transferring knowledge from their partners in developed countries (Vincent-Lancrin, 2007). However, there is little known about how the actual knowledge transfer (KT) between Indonesian and Australian universities may occur.

This paper is a part of a wider study, which examines KT between Indonesian and Australian universities. To provide a more manageable scope, the paper pays special attention to the inter-university dynamics—incorporating social ties and power relations—which facilitate the KT process. First, the inter-organisational KT framework that underpins this study is delineated. Following the theoretical explanation, the case university and the methodology employed are explained. Finally, the paper concludes with the results and implications of this study.

Inter-organisational knowledge transfer: A theoretical framework

Before delving into the discussion on the theoretical framework for this study, it is necessary to delineate what is meant by knowledge and knowledge transfer, which are key terms in this paper. Knowledge is a justified personal belief which is a result of a combination of experiences, personal values, personal characteristics and interactions with others (Courtney & Anderson, 2009). It is used to interpret, evaluate, and incorporate new experiences and interaction in improving an individual or organisation’s capacity to take informed action (Alavi & Leidner, 2001). KT in an organisational context is “the process through which one unit is affected by the experience of another” (Argote & Ingram, 2000, p. 151). It is not identical to an exact replication of knowledge to a new context. In contrast, KT entails modification of the existing knowledge to a new organisational context to solve specific problems faced by the organisation (Bauman, 2005).

Structured and unstructured KT process

KT process can be structured and unstructured based on the level of planning and intention involved. The structured KT process involves four stages (Szulanski, 1996). The initiation stage begins with identification of problems and desired knowledge. In the second stage, implementation, the partner universities may engage in an exchange of knowledge with the aim of adapting new knowledge to the recipient university. In the ramp-up stage, the recipient university begins to apply the acquired knowledge and rectify any problems hampering the application of knowledge. Finally, in the integration stage, the acquired knowledge is institutionalised through the production of standard operational procedures and organisational strategies.
The unstructured process is unplanned and can occur serendipitously (Chen & McQueen, 2010). This may take place by copying existing knowledge from external sources and applying it to local practices. It can also take place by adapting the external knowledge to the new context. By focusing on KT, a university’s capabilities to generate its own knowledge are not precluded. However, for a university that forms a partnership with another university, KT could be pivotal to improve its capacity by acquiring new knowledge from the partner university (Khamseh & Jolly, 2008).

**Types of knowledge and KT mechanisms**

The inter-university KT process, whether structured or unstructured, involves three related constructs: knowledge type, KT mechanism, and inter-university dynamics (Chen, 2010; Easterby-Smith, Lyles, & Tsang, 2008). While knowledge can take the explicit form of curricula and teaching materials, it can also be more tacit such as teaching skills mastered by a lecturer, which can be more difficult to transfer than explicit knowledge (King, 2009). Explicit knowledge is codifiable and overt, whereas tacit knowledge is not readily articulated and codified because it is bound to the senses, intuition, and a particular context (Alavi & Leidner, 2001). Nevertheless, tacit and explicit knowledge are not rigidly demarcated. Both dimensions may be present in any knowledge (Nonaka & Von Krogh, 2009). Recognising that all knowledge has different degrees of tacit and explicit dimensions, the study does not rigidly separate tacit and explicit knowledge and views that both tacit and explicit knowledge can be acquired through DDPs. It takes into account that knowledge is perhaps best transferred through a combination of KT mechanisms (Jasimuddin & Zhang, 2009).

There are two KT mechanisms that correspond to the distinctions between tacit and explicit knowledge. Soft mechanism relies on face-to-face interaction to convey mainly tacit knowledge, whereas hard mechanism utilises information and communication technology (ICT) to convey explicit knowledge (Jasimuddin & Zhang, 2009). However, developments in ICT have created a hybrid of hard and soft KT mechanisms through means such as video-conferencing, blurring the distinctions between the two mechanisms (Courtney & Anderson, 2009).

**Inter-university dynamics: Social ties and power relations**

The inter-university dynamics consist of power relations and social ties (Easterby-Smith et al., 2008; Van Wijk et al., 2008). Social ties can be perceived as the strength of relationship between individuals from different organisations or units involved in a KT process (Hansen, Mors, & Lovás, 2005). Social ties build trust and minimise risk in the partnership (Dhanaraj, Lyles, Steensma, & Tihanyi, 2004). Research has consistently highlighted the importance of trust between partners as a prerequisite of effective KT (Becerra, Lunnan, & Huemer, 2008). Trust between partner universities is so critical that it is often used as a determinant of KT success (Courtney & Anderson, 2009). Dhanaraj et al. (2004) conclude that trust facilitates KT because the partners have a sense of security that the knowledge will not be over-exploited, minimising the risk of expropriation by one of the partners. Moreover, strong personal social ties can be a stronger determiner of success in KT process than national or institutional cultural similarities (Mercer & Zhegin, 2011).

Power relations refer to the perceived degree of equality between partner organisations in terms of their strength in influencing decision making (Ando & Rhee, 2009). The general perception is that developing countries universities are lower than universities from developed countries. This often undermines the relationships between the partners and disrupts the KT process as the Australian university may perceive that it faces a risk that KT to the Indonesian partner erodes its competitive advantage (Heiman & Nickerson, 2004). Hence, the Indonesian universities need
to minimise and moderate the gap in power relations, which can be achieved by strengthening the social ties with their partners (Muthusamy & White, 2005). Staff members who trust each other and have good social ties may have lesser likelihood to impose unacceptable requests to the partners as they have understood each other and have good communication (Fielden, 2011). Therefore, there is a strong connection between the strength of social ties and the equality of power relations.

Based on the above discussions, an inter-university KT theoretical framework can be developed. Figure 1 provides a graphic illustration of the framework. At its centre is the inter-university KT process, depicted by the bold-faced circle and interconnected with three circles. Each of them represents: types of knowledge, KT mechanisms and inter-university dynamics. Two bi-directional arrows connect the KT process with the boxes representing the Indonesian and Australian universities. These arrows signify the potential bi-directional KT between the universities (Mercer & Zhegin, 2011). This framework encapsulates the above discussion of inter-university KT and its related constructs, and provides a meaningful depiction of the complexity involved in analysing KT between universities through DDPs. Although the wider study investigates all the constructs discussed in this section, given the space limitation in this paper, the focus is on the inter-university dynamics that can facilitate KT between Indonesian and Australian universities.

![Inter-university Knowledge Transfer through DDPs](image)

**Figure 1: Inter-university knowledge transfer conceptual framework**

To further guide this research, the specific research questions are:

1. What is the role of social ties in facilitating KT between Indonesian and Australian universities through DDPs?
2. How does the Indonesian university view the power relations with its partner?
3. What factors contribute to the building of positive social ties between Indonesian and Australian university staff?
The case university

While the wider study examines two Indonesian universities and their Australian DDP partner, this paper is limited to one of the Indonesian universities. Therefore, the study provides an in-depth examination of the Indonesian university perspective on the inter-university dynamics. A major private university in a main urban centre of Indonesia has been chosen as the case university. In line with the ethical approval, the university will be referred to as University of the Equator (UE). It has around 10,000 students and several faculties. Its international cooperation is quite extensive with dozens of partner universities in Europe, Asia, America, and Australia. Currently, there are a couple of DDPs that it runs with Australian and European universities. The focus of this study is on the Computer Science DDP with an Australian university, referred to as University of the Antipode (UA). UA is a major provider of Australian HE. It has more than 30,000 students and hundreds of international partners. The program has been running for almost 4 years. Students enrolled in this DDP initially study in Indonesia for 4 semesters and then transfer to the Australian university for 3 semesters. The number of students enrolled in the program has remained low throughout its operations, around 5-10 students per intake.

The DDP itself began by a visit from an international liaison officer from UA to UE. After 1.5 years of negotiation and discussion, it was agreed that a DDP in Computer Science would commence. The DDP’s curriculum was derived from the two universities’ existing curricula. UA and UE lecturers mapped their curricula and see the similarities they had. From this mapping exercise, they agreed on the sequence of the subjects to be taken in Indonesia and Australia, and the equivalence of credits that each university recognised. This process of mapping the curricula provided the opportunity for UE to acquire some explicit knowledge regarding the teaching material, sequence of subjects, and student assessments, which they later used to enrich their regular program curriculum.

Methodology

This study employs the single-case study method (Yin, 2009). Case studies are primarily utilised to generate thick description regarding the potential causal relationships between actors, activities, and outcomes that form a process. The single-case study is appropriate to investigate a situation that has been scarcely analysed such as the case of inter-university dynamics in KT process between Indonesian and Australian universities. In line with this method, interviews were used for collecting data and the data were analysed using thematic analysis approach.

The data collection was conducted between October and November 2011 by means of semi-structured interviews at UE. Nine staff members involved in the DDP operations participated. These include two senior executives at the university level, the director of international division, two senior executives at the faculty level, the head of the school, the coordinator, and two lecturers of the DDP.

The interviews were recorded, transcribed, and translated. Out of the nine interviewees, three were interviewed in English and six were interviewed in Indonesian. The Indonesian transcripts were translated into English by a certified translator and then the English version was back-translated into Indonesian by another certified translator (Liamputtong, 2010). The original and the back-translated versions were then compared. The similarity between the two versions at sentence level was 95.51%. The translated version along with the transcripts from the English interviews was used as the source of data for this study.
The thematic analysis strategy was used to analyse the data (Braun & Clarke, 2006). As this research is guided by a theoretical framework, the interview transcripts were analysed in accordance with the constructs identified in the framework. Therefore, the constructs of social ties and power relations were considered as themes that the researchers used to interrogate the transcripts. Excerpts of the transcripts that discussed those themes were collated and compared. Ideas from the interviewees that contradicted each other were noted and reasons for their discrepant views were sought. Whereas ideas from different interviewees that supported each other were grouped together. While the researchers identified excerpts relevant to the themes, there were excerpts of the transcripts that did not support the themes and the overall theoretical framework. These were set aside to generate rival explanations (Yin, 2009)—essential to ensure that the study not only sought for supportive evidence but also paid attention to contrary data. Following Braun and Clarke’s (2006) recommendation, line-by-line coding for identifying the themes is attempted, but it is still a work-in-progress. Hence the analysis and findings reported here are in the preliminary stage.

**Results**

Due to the ongoing nature of the study at hand, only some of the salient results of this study are presented. The results showed that social ties between the staff members of the partner universities were crucial to KT process. While formal arrangement for structured KT did not exist, the Indonesian staff members who positively viewed their social ties with their Australian counterparts seemed to make use of the unstructured KT process to acquire both tacit and explicit knowledge that could be applied to their context. As they viewed their Australian counterparts not only as professional colleagues but also as personal friends, they had greater freedom to discuss issues not directly related to the DDP. One of the interviewees, for instance, learned about the mechanisms of borrowing computer equipment at UA, which was going to be applied in UE. Another UE lecturer became exposed to how UA honoured its deceased students who were about to graduate by issuing posthumous degrees. In his capacity as the head of Academic Bureau, the UE lecturer was investigating ways to incorporate the practice at UE. These two examples of KT took place without prior planning but led to adoption and adaptation of the UA practices.

On the other hand, UE staff members who did not have highly positive social ties or who had limited personal contacts with the Australian counterparts tended to expect more structured KT process. The prolonged presence of UA lecturers in the UE campus to share knowledge and assist in the adaptation of that knowledge to the local context was viewed as a necessity. So far, there was no opportunity for UA lecturers’ prolonged visit to UE.

While face-to-face contact was considered highly important by all interviewees to facilitate KT, those with positive view of the social ties seemed more comfortable to communicate using ICT-based means such as e-mail and instant messaging with their Australian counterparts. The speed and informality of ICT-based communication were viewed positively as a way to strengthen the personal relationship and provide timely responses to the partner’s inquiries. Although most UE staff viewed video-conference positively as a means of communication for KT with UA, its utilisation was quite limited due to bandwidth issues and lack of promotion for its usage among the lecturers.
In regards to the second research question, in general, the UE staff viewed the power relations with UA did not put them in an inferior position. One of the UE executives gave the example of a previous relationship with a very prestigious Australian university that was not successful, as UE felt the Australian university was too dominant and demanding. The unequal power relations caused UE to terminate that partnership and seek other partners. The partnership with UA was generally characterised by a sense of equality and harmony. However, those with less positive view of the social ties with the partner university tended to stress the importance of negotiation and compromise. The staff with more positive view seemingly did not perceive any problem in the power relations. They felt that all problems could be solved by asking the UA counterpart to follow their suggestions or coming up with a win-win solution after short discussions. They did not sense any risk in the partnership and tended to see the problems as challenges that could be overcome through good personal relationship and communication. One of the challenges faced by this DDP was the low number of student intake each year. This can be perceived as a risk in the DDP’s sustainability in the long run. However, UE staff who had stronger social ties with the UA counterpart did not foresee the termination of partnership due to this problem.

Initial face-to-face contact, the presence of Australian alumni at UE and lecturer of Indonesian background at UA were key factors in building positive social ties. While ICT-based communication played a vital role for the day-to-day communication for the partner universities and provided a means for the KT to take place, initial face-to-face contact was considered very important by all interviewees. Trust was enhanced by directly communicating to the counterpart in person. Although some of the interviewees had had preliminary contacts with UA staff through e-mail and telephone, when they met the UA representatives in person, they began to feel the level of trust increased and the personal social ties flourished.

The presence of Australian alumni working at UE was also another significant factor that built the positive social ties. In the words of one of the faculty level executives, “I think the most useful factor is the increasing number of UA graduates here.” UE lecturers who graduated from Australian universities trusted UA’s academic quality. Since they were also familiar with Australian curriculum and HE system, they could bridge those differences between UE and UA and had better social ties with the UA staff.

On the other side, UA also had a lecturer of Indonesian background who was pivotal in the initial discussions for the establishment of the dual degree partnership. He was initially responsible for mapping the curricula of UE and UA and produced the DDP’s articulation and credit transfer arrangement. Although he was no longer active in the daily operations of the DDP and had limited contacts with UE lecturers, his active involvement in the earlier negotiations and in promoting the program in Indonesia was positively viewed by the UE interviewees. It paved the way for building trust and social ties with the subsequent contact persons from UA who took over the task of coordinating the DDP with UE.

Hence social ties could be perceived as a key agent in facilitating KT for UE because they moderated the unequal power relations and built positive inter-university dynamics with the partner. These social ties were initially cultivated by the Australian alumni working in UE, lecturer of Indonesian background in UA, and face-to-face contact to build trust between the partners. While the face-to-face contact was highly regarded as the ideal means for KT, it was apparent that UE staff who had better views on their social ties with the UA counterparts found opportunities for KT through ICT-supported communication and did not perceive unequal power relations with UA. Furthermore, they were not confined to the structured KT process, such as the curriculum mapping process or the prolonged visit of UA lecturers, to acquire both tacit and explicit knowledge from the partner.
Discussion and implication

Based on the results of this study, personal social ties are key agents in facilitating KT for the Indonesian university. In line with previous studies which highlight the importance of social ties for KT (Easterby-Smith et al., 2008), social ties are related to trust building, risk minimisation, and cross-cultural understanding in the inter-university dynamics. In relation to the power relations and KT mechanisms, this study finds some different results from previous studies (Marginson & Sawir, 2006; Thompson, 2006).

The trust between the partner universities’ staff in this study is helped by the initial face-to-face contact. This finding concurs with a previous study in the Vietnamese-American university partnership. Napier (2005) found KT between Vietnamese and American universities benefited more from face-to-face contact to initially gain trust among the partners. In this Indonesian-Australian context, the initial face-to-face contact is then strengthened by ICT-supported communication, which further nurtures the social ties and conveys the knowledge without being hampered by the distance between the two partners.

The perception regarding risk in the partnership is also reduced among those with positive social ties. Interviewees who view that the partnership is risky tend to do so because they do not have extensive communication and strong social ties with the Australian partners. The risk that they perceive concerns the possibility of not being able to deliver their promises to the students’ parents regarding the continuation of their children’s studies in Australia due to deterioration of the relationship and the perception from UA that UE’s academic quality is not as rigorous as expected. Whereas those with positive social ties see the partnership as solid, despite the low number of students. The open communication, which is the basis of their positive social ties, has allowed the partners to transparently discuss the issue of low enrolment in order to find solutions rather than blaming each other’s weaknesses.

The issue of cultural differences between Indonesia and Australia does not emerge in this particular study. As previously discussed, there are quite a large number of Australian university alumni in UE and UA also has a lecturer of Indonesian background, contributing to better social ties between those involved staff. This confirms previous studies by Fielden (2011) and Mercer and Zhegin (2011) that the national cultural differences may not be critical when the personal social ties are strong.

While Marginson and Sawir (2006) indicate that there were asymmetrical power relations between the University of Indonesia and the Australian National University, this study finds the partnership is generally viewed to be based on the principle of equality. There are no indications that unequal power relations put UE in a lower position than UA. Perhaps, the partnership itself has not lasted very long so that problems of unequal power relations have not emerged. It is also possible that the personal ties between UE and the UA staff members are quite strong to prevent such feeling to emerge. It is likely that learning from its previous unsuccessful partnership, UE now has selected a partner that has more equal standing and willing to cooperate.

This study also partially confirms Thompson’s (2006) research. He studied internet-mediated networking among academics in Indonesia, Malaysia, Singapore and the United States, and found that internet-mediated communication played a supplementary function in the acquisition and transfer of knowledge. It did not replace other forms of KT, such as face-to-face interaction. It is true that face-to-face interaction is perceived as the most ideal means of KT by the research participants in this study. However, ICT-based communication does not necessarily play the supplementary function in KT. This depends on what is viewed as the KT process. If KT is only
confined to the structured process (Szulanski, 1996), then it may be correct that face-to-face contact cannot be replaced. However, if KT can also be perceived as an unstructured process, it is possible that ICT-based communication plays the more significant role. As apparent from the results of this study, UE lecturers can acquire knowledge through e-mail and instant messaging. Perhaps a more complete understanding of KT processes will also lead to a greater appreciation of both the soft and hard KT mechanisms as complementary mechanisms to facilitate KT through DDPs. Moreover, advances in ICT have allowed lecturers to interact with each other visually in real time, such as through the use of video-conference, although it is still under-utilised at UE.

From a more critical perspective, while the study finds examples of KT, mainly through the process of mapping the partner universities’ curricula, it is important to note that this particular DDP has not utilised all KT opportunities between UE and UA. Their partnership has not led to joint research, publication or sharing of management practices that are discussed in the literature (see Vincent-Lancrin, 2007). Many interviewees felt more could be done in acquiring knowledge from UA. It can also be argued that for updating the curriculum and teaching materials, there are other avenues that UE could have taken, not just by transferring it from UA. These may include open-source materials from world-class institutions such as Massachusetts Institute of Technology and open access journals (Ciancanelli, 2007; Naidoo & Jamieson, 2005). The DDP seemingly needs to be enriched with more KT activities and is not merely utilised for UA’s student recruitment and bolstering UE’s reputation.

Based on the above discussion, there are implications that may enhance social ties between partner universities in similar contexts as this study to facilitate KT. First, it is necessary to provide various communication means that can enhance the KT process. Face-to-face interaction in the initial stage of partnership is pivotal to build trust and can be followed up with ICT-based communication at later stages of the partnership. E-mail, instant messaging and video-conference facilities should be made available to allow timely communication and deepening of personal social ties despite the distance between partner universities. Second, seeking a suitable international partner is necessary. UE has had an unsuccessful partnership with an Australian university that viewed it as inferior. The process of finding a new cooperative partner, willing to value the partnership as an equally important endeavour for both parties, took considerable time and a lengthy negotiation process. However, it is a necessary process to ensure the partnership’s sustainability and enable KT to take place. Third, both the Indonesian and Australian universities can harness the Australian alumni currently working in the Indonesian university. Forming alumni chapters and promoting their ties with their alma maters can open opportunities for various forms of partnerships and KT.

**Conclusion**

This study has investigated inter-university dynamics that facilitate KT through a DDP between an Indonesian university and an Australian university from the Indonesian university’s perspective. The preliminary results show that social ties are key agents for KT to take place in the partnership. Social ties help to reduce the perception about risk, increase the potential for KT through unstructured KT process, and build trust among the partners, moderating the potential unequal power relations between them.

While this single-case study does not attempt to draw a generalisation for all Indonesian universities engaged in DDP partnership with Australian universities, for universities with a similar context, the results of this study suggest the need to further intensify KT through DDPs.
to provide an added value for the partner universities. This can be facilitated by strengthening the social ties of the Australian alumni currently working at the Indonesian universities with their alma maters in Australia. Promoting the use of ICT-supported communication to complement the face-to-face interaction can also be useful to deepen the social ties and provide as many KT mechanisms as possible. Furthermore, seeking the right partner for DDPs is crucial to ensure a lasting partnership based on the principles of equality and cooperativeness.

Due to the ongoing nature and focus of this preliminary study, it is not possible to discuss all pertinent issues and elaborate the case description in greater details. The study does not incorporate the Australian perspective on the role of social ties in KT. It also cannot focus on the analysis of the actual KT process itself. The brief description of the case university may also limit the transferability of this case study to other interested universities with comparable characteristics. The wider study, of which this paper is a part, aims to utilise the theoretical framework discussed above in its entirety and address the perspectives of Australian universities on the DDPs with Indonesian partners.

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