

**Behaviours that promote knowledge transfer in international construction  
joint ventures in developing countries: An Eswatini perspective**

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## **ABSTRACT**

The business environment is constantly evolving and is impacted by several factors ranging from political conflicts, technological disruptions, demographic changes, and regulatory challenges. To survive the turbulence in the business landscape, organisations require knowledge and the ability to effectively apply the knowledge. The fundamental asset in any organisation is knowledge which is the foundation of an entity's competitive advantage. Knowledge is embedded in the minds of individuals, making individuals the primary source of organisational success.

The volatile business landscape has driven organisations to collaborate strategically to conquer the everchanging complex and ambiguous terrain and one of the strategic partnerships that have been on the rise in the past decade are international construction joint ventures(ICJV). Globalisation has given rise to the increase of ICJVs. One of the many reasons for the formation of ICJVs is for the sharing of resources such as managerial and technical expertise.

Despite tacit knowledge leading to business success, the existing literature on behaviours that promote the transfer of tacit knowledge in strategic partnerships such as ICJVs is limited. The transfer of knowledge is of great importance for productivity, innovation, and overall improvement in organisations hence there is a need for further research in this area. The study focused on identifying behaviours that promote knowledge transfer in ICJVs and determining interventions that can be introduced to reduce KT barriers and to encourage knowledge transfer in ICJVs.

A qualitative interpretivist approach was utilised wherein thirteen semi structured interviews were conducted. The findings of the study lead to the development of a conceptual framework that promotes KT in ICJVs. The research has added to the body of work that has been executed in the disciplines of international business engagement and inter-organisational knowledge management, which significantly impacts organisational learning, business culture and amenity management. Management recommendations for consideration have been presented for consideration by

## **KEYWORDS**

Knowledge Management, Knowledge Transfer, Tacit knowledge transfer, Strategic alliances, international construction joint ventures

## **PLAGIARISM DECLARATION**

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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### Abbreviations

ICJV	International construction joint venture
JV	Joint Venture
KM	Knowledge Management
KT	Knowledge Transfer
TKT	Tacit Knowledge Transfer
TA	Thematic Analysis

## Chapter 1

### 1.1. Introduction to the Research Problem

Knowledge is embedded in the minds of individuals; individuals are therefore a primary source for organisational success. The knowledge sitting in people's minds is known as implicit or tacit knowledge (TK) (Zahoor et al., 2022). Tacit knowledge transfer (TKT) is difficult to achieve due to its implicit nature (Zahoor et al., 2022). The benefits related to knowledge transfer (KT) tend to emerge at the higher organisational level whereas the actual KT in firms occurs at the level of the individual because it's the attitudes and behaviours of the employees that drive knowledge transfer (Qiu & Haugland, 2019). Despite individual knowledge being key for value creation and success in inter-organisations, research on employee behaviours that result in knowledge being successfully transferred in strategic partnerships is scanty (Qiu & Haugland, 2019). Furthermore, the research on knowledge transfer in developing countries is highly fragmented (Bamel et al., 2021). An additional gap in the literature is on how national culture impacts employees' behaviours to seek knowledge from expert partners in an inter-organisation (Veeravalli et al., 2020). Literature on strategic alliances indicates that it has been extensively researched however research on individual behaviours that promote knowledge transfer is under-researched (Qiu & Haugland, 2019). There is therefore a research gap on employee behaviours in the knowledge transfer organisational phenomenon.

Moreover, research to determine the barriers to knowledge transfer in inter-organisational firms have been extensively explored, however the techniques which are recognised as enablers for employees to overcome the KT barriers have not been adequately researched (Korbi & Chouki, 2017). The interventions required to overcome the barriers related to KT needs to be explored. The research consequently aims to contribute to the literature by tackling this limitation by exploring individual behaviours that promote knowledge transfer between partner organisations with a focus on international construction joint ventures (ICJV) in emerging countries to develop a conceptual framework that promotes KT in ICJVs.



## **1.2. Background to the research problem**

Knowledge transfer (KT) is defined as a process that involves an interchange of either tacit or explicit knowledge between the sender and recipient (Minbaeva et al., 2018). KT is an area of study within the knowledge management discipline that has received a tremendous amount of research in recent years. The increase in KT research is as a response to a volatile and an uncertain economic environment, an increase in globalisation, project complexities, increased costs in research and development, technological shocks, and a reduction in product life cycles (Schilling, 2015). Research has shown that KT is critical for creating and monitoring a competitive advantage thus enabling organisations to achieve commercial success (Milagres & Burcharth, 2019).

Organisations become innovative and gain dynamic capabilities through knowledge transfer (Muhammed & Zaim, 2020). Firms require KT for the development of sustainable competitive advantages because organisations rarely innovate in isolation. Information from various external sources is required by organisations to achieve improved learning capabilities and competitiveness and ultimately producing innovative solutions (Milagres & Burcharth, 2019). Organisations can transfer knowledge to one another through the formation of an inter-organisational strategic alliance. The business environment has seen a rise of strategic alliances, and this is mainly because of the volatile business environment that is characterised by technological disruptions, political discord, population shifts and bureaucratic challenges (Bamel et al., 2021). The reason for the formation of strategic alliances is for firms to acquire resources, new knowledge, new learnings, gain new skills, enter new markets and to achieve profitability and growth in a competitive landscape (Ko et al., 2020). Strategic alliance formation has grown significantly over the years as a key strategy for most firms (Bamel et al., 2021). The different forms of alliances are equity, non-equity, and joint ventures. A joint venture (JV) is a form of strategic alliance wherein several organisations voluntarily form a partnership to achieve a common, valuable, and mutual result (Gulati, 1998). A JV is a method used for transferring knowledge amongst partners and a technique which is used for increasing the knowledge and skills of the host country partner (Khamaksorn et al., 2016). Knowledge is not only transferred between partner organisations, but the joint venture also serves as a mechanism for collectively creating new practices and ideas by capitalising on the knowledge which is possessed by other individuals (Chang et al., 2020). International joint

ventures are characterised by the foreign partner organisation transferring knowledge to the local partner organisation (Milagres & Burcharth, 2019).

Tacit knowledge is the combination of the knowledge possessed by the individuals within the firm, while the benefits of TK emerge at the organisational level, it occurs because of the behaviours and experiences of the individuals (Qiu & Haugland, 2019). Learning within organisations occurs in the minds of employees hence the learning capabilities of employees is important for organisational success (Qiu & Haugland, 2019). Managing knowledge transfer in joint ventures continues to be a complex challenge for managers to overcome and has led to poor performance in terms of the quality of work and timeous delivery of projects (Milagres & Burcharth, 2019). KT from the foreign joint venture partners to local joint venture partners is ineffective and yields sub-standard results, this is mainly because of cross cultural differences, low trust between partners, unstable market conditions, government interference and weak institutional environments (Minbaeva et al., 2018). Local partner organisations therefore continue to have a heavy reliance on their foreign partners for KT (Cho et al., 2022). Foreign partner organisations in a JV exhibit behaviours and characteristics that are not enabling for the creation of a conducive environment for knowledge transfer thus impacting the local counterparts in the JV in terms of handling large projects on their own (Cho et al., 2022).

### **1.3. Theoretical justification**

There has been numerous research that has been explored on inter-organisational alliances and this is mainly due to technological advancements, information proliferation, a knowledgeable workforce, and developments in automation artificial intelligence. By exploring individual behaviours that promote knowledge transfer in partner organisations and further developing a behavioural model that promotes knowledge transfer in a joint venture, the study aims to provide valuable knowledge to aid in ensuring that knowledge management strategies are successful in project based strategic alliances. The research will add to the research work that has been executed in the disciplines of international business engagement and inter-organisational knowledge management, which significantly impact organisational learning, business culture and amenity management (Chen et al., 2016).

The external environment is characterised by unpredictability, to compete in a volatile environment innovation is a key capability achieved through TKT. TKT takes place through socialisation and this is achieved through direct interactions between employees (Ganguly et al., 2019). The literature posits that the transfer of tacit knowledge predominately takes place informally. According to Ganguly et al. (2019) employees that freely and openly possess knowledge sharing behaviours are at the heart of TKT. The findings by Ganguly et al. (2019) further emphasizes the importance of the study which intends to create in-depth insights on the behaviours that promote KT amongst employees. TKT is characterised by learning-by-doing which is tremendously difficult to imitate therefore research on the individual behaviours that are required to create stickiness of knowledge in inter-firm organisations is key to create competitive and innovative firms that can compete in a volatile global market (Ganguly et al., 2019). The study will further add to the body of knowledge in the discipline of organisational behaviour management.

#### **1.4. Business rationale for the study**

When knowledge is possessed by a group of individuals it becomes more valuable hence the need for KT (Zhou et al., 2022). Studies have shown a strong link between KT and organisational performance (Muhammed & Zaim, 2020). Knowledge creation is at the centre of organisational survival, and this is achieved through KT (Muhammed & Zaim, 2020). In the past, cash, raw material, and labour were of more value than knowledge however the business environment has evolved, and knowledge has become one of the most important, if not the most important component of business survival (Muhammed & Zaim, 2020). The economic environment is characterised by knowledge intensive activities and to achieve high performance and become competitive, harnessing the capability to effectively execute knowledge transfer is paramount for an entity's long-lasting prosperity (Farooq, 2018).

The failure to manage knowledge effectively in inter-organisational firms results in wasted resources and increased costs resulting in a reduction in competitiveness (Kogut & Zander, 1992). Effective knowledge management such as the ability to utilise problem solving skills gained from complex projects prevents the repetition of similar mistakes on future projects and reduces the production cycle time on projects (Tan et al, 2006). Globalisation has played a role in the significant rise in the formation of inter-organisations in the built environment, firms have collaborated to form international construction joint ventures with an aim of successfully executing major infrastructure projects (Tetteh &

Chan, 2019). ICJVs are a huge contributor to sustainable development in a country (Tetteh et al., 2022). ICJVs are in operation for a specific period for purposes of executing construction projects hence these are the types of alliances that are project based. During the lifetime of a project, huge amounts of knowledge is produced, the challenge however is that all this knowledge tends to be lost when the project comes to an end (Ren et al., 2019).

The ability to ensure successful KT between individuals results in the reduction of knowledge loss and this puts an end to the loss of resources and time (Zhou, et al., 2022). KT in a joint venture is the process that encompasses the knowledge holder transferring knowledge to the recipients. Through this process the knowledge recipients gain knowledge that improves their technical and management capabilities (Zhou, et al., 2022). KT in projects further improves teamwork and efficiencies and the knowledge reserve. Most importantly, project teams can transfer the knowledge that was gained during the construction project to other similar projects or construction organisations thus preventing the loss of knowledge (Zhou, et al., 2022). Project-based organisations deal with large amounts of information in the execution process and the knowledge created in such projects if effectively managed becomes communal knowledge of project operations and this knowledge can be used on future projects to increase productivity. The knowledge gained in project-based environments becomes a key contributor in building competences that results in the effective management of projects (Abu Bakar et al., 2016).

Ineffective knowledge transfer in project-based organisations leads to a significant loss of essential project specific knowledge (Sokhanvar et al., 2014). It is therefore imperative to study strategies on how best to increase the success of KT in inter-firm alliances such as a construction JV. There has been an increase in the participation of construction firms in the international business landscape because of globalisation (Rafferty et al., 1998). Due to the technical and financial superiority of foreign companies, local firms have become dependent on foreign partners (Cho et al., 2022). It has become a necessity for knowledge to be developed in countries that are classified as developing countries in order to decrease the overt dependency on international firms. It is imperative to increase the capabilities of local firms to handle large scale and complex projects without needing international assistance (Cho et al., 2022).

Strategic alliances have allowed for the collaboration of organisations, organisations are now able to come together and solve intricate United Nations (UN) Sustainable Development goals (SDGs). SDG 17 calls for collaborative efforts geared towards addressing global sustainable development. To achieve this SDG, global partnerships are required at all levels including at national level, civil society level and private sector organisational level. The mobilisation of resources and knowledge requires an increase in cooperation and coordination (UNEP, n.d.). A platform for organisations to accomplish the SDG 17 is through the collaboration of firms to execute mega infrastructure projects and this is done through the establishment of JVs such as ICJVs. At the centre of the collaborative efforts is capacity development and knowledge transfer (Tetteh et al., 2022).

ICJVs offer an environment wherein organisational learning can take place and the opportunity to close knowledge and expertise gaps. When KT is effective, ICJV completely changes the host companies' operations by improving efficiencies and creating sustainable operations (Tetteh et al., 2022).

## **Chapter 2**

### **2.1. Introduction**

A literature review of recently peer reviewed academic journals, research articles and a collection of master's level theses was executed. A clear need for the study through the exploration of literature has been provided. The purpose of reviewing the literature was to investigate the knowledge management (KM) phenomenon to in order to frame the research questions. The existing literature on KM has been discussed in general, with a specific focus on knowledge transfer in inter-organisational partnerships being discussed in detail.

The structure in which the literature is reviewed in this chapter commences with a discussion on knowledge management. Knowledge management as the primary field in which knowledge transfer (KT) is found is unpacked followed by an in-depth literature review on knowledge transfer as a subset of knowledge management. A discussion on strategic alliances occurs followed by a discussion on international construction joint ventures as a form of a strategic alliance are then discussed. The literature review then closes of with a discussion on knowledge transfer in a construction joint venture with the barriers and enablers of knowledge transfer reviewed in detail.

### **2.2. Knowledge Management**

KM as a field of study has grown tremendously in the past two decades. It is defined as an intentional effort directed towards co-ordinating and monitoring knowledge processes (Inkpen, 2002). Knowledge management is the ability of an entity to successfully create, store, transfer, assemble, integrate, explore, and apply knowledge resources (Inkpen, 2002). It is therefore important for an organisation to put in place knowledge management interventions to preserve the valuable knowledge resources (Smith, 2001). Knowledge management occurs at various levels, namely at the individual, group, and organisational level. Individuals create and store knowledge and organisations are responsible for integrating the knowledge (Grant, 1996a, 1996b). According to the knowledge-based theory, knowledge is possessed by the individual employee, the organisation must then take on the responsibility of enabling the integration of technology and other mechanisms so that knowledge sharing is supported (Grant, 1996a, 1996b).

In accordance with the concept of knowledge creation, the basis of organisational knowledge creation is the knowledge possessed by individuals because a firm is unable to produce knowledge on its own. The role of knowledge at the individual level is fundamental to the knowledge-based theory of the firm, it posits that firm superiority depends on the organisation's capacity to incorporate the knowledge within the organisation throughout all the individuals (Sabherwal & Becerra-Fernandez, 2003). Knowledge at the group level and organisational level depends on the individual knowledge therefore KM effectiveness at the level of the individual results in effectiveness at the level of the group (Sabherwal, & Becerra-Fernandez, 2003). The two knowledge categories are namely explicit and tacit knowledge. Explicit knowledge is defined as the information which has been codified such as textbooks, manuals, and articles. Tacit knowledge on the other hand, is knowledge that is characterised by extraction and transfer difficulties since this is knowledge that is possessed by people gained through their experiences. The articulation of knowledge is hard when it comes to tacit knowledge (Zahoor et al., 2022). Explicit knowledge is easy to transfer due to the ease in the codification of this type of knowledge (Meier, 2011).

The world is evolving into knowledge-based economies making knowledge one of the most powerful assets for long term sustainability. A firm that possesses a fund of knowledge is well positioned to achieve commercial success (Ren et al., 2018). Knowledge acquisition is crucial for the survival of organisations (Gonza'lez-Loureiro et al., 2015). According to the resource-based view (RBV), the firms which possess superior knowledge are difficult to imitate leading to an organisation's competitive edge (Alavi & Leidner, 2001). A significant strategic resource that an entity can possess is knowledge (Cantú et al., 2009). Firms that manage their knowledge effectively tend to outperform their counterparts (Boone & Ganeshan, 2008). KM effectiveness is the organisation's ability to obtain and understand the knowledge required by the organisation to enable it to execute its functions (Gupta & Govindarajan, 2000; Jensen & Meckling, 1996). The RBV mentions that an entity's competitive edge is derived from a mixture of physical assets as well as assets which are not tangible such as processes and procedures, management capabilities, and knowledge (Zheng et al., 2010).

A technique for organisations to acquire knowledge is through the formation of strategic alliances. Alliances aim to close knowledge gaps within key areas in organisations which lead to an enhanced position in the competitive environment (Das & Kumar, 2007).

Research on what promotes effective knowledge management in inter-organisations is few and far between as the research that has been done predominantly focuses on high level enablers at the level of the firm and not on enablers at the member level in inter-organisations (Amoozad Mahdiraji et al., 2022). The rise of inter-organisations requires further research to contribute to enablers of effective KM strategies at the level of the individual in inter-organisations (Amoozad Mahdiraji et al., 2022).

### **2.3. Knowledge Transfer**

A fundamental asset in any organisation is knowledge which is the foundation of an entity's competitive advantage (Biloslavo & Lombardi, 2021). Successful knowledge transfer is therefore of great importance for productivity and innovation improvement in organisations. Furthermore, knowledge is a key contributor to economic progress (Amoozad Mahdiraji et al., 2022). Knowledge transfer is defined as a technique in which knowledge is disseminated (Amoozad Mahdiraji et al., 2022). KT is a subset and significant part of KM. The dissemination of knowledge is a complicated process due to the many variables that impact knowledge transfer (Farooq, 2018). There are complexities which are inherent in the way KT takes place, being able to successfully transmit and assimilate knowledge varies from one organisation to the next (Squire et al., 2009). To successfully transfer knowledge, organisations must consciously and proactively implement knowledge management practices (Meier, 2011). There are two ways in which knowledge can be transferred, it can be transferred tacitly or explicitly (Alam et al., 2022). According to Fasbender and Gerpott (2022) employees tend to choose when and how to transmit knowledge to other employees. The transfer of knowledge is therefore a voluntary action (Fasbender & Gerpott, 2022). The KT process comprises of three features, namely knowledge transmission, which is transmitted by the sender, knowledge absorption which is executed by the receiver and context. The three-fold process results in the creation of new knowledge (Fasbender & Gerpott, 2022). The difficulty in transmitting tacit knowledge is because it is reliant on contextual elements and can only be disseminated by humans during engagements (Wilkesmann et al., 2007). There are four knowledge processes in KM, namely knowledge storing, KT, knowledge application and knowledge building and acquisition. (Wilkesmann et al., 2007).



KT is a central element to the KM process in an entity (Fasbender & Gerpott, 2022). The development and effectiveness of an organisation can be enhanced through incorporating knowledge into the processes which are existing in order to form processes which are new (Armistead, 1999). The creation and acquisition of new knowledge results in the achievement of a sustainable advantage (Bou-Llusar & Segarra-Ciprés, 2006). According to Kalkhan (2011) knowledge is managed effectively when it is competently transferred throughout the entity. Despite its importance and its ability to sustain organisations more than capital and labour, knowledge is an asset which organisations continue to neglect the most. Due to globalisation, there has been an increase in organisations actively participating in international business activities. To compete globally, organisations must develop new skills and knowledge required to succeed in international projects. KT is one of the key features for project implementation (Lech, 2011). The flow and transfer of knowledge is therefore essential for the achievement of competitive advantage. According to the theory of knowledge creation, there are four methods which result in effective knowledge creation and transfer, namely “socialization, externalization, combination, and internalization”. Knowledge is created through the interplay between the two types of knowledge namely tacit and explicit knowledge.

Central to organisational learning is the important role played by tacit knowledge as tacit knowledge is the type of knowledge which is responsible for guiding a person’s behaviour. TK is derived from an individual’s lived experience involving aspects such as a person’s values, beliefs and perspectives (Nonaka & Takeuchi, 1995). TK is the knowledge that lives in an employee’s head and serves as one of the greatest knowledgebases for organisations. Because of the contextual nature of TK, it is problematic to codify, store and transmit (Cross et al., 2001). The articulation and imitation of TK is complex however, it can be acquired through conversations, experiences, and storytelling (Tua, 2000). Put differently, tacit knowledge can be acquired through socialisation. Externalisation is a method whereby TKT converts into knowledge which is explicit, this process involves codifying tacit knowledge in documents (Guo et al., 2020b). The communication of behaviours learned over an extended period often becomes difficult (Lee, 2019). There are several factors that lead to the lack of tacit KT such as the high cost associated with the transfer of tacit knowledge in terms of the application of effort and the amount of time. Furthermore, a lack of enticement to codify the knowledge and existence of specific self-serving interest may also hinder tacit KT from taking place (Lee, 2019).

Conversely, explicit knowledge can be expressed in manuals, databases, and videos for distribution (Zack, 1999). The codification of explicit knowledge means that it can easily be replicated making it easy for other firms to imitate (Ranucci & Souder, 2015). Explicit knowledge is more formally expressed, and it is articulated with more accuracy than tacit knowledge (Ranucci & Souder, 2015). The interactions lead to the formation of knowledge which is new (Nonaka & Takeuchi, 2021). New knowledge formation is dependent on the organisation's ability to tackle and effectively apply both forms of knowledge, it is also reliant on the firm's capacity to transfer the knowledge. The traits associated with explicit knowledge comes with ease when it comes to the transmission of the information, accurateness and dependability of the information, the attributes are due to the codification on the information (Park et al., 2022). These methods have been depicted in the SECI model below. The model below describes the process in which knowledge is created as well as transferred. According to the model, there are four ways through which knowledge can be shared, namely through "socialization, externalization, combination, and internationalization." The SECI model demonstrates how knowledge changes from tacit to explicit knowledge and vice versa (Nonaka & Takeuchi, 2021).

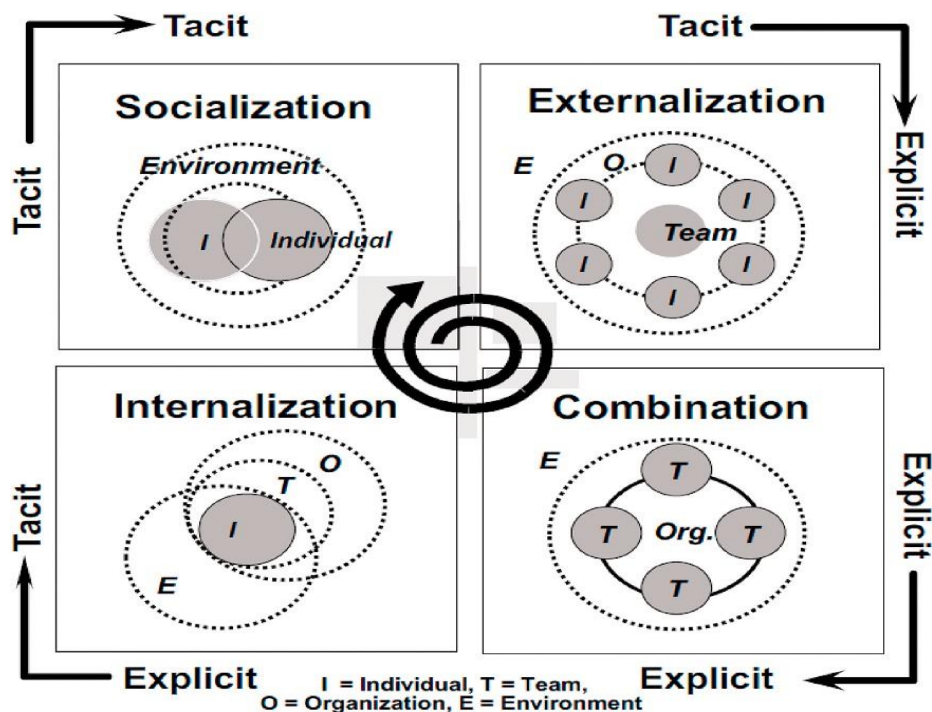
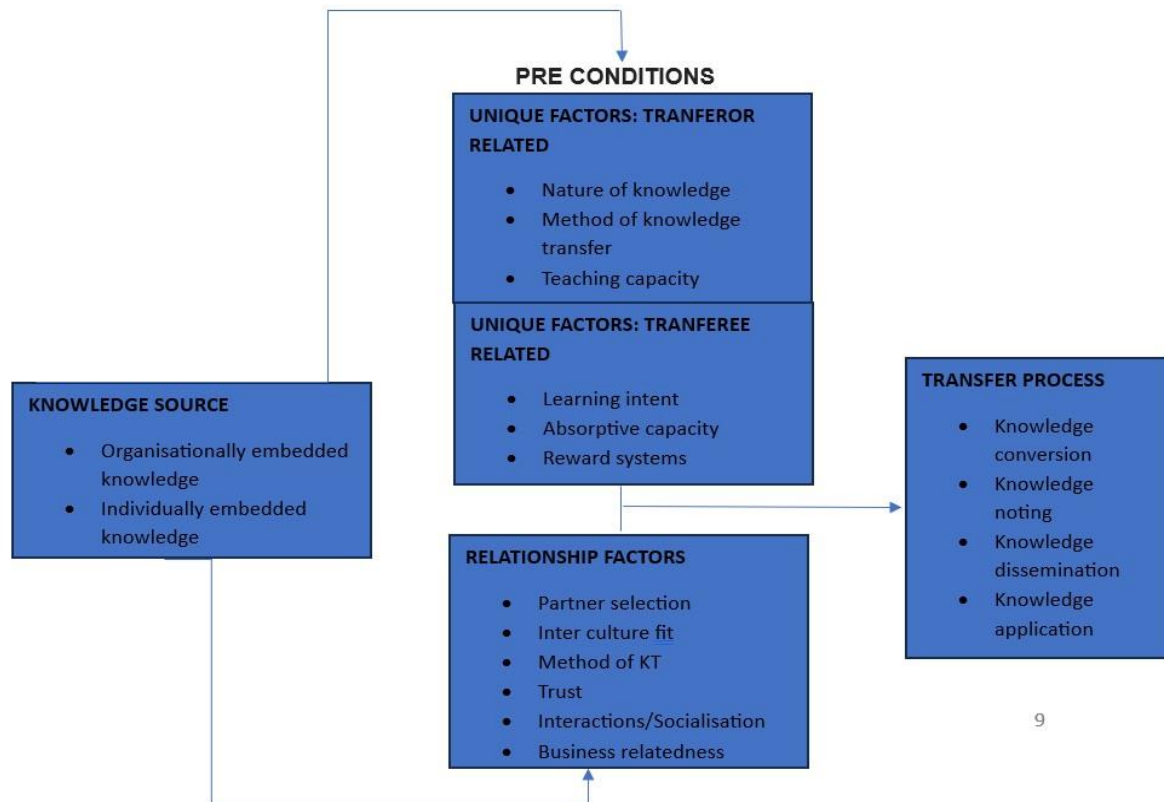


Figure 1: Updated SECI Model as adopted from Nonaka and Takeuchi (2021)

Managing knowledge and effectively transferring tacit knowledge remains as one of the biggest challenges within organizations and it becomes more challenging in inter organisations (Ferreira et al., 2022). KT in inter-organizations is heavily dependent on expatriates. Expatriates are employees that are highly skilled and have the know-how and expert knowledge. These employees are key contributors in KT in joint ventures (Ferreira et al., 2022). There is a tremendous amount of determination that is needed to construct practices that support collaboration between the partners since the partners are competitors (Milagres and Burcharth, 2019). Due to the competitive nature of the relations between the construction JV partners, it results in information hoarding and a lack of openness in sharing knowledge as a leak in specific information may be viewed as giving the partner organisation internal information not meant for the other partner organisation (Gast et al., 2019).

Tacit and explicit knowledge transfer is more easily achieved horizontally, that is at peer level. The reason for this is because the power distance between the individuals is less and the frequency in the interactions is higher at the same level. Vertical knowledge transfer is more challenging due to a greater power distance and hierarchal structures. (Muhammed & Zaim, 2020).

According to Muhammed & Zaim (2020) organisations that are more hierarchical and therefore vertically structured are focused on developing exploitative abilities and efficiencies within the organisation. The top down and bottom-up approach has been used for years for knowledge sharing however knowledge management strategies have evolved and knowledge that flows horizontally has gained recognition in recent years and the importance of building abilities that are explorative have become critical for creating dynamic and innovative abilities in the organisation.



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Figure 2: KT model as adopted from Narteh (2008)

## 2.4. Strategic Alliances

The business environment is constantly changing and impacted by several factors such as political conflicts, technological disruptions, demographic changes, and regulatory challenges. The volatile business landscape has driven organisations to collaborate strategically to conquer the everchanging complex and ambiguous terrain (Gomes, 2020). The formation of strategic alliances is an important strategy for numerous organisations (Bamel et al., 2021). A strategic alliance is when entities voluntarily enter into an agreement with the aim of transmitting and harnessing knowledge to achieve commercial success in the market (Gulati, 1998). One of the many benefits of a strategic alliance includes gaining access to external knowledge, access to new markets, shared risks and costs and improved efficiencies (Meier, 2011). Alliances serve as a channel for the formation, transfer, and utilisation of knowledge in inter-organizations. According to the resource-based view, the resources that an organisation possess determines its competitive advantage therefore resources which are considered important for profitability and growth can be acquired through entering strategic alliances (Bamel et al.,2021). The

gained resources build organisational capabilities to succeed in a business environment fraught with challenges (Bamel et al.,2021).

## **2.5. International Construction Joint Ventures**

An international joint venture (IJV) is a category of a strategic partnership used by multinationals as an entry mode into emerging markets. An IJV is created through the partnership of two or more independent entities coming together to create a new legal entity (Chang et al., 2020). In an IJV there is sharing of resources such as finances, managerial expertise, advanced technology, government connections and labour between the partner companies to achieve efficient operations (Chen, 2016). The focus of the study is on IJVs formed by construction firms. ICJVs comprise of local and foreign firms coming together and collectively undertaking work through the sharing of construction inputs, material, plant and equipment and human resources (Ngowi et al., 2005). To create value in the partnership, the host partner and international partner must combine and balance resources and capabilities (Dawson et al., 2014). Through globalisation, competition in the domestic markets has increased, and this has also improved accessibility to worldwide markets (Gajendran et al., 2013). In internationalizing, constructions companies whether local or foreign need to acquire an in-depth knowledge of their fluid competencies and to achieve this knowledge management should be effectively managed (Raftery et al.,1998). The deregulation of markets and globalisation has resulted in the increase of foreign construction companies participating in the development of infrastructure in emerging countries due to monetary, technical, and managerial constraints in the developing countries (Raftery et al.,1998).

In developing countries there is a lack of technical and managerial capabilities required to successfully execute large and complex mammoth construction projects (Bakri et al., 2022). Due to this challenge in developing countries, there is a heavy reliance on international partners to execute complex mega infrastructure projects which require specialised technical and managerial skills. According to Bakri et al. (2022) contractors in developing countries do not possess the financial, technical, and managerial capacity to embark on infrastructure projects on a large scale without support or assistance. It is for this reason that local construction firms are reliant on foreign construction firms to manage and effectively execute local mammoth infrastructure projects (Bakri et al., 2022). The development of knowledge is a necessity in emerging countries, and the need for knowledge is required to decrease the reliance on foreign construction firm and for local

firms to become self-sufficient. In entering ICJV agreements, one of the many goals that local construction firms aim to achieve is gaining knowledge to increase their capabilities in executing large infrastructure projects (Bakri et al., 2022). There has been extensive research on the barriers of knowledge creation and KT in international joint ventures, there is however scant research on the individual behaviours that promote successful TKT in ICJVs.

Globally, the construction industry contributes significantly to the global market, the contribution accounts for 15% of its gross domestic product (GDP). The projection is that it will expand to US\$15,030bn by 2025, which is a testament to its importance in the international economy (Agyekum et al., 2021). The construction industry is responsible for the development of infrastructure projects that are sustainable, and it is key in a country's economy (Fei et al., 2021). Furthermore, the construction industry plays a critical part in the achievement of the "UN sustainable development goal 17 on global partnerships for sustainable development" (Fei et al., 2021). Sustainable development is however fraught with complexities related to economic, social, and environmental challenges and these challenges cannot be conquered by individual firms on their own hence there is a need for collaborative efforts between different firms to achieve sustainable development partnerships which are at the centre of addressing the SDG 17 complexities (Fobbe, 2020). In alignment to SDG 17, effective global partnerships are required to achieve universal sustainable advancements and an ICJV is one of the vehicles used to attain this goal (Pot, 2020). The construction business is also a substantial contributor in the achievement of other SDGs such as SDG 1 and 8 through the creation of employment opportunities for the jobless which lead to poverty reduction and an improved standard of living. Infrastructure projects play a significant role in driving economic growth (Fei et al., 2021).

The international business landscape has transformed significantly in the past decade because of globalisation. The key to navigating the new knowledge economy is in the ability to produce and supply new services and products before the competition (Khamaksorn et al., 2020). To conquer the complexities that have been presented in the new business landscape, businesses have come together to collaborate and navigate the new complex and everchanging environment (Tetteh et al., 2022). One way in which organizations have come together to collaborate and expand into international markets has been through strategic alliances known as international construction joint ventures

(Khamaksorn et al., 2020). A joint venture is an arrangement between firms that come together to collaborate and execute a specific project wherein one of the firms is located outside the host country (Khamaksorn et al., 2020). ICJVs have started taking over the global commerce landscape (Chang et al., 2020). An ICJV is a project-based alliance formed for the construction of a specific project and it is operational for a specific period, that is, for the duration of the project hence it is for a limited period of time (Tetteh et al., 2022). It is used to achieve sustainable development, and this is done through improving operational efficiencies such as capital resources, employee capabilities and capacity (Tetteh et al., 2022). ICJVs are alliances through which strengthening capacity is achieved and knowledge is transferred between partner firms. It also serves as a mechanism through which the capabilities of the local partner can be enhanced if KT is transferred effectively (Khamaksorn et al., 2020). The interest in ICJVs is on the rise as the international built environment is becoming more complex, cutthroat, dynamic and turbulent. To survive, more construction firms are entering into contractual agreements to bring resources together to execute infrastructure projects (Khamaksorn et al., 2020).

The growing global competition has placed knowledge at the centre for the survival of firms and knowledge in construction plays an important role as it results in the timeous completion of projects as well as high-quality workmanship (Kivrak et al., 2008). Knowledge must therefore be effectively managed to maintain a competitive advantage (Khamaksorn et al., 2020). The ICJV environments provide an opportunity for all partner firms to acquire learnings from each other and these learnings lead to increased performance on the project (Martin & Emptage, 2019). The factors driving developing countries to form ICJV include the need to learn managerial capabilities, a need for capital investment attraction, an opportunity to be involved in a large and complex project and the desire to achieve a set target (Tetteh et al., 2022). For developed countries, the strategic reasons for forming an ICJV are different, the drivers for developed countries are growth into local markets, complying or overcoming the host country's regulatory government requirements or barriers and global expansion (Tetteh et al., 2022). Despite the differences in strategic drivers for developing and developed countries, both gain benefits of shared project risks, enhanced competitiveness, a stronger reputation, and specific knowledge gained when the project is successfully completed (Tetteh et al., 2022).

In summary an ICJV is a platform that closes the gap in terms of expertise and knowledge, if effectively managed it is an environment where all partner organisations can learn from

each other and gain competitive advantage. Organisations achieve transformation within their operations when they are exposed to an ICJV environment and this leads to sustainable operations (Tetteh et al., 2022).

## **2.6. Knowledge transfer factors**

To achieve performance in the international landscape knowledge transfer is a key requirement. Several factors undermine the flow of knowledge within ICJV. Partners in strategic alliances fear losing key organisational information which could possibly result in the diffusion of their core competencies (Beeby & Booth, 2000). This fear creates barriers for knowledge transfer within alliances (Larsson et al., 1998). Trust in ICJVs impacts the way partners work together. Trust between individuals is an essential enabler for knowledge transfer especially for tacit knowledge. The presence of trust amongst partners increases their willingness to provide support and assistance to understand external knowledge. The lack of trust results in ineffective knowledge transfer (Ng, 2023). Commitment is a factor that impacts knowledge transfer. Commitment is when ICJV partners apply effort to achieve long standing gains rather than immediate gains (Ozorhon et al., 2008). According to Adnan (2004) cultural distance is a contextual factor that affects knowledge transfer in ICJV. Cultural distance is the differences in culture-based factors, such languages, values, rules of conduct and norms that hinder the movement of knowledge amongst partners. Prior experience serves as a motivator for KT. Prior relationships for example, are likely to lead to interpersonal gains (Ozorhon et al., 2008).

Effective communication is a key contributor to successful KT. Partners gain an understanding of JV goals, roles, and the obligations of all the players in the JV through effective communication. Likewise, it also aids in the transmission of individual experiences (Ozorhon et al., 2008). An organisation in an alliance must make decisions in terms of the level of degree of transparency and the level of degree of receptiveness it will choose to display. The degree of collaboration and openness will determine the collaborative knowledge sharing behaviour of the firms in a strategic partnership. A firm can exhibit different types of interactive behaviour, namely avoidance, accommodation, competition, collaboration, and compromise (Larsson et al., 1998). New techniques, methods and processes are gained through JV exposure. KT is more difficult to achieve in inter-organisations than in traditional organisations and this is because individual



behaviours are impacted by culture and organisational institution (Ren et al., 2018). KT is heavily motivated by reward systems. Reward systems are a method of motivating behaviours that transfer knowledge to other employees, and these can be achieved through the dual motivations of monetary and non-monetary methods (Ren et al., 2018).

### **2.6.1. Culture**

The role played by organisational culture in KT in inter-organisations is pivotal. According to Ren et al (2018) culture is described as the way in which things are executed in an entity and this includes the common behaviours, values and shared beliefs shared of the employees of a firm. Culture is therefore a strong motivator of specific action such as influencing KT behaviours of employees (Ren et al., 2018). There is however inadequate research on the role that specific cultures play in the transfer of knowledge in an inter-firm (Ren et al., 2018). In a traditional organisation, shared culture creates an environment wherein employees share knowledge openly, it is however not clear whether shared culture can enable the transfer of knowledge in an inter-organisation (Ni et al., 2018). According to Ren et al., (2018) project-based alliances are fast paced and there is a high level of urgency as the timeous delivering of a project is important as well delivering the project in accordance to the set and agreed upon budget is central to project success. Due to the immense time constraints, there is limited available time for active knowledge transfer.

### **2.6.2. Socialisation**

It has been found that socialisation is key for KT in inter-organisations as socialising brings teams together (Ni et al., 2018). Social interaction between project teams leads to improved communication and trust. The outcome of social interaction is that it builds a unified team (Ni et al., 2018). Communication is fundamental for maintaining healthy relationships in a working environment, communication leads to the creation of trust in teams. By acquiring trust, team vulnerability and team dependability is created (Rauniar et al., 2019). Trust leads to several valuable outcomes in inter-firms such as collaboration, confidence in individuals and improved quality of work as well as an ease in sharing knowledge. Trust is central to social relations (Ni et al., 2018).

### **2.6.3. Motivation**

Motivation, culture, an incentives-based system, trust, and leadership support are the most significant contributors to the sharing of knowledge sharing. Knowledge sharing which is a subset of KT results in positive business performance (Farooq, 2018). The promotion of a culture that is focused on learning leads to the transfer of knowledge. Employees must intrinsically want to learn and by doing so knowledge sharing which may lead to KT takes place (Veeravalli et al.,2020). Motivation can be described as the desire that drives an individual to act a particular way (Farooq, 2018). Put differently, motivation is the driving force behind achieving a goal or a set target. Motivation can be the driving force behind creating knowledge seeking behaviours in employees. A shortage in intrinsic and extrinsic motivation can lead to knowledge hoarding at both the levels of the group and individual (Farooq, 2018).

It has been found that there is a willingness of employees to share knowledge and thus potentially leading to the KT if the rewards serve to fulfil their personal interests (Nguyen et al., 2019). According to Veersavalli et al (2020) a growth mindset must be possessed by employees to acquire knowledge. The desire for exploration and a curious mind for knowledge leads to the adoption of knowledge by the employee's seeking knowledge. A knowledge seeking attitude is dependent on an employee's hunger for knowledge (Veersavalli et al., 2020). People that do not require extrinsic motivators are intrinsically motivated. These types of individuals have an inherent desire for personal growth, they possess self-efficacy and generally enjoy the process of learning (Nguyen et al., 2019). To improve self-efficacy and self-induced personal enjoyment, top management is required to establish an atmosphere which is favourable for knowledge sharing. Both motivators are required to motivate employees to share knowledge however customisation of the factors motivating employees is required as the sender and receiver of knowledge are different therefore, they are motivated by different factors (Nguyen et al., 2019).

### **2.6.4. Trust**

Trust is the driving force behind the ability to openly share knowledge (Fasbender & Gerpott, 2022). The faith in someone and an assumption of risk can be described as trust. Trust brings about learning and the sharing of individual experiences. Working relationships that anchored on trust increases KT (Fasbender & Gerpott, 2022). The transfer of knowledge takes place at the will of the donor because the sender of knowledge

is the one who decides on whether to transfer knowledge. Likewise, the recipient of the knowledge risks personal reputational damage by becoming vulnerable to the donor and admitting a lack of knowledge in that specific area (Fasbender & Gerpott, 2022). Both sender and seeker of knowledge must suspend their defences for KT to take place and work towards building trust for KT to be effective (Fasbender & Gerpott, 2022). A lack of trust between partner firms amplifies knowledge protection behaviours. This is when a partner firm protects itself against behaviours that are opportunistic such as imitation (Guo et al., 2020). The receiver of the information may also not trust the quality of the knowledge being transferred if there is no trust (Guo et al., 2020).

If trust is achieved in inter-organisations, it leads to behaviours wherein the firms rely on each other without any fear, openness, collaboration, honesty, and the presence of trust reinforces the relations between partner organisations (Narteh, 2008). Trust is gained over a period of time and the alliance context is also very important, meaning that it is heavily influenced by context and time. Partners take time to assess each other's behaviours in the inter-organisation and if the behaviours are deemed appropriate by the parties, then trust can be created (Guo et al., 2020).

#### **2.6.5. Leadership**

The behaviours of leaders significantly impact the behaviours of employees within an organisation. When leaders exhibit conduct that is supportive and encourages KT, employees tend to show behaviours that promote KT. (Chaman et al., 2021). The active and present role of leadership towards creating an organisational climate that fosters learning through KT increases efficiencies and overall business performance (Chaman et al., 2021). It is key for leadership to plainly communicate the common goals, vision and type of knowledge sharing behaviours that are needed and rewarded as this builds a unified team and an organisation that is anchored on knowledge sharing. Leaders create a conducive environment for KT (Muhammed & Zaim, 2020).

#### **2.7. Barriers to KT in inter-organisations**

Knowledge transfer is impacted by factors at the national level, business level as well as at the individual level. The factors that impede KT at the country level include the geographical dispersion and the institutional and cultural differences. The larger the geographical distance between the partner firms, the bigger the cultural distance thus

leading to challenges in the transfer of knowledge (Vlajicic et al., 2019). At the level of the employee, poor trust, a deficiency in influencing factors such as incentives and the inability to absorb knowledge are the aspects that impede KT. Activities resulting in the limitation of engagements between individuals leads to poor KT. These activities include a lack of socialisation, complexity of the project, time constraints, a large volume of work and an onerous partner relationship (Rios-Ballesteros and Fuerst, 2022). Furthermore, the disseminator of the knowledge is impacted by the cost of time spent with the knowledge receiver and the effort geared towards assisting the receiver in terms of helping him or her to understand the information (Fasbender & Gerpott, 2022). The presence of intense competition in ICJVs results in a reluctance in employees sharing their knowledge in the ICJV because employees may want to maintain individual benefits such as knowledge power and protecting themselves against perceived job losses (Bakri et al., 2022). All these factors hinder KT on the ICJV. The possession of knowledge is perceived as a personal attribute rather than it being organisational knowledge because it is viewed as personal knowledge it results in knowledge protection behaviours. The protection of knowledge is exercised as a security measure in some organisational cultures (Veeravalli et al., 2020).

## **2.8. Enablers of Knowledge Transfer**

According to in social interactions or socialisation increases trust and trust increases KT behaviours. Furthermore, when partners share the same goal, they are open to the transferring knowledge. Lastly, for the success of KT, in addition to culture and motivation, the leadership team must play a visible and active role on the project (Rois-Ballesteros & Fuerst 2022). According to Goh (2002) information technology has also been identified as a key enabler of KT and is a key solution for enabling the sharing of information to encourage a learning supported environment.

Job rotations has also been identified as a method of enabling employees to acquire a wide range of knowledge, furthermore it has the effect of motivating employees to do better in terms of their performance. The job rotation strategy does not only enable a comprehensive range of skills and KT, but it also rises levels of coordination between employees. Job rotation is a technique used for training that involves the movement of employees into different functions for purposes of learning new proficiencies and acquiring knowledge (Al-Zoubi et al., 2022). Another key factor that encourages KT is the use of

artefacts which facilitate coordination and the cooperation of teams (Mariano & Awazu, 2016).

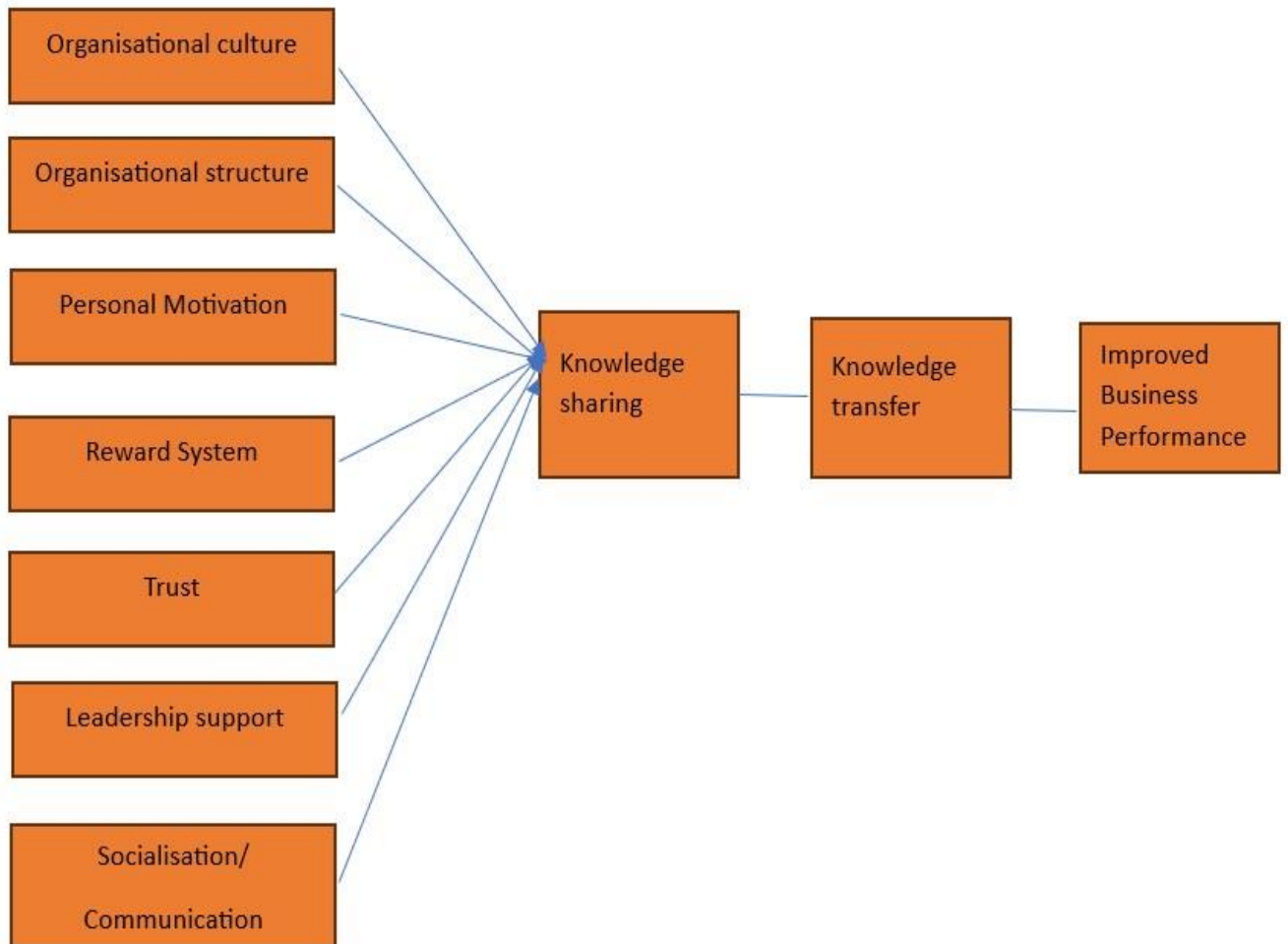


Figure 3: KT factors model based on analysis of the literature review.

### **Chapter 3**

The aim of the research objectives was to identify the behaviours that lead to TKT in project based inter-firms. TKT leads to improved business performance however despite the evidence collected from the literature through the literature review process, individual behaviours that lead to TKT have not been extensively explored. The aim was to further develop a conceptual behavioural model aimed at mitigating KT barriers and encouraging tacit knowledge transfer in a project based inter-organisation.

#### **Research Question 1**

What are the individual behaviours that promote tacit knowledge transfer in an international construction joint venture?

Research question one's aim was to investigate the individual behaviours that are exhibited in an ICJV which are recognized as knowledge transfer promoting behaviours. The different insights were based on the lived experiences of employees that have worked in a ICJV environment. The identification of the behaviours serves to improve the drivers of KT to develop a workforce with the required know how knowledge to execute mega infrastructure projects and further improve the competitiveness of project based local businesses.

#### **Research Question 2**

What interventions should be put in place to mitigate knowledge transfer barriers and to ensure tacit KT takes place in ICJV?

The aim of research question two was to gain insights on developing a conceptual model or framework best suited for JV environment that can be introduced in ICJVs to be used by all employees at different organisational levels by both the local and foreign contractors. The aim of the research is to reduce knowledge transfer barriers and further ensure that tacit knowledge transfer is achieved and is successfully implemented. Through this model the aim is to create a joint venture environment is that is conducive for knowledge transfer.

## Chapter 4

### 4.1. Purpose and Approach

The chapter outlines the methodology and design that was used to respond to the research questions that were formulated. The main aim of the study was to explore the behaviours that promote tacit KT in ICJV in order to acquire an understanding of the behaviours that drive knowledge transfer decisions and to further develop a model that reduces KT barriers and reinforces tacit KT behaviour in international construction joint ventures.

Empirical evidence indicates that knowledge transfer leads to organisational performance (Makore & Eresia-Eke, 2021). Despite the impact of KT on organisational performance, the behaviours that drive TKT are under investigated. There has been recent qualitative research on knowledge seeking behaviours in strategic alliances however further exploration is required on TKT (Veeravalli et al., 2020). A qualitative interpretivist approach was utilised to explore the behaviours that successfully promote tacit KT in ICJV. According to Saunders and Lewis (2018) the interpretivist paradigm is a social phenomenon which is most applicable for organisational behaviours. It involves the investigation of connections between individuals, structures, functions, and characteristics of institutions such as organisations. An exploratory study was conducted since little is understood in the chosen research area and the study sought to gain new insights. Where little is known or even understood, exploratory research is undertaken to investigate the phenomenon (Elman & Mahoney, 2020).

The interpretivism philosophy was used to conduct the research. The interpretivism philosophy is used when the researcher's purpose is "to construct the interpretations of meanings and practices" (Urquhart, 2013). Thirteen explorative semi structured interviews were conducted with two groups, that is, employees from the foreign partner organisation and employees from local partner organisations who have worked in international construction joint ventures. This was done to determine the behaviours that successfully promote tacit KT. The interview process was a participative, interactive, and cooperative approach. Individual employees were interviewed therefore the data gathered was subjective data. The interpretivism philosophy is utilised wherein the research goal is to better understand an unknown area and the desired information is based on what people think about and how they act on those thoughts, the type of challenges they are faced with and how they deal with these challenges (Pizam & Mansfield, 2009). Due to the very limited period of about 6 - 8 weeks that was available for research work in the year 2023,

a cross-sectional study was used. Cross-sectional research is used in time constrained studies (Saunders & Lewis, 2018). The researcher developed an interview guide and proceeded to pre-test the guide to ensure that the research questions captured the essence of the research objectives. Physical and virtual interviews were conducted to collect data. With the express permission of the interviewees, an audio recorder was used for the physical interviews and for the virtual interviews, an online meeting platform recording functionality was used to support note taking. The use of the audio recordings was to ensure that all the information was accurately captured.

#### **4.2. Methodological choices**

The mono method was used. A mono method is when the research only utilizes one data collection tool (Saunders & Lewis, 2018). The study was a mono method qualitative study as only semi structured interviews were used as a collection tool.

#### **4.3. Research design**

Semi structured interviews are used when the researcher wants to gain insights into individuals' lived experiences (Cassell, 2015). The motivation for utilising the semi structure interview approach for this study was to gain an in depth understanding of the behaviours that promote TKT in ICJVs in order to develop a conceptual model that promotes knowledge transfer and can be used in ICJV.

A total of thirteen interviews were conducted. The interviews were conducted face to face and virtually with the use of virtual meeting tools such as Zoom and Microsoft teams. The virtual meeting tools were mostly used with the foreign partner participants who were no longer based in Eswatini due to project completion. An induction approach was used during the study. An induction approach involves a process whereby the theory is built from the bottom up leading to the development of broader theories (Saunders & Lewis, 2018). Theoretical concepts in the KM field with a specific focus on knowledge transfer were gathered from peer reviewed academic literature. The research followed an inductive approach in analysing the data, this resulted in a deeper understanding of the research context.



#### **4.4. Level and Unit of Analysis**

The individual level was the level of analysis that used in the study as the research gap was on behaviours that promote TKT in ICJV. The individual level of analysis was applied in addressing the research questions. The unit of analysis for the study were individual employees that have worked or were working on an international construction joint venture in Eswatini. Knowledge is transferred by employees and TK dwells in the minds of the people (Cross et al., 2001). It is for this reason that individual employees were the unit of analysis, the participants were able to provide insights based on their lived experiences of TKT in an international construction joint venture.

#### **4.5. Population**

The population of this research consisted of employees at two different levels within the ICJV. The employees were inclusive of top management teams and middle managers. All participants had a minimum of one year experience working in an ICJV. The homogeneity of the sample was due to the participants working in the construction industry. Heterogeneity was attempted in that the participants that were interviewed were a mixture of top management and middle management teams. Furthermore, there was diversity in that the interviews included expatriate employees from the foreign contractor partners as well as local employees from the local contractor partners. The participants have worked on different international construction joint ventures, there was a representation from five different ICJVs, and they all came from different parent organisations and one participant worked for the regulatory body that regulates the construction industry hence providing insights from a regulator's perspective. Interviewing a mixture of participants was done to gain a holistic viewpoint on the behaviours that promote TKT on ICJV. The multifaceted approach increased the validity of the research findings. The triangulation matrix as detailed in Table 1 is explained below

- Seven middle managers and six top management (Exco) employees
- Eight employees from local contractor partners, 4 expatriate employees from foreign contractor partners and one employee from the government agency that regulates the construction industry.
- The participants worked in 5 different ICJVs that have operated in Eswatini. ICJV A-E represents the different international construction joint ventures.

**Table 1: Triangulation Matrix**

Management level	Contractor type	Different ICJV
Middle management	Local	ICJV A
Middle Management	Local	ICJV B
Top management	Local	ICJV C
Top management	Foreigner	ICJV B
Top Management	Foreigner	ICJV C
Middle management	Foreigner	ICJV E
Top management	Foreigner	ICJV A
Middle management	Local	ICJV D
Middle management	Local	ICJV E
Middle management	Local	ICJV C
Middle management	Local	ICJV C
Top management	Local	ICVJ D
Top management	Local	construction regulatory body

#### **4.6. Data Analysis**

The data collected through the recorded interviews was converted into written text. Text data was therefore analysed. According to Bell et al. (2019) the appropriate analysis for qualitative and unstructured interviews is content analysis. A thematic analysis (TA) of the data was conducted. Thematic analysis is a method of coding qualitative information (Boyatzis,1998). The analysis followed the thematic analysis approach as explained by Braun and Clarke (2006). TA is a flexible tool which is applied within diverse theoretical frameworks, it is suitable for analysing experiences, insights, and understandings (Braun & Clarke, 2006). The transcripts were analysed inductively.

Transcripts were meticulously read to gain a deeper understanding of the data thereafter initial codes were generated. The codes were grouped into patterns. Through the patterns, prevailing themes emerged. The themes that emerged from the data were linked to the literature review in chapter 2. Several themes emerged because of the inductive type of the study however the themes that were maintained in the study were those that related to the research questions. For analysis the researcher made use of the excel spreadsheet. Six stages were used during the analysis of the data as detailed below in Table 2.

**Table 2: Data analysis process**

In-depth understanding of the data	<ul style="list-style-type: none"><li>• Transcripts were meticulously read. This allowed the researcher to be completely absorbed in the data</li></ul>
Data coding	<ul style="list-style-type: none"><li>• Codes were generated from the quotations as discovered from the data</li><li>• Specific phrases were labelled with codes then a frequency table was generated</li></ul>
Classification of data	<ul style="list-style-type: none"><li>• Codes were arranged according to the similarities to each other.</li><li>• Similar codes were then grouped into subcategories</li></ul>
Themes development	<ul style="list-style-type: none"><li>• The patterns then gave rise to several themes and the themes that were maintained were those related to the research questions</li></ul>
Frequency analysis	<ul style="list-style-type: none"><li>• The frequency table of codes and categories was then generated.</li><li>• The exported data was then analysed further</li></ul>

Author's own table of the analysis process

An excel spreadsheet was used to analyse the data. This encompassed a process of transcribing the data and prepping the data for analysis on excel. Identifiers were removed and replaced with Mr X for individual names and company X for company names during the transcription process to maintain the privacy of the respondents. The data was further stored using unique codes and identifiers were deleted.

#### **4.7. Sampling method and size**

Non-probability sampling techniques were employed for the research due to the qualitative nature of the study. It was not possible for the researcher to attain a list of the entire population hence the non-probability sampling techniques were the most suitable (Saunders & Lewis, 2018). Employees with expert knowledge at the top management level and the middle management level that have worked in an ICJV were difficult to secure, therefore a combination of purposive and snowballing was the non-probability sampling that was used. To identify a specific population or specialists whose accessibility is difficult to acquire, snowball sampling is used (Saunders & Lewis, 2018). Snowball

sampling is often used to identify a specialised population and professionals whose accessibility is not easily obtained while purposive sampling is used when the researcher uses their judgement to identify the best suited participants for the research (Saunders & Lewis, 2018).

For qualitative research, the sample size is contextual and reliant on the paradigm that the researcher will adopt (Boddy, 2016). The sample was collected from a homogeneous population, that is, employees with technical and managerial expertise that have worked in ICJVs that were operating in Eswatini for a minimum of one year. A total of 13 semi-structured interviews with employees that have worked on ICJV were conducted. Four participants from the foreign partner organisation and eight interviews with employees from the local partner organisations were conducted. One additional interview was further conducted with a top management employee from the construction industry regulatory body to attain added insights.

Any number between 12 to 16 interviews are satisfactory for qualitative research (Saunders & Lewis, 2018). The goal to attain saturation was achieved when no new information was forthcoming from the interviewees. In research question one, saturation was achieved at the 7<sup>th</sup> interview conducted and for research question 2, saturation was reached at the 6<sup>th</sup> interview. According to Morse et al. (2002) data saturation arises if no additional information is being collected by the interviewer. Saturation was tested by using themes that occurred during the interviews, when no new themes emerging, the study was showing that saturation had been achieved. Employees from different levels in the joint venture were engaged. The employees were inclusive of executive management and middle management with technical specialists and administrative employees from both the local and foreign partners on the joint venture. In addition to employees who had worked in ICJV, an executive manager from the construction regulatory body formed part of the participants. This sample size included individuals from across the construction industry. Participants included a variety of technical expertise ranging from project engineers, project managers, site agents, contract managers, management consultants, quantity surveyors, operations manager as well as the administrative role of a senior HR officer.

#### **4.8. Reliability and validity**

The study used triangulation to increase the credibility and authenticity of the results. Data collection from different people to acquire multiple perspectives and validation of data is known as data source triangulation. Data source triangulation was used whereby the responses that were received from the two groups of participants, namely employees from the foreign partners and employees from the local partners in an ICJV were checked against each other.

#### **4.9. Data gathering process.**

Semi structured interviews are the measurement instrument that was used to collect the primary data. 13 interviews in total were conducted with participants that had worked and that were working on an ICJV in Eswatini. The longest interview lasted for 63 minutes while the shortest interview lasted for 23 minutes. Semi-structured interviews allow researchers to share their personal narratives on their experiences thereby allowing for deeper insights in a particular phenomenon (Bell et al., 2019). While conducting the interviews some questions were reframed depending on the participant that was being engaged or if the participant didn't understand the question. There were variations in the order in which the questions were asked. Semi structured interviews allow for flexibility, how questions are asked depends on the engagements with the participants (Saunders & Lewis, 2018).

The interview questions were open ended, and the construction of the interview guide was guided by the research questions. Interview guide is as shown in Appendix A. The interview guide was constructed based on the below topics.

- Behaviours that promote KT in ICJV
- Behaviours that impeded KT in ICJV
- Actions/interventions to be put in place to reduce KT barriers and encourage KT behaviours.

The interviews were conducted by the researcher and the participant's responses were captured by the researcher therefore the interviews were classified as researcher completed instruments. The method for collecting the data entailed searching the database for international construction joint ventures on Eswatini's construction industry regulators website to establish all the international construction joint ventures that have

been completed and those that were still ongoing in the Kingdom of Eswatini. Contact details in the form of email addresses were available for all ICJV on the regulator's website. An introductory email was sent to the JV local partner's contact person to introduce myself and my study and to find employees that had worked on the international joint venture organisation. The email detailed the nature of the research, a request to schedule interviews with employees that had worked or were working on ICJVs, and the benefit of study was also explained. The interviews were conducted once the ethical clearance was granted by the GIBS Ethical Clearance Committee. (As seen in Appendix B). One pilot interview test was conducted, and all consent forms were signed and received before proceeding with the interviews. (The consent form sample as seen in Appendix C)

The purpose of the pilot interview was to ensure that the questions were clear and that they would be understood by the participants. This gave the researcher an opportunity to modify the questions to give clarity to unambiguous questions as well as to simplify complex questions. The pilot interview did not form part of the 13 final interviews. The interviews were conducted virtually and physically, and the languages used were English as well as the local language Siswati. The interviews conducted in the local language were translated into English for purposes of the research. The researcher made use of the audio recording functionality on the online meeting platform to support note taking and a recorder for the interviews conducted physically. The reason for the use of the audio recording was to accurately transcribe or capture the words of the participants and not to lose valuable data during the interview process. Additionally, the participants were anonymised.

#### **4.10. Research Limitations**

The qualitative research was prone to the biases, interpretations, and beliefs of the investigator and this had the potential of impacting the results. Purposive sampling may introduce sampling errors as the researcher is using their personal assessment to actively make choices on participants who will be best suited to aid in responding to the research questions (Saunders & Lewis, 2018). To lessen the limitation in relation to the sample size, the researcher achieved saturation when no new information was being heard from the participants. Furthermore, the researcher peer reviewed the identified participants of the study. The sample size was restricted to ICJV that have operated in Eswatini, meaning

that the findings of the study cannot be generalised to other countries and other types of strategic alliances.

#### **4.11. Research Quality Control**

There is a high risk of research bias in qualitative research (Roulston, 2010). To mitigate the bias and further improve the quality of study based on dependability and transferability the below quality processes were employed during the research.

- The literature review was based on peer-reviewed journal articles of high quality from the recent past 5 years.
- An interview guide was constructed based on the literature that was reviewed and the research questions and was used when conducting the interviews. This was done to create consistency as all interviewees were asked questions which were the same with only minor variations. The reason for the process taken was to minimise the bias of the researcher and further standardize the collection of data.
- Pilot testing was conducted through one pilot interview.
- Interviews were conducted through online meeting platforms namely Zoom and Microsoft Teams.
- Word for word transcription was done.
- The collected data was triangulated through acquiring several perspectives and this was done by conducting interviews with employees from the foreign contractor and employees from the local contractor. Furthermore, the participants have worked on different ICJVs, namely 5 different ICJVs.
- Reflection was done by the researcher throughout the process of collecting as well as analysing the data.

#### **4.12. Research limitations**

Limitations of the study were namely that.

- The researcher was a novice researcher, this being the first time that the researcher conducted interviews. Due to the entry level research capabilities, the quality of the data collection process may have been compromised.

- A fair balance between the foreign contractor employees and local contractor employees was not achieved. The researcher had challenges in securing foreign contractor employees that had worked on ICJV in Eswatini. Due to project completion all expatriate employees had returned to their parent organisations which were based outside the borders of Eswatini. The four expatriate employees were however open and provided rich insights on KT behaviours in an ICJV.
- The use of purposive sampling presented researcher bias as the sample was based on the researchers' judgements.
- There was a possibility of participant bias as the participants may have responded based on what they thought the researcher might want to hear.
- The sample size of 13 is not sufficient to generalise the study to all types of ICJV operating in other developing countries as the study was based on one geographical location.

The following chapter will detail the research findings.



## **Chapter 5**

### **5.1. Introduction**

A data gathering and analysis process was conducted and chapter five details the findings of the analysis. The data was collected through interviews which were semi structured. Due to the exploratory nature of the research, an inductive method of data analysis was used. The analysis process involved being immersed in the data. The transcripts were read and reviewed several times, through this iterative process familiarity with the data was established. Codes were generated from the text. The codes were grouped into categories and the categories were then arranged into themes. The themes were used to respond to the research questions, this was done by linking the themes to the research questions as detailed in chapter three. According to Kennedy (2018) inductive analysis is a process wherein the researcher intimately interacts with the data, this process results in the emergence of concepts and theories.

### **5.2. Sample description**

The participants data are detailed in Table 3 below. A total of 13 interviews were conducted resulting in 13 transcripts being coded. Each participant was allocated a special code to maintain anonymity and fictitious names were used to substitute people and company names that the participants referred to during the interviews. For purposes of gaining comprehensive insights on the study of KT in construction joint ventures in Eswatini, the researcher explored the views of employees that worked for a local contractor and employees that worked for a foreign contractor. To maintain relevancy, employees who worked for a JV prior to 2019 were excluded. Participants who formed part of the sample had worked on a JV in Eswatini during the past five-year period. Due to the five-year limitation, only four participants were secured to form part of the foreign contractors' sample. Most employees who worked for a foreign contractor were no longer based in Eswatini due to project completion. In addition to snowballing, the researcher used the public database belonging to Eswatini's construction regulatory authority to obtain contact details, despite the efforts that were made it was difficult to secure a fair sample size for employees who worked for a foreigner contractor. The sample size is therefore inclusive of eight local contractor participants, four foreign contractor participants and one participant from the construction industry regulatory body in Eswatini. The interviews were conducted physically and virtually.

The identification of participants was done through purposive sampling. The criteria employed was management employees who have worked on joint ventures in Eswatini with experience not less than one year on the JV. A sample inclusive of employees from local and foreign contractors.

All participants work in the construction industry and most participants have worked on a joint venture apart from one participant. Furthermore, majority of the roles held by the participants were senior management roles and middle management roles apart from one. The only slight variation in the sample is that nine participants were local Swazis and the four were non-Swazis (foreign contractors). The sample was therefore homogeneous due to relevancy being key to this study.

Table 3: Research Participants

Participant code	Role held in JV	Level of the role	Length of Interview	Contractor type
L01	Quantity surveyor	Middle management	63 minutes	Local
L02	Management Consultant	Middle Management	60 minutes	Local
L03	Project Manager	Top management	40 minutes	Local
F01	Exco/Governing member	Top management	59 minutes	Foreign
F02	Contracts Manager	Top Management	49 minutes	Foreign
F03	Project Engineer	Middle management	28 minutes	Foreign
F04	Project Manager	Top management	42 minutes	Foreign
L04	Quantity surveyor	Middle management	28 minutes	Local
L05	Site Agent	Middle management	24 minutes	Local
L06	Senior HR Officer	Middle management	34 minutes	Local
L07	Quantity surveyor	Middle management	26 minutes	Local
L08	Partner – Director	Top management	32 minutes	Local
L09	Operations Manager	Top management	23 minutes	Local (working for construction regulator)

### 5.3. Data Saturation

Data saturation was achieved at the 7<sup>th</sup> interview for research question 1 and the 6<sup>th</sup> interview for research question 2 after which the interviewer was no longer acquiring new information. A homogeneous sample allows for a deeper exploration (Saunders & Lewis, 2018).

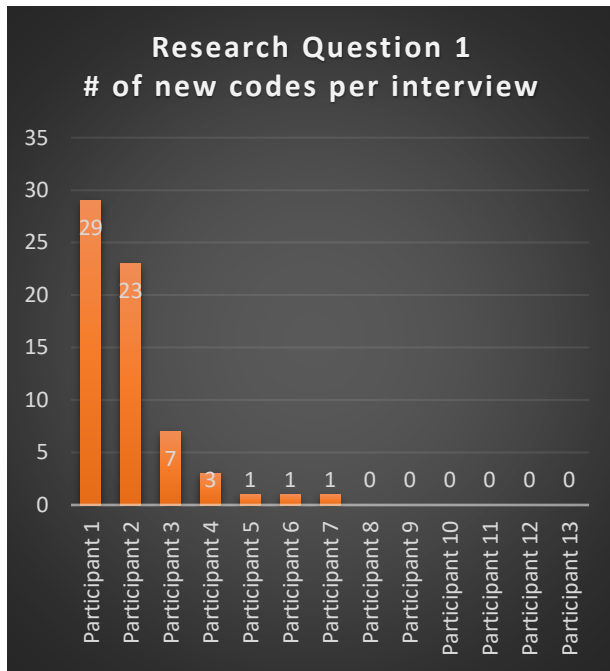


Figure 4: Data saturation –RQ1

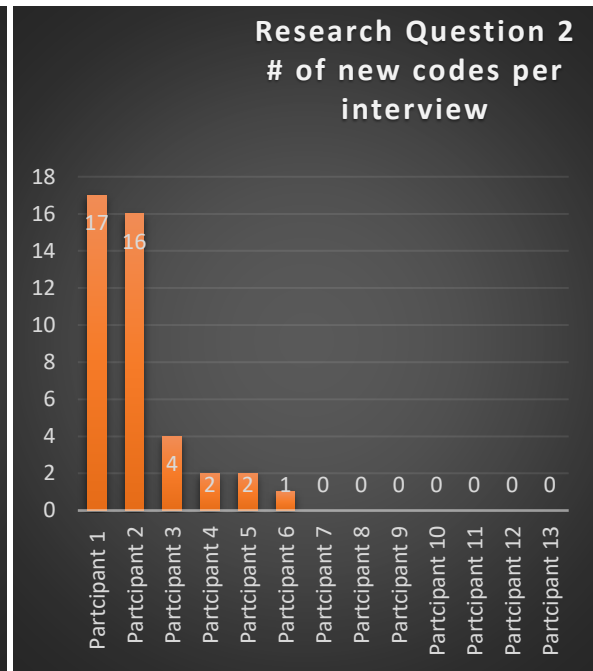


Figure 5: Data saturation - RQ 2

### 5.4. Suitability of the participants

To establish the suitability of the participants the below preliminary questions were asked.

1. What role did you hold in the joint venture organisations?
2. How many years' experience do you have working on a joint venture?
3. Could you explain to me how a JV works?

The sample criteria required participants not to only have experience on a joint venture environment, but it also required participants that deeply understood the workings of a joint venture. At least one year of JV experience was required from the participants and to fulfil the in-depth understanding of the JV environment participants at the technical management level were required. Furthermore, the aim of the 3<sup>rd</sup> question was to establish the level of understanding of the operations of a JV by the participants. 13 interviews were conducted and only two participants didn't fully meet the required criteria however the two participants served to provide insights from a different perspective. One participant did not

meet the technical expertise criteria as the participant held a Senior Human Resources Officer role which is not a technical position but is rather an administrative position. The reason for having an HR practitioner that has worked on a JV as a participant was because knowledge transfer is considered as a discipline within Human Resources Management. The second participant served to provide insights from the industry's regulatory council. A sample of the responses from the participants is presented below.

#### **5.4.1. Foreign Contractors responses demonstrating their suitability.**

F02: "I've not only worked on one joint venture, but I've worked on several joint ventures both on the local and foreign side. I've worked in Zim and Eswatini projects in various roles. In Eswatini the project I worked on was at the Exco level. We had a white project manager and three contracts manager, and I was the only black contracts manager."

F04: "As a project manager most of the job that I do, I do it on a JV kind of agreement. I probably have about 10 years of experience working on JVs in different roles. In countries where we don't have presence, we normally get a local partner to work with."

F01: "In most of the joint ventures I was part of the governing board of the joint venture. So, it will typically be called a JV committee, and your representation is proportionate to your shareholding in the JV. So, on project X myself and Mr. X had a seat on the JV committee that oversaw the JV project itself."

F03: "I've got experience working on joint ventures on the local contractor and foreign contractor. I worked on company X which was on the local contractor and company Y which was for the foreign contractor. I worked as a project engineer."

#### **5.4.2. A sample of Local Contractors responses demonstrating their suitability.**

L03: "I've worked in three different joint ventures, one in South Africa where I was the site agent and two in Swaziland where I was the site agent on one and a project manager on the last one."

L07: "I've worked for the lead partner on a JV since the 1<sup>st</sup> Feb 2016 to the 15<sup>th</sup> of June 2020. The JV I worked for was composed of three partners."

L08: "I have worked on numerous joint ventures in Eswatini, I am actually in a joint venture even now. I have more than 20 years' experience going on 25, my first international JV was with the project X back in 2000."

L02: "I was on one particular JV which a foreign contractor was a part of, and I was a management consultant for 1½ years."

## **5.5. Results for the Research Questions**

### **5.5.1. The transfer of knowledge in a construction joint venture**

Before delving into the research questions, it was vital to first establish if KT takes place in a construction joint venture as the research questions were developed based on literature review hence it was imperative to gather primary data to confirm if KT takes place in an ICJV. The findings revealed that KT does indeed take place however it takes place at varying degrees. The responses or results from the participants as detailed in Table 4 varied. Seven participants agreed that KT takes place however they explicitly stated that KT is highly dependent on the relationship between the partner organisations, indicating a dependency of KT on a healthy working relationship between the partners. KT according to seven participants depends on how the individuals in the partner organisations relate and treat each other, ultimately it depends on individual behaviours on the project. While five participants confirmed that KT happens on an ICJV, two participants were of the view that KT does not necessarily happen because the JV is formed to execute a project and not primarily to transfer knowledge. The responses were based on the below interview question.

*'Is the JV environment conducive for KT between individuals and tell me why you think so?'*

Table 4: Responses from participants on ICJVs conduciveness

Yes
No
It depends on the behaviours of the JV partners

Participant Code	Participants Responses
L01	It's a yes and no answer. The environment is in such a way that the scope of the project and the duration of the project enables a person to be in a learning environment. The difficult part comes in terms of processes, there's a lot shielding of information hence if we share information, we share our processes and procedures which is what makes us competitive. The partner through us will take a portion of our market share
L02	If all partners are transparent and fair KT happens. But if a company has a specific culture or value system that does not enable KT and that company brings that attitude to the JV then it becomes a problem. My experience has been that if everything is professional and above board the KT happens especially at the technical level. You find that its easier for people to share knowledge at the lower levels than it is for your professionals at a higher level
L08	JV environments are conducive for KT provided the reason for the JV is genuine. You do find JVs where partners want to genuinely sit down and say hey this is the whole cake, and this is how we are going to cut the cake. Sometimes even the local partner themselves are not in it for the experience, they are just in it for the cash payout.
F01	Yes, it happens but then it must be a true joint venture. It must be a window dressing JV
L06	The answer is in 2 ways, yes but also no. A JV is for a limited duration of time and its very high paced and there is no time for knowledge transfer. We need enough time to train and monitor however if there is proper planning then skills transfer can happen, what I've found is that there is poor planning resulting in poor KT
F02	I've had 2 different experiences. It depends on the people on the JV and the relationship that you establish with them. In the one environment, the partner company spoke a different language, they knew each other, and I also had a different skin colour from them; that was a hostile environment.
F03	Yes, JVs are helpful with KT. I benefited from the JV but I think it was because of the contract conditions which stated that the foreign engineer will have to work with a local engineer to impart knowledge and skills. By the end of the project the local engineer could do similar work as the foreign engineer
F04	JVs are not primarily formed for KT. A JV goal is to execute the project and make as much return or profit. KT is secondary on a JV. But if the client has set up the contract to set up KT terms and conditions then KT can happen.
L07	Yes, KT happens even though at first there is a lot of holding back of information, they probably think that the company will steal the other company's systems which might hurt them for tenders in future goals
L04	If the project runs as a separate entity, an individual entity then there is KT because at the end of the day the project manager wants people to perform
L09	Because the time is limited, and the purpose is to execute the task its difficult to say it happens. Its about making money and profits, there is no time for learning.

### 5.5.2. Research Question 1

The research question aims to gain insights into the behaviours that promote knowledge transfer between individuals in partner organisations in an international construction joint venture environment. To acquire a deeper insight on the required behaviours, the participants were asked specific questions aimed at providing responses to the research question as mapped below in Table 5. Participants were requested to draw from their lived experiences in the joint venture environment and openly share their experiences. Questions 3, 9 and 2 impelled participants to share their insights on the behaviours that conducive for KT.

Table 5: RQ.1 interview questions

Research Question 1	Interview questions
What are the individual behaviours that promote tacit knowledge transfer in construction joint ventures?	Based on your experience or observations, what type of behaviours encourage knowledge transfer between individuals in the JV?
	Which behaviours do you believe local partners should display to acquire knowledge from the foreign partners at the individual level and why think so?
	Are there any underlying behaviours that create an inconducive environment for knowledge transfer and what do you believe should be done?

The participants were extremely open, and they candidly shared their personal stories and observations based on the time that they have spent working on ICJV. Through the coded transcripts, categories were developed which resulted in emerging themes. The resultant themes as detailed in Table 6 provided answers to RQ1 as presented below.

Table 6: An overview of the results to RQ. 1

Category	Responsive Participants	Total Respondents	Themes
<ul style="list-style-type: none"> <li>• Teamwork</li> <li>• Openness</li> <li>• Trust</li> <li>• Vulnerability</li> </ul>	L01, L02, L03, L04, L05, L06, L07, L08, L09 F01, F02, F03, F04	13	<b>Personal Values</b>
<ul style="list-style-type: none"> <li>• Desire to learn.</li> <li>• Listening to experts</li> <li>• Self-motivation</li> </ul>	L01, L02, L03, L04, L05, L06, L07, L08, F01, F02, F03, F04	12	<b>Intrinsically motivated</b>
<ul style="list-style-type: none"> <li>• Discipline</li> <li>• Hard work</li> <li>• Pride in one's work.</li> <li>• Professionalism</li> </ul>	L02, F01, F04, F03, F02, L03, L08, L01	8	<b>High work ethic</b>
<ul style="list-style-type: none"> <li>• Project interests</li> <li>• Shared Vision</li> </ul>	L05, L08, L02, L03, L07, F03, F02	7	<b>Common Goal</b>
<ul style="list-style-type: none"> <li>• Informal gatherings</li> <li>• Social relations</li> <li>• Diversity</li> <li>• Communication</li> </ul>	F01, F02, F03, F04, L02	5	<b>Socialising</b>

### Personal values

All 13 participants were of the view that having personal values was a critical behaviour for both knowledge seekers and knowledge donors to possess for knowledge to be successfully transmitted in the joint venture. Having a personal value system emerged as the leading theme for TKT. According to the participants a personal value system comprised of trust, honesty, transparency, openness, collaboration, and fairness. Participants agreed that the principles and values that guide human behaviour were important, and employees needed to display those personal values for KT to take place. A sample of the participants responses is provided below.

L02: "So the ability to have knowledge transfer between the partners regardless of the size of each one of the partners is if all individuals from both sides are fair and transparent."



F03: “truthful and transparent, I'm not sure if it's one and the same thing and then honesty with the other guys where I don't know, I say that this much I haven't done it. Teach me how it's done.”

L06: “We need to be candid in our dealings just to build the necessary trust, because trust is really lacking in these joint ventures. It is not there, yet we need it so much in order to do things the right way.”

L05: “The project manager sets the tone for all those employees underneath him; he sets the tone for the rest of the team. So, he sets the tone for knowledge transfer and people not hiding things from each other. You see, the project manager as the lead needs to be open about how things are done on each side then there will be a lot of interaction and teamwork. For me it stems from the main man at the top who is the project manager, what culture will he set for the JV.”

F01: “Teamwork is important, and people must understand that we are in this together to make this work. It's not about the individual here, it's about the joint venture and what's best for it. And it depends on individuals, sometimes you get a project manager that's only supporting his parent company and as an executive committee we rein him in and say hey, no, no, no, no, this is a team sport. So that's something that you must actively guard against.”

### **Intrinsically motivated**

12 of the 13 interviewees agreed that being motivated intrinsically is a key behaviour for TKT. It emerged from the data as a leading TKT behaviour. According to the respondents, being intrinsically motivated comprises of a willingness to learn, being able to listen to knowledge donors and having self-motivation. The word 'learn' appeared 108 times in the data, the emphasis on the word learn indicated that a willingness to learn was held at a high regard by all the participants and that it was a key TKT enabler. The ability to listen was also emphasized by the interviewees demonstrating its importance as an enabler of

TKT. A sample of the participants sentiments is shared below on their views on intrinsic motivation being a key behaviour for KT.

L01: "We also need to encourage people to be intrinsically motivated. Like the individuals must want to have this experience for themselves because some of these things are very implicit in terms of knowledge transfer, they're very implicit. So that motivation to want to know, to get that skill must come from the person."

L03: "the biggest thing is attitude. If your attitude is right and you want to be at that level, you need to demonstrate that and say this is who I am, and this is where I want to be. please give me work, you know, show me the ropes, you must want it."

L04: "For me, I learn by asking, I learn by getting involved. So, if someone wants to learn, I think they need to come every day with as many questions relevant to what they want to learn on that specific day, but also not being afraid to get dirty." Most locals, they think there is something wrong with getting dirty. They just want to be bosses without hard work, and they don't want to learn, unfortunately, when you sit in the air-conditioned offices you don't learn anything. No one is going to push you to learn, you as a person wanting to learn must push yourself."

## **Work Ethic**

Having a strong work ethic was a theme that was shared by most of the participants who strongly believed that hard work and discipline were strong TKT enabling behaviours that needed to be displayed on the JV. Based on the collected data, a strong work ethic included being disciplined, hard work, professionalism, showing up on work on time and just the sheer desire to get the work done. Four local contractor employees while three foreign contractor employees strongly believed that having work ethic was a behaviour that encourages the desire to transfer knowledge to colleagues. When one employee views another employee's strong work ethic it inspires KT. Some of the participants had the below to share about work ethic.

L02: “the other thing that I noted is just the work ethic as well. If you tell foreign contractors that work starts at 7am at 7am they are already working. While your average Swazi is still coming to work at 7am. We really are a lazy nation. We need a strong work ethic culture and to take things more seriously if we want to gain knowledge and learn. There are things that we do as a people that are just anti-business and it's part of our socialization.”

L04: “At the end of the day the project manager doesn't really care what mother company you belong to as an individual. What's important to the project manager is people must work hard and perform. Hard work and results are the currency on site.”

F01: “Really, it's about discipline and the attitude that you show up with. You must be willing to do the tough work and your work must also add value.”

### **Common Goal**

Seven participants agreed that sharing a common goal was a much-needed KT behaviour. The participants indicated that when everyone is clear about the goal and working towards a similar goal it encourages KT because everyone is pulling towards one direction. This view was mostly held by the local contractor employees with only one foreign contractor employee sharing that having the same vision was conducive for knowledge transfer. One participant shared that after realising the importance of them sharing a common goal, they started to share information. This was the experience of participant L07 which is an experience that demonstrated a change of behaviour once the employees realised that they shared the same goal. A sample of the participants had the below to share about sharing a common goal.

L07: “it was difficult at first to give out the information because of the trust issue but as days went by, we started to understand that we here for the same purpose and cause. So, the information we had, we had to share, we had no choice because we were all working towards one aim that was finishing the project successfully.”

F03: “both parties or the contracting parties have to fulfil especially at the management level, they have to fulfil their contractual obligations. If the goal is clear on both sides which is, we are all here to complete this project then sharing can be achieved.”

One participant shared that pulling at different directions negatively impacted the construction performance and what was key therefore was for all parties to be clear about moving towards the same goal. The participant’s statement revealed that when employees do not share or have a common goal it becomes a barrier to tacit knowledge transfer. His sentiments are shared below.

L05: “when some leadership members are pulling at one direction and others at a different direction and there is flexing of muscles at the leadership level then knowledge sharing never happens, and it affects the performance of the site. Everyone on the JV needs to be moving in one direction and this includes the leadership, middle management and even the artisans at the bottom. If we are clear and one on the goal, we will reach our targets on time and make the client happy.”

One of the local respondents shared their in-depth experience on how the power of sharing a common interest and everyone being clear about that common interest enabled KT on the site that she was exposed to. There were valuable learnings that were gained by the participant when the foreign contractor recognised that there were all there serving similar interests. Her sentiments are detailed below.

L02: “I must say that when I worked on this one JV, company X started with an attitude. We were finishing off project X and I was working as the project manager there, coordinating everything. But when they started opening up and realized that it was all in the interest of the project and that we were also there with the same interest and that we weren’t trying to do any other thing but work on the projects, my God, we learnt so much from the Italians, they were so knowledgeable and so professional. The site became so joyful.”

## **Socialising**

Half of the participants felt that having social events was a great way of bringing the team together so that they can relax and put their guard down to get to know each other outside their working environment. They agreed that socialisation had the effect of unifying and creating one team and that this then improved KT as they become more open in the working environment after getting to know each other better at an informal gathering or social event. One participant however felt that social events served no benefit. A sample of the participants who agreed on social interactions being key to KT shared the below sentiments.

L02: “Engineers are not very social people. They are very technically logical. Somebody that needs to help set up that kind of thing for them to socialize and it generally takes much longer for them to warm up at a social level with each other.”

F04: “Most of the time I always find it in cases where I've met people, maybe we've had a drink and we know a little bit about each other, so we normally then work better together moving forward than to only know someone from a professional environment where you haven't seen them sharing a joke.”

F01: “So the team on the site must at least once a month have a social event. Have a joint venture braai and the executives must stay for the braai and be a part of it and we then get to know the problems.”

### **5.5.3. Research Question 2**

The aim of the research question was to identify interventions as provided that can be consolidated to design a conceptual model to reduce KT barriers and encourage KT in international project-based JVs. The main aim of the conceptual framework is for it to be used by joint ventures partners to drive KT and achieve overall business performance to remain competitive in an everchanging business landscape. Participants were requested to share their past experiences and their thoughts on the best intervention methods that they believed could assist in stimulating knowledge transfer in construction joint ventures.

To acquire deeper insights on research question 2, the participants were asked specific questions aimed at providing responses to the research question as mapped in Table 7 below.

Table 7: RQ.2 interview questions

Research Question 2	Interview questions
What interventions should be put in place to ensure successful tacit knowledge transfer in an international construction joint venture?	What interventions have been used to assist with KT in JV projects? And have these been effective.
	What do you believe should be done to promote KT at the individual level and why?

Rich insightful data was gathered from the respondents on approaches that can be employed in project based joint venture firms to boost KT. Two participants however were of the view that a construction joint venture was a fast-paced environment and that very little can be done to transfer knowledge as the main purpose of an ICJV is not to transfer knowledge, but a JV is created to execute a particular project. These participants confirmed the KT barriers that have been extensively researched. Research question two findings are presented below in Table 8 wherein themes emerged as a result of the coding and categorisation process.

Table 8: An overview of the results to RQ.2

Category	Responsive Participants	Total respondents	Themes
JV requirements/clauses Bidding requirements	F01, L01, L02, F04, F03, L05, L03, L09, L08, L06	10	JV Agreements
Periodic reporting Efficient processes Monitoring and evaluation	F01, L01, L02, F03, L07, L04, L05, L03, L06	9	Processes and systems
Informal gatherings Social employee interactions	F01, F04, F02, F03, L03, L04, L02	7	Socialising
Open management discussion Supportive management decision making	F01, L01, F03, L06, L05, L04	6	Leadership support
Employee pairing Understudy	F01, L01, L02, F03, L03	5	Mentorship
Bidding points Reward points	L01, L05, L03, L05	4	Incentives

Notwithstanding that most of the respondents believed that there are interventions that can be put in place to drive KT on project based joint venture firms, there were some participants that held the view that joint ventures by design are not formed for knowledge transfer. The views shared by the participants presented themselves as barriers to KT in project based joint ventures. The participants shared factors that hinder the transfer of knowledge otherwise known as barriers to knowledge transfer. The participants shared that joint ventures were high paced environments that are characterised by time pressures leaving little or no time for KT and that ultimately a JV is about achieving the bottom line.

F02: "The JV is a high paced environment hence there is no time to ensure KT. Its more about hard skills than soft skills."

Whilst the other 2 participants agreed that a JV should not be concerned with developing KT interventions, they however confirmed that there least that can be done to promote knowledge transfer in JVs is for KT terms to be included in JV agreements."

L09: "The purpose of a JV is not for KT, it's about money."

L08: "an international construction joint venture is cutthroat and there is absolutely no time for knowledge transfer and maybe the only thing that can help is to just include those terms in the JV agreement".

### **Joint Venture Agreements**

Majority of the participants, which is 10 out of the 13 interviews that were conducted were of the view that for knowledge transfer to take place in construction joint venture KT terms need to be included in the joint venture bid and joint venture agreement and once this inclusion has been done then KT can be taken seriously on a joint venture. The participants agreed that for a deliverable to be taken seriously it must be included in a contractual agreement and therefore for KT to be recognised and to ensure that it takes place the starting point would be to include KT clauses in joint venture. Joint venture

agreements emerged as one of the strongest themes for research question 2. Below is a sample of the views shared by the respondents.

F03: "I benefited on one JV because knowledge transfer was part of the JV contract conditions, there was an agreement between the two contracting parties that your engineers from Company X will have to work with a local engineer and impart knowledge and skills to the local engineer. By the end of the project, the local engineer should be able to do similar works as the expatriate."

L06: "If knowledge transfer can be part of the JV agreement because then it will be easy to trace the progress. If it can be part of the JV agreement, then it will be easier for it to be part of the monthly progress meetings."

F04: "If the client is driving this kind of initiative to say they want to see this knowledge transfer happening, they must put knowledge transfer measures in the joint venture agreement. If the client is very clear on how the skill transfer looks like and who do they need to see in this meeting representing this JV then it must be detailed in the JV contract."

L03: "If it can be stipulated in the contract bid that there needs to be skills transfer and outline how the skills transfer should be or at what level the skill transfers should be at, then we would report on that."

### **Processes and systems**

Following the coding and categorization of the data, processes and systems emerged as the second strongest theme with 9 of the participants indicating that for KT to be successful, properly functioning reporting processes and systems must be put in place. The participants shared that by putting in place processes and systems it provides a platform for knowledge transfer to be reported on and through this procedure, knowledge transfer can be monitored and evaluated. Through monitoring and evaluation according to the participants, the joint venture will have information on challenges relating to KT, how KT initiatives are progressing and what should be done to mitigate any prevalent KT



barriers on the joint venture. The participants held that through the reporting processes and systems they gain the required knowledge, processes and systems enable the flow of knowledge on the joint venture.

L07: “probably what helped me when I started out was, number one, I would say when I started working as a consultant on one joint venture, they would give me an opportunity to attend monthly meetings to do presentations such as cost reports for the JV and through that process I gained a lot of knowledge so I think that would work.”

L06: “if knowledge transfer can be part of the JV agreement because then it will be easy to trace the progress. If it can be part of the JV agreement, then it will be easier for it to be part of the monthly progress meetings.”

L03: “knowledge transfer to be truly honest is a by the way thing, there is no one monitoring it or even reporting on it, if someone was responsible for monitoring the progress of knowledge transfer then maybe it can be taken seriously.”

L06: “There is something missing on knowledge and skills transfer I guess from our side. We really need to monitor just to see if we are actually transferring the skills to our locals or not? Because it's like we bring in our foreign employees, but then we're not actually on the ground monitoring if it is happening and how much of it is happening.”

L01: “it just needs to be monitored and evaluated. The issues are that it is just not happening and when you don't monitor and evaluate such processes, you never really know who's gaining what knowledge from where and all of that.”

## **Socialising**

Seven of 13 participants agreed that socialising was central to creating an environment that was conducive for KT. They agreed that it was one of the interventions that was important to promote KT at the individual level because it served the purpose of bringing

people together outside the formal structure of a joint venture. The participants shared that the social events provided an opportunity for the team to get to know each other and once that happens people loosen up and they start sharing information when they get back to work. One participant however, based on his personal experience was of the view that social events failed to achieve what it was intended to achieve. The participant's view is expressed below.

L07: "In our joint venture we would run away from social events because we had white people and then us blacks, when coming to social gatherings, the differences were noticeable. Let's say we had a year-end party. We would have a year-end party for all of us, and then they would again organize another party of their own. We tried to do it at first but as time went by, I realised that there was segregation of some sort."

The other participants however believed social gatherings as being important for achieving KT because they helped in breaking down underlying barriers which then improved social relations and created a unified team. Social interactions and social gatherings gave rise to the socialising theme.

L04: "Social gatherings like braais does the most important thing, what it does is it pulls us in one direction, it takes away this thing of coming from different entities, and makes you realize you are working for one entity. That one entity is the JV, you see."

L03: "The social parties do help; I think those ones are quite good. You know, they do help bring the team together and even a guy who was thinking I don't want to share information with this one after having 2, 3, 4 braais and you see that you know what, this guy is not going to take my job. Because I think that's the other thing, people always have the mentality that if I share information and then I will, I won't have work tomorrow. But it does help that getting together once a month or once in two weeks, you know, it loosens them up."

### **Leadership support**

Leadership support received a fair number of responses wherein participants agreed that leadership plays a key role in the transfer of knowledge, the visibility and active role played

by the leadership on the project is a key driver for KT. Six of the 13 participants emphasised the need for leadership support hence it emerged as a theme. The participants were of the view that the leadership team should play an active role in ensuring that challenges pertaining to knowledge transfer are openly addressed and that the knowledge transfer behaviours must first be displayed at the top. According to the participants the top management must set the tone themselves by ensuring that they drive a culture of KT.

L01: “Joint venture challenges are not openly discussed at the executive level, and it needs to be discussed at the level so that they can play an active and visible role in driving knowledge transfer on site. It's at the middle and senior level that you find that that's where all the information hogging is happening. At the lower levels knowledge transfer generally happens. So yeah, those open discussion at the top need to happen because it's a frustration to work in an environment like that and they need to do something to encourage knowledge sharing and knowledge transfer.”

L04: “So what I'm trying to say is the project manager, obviously must come with a culture that is different, a culture that forces knowledge transfer, he has to align the different cultures towards knowledge transfer. I'd rather say it's really about the individual project manager who starts pushing knowledge transfer at the top.”

F03: “There was once a fight about knowledge sharing on site so then the contracting parties were brought in one room by the project manager because it was escalated to the project manager by the one guy. The project manager then specifically made it clear to the one guy that the reason why you are on a JV is for you to do skills transfer, so with this guy complaining it means you are not doing your job of transferring skills. You must start doing that, otherwise you won't be considered for future joint venture jobs with Company X.”

## **Mentorship**

Mentorship emerged as a theme amongst five participants wherein sentiments were shared that this could serve as an important method of transferring knowledge in project-based JVs that are fraught with complexities. The views that were expressed were that learning would take place at a faster rate and this would be extremely helpful in an

environment where there is very little room for making errors. The participants held that mentoring through supervision or employee pairing would help aid knowledge transfer as there would be a top-down knowledge flow. Mentoring would allow for the vertical flow of knowledge from the donor to the seeker. The participants that indicated mentorship as key had the below to say.

L02: It's transfer and mentoring through supervision so to speak, takes place on site where you have a senior person working with one or two junior guys. For instance, a senior QS from the lead partner will be paired with one or two junior quantity surveyors from the minority JV partner."

L03: "Like I said earlier they need to say alright for every role of a QS, a senior QS will be from Company X and our QS or Junior QS must come from Company B. If the site agent is from Company A, the sub site agent must come from Company D, you know. And then there will be skills transfer because now you are working directly with a senior, you know who will share that information with you, if this is how we do things and then you get to learn."

## **Incentives**

Not the strongest theme however incentives emerged as a theme with 4 participants who believed a point reward system given to JV partners for knowledge transfer efforts could work as a method to encourage KT to take place in joint ventures. The participants shared different types of incentives that they believed would encourage KT in joint ventures, namely acquiring bidding points during the bidding process for proposing how KT will be executed in the JV should the JV entity be awarded the tender and awarding of points once the JV has shown evidence that KT has taken place on the JV which then results in the reduction of the annual subscription fees. The participants felt that the introduction of these incentives would play a role in encouraging JV partners to promote knowledge transfer. The participants who agreed on the importance of introducing incentives for KT had the below to share.

L01: “In terms of the regulating bodies they need to use knowledge transfer as a point system for their ratings, your renewal and all of that must not just depend on the number of projects you did. It must include things on how many people have you trained? Where's the evidence that they have been upskilled? You get 10 points or CPD points and those points can go towards something like reducing annual subscription and registration fees.”

L05: “The only way you can force contractors to do something is 1, to compensate them and compensate them such as a points system like CPD points for transferring skills, if no knowledge transfer has taken place the certificate for signing must show a zero then the client must hold payment of the completion certificates by not signing it until they can show how they will improve KT for the next completion phase that will need to be signed. That’s the only way contractors can do whatever they are told to do.”

L03: “there must be scoring of points when you're submitting a bid to say this is how we are going to do skills transfer and when they evaluate your bid, you get points with your proposal and then that proposal, because the client will always be there, and they will always check; are we achieving what you said you will do? If you submit a bid and you don't have a plan on how you're going to do a skills transfer, we put that thing on the side.

Secondary themes as detailed in Table 9 emerged, however they didn’t receive enough responses for them to be detailed as strong or main emergent themes. A presentation of the results has been displayed as the themes require a brief discussion. Below are some of the supporting themes that emerged which received 2 respondents each.

Table 9: Other emergent themes

Category	Responsive Participants	Total respondents	Themes
• Employee rotation	L01, F04	2	<b>Job Rotation</b>
• Apparel with JV logo	F01, F03	2	<b>Artefacts</b>
• Information control	F01, L01	2	<b>Protection of information</b>

## **Job Rotation**

Two participants agreed that job rotations were interventions that should be introduced to promote tacit knowledge transfer in joint ventures. According to the participants the rotations would allow the employees to get exposure in other fields within the joint venture, it would create more learning opportunities of different skills and not just be limited to one specific field. Job rotations would broaden the employees scope resulting in deeper knowledge transfer. The two participants had the below to share.

L01: "I think one thing that should happen in JV projects is job rotations. People must not stay in one job for too long. Whether I'm an engineer, quantity surveyor, procurement, I should be rotated around, and that's one of the ways that you can get those skills transferred."

F04: "we want to rotate them to work in different departments in the joint venture when you do that you will start seeing progress because the more they practice, the more they do, the more the skill transfer happens and they learn different skills and not just one area in the joint venture."

## **Artefacts**

The two participants who shared the importance of joint venture logos and joint venture names on clothing in the joint venture site were both foreign contractor employees. The participants shared that creating site clothing with the new JV logo or name was an effort made by joint ventures to embed in all employees on the JV that they were one new team and that they were no longer their parent companies when they were on the joint venture. The participants felt that through the creation of one team it reduced KT barriers and encouraged knowledge sharing behaviours. The participants shared the below views.

F01: "So that's why you will see the first thing that a construction company does when they start a joint venture is they make clothes with a joint venture logo on it, and they give it to everybody. So, when you work here, you wear JV clothes. This forces people to remember that we are no longer our parent companies, but we are a new team, we are one JV team."

F03: “So in terms of regalia, we encourage them to put on work suits written in the JV name. So, we know that the employees are working for the JV. So that's what we encourage not to say Company X come with your PPE and Company Y come with your PPE. We encourage them to have branded PPE that shows the name of the JV, and this create the new JV.”

### **Information Protection**

The participants agreed that if there were ways in ensuring that information that is shared in a joint venture stays in the JV and is not distributed externally then that would aid in the knowledge transfer process. JV employees are reluctant to share information in a joint venture as the information is then distributed to external individuals. The hoarding of information is sometimes done to control the JV information. Non-disclosure agreements are signed however those only aid in terms of discouraging the employees from sharing the information. Introducing ways to control JV information is an intervention that would reduce the KT barrier of information hoarding.

F01: “Non-disclosure agreements don't effectively work, but what they do is they discourage the willy nilly distribution of information and people just not protecting information. So, the only thing NDAs do is they remind some people, listen, we don't really want you to share this information and if you do and if you push me, I'll shoot at you.”

L01: “there's no copyright legislation. So you find that a document that was made at one construction firm is now being used at another construction firm and you can't really fight it because there's no legislation that you can use to fight the theft or duplication of documents and in Swaziland it takes forever to enforce contracts so something like that just seems like a lot of admin so the best way to control that is to not share information.”

### **Conclusion**

In closing, the results that were presented in this chapter revealed key insights on the behaviours that can be exhibited by all parties on the joint venture in order to gain knowledge from knowledge donors so as to increase performance and become

competitive in the business environment. the findings revealed that KT promoting behaviours are anchored on building a healthy working relationship among all the partners in the JV as knowledge transfer requires the interactions between two or more people for it to take place. Themes that emerged under research question one was personal values, being intrinsically motivated, high work ethic, sharing a common cause and socialising. The participants agreed that these were KT promoting behaviours.

Research question two on the other revealed several themes, the main themes were JV agreements, mentorship, leadership support, incentives, socialising and processes and systems. These themes reflected the interventions methods that would reduce the KT barriers. Furthermore, these interventions would promote the transfer of knowledge in construction joint ventures. Secondary themes that emerged under research question 2 were job rotations, artefacts, and information protection. Based on the literature review conducted in chapter two, some of the results found in research questions one and two were anticipated while some of the findings were unexpected.

The upcoming chapter discusses the findings in detail by comparing the findings to the literature that was reviewed in chapter two.



## **Chapter 6**

### **6.1. Introduction**

The results of the findings were presented in the preceding chapter, chapter 5, and the process through which the results were collected is detailed in chapter 4. In this chapter, the research findings which were based on the behaviours that promote KT in ICJV in developing countries as well interventions that can be put in place to enable knowledge transfer in construction joint ventures are discussed in detail.

A comparison and contrast exercise was conducted and the results were assessed against the literature as detailed in chapter 2. The results of the study are unpacked in this chapter. The findings contribute to an improved and more detailed understanding of the behaviours required to promote KT and to identify the interventions needed to create a favourable environment for KT in an international construction joint venture. An analysis of the data was executed in accordance with the two research questions detailed in chapter three. The analysis has been structured according to the research questions wherein chapter five results have been discussed in-depth.

### **6.2. Results discussion**

#### **6.2.1. Research Question 1**

The identification of TKT promoting behaviours in an international construction joint venture was sought in research question one. The results as detailed in Table 6 on page 41 in chapter 5 were classified according to the number of responses received, starting with the highest ranked theme. Some of the findings were consistent with the reviewed literature while other findings were inconsistent with the literature. The themes for discussion are presented below.

#### **Personal values**

The study found that all 13 of the participants placed the highest emphasis on personal values as a key driver of KT in an ICJV. Personal values comprised of the values of trust, openness, dependability, collaboration, transparency, and fairness. Based on the interviewees lived experiences, these values resulted in knowledge sharing behaviour which then resulted in knowledge transfer. One of the key values, namely trust was

mentioned 34 times in the interview data under research question one indicating the significance of this value in promoting knowledge transfer.

Narteh (2008) argues that when trust is achieved in inter-organisations it results in open, reliable, and collaborative behaviours. The findings were consistent with literature which revealed that the values of trust, consistency and teamwork were key values for KT. Based on the literature review, KT is ineffective when there is no or low trust between the partners (Minbaeva et al., 2018). Trust is central in social relationships which leads to several outcomes which include the values of transparency, openness, and collaboration (Ni et al., 2018). Both foreign contractor employees and local contractor employees perceived personal values as a key ingredient for successfully transferring knowledge and that if trust was present the flow of knowledge and ease of transferring knowledge would be achieved. The findings were consistent with the findings by Larsson et al. (1998) which stated that the level of collaboration, transparency, trust, and openness determines the collaborative knowledge sharing behaviours in strategic partnerships. The presence of the values of vulnerability, trust and dependability creates confidence between the teams and leads to an improved quality of work through knowledge transfer (Ni et al., 2018).

### **Intrinsically motivated**

The study found that of the 13 participants 12 indicated that being intrinsically motivated is a central behaviour for the successful execution of knowledge transfer. Being intrinsically motivated based on the views shared by the participants included an innate desire to learn, the desire to want to know the work for yourself and wanting to achieve targets. There was a clear consistency in the participants responses in that they shared that the willingness to learn must come from the individual that wants to gain knowledge. It was further stated that a willingness to learn is seen through behaviours such as listening to experts, asking the relevant questions, being proactive in doing the actual work while possessing the mental note that work is hard, and nothing comes easy.

The literature on knowledge sharing describes motivation as a desire that drives a human being to act in a particular way (Farooq, 2018). The available literature on intrinsic motivation refers to knowledge sharing it does not make explicit reference to knowledge

transfer it has been shown however that there is a strong relationship between knowledge sharing and knowledge transfer. As stated by Fasbender and Gerpott (2022), the precondition for knowledge transfer is knowledge sharing however knowledge sharing does not guarantee knowledge transfer taking place. According to Veeravalli et al. (2020) employees must intrinsically want to learn and by doing so knowledge sharing which may potentially lead to knowledge transfer may take place.

### **Work ethic**

The study found that having a strong work ethic is a key behaviour for knowledge transfer. Based on the literature review, the finding was unexpected. Rois- Ballesteros and Fuerst found that enabling behaviours of knowledge transfer to be socialisation, motivation, trust, and collaboration. According to the participants, discipline, hard work, professionalism, and taking pride in one's work were perceived as fundamental behaviours that drive or promote knowledge transfer.

A strong work ethic as a behaviour that promotes knowledge transfer is under-researched in the knowledge transfer discipline. Furthermore, when assessing the literature on the barriers of knowledge transfer which is an area that has been extensively researched, discipline and work ethic are not identified as barriers. At the employee level, behaviours that limit knowledge transfer are poor trust and a lack of socialisation while other factors that impede the KT include time, complexity of the project and a lack of incentives (Rois – Ballesteros and Fuerst, 2022).

### **Socialising**

The research found that socialising through informal sessions or during social events was paramount for KT. The participants confirmed that socialising was needed as it broke down barriers such as cultural differences and mistrust and improved relations between partner employees. The participants found that socialising helped the different teams to appreciate diversity and suspend judgements as getting to know each other outside the formal setting greatly improves relations which in turn has a positive effect on KT. These findings were in alignment with the literature which states that tacit knowledge transfer takes place through socialisation, and this is achieved through direct interactions between the

employees (Ganguly et al., 2019). The literature posits that the transfer of tacit knowledge predominately takes place informally (Ganguly et al., 2019).

One of the key distinctive methods that result in effective knowledge creation is socialisation. The respondents indicated that social interactions helped them to achieve a better working relationship and that they needed to direct effort towards becoming more interactive especially informally. Inter- organisational relationships are dependent on interactions to be successful whether those interactions are formal or informal. Central to interaction is communication. Effective communication is a key contributor to successful KT. Communication is fundamental for maintaining healthy relationships in a working environment, furthermore communication leads to the creation of trust in teams (Raunasiar et al., 2019). According to Ni et al. (2018) social interaction between project teams leads to improved communication and trust. The outcome of social interaction is that it builds a unified team.

### **Common goals**

The research findings revealed that when the vision is clear and is shared by all employees it encourages KT behaviours. The same purpose and cause for the joint venture according to the interviewees assists all those involved in the project to stop KT hindering behaviours such as not sharing information as it reminds every employee that the goal is to successfully complete the project. Differences must be put aside to further the targets that have been set. All employees at the various levels in the JV structure need to be moving towards the same direction. The role of the leadership team on emphasising the importance of a shared vision in a joint venture is paramount and according to one of the participants, the leadership team needs to be unified and not pull at different directions when it comes to communicating or displaying shared vision behaviours.

The findings were consistent with the literature however the literature around common goals as an enabler is far and few in between. According to Muhammed & Zaim (2020) it is important for leadership to clearly communicate the common goals, vision and the type of knowledge sharing behaviours that are needed and rewarded as this builds a unified team and leaders are responsible for creating this clear vision. One of the reasons for creating a JV is to achieve certain targets whether at a national or organisational level (Tetteh et al., 2022). Despite the differences in strategic drivers for developing and

developed countries, the one thing that remains is that all parties in the JV want to successfully close the project on time and at the quality standard required by the client.

Through the creation of a shared goal and making sure that it is clearly understood, it has the positive effect of reducing uncertainty and building trust amongst the teams and promoting collaboration. According to Tetteh et al. (2022) a shared common goal has the benefits of partners gaining benefits such as shared project risks and efficiencies.

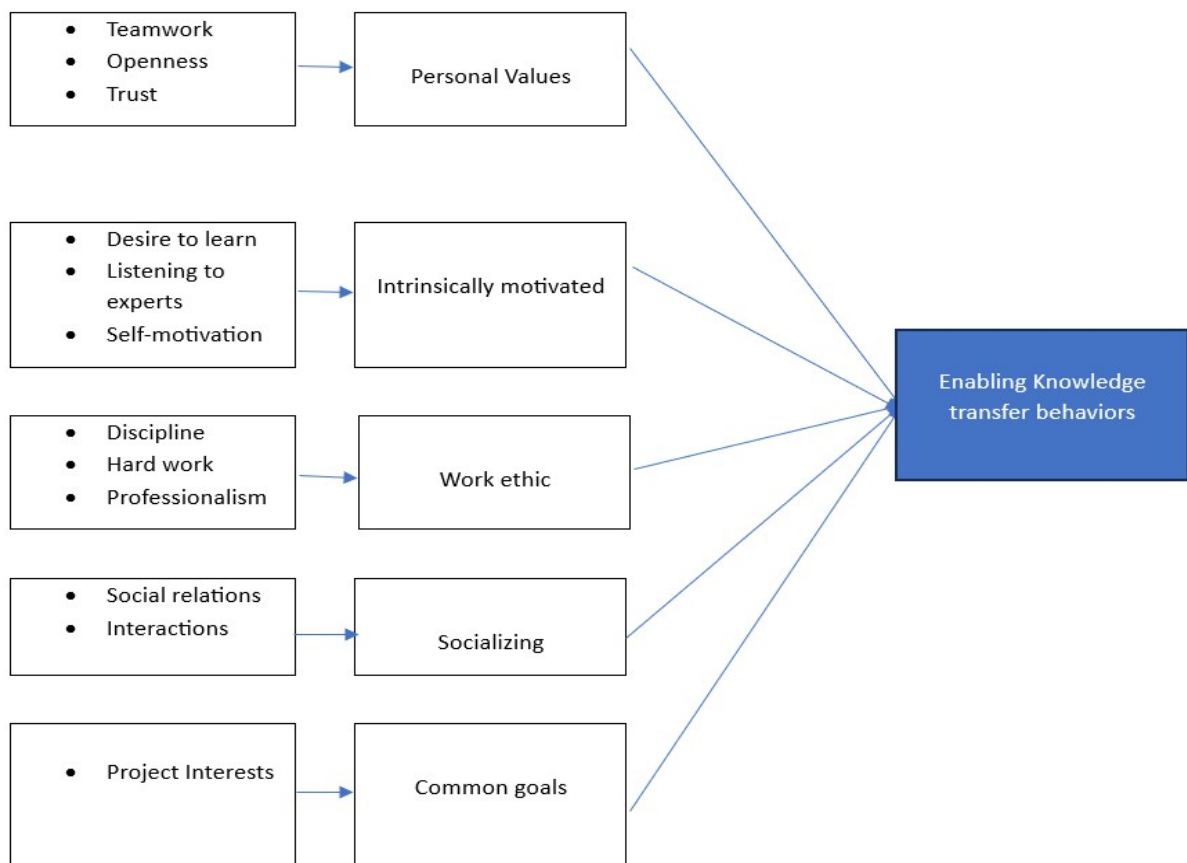


Figure 6: Research Question 1 Outcomes: Enabling Knowledge Transfer Behaviours

In closing, based on the emergent themes for research question one, the participants found that the behaviours that transfer knowledge on an international construction joint venture are personal values, work ethic, socialising, common goals and being intrinsically motivated. The levels at which these behaviours were required on site were not discussed however the participants indicated that these were the behaviours that are needed for KT to be achieved. Some of the themes that emerged such as personal values, intrinsically

motivated and socialising were consistent with the reviewed literature while the behaviours of work ethic and common goals were under-researched and required further exploration.

### **6.2.2. Research Question 2**

Tacit knowledge transfer is fraught with challenges and this research question attempted to address the barriers associated with KT by developing a knowledge transfer model to be used in an international construction joint venture. The research question sought to identify factors that result in knowledge being successfully transferred. To answer the research question, insights were gathered from the participants on what can be done in terms of putting in place interventions that can resolve the barriers that impact KT. The results have been discussed in their order of frequency of the participants responses.

### **Joint Venture Agreements**

The study found that the participants placed JV agreements as the highest form of intervention that should be put in place to ensure that knowledge transfer takes place. Participants held that the nature of a construction JV was to successfully complete the project and therefore knowledge transfer did not form part of the JV agreement. According to the participants the starting point in achieving KT on a construction JV site is for the client to make sure that KT forms part of the JV bidding requirements and for the JV contract to include clauses on KT requirements as well as an indication of how this will be achieved.

The lack of knowledge transfer JV clauses according to the participants was one of the biggest barriers to implementing KT. The participants stated that partners meet targets that are documented and if it's in a JV contract it becomes a contractual obligation which forces or places a duty on both knowledge seekers and knowledge donors to meet contractual terms. Participants further stated that all key targets that are critical are provided for in the contract therefore, for knowledge transfer to be taken seriously it must form part of the JV contract and in that way the partners can direct effort towards ensuring KT. One participant however stated that beyond just including clauses in the JV agreement about KT, it is imperative that the clauses in the JV agreement are explicit about how the partners will achieve KT and how will the steps and monitoring of KT be implemented.

Based on the literature that was reviewed in relation to the enablers of KT in strategic alliances, the findings on JV agreements were unexpected. According to Amoozad Mahdiraji et al (2022) research that has been predominately focused on high level enablers at the organisational level and not on enablers at the employee level in inter-organisations. Known enablers of successful knowledge transfer are culture, motivation, and leadership support (Rois-Ballesteros & Fuerst 2022). Literature on JV agreements as an enabler of KT was limited.

### **Processes and systems**

The study found processes and systems to be a key enabler of knowledge transfer with nine of the participants agreeing that this was an intervention that should be put in place to defeat the knowledge transfer barriers. According to the participants, periodic reporting of KT performance in site management meetings was important because when people are held accountable through a reporting structure on a specific target, they become intentional about performing it. Periodic reporting creates accountability on the members entrusted in ensuring that KT takes place, and it also gives the leadership an opportunity to address none performing areas and if KT is reported on and it is discovered that KT is ineffective because of specific barriers then the leadership can intervene to openly discuss the KT challenges and give it the attention it requires.

Participants further emphasized the importance of monitoring KT on site. Submissions were that knowledge transfer initiatives are not monitored and evaluated on the joint venture and that there is no one on the JV tasked with the responsibility for managing KT. One of the participants shared that it was a “by the way thing” and that employees on the joint venture did not care about it, if it happens then great but if it doesn’t happen then that’s not a matter to be concerned about. It was agreed that KT monitoring systems should be put in place to monitor the progress of KT and that there must be a position on the joint venture that is accountable as there is no role that is responsible for overseeing knowledge transfer. The findings were partly consistent with the literature review. Processes and systems are a theme that included periodic reporting, efficient technological processes and monitoring and evaluation. Periodic reporting, monitoring and evaluation being a key enabler for knowledge transfer was not found in the literature thus making it inconsistent with the academic literature. In terms of systems, the literature

does however state that information technology systems are an enabler of knowledge sharing and are a key solution for facilitating the sharing of information to encourage KT (Goh, 2002).

### **Socialising**

A lack of social activity or interaction in a joint venture was identified as a barrier of KT and the participants agreed that socialising is a knowledge transfer initiative that should be implemented to promote KT in joint ventures. Similar to research question two, socialising also emerged as a theme in research question one as a KT promoting behaviour. Socialising was identified as an approach of bringing employees together in a JV and thus increasing the level of interaction. The effect of increased interaction has beneficial outcomes of improving trust which then creates a unified team.

According to the participants, increased levels of trust increase KT outcomes. The participants indicated that social events such as braais and having drinks at the bar after hours had the effect of making the different teams feel as one team. It had the effect of creating an atmosphere of one JV entity instead of having an environment of different teams being forced to work together on the JV. The findings were consistent with the literature as presented in chapter two wherein the evidence showed that socialisation is key for effective knowledge creation and transfer (Rois-Ballesteros & Fuerst (2022)).

### **Leadership support**

Leadership support as a theme was identified as a key method for resolving the barriers to KT. Leadership support as an enabler for KT has been extensively researched therefore this finding was anticipated. The participants held that leadership needed to visibly support KT initiatives. As stated by the participants, the leadership team needs to provide a platform where challenges in relation to KT are openly discussed at the executive level. One of the barriers identified on joint ventures as shared by the participants was that the knowledge transfer challenges were not discussed and that the information hogging at the middle management level tends not to be resolved because such matters are never escalated upwards.



Furthermore, the interviewees agreed that for KT to be effective it needs to be driven from the top. An emphasis was made that the leadership must create a culture that forces knowledge transfer. Leadership needs to be seen enforcing behaviours that transfer knowledge and condemning behaviours that create barriers. According to the participants leadership needs to align the different cultures towards KT behaviours. Importance was placed on the visible and active role of the leadership team in dealing with KT blocking behaviours and that their visibility and action sets the tone for the JV.

One participant shared a story on an incident that took place on the JV wherein the project manager intervened on a challenge of information sharing that was happening between two employees from different partners, the employee that was failing to share information was told that he would be returned to his parent company and would not be considered for future jobs in JVs because of his behaviour. Top management participants shared that they attended social gatherings and used that informal gathering to listen to any challenges being experienced by their teams because they found that when people are interacting in a social gathering they are relaxed and more open to discuss matters that are otherwise seen as difficult to discuss in a formal forum. According to Farooq (2008) leadership support is a significant contributor to the sharing of knowledge which is a subset of knowledge transfer. The behaviours of leaders considerably impacts the behaviours of employees within an organisation. When leaders exhibit conduct that is supportive and encourages KT, employees tend to show behaviours that promote knowledge transfer (Chaman et al., 2021). The active and present role of leadership teams towards creating an organisational climate that fosters learning through knowledge transfer increases efficiencies, productivity, and overall business performance (Chaman et al., 2021).

## **Mentorship**

The study found mentorship to be an enabler of KT and that it is an intervention method that should be put in place to promote KT. Participants shared that mentoring through supervision was key on JVs and that partnering or pairing a more seasoned employee with an employee that still needs to gain knowledge to grow would enable KT. The vertical pairing would enable the knowledge donor to transfer knowledge to the knowledge seeker. Based on the participants interviews mentorship is the pairing of an expert knowledge holder with a learning or growing employee. According to the participants, the flow of

knowledge from a senior expert to a junior knowledge seeker has worked well in past joint ventures hence the participants held that putting in place a top down and bottom-up pairing to encourage KT is an approach that should be followed to ensure KT in a JV.

Based on the literature review presented in chapter two, this finding was not expected. The findings were not consistent with the literature review. According to Muhammed and Zaim (2020) tacit and explicit knowledge transfer is more easily achieved horizontally, put differently KT is more easily achieved at peer level. The reason for this is because the power distance between the individuals is less and the frequency in the interactions is higher at the same level. Mentorship as an intervention method against KT barriers on an international construction joint venture was a new and unexpected finding.

### **Incentivisation**

Participants revealed two different methods of incentivising KT, namely through the bidding process and through the subscription process. Participants agreed that to motivate contractors to do anything on KT initiatives, they need to be incentivised. One participant shared that contractors can be incentivised through the reduction of annual subscription fees. If contractors show evidence that they have been actively participating and promoting KT initiatives in the joint ventures, then the construction regulatory body through a pointing system for KT initiatives can reduce annual subscription fees.

The second incentivisation that was shared by the interviewees was an incentive through the bidding process where the client explicitly provides KT clauses in the bidding document, where contractors are expected to detail how they intend on transferring knowledge in the JV, what KT initiatives will be put in place and what role will be responsible for providing oversight for the KT initiatives. Contractors can then be awarded points in the bidding phase for their proposed KT implementation plan. In the words of the participants, to track if KT is taking place on the JV, the completion certificates must then indicate KT points and if KT has not taken place, zero points will be allocated on the certificate for KT however if KT has taken place, then the points must be appropriately allocated on the certificate. Through this method, the client which is the Government of Eswatini can be informed on the execution of KT on their infrastructure projects and it gives the client an opportunity to intervene if KT is not taking place. One participant shared that he believed that completion certificates should not be signed off by the client if there

has been no KT on the joint venture until they show evidence of how they intend on rectifying the poor KT in the JV. According to Rios- Ballesteros and Fuerst (2022) a lack of incentives is one of the factors that impedes KT. An incentives-based system is one of the most significant contributors to knowledge transfer (Farooq, 2018). It has been found that employees are willing to transfer knowledge if rewards serve to fulfil their personal interests (Nguyen et al., 2019). Incentive based systems are a method of motivating behaviours that transfer knowledge to other employees, and these can be achieved through the dual motivations of monetary and non-monetary methods (Ren et al., 2018).

Secondary themes emerged through the study namely the themes on job rotations, information protection and artefacts. Each of these themes received two responses each and these responses provided valuable insights on additional methods of mitigating knowledge transfer.

### **Job Rotations**

Two participants shared that job rotations should be a method that is introduced in JVs to fight the barriers to knowledge transfer. The participants shared that employees must be rotated and placed in different roles so that a single employee can gain a wide range of skills. The participants stated that whether an employee is a technical employee in engineering or an administrative employee in procurement all employees must be rotated across the joint venture. It was shared that employees learn by doing and through the rotation they would be exposed to different skills. When contrasted with the literature this finding was consistent with the literature review as provided in chapter two. According to Al-Zoubi et al. (2022) jobs rotations have been used as a method for transferring knowledge for decades.

### **Information protection**

The two participants shared that the reason for not sharing information was because of experiences where JV information was leaked to third parties and the information being used by third party organisations as their information and that they couldn't do much about it because Eswatini lacks copyright legislation. One interviewee shared that they enforced the signing of NDAs however those were not effective as they served only as a tool to discourage employees from sharing JV information with external parties. Based on the

literature review the finding was expected, extensive research has been conducted on the hiding of information as a barrier to knowledge transfer. According to the literature the competitive nature of partners in joint ventures results in information hoarding (Gast et al., 2019). The reason for information hoarding is a fear of losing key organisational information which could possibly result in the diffusion of their core competencies (Beeby & Booth, 2000). This fear creates barriers for knowledge transfer within alliances (Larsson et al., 1998).

### **JV artefacts**

The participants shared their experiences on using artefacts on the joint venture such as clothing, protective gear and machinery branded with the JV logo or JV name. The participants agreed that by ensuring that no employee was on site wearing clothing gear from the parent company and that they were wearing JV clothing it had the effect of creating one new joint venture team. This finding was expected as the literature states that using artefacts encourages the behaviours of cooperation and coordination amongst teams (Mariano & Awazu, 2016).

In closing, the emergent themes in research question two display the interventions that the study found to mitigate or remove the challenges associated with barriers to knowledge transfer. The main themes that emerged were JV agreements, processes and systems, socialising, leadership support, mentorship, and incentives. There were three secondary themes that also emerged that were discussed, namely job rotation, JV artefacts and information protection which some participants considered to be key in mitigating KT challenges in ICJVs. The findings of the study have brought forth a model that can be implemented in international construction joint ventures to ensure that the known barriers associated with knowledge transfer are mitigated against. The findings of this study uncovered the below interventions which should be put in place to mitigate known knowledge transfer barriers in construction joint ventures.

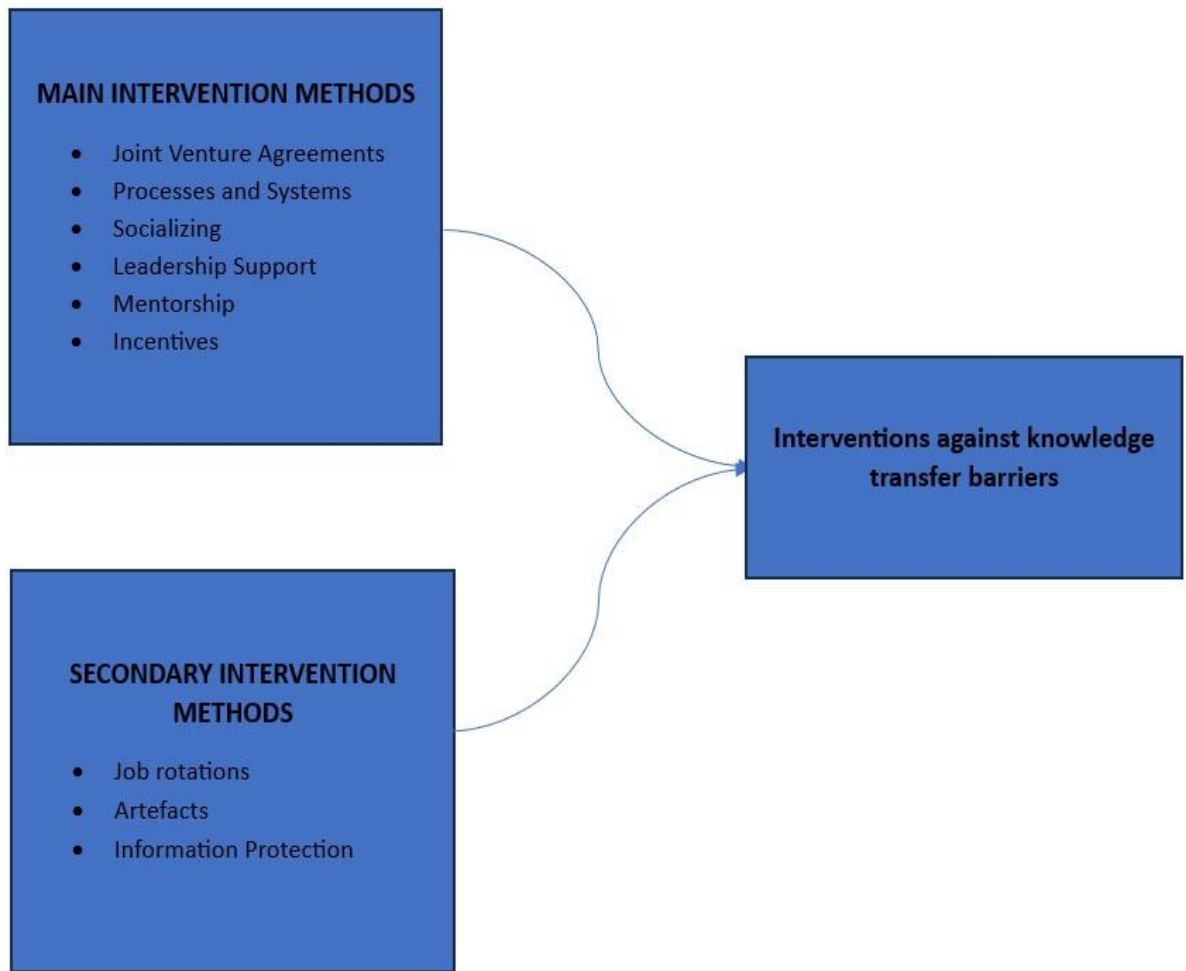


Figure 7: Concept model for resolving Knowledge Transfer barriers and encouraging KT in ICJVs

## **Chapter 7**

### **7.1. Introduction**

Barriers to tacit knowledge transfer in joint ventures have been extensively researched however individual behaviours that promote knowledge transfer have been under-researched causing a research gap on employee behaviours that promote effective tacit knowledge transfer in strategic alliances (Qui & Haugland, 2019). Knowledge is embedded in the minds of individuals and therefore individuals are a primary source of organisational success (Zahoor et al., 2022). Even though it is well known, and it has been proven that possessing knowledge leads to organisational innovation and success, research on tacit knowledge promoting behaviours is scanty. This study sought to explore and gain an in-depth understanding of the employee behaviours that promote TKT in construction joint ventures to improve business performance and competitiveness of construction firms in developing countries. Furthermore, according to Minbaeva et al. (2018) KT from the foreign partners to the local counterparts is ineffective and yields sub-standard results because of the barriers to KT such as cultural differences, low levels of trust, the instability of market conditions, government interference and weak institutional environments (Minbaeva et al., 2018). The study therefore further sought to investigate and identify factors that mitigate or reduce KT barriers in a construction joint venture resulting in the development of a conceptual framework of KT promoting factors.

### **7.2. Research Question 1**

The insights gained from the study in terms of research question one which sought to identify the individual behaviours that promote tacit knowledge transfer in construction joint ventures revealed that to gain knowledge, knowledge seekers were expected to exhibit behaviours that showed that they have a willingness to learn, that they possess self-motivation, have a strong work ethic, share a common goal, and interact socially. The study found that these are the enabling knowledge transfer behaviours. Based on the literature review some of the findings were expected and were consistent with the literature. The themes on socialisation, being intrinsically motivated and personal values were the themes that were consistent with the literature and were the areas in which extensive research has been undertaken. Literature on the two themes on strong work ethic and sharing a common goal were scanty and not consistent with the literature found in the knowledge management field. The difficulty in discovering literature on the two

themes in the knowledge management discipline indicates a need for further research to be conducted on the behaviours of work ethic and sharing a common goal.

In the literature, a lack of work ethic is not identified as a barrier to knowledge transfer nor is it identified as a KT promoting behaviour. In the study however it was discovered that a lack of discipline, a lack of professionalism and hard work displayed by knowledge seekers on the joint venture had the effect of discouraging knowledge holders or experts from openly sharing knowledge with the seekers. It was shared that a lack of work ethic was perceived as laziness and a lack of commitment to know and gain knowledge. Future research is required on the behaviour of work ethic and explore how having a strong work ethic as a knowledge seeker can encourage knowledge transfer behaviours from knowledge donors.

Sharing a common goal on the other hand has been researched and the outcomes of sharing a common goal can be found in the literature however the outcomes according to the literature on sharing the same vision results in the partners being able to gain benefits of shared project risks and efficiencies (Tetteh et al., 2022). The literature does not however indicate if sharing a common goal encourages knowledge transfer behaviours. The literature on sharing a common goal and the effect it has on tacit knowledge transfer in joint ventures is limited. Sharing a common goal as an enabler of tacit knowledge transfer requires further research.

The study has found that some of the KT promoting behaviours found in the literature as KT promoting behaviours in strategic alliances as identified in the context of developed countries are also behaviours that are viewed as promoting knowledge transfer in the context of developing countries in a construction joint venture. Three of the five themes are behaviours that are applicable in the developing countries context and these behaviours were the themes of personal values, intrinsically motivated and socialising. The themes of work ethic and sharing of a common goal were behaviours that emerged as promoting knowledge transfer, this finding is a new finding as literature on these themes as behaviours that promote KT was lacking. An assumption can be made that this is a new finding in terms of behaviours that promote knowledge transfer in developing countries.

### **7.3. Research Question 2**

TKT is difficult to achieve in a project-based environment due to the numerous barriers that are presented by the nature of the environment (Ren et al., 2018). Several barriers to tacit knowledge transfer have been documented such as an absence of trust, a deficiency in incentives and the absence of leadership support and cultural differences, (Ng, 2023). The research question sought to identify interventions that should be introduced in a construction joint venture environment in order to reduce factors that hinder KT in an ICJV.

The available literature largely focuses on the barriers to KT with limited literature existing on how to mitigate those barriers at the individual level. The study found that several intervention methods can be implemented in joint ventures to reduce KT barriers and create a KT conducive environment. The themes that emerged were in two-fold namely the main themes and the secondary themes. The main intervention methods were inclusive of introducing incentives, organising social events, leadership support, joint venture agreements, processes, and systems as well as mentorship. Of the 6 main themes that emerged, 3 themes on leadership support, socialising and incentives were consistent with the literature.

The introduction of an incentive-based system according to the participants was central in reducing KT barriers, the study revealed that different incentives can be introduced to encourage or motivate KT behaviours making this finding to be in alignment with the literature review as presented in chapter 2. Further research is however required to determine if a bidding incentive-based system can indeed encourage KT promoting behaviours. Future research on the different types of incentives and the impact that they have on promoting knowledge transfer at the individual level should be considered. Socialising and the presence of active and visible leadership support was fully supported by the literature as these two factors have been extensively investigated.

KT factors that were unexpected findings were joint venture agreements, processes, and systems as well as mentorship. Known enablers of successful KT are the high-level organisational factors such as culture, leadership support and motivation (Rois-Ballesteros & Fuerst 2022).



Joint venture agreements as an enabler of knowledge transfer were not a theme that was expected and there was no support found in the literature for joint venture agreements as a factor that promotes knowledge transfer. The study made a finding that for knowledge transfer to be taken seriously, the first step would be to explicitly include KT clauses in the agreement. It was found that in the Eswatini context, the inclusion of KT terms in JV agreements was not done. A lack of literature on JV agreements and the role that they play in mitigating KT barriers and promoting knowledge transfer provides an opportunity for scholars to explore this finding further and develop literature for future business use. The business implication would be the encouragement of construction JV partners in developing countries to enhance contract conditions to include KT clauses.

The inclusion of KT clauses in JV agreements will be key in reducing KT barriers. Due to the lack of literature in JV agreements as an enabling KT factor, an assumption can be made that KT terms are a standard inclusion in the formation of strategic alliance contracts, what is unknown however in the developed world context is how the KT terms and conditions are structured in these contracts and whether these clauses are effective in promoting knowledge transfer, this serves as an additional area for future research.

### **Processes and Systems**

Processes were found to be an enabler of knowledge transfer. The processes and systems theme encompassed a reporting system, and a monitoring and evaluation system. There is a limitation to the existing literature on processes and systems suggesting a research gap in terms of the role of systems and processes in enabling knowledge transfer. The literature does however recognise technological systems as being an enabler of knowledge sharing which in turn encourages knowledge transfer (Goh, 2002). The finding that the reporting and monitoring processes and systems would greatly enable knowledge transfer can build on the research that has already been conducted on technological systems. The results on the prominent theme on processes and systems provided a deepened understanding of the theme and further revealed the need for further research on how the reporting and monitoring systems should be implemented to support KT initiatives. Furthermore, further research is required to understand whether the processes and systems will support both explicit and tacit KT, or these systems will only support one form of knowledge transfer. An understanding of the

type of processes and systems best suited for a joint venture environment is also essential. The future research will enable businesses to make informed decisions in terms of investment choices as well as the type of processes and systems best suited for a joint venture environment in construction.

## **Mentorship**

Mentorship emerged as a prominent theme and the results of the study were that a top-down supervision relationship would be beneficial in enabling knowledge transfer in JVs. The existing literature on top-down employee pairing for purposes of KT is outdated. The literature now posits that peer-level knowledge transfer is more effective as it eliminates the power distance between the individuals and the interactions at peer-level are more frequent hence the likelihood of KT taking place and it being effective is high.

There were findings as presented and discussed in chapter 6 that the fast-paced nature of the construction environment prevented knowledge holders from transferring knowledge to knowledge seekers. Literature that exists on mentorship in construction joint ventures is limited, the available literature on mentorship is on general knowledge sharing which does not address the role and impact of mentorship on KT in a construction project-based environment. The lack of research in this space gives rise to several questions such as; will all roles in the JV require mentors and will the mentors improve project time delivery. Mentorship as an enabler of KT requires further research.

Secondary themes were also discovered through the study. The secondary themes did not receive sufficient responses however these themes provided valuable insights on further methods that can be introduced in a JV to reduce KT barriers and ensure that KT takes place. Job rotations was a theme that emerged and was in alignment with the literature. According to the literature job rotations have been a training strategy that has been used for decades as a method of transferring knowledge and skills (Al-Zoubi et al.,2022). However, there is limited research on how to execute job rotations in a project-based firm which is operating for a specific amount of time. Further research would provide valuable and deeper insights on the practicality of job rotations in a project-based environment like a construction joint venture.

The study found that the control of information served as an enabler of KT in an ICJV. One of the barriers to KT in an ICJV is the refusal of employees to openly share information. A joint venture environment is characterized by information hoarding and secretive behaviours. Upon completion of the study, the results showed that one of the reasons employees refuse to share information is because of the release or leakage of JV information to external third parties. The lack of methods in ensuring JV information remains on the JV is one of the key barriers to KT. If a guarantee on the control of information were to be provided, it would greatly reduce the barrier to KT.

The study found that artefacts were a method that aided teams in viewing themselves as one unified team, this then facilitated the transfer of knowledge amongst the employees. This finding was consistent with the literature. According to Mariano and Awazu (2016) the use of artefacts encourages KT as artefacts facilitate the coordination and cooperation of teams.

#### **7.4. Management Recommendations**

Based on the findings of the study leadership teams are encouraged to consider the below recommendations.

- To create an environment that encourages learning by encouraging and rewarding behaviours that promote KT.
- Clients and the Regulating authority need to introduce KT incentives that will encourage all partners in the JV partnership to promote and actively participate in KT initiatives. An investigation into the type of incentives that are suited for a JV environment require further research however this can either take the form of bidding incentives or the reduction of annual subscription as a reward for actively driving KT initiatives.

- Management is advised to deploy employees to the JV that have a growth mindset and employees who are willing to learn and who show behaviours of discipline and self-motivation.
- Management is further advised to introduce social events on the JV which will force employees from the partner organisations to interact informally, this could take the form of celebrating major milestones that have been achieved or alternatively taking the form of have periodic social events such as a social event once a month or on a quarterly basis.
- Investing in systems such as reporting and monitoring systems that enable the open sharing of information also recommended.

In closing, the study revealed new findings on behaviours that promote KT and intervention methods that should be put in place to support KT and mitigate KT barriers. In the developing countries context, it is evident that further research is required on KT behaviours in order to assist local businesses to be competitive and self-reliant. Further research is required on the behaviours of having a strong work ethic and a common goal. Additional research on the new findings on KT mitigation methods of mentorship and JV agreements also require further investigation. The findings have addressed the research gaps as articulated in the research questions. Based on the insights gathered from the study, it is evident that KT and its application in the construction context as well as in the developing countries context requires further study in order for leadership teams to fully understand the KT phenomenon for successful implementation in project-based alliances.

## References

- Abu Bakar, A.H., Yusof, M.N., Tufail, M.A. & Virgiyanti, W. (2016), "Effect of knowledge management on growth performance in construction industry", *Management Decision*, Vol. 54 No. 3, pp. 735-749.
- Agyekum, K., Kukah, A. S., & Amudjie, J. (2021). The impact of COVID-19 on the construction industry in Ghana: the case of some selected firms. *Journal of Engineering, Design and Technology*, 20(1), 222-244.
- Alam, M. Z., Kousar, S., Shafqat, N., & Shabbir, A. (2022). Drivers and challenges of tacit knowledge sharing in automotive workshop employees. *VINE Journal of Information and Knowledge Management Systems*, 52(1), 71-86.
- Alavi, M., Kayworth, T. & Leidner, D. (2006), "An empirical examination of the influence of organizational culture on knowledge management practices", *Journal of Management Information Systems*, Vol. 22 No. 3, pp. 191-224.
- Al-Zoubi, M. O., Masa'deh, R. E., & Twaissi, N. M. (2022). Exploring the relationship among structured-on-the job training, mentoring, job rotation, work environment factors and tacit knowledge transfer. *VINE Journal of Information and Knowledge Management Systems*.
- Amoozad Mahdiraji, H., Beheshti, M., Jafari-Sadeghi, V., & Garcia-Perez, A. (2022). What drives inter-organisational knowledge management? The cause-and-effect analysis using a multi-layer multi-criteria decision-making framework. *Journal of Knowledge Management*, 26(9), 2195-2221.
- Armistead, C. (1999), "Knowledge management and process performance", *Journal of Knowledge Management*, Vol. 3 No. 2, pp. 143-157, doi: 10.1108/13673279910275602.
- Bakri, A. S., Khaderi, S. S., & Abd Shukor, A. S. (2022, October). A Cross-case Analysis on the Barriers to Knowledge Sharing Practices in Construction Joint Ventures. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1067, No. 1, p. 012068). IOP Publishing.
- Bamel, N., Pereira, V., Bamel, U., & Cappiello, G. (2021). Knowledge management within a strategic alliances context: past, present and future. *Journal of Knowledge Management*, 25(7), 1782-1810.

- Beeby, M. & Booth, C. (2000), "Networks and inter-organizational learning: a critical review", *The Learning Organization*, Vol. 7 No. 2, pp. 75-88
- Bell, E., Bryman, A., & Harley, B. (2019). *Business research methods* (5th ed.). Oxford
- Biloslavo, R., & Lombardi, R. (2021). Knowledge transferring and small and medium enterprise's (SME's) effectiveness: emerging insights and future directions. *Business Process Management Journal*, 27(6), 1747-1774.
- Boone, T., & Ganeshan, R. (2008). Knowledge acquisition and transfer among engineers: effects of network structure. *Managerial and Decision Economics*, 29(5), 459-468.
- Bou-Llusar, J.C. & Segarra-Ciprés, M. (2006), "Strategic knowledge transfer and its implications for competitive advantage: an integrative conceptual framework", *Journal of Knowledge Management*, Vol. 10 No. 4, pp. 100-112, doi: 10.1108/13673270610679390.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. sage.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Cantú, F. J., Bustani, A., Molina, A. & Moreira, H. (2009). A knowledge-based development model: the research chair strategy. *Journal of Knowledge Management*, 13(1), 154-70.
- Cassell, C. (2015). *Conducting Research Interviews for Business and Management Students*, London: Sage
- Chaman, S., Zulfiqar, S., Shaheen, S., & Saleem, S. (2021). Leadership styles and employee knowledge sharing: Exploring the mediating role of introjected motivation. *PloS one*, 16(9), e0257174.
- Chang, J., Wang, J. J., & Bai, X. (2020). Good match matters: Knowledge co-creation in international joint ventures. *Industrial Marketing Management*, 84, 138-150. <https://doi.org/10.1016/j.indmarman.2019.06.005>
- Chen, P.L., Tan, D. & Jean "Bryan", R.J. (2016), "Foreign knowledge acquisition through inter-firm collaboration and recruitment: implications for domestic growth of emerging market firms", *International Business Review*, Vol. 25 No. 1, pp. 221-232.

- Cho, H. E., Moon, J. J., & Jeong, I. (2022). Equal ownership split in international joint ventures: performance implications in an emerging market. *Asian Business & Management*, 21(2), 205-230.
- Cross, R., Parker, A., Prusak, L. & Borgatti, S.P. (2001). Knowing what we know: Supporting knowledge creation and sharing in social networks. *Organizational Dynamics*, 30 (2): 100-120.
- Das, T.K. & Kumar, R. (2007), "Learning dynamics in the alliance development process", *Management Decision*, Vol. 45 No. 4, pp. 684--707.
- Dawson, B. K., Young, L., Tu, C., & Chongyi, F. (2014). Co-innovation in networks of resources—A case study in the Chinese exhibition industry. *Industrial Marketing Management*, 43(3), 496–503.
- Elman, C., Gerring, J., & Mahoney, J. (Eds.). (2020). *The production of knowledge: Enhancing progress in social science*. Cambridge University Press.
- Farooq, R. (2018). A conceptual model of knowledge sharing. *International Journal of Innovation Science*, 10(2), 238-260.
- Fasbender, U., & Gerpott, F. H. (2022). Knowledge transfer between younger and older employees: A temporal social comparison model. *Work, Aging and Retirement*, 8(2), 146-162.
- Fei, W., Opoku, A., Agyekum, K., Oppon, J. A., Ahmed, V., Chen, C., & Lok, K. L. (2021). The critical role of the construction industry in achieving the sustainable development goals (SDGs): Delivering projects for the common good. *Sustainability*, 13(16), 9112.
- Ferreira, J. J., Fernandes, C. I., Guo, Y., & Rammal, H. G. (2022). Knowledge worker mobility and knowledge management in MNEs: A bibliometric analysis and research agenda. *Journal of Business Research*, 142, 464-475.
- Fobbe, L. (2020). Analysing Organisational Collaboration Practices for 1171 Sustainability. *Sustainability*, 12(6), 2466.
- Gajendran, T., Brewer, G. and Marimuthu, M. (2013), "Internationalization of construction business and E-commerce: innovation, integration and dynamic capabilities", *Australasian Journal of Construction Economics and Building*, Vol. 13 No. 2, pp. 1-17.

- Ganguly, A., Talukdar, A., & Chatterjee, D. (2019). Evaluating the role of social capital, tacit knowledge sharing, knowledge quality and reciprocity in determining innovation capability of an organization. *Journal of knowledge management*, 23(6), 1105-1135.
- Gast, J., Gundolf, K., Harms, R. and Collado, E.M. (2019), "Knowledge management and coopetition: how do cooperating competitors balance the needs to share and protect their knowledge?", *Industrial Marketing Management*, Vol. 77, pp. 65-74.
- Goh, S. C. (2002). Managing effective knowledge transfer: an integrative framework and some practice implications. *Journal of knowledge management*, 6(1), 23-30.
- Gomes, E. (2020), "Mergers, acquisitions, and strategic alliances as collaborative methods of strategic development and change", *Strategic Change*, Vol. 29 No. 2, pp. 145-148.
- González-Loureiro, M., Alonso, M.V. & Schiuma, G. (2015), "Knowledge and sustained competitive advantage: how do services firms compete?", *Investigaciones Europeas De Direccion Y Economía De La Empresa*, Vol. 21 No. 2, pp. 55-57.
- Grant, R. M. (1996a). Prospering in dynamically competitive environments: Organizational capability as knowledge integration. *Organization Science*, 7(4),375–387.
- Grant, R. M. (1996b). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(Special Issue), 109–122
- Gulati, R. (1998). Alliances and networks. *Strategic management journal*, 19(4), 293- 317.
- Guo, W., Yang, J., Li, D., & Lyu, C. (2020). Knowledge sharing and knowledge protection in strategic alliances: the effects of trust and formal contracts. *Technology Analysis & Strategic Management*, 32(11), 1366-1378.
- Guo, Y., Jasovska, P., Rammal, H. G., & Rose, E. L. (2020). Global mobility of professionals and the transfer of tacit knowledge in multinational service firms. *Journal of Knowledge Management*, 24(3), 553-567.
- Gupta, A. K., & Govindarajan, V. (2000). Knowledge management's social dimension: Lessons from Nucor Steel. *Sloan Management Review*, 42(1)
- Inkpen, A.C. (2002). Learning, knowledge management, and strategic alliances:so many studies, so many unanswered questions. In Contractor, F. J. and Lorange, P. (Eds), *Cooperative Strategies and Alliances*. Oxford: Pergamon, 267–89.



- Jensen, M. C., & Meckling, W. H. (1996). Specific and general knowledge, and organizational structure. In P. S. Myers (Ed.), *Knowledge management and organizational design*. Newton, MA: Butterworth-Heinemann, 17–38.
- Kalkhan, V.D. (2011), “Knowledge continuity management process in organisations”, *Journal of Business and Economics Research*, Vol. 4 No. 3, pp. 41-46
- Kennedy, B. (2018). *Deduction, Induction and Abduction*. SAGE Publications Ltd  
<https://doi.org/10.4135/9781526416070>
- Khamaksorn, A., Kurul, E., & Tah, J. H. M. (2016, December). Factors affecting knowledge transfer in international construction joint venture projects. In *International Conference on Civil, Architecture and Sustainable Development (CASD-2016)*.
- Khamaksorn, A., Tah, J. H., & Kurul, E. (2020). Knowledge creation: A case study of international construction joint venture projects in Thailand. *International Journal of Innovation, Management and Technology*, 11(1), 10-17.
- Kivrak, S., Arslan, G., Dikmen, I., & Birgonul, M. T. (2008). Capturing knowledge in construction projects: Knowledge platform for contractors. *Journal of management in engineering*, 24(2), 87-95.
- Ko, W.L., Kim, S.Y., Lee, J.H. and Song, T.H. (2020), “The effects of strategic alliance emphasis and marketing efficiency on firm value under different technological environments”, *Journal of Business Research*, Vol. 120, November, pp. 453-461.
- Kogut, B. & Zander, U. (1992), “Knowledge of the firm, combinative capabilities, and the replication of technology”, *Organization Science*, Vol. 3 No. 3, pp. 383-397.
- Korbi, F. B., & Chouki, M. (2017). Knowledge transfer in international asymmetric alliances: the key role of translation, artifacts, and proximity. *Journal of Knowledge Management*, 21(5), 1272-1291.
- Larsson, R., Bengtsson, L., Henriksson, K., & Sparks, J. (1998). The interorganizational learning dilemma: Collective knowledge development in strategic alliances. *Organization science*, 9(3), 285-305.
- Lech, P. (2011). Knowledge transfer procedures from consultants to users in ERP implementations. *The Electronic Journal of Knowledge Management*, 9(4), 318-327.

- Lee, P. (2019). Tacit knowledge and university-industry technology transfer. *Research Handbook on Intellectual Property and Technology Transfer (2019, Forthcoming)*, UC Davis Legal Studies Research Paper Forthcoming.
- Makore, S., & Eresia-Eke, C. (2021). Knowledge management as an antecedent of performance in construction firms. *Journal of Contemporary Management*, 18(2), 67-85.
- Mariano, S., & Awazu, Y. (2016). Artifacts in knowledge management research: a systematic literature review and future research directions. *Journal of Knowledge Management*, 20(6), 1333-1352.
- Martin, H., & Emptage, K. (2019). Knowledge-transfer enablers for successful construction joint ventures. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 11(3), 04519015. 67-85.
- Meier, M. (2011). Knowledge Management in Strategic Alliances: A Review of Empirical Evidence. *International Journal of Management Reviews*, 13, 1–2. doi: 10.1111/j.1468-2370.2010.00287.
- Milagres, R., & Burcharth, A. (2019). Knowledge transfer in interorganizational partnerships: what do we know? *Business Process Management Journal*, 25(1), 27-68. <https://doi.org/10.1108/BPMJ-06-2017-0175>
- Minbaeva, D., Park, C., Vertinsky, I., & Cho, Y. S. (2018). Disseminative capacity and knowledge acquisition from foreign partners in international joint ventures. *Journal of World Business*, 53(5), 712-724. <https://doi.org/10.1016/j.jwb.2018.03.011>
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification Strategies for Establishing Reliability and Validity in Qualitative Research. *International Journal of Qualitative Methods*, 1(2), 1–19. <https://doi.org/https://doi.org/10.1177/160940690200100202>
- Muhammed, S., & Zaim, H. (2020). Peer knowledge sharing and organizational performance: the role of leadership support and knowledge management success. *Journal of knowledge management*, 24(10), 2455-2489.
- Narteh, B. (2008). Knowledge transfer in developed-developing country interfirm collaborations: a conceptual framework. *Journal of knowledge management*, 12(1), 78-91.

- Ng, K. Y. N. (2023). Effects of organizational culture, affective commitment and trust on knowledge-sharing tendency. *Journal of Knowledge Management*, 27(4), 1140-1164.
- Ngowi, A.B., Pienaar, E., Talukhaba, A. and Mbachu, J. (2005), "The globalization of the construction industry: a review", *Building and Environment*, Vol. 40 No. 1, pp. 135-141, doi: 10.1016/j. buildenv.2004.05.008.
- Nguyen, T.-M., Nham, P.T. and Hoang, V.-N. (2019), "The theory of planned behavior and knowledge sharing: a systematic review and meta-analytic structural equation modelling", *VINE Journal of Information and Knowledge Management Systems*, Vol. 49 No. 1, pp. 76-94.
- Ni, G., Cui, Q., Sang, L., Wang, W. and Xia, D. (2018), "Knowledge-sharing culture, project-team interaction, and knowledge-sharing performance among project members", *Journal of Management in Engineering*, Vol. 34 No. 2, pp. 04017065-1-12.
- Nonaka, I. & Takeuchi, H. (1995). *The Knowledge-Creating Company*. New York: Oxford University Press.
- Nonaka, I., & Takeuchi, H. (2021). Humanizing strategy. *Long Range Planning*, 54(4), 102070.
- Ozorhon, B., Arditi, D., Dikmen, I., & Birgonul, M. T. (2008). Implications of culture in the performance of international construction joint ventures. *Journal of construction engineering and management*, 134(5), 361-370.
- Park, C., Ghauri, P. N., Lee, J. Y., & Golmohammadi, I. (2022). Unveiling the black box of IJV innovativeness: The role of explicit and tacit knowledge transfer. *Journal of International Management*, 28(4), 100956.
- Pizam, A., & Mansfeld, Y. (2009). *Consumer behaviour in travel and tourism*. New York: Howarth Hospitality Press
- Pot, W. D. (2020). The governance challenge of implementing long-term sustainability objectives 1273 with present-day investment decisions. *Journal of Cleaner Production*, 280, 124475.

- Qiu, X., & Haugland, S. A. (2019). The role of regulatory focus and trustworthiness in knowledge transfer and leakage in alliances. *Industrial Marketing Management*, 83, 162-173.
- Raftery, J., Pasadilla, B., Chiang, Y.H., Hui, E.C.M. & Tang, B.-S. (1998), "Globalization and construction industry development: implications of recent developments in the construction sector in Asia", *Construction*
- Ranucci, R. A., & Souder, D. (2015). Facilitating tacit knowledge transfer: routine compatibility, trustworthiness, and integration in M & As. *Journal of knowledge management*, 19(2), 257-276.
- Rauniar, R., Rawski, G., Morgan, S. and Mishra, S. (2019), "Knowledge integration in IPPD project: role of shared project mission, mutual trust, and mutual influence", *International Journal of Project Management*, Vol. 37 No. 2, pp. 239-258.
- Ren X, Yan Z, Wang Z, He J (2019). Inter-project knowledge transfer in project-based organizations: An organizational context perspective. *Management Decision*, 58(5): 844–863
- Ren, X., Deng, X., & Liang, L. (2018). Knowledge transfer between projects within project-based organizations: the project nature perspective. *Journal of Knowledge Management*, 22(5), 1082-1103.
- Rios-Ballesteros, N., & Fuerst, S. (2022). Exploring the enablers and micro foundations of international knowledge transfer. *Journal of Knowledge Management*, 26(7), 1868-1898.
- Roulston, K. (2010). Considering quality in qualitative interviewing. *Qualitative Research*, 10(2), 228199-. <https://doi.org/10.1177/1468794109356739>
- Sabherwal, R., & Becerra-Fernandez, I. (2003). An empirical study of the effect of knowledge management processes at individual, group, and organizational levels. *Decision sciences*, 34(2), 225-260.
- Saunders, M., & Lewis, P. (2018). *Doing research in business and management*. Pearson.
- Schilling, M. A. (2015). Technology shocks, technological collaboration, and innovation outcomes. *Organization Science*, 26(3), 668-686.
- Smith, E. (2001). The role of tacit and explicit knowledge in the workplace. *Journal of Knowledge Management*, 5(4), 311-321.

- Sokhanvar, S., Matthews, J. & Yarlagadda, P. (2014), "Importance of knowledge management processes in a project-based organization: a case study of research enterprise", *Procedia Engineering*, Vol. 97, pp. 1825-1830
- Squire, B., Cousins, P. D., & Brown, S. (2009). Cooperation and knowledge transfer within buyer–supplier relationships: the moderating properties of trust, relationship duration and supplier performance. *British Journal of Management*, 20(4), 461-477.
- Tan, H.C., Carrillo, P., Anumba, C., Kamara, J.M., Bouchlaghem, D. & Udejaja, C. (2006), "Live capture and reuse of project knowledge in construction organisations", *Knowledge Management Research and Practice*, Vol. 4 No. 2, pp. 149-161, doi: 10.1057/palgrave.kmrp.8500097.
- Tetteh, M. O., and Chan, A. P. (2019). Review of Concepts and Trends in International 1284 Construction Joint Ventures Research. *Journal of Construction Engineering and 1285 Management*, 145(10), 04019057.
- Tetteh, M. O., Chan, A. P., Darko, A., Yevu, S. K., Boateng, E. B., & Nwaogu, J. M. (2022). Key drivers for implementing international construction joint ventures (ICJVs): global insights for sustainable growth. *Engineering, Construction and Architectural Management*, 29(9), 3363-3393.
- Tua, H.H. (2000). "Difficulties in Diffusion of Tacit Knowledge in Organizations." *Journal of Intellectual Capital*, 1 (4): 357-365.
- UNEP. (n.d.). Goal 17: Partnerships for the goals. UNEP - UN Environment Programme. Retrieved October 7, 2023, from <https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-17>
- Urquhart, C. (2013). *Grounded theory for qualitative research: a practical guide*. SAGE.
- Veeravalli, S., Venkatraman, V., & Hariharan, M. (2020). Why do people seek knowledge? Tracing factors that affect knowledge seeking intention. *VINE Journal of Information and Knowledge Management Systems*, 50(2), 271-29
- Vlajcic, D., Marzi, G., Caputo, A. and Dabic, M. (2019), "The role of geographical distance on the relationship between cultural intelligence and knowledge transfer", *Business Process Management Journal*, Vol. 25 No. 1, pp. 104-125.

- Wilkesmann, U., Wilkesmann, M. & Virgillito, A. (2007) "Requirements for knowledge transfer in hospital: how can knowledge transfer be supported in hospitals?", Discussion Papers des Zentrums für Weiterbildung Universität Dortmund, ISSN 1863-0294.
- Zack, M.H. (1999). "Managing Codified Knowledge." *Sloan Management Review*, 40 (4): 45-58
- Zahoor, S., Yang, S., Ren, X., & Haider, S. A. (2022). Corporate governance and humble leadership as antecedents of corporate financial performance: monetary incentive as a moderator. *Front. Psychol.* 13, 904076. doi: 10.3389/fpsyg.2022.904076
- Zheng, W., Yang, B. and McLean, G.N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research*, 63, 763–771.
- Zhou, Q., Deng, X., Wang, G., & Mahmoudi, A. (2022). Linking elements to outcomes of knowledge transfer in the project environment: Current review and future direction. *Frontiers of Engineering Management*, 9(2), 221-238.

## **APPENDIX A: INTERVIEW GUIDE**

### **Preliminary questions**

1. What role do you or did you hold in the joint venture (JV) organisation?
2. How many years' experience do you have working in a joint venture environment?

### **Interview questions**

1. Could you explain to me how the JV works?
2. Is the joint venture environment conducive for knowledge transfer (KT) between individuals and tell me why do you think so?
  - a. Are there any underlying behaviours that create an inconducive environment for knowledge transfer and what do you believe should be done?
3. Based on your experience or observations, what type of behaviours encourage knowledge transfer between individuals in the JV?
4. Do foreign partners willingly transfer knowledge at the individual level? If not, what could be the cause? If they do, what could be the cause?
5. Can you give me an example of when an international partner shared knowledge effectively.
6. Can you give me an example of when an international partner shared knowledge, but it didn't work so well.
  - a. Why do you think it didn't work so well?
  - b. What could have been done better?
7. What kind of knowledge is more easily shared- technical, process or practical?
8. Which individual behaviours do you believe impede the transfer of tacit knowledge?
9. Which behaviours do you believe local partners should display in order to acquire knowledge from the foreign partners at the individual level and why?
10. What interventions have been used to assist with KT in JV projects? And have these been effective?
11. Are challenges pertaining to tacit knowledge transfer openly discussed between the partner organisations?
12. What do you believe should be done to promote KT at the individual level and why?

## APPENDIX B: ETHICAL CLEARANCE APPROVAL

**Gordon Institute  
of Business Science**  
University of Pretoria

**Ethical Clearance  
Approved**

Dear Ziyanda Nokulunga Mtetwa,

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

[Ethical Clearance Form](#)

Kind Regards

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.



## APPENDIX C: CONSENT FORM

# Gordon Institute of Business Science

University of Pretoria

I am currently a student at the University of Pretoria's Gordon Institute of Business Science (GIBS) and I am completing my research in partial fulfilment of a Master of Business Administration (MBA). I am conducting research to identify knowledge enablers that will stimulate knowledge creation and build knowledge transfer (KT) behaviours at the individual level in construction joint ventures (CJV). The research consequently aims to contribute to literature by exploring individual behaviours that promote tacit knowledge transfer (TKT) between partner organisations in construction joint ventures in order to develop a behavioural model that promotes TKT in CJV.

You are requested to participate in the interview. Our interview is expected to last for 45 minutes.

Please be advised that your identity and the information that will be collected during the interview will be kept confidential and anonymous. Your responses will be recorded to reflect the true intentions of your responses and captured without manipulation. All data will be reported without identifiers. Your participation is completely voluntary, you may refuse to participate without penalty, and you are free to withdraw your participation at any point during this process.

If you have any concerns, please contact me or my supervisor, using the details provided below:

**SUPERVISOR:**

Professor Louise Whittaker

Email: [whittakerL@gibs.co.za](mailto:whittakerL@gibs.co.za)

Mobile number: +27 82 457 0892.

**RESEARCHER:**

Ms Ziyanda Nokulunga Mtetwa

Email: [29381772@mygibs.co.za](mailto:29381772@mygibs.co.za)

Mobile number: +268 7606 1293

**As a way to show that you do give consent to fully participate in this study, please sign on the space provided below:**

**RESEARCH RESPONDENT'S SIGNATURE:** \_\_\_\_\_

## APPENDIX E: LIST OF CODES

№	Code	№	Code
1	Transparency	62	Project interest
2	Fair	63	Motivation
3	Corporate culture	64	Drive/ hunger
4	Value system	65	Idiosyncratic processes
5	Attitude	66	Information shielding/hoarding
6	Above board	67	Selectiveness
7	Professional way of doing things	68	Leadership encouragement
8	Open/ openness	69	Theft/duplication of information
9	Information protection	70	Training & development
10	Common/similar/same	71	Monitoring
11	Empowering	72	Evaluation
12	Teaching/ to teach	73	Continuous learning
13	Delegate	74	Discipline
14	Promotions	75	Exposure
15	Trust	76	Job rotations
16	Mediation	77	Ubuntu
17	Information sharing	78	Intrinsically motivated
18	Inform leadership	79	High standard
19	Knowledgeable	80	High quality
20	Competent	81	Measurement
21	Pride of work	82	External help
22	Work ethic	83	Consistent feedback
23	To learn/ learning	84	One team/unity
24	Work culture	85	Honesty
25	Social events/ social gatherings	86	Communication
26	Owning to mistakes	87	Being helpful
27	Organised work	88	Asking questions
28	International standards	89	Documenting information
29	Mentors	90	Humility
30	Submissive	91	Discussions at senior level

31	Eagerness	92	Reporting systems
32	Creating a healthy relationship	93	Admin systems
33	Listening to experts	94	Government policy
34	Common goal	95	Contract conditions
35	Inquisitive	96	Open discussions
36	Collaboration	97	Growth
37	Suspending judgement	98	Performance tracking
38	Pairing of employees/skills	99	Compensation
39	Information leaks	100	Bidding points/reward points
40	Information distribution	101	Hard work
41	JV logo	102	Teamwork
42	Same clothes	103	Understudy
43	Leadership support	104	Efficient processes
44	Leadership decision making	105	Skills integration
45	Resources	106	Hostile
46	Plant and machinery	107	Language
47	Team building initiatives		
48	Braais		
49	Informal sessions		
50	Tender requirements		
51	Periodic reports		
52	Tender documents		
53	Disorganised systems		
54	Copyright legislation		
55	Sharing information with competitors		
56	Job rotations		
57	Poor systems		
58	Clauses		
59	JV structure		
60	Incentives		
61	Points system		