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Workforce nationalisation in Papua New Guinea: Security and logistics in resource organisations

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Workforce Nationalisation in Papua New Guinea:
Security and Logistics in Resource Organisations

Submitted by

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Statement of Sources

This thesis does not contain any published or unpublished material for which I was awarded any other degree or diploma. The sources of information from all other authors were duly recognised in the body of the thesis. This thesis was not submitted for examination in any other tertiary institution. This research followed all the rules and guidelines as directed by the University Ethics Committee.

Signed:

Abstract

Many multinational organisations fail to fully employ the capabilities of their local staff, particularly those in sensitive roles, such as security and logistics positions. It is commonplace to rely on expatriate staff for many of these roles, and this practice is particularly prevalent in the resource industry in Papua New Guinea. This research first aimed to determine whether this reliance on expatriates does exist, and, if so, why this situation occurs. It then examined how resource companies operating in Papua New Guinea manage and develop their national logistics and security workforce, and how nationalisation or workforce indigenisation occurs in this context.

This research employed a mixed-methods approach, combining a case study, 10 qualitative interviews with industry experts, and a survey of 102 industry respondents. Purposive sample selection was used throughout the research, with participants drawn predominantly from leadership roles in industry.

The research findings were able to confirm conclusively that there is a dependence built on expatriate staff in the resource industry. The findings also demonstrated that earlier workforce nationalisation is possible, and that it would bring a cost benefit. The findings also conclusively proved that an organisation achieving earlier workforce nationalisation would receive considerable reputational benefits as a result. More importantly, this research discovered that the key to early successful workforce nationalisation is based around mentoring. Mentoring programs that are supported by senior management, are funded and aim to exist in the long term must be underpinned by four supporting elements: strong human resources, cultural awareness, engagement, and training and development.

All this research was consolidated into developing a new workforce nationalisation model. The development of this theoretical roadmap or model through the conclusive results found in the research should empower the resource industry in Papua New Guinea to transform current practices and theory on workforce nationalisation in the security and logistical fields. The primary reason for undertaking this study was to advance the current body of knowledge on indigenous workforce nationalisation

programs in logistics and security among resource organisations in Papua New Guinea, and it has been well proven that this occurred.

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List of Abbreviations

CRC   Cooperative Research Centre

HR   Human Resources

HRM   Human Resource Management

KPI   Key Performance Indicator

LNG   Liquefied Natural Gas

OCN   Other Country National

PNG   Papua New Guinea

PNG LNG   Papua New Guinea Liquefied Natural Gas

UAE   United Arab Emirates

Chapter 1: Introduction

1.1 Introduction

Many international organisations fail to employ the capabilities of their local staff, particularly in what are deemed to be sensitive roles, such as security and logistics positions. Reliance on expatriate staff in many of these roles is commonplace, and is particularly prevalent in the oil and gas industry in Australasia. In a paper published in the *International Journal of Human Resource Management*, Tharenou and Harvey (2006) detailed their research regarding multinational companies based in the region, including the companies' employee preferences. The research found a reluctance to employ host country nationals in positions of responsibility. Of the multinational companies interviewed, 74% employed expatriate managers brought in for short-term assignments, and 92% employed foreign residents of the host country for long-term assignments. Of these, only 24% of the job descriptions for the multinational companies' expatriate managers included transferring knowledge or skills to and/or training local nationals. This finding suggests a bias towards relying on expatriate staff, and potentially indicates that only a small portion of the managerial staff brought into host countries are there to mentor and develop the local workforce. This supports my observations over the course of more than 20 years of experience working in this field and region. Further anecdotal information gathered from discussions with expatriate managers suggests that these views may be common among senior management, thereby indicating that the issue requires additional research to support anecdotal evidence with empirical data (Tung, 1998.

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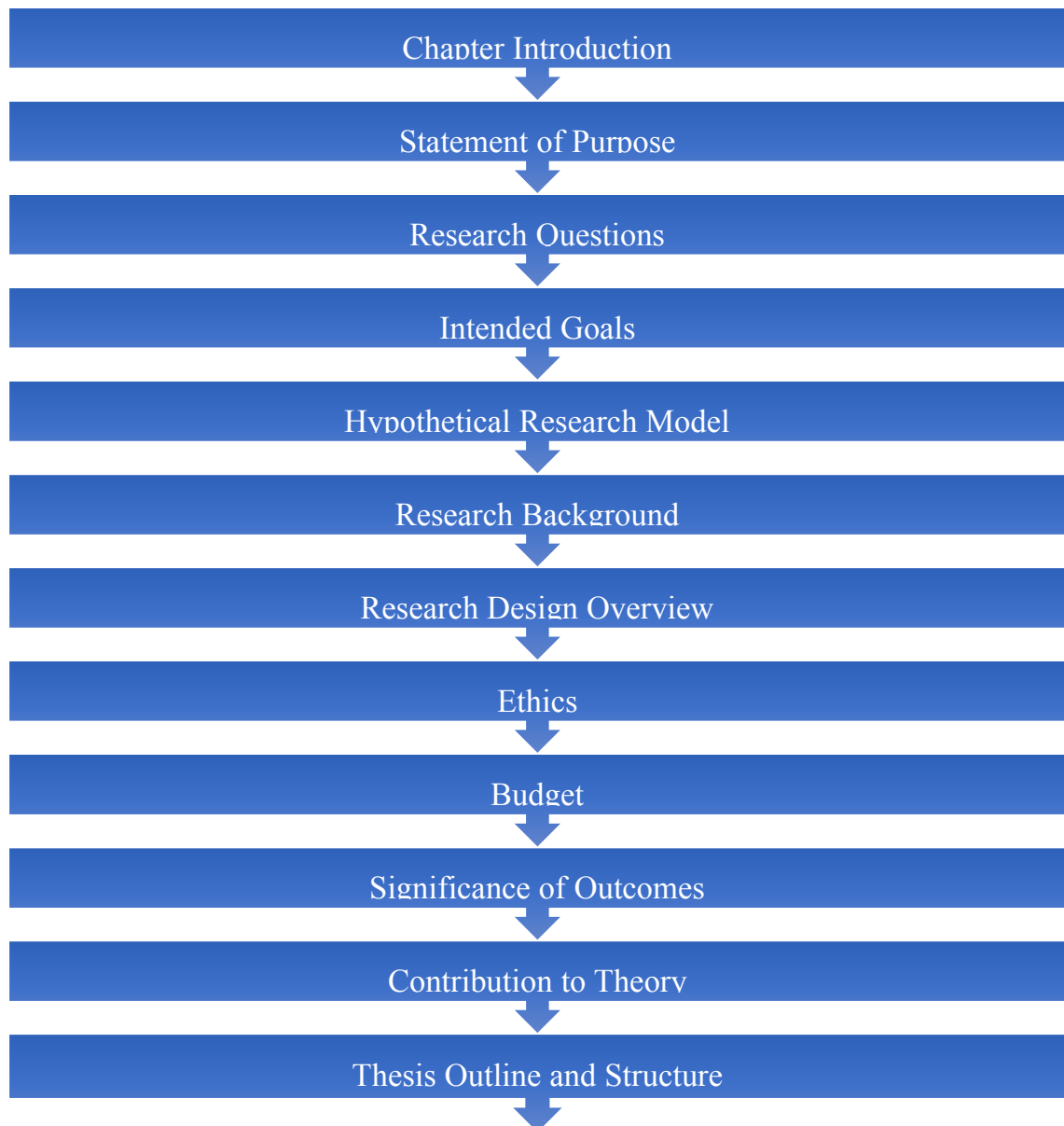
Figure 1.1: Structure of Chapter 1

1.2 Statement of Purpose

The aim of this research was to examine how companies operating in Papua New Guinea manage and develop their national logistics and security workforce, and how workforce nationalisation occurs in this context. The following research questions were addressed to achieve the research aim.

1.2.1 Major Research Question

The study's major research question was:

Which key activities promote a successful program to enable early nationalisation in a resource company operating in Papua New Guinea?

1.2.2 Minor Research Questions

The study's minor research questions were:

1. Why are oil and gas organisations dependent on expatriate staff?
2. How does the role of expatriate staff affect national staff?
3. If, through advanced activity, nationalisation was to occur earlier in the case study, what would be the approximate difference from a cost perspective between the use of expatriate and national workers?
4. Which key factors limit the early nationalisation of security and logistical workforces?
5. Which factors would enable the early nationalisation of staff?

1.3 Intended Goals

This research aimed to achieve the following goals in relation to the field of oil and gas industry nationalisation theory:

- articulate the reasons that a reliance on expatriate staff is prevalent in the industry
- demonstrate effective methods for the early nationalisation of workforces
- articulate the difference between the use of expatriate and indigenous personnel in a percentage and dollar amount
- articulate the difference in nationalisation timeframe and operational capability in the case study
- develop a theoretical roadmap to achieve early nationalisation in this field, which the industry can use to change current nationalisation practices and theory.
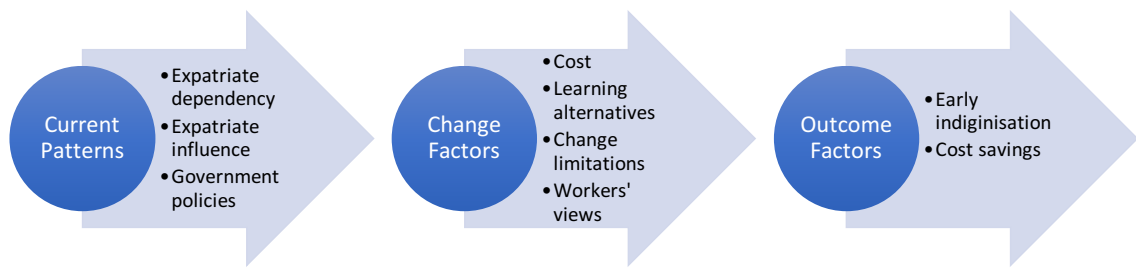
Figure 1.2: Hypothetical Research Model

1.4 Research Background

To better frame the research, it is important to outline my background as the researcher. I am an experienced manager with a strong logistical and security background who recently (through 2014) worked as the Head of Upstream Logistics and Infrastructure on the $20 billion USD ExxonMobil Papua New Guinea Liquefied Natural Gas (PNG LNG) project in Papua New Guinea (PNG). This was a logistical- and security-driven organisation that was predominantly a national-based workforce with a strong commitment to workforce nationalisation. In this role, I was responsible for leading the upstream support teams for logistics, supply chain, catering, camps, aviation, airport, infrastructure, fuels and maintenance.

My previous role was as an advisor/manager for ExxonMobil Development Support in PNG, which oversaw the construction of the project discussed in the case study. I was responsible for developing and implementing the project journey management plans; risk assessments; transport security and safety procedures; transport management plans; and all security, training and safety initiatives over three years. I was also responsible for leadership of ground transport across the project for ExxonMobil, providing specialist advice and risk-mitigation strategies to subcontractors with 350 national staff for three years, covering 17 million kilometres without injury or serious incident.

For the five years previous to this, I worked in Iraq as a Security and Logistics Manager, and as a Deputy Country Manager for the last two years. I was part of a management team that ran multiple contracts in Iraq in the early twenty-first century, including during the 2005 elections. It was during this time that I completed my Bachelor of Science in Security at Edith Cowan University. I have a Master's of Business

Administration (MBA) from the Australian Institute of Business, with the focus of my study being logistics and security in austere environments, such as PNG and Iraq. I also have Australian diplomas in workplace health and safety, occupational health and safety, security and risk management, government (workplace inspections), government (security), training and assessment, and adult vocational education. I am currently the director of a consulting business that specialises in capacity building and providing strategic advice on workforce nationalisation programs and security management to organisations.

I started my career in the Australian Army in 1993 as a paratrooper in the 3rd Battalion, and progressed in the army from soldier to captain, serving on multiple operational deployments always in infantry units. I have been a member of training teams deployed to PNG to train and assist the PNG Defence Force, and, in 2000, I attended the Australian Defence Force School of Languages Tok Pisin course. I have been involved in mentoring programs and workforce nationalisation program development and implementation since 2000. I am a passionate supporter of workplace nationalisation in PNG and view my role in organisations as a facilitator of that nationalisation, as it is articulated in every expatriate's work permit conditions.

1.5 Observation

During the past 20 years, I have had the opportunity to work with, train and be trained by well over 20 different nationalities, and have become well accustomed to operating in a cross-cultural environment. During the last 10 years of working overseas in the civilian sector in developing countries, particularly PNG, I have observed a reliance on expatriate staff and other country nationals to fill many roles in organisations that have the potential to be filled by national staff in the security and logistical fields. In my experience, during the construction phase of projects, large companies avoid committing any time or money to medium- or long-term training and development, instead relying on short-term, fly-in staff and only offering local staff semi-skilled and unskilled jobs. When projects are completed and transition to a steady state, this leaves a large gap in skilled staff, which is again filled with rotational expatriate staff, thereby creating localised unemployment and frustration among locals.

With mixed results, many companies have invested a great deal of time and money into programs to develop local business opportunities and to fund schools and hospitals; however, they have neglected capacity development in local workforces. Some companies run detailed nationalisation plans for semi-skilled or unskilled staff that are almost always aimed well below the supervisor level, and rarely cover security and logistics departments, instead focusing on technical areas, such as petroleum operations that only require minimal staff. However, these reports are anecdotal, based on my own experiences, and without any real support from validated research. Using reflective practice, I was able to review what I have learnt over the previous decade and ask myself what has occurred, what I could have done better, and what I can do to improve the situation for those who come next. This is how my journey started—to discover whether my personal observations have any substance, and, through the rigours of PhD research, to aim to roadmap and develop the best workforce nationalisation practices for the resource industry in PNG.

1.6 Design and Methodology

1.6.1 Research Design Overview

The proposed research was undertaken using a mixed-methods approach that employed a case study, qualitative interviews and a survey. My extensive experience in the industry enabled access to a sufficient number of research participants with relevant experience, thereby ensuring an adequate number of participants in the sample group for the survey and the smaller semi-structured interviews. The qualitative research sample was selected intentionally according to the needs of the study—a practice commonly referred to as 'purposive sampling' or 'purposeful selection'. The purposive sample used throughout the research comprised individuals recently (within the past six years) exposed to security and logistics workforces in the resource industry in PNG. In purposive sampling, the researcher specifies the characteristics of a population of interest and then seeks to locate individuals who have those characteristics (Johnson & Christensen, 2008). Therefore, the respondents for the semi-structured interviews were selected from the main sample, based on additional specific criteria further detailed in the instrument design. Specifically, the respondents were selected because their high degree of experience could provide extensive information about the issues of importance to the research (Coyne, 1997). The sample size was determined first by

examining how many participants were able to meet the set criteria, and then by determining how many could be contacted. The estimated number was reduced once contact details and experience were verified.

The case study concerned a recent project in PNG and provided public information on workforce composition, nationalisation plans and other key performance indicators (KPIs) for which the government requires annual reports. The data generated by the case study were used to create a base context of the size and complexity of the problem and to anchor further research. The case study was quantitative, as only the existing data from KPIs were addressed in this phase of the research to create a baseline for the research to progress. Case study and qualitative interviewing are methods commonly employed in organisational research (Strang, 2015; Saunders, Lewis, & Thornhill, 2012). Therefore, these were appropriate methods for the purposes and goals of this study. Moving into the qualitative phase of the research, a sample group was selected, some of whom would participate in semi-structured interviews. The semi-structured interviews helped finalise the survey questions and enabled a deeper understanding of some of the factors prior to the survey. Although all participants were known to the researcher, they were documented anonymously. All records of names and personal details were removed, and each participant was coded alphabetically (Punch, 2005).

1.6.2 Data Analytic Strategy Overview

This research employed a mixed-methods approach, where each method addressed a different aspect of the research, as follows:

- case study: data analysis of the resource company KPIs
- interviews: 10 semi-structured participant interviews to obtain perspectives on the key subjects and themes
- survey: 100 respondents to provide detailed confirmation of possible themes identified earlier.

The mixed-methods approach offered the research more depth and allowed the data to be triangulated. A mixed-methods approach is useful when neither a quantitative nor qualitative approach alone can address the problem adequately; thus, the strengths of both approaches are combined to provide the best answer (Creswell, 2003). As discussed in the introduction, this study's use of three different approaches to collect

data enabled a much greater understanding of the problem. The mixed-methods approach offers enormous potential to generate new ways to understand the complexities and contexts of social experience, and to enhance capacities for social explanation and generalisation. Such an approach can both draw on and extend some of the best principles of enquiry. In addition, the process will benefit from the researcher's attempt to develop constructivist epistemologies and to engage with difficult methodological issues, especially those dealing with questions of interpretation and explanation (Mason, 2006).

1.6.3 Ethics

This research obtained ethics approval. The research conforms with Chapter 4.8 of the *National Statement on Ethics in Research*. There were no major ethical considerations in this research that could harm or affect an individual. However, there are some potential ethical issues that could affect the quality of data or results; therefore, these had to be considered. One issue was the potential loss or corruption of data. This was addressed through strong control measures, such as the use of a single computer, a hard drive backup with two locations for storage, scans of hard copies, and physical security measures. The physical security measures included tethering laptops, locking hard drives in a safe, protecting the laptop with a password, and encrypting data. The semi-structured interview participants were not identified in the research, and the research was not controversial—any input from participants would not be deemed negative in the industry. Therefore, the potential for controversy was not a consideration for additional attention in this research.

The final ethics consideration was the potential for respondents to the survey to return a non-constructive or purposively negative response. On occasion, this occurs with surveys; therefore, any responses that were well outside the given range were set aside and documented separately in the findings. This situation was an ethics consideration because, with such a small sample as a result of the purposive sample selection, a defective response from even one or two respondents could compromise the research results. Any other ethical issues encountered were documented and passed onto both the supervisor and ethics committee for guidance before recommencing research. On 24 June 2017, 'low risk' approval was granted with no additional measures required.

1.6.4 Budget

The budget for this research was $7,290 Aud. The major cost, which covered travel and accommodation in Port Moresby, was in excess of $4,800 Aud. The majority of the information was gathered online or in person in Australia. Two one-week trips were budgeted for trips to Port Moresby to conduct the interviews and gather information. The research budget was self-funded by the researcher, with the university fees covered by the Australian Government's higher degrees by research funding.

1.6.5 Research Methods Summary

The research instrument design and data analytic strategy were refined and expanded as the research progressed, and are covered in Chapter 3. It was intended to serve as a compass to guide the data collection by providing direction and structure in the early phase of the research. The use of a mixed-methods approach and triangulation of data underpinned the strategy. Including only quantitative or qualitative methods would fall short of the major approaches being used today in the social and human sciences (Creswell, 2003).

First, by conducting a case study of a relevant organisation, the research gained perspective through the production and interpretation of quantitative data. This helped develop a sense of the size and percentages of the concepts being explored. Effectively, the data were secondary data that will be presented simply in graph form as part of the data analysis. Second, the semi-structured interviews of the key subjects were used to further explore the problem in more detail, address all of the research questions, and help develop the final survey questions in full. Third, once all information from the first two phases was analysed, the survey was finalised and used to complete the triangulation of the principal information. It will be presented in an overview format. Meeting the research goals was the reason for undertaking the study, and it was important that these be addressed individually to ensure that the study remained focused on the purpose of the results, which was to advance the current body of knowledge on indigenous workforce nationalisation programs in logistics and security mentoring programs among resource organisations in PNG.

1.7 Significance of Outcomes

One of the more significant outcomes was establishing a theoretical research outcome model—a body of knowledge created with the potential to reduce expatriate costs through early nationalisation. Other benefits of early nationalisation could include reductions in localised unemployment, petty crime, radicalisation of unemployed youth and travel costs. Local employees would work for longer terms because of their residential status, thereby positively affecting workforce retention. Employing locals also instils a greater sense of community ownership of the project, injects more money into the local economy at a grassroots level, and creates training and support infrastructure that would be transferable to future projects in the country.

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Chapter 2: Literature Review

Chapter 3: Research Methodology

Chapter 4: Case Study

Chapter 5: Interviews and Survey Development

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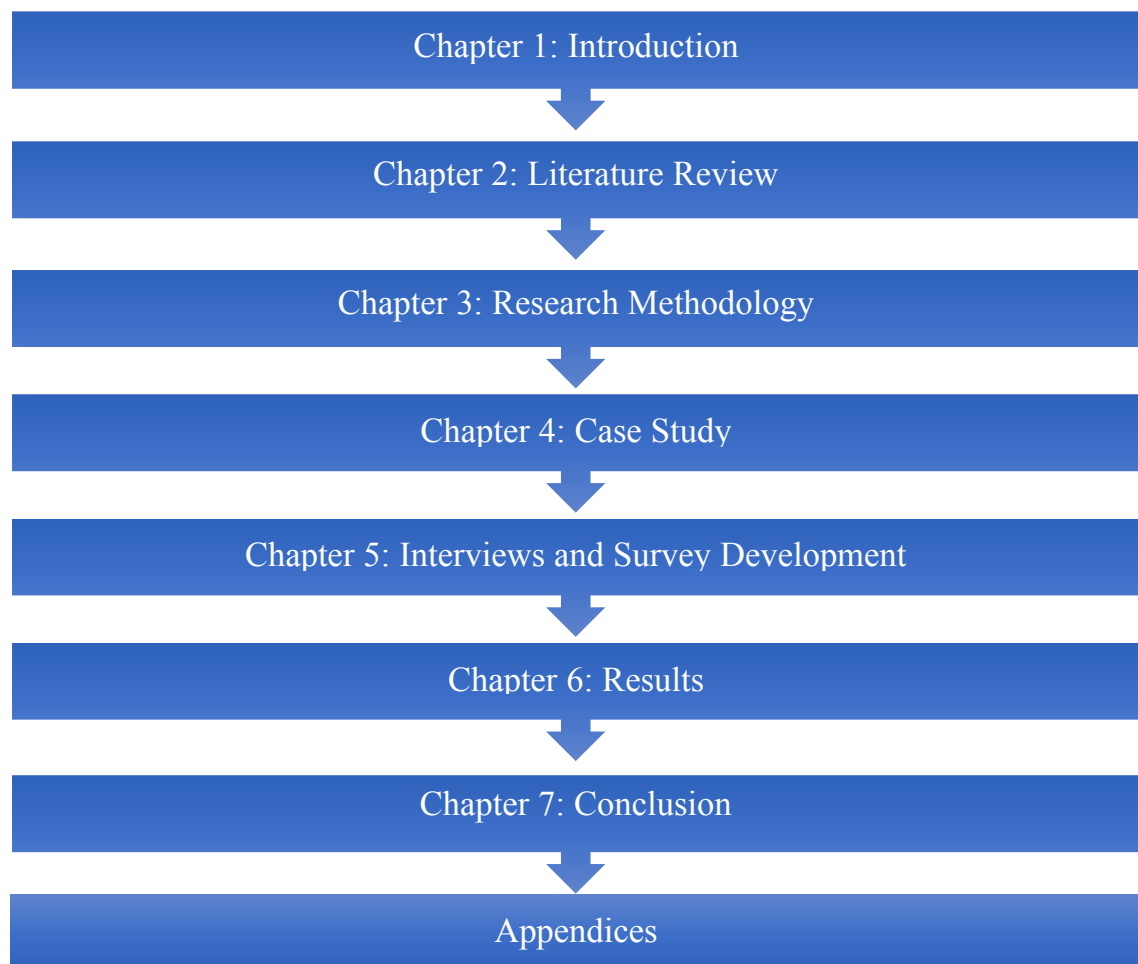
Figure 1.3: Thesis Structure

Chapter 2: Critical Literature Review

2.1 Introduction

Before finalising any research question, it is important to examine the existing literature in some detail to establish what has already been discovered and, more importantly, what gaps still exist. While an early review of the literature indicated a lack of evidence of research specifically examining the mentoring and nationalisation programs used by oil and gas companies, strong research is available investigating the individual aspects of the problem. Strong bodies of work exist that independently investigate mentoring, workforce nationalisation, indigenisation and workplace coaching. The previous literature also thoroughly explores the mentoring of youth in society, mentoring programs in educational settings, the resource industry's cultural and environmental effects, and nationalisation strategies.

For the purposes of the current study, this chapter will evaluate all this previous research in the context of the ways in which a mentoring program specific to PNG can affect a resource company's nationalisation program. Thus, this literature review first seeks to frame the review, including its scope, depth and any potential limitations. It then defines some of the key terms to avoid any ambiguity in the language used throughout this study. Following this, it considers the body of literature that informs each key concept or question being raised to fully explore the validity of each question and find gaps in the existing knowledge. The goal of the literature review is to build a narrative that reveals why the research questions and this research are important (Punch, 2005).

2.2 Scope and Definitions of Terminology

The scope of this literature review began with a primary focus on all literature relating to mentoring programs in resource industries, and the nationalisation and indigenisation programs that are available in English. This scope was then expanded to books, articles, journals and additional secondary data regarding the individual keywords and themes that were available on the internet. The depth of previous research and publications available on mentoring programs in resource companies was found to be inadequate to support the current research. However, much more work was found in each of the

individual areas of mentoring, coaching, workforce nationalisation, indigenisation, workforce development and strategic human resources to build upon and support this research.

To develop a solid knowledge base from which to build this project, the criteria for the material research first narrowed the scope to the most recent decade, and then expanded the scope to include all the keywords and themes developed out of the investigation. In excess of 300 articles and books were used to write this literature review and build the framework to explain why this research is required and how it will be conducted.

There are many terms used in the context of this research, and some, if not all, have different definitions depending on the country, industry or context in which they are used. This research and all written material will be evaluated using the context of the PNG resource industry as a basis for all terms used. The literature on each is used to support and clarify the following terms so they may be used without ambiguity throughout the research.

2.2.1 Indigenisation

The term 'indigenisation' (indigenization) has been used in a variety of contexts all over the world, each holding a slightly different meaning. In religion, it has been used to describe the alteration of teachings or texts to suit the indigenous groups being converted by missionaries. Another definition used by anthropologists is the adapting of Western ideas and culture into indigenous culture, or taking an idea or concept and indigenising it (Merriam-Webster, 2016). The third and most common use of indigenisation is in the human resources or corporate context of nationalisation most often associated with emerging nations. It involves a company or the personnel of a company or organisation transitioning to indigenous personnel and/or ownership. This is usually achieved by the government setting specific targets for companies and/or the company moving towards its own localised indigenous employment goals.

Many examples of the latter idea of 'indigenisation' can be found around the world. For example, 'Emiratisation' is the term used by the United Arab Emirates (UAE) for its policy on hiring local staff. Moreover, in Nigeria, indigenisation and nationalisation are used together in government reporting. However, the most well-known case of this usage and the reason that most Western countries have not readily applied this term

since the 1980s involves Zimbabwean indigenisation. This aggressive government policy sought to fully indigenise or nationalise all primary industry and any successful, foreign-owned private enterprise in Zimbabwe. Instituted by the Mugabe Government, this policy has systematically collapsed the local economy. Internationally, it was viewed as an unfair, poorly developed policy because it removed existing owners without notice or remuneration, and replaced them with unqualified, untrained indigenous personnel, mostly from the defence force. This resulted in a high failure rate among farms and businesses that were previously successful, which subsequently transitioned Zimbabwe from an exporter of produce and goods to a dependent importer, thereby collapsing the economy.

From this instance of 'indigenisation', the term developed a negative connotation, which led to a new reliance on the term 'nationalisation' to describe what had historically been known as indigenisation. While many other countries and cultures use variants of the term, as discussed above, this research applies it within the nationalistic human resources context. Although some literature may occasionally use the terms 'nationalisation' and 'indigenisation' interchangeably, in this research, 'indigenisation' will be the primary term used to describe the transition from expatriate to indigenous staff.

2.2.2 Workforce Nationalisation

As discussed previously, the term 'nationalisation' is closely related to indigenisation, and describes the introduction and use of national content in a company. In this research, 'nationalisation' refers specifically to workforce nationalisation. While very similar to workforce indigenisation, it differs in that it refers to the PNG national workforce as a group, rather than considering each localised indigenous culture as a separate entity. Workforce nationalisation refers to the PNG employment group at a national level, which incorporates inpatriate, national and local indigenous members.

2.2.3 Mentoring

According to Bell (2000), a mentor is someone who helps a protégé learn something that he or she would have learnt less well, more slowly or not at all if left alone. In the context of this research and the PNG resource industries, this term describes the relationship of the supervisor (mentor) responsible for overseeing an indigenous Papua

New Guinean. This term, as well as the relationship and the use of mentoring as a program, will be discussed and evaluated more closely during this review. The definition provided here is merely for contextualisation purposes.

2.2.4 Coaching

Coaching is the process of engaging in regular, structured conversation with a 'client'—an individual or team within a business, profit or non-profit organisation, institution or government who receives business coaching. The goal is to enhance the client's awareness and behaviour to achieve business objectives for both the client and their organisation (Worldwide Association of Business Coaches, 2016.)

Coaching and mentoring are different activities; however, they are often used in conjunction with one another or as part of the same strategic plan; thus, their distinctions must be clearly articulated. Coaching is normally conducted by one individual for an organisation, team or group over a defined period, while mentoring specifically describes a long-term, one-on-one relationship that is often without defined time limits.

2.2.5 Resource Organisation

The term 'resource organisation' describes the multinational companies operating in the natural resource space in PNG. The resource organisations focused on in this research are predominantly oil and gas companies, including ExxonMobil, Oil Search, Repsol, Talisman and others currently operating in PNG. Other smaller organisations, such as mining companies, may be included to a lesser extent; however, since most recent projects in PNG have involved oil and gas, those companies will be the primary focus.

2.2.6 Categories of Staff Terminology

Staff in the resource sector in PNG are broken down into five main categories according to nationality, birthplace and race. While not viewed as acceptable by Western standards and most countries' equity and diversity regulations, this breakdown is required in PNG to categorise the multiple ethnic and tribal dynamics and the landholder rights that the local indigenous people hold in relation to each project. PNG has over 800 different indigenous languages still in use and close to 1,000 separate tribal groups. With a population of over eight million people in the 2005 census and a history of inter-cultural

fighting, it is important to correctly identify people in PNG (Sutton & Arnove, 2004, p. 6).

The five different categories of staff members in PNG are as follows:

- Expatriate: A Western national predominantly viewed as educated and a specialist in a certain area.
- Other country national (OCN): A national from a non-Western or non-developed country, such as a national from the Philippines. These include skilled workers who fill specialist roles, such as welders and construction workers.
- Inpatriate: A PNG national who has been sent overseas for an extended time for education and/or employment, and returns to PNG with experiences and skillsets that are similar to expatriate or OCN staff. Through this extended process, they become Westernised and fully indoctrinated into the culture of multinational organisations.
- National: A PNG national who is not from the local area or the indigenous landowner group related to the project. They often do not share language or culture with the local indigenous groups, and in many cases are viewed the same as an OCN. The term may also be used to describe an inpatriate (defined above).
- Local/indigenous person: A person local to the immediate area affected by the project or the company's operation.

These terms will be used throughout this research, as well as the literature review. They provide an accurate descriptor of staff categories, align with the terms used in PNG and should not be viewed as a departure from the conventional equity and diversity norms used in Australia (Al-Waqfi & Forstenlechner, 2010).

2.2.7 Reflective Practice

Reflective practice is the term used to explain one's ability to reflect on actions to engage in a process of continuous learning. According to Schon and many others, reflective practice involves devoting critical attention to the practical values and theories that inform one's everyday actions. This is normally achieved by reflexively examining and seeking possible reasons to explain what has occurred to determine how it could be achieved in an improved manner. A more practical and accepted version of this practice derives from the military operational setting in which lessons are learnt by

everyone involved reflecting on what could be improved next time. I have used this process in the field throughout the development of the research proposal and into the development of the research to help ascertain the questions that needed to be asked.

There is a large amount of literature on reflective practice and its integration into research and learning. Only a small selection has been included below to support its use in this research. I have drawn heavily on my own experience, reflective practice and the lessons learnt by others to help identify how to best approach the research.

The academic roots of reflective practice date back to John Dewey (1933), who, at the turn of the twentieth century, pioneered the practice of learning, experiencing and then combining this knowledge. His work was influenced by visiting Asia and Africa in his formative years and reading philosophy (Dewey, 1933). Many others came after Dewey and built on his work—including Borton in 1970 and Kolb and Fry in 1975—however, none had the same effects as Argyris and Schön in 1978 (Borton, 1970, Argyris and Schön, 1978 and Kolb and Fry, 1975).

Schön (1983) advocated two types of reflective practice:

1. reflection-on-action, which involves reflecting on a situation that one has already experienced, or an action that one has already taken, and considering what could have been done differently, as well as considering the positives from the interaction
2. reflection-in-action, which involves reflecting on one's actions while performing them, and considering issues such as best practice throughout the process.

According to Schön (1983), professional growth really begins when a person starts to view situations with a critical lens by doubting his or her actions. Doubt brings about a way of thinking that questions and frames situations as 'problems'. Through careful planning and systematic elimination of other possible problems, doubt is settled, and people are able to affirm their knowledge of the situation. Following this, people are able to think about possible situations and their outcomes, and deliberate whether they performed the right actions (Schön, 1983).

This outlines the need to reflect on one's actions or observations to identify problems and possible solutions, and supports the use of reflective practice in research and learning in a professional environment. Schön (1983) further stated that:

> a practitioner's reflection can serve as a corrective to over-learning. Through reflection, he can surface and criticize the tacit understandings that have grown up around the repetitive experiences of a specialized practice, and can make new sense of the situations of uncertainty or uniqueness which he may allow himself to experience. (p. 61)

However, in terms of the current research, the most relevant and pertinent quotation from Schön (1983) may be the following:

> In the varied topography of professional practice, there is a high, hard ground where practitioners can make effective use of research-based theory and technique, and there is a swampy lowland where situations are confusing 'messes' incapable of technical solution. The difficulty is that the problems of the high ground, however great their technical interest, are often relatively unimportant to clients or to the larger society, while in the swamp are the problems of the greatest human concern. (p. 42)

This resonates with my experience over the last 20 years of professional practice, and is a good example of Schön's work in this area. Although many other academics since Schön have built on the early author's combined works to further define reflective practice, this work has focused more on aligning reflective practice within specific professional settings, rather than shifting the basic concept. An example of this further development of reflective practice occurred a few years later in Boud, Keogh, and Walker (1985), when they argued that:

> the outcomes of reflection may include a new way of doing something, the clarification of an issue, the development of a skill or the resolution of a problem. A new cognitive map may emerge, or a new set of ideas may be identified. The changes may be quite small or they may be large. They could involve the development of perspectives on experience or changes in behaviour. The synthesis, validation and appropriation of knowledge are outcomes as well as being part of the reflective process. New links may be formed between previously isolated themes and the relative strengths of relationships may be assessed. Again, a significant skill in learning may be developed through an understanding of one's own learning style and needs. (p. 34)

Here, the authors demonstrated the value of reflective practice in identifying themes and possible solutions, and with it the need to validate knowledge that is important in research. They also stated that:

> reflection is an important human activity in which people recapture their experience, think about it, mull it over and evaluate it. It is this working with experience that is important in learning. (Boud et al., 1985, p. 43)

Both this later work and Dewey's earlier foundational work are all consistent with Schön's concept of embracing one's experience and knowledge through reflective practice. In 1992, in a later work with his original partner, Argyris, Schön (1992) further explores these 'other ways of knowing' through reflection (individual and collaborative). Further, according to Argyris and Schön (1992), professionals possess knowledge that is explicit (that which we can say) and knowledge that is implicit (that which we cannot say, but which is revealed in our actions). A few years later, Clarke, James, and Kelly (1996) defined this concept more clearly by suggesting that, in addition to technical knowledge, professionals need to develop practical, social, political and economic knowledge, as well as self-knowledge.

More recently, Hoyrup and Elkjaer (2006 defined reflective practice as:

> the practice of periodically stepping back to ponder the meaning of what has recently transpired to us and to others in our immediate environment. It illuminates what the self and others have experienced, providing a basis for future action. In particular, it privileges the process of inquiry, leading to an understanding of experience that may have been overlooked in practice … It typically is concerned with forms of learning that seek to inquire about the most fundamental assumptions and premises behind our practices. (p. 36)

This indicates the value of reflecting on one's work or past experiences to better understand what occurred and why, and what one could have done to attain a different outcome. Further, Johns (2000) stated that:

> [r]eflection is a window through which the practitioner can view and focus self within the context of her own lived experience in ways that enable her to confront, understand and work towards resolving the contradictions within her practice between what is desirable and actual practice. Through the conflict of contradiction, the

commitment to realize desirable work and understanding why things are as they are, the practitioner is empowered to take more appropriate action in future situations. (p. 34)

At the European Group for Organisational Studies Conference in July 2006, Hoyrup and Elkjaer (2006) further noted the intrinsic value of reflective practice as it is being used in the context of this research (to help develop and frame the research questions): 'Reflection is a discursive way of creating a space for focusing on problematic situations and of holding them for consideration without premature rush to judgment' (p. 23). McBrien (2007) also suggested that reflective practice is an important tool in professional learning settings, where people learn from their own professional experiences, rather than from formal learning or knowledge transfer. In these cases, it could potentially be the most important source of personal professional development and improvement. It is also an important way to bring together theory and practice because, through reflection, a person is able to see and label forms of thought and theory within the context of his or her work (McBrien, 2007). This is potentially an important perspective because it suggests that reflective practice and experience could be more important to learning than knowledge transfer or theory—an interesting and slightly different take on a common theme found throughout the reflective practice literature.

The final idea that informs reflection in this context derives from McNamara and Field (2007), who stated:

the capacity to reflect on one's own strength and weaknesses, to learn from constructive criticism, and to practice critical reflection by monitoring one's own work performance and interpersonal interactions is essential to the ability to learn from experience and is the cornerstone of the journey to becoming a lifelong learner. (p. 87)

This is a good example of a more current work that still supports the use of reflective practice in the manner in which it is used in this research. While there are many other works that could be drawn upon, these effectively establish the merit of using reflective practice in the case of this research. Given my background and experience, reflective practice is an effective method for developing questions upon which to found the research proposal. While nearly 20 years of experience in the research environment

does not give me the answer to these questions, reflecting on this experience does provide the depth of knowledge to know which questions need answering.

2.3 Previous Studies on the Topic

2.3.1 Papua New Guinean Culture

To understand the complexities of workforce nationalisation programs and how they affect indigenous staff, the national and indigenous context must be understood. Papua New Guineans are a unique people, and each group is vastly different from the other. Therefore, the geographical, socioeconomic, educational and family issues and responsibilities particular to PNG must all be examined. To provide context for the problem, the following overview employs the Central Intelligence Agency's online World Factbook, Encyclopaedia Britannica, Lonely Planet and the Government of PNG's website.

The islands that constitute PNG were settled over a period of 40,000 years by the mixture of peoples who are generally referred to as Melanesians. Since the country achieved independence in 1975, one of its principal challenges has been the difficulty of governing many hundreds of diverse, once isolated, local societies as a viable single nation. Although most people are classified as Melanesian, PNG's social composition is extremely complex. Very small minorities of Micronesian and Polynesian societies can be found on some of the outlying islands and atolls, and, as in the eastern and northern Pacific, these groups have political structures headed by chiefs—a system seldom found among the Melanesian peoples of PNG .

The non-Melanesian portion of the population, including expatriates and immigrants, is small. At the time of independence in 1975, the expatriate community of about 50,000 people was predominantly Australian, with perhaps 10,000 people of Chinese origin whose ancestors had arrived before World War I. By the early twenty-first century, most of those people had moved to Australia. The foreign-born community had not expanded, but had become more diverse; with only some 7,000 Australians, and the largest non-Western groups from China and the Philippines.

In addition to the official languages, there are more than 800 distinct indigenous languages belonging to two radically different language groups—Austronesian (to

which the local languages classified as Melanesian belong) and non-Austronesian, or Papuan. There are some 200 related Austronesian languages. Austronesian speakers generally inhabit the coastal regions and offshore islands, including the Trobriands and Buka. Papuan speakers, who constitute the great majority of the population, live mainly in the interior. The approximately 550 non-Austronesian languages have small speech communities, the largest being the Engan, Melpa and Kuman speakers in the Highlands, each with more than 100,000 speakers. Amid such a multiplicity of tongues, Tok Pisin serves as an effective lingua franca (Lonely Planet, 2016).

PNG's rate of population growth tends to be high, while life expectancy is somewhat low relative to other countries in the region. An estimated half of the population is under 18 years of age. In the late twentieth and early twenty-first centuries, the birth rate greatly exceeded the world average, while the death rate was moderately high and falling. Rapid population growth has created difficulties in providing basic health and education services. Unemployment and underemployment have exacerbated the problems of poverty, crime and ethnic tension, especially in urban areas. The term 'underemployment' is important here, as this explains the use of national staff and, more importantly, the placement of local indigenous staff in menial, low-paying, short-term roles. This situation enables companies to hit government quotas and keeps local landowners happy, as opposed to implementing any real nationalisation efforts on the companies' behalf (Gilberthorpe, 2013).

After 70 years of exploration, major natural gas and crude oil finds were made in the late 1980s, and oil and gas production began near Lake Kutubu and Tari in 1992. This production was developed by Oil Search, a publicly listed Australian and PNG company. In 2014, a large-scale liquefied natural gas (LNG) project, called PNG LNG, was completed on the southwestern slopes of the main range. This project was owned and operated predominantly by ExxonMobil Corporation, with Oil Search, Santos and other minor partners, including the PNG Government.

At times, this major resource exploitation has caused local landowner groups to contest the distribution of resource revenues, principally against the national government. Additionally, serious environmental damage from mine tailings has been a constant problem in several projects. Beginning in 1988, dispute over those issues was one factor that led to open warfare around the Panguna mine, causing both the mine's closure and

a renewal of hostilities among the inhabitants of Bougainville, where a long-dormant secession movement had been simmering. Other factors included the inequity in employment and disproportionate sharing of wealth. A peace process began in 1997. Despite this major upheaval, PNG experienced a mining boom early in the twenty-first century, with several new mines opening during that time, and income from mining and quarrying providing around one-fourth of the gross domestic product (Madeley, 1999). Gold and copper comprised some two-thirds of the value of exports. This has now been overtaken by oil and gas exports from PNG LNG.

Formal salaried work employs only about one-tenth of the adult workforce. The proportion of women in salaried work is very low. Basic wages are higher than in most of Southeast Asia, but productivity is relatively low. There is a shortage of people able to perform skilled work, which is exacerbated in resource industry areas, and the shortfall is made up by thousands of foreign workers. The government has had little success in encouraging rural, village-based development aimed at reducing migration to urban areas by people seeking formal employment.

There is no social security system in PNG, which is one of the reasons the crime rates are high. For most Papua New Guineans, the primary security issues are personal and involve fear of property theft, interpersonal violence and rape. Security concerns are also a major problem for businesses and are regarded a serious deterrent to investment, both foreign and local, as well as tourism. The police service is understaffed, poorly trained and underfunded. As a consequence, private companies have come to play a significant role in security (Dorney, 2016).

2.3.2 Education and Social Services

Roughly half of primary health services and primary schooling are provided by church agencies, with some funding from the government. In several provinces, the coverage offered by primary schools and basic health services has declined since the mid-1980s because of lack of staff and supplies—a trend exacerbated by the decline of the road network (Gilberthorpe, 2013).

Despite PNG's policies for universal primary education and the considerable progress it has made towards expanding education since gaining its independence, schooling remains neither free nor compulsory. At most, around two-thirds of school-age children

attend school, and around three-fifths of adults are literate. In both cases, rates are lower among women and girls than among men and boys. Only about half of those who begin primary school complete all six years, and only one-fourth of those students enrol in secondary school. Even though education is a major government priority, the rapid growth and extreme youthfulness of the population mean that educational demand outstrips supply. Moreover, when an economic decision is necessary, families tend to spend their limited funds to educate sons, rather than daughters. The country has four state-run universities, the University of Papua New Guinea in Port Moresby, and two church-based universities, as well as a number of teacher-training institutions and a medical school (World Factbook, 2016).

Different people's daily lives vary enormously in PNG, with the great majority of the population living across the diverse rural landscape in villages or hamlets. Daily life usually centres on the extended family, with the clan forming the major unit of social organisation. Almost all Melanesian societies are patrilineal, tracing descent through the male line. Even the matrilineal societies, where descent is traced through the female line, remain patriarchal (male dominated). In some areas, descent and land rights can be claimed through either parent, so people can belong to both their parents' clans. When people migrate from rural villages to urban areas or rural resettlement areas, they carry their languages and customs with them and recreate their existing social structures. The social bonds and obligations of the wantok system can provide support for those struggling in new locations, but also place heavy demands on the more affluent people who feel obliged to support their kin. The demands of wantoks are often held to be a root cause of corruption. Increasingly, there are second or third generations of townspeople who have 'mixed marriages' across language lines. While affiliated with both their parents' relatives, they often display a greater sense of nationhood than do their age-mates who have less multicultural backgrounds (Britannica.com, 2016).

In his 2005 report for the Lowy Institute, *Re-Imagining PNG*, Ben Scott (2005) covered many intricacies of PNG culture, and cited work from some current PNG experts, such as Philpot and Reilly. According to Scott (2005), 30 years after independence, PNG is looking increasingly fragile. Moreover, Scott (2005) suggested that the current outlook is quite bleak:

After a good start, the state's authority and capacity has gone into decline. Average health and education levels are improving only incrementally, if at all. HIV has begun to spread at an exponential rate—with disastrous economic and human implications. The natural resources upon which the economy depends appear to be running out. Increasingly avaricious politics, violent elections, corruption, and the ascendancy of organised crime are all causes and symptoms of the problem. The news is not all bad: Papua New Guinea has undertaken important economic and constitutional reforms, and the Bougainville conflict has been resolved. But these positive developments are insufficient, on their own, to counter Papua New Guinea's negative trajectory. Unless this is reversed, Papua New Guinea's democracy will become less liberal, criminal influence will grow, public order will deteriorate, more local groups will go their own way, and Papua New Guineans will become poorer, hungrier, and sicker. There is, however, little likelihood of large-scale violence, overt secessionism, a coup, or an outpouring of refugees. The hope that Papua New Guinea could leapfrog from a multitude of micro-societies to a unitary liberal democracy now looks over-ambitious. The top-down approach Papua New Guinea's government copied from their colonial predecessor has not worked. The state never quite established itself. Few Papua New Guineans see it as the embodiment of their collective will, and many still view it as an alien presence to be either resisted or looted. Papua New Guinea's numerous 'traditional groups' far exceeding its 800-plus languages command greater loyalty. These groups are fluid and overlapping but nonetheless powerful. As the state has weakened, people have come to depend ever more on traditional links for welfare and social regulation. While traditional groups may possess some internal cohesion, relationships between them are often suspicious, competitive and hostile.

Taking better account of the reality of traditional groups is the central challenge of building, from the ground up, the state and nation of Papua New Guinea. Social engineering aimed at moulding a new national identity is unrealistic and making the state 'more traditional' misses the point. The goal should be to build on the positive dimensions of traditional groups (such as internal cohesion and pluralism), deal more directly with the negatives (nepotism and fragmentation) and channel traditional loyalties and rivalries in the most productive way. Official acknowledgment of the reality of ethnic identity is a step back from the ideals of liberal democracy, but it may be necessary to keep moving forwards.

Scott's review of the literature and the situation aligns closely with my own experience.

2.3.3 Australia's Former Colony

In the wake of World War I, in Australia's only attempt at being a colonial power, Australia took over PNG—a power grab that ended peacefully on 16 September 1975 when PNG gained its independence. In the 40-plus years since this independence, Australia has maintained a close relationship with PNG and is still a major contributor of aid and support. Scott (2005) described the relationship as follows:

> Australia has always been somewhat ambivalent about Papua New Guinea. Papua New Guinea was Australia's only colony and one of the few colonial relationships involving neighbours: the interests driving most comparable relationships have propelled the colonial power onwards to annexation and incorporation. Colonial rule ended unusually peacefully, and earlier than large segments of the indigenous population wished. Since independence, Australia has provided Papua New Guinea with considerable aid, and the new state has been unusually narrowly dependent upon the former colonial power. Australia has never been sure about how this large amount of money should be spent most effectively and has swung between allowing Papua New Guinea control and exerting Australian control over it.
>
> Many Papua New Guineans still look to, and have warmer feelings towards, Australia than to any other country. Australian culture has strongly influenced Papua New Guinea, in ways that go well beyond the obsession with Australian Rugby League. Papua New Guinean informality and practicality feels familiar to many Australians. Yet some postcolonial sensitivity has endured, although this is not comparable to that of colonies which wrested independence from the coloniser. Papua New Guinea's unusually high dependence upon Australia only adds to sensitivities about independence and sovereignty. Papua New Guinea's elite can be the most sensitive despite, or perhaps because of, the fact that they have the strongest links to Australia. (pp. 26–27)

Scott's point about PNG being the former and only colony of Australia is particularly critical to the current situation evaluated in this research—the effect of this history on PNG's ongoing relationship with Australia, specifically regarding the country's views towards expatriate staff.

2.3.4 Resource Curse

Scott (2005) argued that, although PNG is blessed with abundant natural resources, this may be something of a curse in disguise:

> The poor performance of many resource-rich countries has increased the attention focused on the 'resource curse' and a number of possible explanations for this have been advanced. Resource wealth encourages rent-seeking, rather than wealth-creating, policies and behaviour. In its most extreme form, this rent-seeking can develop into destructive conflict. Bougainville is just one example of the worldwide phenomenon of a resource-rich region seeking independence. Not only does resource wealth reduce the incentive to produce broad-based growth, but large-scale extractive industries can crowd out other economic activity by drawing in the skilled workforce and by producing a currency appreciation which makes domestic industry and other exporters (in Papua New Guinea, primarily agriculture) less competitive. Resource-dependant economies are difficult to manage as a result of the volatility produced by fluctuating commodity prices. Like many others, Papua New Guinea has incurred liabilities in the good times, especially through an expanded public payroll. These are difficult to correct when times get tough. (p. 27)

This is where PNG is located now—as demonstrated in the previous literature, it has become highly dependent on resource wealth and the resource industry to underpin the nation's economy, not unlike what happened in Western Australia during its 2008 to 2015 resource boom. However, unlike Western Australia, PNG does not have the ability to fall back on other states during downswings in resource commodities' prices. This increasing reliance on the resource industry in PNG is further evidence of the need for strong workforce nationalisation to assist in both protecting the local industry through lower wage costs and keeping employment strong during lower returns.

2.3.5 Customary Land Ownership

According to Foley (2000), and discussed in Scott (2005), about 97% of PNG's land is owned by customary groups. The nature of their rights varies from place to place; however, generally, 'tenure to land is group based, and individuals have rights to land as a result of their membership by birth into a group, or of some other relationship to the group' (Scott, 2005, p. 47). Although there is no comprehensive register of these rights,

there are a number of legal mechanisms through which customary groups can assert them (Scott, 2005). Scott argued:

> the most important point to make about Papua New Guinean culture is that, to a significant extent, there is no such thing. Rather, there are hundreds, possibly thousands, of different cultures. The usual barometer is Papua New Guinea's linguistic diversity. Papua New Guinea is home to over 800 distinct languages, more than any other country and more than 10 per cent of the world total. Unlike other countries with a large number of languages (Indonesia has 742, Nigeria 516 and India 427), Papua New Guinea lacks a widely spoken, or dominant, indigenous language. The point here is not that Papua New Guineans lacks a lingua franca (English and a number of pidgin languages serve this purpose, and many people speak more than one language) but that Papua New Guinea is the most linguistically diverse country in the world.
>
> Language groups are rarely culturally homogenous and can include a number of dialects, tribes and clans that view themselves as quite distinct. The larger Highlands language groups such as Enga and Huli are fragmented along tribal and clan lines. Enga Province is the most linguistically homogenous province (by far) but also one of the most violent. There are cases of clans spanning more than one language group, and clans may be spread across numerous villages, with one village containing several clans. (Foley, 2000, pp. 209, 212).

Foley's (2000) and Scott's (2005) claims are supported by Benjamin Reilly (2005), who conducted the most systematic study of the implications of PNG's diversity. He argued that clans increasingly play the role of interest groups in PNG. Moreover, by seeking to maximise outcomes for their own members, they inevitably and inexorably create a collective action dilemma for the country as a whole. The combined effect of many small ethnic groups acting to secure their own interests undermines the broader interests of society (Foley, 2000; Reilly & Phillpot, 2002).

Reilly and Phillpot (2002) tested the proposition that ethnic diversity can impede development by comparing some of PNG's provinces. Their results appear to indicate that the most ethnically diverse provinces are the least developed. Reilly and Phillpot demonstrated that the degree of ethnic diversity in the province is a far better predictor of the level of development than any other 'environmental' variable. Positive cultural change in PNG is far more likely to occur as a result of local developments than through

top-down social engineering. Local cultures, more than manufactured national ones, can provide a prism that allows people to make sense of and adapt to change in ways that are not always possible for outsiders to anticipate or understand. The rapid changes in PNG in the lead up to independence led to a proliferation of local syncretic movements, which combined the old and the new in innovative ways. It is possible that the current 're-tribalisation', which is largely a reaction to the state's failings, could develop in similar ways (Reilly & Phillpot, 2002, Scott, 2005).

2.3.6 Wantok Culture

PNG's short history has been shaped by the local economies of competition and reciprocity, which long pre-date the state. Terms such as 'bigman' and 'wantok' are frequently used to describe the systems of patronage and informal networks that are often more influential than formal institutions and rules. In PNG, the term 'bigman' is now used to describe businesspeople or, more commonly, politicians (and often both) who maintain their leadership by delivering patronage and resources to their constituents. The term 'wantok' (pidgin for 'one talk') literally refers to those from the same language group; however, its use (often by someone asking for a favour) is less related to language and more related to links. Contemporary wantok networks— especially in urban areas—can be based on language, geography, kinship or simple personal connections, and can encompass people from different parts of the country. The term 'wantok' captures the continuing strength of traditional and regional loyalties in PNG. Even the best-intentioned public servants and politicians can encounter difficulty in resisting pressure from wantoks from their village, clan or tribe. There are two sides to wantok relationships. Although they can provide a social safety net, they can also act as an obstacle to impartial administration, and a disincentive to the accumulation of private wealth, as successful individuals are frequently besieged with demands from wantoks (Gilberthorpe, 2013).

The more promising developments in civil society include the formation of links that span traditional groupings; however, the evidence of these new positive links is scant, while an abundance of evidence suggests that most Papua New Guineans' loyalties are still overwhelmingly local. The difficult and blurry interface between the traditional and the modern is at the heart of many of PNG's problems. The resources delivered by a contemporary bigman (almost always a member of parliament) to his (almost

invariably) wantoks (constituents) are often referred to as 'cargo'. The term 'cargo culture', derived from Millenarian cargo cults, is frequently used in PNG to denote the culture of dependency that emerged as a result of PNG's experience of 'development as something that is delivered from outside' (Scott, 2005). Emerging as a result of PNG's history, elements of cargo culture are manifest across the country. Cargo culture is fundamental to the dominant Papua New Guinean view of the state—not as something that they collectively own, but as a source of resources. This explains the seeming absence of any notion of opportunity cost when it comes to state resources. A pernicious dimension of this problem is the proliferation of demands for state compensation, usually in return for the use of the customary land, even when the land in question is being used to benefit the customary landowners.

2.3.7 Differences in Tribal Groups

In Ethnic Conflict in Papua New Guinea, Reilly (2008) stated that:

> considering the lack of overt racial distinction between them, the depth of cleavages between ethnic groups in Papua New Guinea is often striking, and can be partly explained by geographic factors. Papua New Guinea has some of the world's most dramatic terrain, with a vast range of mountains and valleys running through the middle of the mainland ('the High-lands') and an extensive arc of populated volcanic islands off the coast—all of which create severe difficulties in terms of isolation, access and transport. Accordingly, most groups developed their own physical and cultural identity in isolation … communities living on different sides of the same highland valley sometimes speak languages as distinct from one another as Spanish is from Italian. Part of the difficulty of defining what constitutes an ethnic group in Papua New Guinea is the sheer variation of its ethnic structure, which limits the ability to make generalisations.
>
> In contemporary Papua New Guinea, clans thus increasingly play the role of interest groups. Clans compete with each other for access to resources—not only the jobs and other benefits provided by major resource projects. (pp. 12–13)

This is a useful overview of the tribal differences in PNG. Combined with a sometimes aggressive male-dominated society in the Highlands region, these differences can create a dynamic, complex work environment; thus, these issues need to be considered. Along with language and basic cultural differences, at times, there are diametrically opposing

cultures, which can cause clashes. Matrilineal and patrilineal societies both exist in PNG, as well as traditional village life, which can be very conservative. While these cultures continue to function and many people continue to live in these environments, many people have also become based in the city and live in Port Moresby, which is becoming a contemporary city. These shifts have also affected the differences in tribal groups, as they traditionally did not have so much interaction with each other. Additionally, there is a clash of old versus new, with village children relocating to the city to gain education and work, and then returning home with new ways of thinking and altered values. While this situation does not directly affect this research, understanding the cultural distinctions of these groups reveals the complexities involved, and indicates why a 'one size fits all' approach will not work in PNG.

2.3.8 Workforce Nationalisation Programmes

While there is a strong body of research from the human resources standpoint, detailing primarily expatriate issues, such as retention, job satisfaction and cultural issues, this research contains few references to national staff and the role of nationalisation or indigenisation (Harvey & Moeller, 2009). Approaching this issue from an inpatriate direction, the work of Harvey, Milorad, and Speier (2000) detailed the process of nationals being absorbed by a multinational company into the global headquarters or the process of national staff or OCN staff returning from Western education or employment.

Harbison (1973) argued that human resources—not capital, income or material resources—constitute the ultimate basis for the wealth of nations. Capital and natural resources are passive factors of production, while human beings are the active agents who accumulate capital; exploit natural resources; build social, economic and political organisations; and carry forwards national development. Clearly, a country that is unable to develop the skills and knowledge of its people and use them effectively in the national economy will be unable to develop further (Harbison, 1973). Prominent Papua New Guinean manager, Nama Polum (2011), wrote about this issue in his 2011 doctoral thesis, which investigated how the governmental sector conducted capacity building in PNG.

The PNG Government has already instituted policies to promote the nationalisation and indigenisation of PNG projects and workforces. While these policies are a strong step in the right direction, they are not always strictly monitored and enforced, and they are flexible enough to be exploited by companies. It is important to include these policies and laws in the literature review because they indicate the country's strategic direction regarding nationalisation. According to the guide to the *Employment of Non-citizens Act 2007*, as a general rule, all non-citizens who seek employment in the private sector in PNG must possess a valid work permit before they can commence employment. Additionally, in accordance with this Act, work permits must be granted by the Secretary of the Department of Labour and Industrial Relations. The primary purpose of the *Employment of Non-Citizens Act 2007* (2009) is set out in Section 1 of the Act:

> (1) The purpose of this Act is to provide a **balance** between the needs of the economy for foreign labour and the aspirations of Papua New Guineans for decent work by—
> (a) assisting business to attract and retain the services of qualified, skilled and experienced non-citizens without unnecessary impediments; and (b) promoting a work permit system that contributes to the creation of employment, training and skills-acquisition opportunities for all Papua New Guineans. (*Employment of Non-Citizens Act 2007*, 2009, s. 1)

Of course, the legislation has a variety of purposes, such as protecting the rights of non-citizen workers; however, this is the main purpose of the law. This is a clear statement that the government is, at a strategic level, supportive of creating opportunities for training and skills transfer from expatriate to national staff. The framework set out to ensure that the balance of incoming expatriate staff is matched against the creation of opportunities for indigenous workers.

Foreign employment is a careful balancing act. PNG's foreign employment system must carefully balance competing interests. The government understands that the business community has a legitimate need to recruit foreign workers. Business drives the economy; thus, businesses in PNG must be allowed to attract qualified, skilled and experienced foreign workers when these workers cannot be recruited from within the country. To achieve this objective, the work permit system must ensure that businesses are able to engage non-citizen workers without unnecessary impediments and red tape (*Employment of Non-Citizens Act 2007*, 2009). However, the PNG Constitution also recognises that all citizens have the right to participate fully in their country's economy.

Every Papua New Guinean is entitled to access to employment and career advancement opportunities. Thus, Papua New Guineans must also be allowed opportunities to train and develop their skills to their full potential. In short, the legislation recognises that the work permit system must also care for the interests of Papua New Guineans. The *Employment of Non-Citizens Act 2007* balances these two competing yet legitimate interests. It achieves this by delivering a fair outcome for the business community, while simultaneously promoting a system that recognises the aspirations and needs of all Papua New Guineans (*Employment of Non-Citizens Act 2007*, 2009).

These statements are all indicative of the country's leaders' support of nationalisation through skill transfer between expatriate specialists and indigenous national staff. It further recognises the need for the incoming expatriate staff to be well educated and experienced, requiring that a degree and substantial experience be documented and proven to grant a work permit. This is discussed in detail in the next section below.

Section 10 of the *Employment of Non-Citizens Act 2007* (2009) provides that a work permit may only be issued:

- to a specified employer
- for a specified non-citizen and
- for a specified occupation

As a general rule, non-citizen employees should possess a degree or other tertiary qualification relevant to their field of employment. Applicants should also demonstrate appropriate work experience (at least 3–5 years) in order to qualify for a work permit. Work permits may be granted to highly-skilled non-citizen workers who do not hold any tertiary qualifications. However, detailed proof of the employee's skills and job experience must be provided in an updated curriculum vitae (CV) as part of the work permit application.

This is further evidence of the government's drive to nationalise by creating an environment that effectively supports a mentoring skills transfer program. At least in its literature and policies, the government and its supporting agencies in PNG have designed and implemented a basic strategy for nationalisation. The following quotation, also taken from the Act's guidelines for use, provides further detail on the knowledge-sharing requirements and expectations for expatriate staff. This is again a supportive measure that has a positive implication for this research:

> Sharing knowledge and community participation—Non-citizens are required to share their knowledge and experience with their Papua New Guinean counterparts. It is also important that non-citizens who come to work in PNG are able to communicate with Papua New Guinean citizens within the community. (*Employment of Non-Citizens Act 2007*, 2009)

This further supports the aims of this research and is evidence that the government's policies align with the basic concepts of skills transfer, which is the basis of mentoring programs. Further, this alignment is demonstrated by the steps to renew an expatriate's work permit, detailed here:

> In accordance with Section 26 of the Act, the Secretary will take into account a number of factors to determine whether to renew the work permit. These factors are:
> - The conduct of the non-citizen
> - The extent to which the work permit applicant and employer have contributed to the training and development of Papua New Guineans
> - Any other matters that the Secretary considers appropriate. It is essential when making application for the renewal of a work permit that appropriate evidence of training and development of Papua New Guinean workers is provided. (*Employment of Non-Citizens Act 2007*, 2009)

This further supports the view that the government's policies are, at least in theory, taking steps to aid in the nationalisation process. However, at times, the implementation of these policies may not always align with the strategic intent as a result of human factors in PNG, combined with corporate citizenship attitudes. It is rare for the department to enforce or reject an application if it derives from a large multinational company. Understaffing and poor resourcing of government departments create impediments to policing this well-crafted strategy. Another policy established to encourage companies to take nationalisation seriously is the Good Corporate Citizen Programme. Section 52 of the Act makes provisions for certain employers to be declared 'good corporate citizens' of PNG. The provisions of the Act are supplemented by Part VIII of the regulation. Good corporate citizenship is based on the belief that businesses that 'do the right thing' should be rewarded. In other words, the law is intended to recognise those members of the business community in PNG who make an outstanding contribution to the development of Papua New Guinean workers:

Good Corporate Citizens must be able to demonstrate a sound track record of:

- recruiting and training Papua New Guinean workers
- complying with the *Employment of Non-citizens Act 2007* and other PNG laws
- sound employment, industrial relations and occupational safety and health practices. Businesses will not be able to demonstrate good corporate citizenship by providing a one-off monetary gift. The good behaviour must be sustained—there must be evidence of a real, long-lasting commitment to the ideals of Good Corporate Citizenship.

Good Corporate Citizens may be given 5-year work permits, preferential processing of applications and the use of a sign to publicise such. (*Employment of Non-Citizens Act 2007*, 2009)

To summarise, the PNG Government's strategic policies and nationalisation program, based on the *Employment of Non-Citizens Act 2007*, is viewed as being supportive of this research. It is well developed and balances the corporate needs of companies and the nationalisation aspirations of PNG. It was implemented in a staged process and in consultation with industry. When compared with other countries that are driving workforce and industry nationalisation, PNG's programs have been well received. Examples of policies and programs that have been similar in early intent, but do not share the focus on practical skills transfer through expatriate and indigenous staff exchange, can be found in Nigeria, the UAE, Zimbabwe, Chad and greater Africa.

The most aggressive of these nationalisation programs, the Zimbabwean *Indigenisation and Economic Empowerment Act of 2008*, was implemented in Zimbabwe by the Mugabe Government. This Act, which passed in September 2007 and followed from previous indigenisation laws, was referred to as 'blackening' the economy by some writers, such as Fisher (2010), because it transferred white-owned farms to black Africans. It removed expatriates from positions without regard for skills transfer or the availability of an indigenous replacement, and allowed the state to take over and transfer ownership of companies. The confusion and aggressive policing of the questionable policy caused a dramatic shift in the local economy. In little over a year, Zimbabwe changed from an exporter of primary produce with a stable economy to a dependent importer of food and produce. In 2008, Zimbabwe had the world's highest inflation rate, and it remains in a state of financial turmoil. The law gave Zimbabweans the right to take over and control many foreign-owned companies in Zimbabwe. Specifically, over

50% of all the businesses in the country were transferred to local African hands. The bill defines an indigenous Zimbabwean as 'any person who before the 18th of April 1980 was disadvantaged by unfair discrimination on the grounds of his or her race, and any descendant of such person' (Fisher, 2010), as discussed in the book *Pioneers, Settlers, Aliens, Exiles*, which discusses the change from Rhodesia to Zimbabwe, and nationalisation (Fisher, 2010).

The Zimbabwean law did not specify whether the transfer of ownership should simply apply to mergers and restructurings in the future, or if it should apply to all current companies. In effect, this was an edict stating that no white people could hold positions or own companies, which created an environment where there was no opportunity to transition skills and experience. This policy was more a political tool to gain support before an election than a real effort to indigenise the country's industry. In contrast to the PNG *Employment of Non-Citizens Act 2007*, it contained no practical solutions for employment, training or workforce indigenisation issues. This example of a national policy on indigenisation demonstrates an unworkable framework that would not support this research or its aims, and helps demonstrate the positive aspects of the PNG model.

At the other end of the spectrum, the issues in the Middle East are very different because the workforces predominantly comprise expatriates and OCNs in the private sector, with government jobs being exclusively for local nationals. For example, in the UAE, a high reliance on foreign workers and concentration of local workers in the public sector has created a unique labour market situation. However, as the national workforce continues to grow, it will be impossible to continue to indefinitely absorb the increasing number of nationals into the public sector, which, according to official sources, reached saturation in 2005 (Government of the UAE, 2007). This led to the Emiratisation program being introduced in the early 1990s; however, this program has not been successful in increasing the representation of nationals, especially in the private sector (Sabry & Zaman, 2013). This policy aimed to reduce dependence on expatriate workers and create job opportunities for nationals in both the public and private sectors; however, it has not been effective, and unemployment among local nationals has risen. Although the policy has been in place since the 1990s, the government remained passive and maintained its earlier focus on creating jobs in government departments, rather than focusing on private enterprise workforce nationalisation. It was only after 2000 that an office was even established to coordinate

nationalisation issues; however, it still remains passive, and no real noteworthy directives have been implemented to achieve any practical solutions.

This situation is very different from PNG and Zimbabwe because the countries in the Middle East are very wealthy, and the nationals are well educated and enjoy indigenous privileges, such as governmental positions based on family status and wages above those in the private industry. Status and prestige are placed ahead of career in the Middle East, and the reluctance of indigenous nationals to perform any work perceived as manual labour also creates a different dynamic (Al Ali, 2008). Many, if not all, native staff in the Middle East consider themselves ruling class or management based on birth, and this cultural perspective limits the opportunity to learn. Anecdotal evidence on mentoring programs from the UAE points towards a reluctance to listen to or engage expatriates, which limits the effectiveness of the instituted programs. Combined with the government's reluctance to be proactive, this creates a non-permissive environment for change (Al Ali, 2008).

Based on his research into workforce localisation in emerging Gulf economies, Forstenletchner (2010) argued that nationalisation programs that are designed to provide preferential encouragement and support for the employment of nationals over expatriates have become a key feature of human resource management (HRM) throughout the Middle East, with countries such as Oman, Saudi Arabia and the UAE adopting politically-led nationalisation initiatives (Forstenletchner, 2010). His case study findings demonstrate that the factors affecting the success of these initiatives include complexities surrounding issues such as management commitment, quantitative evaluation methods, resistance to change, and the role of expatriates in implementing Emiratisation (nationalisation) programs. A number of implications and subjects for future research into Emiratisation were identified. These implications related to the reasons underlying the scarcity of HRM literature on nationalisation initiatives, which include emotional perspectives on nationalisation methodologies, strategies for dealing with resistance to nationalisation within organisations, issues surrounding the design of Emiratisation programs, and the role of expatriates as key stakeholders in nationalisation programs (Forstenletchner, 2010). This supports one of the other common findings in this literature review—that the literature narrows once the focus sharpens to specifics of the nationalisation dynamics surrounding the national expatriate relationship. Although research regarding the Gulf States focuses primarily on the UAE,

the UAE's situation is very similar to the other Gulf States, as they all share a common policy direction. Al Ali (2008) also described some of the common barriers to 'localisation' throughout the Gulf Cooperation Council countries in the Middle East. For example, these barriers include an inefficient quota system, a culture that is focused more on prestige than performance, cultural issues concerning women in the workforce, education systems that are not market driven, an inequitable social contract, and the distribution of oil and natural gas wealth to nationals of these countries (Al Ali, 2008; Harry, 2007).

Al-Waqfi and Forstenlechner's (2014) study published in the *International Journal of Human Resource Management* investigated the Middle East problem in some detail, and found that these barriers could be overcome with the right combination of educational and learning programs, as well as interventions aimed at upgrading the overall quality of the local stock of human capital. Programs focused on experiential learning and awareness-building initiatives at various stages of the human resources (HR) development process are necessary to create the right set of work skills and competencies, as well as the work norms, professional standards and attitudes required to perform effectively in highly competitive and demanding work settings, such as those found in contemporary private sector work contexts (Al-Waqfi & Forstenlechner, 2014). This study effectively detailed the issues surrounding nationalisation in the UAE, while also discussing a way forwards to address the issues. Their recommended solutions were developed through research that employed semi-structured interviews and closed questions. This indicates the suitability of the research design chosen for this PNG research project, and provides good examples of questions that are suitable for similar research.

2.3.9 Mentoring

Culturally, many local PNG staff have not been exposed to the outside world and are uncertain of the new work environment. The one-on-one experience provided by mentoring has potential benefits, as PNG staff traditionally learn through sharing ideas, talking and practical training on the job, rather than through the Western educational coursework model prevalent in Australia. For example, in Australia, one cannot obtain a position on a construction site without a White Card, a Certificate IV and the ability to read and write; this is not the case in PNG. Mentoring is a process for the informal

transmission of knowledge, social capital and psychosocial support perceived by the recipient as relevant to work, career or professional development. It entails informal communication, usually face-to-face and over a sustained period, from a person who is perceived to have greater relevant knowledge, wisdom or experience (Eby & Allen, 2002, p. 731). This sharing of knowledge on a personal level is more suitable for the PNG cultural context than is formalised education. Moreover, mentoring will support improved retention of staff and increased development among key PNG staff members. Menard (2009) supports this theory with the idea that formal mentoring programs allow organisations to use the skills of experienced staff by encouraging the transfer of tacit knowledge to mentees who may be new to the organisation.

As stated by Ehrich and Hansford (1999), 'The major advantage of formal mentorship is it ensures that mentorship is extended to individuals and minorities who would not have been considered previously within the organization' (p. 95). Formal mentoring programs can also help attract and retain employees because 'when employees believe that the organization is committed to them, they feel obligated to be committed to the organization' (Baranik, Roling, & Eby, 2010, p. 366). This supports the theory that many local staff in PNG would benefit from personalised leadership and mentoring. Clutterbuck (2011) indicated that the most successful in-company mentoring programs train both mentors and mentees and, at least, provide a detailed face-to-face briefing for line managers so they can support the process. This is further evidence, supported by other literature in this review, that, while all mentoring programs are seen as positive, the more structured and supported they are and the more resources they employ, the more effective they can become.

The American Society for Training and Development conducted a HR development survey to determine how learning occurs in organisations. The survey asked the question: 'How does learning occur in your company?'. The results were as follows:

- 95%—formal in-house training
- 83%—teams
- 79%—formal off-site training
- 71%—coaching or mentoring
- 71%—university programs
- 69%—continuous improvement

- 66%—individual development plans
- 58%—feedback
- 55%—best practices
- 42%—job rotation
- 38%—focus groups
- 18%—quality circles
- 12%—other.

These results demonstrate that mentoring is the way in which learning occurs 71% of the time in the companies surveyed, and is gaining support, at least in the United States (Benson, 1997). Mentoring is an intense long-term relationship between a senior, more experienced individual (the mentor) and a more junior, less experienced individual (the protégé) (Kram, 1985, as cited in Eby & Allen, 2002, p. 456). According to Williams's (2000) reading in the *FBI Law Enforcement Bulletin*, mentoring provides an unthreatening environment for learning and growth to occur. In addition, mentors and mentoring have a positive and powerful effect on the professional growth, career advancement and career mobility of the protégé. Williams (2000) suggested that mentoring promotes six areas that must be learnt by a person moving into a management or leadership role: the politics, norms, standards, values, ideology and history of the organisation. This leads to increased job satisfaction and creates a stronger relationship between the organisation and individual (Williams, 2000). This is a strong example of why mentoring is such a supportive endeavour for local staff in PNG.

Typically, it would take years to teach the local staff non-traditional topics, such as organisational politics and company culture; however, mentoring would allow this knowledge to be developed much faster. For someone entering a leadership position, it is imperative not only to learn how to do things, but also to learn the details behind decisions and the cultural contexts that inform the decision-making process. In PNG, a local will have a different understanding of issues than will a Westerner, and the decision-making process will reflect this. While this understanding may not change how he or she does things, it will inform how he or she approaches the process. Moreover, according to the United States Navy, mentoring improves employee performance, increases commitment to the organisation, improves the flow of organisational information, and supports leadership and management development (Navy Mentoring

Handbook, n.d.). While the navy's focus is on developing future leaders, this is not far removed from the research aim, which is to mentor locals into leadership roles in PNG.

The common theme presented in the mentoring literature thus far is the need to implement structures and resources to support the mentoring programs. The level of support required renders it critical for the company involved to, at a minimum, correctly employ the HR department to support the process. Additional research suggests that when more input and ownership comes from a higher level, mentoring has a greater chance of success. When the leadership within a company sets strategic objectives and allocates appropriate resources to structure a well-designed program, the effectiveness of the program is increased. An organisation's mentoring program must be aligned with the company's strategic goals (Allen, Finkelstein, & Poteet, 2009). Facilitated mentoring is a structure applied to the mentoring process in which the organisation builds a formal structure around its strategic needs to achieve the corporate goals (Murray, 2001). In a recent literature review of coaching and mentoring in the rail industry in Australia, the Cooperative Research Centre (CRC) (2014) found that there are four phases that will help organisations ensure the efficiency of a mentoring program and safeguard its longevity. Taken from the CRC (2014) report, these phases are as follows.

Start-up: This phase builds the foundation for implementation. Start-up requires a considerable investment in time to meet people, research the topic, plan, prepare materials and brief the stakeholders.

Implementation: This phase involves promoting the program and inducting stakeholders through written communication, leaflets, websites and employee forums. Boags (2011) suggested that a one-year program can take up to 14 to 16 months to implement.

Monitoring and evaluation: Evaluation is a critical process for any learning program, and intermediate check-points, or formative evaluation, help measure and monitor progress.

Transition and expansion: Once evaluation information has been gathered and analysed, mentoring programs typically need revising in one way or another. If the mentoring program creates interest in another part of the organisation, the program may need revision, although it should not need to go back to basics. Some companies have

assumed that the qualities of a manager or leader are such that they should automatically be able to perform in the role of mentor. In practice, many managers are unable to escape the habit of telling and advising. Many also lack the depth of self-awareness that characterises an effective mentor. According to Clutterbuck (2011), the most successful in-company mentoring programs train both mentors and mentees, and at least provide a detailed face-to-face briefing for line managers. The figures are stark—without any training at all, less than one in three pairings will deliver significant results for either party. Training mentors alone raises the success rate to around 65%. Training both mentors and mentees and educating line managers about the program pushed the success rate above 90%, with both parties reporting substantial gains (CRC, 2014).

In an article in *Security Management* magazine, Yan Byalik (2017) stated that 'security mentorships play out as mutuality in motion'. According to Byalik's argument, since each party can have an equal effect on the outcome, it is just as important to select the correct skillsets in the manager or mentor as it is to select the staff who will be mentored and trained. This supports the idea that selection of staff to mentor a PNG national is as important as the process of hiring a new staff member. It is not enough to be a strong leader or technical expert in a mentoring program—the mentor must have a good understanding of culture and language, as well as respect for the staff. The literature suggests that common respect, cultural understanding and an ability to guide and mentor create a good mentor, rather than technical subject matter expertise or decades in a job. Another body of literature discusses the effects of coaching on mentoring programs and on improving the success of the organisation through using both in some cases.

2.3.10 Coaching

According to a study of Fortune 500 companies, mentoring (and coaching) programs help organisations to 'cope with the challenges of increased globalisation, technological advancements, and the need to retain a high-quality workforce' (Hegstad & Wentling, 2004, p. 421). Hegstad and Wentling (2004) further suggested that these two activities have an important role to play in increasing employee engagement, job satisfaction and retention. These are some of the challenges faced by indigenous Papua New Guinean staff when they begin work with a large resource company in PNG. This study also suggested the benefits of using both mentoring and coaching alongside one another.

While this study was conducted outside of PNG, it supports the idea that mentoring programs have a positive effect on workforce development and that coaching has the potential to play a supportive role.

Most governments and many organisations see the need for ongoing workplace learning to ensure sustainability (Darwin, 2000, p. 198). In this context, mentoring and coaching are often promoted in the HR department and professional development literature as useful processes to facilitate learning, manage change, improve staff retention and optimise performance. A common theme present in the literature on mentoring programs is that coaching in addition to mentoring has a positive effect. However, the use of coaching instead of mentoring has a very different effect on the workforce and is not as suitable for or as successful with indigenous programs. This provides a valuable insight for this research because it supports the findings from the CRC report that the best success occurs when both mentoring and coaching are combined within a corporate strategic plan and implemented according to a well-defined model. As well as being well-resourced, well-supported and correctly implemented by trained personnel, successful programs must occur over an extended period. Programs of fewer than 12 months are not going to produce the same results as programs that devote considerably more time to the process. The current literature supports my early theory that mentoring is potentially one of the key positive factors for nationalisation. It also indicates that coaching may provide additional support to mentoring programs and workforce development, and should be included in this research.

2.4 Periodical Literature

In addition to the academic literature covered previously, the most current discussions on the issue are found on online forums, blogs and professional platforms, such as LinkedIn. These articles and opinion pieces, while not peer-reviewed academic literature, nevertheless provide valuable information that can inform the research.

Ede (2016), previously the country manager for an international resource support organisation, wrote a series of short professional articles to help inform new managers of the complexities of working in PNG. His advice included the following:

> The first point to note is the difference in the PNG effort and the Australian effort. It's about 4 times more. That's not a mistake. It really does take that additional effort, and

you need to be ready for it. The next thing to note is the general characteristics of the effort. It's not technical expertise. It is very much society and people orientated, either as individuals or as a community. I explore each below based on many years of experience in PNG.

People: Getting the right people in PNG is not easy. We have all become accustomed to social media and job site type recruiting techniques, but in PNG you have to turn back time. Less than 2% of the population is connected to the internet, and newspapers reach only a small portion of the population. You get good people through word of mouth or prior relationships and that takes time to work its way through communities. Over time the PNG experienced organisations have built relationships with the right people needed to do the work, and these libraries of competent people is a significant competitive advantage. It's gold.

Getting resources lined up if you have no prior experience (for some of the factors below) can take 6 months; it's just the way it is in PNG. If you get a tender out of the blue with 3 weeks to submit a price and you have done nothing in advance and you have little choice.

Competency fraud in PNG is quite common. Forged qualifications, references and CVs are examples. Ensuring you are getting genuinely competent people takes time and effort. Good people are there, but there are a lot of people that need jobs and are prepared to give it a go even though they are not fully competent. Be careful. Resolving that takes time and effort and also risk. (Ede, 2016)

Here, Ede (2016) highlighted a recurring theme seen throughout much of the previously reviewed literature, which is the high level of fraud in qualifications and experience found in PNG. He further stated:

As a general rule PNG employees are higher maintenance than comparable Australian staff. As an example, ambit claims, absenteeism, fraud, theft, extraordinary leave requests, high turnover rates and issues at home are common. One of the great characteristics of PNGeans is they will never die wondering so they will challenge the system if they perceive some injustice. That takes work to resolve.

Essential to running a business in PNG is clarity and consistency in your people management systems. They will be tested like they have never been before. Having fair and just culture documents is essential to providing that clarity.

The people effort in PNG is at least 6x more than Australia.

Development of Skills: In general, we employ competent people in Australia. People complete school, apprenticeships, diplomas, degrees. Literacy and graduation rates. In PNG people are poor, and to get people highly skilled requires extraordinary effort. There is no magic. You are not going to get a ready-made workforce.

Allegiance to existing employers in PNG is often not high. Really good folks who you think have their heart into what you are doing will suddenly depart due to a very little more per hour increase in pay. Replacing those skills in your workforce can be tough.

Delivering the required skills training in PNG is not easy, and it requires commitment, planning and budget. There are few training providers, but more critical is being able to deliver the training where it's needed. If you live 4 hours by walk to the nearest town and cannot fund accommodation in a potentially hostile location for you, it matters. Training delivery is expensive.

In reality, sadly, only a privileged few get the opportunity. On the job training works, but you need to manage keeping unskilled people safe.

Competitors have made large pre-investments in training so for newbies getting competitive in this space is tough. If the business strategy is to steal competent people from others and everyone does it, then things escalate very quickly and in reality, the crux of the problem is not addressed. More investment in skills training is required.

Development of skills in PNG will take at least 5x more effort than in Australia.

Impact Zone Engagement: Ownership of land means everything in PNG. It's your income, your pension, your health insurance, and most likely the route to your life partner. In a nation where there is little government provision of essentials, you need your land to survive. Projects displace people from their land, and in doing so there is a fair expectation that they are compensated for it for generations. In PNG that means jobs, education, and healthcare.

As an employer, you need to respect those impacted by the project, and in PNG the rights of those in proximity to impact zone is passionately policed. The rights decrease in expanding zones, but it's down to 10s of metres in some cases. It's so easy to make mistakes and then subsequently get into some very difficult Industrial Relations issues.

It requires knowledge to administer and to do the right thing. We don't have anything similar in Australia, and so this sector needs a complete new skill set for most.

Claims for ethical breaches are high in this area. Ensuring your staff are aware of, and complying with ethics, takes extra effort.

Cultural Alignment: In Australia with pretty much a homogenous work force, time and effort in cultural alignment between staff is low. In PNG educating western and eastern staff on culture in PNG, and vice versa takes time and effort. Understanding PNG does not happen with a few simple inductions. How PNGean society interdependency, sense of status, indirectness and importance on relationships drive behaviours takes time, experience and coaching to understand. It takes 3–6 months to start to appreciate the complexities.

We can also be overly sympathetic, and those with experience understand how relationships need to be managed. There is a firmness in management that we are not use to in AU. Unless well managed **no means no, yes means yes, and maybe is not a no so must mean yes.** Getting this wrong can be very problematic.

Security: Unfortunately, the method used in PNG to resolve many issues is physical violence. Allegiance to their community (wantok) for many PNGeans is worth more than current jobs and careers, so the incidence of opportunistic security events is high. In open environments, the sense of justice against the non-locals means that theft is considered fair game. Seeing vendors trying to sell the site back the stolen products from the site through the fence sticks with you. Complete absence of the normal controls we enjoy in Australia.

Further, when the communities reach breaking point on an issue, they often seek retribution violently. Protection in these situations needs to be extreme, and I admire the folks that are out there doing that.

Understanding the complicated security needs and ensuring integrity of those systems takes expertise and experience. Again, whilst the engaging organisation may provide umbrella security, managing your interface to it takes time and effort. Many organisations entering PNG don't however have the luxury of coming in under someone else's umbrella.

Unintended loses are not to be ignored. Bills can be paid for with mobile phones in PNG. A company phone misused can wipe out any profit for the year!

The effort required in my experience is at least 8 times that of Australian business.

Relationships: Relationships in PNG are key. Respect is earned, and relationships need to be formed respecting the hierarchy of status. Developing national content properly needs a close and genuine relationship with leaders. Those relationships are not easy to form. Many have been there before, promised a lot, and under delivered. I understand the sense of cynicism and lack of trust. Relationships in Australia are important also and take a lot of effort, but it takes 3 times the effort in PNG.

Those competing in the PNG market generally have an aspirational delivery mix for the lower volume EPC [engineering, procurement and construction] work of 10% western expatriates, 20% eastern expatriates and 70% national citizens. It would be great to make the national content higher, but there is a real gap in skills in the middle ground at the moment, and supervision ratios by competent personnel need to be high to exercise due diligence with safety. 1:5 on higher risk activities. By adding skills into the market, the 10% and 20% will reduce in time, but it will take just that.

That's where work continuity comes in again. On the largest projects, labour numbers peaked circa 22,000 in country. Getting the national content on this volume with any skill level is impossible at the moment (fact of life even though I would like it better), and 40% is in the order of what was achieved previously. With only a fraction of those being able to be retained in market post the major projects, skills are being lost.

But fundamentally over time, as your business in PNG matures and you add skill, it will be getting more nationalised. That's what we want to happen. That will reduce revenue. The comparative cost of the different employees compared to nationals is circa 20 times for western expatriates and 5 times for eastern expatriates.

Nationalisation and revenue compete against each other. Overheads have a habit of increasing overtime as the complexities of an increasing national workforce adds non-recoverable costs. Provisioning of staff is a fairly fixed cost, but as a percent of revenue considerably higher for national staff. As a result, the ability to absorb risks with that provisioning reduces. Thus, ultimately, unless well planned, profit margin decreases as you do the right thing! This disconnection of the drivers should be something that is discussed and aligned with customers to get everything heading in the right direction. (Ede, 2016)

The information in this series of three articles was written by Ede upon his return to Australia in 2016 after his first PNG assignment for the PNG LNG project. It mirrors

much of the anecdotal evidence presented in the papers and through social media on the PNG experience for new in-country expatriates.

A long-term expatriate security manager in PNG, Timothy Vincent (2016), conducted a master's-level research project regarding the situations he noted in his company in the resource industry in 2016, and presented some valuable observations. He stated that, in today's global village, with inherent multicultural influences, effective employee cultural integration within firms is integral to strategic advantage—none more so than the dynamic combination of expatriate and national employees working collaboratively in developing nations, such as PNG:

> Papua New Guinea is truly unique in respect of its culture and people whilst also being typical of a third-world developing nation, it also additionally suffers the legacy of Australian colonialism from its administration period prior to becoming an Independent State in 1975. Cultural integration of international employees must address a multitude of complex interwoven challenges including an introduction to language and customs; an awareness of regional diversity and idiosyncrasies; adapting to wide variations of standards and expectations; adjusting to considerable political, economic and social inequality; and overcoming occasional xenophobic intolerance and expatriate bias. (Vincent, 2016)

He goes on to observe that, despite such challenges, Papua New Guineans are largely welcoming and accepting at an individual level, and frequently inviting because of their inherent community-based social ethos. His research points towards strong support for good cultural induction programs that are operated across the organisation for all employees as being an enabler of an effective workplace. He was also able to demonstrate the advantages of a cohesive workforce that is culturally aware and that in turn supports the mentoring program (Vincent, 2016).

2.5 Potential Theories Evaluated

2.5.1 Homo Social Reproductive Theory

In 1977, Kantor (1977) undertook research to investigate why minority groups struggled to progress into middle and senior management. This research, which developed into homo social reproduction theory, found that people in authority normally engage people with characteristics similar to themselves, thereby creating an environment in which the senior management replicates itself by hiring staff with similar characteristics. Kantor's theory is very similar to and builds on Moore's (1962) theory of bureaucratic kinship.

More recently, Indigenous Australian academic Trevor Maher (2012) argued that homo social reproduction activities are present in Australian Aboriginal organisations, and this is affecting their success or lack thereof. Specifically, it affects the way people are hired and trained inside these organisations. He argued that unsuccessful managers have replicated themselves by hiring staff with similar traits to themselves, and then trained and mentored them. This creates a cyclical process that continues to replicate failure and prevents alternative ideas or more qualified and motivated staff from being hired. This is the premise of homo social reproductive activities: managers continue to hire friends and like-minded colleagues, and nothing changes (Maher, 2012). While Maher's study focused on the Australian Aboriginal community and the theory's effect on the employment practices of Australian organisations, it could have relevance for nationalisation programs in PNG. Homo social reproduction theory can be traced back to social exchange and network theories from the 1950s and 1960s, which revolved around the tendency for people of a similar nature to interact. While possible, it seems unlikely that Kantor's (1977) theory has any relevance to the hiring practices of Papua New Guinean staff as part of the nationalisation process; however, it may affect the way in which more senior staff are hired to act as managers and mentors.

The resource industry, particularly in PNG, comprises predominately international multinational companies that tend to focus on time with the company as a way of promoting staff. Increasing responsibility and status is normally based on time as an employee, rather than suitability for a specific task. This is for the international multinational companies sometimes seen as development opportunities of staff through international expatriate postings more so than finding the exact fit for each task. While there is nothing wrong with this approach from the HR perspective of the organisation, it may be a factor in workforce naturalisation programs. It may also lend itself to Kantor's theory; therefore, it cannot be ruled out as having a potential effect on workforce nationalisation in the resource industry in PNG.

The issue of wantokism was covered in detail during this paper's introduction of PNG cultural complexities, but may also align somewhat with Kantor's (1977) theory, as it is a protective measure to ensure PNG's own people are looked after. Considering the research problem introduced in Chapter 1, Kantor's theory may have a minor role in explaining the reliance on expatriate staff in the resource industry in PNG. The level of comfort felt when using one's own long-term staff, as opposed to recruiting, training,

mentoring and ultimately empowering and trusting a new national staff member, could be a factor. These issues will all be addressed in more detail through the semi-structured interviews and subsequent validation of data through the confirmatory survey as part of this research.

2.6 Current Literature from Industry and Government

During a March 2017 PNG energy and resource industry summit held in Port Moresby, Susil Kongoi (2017), ExxonMobil PNG's local content manager, presented a talk on ExxonMobil's national content plan in PNG, and stated:

> We view national content as a critical partnership responsibility throughout the full lifecycle of our business. ExxonMobil, government, suppliers, contractors, non-profit organisations and community associations all have a unique part to play in the development of national content. The combined role of everyone, if synchronised correctly, leads to economic progress and development. (p. 2)

She stated that this program had three core elements: workforce development, supplier development and strategic community investment. Workforce development would involve building operational and intellectual capacity as a top priority, which was structured in a way to provide citizens with the experience and competencies needed to run the business for many decades to come:

> we are committed to employing as many qualified people as possible from communities in which we operate and we also work with our contractors to help them maximise local employment opportunities. We are continuing to build the skills of Papua New Guinean citizens through training programmes focused on developing the technical skills of the production workforce, including building the capacity of graduate engineers and operations and maintenance trainees. (Kongoi, 2017, p. 2)

Kongoi (2017) also stated that they currently had 2,500 staff working for the project in PNG (the PNG LNG project), and, of those, 82% were national workers. While this seems to be a successful nationalisation program, these figures can be attributed to the large numbers of semi-skilled labourers. However, this example does suggest that the project is actively working towards workforce nationalisation. Kongoi also stated that their organisation is only three years into production, and they had delivered 200,000 hours of training to achieve this.

Kongoi (2017) stated that, since the inception of the graduate trainee program in 2010, they had transformed 210 maintenance and operations trainees into qualified staff. This was from a yearly pool of more than 50 trainees. This further indicates what was discussed earlier in the literature and in the formulation of the problem in Chapter 1— that resource companies in PNG focus on technical staff, not logistics and security. The resources used to successfully run the PNG LNG trainee program are significant, including a dedicated school being built in Port Moresby, and trainees being sent to Canada for over six months to assimilate into the company culture and gain experience. This has proven successful for the project, yet has only been undertaken in the technical field and with great expense and large attrition rates.

In addition to Kongoi's talk, ExxonMobil's Technical Manager, Melissa Bond, also spoke of the strategic community investment that ExxonMobil PNG was aiming to make going forwards by building the capacity of individuals and communities through training and education. This all supports the findings from the literature review that most, if not all, resource companies operating in PNG are, in principle, supportive of workforce nationalisation and, if given the opportunity, would include security and logistical staff in more of these programs. At the same summit in Port Moresby, PNG's Prime Minister Peter O'Neill (2017) stated:

> Total from France are going forward with its investment in the Papua LNG project.
>
> This will generate thousands of new jobs, both in Port Moresby and the country.
>
> The project will bring billions of investments, and provide further stimulus for economic growth. We are positioning our country for the next level of development in the oil and gas sector-that will take place in the term of new parliament.
>
> Further to this, our country has the potential to create a downstream processing industry from our gas. The production of petrochemicals for the use in PNG, and for sale in the global market, is the next logical step for our gas.
>
> This will stimulate employment at a high technical level, and generate increased revenue for our country. As in other primary production sectors, we should be looking beyond selling raw products and creating higher-value products. Through a National Content Policy, Papua New Guinea will strengthen the capacity of our people and our industries.

This will strengthen skills and knowledge in a range of sectors including construction, engineering and small to medium businesses. Gone are the days where our resource production left value-adding to take place overseas.

By facilitating third party access to our product and processes, we will maximise economies of sale and increase efficiencies.

As a government, and as a nation, we have to think beyond how things were done before.

We cannot think of five-year parliamentary terms—we must have long-range vision.

This is further evidence of the government's support for workforce nationalisation in the resource industry. However, this vocal support cannot truly be validated until the next large project after the PNG LNG project commences in 2018, if the government relapses to its previous practice of loosely enforcing the rules supporting workforce nationalisation, as discussed previously. Dispensation for hiring of overseas staff during construction phases of projects, while speeding up projects early on, has a knock-on effect when it comes to upskilling and nationalising workforces pre-production.

In the PNG Business Development Guild journal, an article written by Wilkins (2017) stated that, after a decade of impressive economic growth, during which PNG was one of the Asia-Pacific's fastest growing economies, PNG is now experiencing a prolonged period of more modest expansion. The Asian Development Bank's 3% gross domestic product growth forecast for PNG for 2017, while still positive, is marginally behind the International Monetary Fund's global growth forecast of 3.4% for the year. Although the consensus among experts is that it will be another 12 to 18 months before the economy picks up substantially, companies are already preparing themselves for the next upturn (Wilkins, 2017). These figures support earlier literature regarding the slowdown of resource projects in PNG and the lull before the next wave of investment and project funding approval.

In an interview with one of the country's leading businesspeople, Michael Kingston from KK Kingston argued that employing PNG nationals ensures longevity of tenure and reduces staff turnover. Moreover, it is cheaper. He stated that most expatriates in PNG work in the region to save money, and then move elsewhere. However, locals can stay for decades—a continuity that Kingston called 'fantastic'. The challenge is to place

locals into positions of senior management, which means training them in managerial best practice and implementing a mentoring system (James, 2017). This further demonstrates local industries' willingness to employ national staff, and suggests that the only factor holding them back in most cases is the lack of technical skills required. However, it is important to note that Kingston's company does not work inside the resource industry, but as a support organisation for it; thus, they would not regularly require the same degree of technical skills. Nevertheless, these comments mirror the ongoing theme that there is support in the private industry to assist workforce nationalisation, at least among local companies (James, 2017).

Peter Botten (2017), the Managing Director of Oil Search—PNG's largest resource company—recently stated that Oil Search's future is directly tied to PNG. Therefore, according to Botten, it is in Oil Search's best interest to bring the community along with them. This is a further example of a PNG resource company supporting workforce nationalisation. However, in Oil Search's case, they hold the benefit of over 20 years of operations in PNG to help them reach their targets (Botten, 2017). The literature suggests that they are supportive of workforce nationalisation; however, in practice, their security and logistical workforces have not kept pace with their engineering and technical workforces. This is a common theme, as seen with the ExxonMobil model, and is primarily due to the importance that is placed on engineers in the oil and gas industry worldwide.

All the most current literature on both the PNG Government and companies operating in PNG supports workforce nationalisation. However, companies continue to prefer focusing on training and development for engineering and technical staff, which leaves behind the supporting fields, such as logistics and security. This information all further supports the academic literature reviewed earlier, as well as the formulation of this study's initial research problem in Chapter 1.

2.7 Principal Questions Under Investigation

One of the principle questions to answer in this research is: how are resource companies operating in PNG managing and developing their national logistics and security workforce, and how does nationalisation occur in this context? However, to answer this

question, one must examine each of the different aspects of the problem and develop a series of questions to ask, so that a theory, or theories, may be developed.

Using the literature review, it is possible to start drawing some parallels between previous research and the existing problem. It is important to both understand the problem and to frame the work that already exists to clearly identify the existing gaps. Work conducted in other countries on the same issue, work conducted in PNG on other questions, and similar research are all valuable for building the knowledge base to develop the right questions that are worth exploration. Without a well-researched and documented starting point, it is not possible to progress the body of knowledge forwards. Based on the themes discovered in the reviewed literature and the work conducted previously, the following questions were developed to address the aims of the research. The strategic aim of the research considered how to use mentoring programs as a best practice for developing indigenous Papua New Guinean staff who work in security and logistical roles in the resource sector. Therefore, this research needed to consider a variety of sub-questions and issues. These issues may inhibit or restrict the progression of staff or a company's indigenisation programs, or may affect timelines. Thus, the initial question was as follows:

> Which key activities promote a successful mentoring program that enables early nationalisation in a resource company operating in PNG?

This has been explored in some detail in the literature review, and many theories have already been presented to both build on and ask further questions in the research. It is not the aim of the developmental stage and literature review to answer the questions fully, but to create an informed environment where the questions are tested and fully validated with a range of possible theories to examine the questions identified for the research. Another question was as follows:

> Why do oil and gas organisations build dependence on expatriate staff?

Both the literature and anecdotal evidence identify this as a problem; thus, it had to be addressed in this research because it is a barrier to nationalisation. Another similar question was as follows:

Which are the key factors that limit the early nationalisation of security and logistical workforces?

Issues such as government policies, corporate objectives and profitability, and short-term objectives that were identified in the literature review as affecting nationalisation programs needed to be fully explored to help define the problem and discover possible solutions. Looking at the case study, it was important to determine which factors would enable the early nationalisation of staff and which approaches have been successful. This could then be built on through the interviews and further surveys. The final question considered was as follows:

If nationalisation had occurred earlier through advanced mentoring in each of the case studies, what would be the approximate difference between expatriate and national staff from a cost perspective?

This would allow an approximate dollar amount to be theorised based on the research to indicate whether there is a financial benefit to organisations following an aggressive nationalisation path through mentoring. It may be that nationalisation is more of a corporate social responsibility issue than a strategic HR cost-saving issue.

Demonstrating the most effective methods for the early nationalisation of workforces and articulating the differences between expatriate and indigenous personnel in a percentage and dollar amount will help companies and the government make informed decisions about indigenisation and nationalisation policies and programs. If this research can develop a theoretical roadmap to achieve early nationalisation in this field through exploration of these questions, this can be used by industry to change current nationalisation practices and theory. As discussed in this review, the literature supports and has helped create a framework for these principle questions developed to address the research aims and objectives.

2.8 General Conclusions Drawn

The political and cultural environment in PNG is supportive of nationalisation and indigenisation programs for resource companies operating in PNG. When examining the literature on nationalisation worldwide, countries such as Zimbabwe have a governmental policy that is too aggressive and not supportive of a staged partnership

approach to workforce indigenisation. Instead, they simply removed all non-indigenous staff, regardless of skill shortage issues or training requirements, which prevented mentoring and skills development. This environment does not permit a company to conduct a workforce mentoring program to achieve nationalisation in the true sense. A workforce that cannot operate effectively or safely is not truly nationalised, as it is merely operating without key roles in place, rather than having trained and competent nationals filling those roles. However, at a strategic governmental level, PNG has taken the steps required to create an environment where companies can nationalise and indigenise the workforce. These steps include clear and well-documented policies, rules and corporate expectations that allow companies to operate mentoring and skills transfer programs without undue influence from the government. The PNG Government's policy was well explored in the preceding literature review and, in comparison with other countries' policies, PNG seems to be moving in the right direction.

Another conclusion drawn from the literature is the lack of research being conducted on mentoring and nationalisation programs in the resource industry worldwide, not just in PNG. The scholars who have been researching the Gulf States all documented the lack of research when compared with other fields, and the need for more research. In PNG, this research is very sparse, and the readings for this literature review had to expand from the principal area to gain a greater understanding of the topic. The region of interest expanded from PNG to include worldwide literature on each of the topics of interest. Mentoring programs in Australia, New Zealand, Canada, the United States, Mexico, Africa and the Gulf States were all featured in the literature review. Sufficient literature was found when the search was expanded; however, this supports the view that more work must be conducted in this field. All the reviewed papers agreed that more work needs to be undertaken in the areas of workforce mentoring and nationalisation and indigenisation theory.

The review identified the need for mentoring programs to be a part of companies' strategic direction. They must also be supported from the senior levels of management. Moreover, they must be well resourced both with time and money, and the participants must be trained and suited to the program. The literature supports the theory that the best success rates derive from a formally designed, implemented, resourced and run program that has the support of everyone involved. Other literature suggests that, while coaching may play a role in supporting workforce mentoring programs, mentoring is the

most successful program in indigenous settings in the resource industry. The cultural issues of the PNG local people or indigenous Papua New Guineans have been investigated in the context of the ways they fit into resource companies' corporate culture. In many parts of PNG, such as around Port Moresby, there is a culture of individuality and the people are fully Westernised; however, in other areas, such as the Highlands, cultural issues are significant and will require much additional mentoring and flexibility. Since most of the resource industry projects are in this Highlands region, and they are the most culturally sensitive areas, this region will be the focus of this research into mentoring issues. The literature suggests that the more culturally diverse and uneducated an individual, the more susceptible they are to mentoring and one-on-one interaction. It is highly unlikely that indigenous personnel who have not previously been exposed to a corporate culture will integrate fully without issues. The literature supports the value of early mentoring to assist with this process, and this research considers this issue to fully explore how far it can be taken. Overall, the conclusion being drawn from the literature is that indigenous nationals will benefit from mentoring.
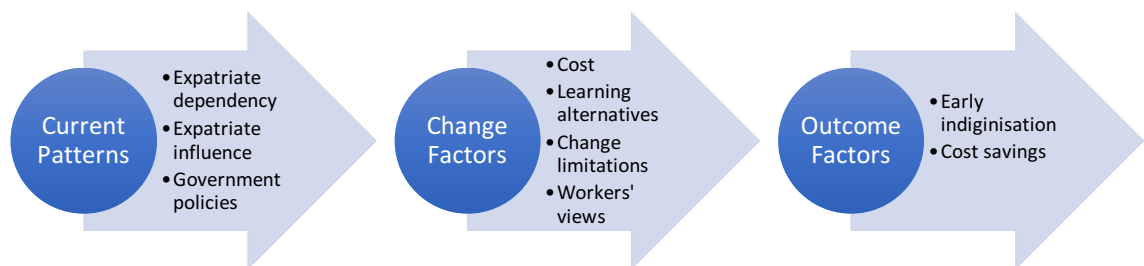
Figure 2.1: Hypothetical Research Model

2.9 Conclusion

This literature review—with a scope of 300-plus publications across the different areas associated with mentoring, the resource industry in PNG, PNG culture, and workforce nationalisation and indigenisation programs—was conducted to support the research proposal process. To effectively target an area of research, the current body of knowledge must be evaluated. Through the literature review, it was discovered that a gap in the body of knowledge exists in the area of workforce indigenisation and workforce nationalisation in the resource sector in PNG. Moreover, there is a lack of

research regarding the use of mentoring programs to enhance the effectiveness of nationalisation, and a gap in the literature exists. Thus, it is proposed that a problem worthy of research has been discovered, and the framework to undertake the research has been established through a review of the literature.

Chapter 3: Research Design and Method

3.1 Research Design Overview

One need not identify with a specific paradigm when undertaking qualitative research (Bryman, 2004). Qualitative research, broadly defined, means 'any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification' (Corbin & Strauss, 2008, p. 17). Qualitative research is a broad systematic approach that encompasses many research methods. It involves disciplined enquiry that examines people's lives, experiences and behaviours, as well as the stories and meanings that individuals ascribe to them (Denzin & Lincoln, 2000). Qualitative research can also be used to investigate the functioning of organisations (such as relationships between individuals, individuals and groups) and broader social environments. This approach to research can involve the studied use and collection of a variety of empirical materials, including case studies, personal experiences, life stories, interviews, observations and cultural texts. Also known as 'interpretivism', the qualitative approach is a way to gain insights by discovering meanings through the intentional improvement of the researcher's comprehension of the whole as a result of exploring the richness, depth and complexity of phenomena (Corbin & Strauss, 2008).

The research detailed here was undertaken using a mixed-methods approach that employed a case study, qualitative interviews and a survey. The researcher's extensive experience in the industry enabled access to a sufficient number of research participants with relevant experience, thereby ensuring an adequate number of participants in the sample group for the survey and the smaller semi-structured interviews. The qualitative research sample was selected intentionally according to the needs of the study, which is a practice commonly referred to as 'purposive sampling' or 'purposeful selection'. The purposive sample used throughout the research comprised individuals recently (within the past six years) exposed to security and logistics workforces in the resource industry in PNG. In purposive sampling, the researcher specifies the characteristics of a population of interest and then seeks to locate individuals who have those characteristics (Johnson & Christensen, 2008). Therefore, the respondents for the semi-structured interviews were selected from the main sample based on additional specific criteria further detailed in the instrument design. Specifically, the respondents were selected

because their high degree of experience could provide extensive information about the issues that were important to the research (Coyne, 1997). The sample size was determined first by considering how many participants met the set criteria, and then by determining how many could be contacted. The number estimated was reduced once contact details and experience were verified.

The case study concerns a recent project in PNG and provides public information on workforce composition, nationalisation plans and other KPIs for which the government requires annual reports. The data generated by the case study were used to create a base context of the size and complexity of the problem and to anchor further research. The case study is quantitative, as only the existing data from KPIs were addressed in this phase of the research to create a baseline for the research to progress. Case studies and qualitative interviewing are methods commonly employed in organisational research (Strang, 2015; Saunders et al., 2012). Therefore, these were appropriate methods for the purpose and goals of this study. Moving into the qualitative phase of the research, a sample group was selected, some of whom participated in semi-structured interviews. The semi-structured interviews assisted in finalising the survey questions and gaining a deeper understanding of some of the factors prior to the survey. Although all participants were known to the researcher, they were documented anonymously. All records of names and personal details were removed, and each participant was coded alphabetically (Punch, 2005).

3.2 Research Instrument Design

3.2.1 Phase 1: The Case Study

The case study was predominantly quantitative, as the existing data were from the project's KPIs, which were addressed to create a baseline for the subsequent qualitative research. A KPI is a concept used in most corporate contexts for corporately reportable and measurable data, including incidents, accidents, staff numbers, staff demographics, environmental incidents and more. The information was retrieved from the Government of PNG, the corporate website of the selected project, and the corporation's annual reports. This provided access only to data that had been checked and verified by responsible agencies—that is, data already released into the public domain. Such sources ensured the accuracy of the data, while removing the names of the selected

company and project from the process. Being assured of data integrity means having confidence that the data are complete, verified and remain unaltered (Committee on Science, Engineering, & Public Policy, 2009). In addition to quantifiably measured KPI data, the annual reports of the organisation reviewed in the case study were examined to identify any strategic plans, ongoing programs and potential themes that could be relevant to the study. Ethics approval was required, in principle, for the research; however, permission to access the data was not required because the data were all in the public domain. Nevertheless, I held an initial discussion on the proposed research with the relevant minister of the PNG Government, who verbally confirmed willingness to provide support for the study where required.

3.2.2 Phase 2: The Interviews (Qualitative and Semi-structured)

From the initial sample pool of 300, 10 participants were chosen for the semi-structured interviews on the basis of holding the following characteristics:

- exposure to multiple projects
- experience in training and workforce development
- previous work experience in key roles in PNG.

Their experience allowed for a depth of knowledge that enabled them to expand on themes critical to the research. The interview guide provided a structure for the interviews and the interview template. The interviews were conducted face-to-face over a 10-week period and were recorded using a data-recording device. All interview schedules and research received ethics approval prior to commencement.

3.2.2.1 Interview Guide

Eight principles guided the preparation stage for the interviews, as follows:

1. choose a setting with little distraction
2. explain the purpose of the interview
3. address the terms of confidentiality
4. explain the format of the interview
5. indicate how long the interview typically takes

6. provide participants with information about how to contact the researcher later if they wish to

7. ask participants if they have any questions before starting the interview

8. do not rely on memory to recall participants' responses (McNamara, 2009).

The application of these eight principles informed the development of the conduct checklist for the interview to maintain the consistency and quality of the semi-structured interview process. The interviews were conducted as follows:

- Each interview was approximately one hour in duration. Bookings were arranged with subjects for an appropriate time.

- Upon arrival, the subject received an overview of the research project, a profile of the researcher, and an outline of how the interview and follow up would occur.

- The subject received a copy of the consent form (approved by ethics) to sign, along with a copy to keep.

- The subject received the researcher's contact details.

- The interviews were recorded and transcribed.

- Feedback (if requested) was provided to subjects through a research outcome summary.

- The subject was given a final reminder of consent and the ability to withdraw at any time without penalty.

- Upon conclusion of the interview, each subject was asked if they had questions.

- Recordings and notes were checked to ensure completion.

- The subject was thanked.

- All data were stored anonymously and securely for later analysis.

Sound interview strategies help the researcher go beyond the obvious, low-level categories that do not produce new knowledge. Any competent interviewer shapes questions to obtain rich material and, simultaneously, to avoid imposing preconceived notions on that material (Charmaz, 2006). The interview quality was significantly enhanced by developing a sound structure for the interview process through using a guide that included well-developed and tested questions.

3.2.2.2 Semi-structured Interview Template

Potential Questions

1. Based on your observations, why do you think oil and gas organisations build dependence on expatriate staff?

2. Is it possible to develop an indigenous workforce in the early phase of the project so that they are better skilled for start-up? What has led you to have your opinion?

3. If indigenisation/nationalisation was to occur earlier through advanced mentoring, what do you think the cost difference would be between expatriates and nationals?

4. Which are the key factors that limit the nationalisation of security and logistical workforces?

5. Which factors would enable the early nationalisation of staff?

6. Which factors have enabled you to be successful in the past?

7. In your experience, which key activities promote a successful mentoring program in a resource company operating in PNG?

8. Do you have any other information or opinions regarding mentoring or nationalisation in PNG that have not already been discussed?

3.2.3 Phase 3: The Survey (Quantitative)

The survey sample group was drawn predominantly from managers and supervisors with recent exposure to security and logistics workforces in the resource industry in PNG. Of the 300 people identified, a sample size of at least 50 was needed to fulfil the research aims. It was intended that, if a response of fewer than 50 people was received, the sample size would be expanded by using the existing criteria until 50 was reached. Sample sizes that are larger than 30, but fewer than 500, are usually appropriate for most research (Sekaran & Bougie, 2010). Given that more than 50 respondents answered the survey, the survey was left open for a period of three months to gain as many additional responses as possible. A number larger than 100 was the optimum number, and this was achieved. While an initial draft of the survey questions was developed during Phases 1 and 2, it was not formalised until the case study and interviews were complete and fully analysed. This is shown in detail in Chapter 5. The

draft of the survey questions was developed further according to the framework created by and the results from the semi-structured interview template, in combination with the results of the case study. Ultimately, the final questionnaire could not be built and refined until the full literature review was completed and the early phases of the research were undertaken and analysed.

In this context and with the relevant data to support the final selection of questions for the survey, a final draft was completed and piloted to ensure reliability and design integrity before proceeding to the final survey phase. This enabled the final phase of the research to build on and confirm ideas and themes from the early work, while still allowing space for additional information to be presented. The survey was delivered to participants using SurveyMonkey, which is a secure online service designed to support the process.

Participants from the sample were emailed the link, which anonymously recorded the results using only a URL on the SurveyMonkey system. The survey design consisted of an introduction page that contained a privacy statement, research details and the contact information of the researcher, with an electronic acknowledgment of consent that conformed to the ethics application. SurveyMonkey and its data collection methods, security and processes align with the academic and legal standards in Australia, the United States and Europe. As a recognised and accepted tool for academic research, it was used to provide the survey data for this project. The last and most important aspect of this final stage of the research process was to allow the purposive sample of respondents to weight each of the themes presented from the research to demonstrate their opinion regarding the importance of each theme.

3.3 Data Analytic Strategy Overview

This research employed a mixed-methods approach, where each method addressed a different aspect of the research, as follows:

- case study: data analysis of the resource company's KPIs
- interviews: 10 semi-structured participant interviews to obtain perspectives on the key subjects and themes

- survey: 50 or more respondents to provide detailed confirmation of possible themes identified earlier.

The mixed-methods approach gave the research more depth and allowed the data to be triangulated. A mixed-methods approach is useful when neither a quantitative nor qualitative approach alone can address the problem adequately; thus, the strengths of both methods are used together to provide the best answer (Creswell, 2003). As discussed in the introduction, this study's use of three different approaches to data collection enabled me to obtain a much greater understanding of the problem. The mixed-methods approach offers enormous potential for generating new ways to understand the complexities and contexts of social experience, as well as enhancing the capacities of social explanation and generalisation. This approach can both draw on and extend some of the best principles of enquiry. In addition, the process benefited my attempt to develop constructivist epistemologies and to engage with thorny methodological issues, especially those dealing with questions of interpretation and explanation (Mason, 2006).

3.3.1 Phase 1: Case Study Data

The specific information targeted in the case study was annual workforce data, including, yet not limited to, the following:

- year of project
- length of project
- workforce size across the project
- workforce composition, such as national, expatriate or OCN
- nationalisation targets
- mentoring program size by organisation
- training organisation size
- total project expenditures
- total wage expenditures broken down into workforce groups.

The data were recorded in Microsoft Excel graphs that best displayed the information in a logical sequence, and were used to create a baseline for the research project. The data allowed hypothetical comparisons on potential cost savings, and enabled workforce

structures to be estimated for future projects. The request for information was initiated before the interviews, but was not concluded before the interview process began. While information from the case study did not influence the semi-structured interviews, it was reviewed carefully in relation to the interview results prior to the final survey being developed and piloted.

3.3.2 Phase 2: Interviews Data

The semi-structured interview process provided a number of possibilities. It was structured to address specific topics related to the focus of the study, while also leaving space for participants to suggest new phenomena that may have added to or altered the scope of the study. There is a great deal of versatility in the semi-structured interview, and the arrangement of questions may be structured to yield considerable and often multidimensional streams of data (Galletta & Cross, 2013).

Therefore, the semi-structured interviews formed the main focus of the initial research instrument design. The use of the potential template enabled the reliability of the questions to be validated for the survey, while also eliciting potentially new or more detailed information on each subject area. This information was documented in prepared workbooks, and the interviews were recorded using data-recording devices, and stored following transcription. All transcription of audio data was undertaken by an independent administrative assistant, and then checked by the researcher in its entirety to ensure consistency before the data analysis began. An independent review by a third-party consultant who can evaluate the codes and themes to determine the quality and effectiveness of the interview transcripts is often recommended (Creswell, 2003).

I will retain all captured data and supporting notes from the semi-structured interviews in a sealed envelope for a period of two years post-publication. Names will be retained on the original documents, such as consent forms, but all subjects will be identified with a single capital letter in the research, thereby maintaining the anonymity of the participants. The focus of the evaluation was on key themes. The information was presented through individual questions in the semi-structured interview. Each of the main texts from the 10 respondents were then marked accordingly, with a summary of key relevant themes. Table 3.1 provides a sample of the results presentation.

Table 3.1: Example of the Semi-structured Interview Results Presentation

Question 1	Based on your observations, why do you think oil and gas organisations build dependence on expatriate staff?
A	Answer
B	Answer
C	Answer
D	Answer
E	Answer
F	Answer
G	Answer
H	Answer
I	Answer
Summary	Summary of key themes or points made and the researcher's comments

It was important to include each interviewee's answers to demonstrate themes or ideas to support the conclusions drawn on each topic. This provided a logical and transparent analysis of each question, as well as support for each conclusion. Further, if there were any issues with the reliability of an interview, or if the interviewee withdrew consent, the interview would be terminated and documented accordingly. However, this did not occur in this research.

3.3.3 Phase 3: The Survey Data

The final content of the surveys was developed once the semi-structured interviews were completed and the questions were fully evaluated. The aim of the survey was to validate, evaluate and support the themes and concepts developed through the interviews and preceding research. If a concept or theme received widespread support from the sample group in the survey, it was considered validated; alternatively, if it did not receive widespread support, it was not considered validated. The data were used in their entirety, and were illustrated and displayed using SurveyMonkey's academic graphs and tables for each question.

No advanced statistical analysis was required to demonstrate the required information at this stage, as the primary use was to confirm basic responses to each concept. The results presented using SurveyMonkey analytics through weighted averages based on the use of a Likert scale were conclusive and suitable for the research. This was determined during Phase 3. The survey was delivered to participants using

SurveyMonkey—a secure online service designed to support the process. Participants from the sample were emailed the link, which anonymously recorded the results using only a URL on the SurveyMonkey system.

The survey design consisted of an introduction page that contained a privacy statement, research details and the contact information of the researcher, with an electronic acknowledgment of consent that conformed to the ethics application. SurveyMonkey and its data collection methods, security and processes align with the academic and legal standards in Australia, the United States and Europe. As a recognised and accepted tool for academic research, it was used to provide the survey data for this project.

3.4 Ethics

Ethics approval was granted for the research on 6 June 2017. The research conforms to Chapter 4.8 of the *National Statement on Ethics in Research*. There were no major ethical considerations in this research that could harm or affect an individual. However, some potential ethical issues that could affect the quality of data or results had to be considered. One was the potential loss or corruption of data. This was addressed through strong control measures, such as using a single computer and a hard drive backup with two locations for storage, scanning hard copies, and following physical security measures. The physical security measures included tethering laptops, locking away hard drives in a safe, protecting the laptop with a password, and encrypting data. The semi-structured interview participants are not identified in the research, and the research is not controversial, meaning that no input from the participants would be deemed negative in the industry. Thus, this was not a consideration for additional attention in this research. The final ethics consideration was the potential for respondents to the survey to return a non-constructive or purposively negative response. With such a small sample because of the purposive sample selection, a defective response from even one or two respondents could compromise the research results.

3.5 Research Methods Summary

The research instrument design and data analytic strategy were refined and expanded as the research progressed. They served as a compass to guide and give the data collection direction and structure in the early phase of the research. The use of a mixed-methods

approach and triangulation of data underpinned the strategy. Including only quantitative or qualitative methods would fall short of the major approaches being used today in the social and human sciences (Creswell, 2003).

The research gained perspective through the quantitative data gathered from the case study of an organisation. This assisted in developing a sense of the size and the percentages of the concepts being explored. Effectively, the data were secondary data and were presented simply in graph form as part of the data analysis. The semi-structured interviews of the key subjects were used to explore the problem in more detail, address the research questions, and help develop the final survey questions. Once all information from the first two phases was analysed, the survey was finalised and used to complete the triangulation of principal information. It was presented in an overview format. The research goal—to advance the current body of knowledge on indigenous workforce nationalisation programs in logistics and security mentoring programs in resource organisations in PNG—was addressed individually to ensure that a focus on results was maintained throughout the study.

Chapter 4: Case Study of the PNG LNG Project, 2009 to 2016

4.1 Introduction

The use of a case study in this research was predominantly to demonstrate the size, scope and complexity of a resource project in PNG. I selected the PNG LNG project for this research because it is the most recent project completed in PNG, and it is now in a steady state of operation, also known as production. Through the use of the company's employment data (published yearly and provided on its website), I will be able to demonstrate the size of the workforce during each phase of the project—from the early pre-construction work that involved preparing the landscape for construction, to the construction phase, and then onto the final turnover from the project to the organisation of production. Finally, the project was commissioned, gas was introduced to the system, and the project moved into steady-state production. The workforce numbers that relate to this project outline are depicted in the case study, thereby providing context for the research. The primary limitation of this case study is that only the workforce data were examined fully. These data and all other information used in the case study were drawn from publicly released information and governmental reporting—copies of which are available on the company website www.pnglng.com.

4.2 Background

ExxonMobil is the parent company of ExxonMobil PNG Limited—the operator of the PNG LNG project, who successfully and safely delivered PNG's first LNG project. In 2004, an affiliate of ExxonMobil began working on a concept to commercialise the natural gas in PNG's Southern Highlands and transport this via a 3,000-kilometre pipeline to customers in Australia. In 2007, it was decided that this project, the PNG Gas Project, was unfeasible, and work began on evaluating an LNG project within PNG.

In 2008, the initial PNG LNG project partners signed a joint operating agreement. In that same year, an independent economic impact study was commissioned and demonstrated that the project would have a significant effect on PNG's gross domestic product, in addition to providing other benefits, such as employment and business opportunities. On 22 May 2008, the project venture participants and PNG state formally signed the Gas Agreement. The Gas Agreement established the fiscal regime and legal

framework by which the PNG LNG project was to be regulated throughout its lifetime, and established the terms and mechanism for state equity participation in the project. Following this, it was announced that the project would begin front-end engineering design (FEED).

Between December 2009 and March 2010, sales and marketing agreements for the gas were signed with four major customers. In October 2009, the environmental impact statement, which drew on 26 supporting studies and took two years to complete, was approved by the PNG Government. This documented the many rigorous commitments and measures the project would implement to manage the environment. On 8 December 2009, the project venture participants approved the project, thereby paving the way for construction to begin. This was supported by the completion of financing arrangements with lenders in March 2010. Engineering, procurement and construction contracts were approved in late 2009, and construction work began in early 2010. In April 2014, the PNG LNG project started production of LNG ahead of schedule. On 25 May 2014, the first shipment of LNG from the PNG LNG project was delivered by the *Spirit of Hela* to the Tokyo Electric Power Co. Inc. (TEPCO) in Japan.

4.3 Project Overview

Figure 4.1 PNGLNG Project Map

The US$19 billion PNG LNG project is an integrated development that includes gas production and processing facilities that extend from Hela, the Southern Highlands, and the Western and Gulf provinces to Port Moresby in the Central Province. ExxonMobil PNG Limited operates PNG LNG on behalf of six co-venture partners. The facilities are connected by over 700 kilometres of onshore and offshore pipeline, and include a gas conditioning plant in Hides and a liquefaction and storage facility near Port Moresby. LNG production began in April 2014, months ahead of schedule. Since then, the project has been reliably supplying LNG to four long-term major customers in the Asia region, including:

- China Petroleum and Chemical Corporation (Sinopec)
- Osaka Gas Company Limited
- The Tokyo Electric Power Company Inc.
- CPC Corporation.

The following facts represent the scope and scale of the project:

- In 2016, the project operations produced 7.9 million tonnes of LNG—an increase of 14% from the original design specification of 6.9 million tonnes per annum (MTA). Over the next 30 years, the project estimates that PNG LNG will produce more than 11 trillion cubic feet of LNG.
- The project production workforce consists of 2,400 workers, of which more than 80% are Papua New Guinean and 20% are women.
- Around one billion cubic feet of natural gas is converted into LNG every day at the LNG plant.
- The project produced over 7.9 million tonnes of LNG in 2016.
- Over 210 Papua New Guinean operations and maintenance technicians are being trained, of which 25% are women.
- PGK 12 billion has been spent on services provided by Papua New Guinean companies since 2010, PGK 3 billion of which is with landowner companies.
- More than 17,500 Papua New Guinean entrepreneurs have been assisted by the ExxonMobil-established Enterprise Centre to help develop their business.
- 1,500 Papua New Guinean businesses are registered on the PNG LNG–established Enterprise Centre Supplier Database.

- More than PGK 800 million has been invested in community and infrastructure programs focused on education, health, women's empowerment, environment and agriculture.

Additional construction facts:

- The US$19 billion PNG LNG project is an integrated development that includes gas production and processing facilities that extend from Hela, the Southern Highlands, and the Western and Gulf provinces to Port Moresby in the Central Province.
- ExxonMobil PNG Limited operates PNG LNG on behalf of six co-venture partners.
- The project facilities are connected by over 700 kilometres of onshore and offshore pipeline, and include a gas conditioning plant in Hides and a liquefaction and storage facility near Port Moresby.
- LNG production began in April 2014—months ahead of schedule. Since then, the project has been reliably supplying LNG to four long-term major customers in the Asia region, including:
  - China Petroleum and Chemical Corporation (Sinopec)
  - Osaka Gas Company Limited
  - The Tokyo Electric Power Company Inc.
  - CPC Corporation.
- In 2016, the project operations produced 7.9 million tonnes of LNG—an increase of 14% from the original design specification of 6.9 million tonnes per annum (MTA). Over the next 30 years, it is estimated that the PNG LNG project will produce more than 11 trillion cubic feet of LNG.

4.4 Workforce Composition

Over 55,000 workers were involved in the construction of the project, with 21,220 employed at its peak in 2012. More than 10,000 Papua New Guineans were trained for construction and operation roles, and more than 2.17 million hours of training through 13,000 training programs were delivered. In a presentation to lenders in 2010 and again to local leaders in PNG, the PNG LNG management presented the following information:

- First priority: PNG citizens originating from within the local representative landowner company area.

- Second priority: PNG citizens from the overall project impact area.

- Third priority: PNG citizens from the four provinces of the project impact area and the national capital district.

- Fourth priority: PNG citizens from elsewhere in PNG.

- Last priority: Non-PNG citizens from overseas—only for positions open to foreigners.

The below was enacted into the Act as an amendment at the same time, which removed the obligation to follow the Act—not just for ExxonMobil PNG, but for all contractors associated with the project.
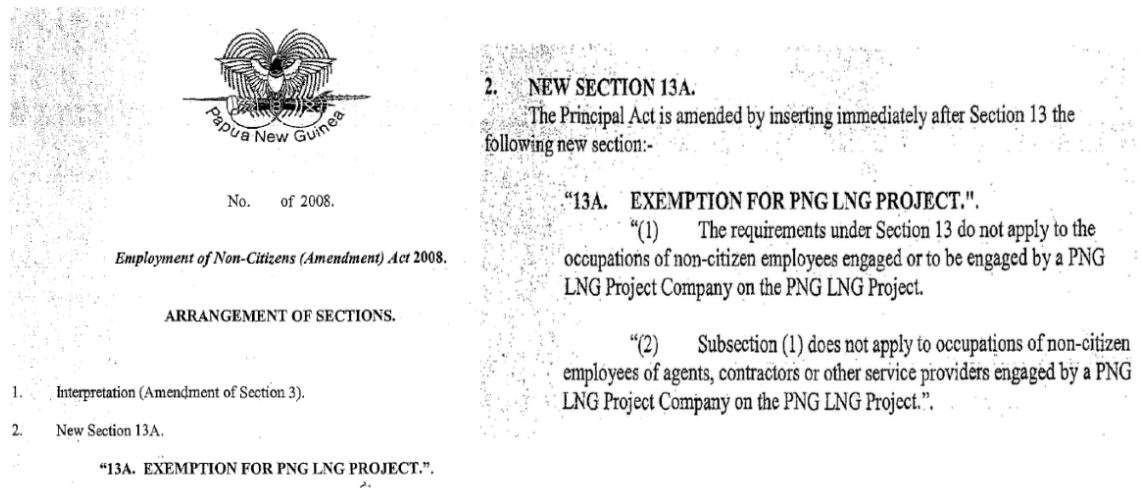
Figure 4.2 PNGLNG Exemption Rule

4.5 Employment Data

Table 4.1 Workforce Employment by Year

Year	Total Workforce	Non-PNG Nationals	PNG Nationals	PNG Nationals %
2010	5,719	1,155	4,564	80
2011	14,376	5,812	8,564	60
2012	21,220	12,799	8,421	40
2013	14,749	9,149	5,600	38
2014	2,178	641	1,537	71
2015	2,400	519	1,899	79
2016	2,406	476	2,046	81
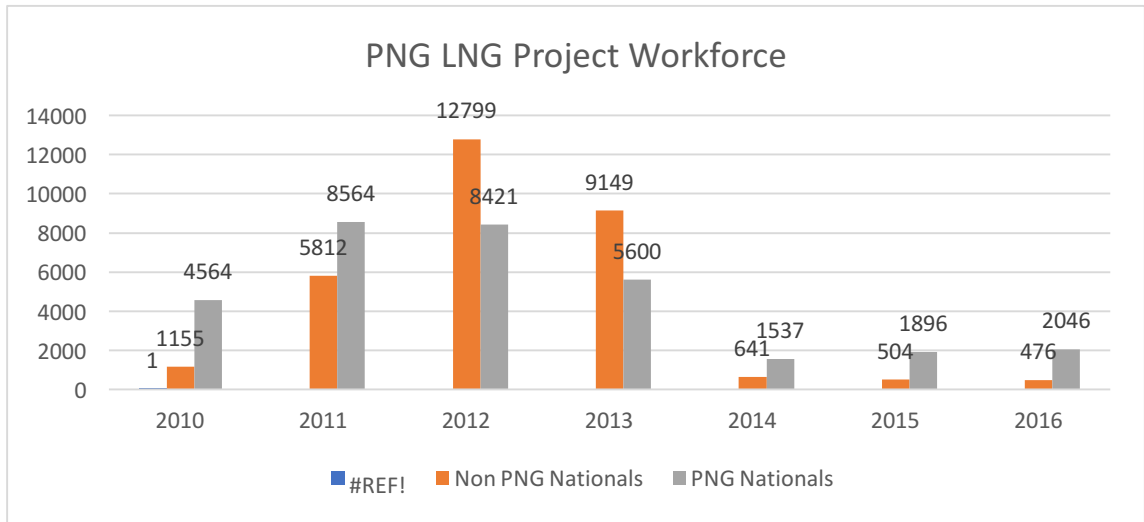
Figure 4.3 PNGLNG Workforce Composition

2010

- Early work in Hides, clearing for pipeline and plant site footprints.
- Work starts on LNG marine terminal and jetty.
- Work starts clearing the LNG plant outside of Port Moresby.
- Setting up and building of camps to support the project.
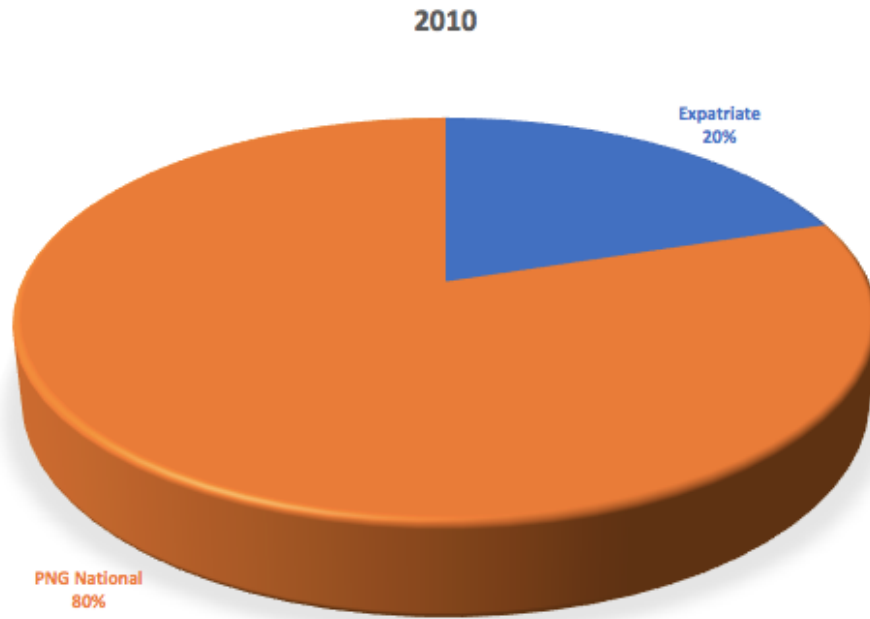
Figure 4.4 Workforce Composition 2010

2011

- Drilling operations commence in the Highlands.
- Construction of Komo Airport commences.
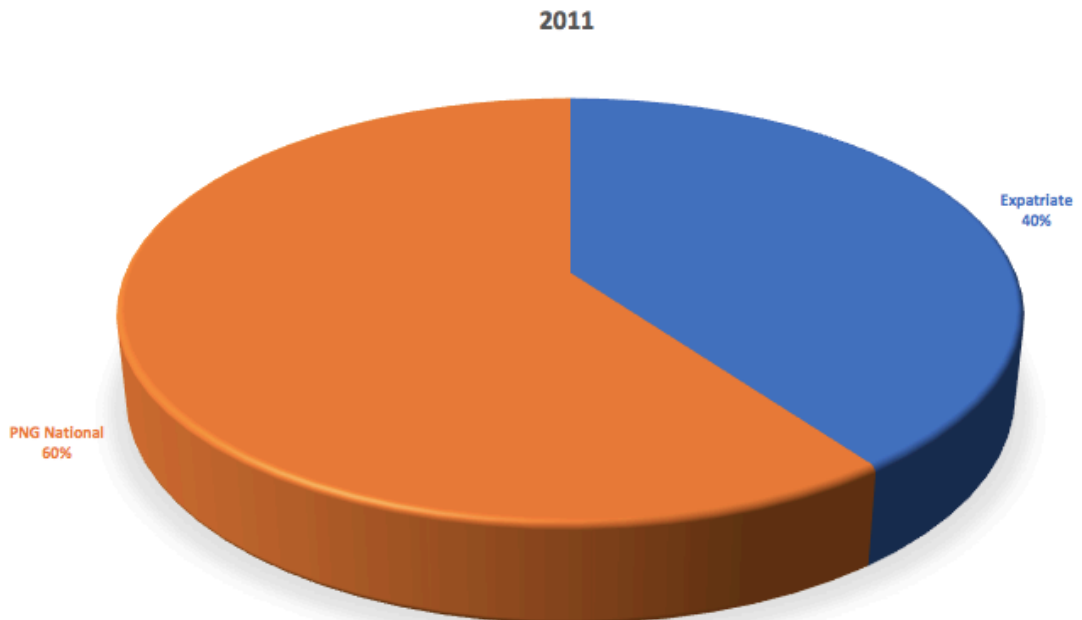
Figure 4.5 Workforce Composition 2011

2012

- Construction is underway on all parts of the project. Workforce will peek at year's end.
- Drilling is underway in the Highlands.
- Pipeline construction in the Highlands and subsea is underway.
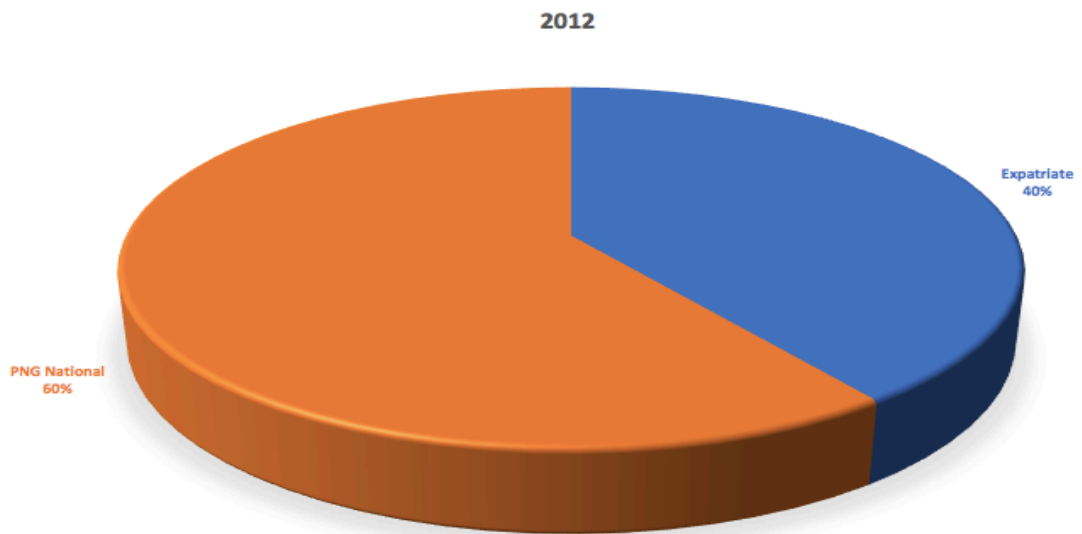
Figure 4.6 Workforce Composition 2012

2013

- Construction is nearing completion on most of the project.
- Komo is handed over and being used for heavy load flights for turbines.
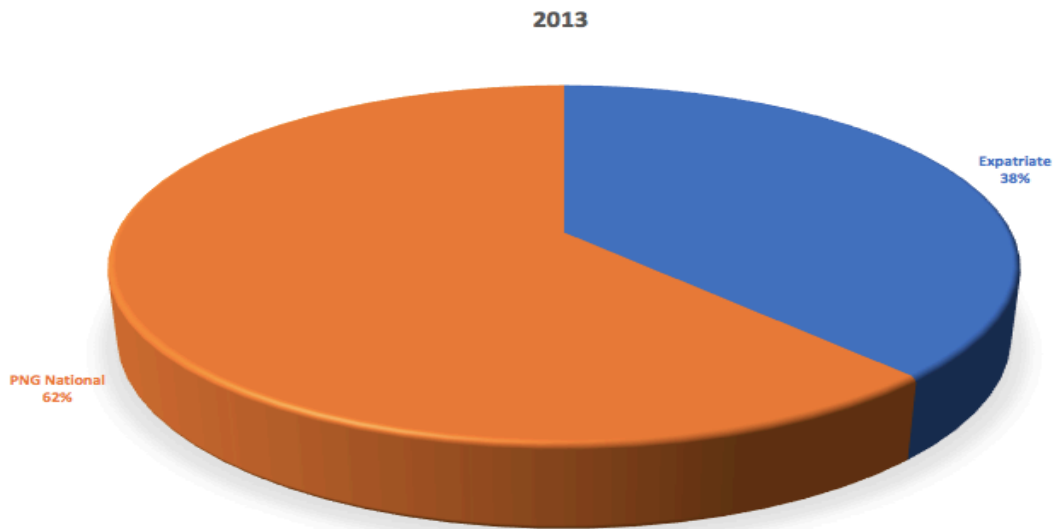
Figure 4.7 Workforce Composition 2013

2014

- In February, turn over and commissioning commences at Hides Gas Conditioning Plant.
- In April, the first gas is produced and the pipeline goes live, with the LNG plant in Port Moresby ready to deliver its first cargo months ahead of schedule.
- In May, the first shipment is delivered and departs PNG.
- The project transitions into steady-state production.
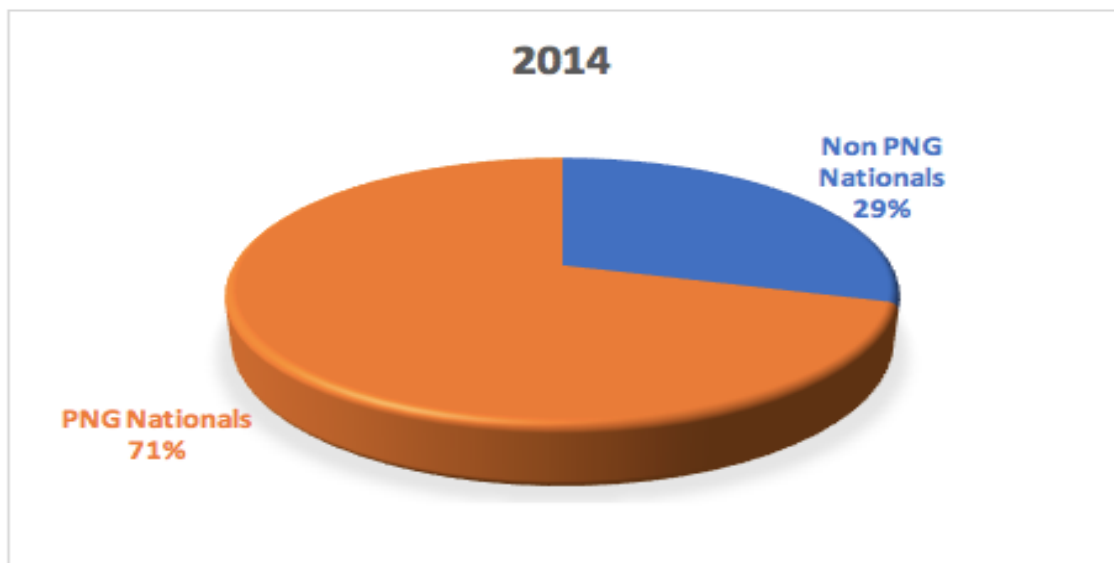
Figure 4.8 Workforce Composition 2014

2015

- The project is in steady-state production.
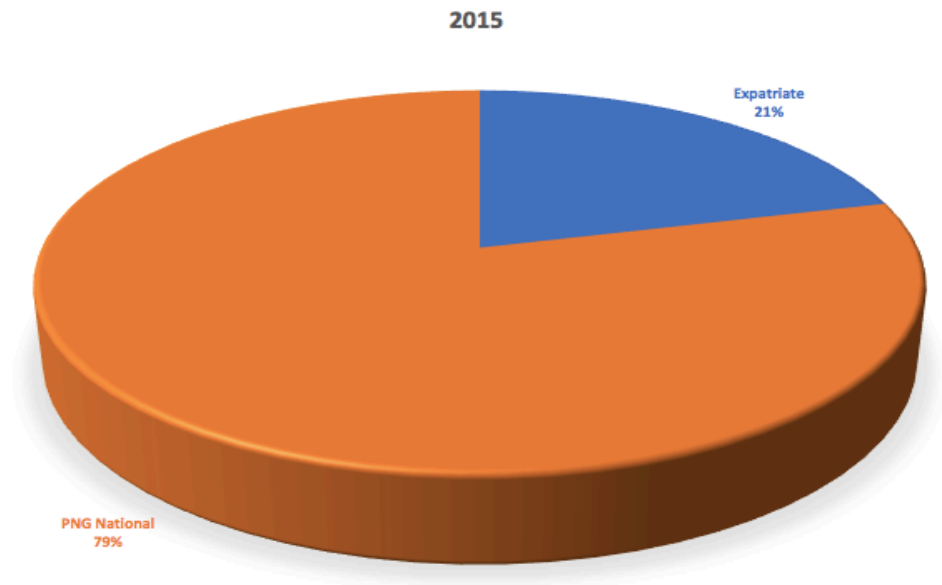
Figure 4.9 Workforce Composition 2015

2016

- Angore expansion project is pending.
- The project is in steady-state production.
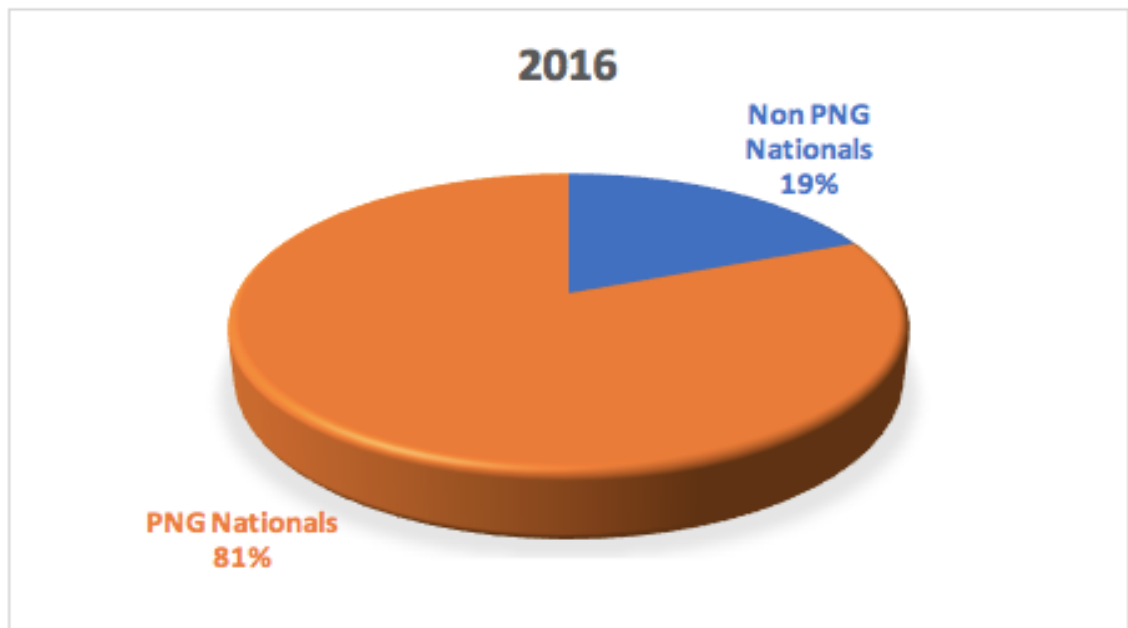
Figure 4.10 Workforce Composition 2016

4.6 Non-PNG Citizens Employment

All of the data available, detailed above in figures 4.3 through to 4.10, broke down the staff into two groupings. These groupings were not further broken down. The 2010 report developed at the start of the project recommended that PNG LNG (then referred to as Esso Highlands, and now also known as ExxonMobil PNG [EMPNG]) and its prime contractors (engineering, procurement and construction contractors) should develop their own national content plans. They were also asked to report the breakdown of local staff according to local project area (indigenous), project district, PNG national and other. In addition, they were asked to provide further breakdowns according to gender and job type to aid in social reporting on equity and diversity for the project. Any non-PNG citizens were to be reported as total non-PNG workers, expatriate staff and OCNs that comprised the semi-skilled and unskilled non-PNG workers. Although these data were collected during the project, very few of the data were made available publically, so they could not be used in this case study. However, some estimates from the Labour Department placed the OCN number on the project at an excess of 9,000 in 2012.

The following is an overview of the work permits issued to foreign workers during the project. In 2005, only 6,000 permits were issued, and these were issued predominantly to Australian and New Zealand nationals, while two smaller groups comprised Chinese

and Malaysian nationals. There is then a break in the data until 2010, when the project begins. At this point, the number of permits issued more than doubled, reaching 1,500, of which 1,125 were directly for PNG. A substantial amount of these permits were likely project-related, but for associated organisations in PNG, such as construction and other industries not directly involved in the LNG project. The number jumped to 5,000 permits in 2011, most of which could be directly linked to the project's 4,657 increase in non-national staff. Similar growth can be seen in the 2012 numbers, when an additional 5,000 work permits were issued to support the project (Voigt-Graf, 2013).
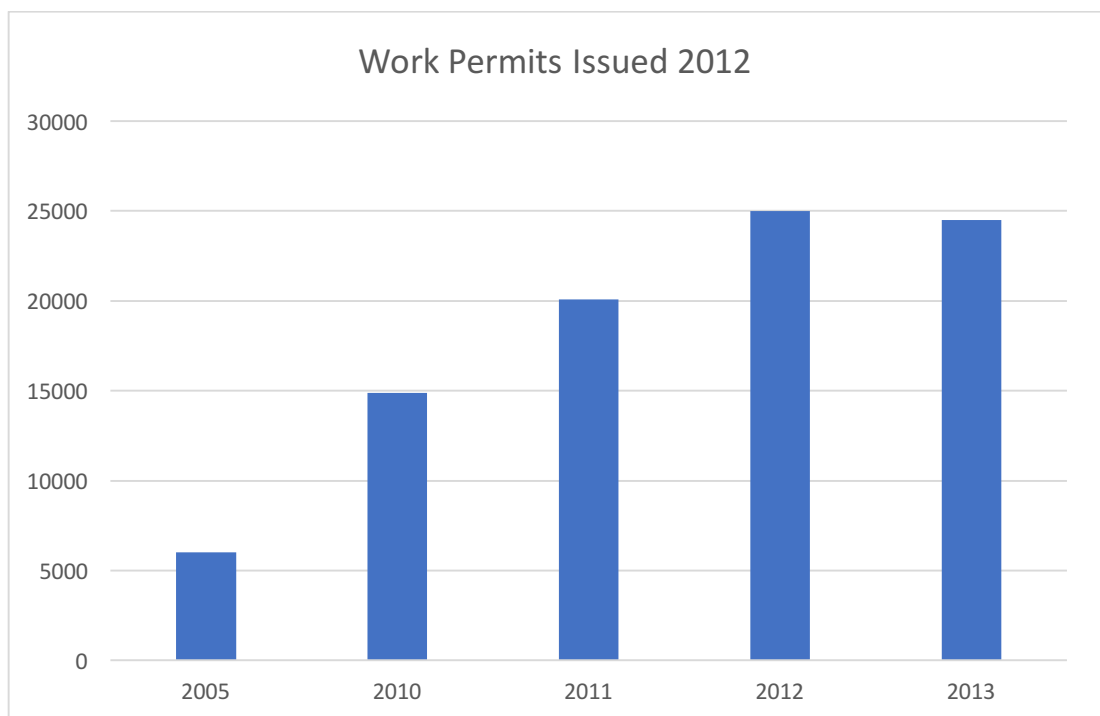
Figure 4.11: PNG Department of Labour Data, Retrieved 2015

To gain insight into the use of OCNs and expatriates in PNG, the following figure analyses the breakdown of nationalities among the workers who received permits in 2012. This figure was developed by Dr Voigt-Graf for the National Research Institute in 2013.

Where foreign workers come from

China 3,930
Malaysia 2,516
Indian sub-continent 3,991
Other developing 6,957
Other developed 8,175
Australia 22,466
Philipines 15,067

6% 4% 6% 11% 13% 36% 24%

Source: Carmen Voigt-Graf, National Research Institute
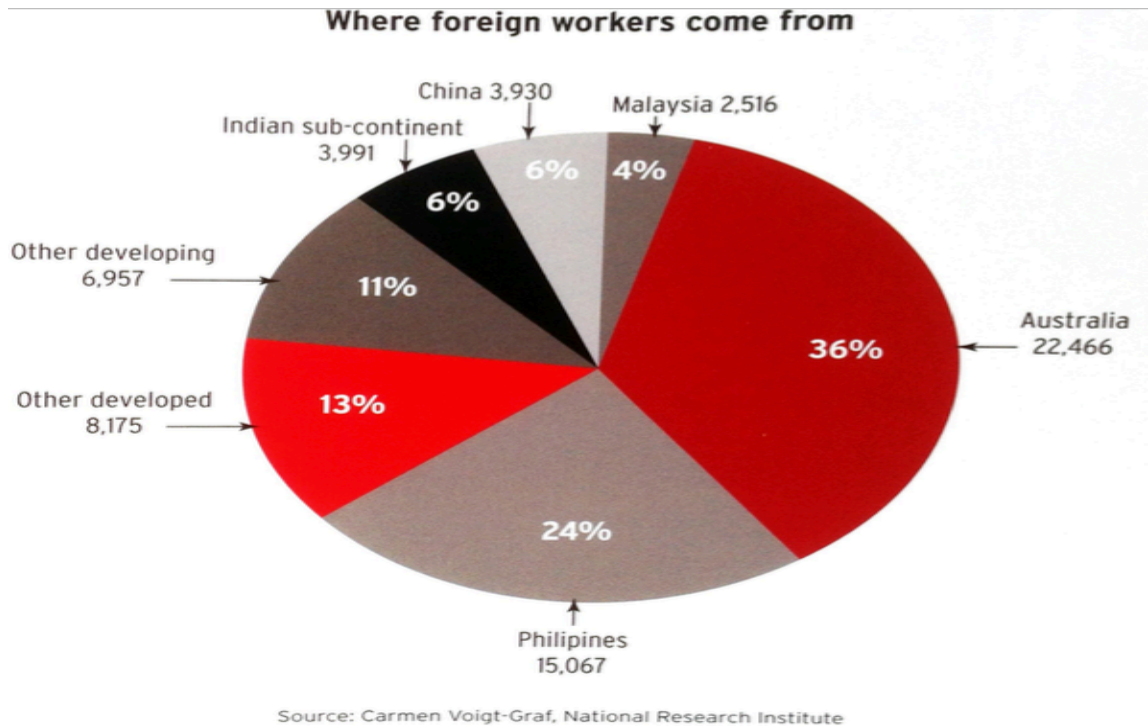
Figure 4.12 Origin of Workforce in PNG 2012

When analysing the above breakdown of work permit recipients by nationality in the context of the PNG LNG project, we must first estimate the non-project numbers. The estimated number of Australians living and working in PNG at the start of the project in 2009 was 14,000. According to the National Research Institute figures above, this number increased to 22,466 in 2012. The increase of 8,466 over three years supports the anecdotal evidence that the majority of expatriates working on this project were Australian. Other developed nations included Canada, the United Kingdom and the United States. Anecdotal evidence gleaned from conversations and observations placed the number of Philippine nationals on the project (estimated at over 9,000) as the largest workforce in 2012. This means they were both the largest workforce on the project in 2012 and the primary OCN nationality working on the project. These personnel were mainly employed for specialist construction and welding trades required for the pipeline, as well as construction of the gas plant. Very few Chinese or Malaysian workers were involved in the PNG LNG project; however, PNG has many large companies operating out of Malaysia and China, which would account for the number of permits for workers from those countries (Voigt-Graf, 2013).

4.7 Workforce Nationalisation Example in Security

The following text provides an example of the successful security workforce nationalisation on the project, taken from the PNG LNG website www.pnglng.com:

> Security Lead for Port Moresby and LNG Plant, Mildred, is an example of how hard work and dedication can lead to career development.
>
> Mildred began her career with ExxonMobil PNG (EMPNG) in 2011 as a contract night guard. It was here that Mildred learnt the importance of safety and security and grew a passion to progress a career in this field.
>
> Taking her new-found passion in her stride, Mildred went on to become an executive driver and then a site security contact for EMPNG's head office in Port Moresby.
>
> In November 2015, Mildred's hard work and respect for EMPNG's values of safety and security was rewarded when she became the first female Papua New Guinean to be promoted to the position of Security Lead for Port Moresby and the LNG Plant site.
>
> In her role, Mildred is responsible for overseeing Port Moresby and the LNG Plant Site Security Operations by way of providing guidance to staff and contractors. She is committed to protecting the people and assets that are in her care.
>
> The promotion was not only a reflection of her work performance and recognised capabilities, but the support she provides female staff on personal security issues outside the office.
>
> Mildred is most proud of being the first female Papua New Guinean in security operations to be promoted to Lead. Along with this, she is proud to be making a difference to the workforce with her fresh eyes and passion to deliver her best, influencing staff who share the same passion.
>
> One of Mildred's career highlights was attending security leadership training at Las Vegas, USA, in 2015 where she learnt detailed protection protocols (EMPNG case study, July 2017).

Although this was taken from the PNG LNG website in July 2017, the focus of the case study (Mildred) had already departed the company in March 2017. However, it is a useful case study for this research because it allows a comparison of the differences

between the programs for maintenance and operations technicians and the programs for the security departments. No formalised mentoring or workforce nationalisation program existed for the security or logistical workforces at the start of the project in 2010. However, there was an operations and maintenance program that involved millions of dollars, dozens of specialised expatriate staff, and a purpose-built facility in Port Moresby to enable a live-in program. The security department's workforce development program was smaller in scale, developed later in the project, and championed by only a few managers. It had no budget or strategic direction other than an end objective number to achieve in 2015 for national employment. Thus, the success of this case study is likely a testament to a handful of security managers mentoring and working with an already strong performer to achieve a good result. This case study on Mildred was used to demonstrate that positive results can be achieved in a security setting on a resource project, given the right support. It also demonstrates the bias shown towards technical disciplines that more closely align with the resource company's primary business—in this case, operations and maintenance technicians. This example further demonstrates that, given the same conditions and support afforded to the technical trainees in the early phase of the project, the security and logistical workforce may have been more able to produce strong managers in 2017.

The recent opening of a technical training college in Port Moresby to support the resource industry is a step in the right direction. Thought should be devoted to operating parallel courses in both logistics and security and risk management to complement the technical disciplines. This would allow a more structured approach to training staff, akin to apprenticeships that develop staff in a more structured way in the resource industry.

4.8 Conclusion

Overall, the PNG LNG project was very successful. It was completed on time and was able to produce gas (LNG) earlier than scheduled. However, it did suffer from some cost issues—eventually expanding from US$16 billion to nearly US$20 billion. This was primarily caused by a foreign exchange swing, coupled with the additional costs of building the Komo Airport to accommodate the required Antonov aircraft. The runway and supporting infrastructure to support the Antonov loads were added to the project scope when the expansion of the Tari Airport was deemed unfeasible in late 2009.

The case study of this completed project demonstrated the size and composition of the workforce from pre-construction, which relied predominantly on localised manual labour, through to construction, which relied on both expatriate managers and supervisors. The construction phase also showed a swing towards large workforces of semi-skilled trades brought in from overseas in the form of OCNs, such as welders and tradespeople from the Philippines and India. During this phase, the majority of national workers were in unskilled positions, with the exception of a few skilled hires from other companies. Nevertheless, there were some workforce nationalisation initiatives during the project, one of which was the operations and maintenance technician program that developed local staff and was responsible for developing 210 skilled workers by 2016. Other informal or departmental initiatives were attempted during this time, with varying results. In the security and logistics organisations, there was no formalised program, such as the program to develop operations and maintenance staff, supported by senior management.

This case study successfully demonstrated and supported three key points that support this research. It articulated the data on staff numbers during each phase of the project and discussed the reasons for the staff composition. In terms of workforce nationalisation, it indicated what can be achieved with senior support, long-term goals and funding. The best examples are the operations and maintenance trainees, who began the process in 2010 and now provide 210 fully trained operators. This case study also supported the theory that the same opportunities were not available for the security and logistics workforces, which had no focused workforce nationalisation program operating from the project's beginning. Although there was a minor mentoring program at the middle-manager level in the logistics department, this program had limited success. The security department had some early success, as demonstrated in the case study of Mildred above; however, this success was short lived. In summary, this case study was able to further support the research argument that there are limited workforce nationalisation programs for the security and logistical workforces in PNG resource projects (ExxonMobil, 2016).

Chapter 5: Interviews and Survey Development

5.1 Introduction

This chapter builds on the case study, research proposal and literature review to fully develop the final semi-structured interview template that will form the basis of the interviews. This template was approved by the ethics committee from Notre Dame University Freemantle and was used to collect the interview data from the 10 interviews. Following elucidation of the template, I will provide an overview of the interview results and summarise some key responses that helped underpin the development of the survey.

This chapter demonstrates how the data were used to inform and develop the survey instrument to be used as the confirmatory research. The final approved copy of the survey instrument that was used in the research survey is provided at the end of the chapter. This chapter documents and articulates the process outlined in the research methods, which employed the information drawn from the different sources, including the interviews, to develop the final survey instrument. This development concludes the chapter and sets the groundwork for the findings and discussion chapter, which presents the survey and its analysis in full.

Semi-structured Interview Template – Questions
1. Based on your observations, do you think oil and gas organisations build dependence on expatriate staff, if so why?
2. Is it possible to develop an indigenous workforce in the early phase of the project so they are better skilled for start-up; what has led you to have that opinion?
3. If indigenization/nationalisation were to occur earlier, what do you think the cost difference would be between expatriates and nationals?
4. What are the key factors that limit the nationalisation of security and logistical workforces?
5. What factors would enable the early nationalisation of staff?
6. What factors have enabled you to be successful in the past?
7. In your experience, what key activities promote a successful mentoring program in a resource company operating in Papua New Guinea?
8. Do you have any other information or opinions regarding the mentoring or nationalisation in PNG that's not already been discussed?

Figure 5.1: Final Interview Template

5.2 The Interviews

The interviews were conducted according to the proposed structure and research methods, with the majority conducted face-to-face and recorded for later transcription. The researcher was responsible for conducting all 10 interviews. The full results can be found in the appendix. The final three interviews were conducted over the telephone, as it was not possible to meet face-to-face without difficulty. The same process was used for the telephone interviews, including recording the interview and transcribing it in full. All interviews were anonymous. A letter designated each individual participant, and no reference linked the participants to the letters. The statements and answers in response to the above questions are summarised in the figures below.

		Key Points and Themes Question 1
		Based on your observations, do you think oil and gas organisations build dependence on expatriate staff, if so why?
A		Yes • Technical expertise of expatriates • Issues with education and training in the national workforce
B		Yes • Technical expertise of expatriates • Use of international assignments to give expat employees experience
C		Yes • Technical expertise of expatriates • Issues with education and training in the national workforce
D		Yes • Limited pool of educated experienced nationals • Poor recruitment structure that limits placing experienced nationals • Technical expertise of expatriates • Issues with education and training in the national workforce • Ability to hire and fire expats quickly (short term contracts no local labour law issues)
E		Yes • Technical expertise of expatriates (immediate capability no training needed) • Issues with education and training in the national workforce • Faster with Expats
F		Yes • Poor recruitment structure that limits placing experienced nationals • Technical expertise of expatriates
G		Yes • Limited pool of educated experienced nationals • Technical expertise of expatriates (immediate capability no training needed)
H		Yes • Limited pool of educated experienced nationals • Expats looking out for own positions (looking out for each other)
I		Yes • Limited pool of educated experienced nationals • Expats empire building
J		Yes • Limited pool of educated experienced nationals • Expats easier to use

Figure 5.2 Question 1

	Key Points and Themes Question 2
	Is it possible to develop an indigenous workforce in the early phase of the project so they are better skilled for startup; what has led you to have that opinion?
A	Potentially • Not witnessed it being successful in 2 projects (early phase) • Reliance on Expat and OCNs even with larger National numbers
B	Yes • Selection of the right managers (Expats) to lead is crucial • Cultural understanding by management • Communication and language (expat manager to national) • Long process best started early (nationalisation) • Mentoring important • Skills development
C	Potentially but difficult • Limited pool of educated experienced nationals • Issues with education and training in the national workforce • Technical proficiency needed takes time to develop • Commitment from the company needs to be significant
D	Yes • Realistic in setting goals and roles they start at • Training that is structured and progressive like AQSF level 2 or 3 initially • Merit based Development of staff into Certificate IV and Diploma as they progress • The right staff to lead and train them
E	Yes, but not witnessed it in three projects • Need the right managers with an understanding of PNG and its culture • Shortage of skilled nationals to assist • Cultural shortcomings in big company's impacted nationalisation early • Need solid commitment from company (not ad hock or lip service nationalisation strategies) • Cultural understanding of PNG
F	Possible • Need the right Manager with an understanding of PNG • Need to have the time and resources to achieve objectives • Human Resources you need the right national staff to develop and the right management of these staff
G	Yes • Need to develop staff out of school before they start on the project • Long term view of staff development • Apprenticeships or trainee ships for staff (mix of practical and theory based training)
H	Yes • Strongly believe
I	Yes
J	Yes

Figure 5.3 Question 2

	Key Points and Themes Question 3
	If indigenisation/nationalisation were to occur earlier, what do you think the cost difference would be between expatriates and nationals?
A	• Cost saving potential early due to reduced expats but cost increase later due to issues • Without skilled managers and technical experts to drive nationalisation it would not save money longer term
B	• It would be a massive cost saving if you could increase the national workforce earlier • The money would need to be spent on training and development of national staff to be effective
C	• Nationalisation programs should be seen as longer term • If it occurs too early before everyone is ready will be issues
D	• Cost much less • Significant quality and project time issues if done too early • Highly skilled nationals hard to find and expensive now
E	• Unknown
F	• Initial cost benefit to replacing expats early • Project time overruns due to reduced capability being much higher • False economy nationalising to early
G	• Would be a cost benefit but in the longer term • Need to still take a longer-term approach to nationalisation • Dependant on getting the right people in early Managers and National staff
H	Yes • Companies often take short term view only • Notion that if they upskill significantly they will leave
I	Yes
J	Yes • Lower cost

Figure 5.4 Question 3

	Key Points and Themes Question 4
	What are the key factors that limit the nationalisation of security and logistical workforces?
A	• Demographical issues • Cultural issues
B	• Experience of managers (cultural understanding, suitability to PNG) • Not having the right people in roles both national and expats
C	• Culture • Time frame
D	• Lack of experienced staff • Lack of formal qualifications even in semi-skilled • Different starting standard than western country's • Wantok issues • Cultural issues • Motivation and cultural expectations of national staff • Cultural alignment between company and local staff
E	• Skills, knowledge and experience of national staff • Motivation and cultural expectations of national staff • Cultural alignment between company and local staff • Wantok issues
F	• Wantok issues • Cultural issues • Motivation and cultural expectations of national staff • Cultural alignment between company and Melanesian culture • Family responsibilities impacting work (priorities for many national staff are family first)
G	• Lack of training and development • Minimum wage mentality of company's dealing with security • Low motivation and engaugment of workers
H	• Reluctance to over invest in training and development staff • Time frame
I	• Cultural issues • Reluctance to invest in staff • Fear of staff changing companies once trained
J	• Qualified national staff • Training capability of the organisation • Recruiting Uni grads

Figure 5.5 Question 4

		Key Points and Themes Question 5
		What factors would enable the early nationalisation of staff?
A		• Language and communications • Cultural understanding
B		• Mentoring • Language and communications • Cultural understanding • Training that needs to be nationally recognised and ongoing • Career progression and oportunitys (through recognised training)
C		• Identifying key Nationals early for supervisory or management positions • Sending national staff overseas to other projects for experience • Cultural alignment between the company and PNG • Company having a deep understanding of PNG culture • Training for staff, structured and ongoing
D		• Very good HR Department as critical • PNG national content plan needs to be developed and in place before boots on ground • Commitment from senior management • Cultural alignment between the company and PNG • Identifying key Nationals early for supervisory or management positions
E		• Commitment by Government • Commitment by the companys and management • Mentoring (as a credible program) • Community engaugment
F		• Mentoring programs • Selection of the right staff (Expat managers) • Selection of the right staff (National workers) • Management expertise in leadership, mentoring, PNG culture • Ownership of the process by management • Engagement with nationals • Critical managers lead by example, empathy and strong leadership
G		• Early start out of school into programs • Apprenticeships or traineeships pre-company job • Longer term industry focus rather than immediate nationalisation focus • Professional development
H		• Improving compensation and longer-term staff benefits • Early start out of school into programs • Apprenticeships or traineeships pre-company job • Professional development
I		• Improving compensation and longer-term staff benefits • Professional development • Graduate programs • Long term view
J		• Mentoring programs well structured • HR Process quality of staff • Graduate programs

Figure 5.6 Question 5

	Key Points and Themes Question 6
	What factors have enabled you to be successful in the past?
A	• Language and cultural understanding • Incremental responsibility to build capability • Enable staff to problem solve and make decisions independently • One on one approach with staff feedback • Mentoring
B	• Cultural knowledge • Language and communications • Mentoring • Building relationships with staff based on mutual respect • Military background and country experience
C	• Recruitment of the right people • Cultural understanding • Training ongoing and proportionate • Engagement with staff • Selection of the right expat staff to mentor • Long term focus
D	• Cultural knowledge • Language and communications • Mentoring • Building relationships with staff based on mutual respect • Country experience • Training and development of staff
E	• Empowering the National staff • Cultural knowledge • Language and communications • Mentoring • Building relationships with staff based on mutual respect • Country experience • Training and development of staff
F	• Selection of staff • Training • Cultural understanding • Mentoring • Engagement of the national staff
G	• Cultural understanding • Mentoring • Engagement of the national staff
H	• Cultural understanding • Mentoring • Language skills • Effective communication
I	• Cultural understanding • Mentoring • Language skills
J	• Quality of Staff • Cultural understanding • Mentoring • Good HR

Figure 5.7 Question 6

	Key Points and Themes Question 7
	In your experience, what key activities promote a successful mentoring program in a resource company operating in Papua New Guinea?
A	• Empower them to make small mistakes and learn from them • Build trust in the team • Engagement with staff
B	• Understanding the culture and country • Understanding the complexity of the people and living conditions • A deep understanding of what impacts the national staff allows a greater understanding of what motivates staff
C	• Engagement with staff • Training and selection of expats to mentor nationals is critical • Cultural understanding and experience for managers • Long term focus
D	• Mentoring programs require full commitment by the company and management • Strong HR team to support • Ongoing commitment by managers to develop national staff • Documented, audited and supported programs • Identify strengths and weaknesses with staff and develop plans to close out • Written, agreed on plans are most effective • Ongoing development and training opportunities for staff • Clearly defined HR policies for staff • Use of reward development opportunities for staff to receive training overseas • Graduate programs to assist promising staff educational opportunity • Use of the Australian AQF vocational qualification courses in training • Ongoing progressive opportunities for staff in training and development
E	• Formalised mentoring programs • Flexibility around family commitments (comes back to cultural understanding) • Longer term Session planning (staff can see the potential opportunities)
F	• Selection process for managers needs to incorporate additional skills • Support to managers by specialists in mentoring, training and PNG • Training and support to the National staff • Ongoing support and guidance to keep them at standard • Lead by example the national staff will look to the manager
G	• Selection of the Expat manager critical • Buy in from all the stakeholders • Remuneration is sufficient
H	• Understanding the culture and country • Understanding the complexity of the people and living conditions • Not trying to enforce western values on things
I	• Selection of Staff • Cultural understanding
J	• Quality of Mentors • Structured programs • Sufficient time allowed • Subject expert often not an effective mentor

Figure 5.8 Question 7

	Key Points and Themes Question 8
	Do you have any other information or opinions regarding the mentoring or nationalisation in PNG that's not already been discussed?
A	• Culture • Mentoring • Selection of expat managers to mentor staff • Environmentally aware
B	• Leadership of the process (the company needs to drive nationalisation) • Cultural understanding from management • Most managers in PNG are not suitable mentors (lack skills in the area or knowledge) • Reluctance to nationalise or mentor by many managers (Once complete they are out of a job) • Lack or teaching and training skills with many expat managers (experts in their technical area only) • Lack of cultural buy in or knowledge by expats • Ex military expats possess the mentoring skills and cultural awareness as it's a taught skill in Army and used in skill transfer predominantly • Ex Army/Police expats are more dynamic and apt to adapt to local cultures more readily than traditional resource company staff
C	• Setting realistic expectations • Be community focused not just on internal company goals • Assist in Nation building
D	• Developing the new younger well educated class • Balancing the educated from the city with the support and development of locally employed (indigenous) regional staff from project area
E	• Lack of government support financially to support onus falls to the company in regional areas
F	• Mentoring has to be consistent • Training has to be supported and ongoing • Ongoing support to national staff and positive performance management • Achievable goals for staff •
G	• Understanding PNG culture • Wantok influence on company culture • Fair and transparent dealing with staff
H	• Nothing aditional
I	• No
J	• Cultural understanding • Suitability of Mentors • Mentor Skill Sets • Importance of mentors soft skills • Most Mentors ex Mil

Figure 5.9 Question 8

5.3 Key Issues and Discussion

The common theme throughout the interviews was the importance of mentoring in any workforce nationalisation program. This was also supported through the literature and, to a lesser extent, the case study. A sample of the comments from the interviews is provided below to support the themes; however, these comments are not exhaustive. As

aforementioned, the full interviews are contained in the appendix. The interviews were mostly supportive of the view that resource organisations in PNG indicate a dependence on expatriate staff. They also supported the possibility of early nationalisation in resource projects, given the right conditions; however, they were inconclusive in determining what, if any, dollar amount would be involved if this were to occur. As revealed in the quotations below, there was strong support for the need for mentors to be carefully selected and have both technical and soft skills to be successful as mentors in PNG. Significant cultural understanding and communication skills were also strongly supported, including understanding the local language. All the themes and statements were coded and summarised in the above tables for use in weighting the survey responses. The following quotations are presented to further the discussion of key themes.

5.3.1 Dependence on Expatriates

The first series of quotations discusses the dependence on expatriates, and why the interviewees thought this dependence exists:

> Within the oil and gas industry, external to Western countries, I believe there is a dependency built on expats, particularly through the start-up to project phase, and even into operations. I think this comes from a combination of issues, specifically within the PNG context. The low level of education and governance within PNG society means that, although you would have the number of people that you require to undertake any operation, it would take a lot of work by the company to build them up to the correct level … The dependency on expats is two-fold. One, it's start-up, and probably, two, it's to educate the workforce. (Interview C)

> Yes, I do, particularly in a third-world country, my experience is that there is a limited pool of national staff with the experience and the education that's required, coupled with, from what I can see, a very poor recruitment structure, so the recruitment companies that I dealt with in PNG have never given me good service or good-quality candidates. So to identify the local national staff is very difficult. Also, typically, the lead time can be a challenge for companies unless they do have some sort of plan from very early days. It's very difficult to employ staff, even if they come forward and experienced, and to teach them the company way and the company safety and security expectations. (Interview D)

Because it's easier to bring in people from their own organisation, rather than to train up local staff. (Interview J)

The majority of interviewees held a similar view regarding companies' dependence on expatriates. This was supported by the literature and was confirmed as being worthy of inclusion in the survey for additional respondents to comment on.

5.3.2 Early Nationalisation

The questions regarding early nationalisation were twofold. First, they asked whether early nationalisation is possible to achieve. Second, they asked whether there would there be a cost saving from nationalisation. The quotations below support the findings identified in the literature and the summaries above. Almost all interviewees believed that it is possible to nationalise early and that it would potentially save costs. Some interviewees, such as Interviewee B, stated that nationalisation would enable massive cost savings, while other interviewees stated it would produce savings up front, but the cost would potentially equal out later. Overall, the majority supported both statements, but did not wish to suggest dollar values of the costs saved. For example:

There's always going to be a number of willing, and probably intellectually capable, local nationals who could undertake early phase project start-up, but, having said that, all oil and particularly gas programs or projects are very heavily technologically based. If you don't have that base level of technological understanding—and I'm talking base-level computer skills, you know, even use of mobile phones, that sort of stuff—within the local community indigenous to the area you're starting up in, it will be very difficult to train a start-up workforce for early stage, and it would take a significant commitment from the company to do that … Early nationalisation of staff could be theoretically achieved by identifying key performers early and getting them involved in other projects that the company has involved globally. Again, I'm talking for larger companies that have global projects, so potentially moving them to other roles within the company in a third country, whereby they would get to understand the company, get a little bit of loyalty towards the company as well. That would also have to be tempered with the fact that the company would need to understand the culture and the tribal interactions between those people that they are bringing on board. (Interview C)

Yeah, I think there would be a cost benefit in the long term. I mean, maybe initially, in mainstream or P2P cost would be prohibited because it will take even longer. I think the capacity of the PNG workforce is not as great as they expect. It's cultivating the right people, then identifying and matching those right people to skills and building on those, that may take a little bit more time in comparison to an expat. But in the long term, the cost would extrapolate out to probably be cheaper than maintaining an extra workforce. (Interview G)

You know, there's going to be a cost benefit there. There's multiple sides to that too—it's not just a dollar benefit, as you said, and it may not be a dollar benefit, because if you get good-quality nationals, you've got to look after them because if you've got good-quality nationals in your team, in some of the countries I've operated in, they pay almost as much as expatriates, and if you're looking after them and their families with health and medical, those costs do add up. So, dollar aside, the benefits are, you know, there's a morale level on site, you got good senior nationals in your teams and operating it, it breaks down those potential communications issues, potential social issues. It also adds pressure on those issues as well because the local community pressures on those people—their own cultural pressures—can take its toll. But there's going to be a value there—that's a positive to have your own people in-country running your business. (Interview H)

Yes, it definitely is [possible to nationalise early]. My previous company had some success previously that has led to nationals in key jobs, so they just need to expand on that. (Interview J)

I think there would be a significant cost differential and that nationals would cost significantly less, but I think it will be very difficult to quantify unless you got a specific time or project. There are some PNG local national staff who are on significantly higher salaries than the rest of the workforce, almost approaching those of expats. One of the reasons for that is some of those people are getting housing or housing allowance as well, and that's one of the biggest expenses in that country, and it also obviously depends on how much project work is on in the region of the time, so that's kind of impacted directly on your expat rates. So, for instance, today, the rates are probably two-thirds what they were six years ago, which means you can get an expat for probably, $150 K salary with housing, etc. (Interview D)

These statements all support the possibility of nationalising the resource industry's security and logistical workforce early, and the potential for significant cost savings for

the organisation. This information now needed to be validated by the survey, and for the quantitative measurement to indicate whether this information was supported and by what percentage of respondents.

5.3.3 Human Relations

The literature is very clear regarding the importance of a strong HR team in an organisation to support the workforce nationalisation process. The challenges facing PNG in this area are well documented and discussed in many articles and books, and include certificate fraud, lack of transparency in some governmental and educational establishments, and the inability in many cases to accurately check background information. These HR challenges must be addressed effectively to have any chance of success in harnessing the local workforce. This is discussed in the following quotation:

> I think what we need internally is an excellent HR department. You need to have developed a very comprehensive and robust national content plan, so this needs to be identified well before any boots hit the ground, and commitment from senior management needs to be made, then to be managed and show that it's rolled out. So you need to get the people in early, and you need to get the plan in place and the people starting coming early to just understand the culture of the company. Typically the nationals in PNG are very, I guess, immature compared to Western cultures, like in the subject pretty jealousy and all sorts of office politics, so you need to then identify key positions in the national workforce and make sure that you put people in those key positions that will be able to drive the company culture and the management of people underneath them and keep them working as a team and, I guess, keep those cultural issues away from the productivity of the workforce. (Interview D)

The need for HR to be involved throughout the process and be a key stakeholder has been made clear. It is not only about hiring and firing—it is the ongoing support of national staff through strong HR leadership that supports success, as discussed further below:

> Have a dedicated HR training and mentoring program and a consistent, meaningful personal development system. So once most companies have all that stuff, they are not really going to use it. So if you do a PDA, personal development plan, it's normally tick the box, tick the box, it's all electronic. You need to read it to the local

nationals, you need to be working with them always, weekly, to identify what their strengths and weaknesses are and help mentor them into the roles, but you want to help mentoring to be successful on the roles, you need to consistently document, and again I am told this specifically by PNG nationals. When something is through to HR, then you need to go through the HR process, correctly and in detail—that means writing a letter and having the letter given to the person. (Interview D)

With my national staff, it's been the quality of staff we have employed, really smart and proactive; they listen and take on the training. If we have the right people in place to mentor, they really take on board what's being told to them. (Interview J)

According to other responses, hiring the right people, both expatriates and nationals, is central to having a strong workforce that can support mentoring and, with it, the nationalisation process:

You need the right people to do that because a lot of the times they bring in supervisors, managers that don't have an understanding of the goings-on within the country. They don't have the skillset or the language sets to bridge the barriers between that, and then it's just really considered an expense to go through and work with the skillset of the people to bring them along and it is. It's a long journey. It's not something that can be done overnight, and it needs to be done right at the front end of the project and then having the staff that are mentoring them and working with them knowing what final outcome is required. (Interview A)

The mentors themselves, not everyone can be a teacher or mentor. You may know your job really well, but may not be good at transferring that knowledge across to the staff. The role of mentors is above what an average or normal person is able or willing to do in many cases. So definitely good mentors are the key, as well as the time to train up people to do the job they need to do. (Interview J)

These points, which were coded and summarised in the 8 Figure above, were used in the survey. The respondents were asked to weight each point or theme to confirm the importance of each and how they affect workforce nationalisation.

5.3.4 Training and Workforce Development

One of the recurring themes was the training and ongoing workforce development of the national workforce. The literature articulates the importance of ongoing training and

development in developing nations, not just in PNG. The relationship to the workforce nationalisation process and to mentoring is well supported by the literature, and was further supported by the interview responses:

> My experience has been, we in my company actually, brought in a trainer from Australia from a TAFE college or a similar standard of educational providers and ran Certificate 3, 4 and diploma courses, and the development courses for local staff that we have employed, and used as a reward-based system for those who were good workers and also gave them a qualification. We did see significant results in productivity, specifically around logistics operators, and that was in the warehousing. The guys really reacted well and seemed to get a better grasp of things too. (Interview D)

The use of educational programs and traineeships was also covered by many of the interviews and is supported through the literature. The use of internationally recognised training or Australian Qualifications Framework training (which closely aligns with international standards) is important, as discussed below. Education and training before employees start work or early into an employee's new role are important enablers, as supported by many of the interviews:

> The ultimate activity that you can use would have to be the graduate program. This sees them taken through universities, but obviously it's going to be a long-term program, so getting that in place in a project environment, it's difficult. We found that the Australian Cert. III and Cert. IV-associated level of education was something that could be taught readily, practically and that they could grasp quite quickly to almost independently of what level of formal education they have had and that really gave them some direction. (Interview D)

> Okay, the perfect world. I think you got to grab them at the start. You got to get them coming out of school, with some education. And that's going to continue on through in the workplace, through your traineeships and employee professional development. That would see them flowing into industry, not just security that have cross-boarded all the resourcing sector. Then you would get a much more substantial national workforce, as opposed to domination by an expatriate workforce. (Interview G)

5.3.5 Culture and Communication

Being able to communicate is central to any relationship being formed, and mentoring is a relationship-based pursuit. The ability to develop a strong working relationship that promotes skill exchange and trust is another central element to mentoring and the workforce nationalisation process. Being able to exchange even basic pleasantries in the local language, as discussed below, demonstrates a level of interest and cultural understanding that helps engage the local workforce:

> Well, first of all, the language issue. I mean, PNG is easy. I mean because the PNG language is easy to learn. I think that being successful is that I've learnt the language, and I speak it relatively fluid. It opens up massive doors, huge doors. I think that a number of the expatriate staff there, that's where they struggled not learning. They could be in the country, they could be a long-term expat, but if I can't speak the language, the nationals know that. And the respect that you get for speaking the language far outweighs, in my opinion, any amount of time that you continue to go back to PNG. That said, definitely the language—that's the key, I think, to being successful there. (Interview A)

> It's a tough one because I have had some success and some failures where I thought I was successful; however, I found that learning a local language as much as you can has been a real boon for me, particularly in PNG. It allowed me to build personal relationships with the national workers. It sometimes can become an 'us and them' situation in countries, particularly with a language barrier, so I think that having some empathy to also workers, but really trying to develop them and prove to them that you are trying to upskill them and give them ongoing qualifications, etc. to move forward once the project is finished. (Interview D)

The ability to communicate and establish rapport with staff will greatly enhance a mentor's acceptance and assist in building trust in his or her team. Clear communication and honesty are discussed as being some of the most important factors in teaching and mentoring in PNG. These issues were covered in some detail in the survey to fully understand the importance of each and how they are weighted in importance.

5.3.6 Mentoring

The importance of mentoring in the promotion of workforce nationalisation in PNG was made very clear through the literature and interviews. While a great deal of work has

been done on mentoring in general and on mentoring in the context of indigenous personnel in other countries, little has been completed in the PNG resource industry. The work that has been completed in this field has involved predominantly internal company-specific studies that were not published. Anecdotal evidence from these sources suggests that mentoring is the single most important part of this process. This is also supported in the following quotations from the interviews and is summarised in the above table:

> The key thing to promote a successful mentoring program is being able to understand the country and the culture, the people, the diversity of the people, their living standards, and their conditions. Until you understand that and their challenges, you won't bridge that gap between the individuals, and then it's just knowing how to work and the different mind sets between their cultures and who you are dealing with. (Interview A)

> You will find that a lot of the guys that have come in to do the mentoring have a reluctance to be mentors, purely because they see that they are doing themselves out of a job, or, at the end of the day, the guys don't have the skill to teach or train because they don't have the understanding. Even if they are on the same level, they are not geared around it. They might know their trade, they know their craft, but they are not an instructor or a trainer *per se*, so then when you throw this dynamics from a different culture or Papua New Guinean culture, they don't understand it. They don't have or don't want or have the will to grasp that culture and their understanding of training. So you will get guys that will do stupid things that will derail the whole process and put it back, and then it's a decision that someone needs to make on whether they are going to remove that individual. Then they need to take that seriously because it's generally an expat and then they need to go and find the individual that can pick up and then plug them back in, and that's very limiting and challenging. Then you then have to rebuild that rapport with the whole national team to then try and backtrack and recover that training, and then, at that point, they are going to be guarded anyhow, so the next person is going to come in, there is a whole lot of groundwork that's going to derail the whole process that he's got to go through and fix. So it's very important to get your baseline right at the beginning and PNG people, the people having an understanding of what they need to achieve and what the end state is going to be. (Interview B)

The right level of engagement. When we are talking about mentoring, we are probably talking again about an expat mentoring program. So that links back to having the people with the right cultural experience, knowledge, not necessarily qualifications—just because you're a qualified anthropologist doesn't mean you're going to understand how people interact in Papua New Guinea.

The knowledge and experience of Papua New Guinea culture, gained over probably a number of different job groups. The fact that you've worked not only in the oil and gas industry, but if you'd worked, say, in logistics or security, or government or other programs having a mentor program run by and organised by people who understand the culture and who have worked in Papua New Guinea with Papua New Guineans, in parts of the country over a period of time. So, again, it's a long-term prospect—it's not something that you would be able to say, 'a person has done a year or two there, maybe they understand the culture'. (Interview C)

You need a proper mentoring program. You need one that's set up. It allows for people to move and to be successful in it within that department. You've got to show that there is promotion, there is progression, that's the government will support those processes because that's part of their policies. The other aspect to that is also that it's not just that you've got to make sure that, when you're doing a mentoring program, that there is major factors within PNG society, family interactions that impact on that progress, and therefore you'd need to give support to that particular person to achieve those areas that require more pressure and understand there might be decisions that—because it comes back to this PNG national perspective: 'What's in it for me? What's in it for my family?'. (Interview E)

For the mentoring and PNG people, again, that has to be constant—you just can't give somebody some bit of training or bit of knowledge and then just leave them loose and then expect them to work at what they are doing. The big thing for PNG citizens is performance management; there is this performance management, so we are always having to pull them up and say good job because they like to hear that, this is lot of things no one wants to hear that and growled at that time, but continuous positive reinforcement, positive management and giving them accurate, achievable goals, change their workplace, this is what I meant to do, and leave them to it. (Interview F)

It's interesting that there's a perception of some expatriates that, well, the local won't be as good as the expatriate, but there are local professionals in those fields that are

very capable, very skilled, given the right support and mentor. Identifying the right people in the right roles. Proper job descriptions, proper roles and responsibilities outlined, appropriate mentoring and appropriate check and balances on the guys. (Interview H)

It is evident that mentoring, mentoring programs, the mentors themselves and the skillsets possessed by the mentors all heavily influence the success of workforce nationalisation in PNG. The survey covered all these aspects in detail. Moreover, in addition to asking the extent to which mentoring and its components are required, it sought to discover how they work together.

5.3.7 Engagement

The ways in which managers and leaders expect mentors to engage with the national staff they are leading is critical to the success of any team. The evidence from the literature pointed towards this being an important part of the process, and this importance was also supported through the interviews:

We need expats actually interested in the local culture, interested in the local people and standing by them and show them by example and leading by example. This is what has to be done and there is no 'I tried my best'. This is the standard; you need the standard and we continue from this. That's the sort person you need, and I guess this is why the leading by example needs the people with the right integrity that stand by and say, 'this is exactly what I am doing and this is how it is supposed to be done', and you don't falter. You have to have a standard that you stick to and you have to be able to imitate somebody in a position that they may have done. (Interview F)

I think you got to understand the culture, for sure. And you got to embrace it. You got to understand they got their own way of doing things and you can't come in and label the side you're in, detail why you have highlighted it in which to pick a fight with a lot of them, and not take an attitude of being autocratic in your room. You got to give in to the talent, the ownership of what they're doing, of why, and that will take a lot more interest and pride and being an asset to the company, rather than just a bum on their seats. It's huge. That flexibility, the can-do attitude, I think has saved me doing well in making business, recognising their weaknesses and their strengths. Building a way to assist, but also using their strengths and not only right in today, but also being better as well. (Interview G)

I think definitely I have a better understanding of the culture, a good understanding of the culture, and making efforts to understand the culture makes a huge difference. You do get a lot of foreign experts who come in and not make any efforts whatsoever, and they'll just fail miserably. Language skills is definitely another one. (Interview I)

As indicated by the interview responses, the ways in which expatriate staff engage and develop trust and teamwork is a central element of workforce nationalisation. While closely related to communication and cultural understanding, these issues were developed further in the survey to enable a clearer picture to be established.

Ongoing support for national staff is also part of this dynamic and was considered in the interviews. The interviewees suggested that the performance of staff needs to be managed in a consistent, fair and transparent manner, with ongoing one-on-one feedback. Development of work plans that address shortcomings, while promoting strengths, are integral to the success of local staffs' development. This is clearly articulated in the interview quotations below:

So once you have given them the training, the constant supervision, constant mentoring, and again just showing them what the standard is, bringing them up to the standard and trying to teach them to maintain that standard is actually the hardest part. (Interview F)

Training and mentoring is a big thing, and gradual increments, with the right job description and the right skillsets required in place and the right exposures, elevating the guys into the role, but having that check and balance for them, so they've got someone they can rely on to go back to and be held accountable, but also to sound out if they're on the right track. (Interview H)

Making sure you have people who can actually mentor well in these positions in leadership. Mostly ex-military are currently successful mentoring, but it's more about the individual characteristics of the person—being patience, knowledge of the subject and a willingness to work with someone, and cultural understanding of the people you're working with, as PNG has differences that many other countries may not have. Having worked previously in PNG would greatly benefit the mentors as well. (Interview J)

This concludes the discussion of the key themes identified through the interviews and summarised in the table above for use in the survey development.

5.4 Developing the Survey

After reviewing the literature, extracting the relevant information from the interviews, and summarising those findings, the two sources of data had to be compared to develop the survey. The use of mentoring in support of workforce nationalisation was common to both the literature and interviews, as was the importance of communication and cultural understanding.

All the interviews supported what was discussed in the literature—that there appears to be a dependence on expatriate staff in resource organisations in PNG. Additionally, the interviewees agreed that it was possible to nationalise the workforce much earlier. The majority of interviewees also supported the claim that companies would enjoy a cost benefit and definitely a reputational benefit from earlier nationalisation of their workforces. All these findings were used to develop the questions and statements for the survey. Any statement or view supported by at least two interviewees was included.

In consultation with quantitative research specialists, it was decided that, because the sample group comprised individuals with strong professional experience, any responses that were shared by more than one participant should be included in the survey. The interview responses were used as a benchmark to develop the survey, with a Likert scale used to assign a weight to each item.

Additionally, the first draft of the survey was revised to include demographic information and the use of the Likert scale, as detailed above. Given that this was one of the first surveys conducted on this subject in PNG, as well as the difficulties in obtaining over 100 respondents from this field, it was determined that this additional demographic information should be included for future use. These details also provided more depth to the initial data being sought, and enabled comparisons of the responses across the different demographic groups.

5.5 The Complete Study Survey

Workforce Nationalisation in Papua New Guinea: Security and Logistics in Resource Organisations

Dear Participant

You are invited to participate in this anonymous survey in support of a research project described below and on clicking next below will be agreeing to participate.

What the project is about
The aim in the research is to examine how resource companies operating in Papua New Guinea manage and develop their national logistic and security workforce and how nationalisation or workforce indigenisation occurs in this context. The intention is to contribute original knowledge to the field of industry security and logistics nationalisation theory by identifying the reasons that a reliance on expatriate staff is prevalent in the industry and exploring and documenting the most effective methods for early nationalisation of workforces. Moreover, by developing a theoretical roadmap relative to achievement of early indigenisation in the field, the industry will be empowered to transform current practices and theory.

Who is undertaking the project
This project is being conducted by Warren Doudle and will form the basis for the degree of PhD at The University of Notre Dame Australia, under the supervision of Professor Leland Entrekin and Professor Peter Gall.

What will I be asked to do and are there any risks associated with participating in this project?
Answer the anonymous survey and there is no foreseeable risk in you participating in this research project.

What are the benefits of the research project?
One of the more significant outcomes is the establishment of a theoretical Research Outcome Model (ROM); a body of knowledge created with the potential for a reduction in expatriate costs from early nationalization. Other benefits of early nationalization could include: reduced localized unemployment, reduction in petty crime, and reduction in potential radicalization of unemployed youth and reduction in travel costs. Local employees would work for longer terms due to their residential status, positively impacting on workforce retention. Employing locals also instills a greater community ownership of the project, injects more money into the local economy at a grassroots level and creates training and support infrastructure which would be transferable to future projects in the country.

Will I be able to find out the results of the project?
Once the study is complete the results will be published and made available through Notre Dame.

What if I have a concern or complaint?
The study has been approved by the Human Research Ethics Committee at The University of Notre Dame Australia (approval number 017081F). If you have a concern or complaint regarding the ethical conduct of this research project and would like to speak to an independent person, please contact Notre Dame's Ethics Officer at (+61 8) 9433 0943 or research@nd.edu.au. Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

How do I participate?
If you are happy to participate, please click on the link taking you to the survey.

Yours sincerely,
Warren Doudle

* 1. Which of the following describes you?

○ PNG National

○ Non-PNG National

* 2. Do you identify as

○ Male

○ Female

○ Don't wish to Identify

* 3. Which describes your age group

○ Less than 29

○ 30 to 39

○ 40 to 49

○ 50 plus

* 4. Which describes your highest education attained including any current study

○ High School   ○ Undergrad

○ Vocational   ○ Post Grad

○ Undergrad Incomplete

* 5. Would you consider your experience working on resource projects in PNG as

○ None   ○ 6 to 10 years

○ 2 years or less   ○ Over 11 years

○ 2 to 5 years

* 6. Based on your observations, do you think resource organisations build dependence on expatriate staff

1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree
○	○	○	○	○

* 7. Rate the following factors and their impact on building dependence on expatriate staff in resource organisation's

	Very Important	Important	Neither	Unimportant	Very Unimportant
Ability to hire and fire expats quickly (short term contracts no local labor law issues)	○	○	○	○	○
Expats looking out for own positions (looking out for each other)	○	○	○	○	○
Issues with education and training in the national workforce	○	○	○	○	○
Poor recruitment structure that limits placing experienced nationals	○	○	○	○	○
Use of international assignments to give expat employees experience	○	○	○	○	○
Faster with Expats	○	○	○	○	○
Limited pool of educated experienced nationals	○	○	○	○	○
Technical expertise of expatriates	○	○	○	○	○
Expats easier to use	○	○	○	○	○

Please rate your response to the following statement's

* 8. It is possible to develop a national workforce in the early phase of the project so they are better skilled for startup

1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree
○	○	○	○	○

* 9. If workforce nationalisation was to occur earlier in projects their would be cost benefits to the company

1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree
○	○	○	○	○

* 10. If workforce nationalisation were to occur earlier in a project there would be a positive time difference to the project delivery

1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree
○	○	○	○	○

* 11. If workforce nationalisation were to occur earlier there would be significant reputational benefits to the company

1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree
○	○	○	○	○

* 12. What are the key factors that limit the workforce nationalisation of security and logistical workforces in your experience?

	Very Important	Important	Neither	Unimportant	Very Unimportant
Cultural issues	○	○	○	○	○
Experience and suitability of managers	○	○	○	○	○
Not having the right people in roles both national and expat	○	○	○	○	○
Lack of qualifications even in semi-skilled	○	○	○	○	○
Wantok issues	○	○	○	○	○
Motivation and cultural expectations of staff	○	○	○	○	○
Skills, knowledge and experience of staff	○	○	○	○	○
Lack of training and development	○	○	○	○	○
Minimum wage mentality of companies	○	○	○	○	○
Low motivation and engagement of staff	○	○	○	○	○

* 13. What factors would enable the early nationalisation of staff please rate the impact of the following

	Very Important	Important	Neither	Unimportant	Very Unimportant
Mentoring programs	○	○	○	○	○
Communication (Expats learning language)	○	○	○	○	○
Training needs to be nationally recognised and ongoing	○	○	○	○	○
Identifying key national staff early for supervisory and managment	○	○	○	○	○
Selection of staff (Expat)	○	○	○	○	○
Selection of staff (National)	○	○	○	○	○
Longer term industry focus rather than immediate focus	○	○	○	○	○
Apprenticeships or traineeships pre-company employment	○	○	○	○	○

* 14. What factors have you seen being successful in the past please rate the following

	Very Important	Important	Neither	Unimportant	Very Unimportant
Selection of expat managers to mentor local staff	○	○	○	○	○
Language and cultural understanding	○	○	○	○	○
Incremental responsibility to build capacity	○	○	○	○	○
One on one approach with feedback for staff	○	○	○	○	○
Mentoring	○	○	○	○	○
Building relationships with staff based on mutual respect	○	○	○	○	○
Paramilitary background and in country experience	○	○	○	○	○
Training and development of staff	○	○	○	○	○
Selection of mentors	○	○	○	○	○

* 15. In your experience, what key activities promote a successful mentoring program in a resource company operating in Papua New Guinea?

	Very Important	Important	Neither	Unimportant	Very Unimportant
Build trust in the team	○	○	○	○	○
Engagement with staff	○	○	○	○	○
Understanding the culture and country	○	○	○	○	○
Long term focus	○	○	○	○	○
Mentoring programs need full commitment by management and the company	○	○	○	○	○
Identifying strengths and weaknesses with staff and implement personal development plans	○	○	○	○	○
Educational opportunities such as graduate programs to assist promising staff develop	○	○	○	○	○
Long term session planning (staff can see where the future opportunities are)	○	○	○	○	○
Quality of mentors and managers	○	○	○	○	○

* 16. What in your opinion makes a good mentor in PNG?

	Very Important	Important	Neither	Unimportant	Very Unimportant
Not trying to enforce western values on everything	○	○	○	○	○
Staff engagement	○	○	○	○	○
Understanding the country and culture	○	○	○	○	○
Communications skills (speaks Tok Pison)	○	○	○	○	○
Builds trust in the team	○	○	○	○	○
Has training and teaching skills	○	○	○	○	○
Fair and transparent dealing with staff	○	○	○	○	○
Ongoing support to national staff and positive performance management	○	○	○	○	○
Ex-Military or Police background	○	○	○	○	○

* 17. What other factors do you think impact workforce nationalisation in a resource company operating in Papua New Guinea?

	Very Important	Important	Neither	Unimportant	Very Unimportant
Selection of expat managers to mentor staff	◯	◯	◯	◯	◯
Leadership of the process	◯	◯	◯	◯	◯
Reluctance to mentor by managers	◯	◯	◯	◯	◯
Setting realistic expectations	◯	◯	◯	◯	◯
Consistency of mentoring	◯	◯	◯	◯	◯
Ongoing and supported training	◯	◯	◯	◯	◯
Ongoing support to national staff and positive performance management	◯	◯	◯	◯	◯
Understanding of PNG culture	◯	◯	◯	◯	◯
Fair and transparent dealing with staff	◯	◯	◯	◯	◯

5.6 Conclusion

The final survey instrument was approved by the ethics committee from the University of Notre Dame Fremantle on 1 November 2017, and went online on 16 November 2017, when the link was emailed to the participants. The first responses arrived on 20 November 2017 (see the response graph detailing the volume and dates of responses in Figure 5.10 below).
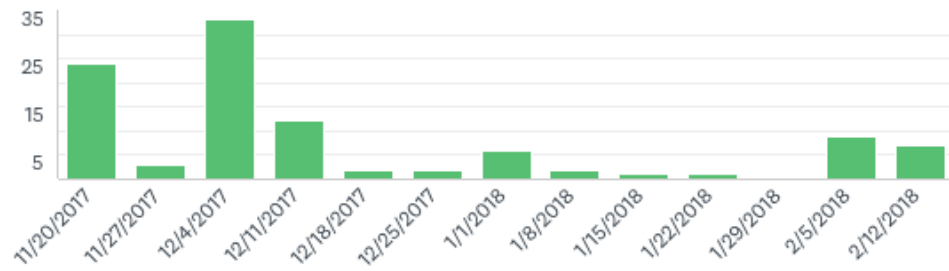
Figure 5.10: Responses to the Survey by Date

Three hundred possible participants were contacted over a period of three months, most in the first weeks. The best-case scenario target of over 100 responses was achieved on the cusp of the three-month mark. The survey was closed for responses on 12 February 2018, with 102 responses received. The following chapter will present the findings, and discuss and analyse the data.
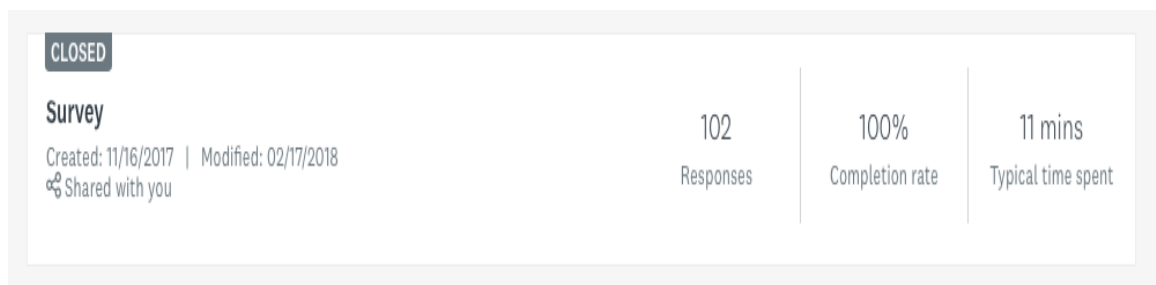
Figure 5.11: Survey Creation and Response Record

Chapter 6: Survey Results

6.1 Introduction

This chapter presents the results of the survey, beginning with the survey participants' demographic information. While demographic information was not deemed critical for this research, it was important to capture these data to analyse the different groups' responses against the average to ensure there were no major differences or anomalies. It was also important to be able to compare the survey respondents' demographics against what was found in the purposive sample selection used in this research. Once the demographic information has been adequately addressed, the chapter will progress to present the data and results for each question, in ascending order, in both graphical and table form.

After the results of each question are displayed accurately, the top five responses will be summarised and discussed in some detail through initial analysis. Other responses that may have an effect or have a similar weighted average will also be discussed. Each of the questions will have the associated findings and data presented individually, with an initial discussion and analysis completed and summarised. The findings will then be discussed in terms of how they address the research questions—particularly the primary research question.

As discussed in detail in the research methods and research proposal, this research used a mixed-methods approach, with a literature review, a case study (detailed in Chapter 4) and 10 semi-structured interviews all used to inform the development of the survey instrument. While this research was predominantly qualitative, the survey allowed for the qualitative information gained during the first phases of the research to be validated and weighted quantitatively. SurveyMonkey was used as both the survey platform and analysis tool and software, as described previously. Upon completion of the detailed discussion and summary of all the information, the initial research model will be reviewed and revised, and conclusions will be drawn regarding the research findings.

6.2 Demographic Information

The survey participants were drawn from a purposive sample selection consisting of current and former staff—predominantly managers and leaders—involved in projects in security and logistical organisations in the PNG resource industry. The sample would cause an anomaly in the demographic information because this industry has traditionally been a middle-aged and male-dominated environment. Over one-third of the female respondents were aged younger than 39, and over 90% of responses were from male participants. Over 70% of respondents were over 40 years of age, which is expected in leadership and management positions in the resource industry; thus, this finding fairly reflects the population.

As the results below demonstrate, over 70% of respondents were expatriates or non-PNG nationals, which proportionately reflects the resource industry leadership and management population. The case study in Chapter 4 already established the traditional breakdown of staffing and the workforce composition for a resource industry project in PNG. It was impossible to obtain exact verified data from the national statistics office in PNG to support these demographic data in comparison to the national standard or an averaged demographic figure because of the lack of records and no sharing of government data. In addition, the national statistics office has recently been implicated in a fraud investigation that led to its leadership being imprisoned for fraud. The investigation found that leadership was involved in questionable practices for at least four years that seriously affected the reliability and accuracy of any records the office produced. As a result, the case study approach was used to gain an overview of the HR breakdown of a project in PNG (Post Courier, 2016).

It was also found that over 67% of respondents had a tertiary education, with a further 11% having an unfinished tertiary education. Twelve per cent had vocational education up to and including advanced diplomas and diplomas, while the rest (7%) had finished high school.
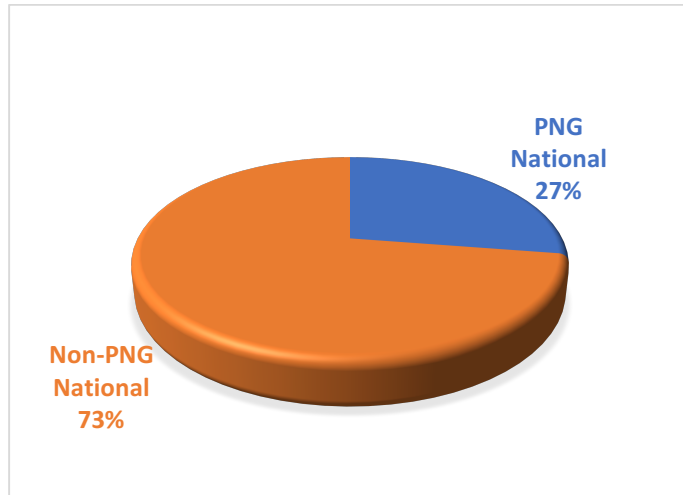
Figure 6.1 National to Non-National Respondent's
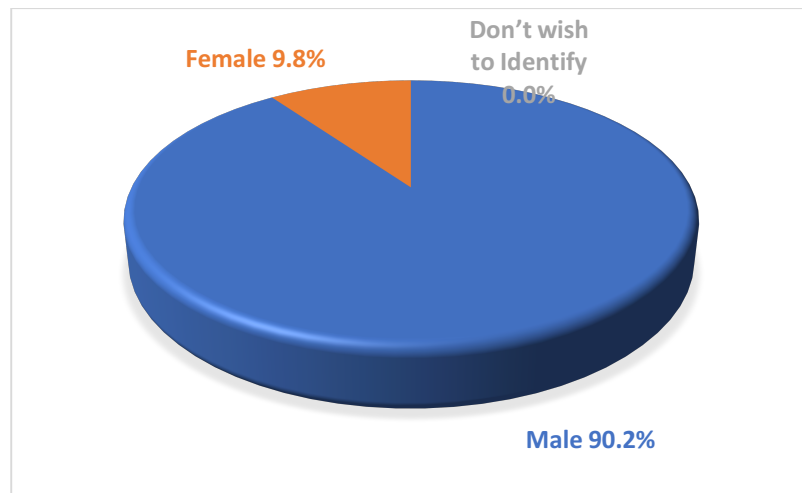
Figure 6.2 Male to Female Respondent's
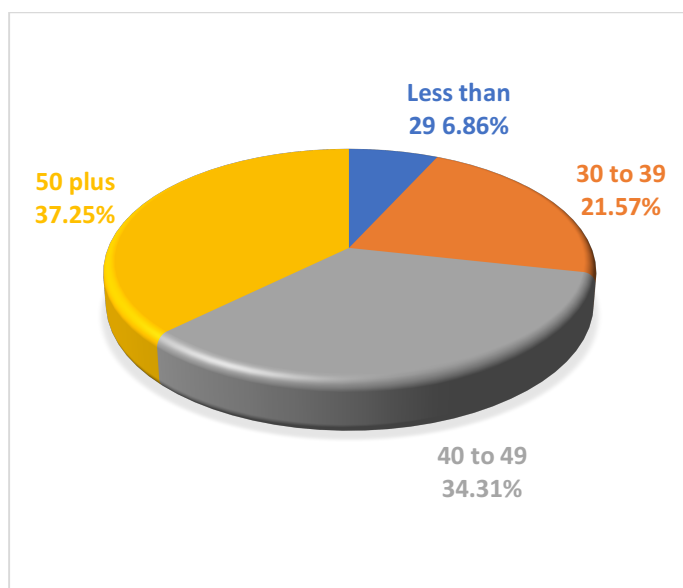
Figure 6.3 Age of Respondent's
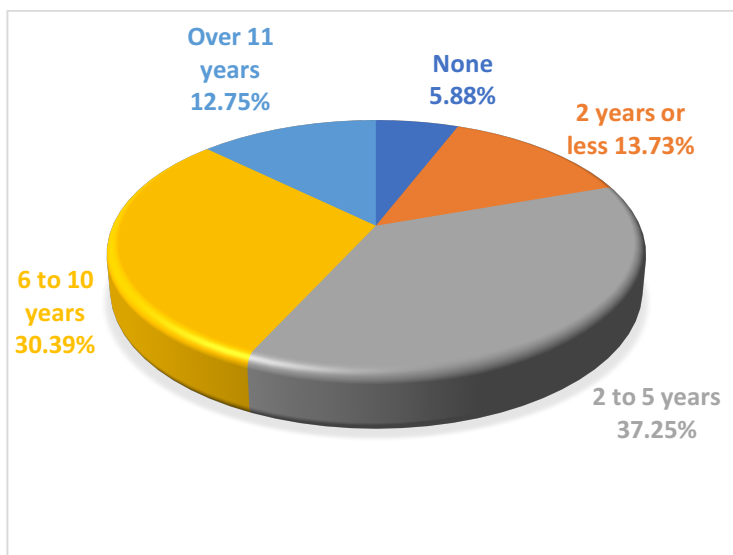
Figure 6.4 Experience of Respondent's

Table 6.1 Education of Respondent's

	HIGH SCHOOL	VOCATIONAL	UNDERGRAD INCOMPLETE	UNDERGRAD	POST GRAD	TOTAL
Q1: PNG National (A)	7.14% 2	0.00% 0	25.00% 7	50.00% 14	17.86% 5	27.45% 28
Q1: Non-PNG National (B)	8.11% 6	17.57% 13	6.76% 5	18.92% 14	48.65% 36	72.55% 74
Total Respondents	8	13	12	28	41	102

Table 6.2 Experience of Respondent's

	NONE	2 YEARS OR LESS	2 TO 5 YEARS	6 TO 10 YEARS	OVER 11 YEARS	TOTAL
Q1: PNG National (A)	14.29% 4	10.71% 3	32.14% 9	32.14% 9	10.71% 3	27.45% 28
Q1: Non-PNG National (B)	2.70% 2	14.86% 11	39.19% 29	29.73% 22	13.51% 10	72.55% 74
Total Respondents	6	14	38	31	13	102
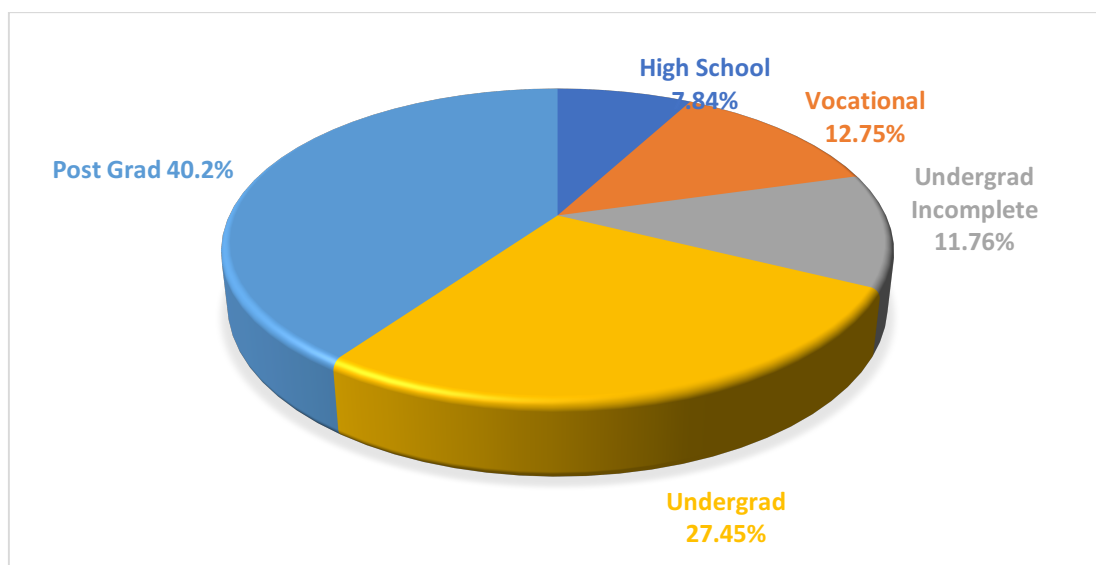
Figure 6.5 Education of Respondent's

6.3 Results

Question 6: Based on your observations, do you think resource organisations build dependence on expatriate staff?
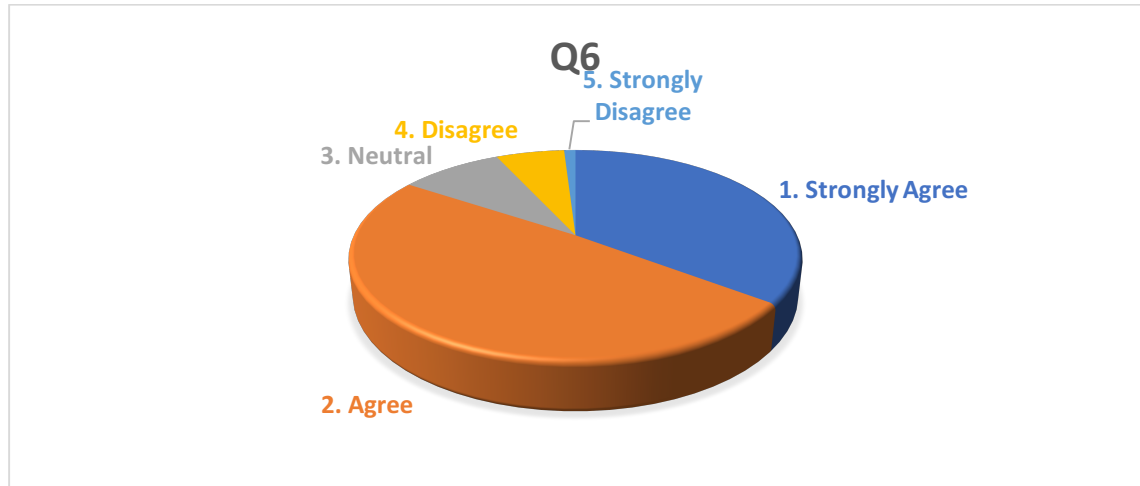
Figure 6.6 Question 6 Response

Table 6.3 Question 6 Response

0	0.2	0.4	0.6	0.8	1	1.2	1.4	1.6
1.8	2							

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
(no label)	35.29% 36	49.02% 50	8.82% 9	5.88% 6	0.98% 1	102	1

Table 6.4 Question 6 Response by Nationality

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
Q1: PNG National (A)	35.71% 10	42.86% 12	14.29% 4	7.14% 2	0.00% 0	27.45% 28	1.93
Q1: Non-PNG National (B)	35.14% 26	51.35% 38	6.76% 5	5.41% 4	1.35% 1	72.55% 74	1.86

Table 6.5 Question 6 Response by Experience

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
Q5: None (A)	33.33% 2	33.33% 2	16.67% 1	16.67% 1	0.00% 0	5.88% 6	2.17
Q5: 2 years or less (B)	50.00% 7	28.57% 4	0.00% 0	14.29% 2	7.14% 1	13.73% 14	2.00
Q5: 2 to 5 years (C)	28.95% 11	55.26% 21	13.16% 5	2.63% 1	0.00% 0	37.25% 38	1.89
Q5: 6 to 10 years (D)	38.71% 12	51.61% 16	3.23% 1	6.45% 2	0.00% 0	30.39% 31	1.77
Q5: Over 11 years (E)	30.77% 4	53.85% 7	15.38% 2	0.00% 0	0.00% 0	12.75% 13	1.85

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With 35.29% of the responses stating they very strongly agreed and a further 49.02% agreeing, as well as a weighted response of 1.88, the data provided from the responses to this question indicated that it was strongly supported. A neutral response accounted for 8.82% of responses, while 5.88% disagreed, and 0.98% (a single respondent) strongly disagreed. It is worth noting that, when the responses compared nationals to non-nationals, the nationals were less supportive of the statement at 1.93, compared with the non-nationals (expatriates) at 1.86. The data clearly indicate that the majority of the respondents—84.31% or 86 responses—supported the view that resource organisations in PNG build dependence on expatriate staff. An overall weighting of 1.88 confirmed that this statement was accurate, which was supported by the semi-structured interviews and literature covered previously.

Q7: Rate the following factors and their effect on building dependence on expatriate staff in resource organisations.
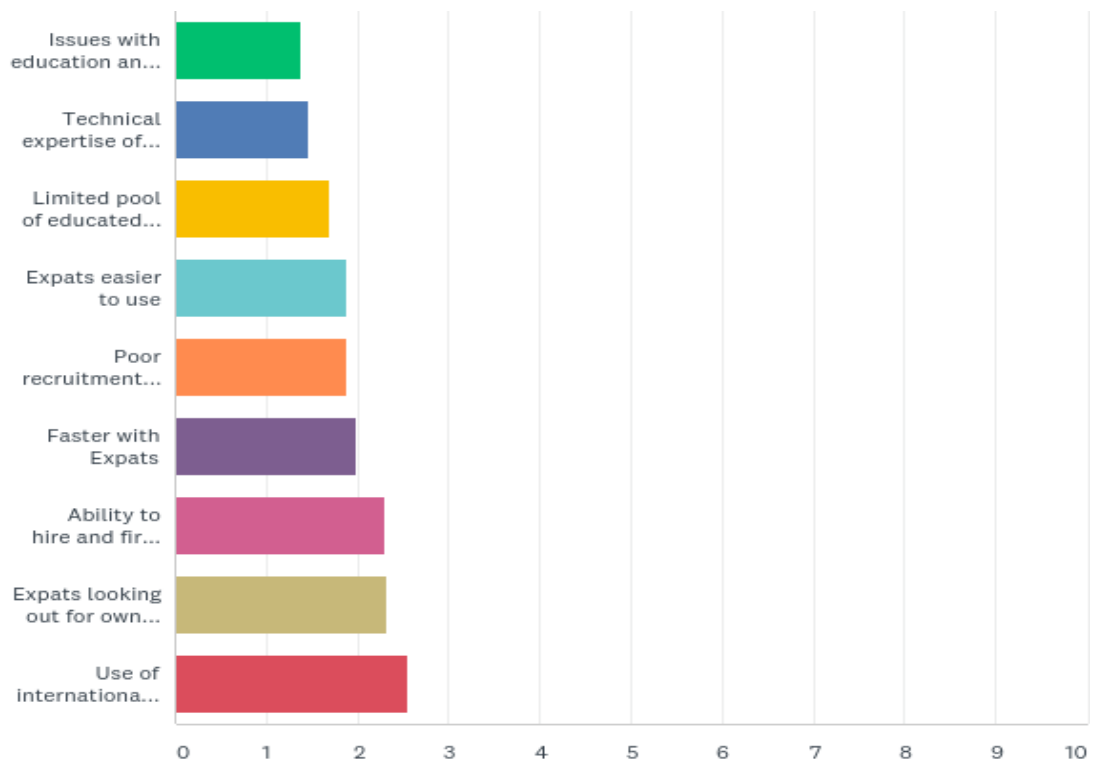
Figure 6.7 Question 7 Response

Table 6.6 Question 7 Response

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Issues with education and training in the national workforce	66.00% 66	30.00% 30	3.00% 3	1.00% 1	0.00% 0	100	1.39
Technical expertise of expatriates	62.75% 64	30.39% 31	3.92% 4	2.94% 3	0.00% 0	102	1.47
Limited pool of educated experienced nationals	50.00% 51	37.25% 38	6.86% 7	4.90% 5	0.98% 1	102	1.70
Expats easier to use	39.22% 40	41.18% 42	12.75% 13	5.88% 6	0.98% 1	102	1.88
Poor recruitment structure that limits placing experienced nationals	37.25% 38	42.16% 43	14.71% 15	5.88% 6	0.00% 0	102	1.89
Faster with Expats	30.69% 31	46.53% 47	15.84% 16	6.93% 7	0.00% 0	101	1.99
Ability to hire and fire expats quickly (short term contracts no local labor law issues)	15.69% 16	54.90% 56	13.73% 14	14.71% 15	0.98% 1	102	2.30
Expats looking out for own positions (looking out for each other)	19.61% 20	47.06% 48	16.67% 17	14.71% 15	1.96% 2	102	2.32
Use of international assignments to give expat employees experience	15.69% 16	35.29% 36	28.43% 29	18.63% 19	1.96% 2	102	2.56

After identifying initial factors through the semi-structured interviews, the survey respondents weighted the potential effect of these factors in terms of their influence on building dependence on expatriate staff. The most strongly supported factor was 'issues with education and training of the national workforce', with 66% of all respondents stating that this was very important and 30% stating it was important, and a weighted average of 1.39. When PNG national and expatriate responses were compared, they were very close: 1.36 and 1.40, respectively. This was followed by the 'technical expertise of expatriates', for which 62.75% stated that it was very important and 30.39%

stated it was important, and the weighted average was 1.47. PNG nationals gave this factor less weight (1.34) than did the national respondents (1.82). None of the respondents reported thinking that these factors were unimportant. However, the third factor—'limited pool of educated, experienced nationals'—elicited a greater variety of responses. Fifty per cent claimed that it was very important, 37.25% said it was important, 6.86% stated neither, 4.90% stated that it was unimportant, and a single response (0.98%) indicated that it was very unimportant. This led to a weighted average of 1.70. The fourth factor—'expatriates are easier to use'—had a weighted average of 1.88. The fifth factor—'poor recruitment structure that limits placing experienced nationals'—had a weighted average of 1.89. The rest of the factors, with significantly higher weighted averages, are covered in Table 6.6. Of those, only 'faster with expatriates', with a weighted average of 1.99, was close to the previous five responses, which were well under 2.

Q8: Is it possible to develop a national workforce in the early phase of the project, so they are better skilled for start-up?
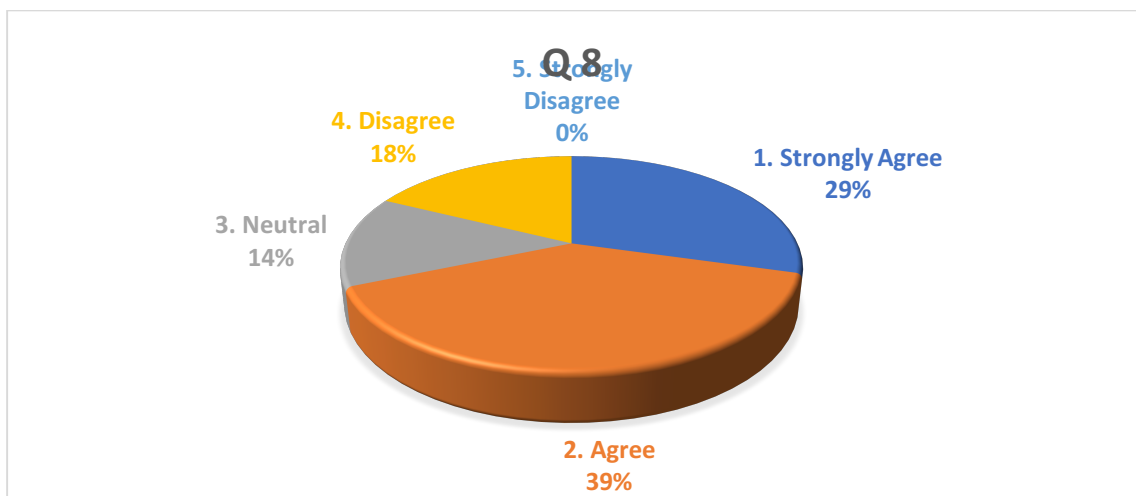
Figure 6.8 Question 8 Response

Table 6.7 Question 8 Response

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
(no label)	29.41% 30	39.22% 40	13.73% 14	17.65% 18	0.00% 0	102	2.20

Table 6.8 Question 8 Response by Respondent Experience

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
Q5: None (A)	50.00% 3	33.33% 2	16.67% 1	0.00% 0	0.00% 0	5.88% 6	1.67
Q5: 2 years or less (B)	21.43% 3	28.57% 4	14.29% 2	35.71% 5	0.00% 0	13.73% 14	2.64
Q5: 2 to 5 years (C)	23.68% 9	42.11% 16	15.79% 6	18.42% 7	0.00% 0	37.25% 38	2.29
Q5: 6 to 10 years (D)	32.26% 10	38.71% 12	12.90% 4	16.13% 5	0.00% 0	30.39% 31	2.13
Q5: Over 11 years (E)	38.46% 5	46.15% 6	7.69% 1	7.69% 1	0.00% 0	12.75% 13	1.85

Table 6.9 Question 8 Response by Respondent Nationality

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
Q1: PNG National (A)	67.86% 19	25.00% 7	3.57% 1	3.57% 1	0.00% 0	27.45% 28	1.43
Q1: Non-PNG National (B)	14.86% 11	44.59% 33	17.57% 13	22.97% 17	0.00% 0	72.55% 74	2.49

The respondents strongly supported the question about whether it is possible to develop a national workforce in the early phase of the project, so they will be better prepared and better skilled for start-up and operations. Of the respondents, 29.41% strongly agreed with the statement, 39.22% agreed, 13.73% were neutral, and 17.65% disagreed with the statement. No respondent strongly disagreed with the statement. This gave the statement a weighted average of 2.20.

When investigating variances from different respondents, the most positive support for the statement came from those with either very little experience or over 10 years of experience, with respondents in the 'over 11 years' bracket having a weighted average of 1.85, which showed very strong support. PNG nationals supported this statement more strongly than did non-nationals, with a weighted average of 1.43. In comparison, non-PNG nationals, or expatriate respondents, had a weighted average of 2.49, which showed support for the statement, but not as strongly as the PNG respondents. Over 67% of PNG nationals strongly agreed with the statement, compared with only 14.86% of non-PNG nationals strongly agreeing. This statement received similarly varied support during the semi-structured interviews conducted prior to the survey. This question was designed to gain a better understanding of the respondents' perceptions of PNG nationals being trained earlier in the project. It was based more on the perceptions of individuals who had experience in this area, rather than on statistics and hard science. As a result of the lack of accurate statistics at the governmental level in PNG, it is very challenging to gain an accurate picture and data to support this statement. Nevertheless, it is worthwhile trying to understand the perceptions of the individuals surveyed in terms of their professional opinion, which, at this stage, is the most accurate data

available to support this statement. With a weighted average of 2.20—meaning that 70 of 102 respondents indicated that they agreed or strongly agreed—the data suggest that this statement is well supported. Further, though relatively sparse, support for this statement was also found in the literature and the semi-structured interviews.

Q9: If workforce nationalisation was to occur earlier in projects, would there be cost benefits for the company?
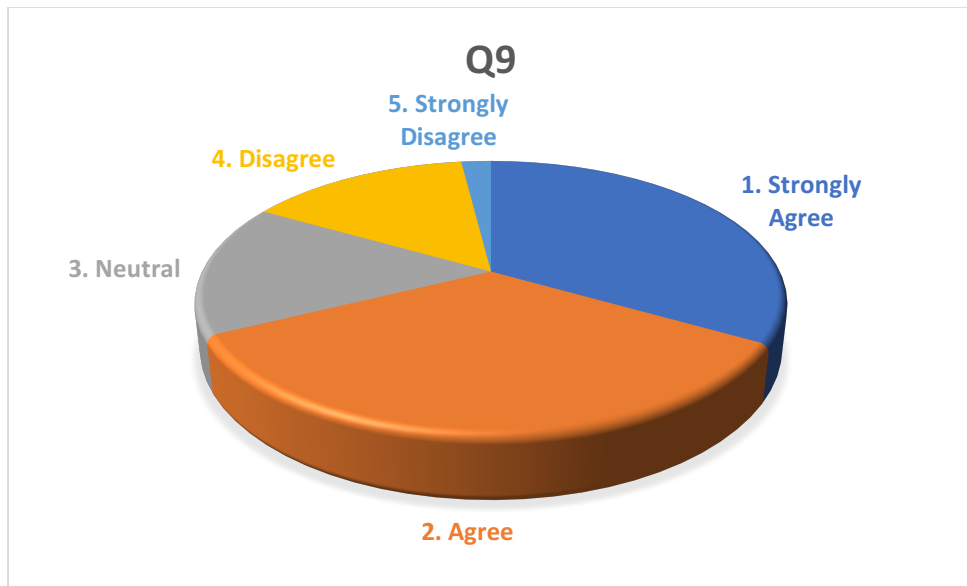
Figure 6.9 Question 9 Response

Table 6.10 Question 9 Response

1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
33.33%	34.31%	15.69%	14.71%	1.96%		
34	35	16	15	2	102	2.18

Table 6.11 Question 9 Response by Nationality

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
Q1: PNG National (A)	60.71%	21.43%	10.71%	7.14%	0.00%	27.45%	
	17	6	3	2	0	28	1.64
Q1: Non-PNG National (B)	22.97%	39.19%	17.57%	17.57%	2.70%	72.55%	
	17	29	13	13	2	74	2.38

This question asked whether, if workforce nationalisation was to occur earlier in projects, as discussed in a previous question, there would be cost benefits for the company. This statement was strongly supported, with 33.33% strongly agreeing, 34.31% agreeing, 15.69% remaining neutral or undecided, 14.71% disagreeing, and

only 1.96% (two respondents) strongly disagreeing. With a weighted average of 1.64, PNG nationals more strongly supported this statement than did non-PNG nationals, who had a weighted average of 2.38. In regard to the effect of experience on the responses, respondents with limited experience and respondents with between six and 10 years of experience had lower weighted averages, whereas respondents with two years of experience had the highest weighted average at 2.36. This question, as with the previous question, was based on the respondents' opinions and subject to our hypothetical propositions. However, the concepts in the statement were still strongly supported.

Q10: If workforce nationalisation were to occur earlier in a project, would there be a positive time difference for the project delivery?
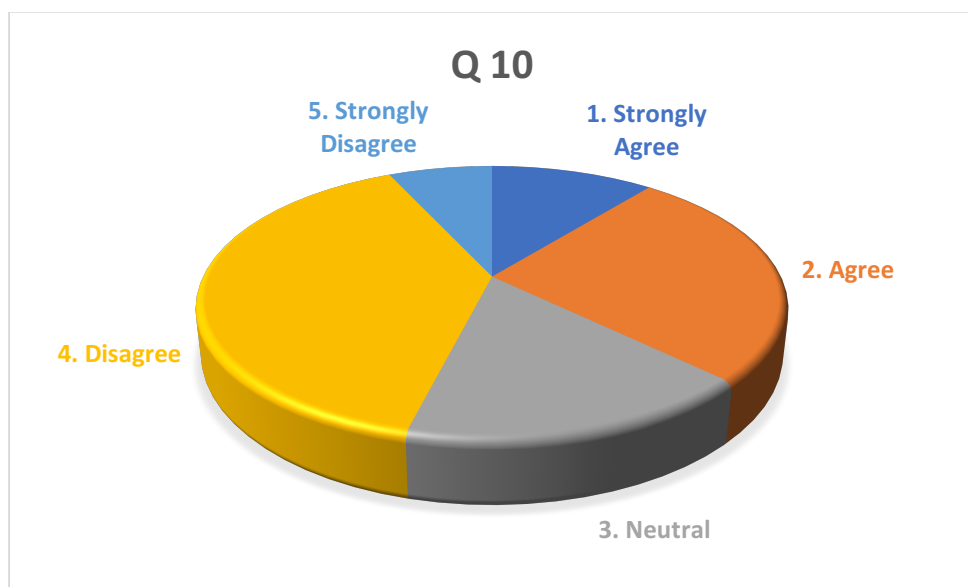
Figure 6.10 Question 10 Response

Table 6.12 Question 10 Response

1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
10.78%	26.47%	16.67%	39.22%	6.86%		
11	27	17	40	7	102	3.05

Table 6.13 Question 10 Response by Respondent's Experience

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
Q5: None (A)	16.67%	50.00%	16.67%	16.67%	0.00%	5.88%	
	1	3	1	1	0	6	2.33
Q5: 2 years or less (B)	21.43%	7.14%	7.14%	64.29%	0.00%	13.73%	
	3	1	1	9	0	14	3.14
Q5: 2 to 5 years (C)	10.53%	21.05%	15.79%	44.74%	7.89%	37.25%	
	4	8	6	17	3	38	3.18
Q5: 6 to 10 years (D)	6.45%	29.03%	22.58%	29.03%	12.90%	30.39%	
	2	9	7	9	4	31	3.13
Q5: Over 11 years (E)	7.69%	46.15%	15.38%	30.77%	0.00%	12.75%	
	1	6	2	4	0	13	2.69

As with the previous statement, the potential effect of early workforce nationalisation was met with mixed results. Only 10.78% respondents strongly agreed, 26.47% agreed, 16.67% remained neutral, 39.22% disagreed and 6.86% strongly disagreed. In terms of the actual numbers of respondents, a total of 38 respondents supported this statement, while 47 did not support the statement, and 17 were neutral. Given that the majority of respondents did not agree, the statement was not supported. However, the potential effect remains hypothetical and based on opinion until the statement can truly be measured, which can only occur after accurate data are collected regarding the different variables during a project or multiple projects. Given that the collection of such data may be many years away, this research provides the most accurate data available. Additionally, it is worth noting that, when the survey results are viewed in conjunction with the case study and semi-structured interviews, the overall view of the statement shifted more towards neutral. Nevertheless, statistically speaking, it is difficult to argue with the results of the survey, which show a weighted average of 3.05.

Q11: If workforce nationalisation were to occur earlier, would there be significant reputational benefits for the company?
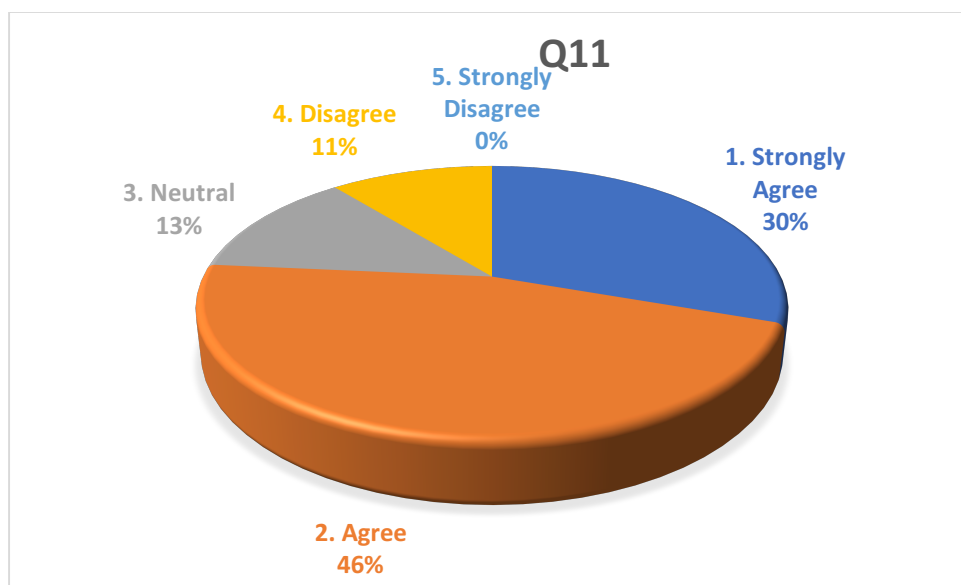
Figure 6.11Question 11 Response

Table 6.14 Question 11 Response

1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
30.39%	46.08%	12.75%	10.78%	0.00%		
31	47	13	11	0	102	2.04

Table 6.15 Question 11 Response by Nationality

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
Q1: PNG National (A)	46.43%	39.29%	10.71%	3.57%	0.00%	27.45%	
	13	11	3	1	0	28	1.71
Q1: Non-PNG National (B)	24.32%	48.65%	13.51%	13.51%	0.00%	72.55%	
	18	36	10	10	0	74	2.16

Table 6.16 Question 11 Response by Respondents Experience

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
Q5: None (A)	33.33%	66.67%	0.00%	0.00%	0.00%	5.88%	
	2	4	0	0	0	6	1.67
Q5: 2 years or less (B)	21.43%	57.14%	7.14%	14.29%	0.00%	13.73%	
	3	8	1	2	0	14	2.14
Q5: 2 to 5 years (C)	21.05%	42.11%	15.79%	21.05%	0.00%	37.25%	
	8	16	6	8 D	0	38	2.37
Q5: 6 to 10 years (D)	38.71%	45.16%	12.90%	3.23%	0.00%	30.39%	
	12	14	4	1 C	0	31	1.81
Q5: Over 11 years (E)	46.15%	38.46%	15.38%	0.00%	0.00%	12.75%	
	6	5	2	0	0	13	1.69

There was strong support for the idea that companies would reap reputational benefits from early nationalisation. The respondents were very supportive of this statement, with

30.39% strongly agreeing and a further 46.08% agreeing. Only 13 respondents, or 12.75%, remained neutral, and 10.78% disagreed, while no respondent strongly disagreed. This produced a weighted average of 2.04, which indicated strong support for the statement. In terms of different demographic groups, PNG nationals were more positive (with a weighted average of 1.71) than were non-PNG nationals (with a weighted average of 2.16).

While all experience groups had strong weighted averages, the least experienced group and the group with six to 10 years of experience had 1.67 and 1.81, respectively, while the highest weighted average (2.37) came from the group with two to five years of experience. This aligns closely with the results from the semi-structured interviews and case study. The data gleaned from this statement clearly support the idea that there would be significant reputational benefits for any company that nationalises its workforce earlier. With a weighted average of 2.04 and only 11 respondents disagreeing with the statement, the research results from the survey overwhelmingly supported the statement.

Q12: In your experience, which are the key factors that limit the workforce nationalisation of security and logistical workforces?
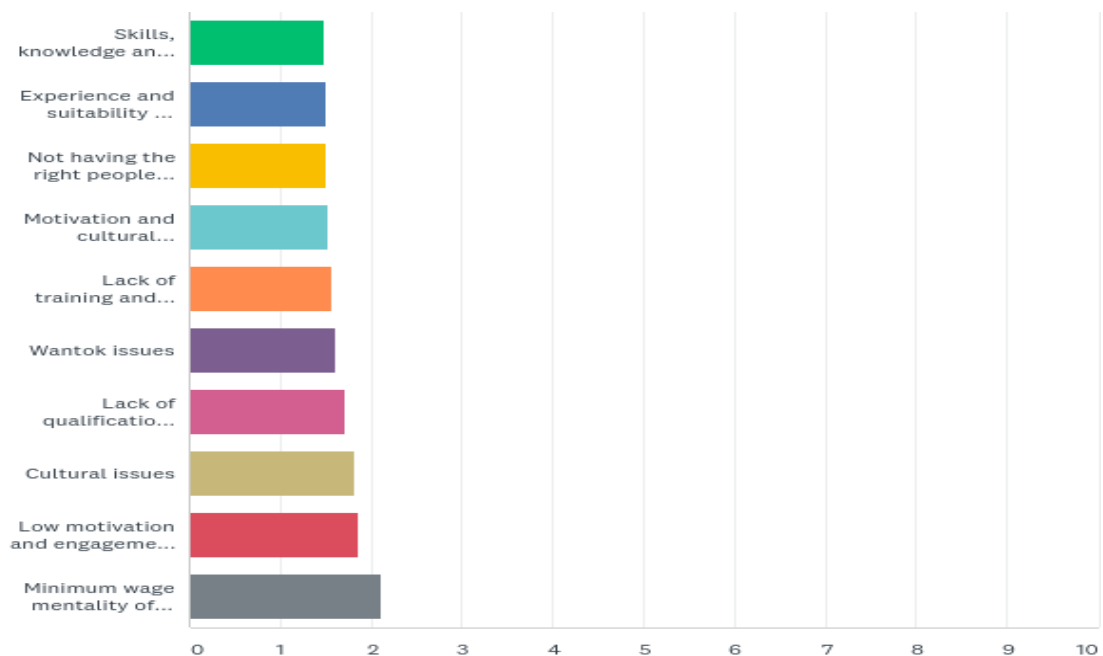
Figure 6.12 Question 12 Response

Table 6.17 Question 12 Response

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Skills, knowledge and experience of staff	56.86% 58	39.22% 40	2.94% 3	0.98% 1	0.00% 0	102	1.48
Experience and suitability of managers	51.96% 53	45.10% 46	2.94% 3	0.00% 0	0.00% 0	102	1.51
Not having the right people in roles both national and expat	56.44% 57	37.62% 38	3.96% 4	1.98% 2	0.00% 0	101	1.51
Motivation and cultural expectations of staff	53.92% 55	42.16% 43	1.96% 2	0.98% 1	0.98% 1	102	1.53
Lack of training and development	52.94% 54	41.18% 42	3.92% 4	0.98% 1	0.98% 1	102	1.56
Wantok issues	55.56% 55	31.31% 31	10.10% 10	2.02% 2	1.01% 1	99	1.62
Lack of qualifications even in semi-skilled	46.08% 47	41.18% 42	9.80% 10	1.96% 2	0.98% 1	102	1.71
Cultural issues	35.87% 33	48.91% 45	13.04% 12	2.17% 2	0.00% 0	92	1.82
Low motivation and engagement of staff	41.18% 42	39.22% 40	11.76% 12	6.86% 7	0.98% 1	102	1.87
Minimum wage mentality of companies	34.31% 35	35.29% 36	16.67% 17	11.76% 12	1.96% 2	102	2.12

The information gathered during the semi-structured interviews suggested that, in terms of the key factors that limit workforce naturalisation in security and logistics, all the possible responses contained in the survey had merit. Thus, the purpose of the survey was to provide weight and clarity to the most commonly perceived limitations to workforce nationalisation. The limitation found to have the most effect, with a weighted average of 1.48, was the lack of skills, knowledge and experience of staff, with 56.86% of respondents stating that this was very important and a further 39.22% indicating that it was important, while only 2.94% said it was neither important nor unimportant, and only one respondent (0.98%) stating that it was unimportant. This limitation factor was by far the most supported, and received almost universal support from the respondents,

with 98 respondents stating that it was either important or very important. The next two factors—'experience and suitability of managers' and 'not having the right people in roles, both nationals and expatriates'—were equal, with weighted factors of 1.51. Both these answers were also very closely related to the first factor, as they ultimately involve having the right people in the right positions, with skills and experience suitable for the role.

The motivation and cultural expectations of staff came in fourth, with a weighted average of 1.53. Other responses that were strongly supported were lack of training and development (with a weighted average of 1.56) and wantok issues (1.62), which are cultural, family-related effects, as explained in the literature review. Responses to the rest of the factors are detailed in the above table and graph. These include lack of qualifications, even among semi-skilled staff; cultural issues; motivation and engagement of staff; and companies' minimum wage mentality. While all these were strongly supported as factors that limit workforce nationalisation, the first five were shown to have the most support.

Q13: Which factors would enable the early nationalisation of staff? Please rate the effects of the following.
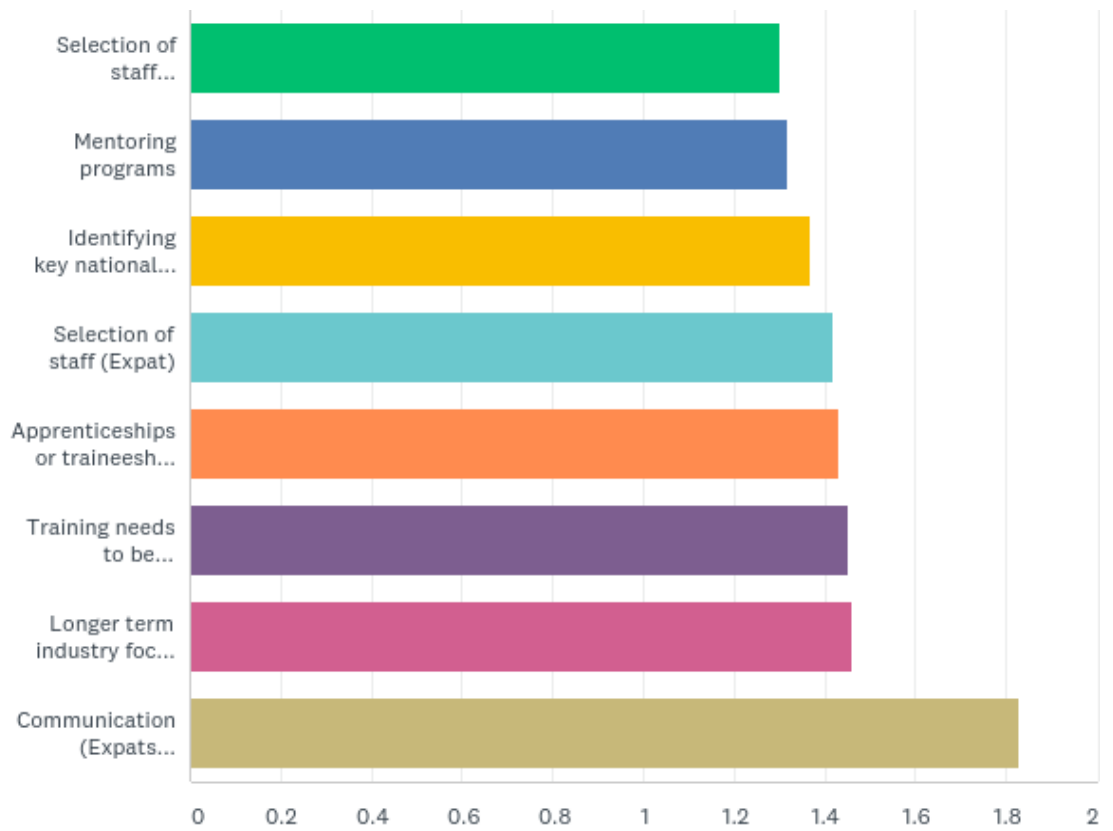
Figure 6.13 Question 13 Response

Table 6.18 Question 13 Response

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Selection of staff (National)	72.28% 73	25.74% 26	1.98% 2	0.00% 0	0.00% 0	101	1.30
Mentoring programs	70.53% 67	27.37% 26	2.11% 2	0.00% 0	0.00% 0	95	1.32
Identifying key national staff early for supervisory and managment	63.73% 65	35.29% 36	0.98% 1	0.00% 0	0.00% 0	102	1.37
Selection of staff (Expat)	67.65% 69	25.49% 26	4.90% 5	0.98% 1	0.98% 1	102	1.42
Apprenticeships or traineeships pre-company employment	62.75% 64	31.37% 32	5.88% 6	0.00% 0	0.00% 0	102	1.43
Training needs to be nationally recognised and ongoing	61.76% 63	32.35% 33	4.90% 5	0.98% 1	0.00% 0	102	1.45
Longer term industry focus rather than immediate focus	63.73% 65	28.43% 29	5.88% 6	1.96% 2	0.00% 0	102	1.46
Communication (Expats learning language)	39.22% 40	45.10% 46	9.80% 10	4.90% 5	0.98% 1	102	1.83

Figure 6.13 and Table 6.18 display the factors that enable the early nationalisation of staff, in ascending order. Looking at the top five responses, selection of staff was clearly viewed as the most important factor, with 72.28% of respondents stating it was very important, and 25.74% stating it was important, giving it a weighted average of 1.30. None of the respondents stated that this factor was unimportant or very unimportant, and only two respondents were neutral. This indicated that the selection of national staff was the leading factor. Mentoring programs were a close second, with a weighted average of 1.32. Again, no respondents stated that this factor was unimportant or very unimportant. The third-most important factor was 'identify key national staff early for supervisory and management positions'. This was also strongly supported, with a weighted average of 1.37, and no respondents in the negative. The selection of expatriate staff was fourth, with a weighted average of 1.42. Apprenticeships and

traineeships were fifth, with a weighted average of 1.43. The responses to this question were all very strongly supported, as all had weighted averages well under two, with the highest—communication with expatriates learning the local language—being 1.83, which was still a very strong response

14: Which factors have you seen be successful in the past? Please rate the following.
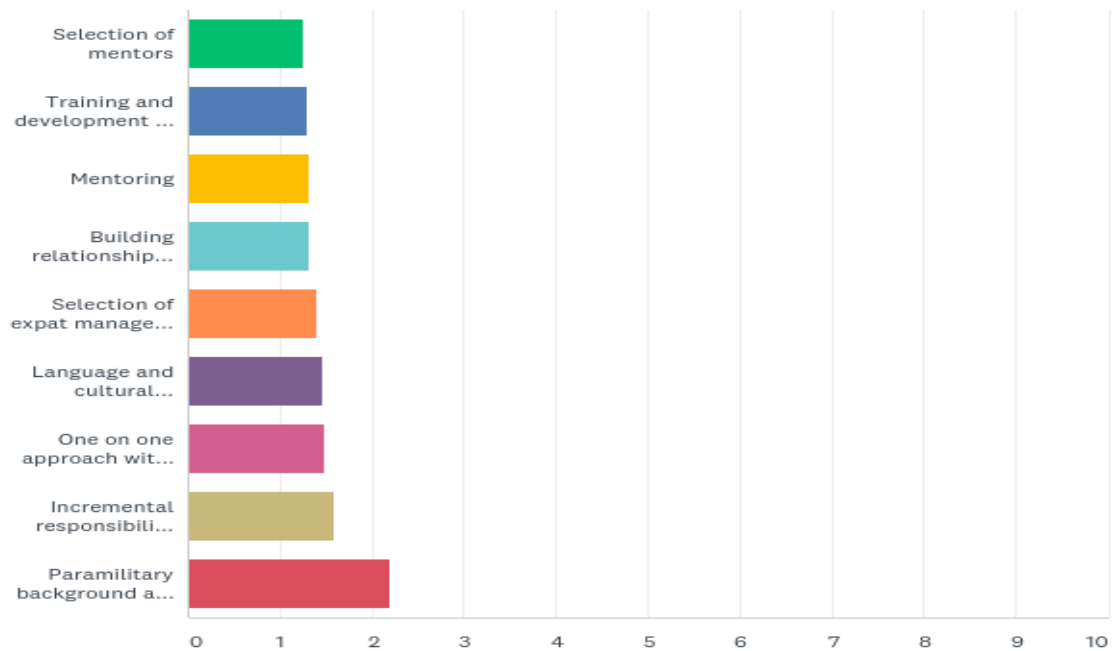
Figure 6.14 Question 14 Response

Table 6.19 Question 14 Response

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Selection of mentors	77.45% 79	19.61% 20	2.94% 3	0.00% 0	0.00% 0	102	1.25
Training and development of staff	73.27% 74	24.75% 25	0.99% 1	0.99% 1	0.00% 0	101	1.30
Mentoring	75.00% 75	21.00% 21	3.00% 3	0.00% 0	1.00% 1	100	1.31
Building relationships with staff based on mutual respect	74.26% 75	23.76% 24	0.00% 0	0.99% 1	0.99% 1	101	1.31
Selection of expat managers to mentor local staff	70.59% 72	21.57% 22	5.88% 6	0.98% 1	0.98% 1	102	1.40
Language and cultural understanding	64.36% 65	27.72% 28	4.95% 5	2.97% 3	0.00% 0	101	1.47
One on one approach with feedback for staff	59.80% 61	34.31% 35	3.92% 4	1.96% 2	0.00% 0	102	1.48
Incremental responsibility to build capacity	49.02% 50	45.10% 46	4.90% 5	0.98% 1	0.00% 0	102	1.58
Paramilitary background and in country experience	29.70% 30	37.62% 38	17.82% 18	13.86% 14	0.99% 1	101	2.19

While similar to the previous question, this question was intended to specifically address which factors the respondents had seen to be successful in the past, as opposed to any judgemental or theoretically-based opinions. According to the results, 77.45% of respondents stated that the selection of mentors was very important, while a further 19.61% stated that it was important. This was by far the most supported statement, with a weighted average of 1.25. This response was also strongly supported during the semi-structured interviews and anecdotally throughout the research process. Training and development of staff was in second position, with a weighted average of 1.30, while mentoring was third, with a weighted average of 1.31. Building relationships with staff based on mutual respect received equal weighting to mentoring at 1.31, while the selection of expat managers to mentor local staff followed, with a weighted average of

1.40. Again, the other responses were all strongly supported, as demonstrated in Table 6.19 above.

We can see a pattern beginning to form around mentoring, training, selection of staff to support these activities, and development of national staff by the right people. The selection of mentors, training and development, mentoring programs, and the importance of selecting expatriates who can mentor were all factors with a weighted average under 1.40, which indicated very strong support. The context of this question asked the respondents—predominantly from supervisory or management positions—to report what they had observed while working on previous projects; thus, this was potentially a source of one of the most accurate summaries of which activities have succeeded previously. The conclusive support given to these factors by both the semi-structured interviews and survey respondents constitutes one of the most comprehensive analyses undertaken in this area, according to the information found in the literature. In the context of this research, this is potentially one of the most supportive and informative responses because it underpins our understanding of which approaches have succeeded in the past.

15: In your experience, which key activities promote a successful mentoring program in a resource company operating in PNG?
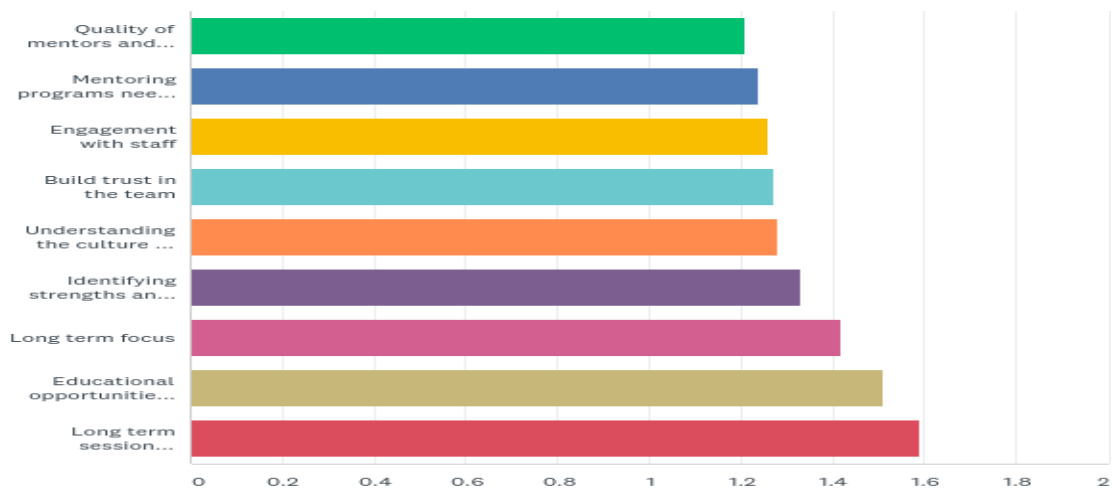
Figure 6.15 Question 15 Response

Table 6.20 Question 15 Response

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Quality of mentors and managers	81.37% 83	16.67% 17	1.96% 2	0.00% 0	0.00% 0	102	1.21
Mentoring programs need full commitment by management and the company	80.39% 82	15.69% 16	3.92% 4	0.00% 0	0.00% 0	102	1.24
Engagement with staff	76.47% 78	20.59% 21	2.94% 3	0.00% 0	0.00% 0	102	1.26
Build trust in the team	75.49% 77	21.57% 22	2.94% 3	0.00% 0	0.00% 0	102	1.27
Understanding the culture and country	73.53% 75	24.51% 25	1.96% 2	0.00% 0	0.00% 0	102	1.28
Identifying strengths and weaknesses with staff and implement personal development plans	70.59% 72	25.49% 26	3.92% 4	0.00% 0	0.00% 0	102	1.33
Long term focus	68.63% 70	22.55% 23	6.86% 7	1.96% 2	0.00% 0	102	1.42
Educational opportunities such as graduate programs to assist promising staff develop	55.88% 57	38.24% 39	4.90% 5	0.98% 1	0.00% 0	102	1.51
Long term session planning (staff can see where the future opportunities are)	51.96% 53	39.22% 40	7.84% 8	0.00% 0	0.98% 1	102	1.59

With regard to mentoring programs in resource companies, the following key activities were found to promote successful mentoring programs. The quality of mentors and managers was found to be most the important factor, with 81.37% stating it was very important and 16.67% stating that it was important, giving it a weighted average of 1.21. However, this factor was followed closely by mentoring programs needing full commitment from management and the company, which had a weighted average of 1.24. Engagement with staff had a weighted average of 1.26, while building trust in the team had a weighted average of 1.27, and understanding culture and country had a weighted average of 1.28. The top five results all had a weighted average of better than 1.28, with no respondents, out of 102, stating that any of these factors were unimportant or very unimportant. Just outside of the top five, but still very important, was identifying strengths and weaknesses of staff and implementing personal development plans, with a weighted average of 1.33. Table 6.20 above demonstrates conclusive

results regarding the importance of these activities, as all results were well under a weighted average of 1.59.

It is important to note that a large amount of responses and data from the semi-structured interviews were summarised into similar responses, and then the top nine were used in the survey. As discussed in detail previously, the purpose of the survey was to provide further depth to the qualitative data, while allowing responses to be measured quantitatively. This allowed for the research results to be demonstrated accurately and enabled analysis of the top five responses.

The survey further assisted in removing any ambiguity or potential emotive responses or waiting, and presented the data drawn from 102 responses in a numerical, statistically accurate, quantitative figure. In summary, for Question 15, it was clear that the quality of managers, mentors and mentoring programs, combined with staff engagement, were the most prominent factors, which was supported by these factors receiving the top three responses. This continues with the ongoing theme supporting like responses, which will be discussed and analysed in detail at the completion of the findings section from the survey.

Q16: In your opinion, what makes a good mentor in PNG?
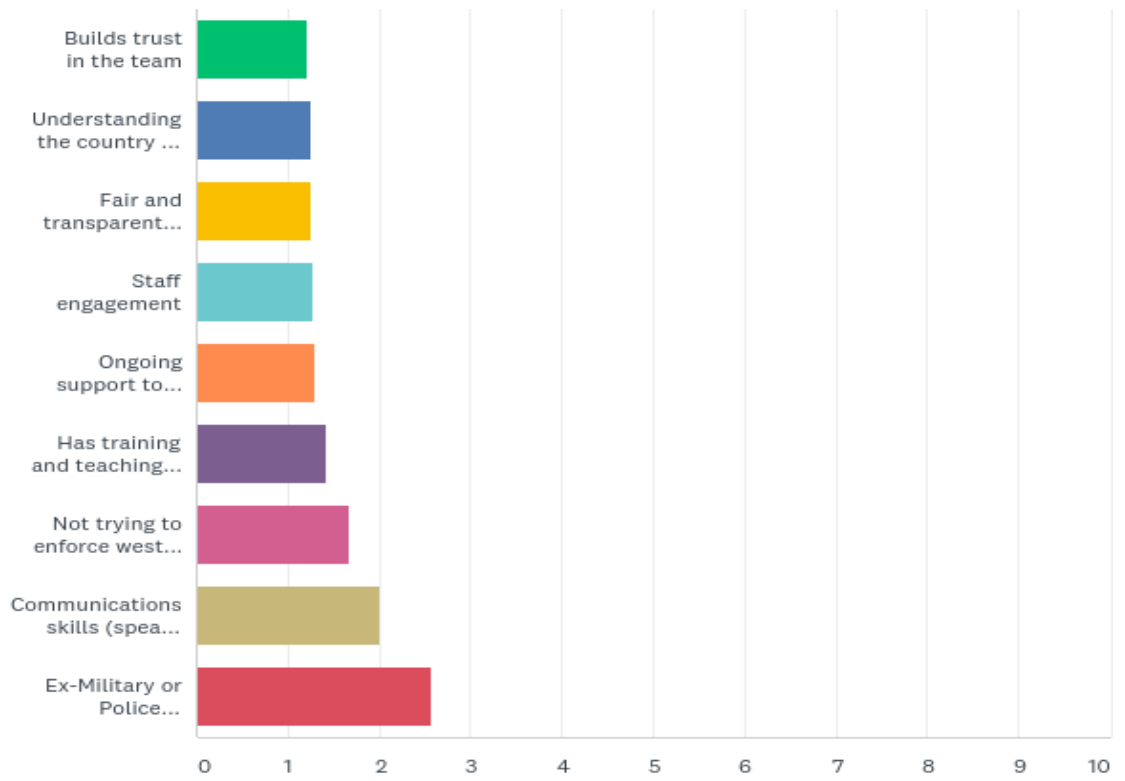
Figure 6.16 Question 16 Response

Table 6.21 Question 16 Response

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Builds trust in the team	80.39% 82	18.63% 19	0.98% 1	0.00% 0	0.00% 0	102	1.21
Understanding the country and culture	75.49% 77	24.51% 25	0.00% 0	0.00% 0	0.00% 0	102	1.25
Fair and transparent dealing with staff	76.47% 78	21.57% 22	1.96% 2	0.00% 0	0.00% 0	102	1.25
Staff engagement	73.27% 74	26.73% 27	0.00% 0	0.00% 0	0.00% 0	101	1.27
Ongoing support to national staff and positive performance management	72.55% 74	24.51% 25	2.94% 3	0.00% 0	0.00% 0	102	1.30
Has training and teaching skills	60.78% 62	35.29% 36	3.92% 4	0.00% 0	0.00% 0	102	1.43
Not trying to enforce western values on everything	49.50% 50	38.61% 39	6.93% 7	4.95% 5	0.00% 0	101	1.67
Communications skills (speaks Tok Pison)	35.29% 36	40.20% 41	15.69% 16	6.86% 7	1.96% 2	102	2.00
Ex-Military or Police background	18.81% 19	32.67% 33	24.75% 25	18.81% 19	4.95% 5	101	2.58

Continuing from the previous question regarding mentoring, this question considered the respondents' opinions regarding the attributes of good mentors in the resource industry's security and logistical workforce in PNG. Building trust in the team was the factor that elicited the strongest response, with 80.39% stating that it was very important and an additional 18.63% stating that it was important. Only one person (or 0.98%) responded that it was neither important nor unimportant, and no respondent stated that it was unimportant. With a weighted average of 1.21, this was clearly the strongest response in a top five that were all under 1.30.

The factor with the second-strongest response was understanding the country and culture, at 1.25, again with no unimportant or very unimportant responses. Interestingly, no participant responded neutrally to this factor. Transparent dealings had a weighted average of 1.25 and no negative responses, while staff engagement also had no negative responses and a weighted average of 1.27. The final response of the top five, with a weighted average of 1.30, was the ongoing support to national staff and positive performance management. The rest of the responses—including teaching and training skills, not trying to enforce Western values and communication skills—also had strong results, rounding to an average of 2.00. Mentors or managers being ex-military or having a police background had a weighted average of 2.58, which indicated support for this being an influential factor; however, this did not indicate the level of importance that was initially discussed during the semi-structured interviews. It could be anecdotal or coincidental that so many mentors working in PNG come from this kind of environment. The survey data indicated that, while this is potentially a positive factor, it has nowhere near the significance of the eight proceeding factors.

Q17: Which other factors do you think affect workforce nationalisation in a resource company operating in PNG?
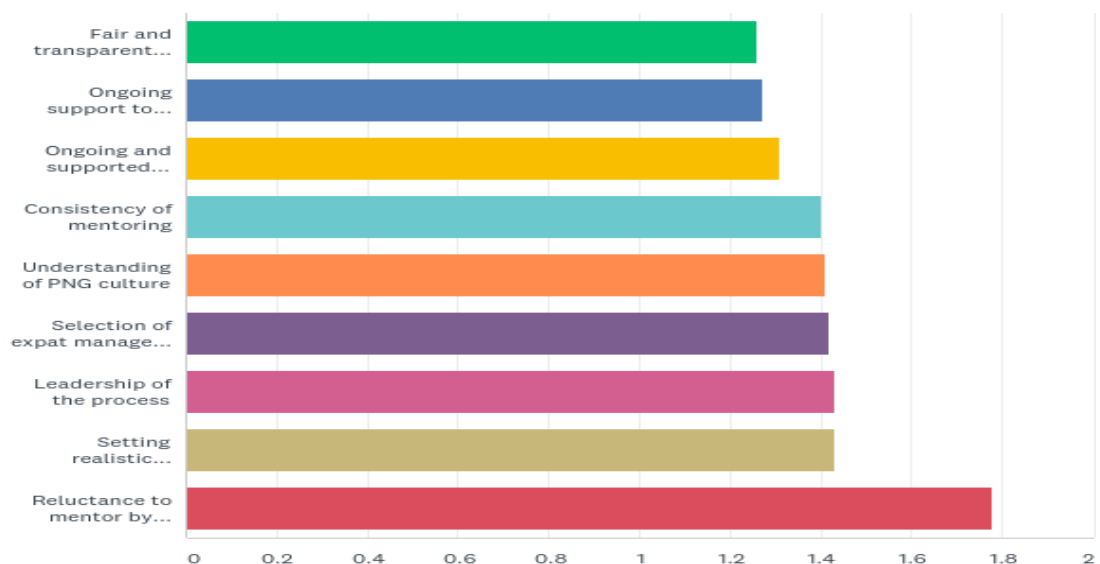
Figure 6.17 Question 17 Response

Table 6.22 Question 17 Response

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Fair and transparent dealing with staff	74.51% 76	24.51% 25	0.98% 1	0.00% 0	0.00% 0	102	1.26
Ongoing support to national staff and positive performance management	74.51% 76	23.53% 24	1.96% 2	0.00% 0	0.00% 0	102	1.27
Ongoing and supported training	70.30% 71	28.71% 29	0.99% 1	0.00% 0	0.00% 0	101	1.31
Consistency of mentoring	61.76% 63	36.27% 37	1.96% 2	0.00% 0	0.00% 0	102	1.40
Understanding of PNG culture	61.76% 63	35.29% 36	2.94% 3	0.00% 0	0.00% 0	102	1.41
Selection of expat managers to mentor staff	60.78% 62	36.27% 37	2.94% 3	0.00% 0	0.00% 0	102	1.42
Leadership of the process	60.40% 61	37.62% 38	0.99% 1	0.99% 1	0.00% 0	101	1.43
Setting realistic expectations	56.86% 58	43.14% 44	0.00% 0	0.00% 0	0.00% 0	102	1.43
Reluctance to mentor by managers	42.16% 43	43.14% 44	8.82% 9	5.88% 6	0.00% 0	102	1.78

This question was derived to cover all the other factors raised during the semi-structured interviews and literature review that were not articulated through any of the other questions. Specifically, these were factors raised during the interviews when participants were asked if they wished to emphasise any particular points. Although many of the points covered by Question 17 were covered previously or in a different context, it was important to allow the interviewees a final opportunity to reinforce previous statements or provide information they felt needed to be discussed. The responses to this prompt from the semi-structured interviews were summarised previously. All responses with more than three similar answers during the interviews were included in the list of possible responses to Question 17 of the survey. The rates to the different responses were very similar to like responses from previous questions. Fair and transparent dealing with staff came first, with a weighted average of 1.26, while ongoing support for national staff and positive performance management came in a close second, with a weighted average of 1.27. Ongoing and supported training was also strongly supported, with a weighted average of 1.31, which indicated how closely weighted the top three were. Consistency of mentoring and understanding the PNG culture made up the top five, with weighted averages of 1.40 and 1.41, respectively. Again, the selection of expatriate managers to mentor staff was quite strong, with a

weighted average of 1.42, while both leadership of the process and setting realistic expectations had weighted averages of 1.43. The final response, with a weighted average of 1.78, was reluctance to mentor by managers. This final point—although last in the list of responses to Question 17—was an important issue raised during the semi-structured interviews, and also appeared in the literature review. Although it stands alone as its own point in this question, in previous questions, it would potentially be closely aligned with selection of correct staff and selection of skilled mentors or managers. It may have been strongly represented during the semi-structured interviews because of its anecdotal support, and, with 87 responses agreeing or strongly agreeing, there could be some truth to this statement. However, it was the last and least supported response in this section. The way in which staff are managed and supported, in conjunction with training and performance management, are clearly the central factors that can be drawn from this final section.

6.4 Summary of Findings

When interpreting data gathered from research, it is important to return to the research questions. After all, the research questions drove the development of the semi-structured interview questions and, with those, the survey questions. First, the minor research questions need to be addressed, which will underpin the summary of findings and the information required to answer the primary research question.

6.4.1 Minor Research Questions

Why do resource organisations build dependence on expatriate staff?

To answer this question, it must first be determined that there is actually dependence on expatriate staff. This was the basis of Question 6, which conclusively demonstrated that the perception of 96 of 102 respondents was that there is dependence on expatriate staff. With a weighted average of 1.88, the responses clearly demonstrated that resource organisations do build dependence on expatriate staff in PNG. Having demonstrated that this dependence exists, we analysed the findings from Question 7 regarding what may influence this dependence. As discussed in the results of Question 7, issues with education and training in the national workforce was considered the most influential factor, with a weighted average of 1.39. Both the semi-structured interviews and previous literature on the subject support this as one of the top factors causing this

dependence. The previous literature suggested that issues with education, including availability, lack of transparency, authenticity of educational documents, education levels and the availability of training positions, all affect the skills and training qualifications of the national workforce. The technical expertise of expatriates, with a weighted average of 1.47, was the second most influential factor. This finding was also supported by the literature and interviews, which suggested that workforce nationalisation is influenced by the ability to hire technical experts from overseas and then release them as soon as they are no longer needed.

The survey responses further demonstrated that this practice is especially prevalent in the resource industry during the project and construction phase. The final three factors from the top five included a limited pool of educated and experienced nationals (which was closely related to the first response and had a weighted average of 1.70), expatriates being easier to use (with a weighted factor of 1.88), and a recruitment structure that limits placing nationals (with a weighted average of 1.89). These results were fairly conclusive in demonstrating that the three main factors that cause resource organisations to depend on expatriates are the speed and ease of use with expatriates; issues with finding and recruiting the right national staff; and the perceived and real issues surrounding the education, training and experience of national staff. As indicated by the semi-structured interviews, this issue includes both national staff who cannot provide accurate documentation to support their education and training, and multiple cases of fraudulent and questionable documentation. The lack of transparency and the corruption in the country's educational and governmental organisations creates ambiguity and uncertainty when hiring staff. These reasons, while not exhaustive, were the top five responses from the 102 respondents demonstrating the most plausible reasons for the reliance on expatriate professionals in the resource industry in PNG.

How does the role of expatriate staff affect national staff?

In support of the information found in the literature and the answers from the semi-structured interviews, the information gathered through the survey demonstrated that numerous factors were deemed important, ranging from the suitability of managers and how they mentor national staff (with a weighted average of 1.51 in Question 12) to the need for ongoing support for national staff and positive performance management (with a weighted factor of 1.27 in Question 17). Both the consistency and quality of mentors

received very high responses of 1.21 and 1.40, respectively, while fair and transparent dealing with staff had a weighted average of 1.25, staff engagement was 1.27, and one-on-one feedback with staff was 1.48. When viewing these responses and considering how they factor into answering this question, the predominant responses all involved mentoring and the way mentors interface with national staff. For example, in Question 14, selection of mentors had a weighted average of 1.25, followed closely by mentoring and training of development staff at 1.30. While other factors could be considered important—such as understanding the culture—a variety of responses across multiple questions all suggested that the most important factors are transparency when dealing with staff and staff engagement.

If nationalisation were to occur earlier through advanced activity in the case study, what would be the approximate difference from a cost perspective between the use of expatriates and nationals?

While this minor research question was designed with the purpose of using the case study to identify an approximate delta (difference in numerical figures) for what would happen if nationalisation were to occur earlier, it could not be estimated with any real degree of accuracy. However, in the survey, 33.33% of the respondents strongly agreed that there would be a positive cost benefit, and an additional 34.31% agreed that there would be a positive cost benefit. Nevertheless, 15.69% of the responses were neutral, 14.71% disagreed, and 1.96 strongly disagreed that there would be a positive cost benefit to the company. This yielded a weighted average of 2.18 in support of the potential of cost benefits to a company undertaking early workforce nationalisation. This indicates that the majority of respondents agreed that there would be positive cost benefits; however, any dollar amount would be proportionate to the rate of nationalisation and the size and complexity of the project.

Anecdotal evidence drawn from discussions with project finance specialists supports the idea that, in the example from the case study, developing and supporting the organisation's logistics team with a more aggressive and early nationalisation program could have potentially saved over five years of work and somewhere in the vicinity of US$5 million. However, this information is anecdotal and based on assumptions from the case study and the numbers of staff, which cannot be verified; thus, it is purely speculative.

Which key factors limit early nationalisation of security and logistical workforces?

According to the responses to Question 12, the top five factors were a lack skills and experience among staff (which had a weighted average of 1.48), not having the right people in both national and expatriate roles (which had a weighted average of 1.51), the experience and suitability of managers (which had a weighted average of 1.51), the motivation and cultural expectations of staff (which had a weighted average of 1.53) and the lack of training and development (which had a weighted average of 1.56). When considering these responses in the context of the relevant literature and interviews, it seems that a number of these factors existing concurrently causes the largest limitations. When staff lack skills, knowledge and experience, it directly affects the second response, which is not having the right people in both national and expatriate roles.

When considered in relation to response three—the experience and suitability of managers—these factors are all similar, in that they suggest that having the wrong people in support roles and other potential mismatched personnel has a significant negative effect. Inexperienced managers with little knowledge or interest in mentoring, who are leading staff with minimal training and experience, affects the workforce significantly, as demonstrated through the fourth response—motivation and cultural expectations of staff. The way in which staff are led and treated and the support they receive from managers and supervisors are all key factors that, if not handled properly, would limit the success of a nationalisation program.

Which factors would enable the early nationalisation of staff?

The final of the minor questions dealt with the factors that help enable the early nationalisation of staff, which was covered in Question 13 of the survey findings above. The selection of national staff, with a weighted average of 1.30, was the top response, closely followed by mentoring programs, with a weighted average of 1.32. Identifying key national staff early for supervisory and management positions also scored very high, with a weighted average of 1.37. Selection of staff (expatriates) and apprenticeships or traineeships came in at positions four and five, with weighted averages of 1.42 and 1.43, respectively.

These results support the evidence from the literature and interviews that it is important to select the correct staff (both expatriate and national) early in the process and to focus

on finding national staff suitable for supervisory and manager positions who can be mentored and developed early. Based on the similarities between the first four responses, it is clear that the quantitative data support the qualitative findings regarding this minor research question.

6.4.2 Major Research Question

Which key activities promote a successful program to enable early nationalisation in a resource company operating in PNG?

With the minor research questions summarised in the findings above, the major research question needs to be addressed. In doing so, this section will include a summary analysis of all the information from Question 14, while also comparing and contrasting all the key findings from the rest of the research results. The findings from Question 14 were presented in ascending order and sorted into similar responses. These similar responses were then matched with the top five responses from the other questions to develop similar factors. This resulted in five distinct groups of responses, categorised as follows: mentoring, training and development, staff engagement, culture and HR factors. Figure 6.18 below illustrates the findings for the mentoring category, with each similar factor mapped in relation to the broader category.

Figure 6.18 Initial Mentoring Factors

Mentoring

- 1.25 Selection of mentors
- 1.31 Mentoring
- 1.21 Quality of mentors and managers
- 1.24 Mentoring program needs full commitment by management and company
- 1.27 Ongoing support for national staff and positive performance management
- 1.32 Mentoring programs
- 1.40 Selection of managers to mentor staff
- 1.40 Consistency of mentors
- 1.51 Experience and suitability of managers.

Figure 6.19 Initial Training and Development Factors

Training and development

- 1.30 Training and development of staff
- 1.31 Ongoing supported training
- 1.39 Issues with education and training
- 1.43 Apprenticeships and traineeships
- 1.48 Skills, knowledge and experience of staff
- 1.56 Lack of training and development opportunities.

Figure 6.20 Initial Engagement Factors

Engagement

- 1.31 Building relationships with staff based on mutual respect
- 1.21 Building trust in the team
- 1.25 Fair and transparent dealing with staff
- 1.26 Fair and transparent dealing with staff
- 1.27 Staff engagement
- 1.26 Engagement with staff
- 1.27 Building trust in the team
- 1.30 Ongoing support for national staff and positive performance management
- 1.58 Incremental responsibility to build capacity
- 1.48 One-on-one feedback with staff.
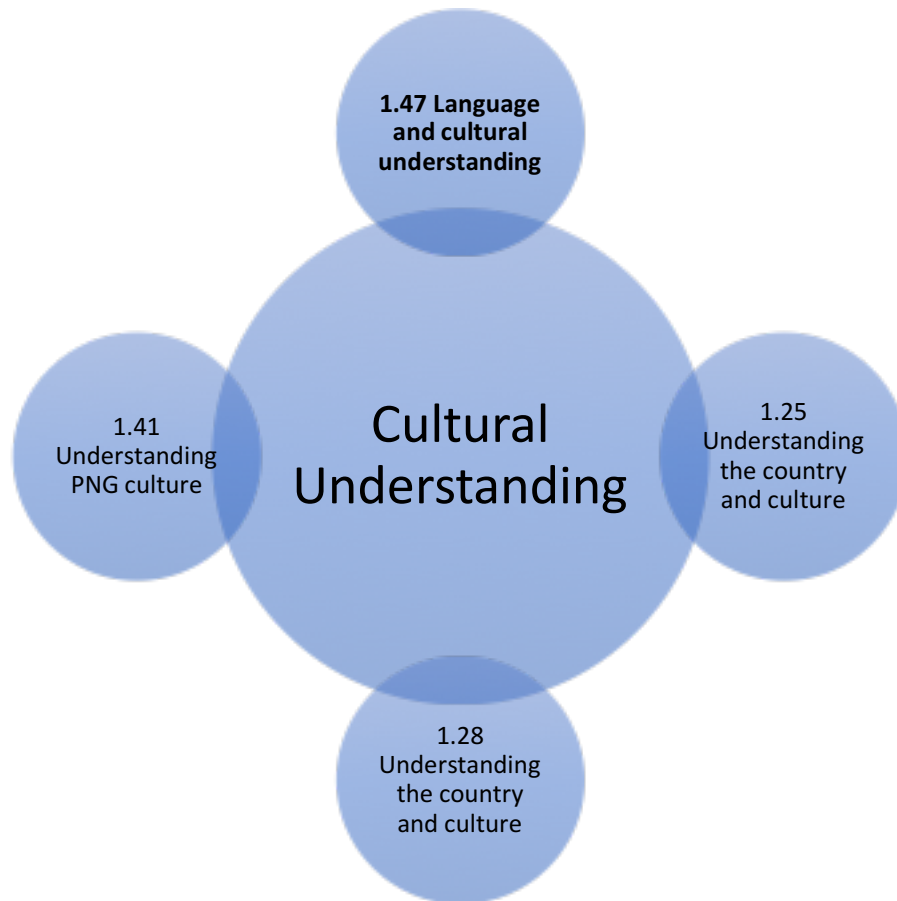
Figure 6.21 Inital Cultural Understanding Factors

Cultural understanding

- 1.47 Language and cultural understanding
- 1.25 Understanding the country and culture
- 1.28 Understanding the country and culture
- 1.41 Understanding PNG culture.

Figure 6.22 Initial Human Resource Factors

HR factors

- 1.30 Selection of staff—nationals
- 1.37 Identifying key national staff early for supervisory and management positions
- 1.42 Selection of staff—expatriates
- 1.47 Technical expertise of expatriates
- 1.5 Not having the right people in roles, both nationals and expatriates
- 1.53 Motivation and cultural expectations of staff
- 1.70 Limited pool of nationals
- 1.88 Expatriates easier to use
- 1.89 Poor recruitment structure limits placing experienced nationals.
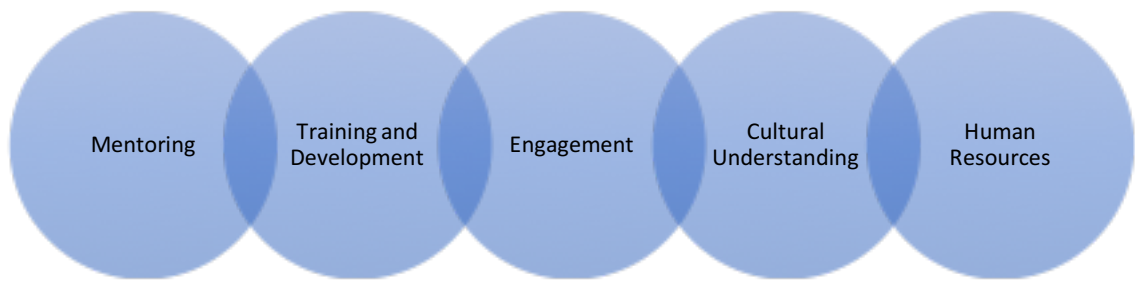
Figure 6.23: Five Critical Factors to Support Workforce Nationalisation in PNG

These findings provide a strong understanding of the key activities that promote successful nationalisation programs in resource organisations operating in PNG. As discussed, the purpose of Question 14 was to provide the basis to answer the major research question, with support from the rest of the research question responses. When looking at the table above and the strong weighting of each of the responses from Question 14, the five themes were clearly identified.

6.4.3 Grouping the Responses

Now that the findings have been broken into the key five categories above, each will be discussed to further develop the summary. As shown, the responses that comprised each of the five categories often included multiple variations of the same response or similar responses. These were further broken down to create a single 'action item' for each to be used in developing the final model.

6.4.3.1 Mentoring
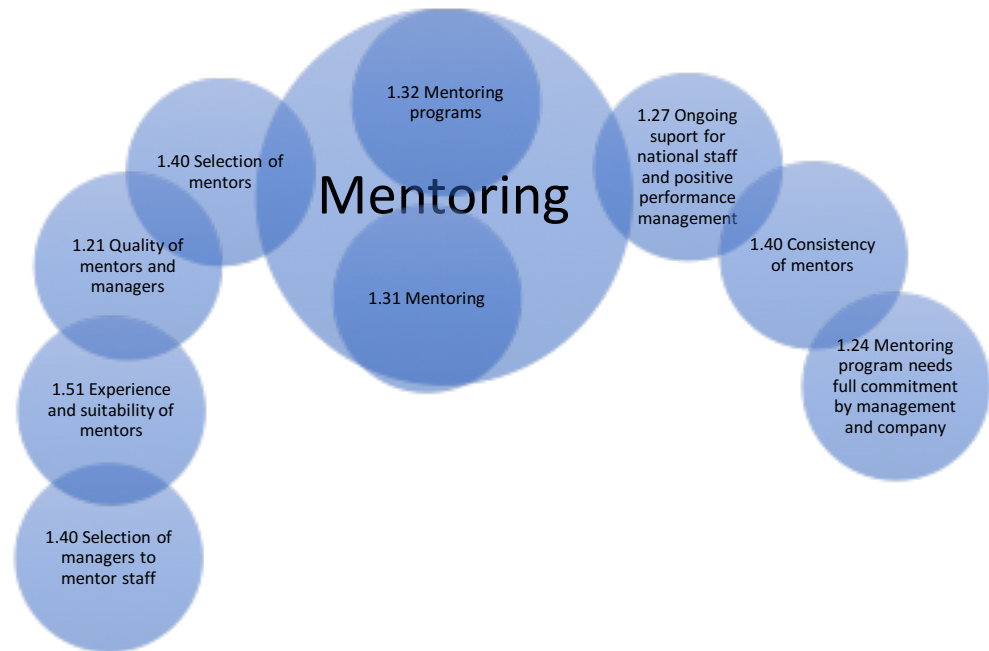
Figure 6.24 Mentoring

While the previous version of the mentoring model showed every response that could be grouped under mentoring, it has now been refined further. The first step was to identify the key responses that linked directly with the grouping, which were mentoring (1.31) and mentoring programs (1.32). Both of these factors demonstrated the importance of mentoring as both a primary function in workforce nationalisation and a sub-function to be considered and used. This left two distinct mentoring sub-groups: selection of mentors and conduct of mentors. Under selection of mentors, the following sub-responses were grouped: selection of mentors (1.25), quality of mentors and managers (1.21), experience and suitability of managers (1.51) and selection of managers to mentor staff (1.40). All these responses were related to the importance of selecting the right managers to mentor national staff, including their experience; suitability; and other qualities that make a good mentor, such as cultural understanding, communication skills, ability to transfer knowledge and teaching skills.

The second sub-group of mentoring—the conduct of mentors—included the following: the mentoring program needs full commitment by management and company (1.24), ongoing support for national staff and positive performance management (1.27) and consistency of mentors (1.40). All these responses involved what happens after staff

selection has occurred and mentoring programs are potentially underway. Integral to the success of any program is demonstration that senior management supports and is fully committed to their mentoring program, as discussed in detail in the literature, the semi-structured interviews and now the survey results.

It has been well demonstrated throughout the research findings, case study, literature and interviews that mentoring is one of the key factors supporting workforce nationalisation. Further, it has been shown that, in addition to having mentoring or a mentoring program, there needs to be full commitment by management, as well as a well-designed and well-operated program. This needs to be driven by the right people, as indicated through the importance of selecting managers and mentors. Without trained and experienced mentors, the program will have a reduced chance of success. The final summary draws all the groups together into a single model to discuss the findings holistically and demonstrate the optimum workforce nationalisation model.

6.4.3.2 Training and Development

Figure 6.25 Training and Development

Training and development of staff (1.30) mirrored the group label and was the key factor within which the others were grouped. These included issues with education and training (1.39); the skills, knowledge and experience of staff (1.48); and a lack of training and development opportunities (1.56). These were all potentially limiting factors that must be addressed when seeking to drive workforce nationalisation. They

should be fully considered and understood before the development of a program. The skills and experience of staff feed directly into issues with available opportunities for education and training because, in some parts of PNG—especially in remote resource project areas—there are limited opportunities for potential staff. These issues need to be considered in relation to the second sub-grouping, which included ongoing, supported training and the use of apprenticeships and traineeships.

While the key factor here is the training and development of national staff, the two sub-groups indicated how this should occur and what the limiting factors may be. With a weighted average of 1.30, the importance of training and developing national staff was clearly demonstrated through the data. The ways to respond to this factor were also made clear, as ongoing, supported training had a weighted average of 1.31 and apprenticeships or traineeships had a weighted average of 1.43. The survey results conclusively confirmed the findings from the literature and interviews that both traineeships and apprenticeships, coupled with ongoing, supported training, are crucial to successful workforce nationalisation.

6.4.3.3 Engagement
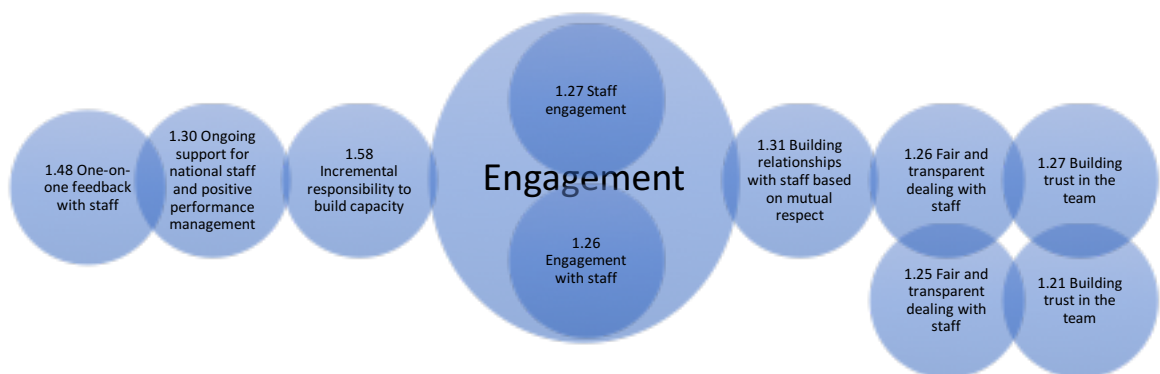
Figure 6.26 Engagement

The primary grouping of engagement was further broken into two sub-groupings: performance management and mutual respect. Engagement with staff (1.26) and 1.27 staff engagement (1.27) were absorbed by the primary grouping of engagement. The performance management sub-grouping consisted of one-on-one feedback with staff

(1.48), ongoing support to national staff and positive performance management (1.30) and incremental responsibility to build capacity (1.58). These responses were all related to how to best manage the performance of national staff, and clearly demonstrated that one-on-one feedback, coupled with ongoing supportive management, are the best methods for managing staff. As covered in some detail previously, these averages show strong statistical support for what was covered thoroughly during the interviews.

The other key component to this sub-grouping is the incremental responsibility to build capacity, which both Interviewees B and E discussed in detail, and was confirmed by the survey as being a key factor in enabling staff. The mutual respect sub-group included building relationships with staff based on mutual respect (1.31), building trust in the team (1.21), fair and transparent dealing with staff (1.25), fair and transparent dealing with staff (1.26) and building trust in the team (1.27). Looking at these results, as well as the two results that were replicated (building trust in the team and fair and transparent dealing with staff), it is clear how highly regarded these factors were in terms of their importance for the workforce nationalisation process. During the interviews, many of the interviewees considered these two points to be critical to the process, and particularly stated that if staff do not respect you and there is no trust, you will have a very low chance of success. Mentoring is built on common respect and trust in one another, and a key aspect of this trust is being open and transparent. This was clearly shown through the findings.

6.4.3.4 Cultural Understanding
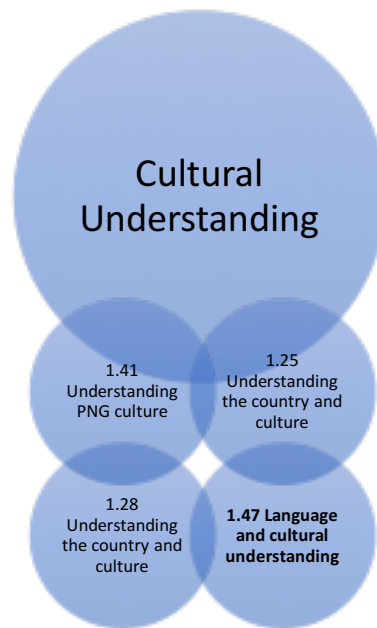
Figure 6.27 Cultural Understanding

The process of further grouping cultural understanding was not required because all responses were so closely aligned that they could be considered the same factor. Thus, they will be now discussed as such. When looking at the individual responses—language and cultural understanding (1.47), understanding the country and culture (1.25), understanding the country and culture (1.28) and understanding PNG culture (1.41)—the findings clearly demonstrated that the ability of the expatriate manager and mentor to understand the culture and attain even a rudimentary understanding of the language greatly assists in the mentoring process. Being able to communicate effectively is central to passing on knowledge. It was also suggested in the interviews (Interview C) that the fastest way to develop a common ground is through social-based conversation with workers. Something as basic as exchanging greetings in the local language can greatly improve the previous factor's (engagement) success. As discussed in some detail in the literature, PNG is a very complex country with hundreds of different cultures and languages. Managers and mentors must understand the effect of culture so that it can be employed as an enabler, instead of a limitation. If certain factors are understood and become part of the plan, they can greatly assist managers' ability to communicate with and engage staff, which has a positive effect on the workforce

nationalisation process. The importance of this is clearly demonstrated by this factor's 1.25 weighted average obtained from the survey.

6.4.3.5 Human Resource Factors
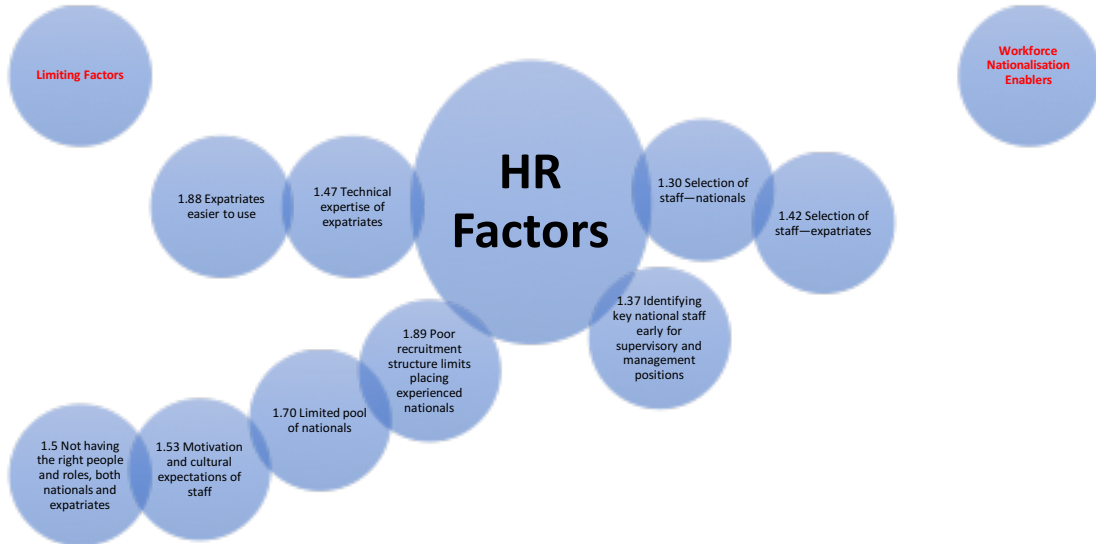
Figure 6.28 Human Resource Factors

Breaking down the HR factors into sub-groups was undertaken differently than with the other four factors, as shown in the diagram above. The sub-groups were broken down to have the two enabling sub-groups (identifying key national staff early for supervisory and management positions [1.37] and selection of staff—nationals and expatriates [1.30]) on the right and the two limiting sub-groups on the left. The technical expertise of expatriates (1.47) and expatriates being easier to use (1.88) were grouped together to form the primary information regarding why companies prefer to employ expatriates, rather than promoting nationalisation. The other limitations grouped together were as follows.

The factor of not having the right people and roles, both nationals and expatriates (1.50), has been discussed in some detail and was covered from a different perspective—the need to find and hire the right people—in the mentoring grouping above. The motivation and cultural expectations of staff (1.53) was discussed as a potential limitation. Once the moral in the organisation begins to collapse and a focus on mentoring dissipates, as discussed during the interviews and supported by the surveys, this has a major effect on the workforce nationalisation process.

The response regarding the limited pool of nationals (1.70) was drawn from the interviews and refers to the inability of companies to find and hire experienced national staff during project start-up. This limitation was supported by the survey data. The limited pool of nationals problem is also related to the response that poor recruitment structures limit the placement of experienced nationals (1.89). This problem has been observed and was discussed in the interviews, and the survey confirmed that the PNG recruitment framework has limitations. These problems are connected to the lack of transparency and integrity in some of the educational and training records for potential staff, as well as the fact that PNG has a high ranking on the country corruption index. All these factors combined are responsible for the lack of trust in the recruitment process, which has a negative effect on workforce nationalisation.

6.5 Conclusion

The below figure displays the final grouping of the five factors most critical to workforce nationalisation in PNG, and demonstrates their relationship to mentoring. The final summary and conclusion chapter will focus predominantly on the enabling factors for workforce nationalisation, and how to move forwards towards nationalisation. Moreover, importantly, this chapter will summarise the potential limitations of this study.

Figure 6.29 Proposed Mentoring Model

Chapter 7: Conclusion

7.1 Introduction of Chapter

This final chapter will provide an overview of the work undertaken in this study, followed by presenting the conclusion to this research. This conclusion will include a consideration of the limitations of the research, the major findings and the potential influence of these discoveries. Additionally, it will demonstrate this study's substantial and original contribution to knowledge in the field of workforce nationalisation, and outline areas of potential future research. The summary of findings from the preceding chapter will be outlined and summarised with the final research outcome model.

7.2 Overview of Thesis

This thesis has followed the progress of the research, from the original design and proposal through to the presentation of the final survey data in the preceding chapter. The use of a case study, a literature review and 10 interviews to gather qualitative data to inform and develop the survey instrument was found to be an effective method for the research. The journey was clearly mapped out and documented, with each chapter demonstrating how this research was achieved and what was accomplished. The findings chapter reported on the results of the survey in detail and analysed how the data affected the research questions.

7.3 Limitations of the Research

While the research was able to address almost all of the questions asked in the proposal and gain an in-depth understanding of the workforce nationalisation process, it did have some limitations. Although it was not originally designed to extend beyond the research questions, the research survey collected valuable data that could be used for additional future research in this area. As a result of the difficulty in undertaking interviews and completing a survey with such a large number of industry professionals in this field, combined with the researcher's position, the decision was made to gain as much relevant data as possible. While all the data were used and analysed to draw key findings in relation to the original research questions, much more could be done using these raw data. Thus, this is a limitation of this research and an avenue for further

research. Another limitation is the narrow scope of the research, which focused specifically on security and logistical staff in the resource industry. This scope could be developed further in the future to include a more a country-based focus. Other limitations include the availability of sensitive industry data, which could exist in this field, but are deemed confidential by commercial companies. Finally, further research conducted using these findings in conjunction with a mature PNG-based operator may generate stronger results or confirm this study's findings.

7.4 Major Research Findings

This research set out to discover the most effective way for an organisation's logistical and security operations to undertake workforce nationalisation in the resource industry in PNG. To this end, a series of minor research questions were developed to support the primary research question. Through a review of the literature and semi-structured interviews, these initial research questions were developed further into the survey questions. The participants of the survey were drawn from a purposive sample selection consisting of current and former staff—predominantly managers and leaders—involved in projects with security and logistical organisations in the PNG resource industry. Although this purposive sample was demographically anomalous in comparison with a comparable sample in society, middle-aged men traditionally dominate this industry; thus, the sample offered an appropriate representation in this instance. Indeed, over 90% of responses were from male participants, which reflects the demographics found in the perpositive population and was not cause for further analysis. In terms of the nationalities surveyed, 27% identified as PNG nationals and 73% identified as non-PNG nationals or expatriates; this also aligns with the data from the case study and employment figures.

Additionally, over 67% of respondents had a tertiary education and 11% reported having an unfinished tertiary education. A further 12% had vocational education up to and including advanced diplomas and diplomas, while the remainder (around 7%) had finished high school. These were interesting demographic data that, while not part of the primary research, were still valuable for determining differences in perceptions across a variety of factors.

The survey of these 102 industry professionals, predominantly from key roles, provided unique insights into what they had experienced first-hand, as well as what they had witnessed over decades of working in PNG. Based on the findings from the literature review, this study is the first of its kind to conduct research in this subject area in PNG. As will be discussed in more detail during the section on further research opportunities, the uniqueness of the study subject renders the collected raw data very valuable for future research.

To summarise the demographic information, after comparing cross tabs and the average weights for each of the key responses, while there were minor differences (which were discussed in detail in Chapter 6), they did not affect the rankings of the key responses. It was found that level of experience had more of an effect than age or nationality in terms of influencing differing responses. However, none of the demographic distinctions produced sufficiently different findings to alter the results or the analysis of the findings. Therefore, the weighted average of each response was used. With the demographic findings and their effect on the research findings clearly established, the major research findings can be presented. The most effective way to present these major research findings is to return to the questions posed in the original proposal that drove this research project.

7.4.1 Minor Research Questions

Why do resource organisations build dependence on expatriate staff?

Multiple questions were required to address this question fully, as the fact of dependence on expatriate staff had to be established before the reasons for this dependence could be established. The fact of dependence on expatriate staff was demonstrated conclusively, as 86 of 102 respondents either strongly agreed or agreed with this statement. With a weighted average of 1.88 in response to the statement that resource organisations in PNG do build dependence on expatriate staff, the survey demonstrated clear support for this statement.

After determining this fact, the next step was to question why this dependence exists. The top response in answer to this question was issues with a lack of education and training in the national workforce, which had a weighted average of 1.39. The analysis of the semi-structured interviews and relevant literature on the subject also supported

this being one of the top reasons. Specifically, issues with education include availability, lack of transparency, and authenticity of educational documents. Additionally, low levels of education and a lack of available training positions significantly affect the skills and training qualifications of the national workforce. The second response, with a weighted factor of 1.47, was the technical expertise of expatriates. The discussion based on the literature and interviews also suggested that companies prefer being able to hire technical experts from overseas, and then release these employees as soon as they are no longer required.

This is especially prevalent in the resource industry during the project and construction phase, as was demonstrated further through the responses to the survey. The final three factors from the top five responses to this question were a limited pool of educated experience nationals, which was closely related to the first response; expatriates being easier; and a recruitment structure that limits placing nationals. These results were fairly conclusive in demonstrating that the three main factors that cause resource organisations to depend on expatriates are the speed and ease of use provided by expatriates, issues with finding and recruiting the right national staff, and the perceived and real issues surrounding the education and training required to produce an experienced pool of national staff.

How does the role of expatriate staff affect national staff?

Based on the responses to multiple questions in the survey, as well as the literature review and interviews, there was overwhelming support to suggest that the suitability of managers and the ways they mentor national staff are critical ways in which expatriate staff affect national staff. The need for ongoing support for national staff through positive performance management received a weighted average of 1.27. The consistency of mentors and quality of mentors both had very high responses, with weighted averages of 1.21 and 1.40, respectively, while fair and transparent dealing with staff had a weighted average of 1.25, staff engagement was weighted at 1.27, one-on-one feedback with staff was weighted 1.48, and staff engagement was weighted 1.27. When considering how all these responses factored into answering this question, it was noteworthy that the predominant responses all related to mentoring and how mentors interact with national staff. One example of this was 'selection of mentors', which was a response from Question 14 that received a weighted average of 1.25. This was followed

closely by mentoring and the ways mentors train development staff, which had a weighted average of 1.30. While other factors could be considered important, such as understanding the culture, the variety of responses across multiple questions all supported the idea that being transparent when dealing with staff and improving staff engagement are the most influential issues.

If nationalisation were to occur earlier through advanced activity in each of the cases studied, what would be the approximate difference from a cost perspective between the use of expatriate and national staff?

While this minor research question was designed to identify an approximate delta (difference in numerical figures) regarding what would happen if nationalisation were to occur earlier, it could not be estimated with any real degree of accuracy. Nevertheless, 33.33% of the respondents strongly agreed that there would be a positive cost benefit, while an additional 34.31% agreed there would be a positive cost benefit. However, 15.69% of the respondents remained neutral, 14.71% disagreed and 1.96 strongly disagreed that there would be a positive cost benefit to the company. This produced a weighted average of 2.18 in support of the potential for cost benefits to companies undertaking early workforce nationalisation. This indicated that the majority of respondents agreed that there would be positive cost benefits; however, any dollar amount would be proportionate to the rate of nationalisation and the size and complexity of the project.

This provides evidence of a positive cost benefit to workforce nationalisation, and, the earlier the process is started, the greater the potential cost savings. This proves that early workforce nationalisation and any money spent on the early training and development of national staff is a business enabler and provides the potential for cost reduction over time. This information will allow companies to make financial decisions in a more holistic manner when preparing budgets for projects that integrate local content and workforce development. Spending in this area should be viewed as an early investment with a tangible return in the medium to long term, and not a required cost to be borne out of social or governmental requirements. This research has also proven that the greatest return on investment derives from a well-developed and supported workforce nationalisation plan that uses the mentoring model developed from the research. The use of sporadic, ad hoc attempts at mentoring or workforce nationalisation in an

organisation will not only be less cost effective, but will also produce significantly worse results.

Which key factors limit early nationalisation of security and logistical workforces?

The skills and experience of staff, or lack thereof, was the highest rated factor offered in response to this question on the survey, while not having the right people (both nationals and expatriates) in roles, and the experience and suitability of managers received similarly strong responses. Both the reviewed literature and the interviews confirmed that these factors were the largest limitations. When staff lack skills, knowledge and experience, this directly relates to the second problem of not having the right people (both nationals and expatriates) in roles.

When taken in context with response three—the experience and suitability of managers—these factors are all similar and/or affect each other, as the wrong people in certain roles are unable to support other potential mismatched personnel. It was discussed that an inexperienced manager with little knowledge or interest in mentoring, leading staff with minimal training and experience, significantly affects the workforce. The ways in which staff are led and treated, and the support they receive from managers and supervisors are all key factors that limit nationalisation programs if they are not handled effectively.

Which factors would enable the early nationalisation of staff?

The top survey response to this question was the selection of national staff, with a weighted average of 1.30. This was closely followed by mentoring programs, with a weighted average of 1.32. Identifying key national staff early for supervisory and management positions also scored highly, with a weighted average of 1.37. Selection of expatriate staff and apprenticeships or traineeships came in fourth and fifth place, with weighted averages of 1.42 and 1.43, respectively.

These results support the anecdotal evidence from the literature review and interviews that it is critical to select the correct staff—both expatriates and nationals—early in the process, with a focus on finding national staff suitable for supervisory and management positions, who can be mentored and developed at the beginning of the process. With mentoring programs in second place, and critically related to the first, third and fourth

responses, the quantitative data support the idea that mentoring is a critical answer to this minor research question. Selecting the right staff to be mentored, coupled with having the right mentors and managers, has been shown throughout the research to be critical to the workforce nationalisation process.

With the minor research questions addressed and all the findings from the different stages of research brought together, the final major question can now be addressed.

7.4.2 Major Research Question

Which key activities promote a successful program to enable early nationalisation of logistics and security workforces in a resource company operating in PNG?

It has been well demonstrated throughout the survey results, case study, literature review and interviews that mentoring is a key factor to support workforce nationalisation. It was further shown above that, in addition to only implementing mentoring or a mentoring program, there needs to be full commitment from management and a well-designed and well-operated program. This needs to be driven by the right people, as indicated by the importance granted to the selection of managers and mentors. Without trained and experienced mentors, the program will have a reduced chance of success. When viewed holistically with the four supporting factors, this comes together into a single model to demonstrate the optimum workforce nationalisation model, as discussed below.

7.5 Implications of the Findings

The implications of the findings are critical to the way PNG national staff and their future development is viewed in the resource industry. Given that this research proves that resource companies have built dependence on expatriate staff and that it is possible to transfer skills and nationalise earlier, companies and key managers must revisit their workforce nationalisation programs. Expatriate managers and mentors must be held accountable for the provisions in their work permits regarding the development of national staff. With clear evidence that early workforce nationalisation programs will have a positive effect on both the reputation and finances of businesses, companies can now develop more aggressive workforce nationalisation targets. This research has demonstrated that acting morally will also provide financial benefits. One of the more

pertinent implications from the findings is that mentoring is the single most important driving force in the workforce nationalisation process. A strong mentoring program that is well supported and developed and that employs the spectrum of supporting elements will enable the organisation to nationalise its workforce more effectively.

7.6 Theoretical and Practical Outcomes

This research developed the following theoretical model for workforce nationalisation built around mentoring.
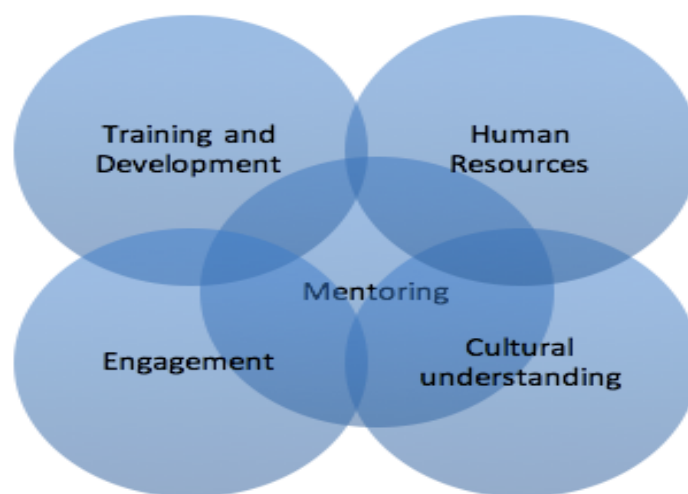
Figure 7.1 Final Mentoring Model

This theoretical model is based on the results from the research and underpinned by strong statistical support in each area. The evidence in the findings strongly supports that mentoring should be used as the primary function to progress a workforce nationalisation program. The support of the four enabling factors—engagement, cultural understanding, training and development, and HR—underpins the success of the mentoring program. This is the way forwards to pursue a nationalised workforce in the resource industry in PNG. This can be implemented practically through a well-defined mentoring program that is supported by senior management and that incorporates all of the supporting four factors and the building blocks found within each group, as detailed in the findings.

7.7 Original Contribution to the Body of Knowledge

This study has made the following original contributions to knowledge in the field of resource industry security and logistics nationalisation theory:

- It has proven that there is a reliance on expatriate staff in the resource industry in PNG, and demonstrated why this is practice is so prevalent.
- It has discovered and presented the most statistically effective methods for the early nationalisation of workforces in a resource industry environment in PNG.
- While an exact dollar amount could not be determined with any accuracy, the research demonstrated that there would be a positive cost difference to companies that undertake early nationalisation programs.
- Finally, and most importantly, this research developed a theoretical roadmap to achieve early nationalisation in this field that can be used by industry to change current nationalisation practices and theory.

Using this research, it can be demonstrated that the early nationalisation of the security and logistical workforce in PNG is very possible, is highly cost effective in both the short and long term, and will have reputational benefits for the company that far exceed any tangible benefit. It proves that central to this process is mentoring programs that are supported by management and underpinned with strong HR support, cultural understanding, training and ongoing development and (most importantly) engagement. This has all been proven throughout this research and supported by the data. This presents an original contribution to knowledge in this field and will provide a base upon which ongoing work can be undertaken.

7.8 Future Research

There has been a previous lack of research in the area of workforce nationalisation theory in PNG generally, and specifically in the security and logistical fields. Areas of potential research that would continue to move the developed body of knowledge forwards should include more specific research into mentoring programs in resource organisations in PNG. This would be valuable and is currently receiving a great deal of interest from government and academic actors in PNG. Research into the ways that this new mentoring-based nationalisation model could be adapted and used in an

organisation could be compared with previous methods in a case study, which would also be of merit. This research could also be compared with existing work being undertaken by Aboriginal scholars in Australia to determine whether it has merit in that context. Any research that furthers the body of knowledge on workforce nationalisation in PNG and supports the transition of local staff into management has great merit and should be supported.

7.9 Conclusion

This research has been able to confirm with a high degree of accuracy that resource organisations do build dependence on expatriate staff in PNG. It has shown that many companies, while aiming to nationalise their logistical and security workforces, have had mixed results, despite substantial spending. It has proven that these mixed results are predominantly caused by multiple issues, such as incompatible or misaligned HR practices, poorly designed or supported mentoring programs, and a lack of cultural understanding used in the process. More importantly, this research found that if companies pursue early workforce nationalisation, they will attain cost benefits. This research has also demonstrated that substantial reputational benefits would be achieved by the organisation, which could flow onto public perceptions and community engagement. This is extremely valuable to organisations that are reliant on landowner interaction and ongoing support for their projects. However, the most important conclusion derived from this research is determining which factors a workforce nationalisation program needs to succeed, and how that final model should appear.

The findings from this research, which culminated in the final confirmatory survey of 102 industry professionals, have proven that mentoring is the fundamental key to successful workforce nationalisation in the resource industry in PNG. It has proven that, for mentoring to be successful, the mentoring program must be well resourced, well designed and strongly supported by the organisation's most senior managers. Moreover, it has found that, for the mentoring program to be as effective as possible, it must be underpinned by strong HR support, training and development, engagement with staff, and cultural understanding.

All the findings clearly demonstrate which factors are most important to the process, and how they are interdependent with each other and with mentoring, as demonstrated

in the model. These conclusions are unequivocal in indicating the importance of mentoring for the success of the workforce nationalisation process for the resource industry's logistical and security teams. Additionally, this research has proven that early workforce nationalisation in PNG is a sound investment by companies because it generates positive financial benefits and significant reputational benefits.

Overall, this research has achieved its aim, which was to prove that companies can nationalise their workforce in PNG earlier, and that this early nationalisation would be of great advantage to them. If even a single company in PNG decides to use this new workforce nationalisation model to improve the effectiveness of their nationalisation program to increase local employment, this research has been worthwhile.

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Appendices

Appendix 1: Ethics Approval

THE UNIVERSITY OF
NOTRE DAME
AUSTRALIA

19 Mouat Street (PO Box 1225) Fremantle WA 6959
+61 8 9433 0555 | enquiries@nd.edu.au

8 June 2017

Dr Peter Gall & Mr Warren Doudle
School of Business
The University of Notre Dame Australia
Fremantle Campus

Dear Peter and Warren,

Reference Number: 017081F

Project Title: "Workforce Nationalisation in Papua New Guinea: Security and Logistics in Resource Organisations."

Your response to the conditions imposed by a sub-committee of the university's Human Research Ethics Committee, has been reviewed and assessed as meeting all the requirements as outlined in the *National Statement on Ethical Conduct in Human Research* (2007, updated May 2015). I am pleased to advise that ethical clearance has been granted for this proposed study.

Other researchers identified as working on this project are:

Name	School/Centre	Role
Prof Leland Entrekin	Murdoch University	Primary Supervisor

All research projects are approved subject to standard conditions of approval. Please read the attached document for details of these conditions.

On behalf of the Human Research Ethics Committee, I wish you well with your study.

Yours sincerely,

Dr Natalie Giles
Research Ethics Officer
Research Office

cc: Chris Mawson, Acting SRC Chair, School of Business

Broome Campus 88 Guy Street (PO Box 2287) Broome WA 6725
Sydney Campus 140 Broadway (PO Box 944) NSW 2007

Fremantle   Broome   Sydney

ABN 69 330 643 210 | CRICOS Provider Code: 01032F   nd.edu.au

Appendix 2: Research Consent Form

THE UNIVERSITY OF NOTRE DAME
AUSTRALIA

CONSENT FORM

Workforce Nationalisation in Papua New Guinea: Security and Logistics in Resource Organisations

- I agree to take part in this research project.

- I have read the Information Sheet provided and been given a full explanation of the purpose of this research project and what is involved in the interview(s).

- I understand that I will be interviewed and that the interview will be audio recorded

- The researcher has answered all my questions and has explained possible risks that may arise as a result of the interview and how these risks will be managed.

- I understand that I do not have to answer specific questions if do not want to and may withdraw from participating in the project at any time without prejudice.

- I understand that all information provided by me is treated as confidential and will not be released by the researcher to a third party unless required to do so by law.

- I agree that any research data gathered for the study may be published provided my name or other identifying information is not disclosed.

- I understand that research data gathered may be used for future research but my name and other identifying information will be removed.

Name of participant			
Signature of participant		Date	

- I confirm that I have provided the Information Sheet concerning this research project to the above participant, explained what participating involves and have answered all questions asked of me.

Signature of Researcher		Date	

Consent Form template June 2015

Appendix 3: Participant Information Sheet

THE UNIVERSITY OF
NOTRE DAME
AUSTRALIA

PARTICIPANT INFORMATION SHEET

Workforce Nationalisation in Papua New Guinea: Security and Logistics in Resource Organisations

Dear Participant

You are invited to participate in the research project described below.

What is the project about?

The aim in the research is to examine how resource companies operating in Papua New Guinea manage and develop their national logistic and security workforce and how nationalisation or workforce indigenisation occurs in this context. The intention is to contribute original knowledge to the field of oil and gas industry security and logistics nationalisation theory by identifying the reasons that a reliance on expatriate staff is prevalent in the industry and exploring and documenting the most effective methods for early nationalisation of workforces. Moreover, by developing a theoretical roadmap relative to achievement of early indigenisation in the field, the industry will be empowered to transform current practices and theory.

Who is undertaking the project?

This project is being conducted by Warren Doudle and will form the basis for the degree of PhD at The

University of Notre Dame Australia, under the supervision of Professor Leland Entrekin and Professor Peter

Gall.

What will I be asked to do?

If you consent to take part in this research study, it is important that you understand the purpose of the study and the procedures you will be asked to undergo. Please make sure that you ask any questions you may have, and that all your questions have been answered to your satisfaction before you agree to participate.

You may be asked to complete the following:

- A face-to-face semi structured interview consisting of ten questions of an hour in duration, this will be audio recorded for transcription later.
- Sign a consent form.
- The interview will be conducted at a time and place that is agreeable to yourself.

Are there any risks associated with participating in this project?

There is no foreseeable risk in you participating in this research project

Appendix 4: Interview Question Template

Semi-structured Interview Template - Questions

1. Based on your observations, do you think oil and gas organisations build dependence on expatriate staff, if so why?

2. Is it possible to develop an indigenous workforce in the early phase of the project so they are better skilled for start up; what has led you to have that opinion?

3. If indigenization/nationalisation were to occur earlier, what do you think the cost difference would be between expatriates and nationals?

4. What are the key factors that limit the nationalisation of security and logistical workforces?

5. What factors would enable the early nationalisation of staff?

6. What factors have enabled you to be successful in the past?

7. In your experience, what key activities promote a successful mentoring program in a resource company operating in Papua New Guinea?

8. Do you have any other information or opinions regarding the mentoring or nationalisation in PNG that's not already been discussed?

Appendix 5: Candidacy Confirmation

9 June 2017

Warren Doudle
145B Duffy Road
CARINE WA 6020

Dear Warren,

On behalf of the School of Business, I write to advise you of approval of your research proposal and full candidacy in your Doctoral studies.

The Research Office congratulates you on this achievement and wishes you well for your research program. Please do not hesitate to contact the Research Office or your Supervisor if you have any questions about your candidacy.

Yours sincerely,

Professor Greg Blatch
Pro Vice Chancellor – Research

cc: *Mr Chris Mawson, Dean, School of Business*
        Dr Leland Entrekin, Supervisor
        Dr Peter Gall, Co-Supervisor
        Dr Kate Howell, Higher Degree by Research Education Coordinator

Appendix 6: Interview Summary

	Question 1—Key Points and Themes Based on your observations, do you think resource organisations build dependence on expatriate staff? If so, why?
A	Yes • Technical expertise of expatriates • Issues with education and training in the national workforce
B	Yes • Technical expertise of expatriates • Use of international assignments to give expatriate employees experience
C	Yes • Technical expertise of expatriates • Issues with education and training in the national workforce
D	Yes • Limited pool of educated, experienced nationals • Poor recruitment structure that limits placing experienced nationals • Technical expertise of expatriates • Issues with education and training in the national workforce • Ability to hire and fire expatriates quickly (short-term contracts, no local labour law issues)
E	Yes • Technical expertise of expatriates (immediate capability, no training needed) • Issues with education and training in the national workforce • Faster with expatriates
F	Yes • Poor recruitment structure that limits placing experienced nationals • Technical expertise of expatriates
G	Yes • Limited pool of educated, experienced nationals • Technical expertise of expatriates (immediate capability, no training needed)
H	Yes • Limited pool of educated, experienced nationals • Expatriates looking out for own positions (looking out for each other)
I	Yes • Limited pool of educated, experienced nationals • Expatriates empire building
J	Yes • Limited pool of educated, experienced nationals • Expatriates easier to use

	Question 2—Key Points and Themes
	Is it possible to develop an indigenous workforce in the early phase of the project, so they are better skilled for start-up? What has led you to have that opinion?
A	Potentially • Not witnessed it being successful in two projects (early phase) • Reliance on expatriates and OCNs, even with larger national numbers
B	Yes • Selection of the right managers (expatriates) to lead is crucial • Cultural understanding by management • Communication and language (expatriate manager to national) • Long process, best started early (nationalisation) • Mentoring important • Skills development
C	Potentially, but difficult • Limited pool of educated, experienced nationals • Issues with education and training in the national workforce • Technical proficiency needed, takes time to develop • Commitment from the company needs to be significant
D	Yes • Realistic in setting goals and roles at which they start • Training that is structured and progressive, such as AQSF Level 2 or 3 initially • Merit-based development of staff into Certificate IV and diploma as they progress • The right staff to lead and train them
E	Yes, but not witnessed it in three projects • Need the right managers with an understanding of PNG and its culture • Shortage of skilled nationals to assist • Cultural shortcomings in big companies affected nationalisation early • Need solid commitment from company (not ad hoc or lip-service nationalisation strategies) • Cultural understanding of PNG
F	Possible • Need the right manager with an understanding of PNG • Need to have the time and resources to achieve objectives • HR need the right national staff to develop and the right management of these staff
G	Yes • Need to develop staff out of school before they start on the project • Long-term view of staff development • Apprenticeships or traineeships for staff (mix of practical and theory-based training)
H	Yes • Strongly believe
I	Yes
J	Yes

	Question 3—Key Points and Themes
	Question 3—Key Points and Themes If indigenisation/nationalisation were to occur earlier, what do you think the cost difference would be between expatriates and nationals?
A	• Cost saving potential early because of reduced expatriates, but cost increase later because of issues • Without skilled managers and technical experts to drive nationalisation, it would not save money longer term
B	• It would be a massive cost saving if you could increase the national workforce earlier • The money would need to be spent on training and development of national staff to be effective
C	• Nationalisation programs should be seen as longer term • If it occurs too early before everyone is ready, there will be issues
D	• Costs much less • Significant quality and project time issues if undertaken too early • Highly-skilled nationals are hard to find and expensive now
E	• Unknown
F	• Initial cost benefit to replacing expatriates early • Project time overruns because reduced capability is much higher • False economy, nationalising too early
G	• Would be a cost benefit, but in the longer term • Need to still take a longer-term approach to nationalisation • Dependent on getting the right people in early—managers and national staff
H	Yes • Companies often take short-term view only • Notion that if they upskill significantly, they will leave
I	Yes
J	Yes • Lower cost

	Question 4—Key Points and Themes
	Which are the key factors that limit the nationalisation of security and logistical workforces?
A	• Demographical issues • Cultural issues
B	• Experience of managers (cultural understanding, suitability to PNG) • Not having the right people in roles, both nationals and expatriates
C	• Culture • Timeframe
D	• Lack of experienced staff • Lack of formal qualifications, even in semi-skilled positions • Different starting standard than Western countries • Wantok issues • Cultural issues • Motivation and cultural expectations of national staff • Cultural alignment between company and local staff
E	• Skills, knowledge and experience of national staff • Motivation and cultural expectations of national staff • Cultural alignment between company and local staff • Wantok issues
F	• Wantok issues • Cultural issues • Motivation and cultural expectations of national staff • Cultural alignment between company and Melanesian culture • Family responsibilities affecting work (family is the priority for many national staff)
G	• Lack of training and development • Minimum wage mentality of companies dealing with security • Low motivation and engagement of workers
H	• Reluctance to over-invest in training and development staff • Timeframe
I	• Cultural issues • Reluctance to invest in staff • Fear of staff changing companies once trained
J	• Qualified national staff • Training capability of the organisation • Recruiting university graduates

		Question 5—Key Points and Themes
		Which factors would enable the early nationalisation of staff?
A		• Language and communications • Cultural understanding
B		• Mentoring • Language and communications • Cultural understanding • Training that needs to be nationally recognised and ongoing • Career progression and opportunities (through recognised training)
C		• Identifying key nationals early for supervisory or management positions • Sending national staff overseas to other projects for experience • Cultural alignment between the company and PNG • Company having a deep understanding of PNG culture • Training for staff—structured and ongoing
D		• Very good HR department is critical • PNG national content plan needs to be developed and in place before boots on ground • Commitment from senior management • Cultural alignment between the company and PNG • Identifying key nationals early for supervisory or management positions
E		• Commitment by government • Commitment by the company and management • Mentoring (as a credible program) • Community engagement
F		• Mentoring programs • Selection of the right staff (expatriate managers) • Selection of the right staff (national workers) • Management expertise in leadership, mentoring, PNG culture • Ownership of the process by management • Engagement with nationals • Critical managers lead by example, empathy and strong leadership
G		• Early start, out of school into programs • Apprenticeships or traineeships pre-company job • Longer-term industry focus, rather than immediate nationalisation focus • Professional development
H		• Improving compensation and longer-term staff benefits • Early start, out of school into programs • Apprenticeships or traineeships pre-company job • Professional development
I		• Improving compensation and longer-term staff benefits • Professional development • Graduate programs • Long-term view
J		• Mentoring programs, well structured • HR process quality of staff • Graduate programs

	Question 6—Key Points and Themes
	Which factors have enabled you to be successful in the past?
A	• Language and cultural understanding • Incremental responsibility to build capability • Enable staff to problem solve and make decisions independently • One-on-one approach with staff feedback • Mentoring
B	• Cultural knowledge • Language and communications • Mentoring • Building relationships with staff based on mutual respect • Military background and country experience
C	• Recruitment of the right people • Cultural understanding • Training ongoing and proportionate • Engagement with staff • Selection of the right expatriate staff to mentor • Long-term focus
D	• Cultural knowledge • Language and communications • Mentoring • Building relationships with staff based on mutual respect • Country experience • Training and development of staff
E	• Empowering the national staff • Cultural knowledge • Language and communications • Mentoring • Building relationships with staff based on mutual respect • Country experience • Training and development of staff
F	• Selection of staff • Training • Cultural understanding • Mentoring • Engagement of the national staff
G	• Cultural understanding • Mentoring • Engagement of the national staff
H	• Cultural understanding • Mentoring • Language skills • Effective communication
I	• Cultural understanding • Mentoring • Language skills
J	• Quality of staff • Cultural understanding • Mentoring • Good HR

		Question 7—Key Points and Themes
		In your experience, which key activities promote a successful mentoring program in a resource company operating in PNG?
A		• Empower them to make small mistakes and learn from them • Build trust in the team • Engagement with staff
B		• Understanding the culture and country • Understanding the complexity of the people and living conditions • A deep understanding of what affects the national staff allows a greater understanding of what motivates staff
C		• Engagement with staff • Training and selection of expatriates to mentor nationals is critical • Cultural understanding and experience for managers • Long-term focus
D		• Mentoring programs require full commitment by the company and management • Strong HR team to support • Ongoing commitment by managers to develop national staff • Documented, audited and supported programs • Identify strengths and weaknesses with staff and develop plans to close out • Written, agreed-on plans are most effective • Ongoing development and training opportunities for staff • Clearly defined HR policies for staff • Use of reward development opportunities for staff to receive training overseas • Graduate programs to assist promising staff, educational opportunity • Use of the Australian Qualifications Framework vocational courses in training • Ongoing progressive opportunities for staff in training and development
E		• Formalised mentoring programs • Flexibility around family commitments (comes back to cultural understanding) • Longer-term session planning (staff can see the potential opportunities)
F		• Selection process for managers needs to incorporate additional skills • Support for managers by specialists in mentoring, training and PNG • Training and support for the national staff • Ongoing support and guidance to keep them at standard • Lead by example—the national staff will look to the manager
G		• Selection of the expatriate manager is critical • Buy-in from all the stakeholders • Remuneration is sufficient
H		• Understanding the culture and country • Understanding the complexity of the people and living conditions • Not trying to enforce Western values on things
I		• Selection of staff • Cultural understanding
J		• Quality of mentors • Structured programs • Sufficient time allowed • Subject expert is often not an effective mentor

		Question 8—Key Points and Themes
		Do you have any other information or opinions regarding the mentoring or nationalisation in PNG that has not already been discussed?
A		• Culture • Mentoring • Selection of expatriate managers to mentor staff • Environmentally aware
B		• Leadership of the process (the company needs to drive nationalisation) • Cultural understanding from management • Most managers in PNG are not suitable mentors (lack skills or knowledge in the area) • Reluctance to nationalise or mentor by many managers (once complete, they are out of a job) • Lack or teaching and training skills with many expatriate managers (experts in their technical area only) • Lack of cultural buy-in or knowledge by expatriates • Ex-military expatriates possess the mentoring skills and cultural awareness because this is a taught skill in the army and used in skill transfer predominantly • Ex-army/police expatriates are more dynamic and can adapt to local cultures more readily than can traditional resource company staff
C		• Setting realistic expectations • Be community focused, not just focused on internal company goals • Assist in nation building
D		• Developing the new younger, well-educated class • Balancing the educated from the city with the support and development of locally employed (indigenous) regional staff from project area
E		• Lack of government support financially—onus falls on the company in regional areas
F		• Mentoring has to be consistent • Training has to be supported and ongoing • Ongoing support for national staff and positive performance management • Achievable goals for staff
G		• Understanding PNG culture • Wantok influence on company culture • Fair and transparent dealing with staff
H		• Nothing additional
I		• No
J		• Cultural understanding • Suitability of mentors • Mentor skillsets • Importance of mentors' soft skills • Most mentors are ex-military

Appendix 7: Interview Transcripts

Interview A

Question 1

Interviewee: I guess with Papua New Guinea in terms of dependence on expatriates staff, I think that, oh yeah, more so place like Papua New Guinea. I mean, if you look oil and gas industry there and the mining industry, it's all been predominantly created and start-up purely as a result of expatriates starting them up. I know that Ok Tedi [Mining] now is looking at 80%, 20% national staff, but now that Ok Tedi has been taken over by the PNG Government, they have got significant problems up there, significant problems. When you say building dependence on expatriate staff, I think there are two areas—one is the fact that the expatriate staff has the technical skills in those technical management positions and I guess the other dependence is that the education standards of the national staff that we are looking at now are quite questionable. You've got a number of national technical specialists entering the oil and gas industry who have never studied. They're all forged degrees and the advanced diplomas etc., etc. So definitely I think that the oil and gas dependence on next expatriates staff is there. Yeah, without that, I don't think that those oil and gas companies can be profitable enough to function.

Question 2

Interviewee: I mean you look at Oil Search also—I've spent a number of years work before Oil Search. Peter Botten is a managing director. He had a policy where he wanted to push Oil Search to an 80:20 ratio now. He's been pushing that sice Oil Search purchased the company from Chevron 1996. I left last year and it's still at least 60:40, 60 expatriates, 40 nationals. I now work for ExxonMobil. ExxonMobil now, once again, I don't know the true figures and what the percentage is, but when you have a look at that management level or senior supervisor level, there will expatriates and I also rely a lot on OCNs, which are Filipinos as well.

Question 3

Interviewee: At the moment, I'm involved in a project which is an expansion project for the LNG plant. So we look at and it's two of three projects. So we're actually doing this right now. So we're bringing in unskilled and skilled nationals onto the project in order to skill them up if we need to for the next three years. I think that, yes, it's possible to do that, but the biggest obstacle is the demographical issues in Papua New Guinea. So, for example, where I am at the moment in one particular area at the Angora project, the highest gas plant is less than 16 kilometres away and there are clear delineate boundaries of tribal boundaries where we could have the best dozer operator. But because he's not from that particular area, we can't use it. So, yep, we start the project, but in Papua New Guinea, you are governed by the clan issues and the boundaries of each clan and having the appropriate demographics in that particular area. So, for example, when we move further down, for example, the pipeline, then we get the demographical area changes and we have to release some very good operators—it's a very good skilled national staff—and take on unsecured staff because they're not from that area.

Question 4

Interviewee: I think, at the start-up, it would be significant and, maybe on the surface, the cutting would probably see the profit, I guess, of paying less for national staff, but after being up there for many, many years and you've been there self, of course, that cost really is not relative to the cost of having a large national for indigenous skilled, semi-skilled, unskilled group working on the project because, as we know, sort of, they can turn up to work, they have issues is the significant safety issues, security issue. So, in my opinion, I don't think … yes, initially, the oil gas covers would say that, yes, sort of, the profit margins would be a lot higher, but, I think, in the long term, it would be detrimental.

Question 5

Interviewee: Most definitely the demographical issue's up there. Right across Papua Guinea, whether it's mining oil and gas, whether it's at Sun Hollins, whether it's overly here on, and, in a classic example—the second-largest copper mine of world and it came to an abrupt halt. Yes, I mean there was an issue there with BCL [Bougainville Copper

Limited] and the environmental issues, but how the issue was internal plans fighting. Even where I am right now in Angourie, this project that is the project schedule was 18 months. It's already gone out to two and a half year and the only issues we're having right now is the internal fighting between clans within a small area, and I think that's one of the key factors can limit the nationalisation.

Question 6

Interviewee: Well, first of all, the language issue. I mean, PNG is easy, I mean, because the PNG languages is easy to learn, I think that where we all being successful is that I've learnt the language and I speak it relatively fluid. It's opens up massive doors, huge doors. And I think that number the expatriate staff there, that's where they struggled. And they could be in the country, they could be a long-term expat, but if I can't speak the language, the nationals know that. And the respect that you get for speaking the language far outweighs, in my opinion, any amount of time that you continue to go back to PNG. But what I will say is that now I'm going to live there for a number of years—for four or three years. Now I've took my wife, my daughter there, we lived there for the four/three years. I was attached to the PNGDF and I've been working on and off there for past 10 years. When I think I understand them and there's a point where we're about, 'yep, I've got it', they'll turn around and do something that will completely fucking flabbergast me and I walk away, it's like the head on. I've got no idea. And I mean, what it's like, they're PNG, that'd be such a complex culture that in any expatriate or non-Papua New Guinea thinks that he understands Papua New Guinea, he has got rocks in his head, completely. That said, definitely the language—that's the key, I think, to being successful there.

Question 7

Interviewee: Yeah, I figured out money is that, let them make mistakes and give them the responsibility to a point where they can make a mistake which is not detrimental to either production or safety. A lot of senior managers here, a lot of expats refrain from allowing the national staff to either make a decision or to take control of situation because they're too scared that they're going to stuff it up or will not do it to the expat level. And the nationals know that. The PNG nationals know that the reason why he's not letting me do that is because he thinks I'm going to fuck it up. And many times, we

all have a PNG staff, I've turned around, I've told to do something, they'll look at me with surprise and going, 'you actually want me to do that?'. And that's open up a lot of doors the world, so giving them the latitude to make it sort of makes an informed decision without being guided by or told how to do quite expected. Let them make a mistake that's not going to affect productivity or safety. I mean that's to speak a language. You can mentor anyone.

Question 8

Interviewee: And I guess one thing that I'm noticing more in Papua New Guinea is that the national people, I guess, if you were on a clock back 10 years ago, they'll sell the grandmother for the money, and, but now, there are more so environmentally cautious of what they expect ever sort of what these large companies are doing. Ten years ago, I mean, they'll claim compensation for trees to be cut down, not because they were concerned about the trees—it was more about the money. Yes, they still do that, but I'm starting to see an honest concern by the locals. The local landowners on environmental issues, I mean, for example, we're cutting the right away for a pipeline and what we're doing now is we are taking more of the material, 'the dirt out', because it's good fill and landowner was concerned and actually didn't want any more compensation for it, but he was concerned by the amount of dirt we'll be removing because of the impact that would have on the water system further downstream. This is a land owner who's never been to high school and so that really surprised me. So now becoming quite well educated, as well I'm aware of that the oil and gas companies, I mean, they don't have a very good environmental record or reputation and not stopping if they have to you.

Interview B

Question 1

Interviewee: They do build a dependence on expatriate staffs. Obviously, right at the early stages, you need the expertise and the like to get through the project and then to do the mentorship and the consideration, but if they plays that out too quickly, you would find generally then there would be no rotations, so I will prefer other projects which then [unclear 00:50] the case, staff, experience within other projects in other countries, so they build that dependency to get people, their own people, their experience and expertise, when they go around and move them through their ranks and for promotions,

for PRCs, for engineers and like. Yeah, basically, pretty much, yes, I do, and it's just for their experience within their projects around the world as well.

Question 2

Interviewee: Yes, it is. What it does is it comes to indicate selection, knowing the people and their skillsets and then working and fostering that environment. You need the right people to do that because, a lot of the times, they bring in supervisors, managers that don't have an understanding of the going-on within the country. They don't have the skillset or the language sets to bridge the barriers between that, and then it's just real considered an expense to go through and work with the skillset of the people to bring them along, and it is—it's a long journey. It's not something that can be done overnight and it needs to be done right at the front end of the project and then having the staff that are mentoring them and working with them, knowing what the final outcome is required.

Question 3

Yes, it's a massive difference. It would be a huge difference in cost just on the wide structure. In particular, within PNG, the difference are huge and the tax implications and you are looking at the travel for people, multitude of sorts where people come from United States, Australia, South Africa, so it would significantly reduce the cost, even to the point where the cost savings you could transfer it across to skill training or development.

Question 4

A lot of it is the experiences of the guys, but, at the end of the day, it's one thing to sit down and do the right selection and then work with the guys and have an understanding to work with them, and then it's also the nationally recognised competencies to get certificates. You would have to then go back out to, say, the Australian standard for security or logistics, and getting those qualifications, and then I think the mentoring of those guys as well. I think, if you don't have the right people, it's going to be struggle to get down to … let's say you need two guys, if your guys to have the in-country experience, some degree of language, communication, them being able to build the flow, rapport of the guys, so you would then generally be looking at your military, ex-

policing-type mentors, supervisors within those organisations or within those specific groups. Security, logistics is a little bit more dynamic.

Question 5

I think good mentorship from the guys, them having the language, building the rapport, the understanding of the guys, I think, and then having the competencies that guys can then cross off and do … once again, it's going at and finding out nationally recognised competency for security and also the logistics to then bring them along. Some of the … one of the main issues is probably you got young kids doing logistics work and they've done multitudes of the jobs, but they really don't have the qualification following through at the end of their cycle. So, even if they should terminate at some point, they then have no physical qualification.

Question 6

I think just I drew a lot out of my military experience—knowing the country, the will to learn the language and understand the people and their culture, and to persist and know what the physical outcome needed to be for the guys to grow or for the team members to grow.

Question 7

The key things to promote a successful mentoring program is being able to understand the country and the culture, the people, the diversity of the people, their living standards and their conditions. Until you understand that and their challenges, you won't bridge that gap between the individuals, and then it's just knowing how to work and the different mind sets between their cultures and who you are dealing with.

Question 8

At the end of the day it's all down to, as we discussed, the leadership teams, the managers and the supervisor's understanding, and if they don't do that … a very bad manager or a very mediocre manager will set, will do rather whole process for a group or an organisational department, so we will struggle to get anywhere. You will find that a lot of the guys that have come in to do the mentorship have a reluctance to be mentors purely because they see that as going themselves out of the jobs periodically or at the

end of the day, and then the guys don't have the skill to teach or train because they don't have the understanding. Well, even if they are on the same level, they are not geared around … they know their trade, they know their craft, but they are not an instructor or a trainer *per se*. So then when you throw this dynamics from a different culture or Papua New Guinean culture, they don't understand it, and they don't have or don't want or have the will to grasp that culture and their understanding of training, so you will get guys that will do stupid things that will derail the whole process and put it back, and then it's a decision that someone needs to make on whether they are going to remove that individual, and then they need to take that seriously because it's a generally to be an expat, and then they need to go and find the individual that can pick that up and then plug them back in, and that's very limiting and challenging. And then you then have to rebuild that rapport with the whole national team to then try and backtrack and recover that training, and then at that point they are going to be guarded anyhow, so the next person is going to come in, there is a whole lot of groundwork that's going to derail the whole process that he's got to go through and fix. So it's very important to get your baseline right at the beginning, and PNG people, the people having an understanding of what they need to achieve and what's the end state is going to be.

That's very much so and they are persisted and proceeded and they have a … and it's generally growing within the military organisation on working with people and getting the best out of people and then having an understanding of the conditions and being sympathetic to what the core group is, and they are very diverse in their approach. So they will look at someone and go, 'well, they've got this type of staff', so they change their style to an individual, then bring them up to where they need to be, whereas … like I said, at the beginning, the guys that generally come in are really good at their craft, but they are not ones and they will struggle to train and teach an expat and, once you throw them into PNG, then they are struggling and they are beyond that foot, whereas it's well known that the ex-military-style guys will come in and, well, the ex-police are quite dynamic and they will work with people that are whole lot closer.

Interview C

Question 1

Within the oil and gas industry, external to Western countries, I believe there is a dependency built on expats, particularly through the start-up to project phase, and even into operations. I think this comes from a combination of issues, specifically within the PNG context. The low level of education and governance within PNG society means that, although you would have the number of people that you require to undertake any operation, it would take a lot of work by the company to build them up to the correct level. The dependency on expats is two-fold. It's, one, to start-up and probably, two, to educate the workforce.

Question 2

I suppose, again, that links into the answer to the first question. There's always going to be a number of willing (and probably intellectually capable) local nationals who could undertake early phase project start-up, but, having said that, all oil and particularly gas programs or projects are very heavily technologically based. If you don't have that base level of technological understanding—and I'm talking base-level computer skills, you know, even use of mobile phones, that sort of stuff—within the local community, indigenous to the area you're starting up in, it will be very difficult to train a start-up workforce for early stage and it would take a significant commitment from the company to do that.

Question 3

In the experience of the project that I was on in Papua New Guinea, the attempt to do that also caused a number of issues, whereby we had a program where we tried to get people in, but it was always going to be a discriminatory program as all HR activities are—there was only 1,000 positions and 5,000 applied. Once those 1,000 positions are filled, the 4,000 who didn't get them are going to be significantly upset. This program of early start-up, early education can also bring problems into the project in the early stages.

Question 4

The key factors in the PNG sense again is around culture and tribalism, so that would be the main one that I would say as a factor that limits security and logistics workforces. You'd need to fully understand the cultural aspects of all areas in which you work, and the fact that, by nationalising security and logistics activities, you could be building in a bias towards a certain tribe or a certain language group, a certain part of the country, a certain educated elite. So you'll build the bias in by nationalising. Nationalisation is something that would be a long-term goal—when I say long term, I mean 10 to 15 years, maybe longer. Ultimately, you need to gain the impartiality and the trust, particularly in the security field. We also need to have them understand the rule of law—just because they live in the country doesn't mean they understand the rule of law of the country. Logistics—being a big contract and a key component of logistics in Papua New Guinea is security, you could build in your security problems, which would be certain groups allowing certain parts of the country into logistics supply chain, to remove items that they require. Nationalisation at an early stage is very difficult. In fact, it would be impossible.

Question 5

Early nationalisation of staff could be theoretically achieved by identifying key performers early and getting them involved in other projects that the company has involved globally. Again, I'm talking for larger companies that have global projects, so potentially moving them to other roles within the company in a third country, whereby they would get to understand the company, get a little bit of loyalty towards the company as well. That would also have to be tempered with the fact that the company would need to understand the culture and the tribal interactions between those people that they are bringing on board. Once they go back, have no doubt that they would be tempted, if not likely, to drift back into the same tribal behaviour that they were removed from for their one or two years of training. Training in the country is always a preference, but it's also one of the things that maintains that level of culture, whereby they will act as they have always acted, and, regardless of the training, they will show loyalty, particularly from a patronage level to the senior people within their tribe, as opposed to the senior people within the country.

Question 6

In nationalisation, it will always come down to HR and recruitment of the right people. The recruitment of the right people is critical in any nationalisation program. The company undertaking it needs to get a full understanding of the culture and the diversity within the country. Again, in a PNG sense, just because you have a PNG national working doesn't mean they understand the culture of the area they're working in. A Mimosa or a Ora man working in the Highlands is actually seen as a foreign worker, so when they talk about foreign workers, they're not talking about someone who comes from another country necessarily, they would be talking about someone who doesn't come from their region. So, the success factors will always be choosing the right candidate—a candidate who has the ability to be impartial, who doesn't see this as a step on their journey towards being a senior patron within their tribe or cultural area, and having them understand that they are part of the company. That links back to my last answer—removing them from the country for training, I think, would be one of the keys, as well.

Question 7

The right level of engagement. When we are talking about mentoring, we are probably talking again about an expat mentoring program. So that links back to having the people with the right cultural experience, knowledge, not necessarily qualifications—just because you're a qualified anthropologist doesn't mean you're going to understand how people interact in Papua New Guinea. The knowledge and experience of Papua New Guinea culture, gained over probably a number of different job groups … The fact that you've worked not only in the oil and gas industry, but if you'd worked, say, in logistics or security or government or other programs having a mentor program run by and organised by people who understand the culture, and who have worked in Papua New Guinea, with Papua New Guineans, in parts [of] the country over a period of time. So, again, it's a long term prospect—it's not something that you would be able to say, 'a person has done a year or two there, maybe they understand the culture'. They would have had to have done that over a period of time.

Question 8

I suppose the biggest one for me would be expectation setting for the nationalised workforce. It's an anecdote, but it did occur to me. In the initial phases of the project that I was involved in with an oil and gas company, we would constantly be having discussions with local nationals regarding the company bringing in foreign workers and not providing us with the jobs required. The expectation of the people within Papua New Guinea was that they were going to be getting all the jobs, running everything—all the money would be coming to them. I know during a business deal setting, in a business development sense, you've got to give the impression that the local populace is going to get something out of it; however, having said that, when you have an uneducated population, the sort of jobs they are going to get will not be production engineers. They will not be senior advisors to the deputy chairman, they will be the services jobs. The jobs that support the industry or support the business endeavour itself. So I think probably for me, in the early stages, expectation setting for the populous.

Another one that's always difficult is what other soft styles of hearts and minds you can bring to the country. If you are going to bring in education programs, they need to be global or national, they need to be for everyone—hospitals, power, all those very low-level things in the West we think is just state of play. If you happened to bring in a good long-term program, whereby the people of the area and the region were getting education, that would assist, definitely. Improvements in infrastructure, improvements in just basic lifestyle—health clinics, all of that sort of stuff. Again, it's a long-term program, you can't just put it in in the first two years, fund it up until you get FID and then move on. You need to set that expectation early and maintain it. It is, to a degree, a little bit of nation building, which is not an oil and gas company's core focus, but I think it would assist in nationalisation of a workforce and maintenance of security from the beginning. If they have a stake in what that company is doing, they're going to be happy to let that company continue to do what they are doing to make money. That's all.

Interview D

Question 1

Yes, I do, particularly in a third-world country, my experience is that there is limited pool of national staff with the experience and the education that's required, coupled with, from what I can see, a very poor recruitment structure, so the recruitment companies that I dealt with in PNG have never given me good service or good-quality candidates. So to identify the local national staff is very difficult. Also, typically, the lead time can be a challenge for companies unless they do have some sort of plan from very early days. That's very difficult to employ staff, even if they come forward and experienced, and to teach them the company way and the company safety and security expectations. The other issue I found is it's easy to get an expat on a contract because you can hire and fire as quick as you like, they get come back to you. But companies like [X], if you take a staff member, local, national, you have got to get the Department of Labour and HR involved if you ever need to release them. It's quite difficult, so internally, for the company, it can be easier to get an expat on staff, use their expertise and get rid of them as required. And I guess the other thing that I noted was, if you look at it in the general industry in countries like PNG, significant number of expatriates, in general industry as well, which is difficult to employ experienced like, or even to mentor them into the most senior position.

Question 2

I think it is, but you need to pick the level that you are going to skill them to and on the roles they are going to undertake if it's a specialist position. Obviously you are going to struggle unless you have got candidates that have significant experience in that area. I think that, in general workforce, as in skills labour, even supervisor roles, it's not difficult to skill local people and get them up to a level where they can operate. My experience has been, we, in my company actually, brought in a trainer from Australia from a TAFE colleges or of a similar standard of educational providers and ran Certificate 3, 4 and diploma courses, and the development courses for local staff that we have employed, and used as a reward-based system for those who were good workers and also gave them a qualification. We did see significant results in productivity, specifically around logistics operators, and that was in the warehousing. The guys really

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reacted well and seemed to get a better grasp of things too. I guess engaged with SAP, which was the system we were using at the time that, I guess, had grasp of what's high level store have operated. We had much better productivity on materials handling equipment and much better results for the fuel operators who basically needed that specialist training to understand the risks and hassles associated with the bulk flow storage transport and distribution.

Question 3

I think there would be a significant cost differential, and that nationals would cost significantly less, but I think it will be very difficult to quantify unless you got a specific time or project. There are some inference in PNG local national staff, who are on significantly higher salaries than the rest of the workforce, almost approaching those of expats, and one of the reasons for that is some of those people and they are getting housing as well, and that's one of the biggest expenses in that country. And it also obviously depends on how much project work is on in the region of the time, so that's kind of impacted directly on your expat rates. So, for instance, today, the rates are probably two-thirds what they were six years ago, which means you can get an expat for probably $150K salary with housing, etc.

Question 4

Yep, so, I think there's a number of factors. One is lack of experienced local staff, experienced qualified local staff, so you might get someone who says he is a plumber, but he has no formal qualifications, but he has worked as a plumber all his life. You might get someone who can operate a 35-ton forklift, but he doesn't have a forklift on his license, and sometimes it's difficult to get those people qualified. I think that the general depth of work experience is not in line with what you find in more Western countries and, in same, it's the work ethic and loyalty. Because the rates are not significantly high for the nationals, you can get the issue of, 'look, I am just going to walk away and go back to the village', and they can, if it gets too hard that can, morale tends to drop significantly. There is also the local, I guess, country involvement sort of things, so if you are living in villages, the family obligations and extended families and clan issues, you can have staff that are like for, because of family obligations with

deaths in the family, extended family or marriages or any number of different cultural reasons, and be absent for weeks a year.

Question 5

I think what we need internally is an excellent HR department, you need to have developed a very comprehensive and robust national content plan, so this needs to be identified well before any boots hit the ground, and commitment from senior management needs to be made, then to be managed and show that it's rolled out. So you need to get the people in early and you need to get the plan in place and the people starting coming early to just understand the culture of the company. These, typically, the nationals in PNG are very, I guess, immature compared to Western cultures, like in the subject pretty jealousy and all sorts of office politics. So you need to then identify key positions in the national workforce and make sure that you put people in those key positions that will be able to drive the company culture and the management of people underneath them and keep them working as a team and, I guess, keep that culture issues away from the productivity of the workforce.

Question 6

Interviewee: It's tough one because I have had some success and some failures where I thought I was successful; however, I found that learning a local language as much as you can has been a real boon for me, particularly in PNG. It allowed me to build personal relationships with the national workers. It sometimes can become an 'us and them' situation in countries, particularly with a language barrier, so but I think that having some empathy to also workers, but really trying to develop them and proved to them that you are trying to upskill them and give them ongoing qualifications, etc. to move forward once the project is finished. This is typically a major issue coming in for project, particularly in third-world countries, the people are not used to the concept of working, saving money, they can have lines outstanding in the project, finishes and have no viable time, so it's not just education around the skills that they need to able to fulfil the job. You need to help them with life skills and we did this recently as well, we had finance and banking guys come and run through with the set ups, financial planning. Some of them aren't earning very much, but they don't have any concept of how to

handle money or manage money, so you need sometimes to look outside the workplace as well and help them manage that situation.

Question 7

There's couple of things and this is really labour intensive and you really need to, if you are going to do, what I am about to say, you need to do it to the n-th degree and do it properly, and that's to have a dedicated HR training and mentoring program and a consistent meaningful personal development system. So once most companies have all that stuff, they are not really going to use it, so, if you do a PDA, personal development plan, it's normally tick the box, tick the box, it's all electronic. You need to read it to the local nationals, you need to be working with them always, weekly, to identify what their strengths and weaknesses and help mentor them into the roles, but you want to help mentoring to be successful on the roles. You need to consistently document it and, again, I am told this specifically by PNG nationals, but, like, for me, the constant reminders. When something is through to HR, then you need to go through the HR process correctly and in detail. That means writing a letter and having the letter given to the person who is being stood down, and then the person having a meeting with the HR representative, someone as a support person or supervisor, etc., that needs to happen. If it needs to have the Department of Labour, that needs to happen and then you need to make sure that the HR policies of the company and the employee's terms and conditions are clearly documented and that the training sessions you have that that everyone can understand it. We ran training sessions on equal opportunity and workplace bullying, and it caused a lots of complaints to HR with people saying that they should have been promoted somewhere, and they thought they have been bullied. And it was very difficult to get them to understand the content of what equal opportunities means and what bullying was—your boss gets to tell you what to do because that's his job. So we needed to really get that they understand and work out a way to roll all this stuff out and make sure it is constantly monitored and updated. As the supervisors and the managers, you need to make sure your educational strengths and your exposure to Western working cultures is, I guess, elevated, so, I mean, if you can send people to say Australia or another developed nation for a period of time to work within a workforce, say, that sort of experience for someone who has come from a village and is used to that culture. The ultimate activity that you can use would have to be the graduate program, that sees them taken and, get them through universities, but obviously it's going to be a

long-term, a long-term program, so getting that in place in a project environment, it's difficult. We found that the Australian Cert. III and Cert. IV-associated level of education was something that could be taught readily, practically and that they could grasp quite quickly to almost independently of what level of formal education they have had, and that really gave them some direction.

Question 8

I think, specifically at PNG, that's very interesting stage that country's development. There are significantly or significant number of well-educated, well-experienced PNG nationals now that tend to get sucked up in the vortex, so, I guess, more see in management and the guys at that supervisor level or line manager level can tell the guys are all, probably, learn on the job, rather than them being educated overseas and working overseas, and I guess it's interesting to see that and to see the younger generation that are very Westernised and, my opinion is, as those people come through, you will see that movement mature—the workforce that is used to living independent from that village situation. The challenge is going to be when you are working on a project, it's typically remote, and you are going to try and to drag as much local labour in as you can for the lower-end jobs, and if you are bringing in PNG nationals from other areas, it can create jealousy within the local workforce because their opinion is that they are just as good as the guys from Port Moresby, etc. You then have that internal position which makes the more senior guys further, they are mostly engaged to supervised, but it's a talent thing and that will challenge that talent.

Interview E

Question 1

Okay, yeah, I think from my experience, basically, with them with a [X] company that I've worked for and also with the construction company that I've worked for together, look, yes, they build dependence on expat staff because there is a core experience and knowledge that's there, and the reason being that is that PNG nationals as such haven't been trained to that same accord or what to have an experience that required to some of these particular big jobs. And so, yes, there is a dependence to look at it how you manage expatriate staff in the sense of the next stage of mentoring and developing is something that is another bit, another element altogether, but that's there they need to—

it's cost, it's time, it's you know they're sending there, god, I forgot the name of the—stakeholders and so on. And so don't get in there, do it quickly as possible, the other aspects there another element there at that's another stage.

Question 2

Okay. That's really interesting because the two oil companies [02:09 inaudible] also Exxon, two different elements here. One [02:18 inaudible] it's an old company, it's been there for a long time, it's come through independence and country all the localisation processes, so it's got a very different perspective of how it developed its national staff. Exxon is a different story because it was basically, it was there in the early stages, but clearly as an exploration, as a presence, and or some of the guys and assistants of all such and such, but when it started to do the energy project big time, I think that again it was given to timing and also basically when the money was available. It was really, I do remember when I get back 2007, when we started looking strongly at the LNG project and a lot of the expatriate OSL staff, primarily I would say good 90% of the staff were being seconded to Exxon. Those who were said they were selected that made up the LNG component 90% of those would have been expatriate and don't ignore the planning doing all the crossings and so on. And again we've got to remember too, with Exxon, when it came to Exxon itself, the big guys and so on, a lot of they had no understanding of the nature of PNG itself and what its capabilities were because they were just not exposed to it. I think when it comes to the developing indigenous workforce early in the early days, yes, they had some elements that were there, but they reliance on expected what's the key to getting and moving, and I think that if they had a, yes, if they had time to do a lot more, I think they could have been far more effective, but I think that it was really basically got all the planning done, let's get moving, let's start this issue and will basically train on job. And also, again, I think, as I speak to you last week, there are be key a number of key nationals who were doing very well that we identified that would become part of the employment structure of Exxon and so on, and they would be at that core that would move internationally, but that was very few number.

Question 3

Yeah, I was looking at that question earlier this morning and I was just thinking that my first response would have been, yeah, I'd like to see the merits of there should be [05:40 inaudible] should be done on the mirror to search [05:44 inaudible] said and they say, yes, if you're doing the job, doesn't matter who you are, what you are, you should get paid that element, but then trying it into getting back into perspective when it comes to PNG itself economies of scale, you've got issues, but you would end up with if you were to pay expat, let's say, the salary to a person who's doing the same job, you would create a very strong elite class, which is not necessarily what you're looking for. There are decisions that would be made by government as such, but comes back to that earlier question—the second question was that if you identified key personnel who are going to be permanent and true that, yes, they should be basically developed on their merits, their experiences and so on, and they would by over time they should be on parity with those expected and have those skills and so on, but basically, I would say that, yes, there would be [06:57 inaudible] and as the case is that a lot of the PNG nationals who paid by Exxon and even our cell was certainly a far better position than their PNG natural counterparts and other industries.

Question 4

Oh wow, key factors! Again, comes back to skill, knowledge, experience and, again, look, I can see and I saw what happen also, yeah, it was the element, still strong element of Exxon, but through our cell elements, I could see that you can get, I mean, they have strong security elements within the OSL setup and so on, but again there was only a small number of people who were basically capable, having those by government and many places you would find, for example, that if there was a job flying flight as such as bank to bank, he had a PNG national the bank the bank would be and in many ways that would then two things, one is that where a PNG national is developing and working with the building needs is knowledge base and so on, and I think that's where it works other order to this too, is that when it comes to dealing with PNG nationals, the elements of family, wantok system, all those elements come into very strong claim. And particularly if you are employing people within the project areas themselves, you have to be a very strong bidding arrangement then. I saw from my own experience many, many times, we would get a security person in onto the rigs and so on, and we would

and now major issues would be that we would get people outside the project area to be the head security elements to it because what would normally happen and it did happen, but you got the local person within the project area, he was compromising, he could be compromised and in many cases were compromised, and it just made it really difficult and it was a cost—a lot of money was being lost because of those elements, but doing that also your claim then he got the issues of, you know, 'are you favouring the outside provinces?' and so on. And again it's difficult to say how best to do this because it's not just—it's the sections of certain people within the project area that in particular jobs that you need to, you know, have. We would find, for example, if we're having people on the roof during the normal chances the rig we personnel and so on, yes, the job would be that we would look within the project area first and then with little gap site the project area ever stopped there, they would be looking internationally.

Question 5

Yeah, perfect world would be stock commitments both by government and by companies to develop, maintain and manage a proper mentoring program, one of succession planning, but that requires an honesty I'd say within the elements of those, I mean, many cases and, I'm not, it can be easily added. Yes, mentoring can be regarded in some cases as tokenism—you're doing it purely because you had to do something, whether it's meaningful or not is another element to it. Look, certainly in the community of, community engagement, the strong PNG national elements that are very touchy, but guys who were head of those elements, they were there and, in some cases, you know damn well that there's corruption going on. In other cases, you've got other guys who were very good, they did their jobs, they're all good, but also were ostracised in many ways by other nationals because of the strong position of being, what's the word, not that they were practically unapproachable to sort of.

Question 6

Good report, now in the languages. Look, I was living since 1964 and I think that really being, being professional, beings issues also, I mean, the approach that I used to do and still do was that, you know, I can remember and I just give an example where we will have a room for internationals, my support staff as such, and we're going looking at a particular project and we're going to say, 'okay, this is how we get to', I say, 'this is

what's required, what we need to do', and I can remember many cases, the class just sitting there and waiting for me to say, 'this is how we go to do it', and I would say, 'no'. I said, 'that's the end point—we will need to get there. How do you think we should get there? What do we need to do to have everybody coming to get there?'. So straight away, all of a sudden, it's gone back to the class. If you want to call the grid that's in front of me to say, 'you're right, I want your input, let's see what you've got to say, let's see what you've got to say'. So you got to value the input that comes in, if you find things are not the same of course you are [14:16 inaudible] develop these relationships and so on, but its ownership, it's so important, ownership, to where you are going, and by giving ownership and commitment to that, you know, the group will start working to that, there's loyalty to that, it's motivation to achieve and many cases if you're doing that, other people who can't understand I don't have that type of a pull or approach which see that as a threat.

Question 7

All right. You need a proper mentoring program, you need one that's set up, it allows for people to move and to be successful in it within that department. You've got to show that there is promotion, there is progressive, that's the it need government to support those processes because that's part of their policies. The other aspect to that is also is that it's not just—you've got to make sure that there is that when you're doing a mentoring program, that there is another major factors within PNG society, family interactions that impact on that progress, and therefore you'd need to give support to that particular person in to achieve those areas that require more pressure and understand there might be decisions that because it comes back to this [16:14 inaudible] the PNG national perspective—'what's in it for me? What's in it for my family?'. And that that's, you know, that is, it's so difficult to find that balance, but you do need to have a strong mentoring program that's set out, that's such a particular processes, you know, that it was going to have it individual, you've got a program that could go for two years, two years, maybe three years, and there are certain elements that may can be achieved if the KPI's tied to that.

Question 8

Look, it's really, the sad part is that, but not much more than I would say other that the, from the environment that these companies have got to work in, and, in some ways, without saying it, in such ways, but the companies that are there have provided—look, the examples would be quick. I mean, a good example would be, like, when I was there, reset there were transporting works to look at their budget and the budget was two that were going to put in our [17:50 inaudible] 21 bridges on the highway, on the Highlands highway, and I remember the third day of my job, my boss and I can remember, we were sitting down with the minister and heads of transporting works or works in supply and another like lining there—of course, it was also the election year, 2012, and they were outlining the budget and here, this was us, I think it was 40 million dollars, 40 million or so it would take, and I think 16 million was it, it was for proper work on the highway, which was to cover technically for three bridges. And I can remember coming up there and I had a morning thing that hit the boss up—'boss, there is no money for bridges', I should that money is there, but it's what politicians—it's for elections and what we'll need to do is that we need to commit moneys if we want these bridges put down. We need to do it as part of our program and we made that decision, I can see that, will do that, and so the thing is that companies will need to, you know, they will do what is required, but put more money into projects, when many ways to come actually covering this thing, but the government doesn't do it, the companies carry the burden a lot more, and without a cell the way that they do it, they work very strongly on tax credits. And something that Exxon didn't want to do initially, they did not want to do tax credits. I didn't see that it's the way to do it, I don't think they've ever done it and put a hazardous test in the last couple of years in, except that it's gone down their way. So, yeah, on to it.

Interview F

Question 1

There is two problem with that question. The building of dependency of expatriates staff comes down to the experience and training over the individuals that are speechless roles—for example, drilling, and hard takes lot of time and lot of practice. So, for our organisation, the drilling team, we will get national apprentice to work alongside, but

the technical expertise can be taught in the labour we have for drilling every year. So that specialist sort of roles does not depend on expatriates and it doesn't matter which country they are working, whether it be PNG or Nigeria. For other roles, however, there is time to nationalise lot of positions or secure your lead position at PNG or success in nationalise [inaudible] that was lot of work getting one individual that state for cost do for organisation and subsequently. In the current organisation, they differently rely on expatriates' experience and advisory roles. All of the nationalisation we have done and to the supervisory roles having worked out, as a lot of them have taken up the role, but just could not reach required standard.

Question 2

Yep, so nationalisation for our construction priorities. We had a lot of expatriates put into role and had national staff PNG, through each other to bring them up to stage as quick as they could. A lot of these positions are expected to nations to take over within x amount of years, some positions and unfortunately I couldn't take up the role successfully. Have I been given time and more experience, which is why we started and drawing construction, one of this [inaudible] transition into roles and we just had an expatriates we want to at the task without the affiliates [inaudible]. So it is possible, but it takes a lot of time, it takes a right PNG individual for it work and even lead them. Sometimes they have issues and sometimes they have to do work and take, but you can start with the goals, the better of you are going forward, which is what we do in construction.

Question 3

There is an initial cost benefit I have seen. The rates that are expected from and paid to expats is a lot higher than the nationals, but if we did do a lot of jobs nationalise literally and handed on expats leaving, we would have found the project wouldn't have incurred us and wouldn't have moved in production, just because of the work light and the attention it's record which is on the extensive of the position, we could have saved money in the short end, but we would have had to go back and re-fix it, which means bringing back expats anyway.

Question 4

So there is kind of limits for the nationalisation of it and the first thing is you got to deal with the culture of PNG and the person at PNG and the knack of all of people that are [inaudible]. For example, the expats that have been around and had a lot of experience and put a lot of time into the individuals and in the wantok system, where they had to leave because the mothers, fathers, brothers, dogs died and their wife, and then the expat comes back to work and just kick off. For as an expat wouldn't be in that position and, yeah, security and logistics and everyone, it's a critical part to this project in particular, and you need to have that reliability, you need to have integrity and also we have to have a hard drive, which is not easily found within the PNG culture because of the Melanesian culture and everything ticks wrong and they are in times. So we finally had to find the people that have the high integrity and high level of drive record to take some of the tasks, which can be complex and even some of the simple tasks, man engaged, it's got to be done, so that's where PNG staff like to drive and to polish, the first things of.

Question 5

So, in a perfect world, if you had the right people that can take the training and that take the mentoring portion of it and then constantly individuals and agreeing with them in success, now that definitely helps and, for example, the, but being around the world, we need expats actually interested in the local culture, interested in the local people and standing by them and show them by example and leading by example, 'this is what has to be done'. And there is no, 'I tried my best'—this is the standard, you need the standard and we continue from this. That's the sort person you need and I guess this is why the leading by example needs the people with the right integrity that stand by and say, 'this is exactly what I am doing and this is how it is supposed to be done', and you don't falter. You have to have a standard that you stick to and you have to be able to imitate somebody in a position that they may have done that, and it's interesting to give them up to speech to standard that is acceptable by the company.

Question 6

Just like, just discussing, so with my background and being around the world and working for different organisations and particularly nurturing the police and having

experience, just showing the guys that this is the way the job is, this is the standard, standing around with them even in the I bet yourself getting in that getting to know any of the issues and been working through with them as one of the constantly working on these standards to improve to level that we find acceptable. There is a lot of secret task among the PNG people that can come in and do a really, wow, and then I just got to keep pepping them up, ever since, if you have, for example, PNG national that handed over to, one of the first things I told him was you have to be 100% reliable. If it's going to be your task at seven o'clock, you need to be there, not 20 minutes short, 40 minutes short, don't even turn out, which seems to be problem where he is at, leading by example, so the those mentoring the slide without filtering and that's deciding to side lock that's what they need to do to keep, to meet the standard and to keep with it.

Question 7

So, starting from the staff, it's the selection process that you got, there is a lot of staff around the—they have had jobs in that area that had never had this sort of level of resources and to deal with him and PNG side, in order to get people up to stage, you have to have the right person to start off with. So there is a big part of people that have been around and worked and we have pulled them in and we have that try and you can pick up pretty quickly on the training, on the initial training, whether they are going to survive through or not. So once you have given them the training, the constant supervision, constant mentoring and again just showing them what the standard is, bringing them up to the standard and trying to teach them to maintain that standard is actually the hardest part.

Question 8

For the mentoring and PNG people again, that has to be constant—you just can't give somebody some bit of training or bit of knowledge and then just leave them loose and then expect them to work at what they are doing, there is some smart focus here, to get some information number 1 with it and tell them that the degradation of skills will come out within and they will get placed quickly, so it has to be continuously keep on and the big thing for PNG citizens is performance management, there is this performance management, so we are always have to pull them on and hope they do a good job because they like to hear that, this is because no one wants to hear that and growled at

that time, but continuous positive reinforcement, positive management and giving them accurate achievable goals, change their workplace, this is what I meant to do and leave them to it.

Interview G

Question 1

Yes, I do. Primarily because the skillsets are our key in from a local, national level from PNG side of things. Those skillsets are definitely sought after and can only be generally found to expatriate, more on.

Question 2

I've been to the Houston. I think you have to get them—basically, it's like coming out of school and university or from school, putting them directly to a comprehensive traineeship. Actually, that way, and I think then you can build a sustainable and indigenous workforce that would be able to follow through and be stable, from the Melanesian point of view.

Question 3

Yeah, I think there would be a cost benefit in the long term. I mean, maybe initially, in mainstream or P2P cost would be prohibited because it will take even longer. I think the capacity of the PNG workforce is not as great as they expect. It's cultivating the right, the identifying and carving those right people to skills and building on those, that may take a little bit more time in comparison to an expat. But, in the long term, the cost would extrapolate out to probably be cheaper than maintaining an extra workforce.

Question 4

Okay, I think probably the lack of oil training and skilled training from a security aspect. Basically it's bums on their seats. Everybody's paid a minimum wage, very poorly paid, or poorly motivated and it's subsistence pay, which doesn't allow them to undertake any professional development. Therefore you'd only going to get that 'bum on their seats' mentality. I think that can go on with the domination of the market by a key player, it also limits the capital of the industry as well.

Question 5

Okay, the perfect world, I think you got to grab them at the start. You got to get them coming out of school, with some education. And that's going to continue on through in the workplace, through your traineeships and employee professional development. That would see them flowing into industry, not just security that have cross-boarded all the resourcing sector. Then you would get a much more substantial national workforce, as opposed to domination by an expatriate workforce. In terms of time, it's still very quiet, though. I expect for a number of years, until I can be pretty confident in being able to sub-manage.

Question 6

I think you got to understand the culture, for sure. And you got to embrace it. You got to understand they got their own way of doing things and you can't come in and label the side you're in, detail why you have highlighted it in which to pick a fight with a lot of them, and not take an attitude of being autocratic in your room. You got to give in to the talent, the ownership of what they're doing, of why, and that will take a lot more interest and pride and being an asset to the company, rather than just a bum on their seats. It's huge. That flexibility, the can-do attitude, I think has saved me doing well in making business, recognising their weaknesses and their strengths. Building a way to assist, but also using their strengths and not only right in today, but also being better as well.

Question 7

It can't be an expatriate added mainly to it and it's huge. Everyone had a stake in what it is they're working on and luckily, at the moment, they can see [07:18 inaudible] accounts and benefits. The more they just stay engaged with the benefit, and ones that develop themselves because they consider rewards. I think by keeping in mind of what it involved is a key to their success. I think we need to take not only depends on their skills, but also their pays also represent, I think, the work that they're doing at the moment. They're paid on the basis that they're a foreign country national and current country nationals are traditionally paid very, very low in comparison to expats. I think that needs to be changed because, again, in the longevity of it, it will give you a sustainable local workforce.

Question 8

I think just understanding the PNG culture. We've got this wantok system of rights and then recognising that it's a cultural, social and also it's sort of a way of indigenous PNG that's also realised doing business with the way, so to speak, with Westerner. We would resource this company, they then operate under wantok. So it's not related, people understand it's not going to be a case of just wanting to be employed by captain third, rather petty relation because it's wantok. But I say the executive money company will understand that this is the guards operate and it's being treated by how the workforce is distributed and currently utilised about being in a creative.

Interview H

Question 1

Yes, they do to a certain point, I mean, initially, during start-ups, they rely on teams they fly in with special skills company allotment and, as the projects grow, they try to put in nationalisation programs and it's part of the requirements under the government laws here in PNG.

Question 2

Yeah, it is possible, but it's going to be relevant to the business. For example, the workforce will be aligned with the business objectives of the time. If you've just got surveys going on, if you've just got seismic programs going on, these technical skills in seismic roles and we mentioned the engineering side of things before, these technical engineering roles in seismic, but the majority of seismic work, we're kind of using seismic as this example, is local labour high and team leaders in the crews. And seismic can be spread out over hundreds of kilometres, hundreds of square kilometres, with that sort of early stages of the project. Yeah, you've got a lot of national labour there, but it's taking identifying, in the early stages of your time and country, the key people that are going to be retained and developed. And when you do identify those people, keeping them on board throughout the start-up project and giving them other exposures and building them over time. So, it's got to be relevant. You don't come into an operation, you don't come into a country straight up, and then just run project operations where we're doing the same job now for the next 20 years. There's number of different phases

of that project and they're completely different—for example, the early exploration days, the seismic role and the operator's role is very different. But in the early days, if you get the right people on board and you know they are skilled, capable, technically skilled, community savvy, have a good work ethic and are good team players, then they're the people you want to keep throughout the project and taking them on to an exploration role, surveys, construction phase and then operations phase, that's pretty unique.

Question 3

You know, there's going to be a cost benefit there. There's multiple sides to that, too—it's not just a dollar benefit, as you said, and it may not be a dollar benefit because if you get good-quality nationals, you've got to look after them because if you've got good-quality nationals in your team, in some of the countries I've operated in, they pay almost as much as expatriates, and if you're looking after them and their families with health and medical, those costs do add up. So, dollar aside, the benefits are, you know, there's a morale level on site, you got good senior nationals in your teams and operating it, it breaks down those potential communications issues, potential social issues. It also adds pressure on those issues as well because the local community pressures on those people—their own cultural pressures—can take its toll. But there's going to be a value there, that's a positive to have your own people in-country running your business.

Question 4

First is perception. It's interesting that there's a perception of some expatriates that, well, the local won't be as good as the expatriate, but there are local professionals in those fields that are very capable, very skilled, given the right support and mentor.

Question 5

Identifying the right people in the right roles. Proper job descriptions, proper roles and responsibilities outlined, appropriate mentoring and appropriate check and balances on the guys. The ethics side of it has to be well laid out and structured, there has to be a good check and balance on that. There's also going to be the ability for the nationals to have a fall-back to come back to a manager or an expatriate and say, 'look, there's a local pressure here that's being applied', and they've got to be able to do that and

identify that so it doesn't impact their job because there will be local pressures applied and they will be encouraged to veer off course and you don't want that. So you need them out for the guys and they know that out and they can execute on that.

Question 6

Training and mentoring is a big thing and gradual increments, with the right job description and the right skillsets required in place and the right exposures, elevating the guys into the role, but having that that check and balance for them so they've got someone they can rely on to go back to and be held accountable, but also to sound out if they're on the right track.

Question 7

What I put in my development plan? Yeah, international exposure. For example, in the companies I've worked in, they're multinationals and I have expatriates from all over the world coming to these countries, and PNG is one of several countries I've worked in and I've seen it where we looked at providing international exposure to all up-and-coming managers, and when we did that in previous roles, those guys went on to excel, they understood what it's like to go out on the up rise as a manager in a company, but as an expatriate within them all, so they know what expectations are held of them by the international community.

Question 8

Yes, certainly. It's interesting, I found that there's a rush to nationalise positions, it gets to a certain point where the Department of Immigration or Department of Labour, whichever government agency in which country you're operating in, requires a development plan for your nationals. There's a requirement put in place; therefore, the company responds with, 'What are we going to do? We've got to nationalise, we've got to do this', and I think it's good one for cost cutting because expats cost too much and too is they put together a plan that can be quite shallow and thin, shall we say. And I've had experience where we looked at the nationalisation plan for my role in another country and it was thin—it was just, you know, 'if you've done this course, if you've done this and you've got this experience, then you're qualified for management'. Well, that wasn't appropriate for the role because of the expectations internationally and the

different levels we had to work at and the different people/stakeholders we had to engage—we're talking government officials, military police and local government agencies, as in elected members, etc. So, we looked to it, as I said before, sending a guy overseas to work at a level lower than what he was currently working at in team within your company, but in another region, and the guy went over there and excelled, and we've always had a guy come over to our team and excelled, he's gone back, took off in his career in management. And he said to me personally, he said if it wasn't for that exposure internationally operating in a team, a level below him, so he took the pressure off technically on his work role, but he could appreciate more the softer aspects, the cultural issues, the living as an expert, the travel issues, the language issues—not only language, but the interpretations, the—I guess it's cultural, but there's a lot of aspects of the culture that really opened his eyes up on the expectations of him to perform at a certain level. So when he goes back to his country, he sees these expatriates coming, he sees the way his team is performing and he gets a different approach to it. He's going to be functional lead for the company because his boss at the time and he said he couldn't believe when he came back after 12 months—he's come back and his level of understanding, appreciation and application to work was good. So it was not only ticking the box here, but exposing him to other issues, exposing other departments, not only working within security or logistics, but exposing other departments and understanding how they'd have had an impact on other departments, being a service agent as we are.

Interview I

Question 1

Yes, I think. Well, some do and some don't, I guess, that varies, but, in general, yes, I'd say there is a tendency to be dependent on experts. Probably two reasons—in some areas, I've seen people [who are expatriates], so I think they just look out for themselves, maybe build their own empires. In other areas that's kind of nationalised as much as possible, there's either not the skills or there's a lack of a liability sector.

Question 2

Yeah, definitely. Yeah, I think I strongly believe in that one.

Question 3

Yeah, I think so, I think it's a false economy. I think there's a tendency even in PNG that once they've got skills, they'll run away. They don't look for long term—many people don't anyway. So they'll go and get the skills, they're trained up and then they'll run out somewhere else.

Question 4

From what I've seen, there's a real reluctance to over-invest at the moment, particularly from the company I work with, to put too much time and effort in and maybe they've done it with some and they've just disappeared in the tracks, so, well, I think they've actually reduced that because they've seen a lot of loss of skills and people run away.

Question 5

I think starting with university graduates and getting people into those university graduate positions and building all through their young, as well for the nationalisation scheme with proper benefits for staying long term, whether it be housing benefits or health benefits or schooling benefits, all includes one of the key factors they'll look for when they move in between companies.

Question 6

I think definitely I have a better understanding of the culture, a good understanding of the culture and making efforts to understand the culture makes a huge difference. You do get a lot of foreign experts who come in and not make any efforts whatsoever and they'll just fail miserably. Language skills is definitely another one.

Question 7

Yeah, I suppose selection of staff is definitely relies on cultural understanding, making it relevant to their culture and understanding, I think, but still American odds and it just does not work, it's still Australian odds, it doesn't work.

Question 8

I think if there's something, I'll let you know it.

Interview J

Question 1

Yes, just because it's easier to bring in people from their own organisation, rather than to train up local staff.

Question 2

Yes, it definitely is. They [previous company] have had some success previously that has led to nationals in key jobs, so they just need to expand on that.

Question 3

Yes, absolutely, the cost involved to bring in all the expats from their home countries is significant to the organisation, whereas if they had local staff that could do the same job with the same quality, it would be much cheaper. They would save heaps of money using local staff, rather than flying in their own.

Question 4

Qualified national staff, uni[versity] grads [graduates], training capability—do they have time and resources to train them up? Finding staff straight out of the university.

Question 5

Structured mentoring in place, procedures in place, qualified nationals or the recruiting of more good nationals to train up for positions in the future, graduates that are suitable for training up into jobs, maybe working with local universities to identify and funnel graduates into the programs.

Question 6

With my national staff, it's been the quality of staff we have employed, really smart and proactive. They listen and take on the training. If we have the right people in place to mentor, they really take on board what's being told to them.

Question 7

The mentors themselves—not everyone can be a teacher or mentor. You may know your job really well, but may not be good at transferring that knowledge across to the staff. The role of mentors is above what an average or normal person is able or willing to do in many cases. So definitely good mentors are the key, as well as the time to train up people to do the job they need to do.

Question 8

Making sure you have people who can actually mentor well in these positions in leadership. Mostly ex-military are currently successful mentoring, but it's more about the individual characteristics of the person—being patience, knowledge of the subject and a willingness to work with someone and cultural understanding of the people you're working with, as PNG has differences that many other countries may not have. Having worked previously in PNG would greatly benefit the mentors as well.

Appendix 8: Complete Survey Response Data

Survey

Q1 Which of the following describes you?

Answered: 102   Skipped: 0
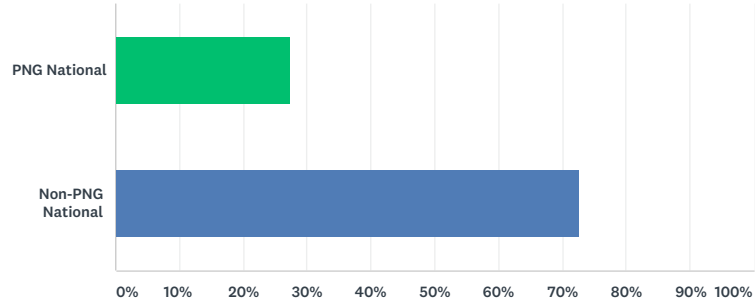
ANSWER CHOICES	RESPONSES	
PNG National	27.45%	28
Non-PNG National	72.55%	74
TOTAL		102

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Q2 Do you identify as

Answered: 102   Skipped: 0
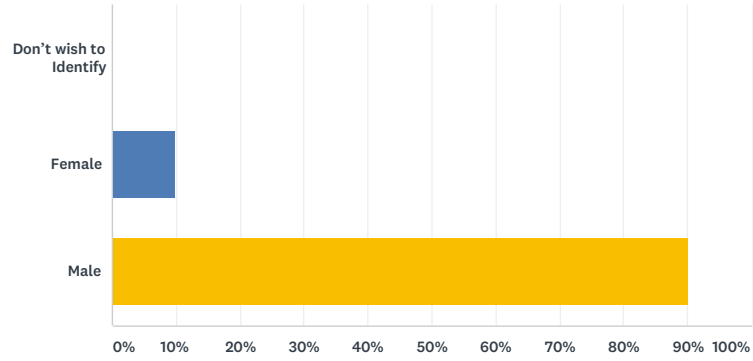
ANSWER CHOICES	RESPONSES	
Don't wish to Identify	0.00%	0
Female	9.80%	10
Male	90.20%	92
TOTAL		102

Q3 Which describes your age group

Answered: 102   Skipped: 0
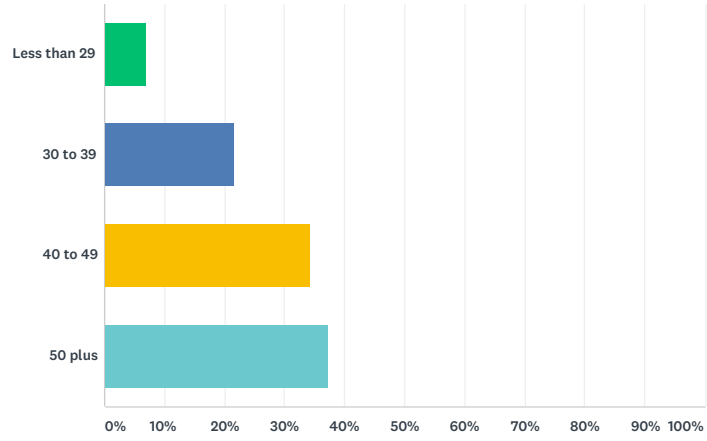
ANSWER CHOICES	RESPONSES	
Less than 29	6.86%	7
30 to 39	21.57%	22
40 to 49	34.31%	35
50 plus	37.25%	38
TOTAL		102

Q4 Which describes your highest education attained including any current study

Answered: 102   Skipped: 0
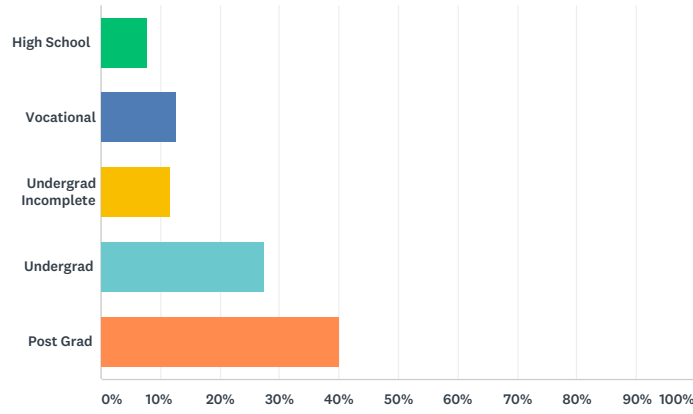
ANSWER CHOICES	RESPONSES	
High School	7.84%	8
Vocational	12.75%	13
Undergrad Incomplete	11.76%	12
Undergrad	27.45%	28
Post Grad	40.20%	41
TOTAL		102

Q5 Would you consider your experience working on resource projects in PNG as

Answered: 102   Skipped: 0
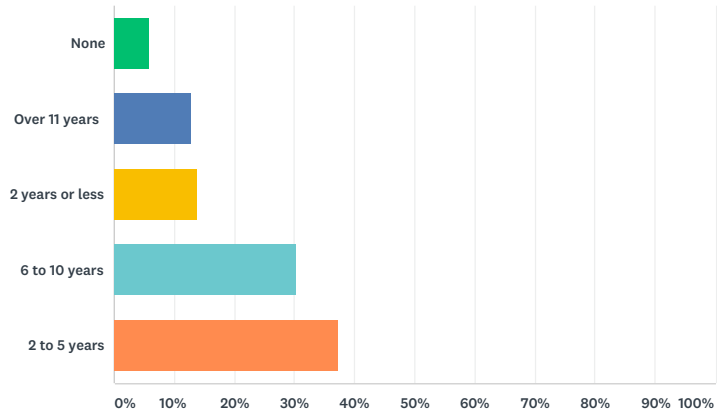
ANSWER CHOICES	RESPONSES	
None	5.88%	6
Over 11 years	12.75%	13
2 years or less	13.73%	14
6 to 10 years	30.39%	31
2 to 5 years	37.25%	38
TOTAL		102

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Q6 Based on your observations, do you think resource organisations build dependence on expatriate staff

Answered: 102   Skipped: 0

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
(no label)	35.29% 36	49.02% 50	8.82% 9	5.88% 6	0.98% 1	102	1.88

Q7 Rate the following factors and their impact on building dependence on expatriate staff in resource organisation's

Answered: 102   Skipped: 0

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Issues with education and training in the national workforce	66.00% 66	30.00% 30	3.00% 3	1.00% 1	0.00% 0	100	1.39
Technical expertise of expatriates	62.75% 64	30.39% 31	3.92% 4	2.94% 3	0.00% 0	102	1.47
Limited pool of educated experienced nationals	50.00% 51	37.25% 38	6.86% 7	4.90% 5	0.98% 1	102	1.70
Expats easier to use	39.22% 40	41.18% 42	12.75% 13	5.88% 6	0.98% 1	102	1.88
Poor recruitment structure that limits placing experienced nationals	37.25% 38	42.16% 43	14.71% 15	5.88% 6	0.00% 0	102	1.89
Faster with Expats	30.69% 31	46.53% 47	15.84% 16	6.93% 7	0.00% 0	101	1.99
Ability to hire and fire expats quickly (short term contracts no local labor law issues)	15.69% 16	54.90% 56	13.73% 14	14.71% 15	0.98% 1	102	2.30

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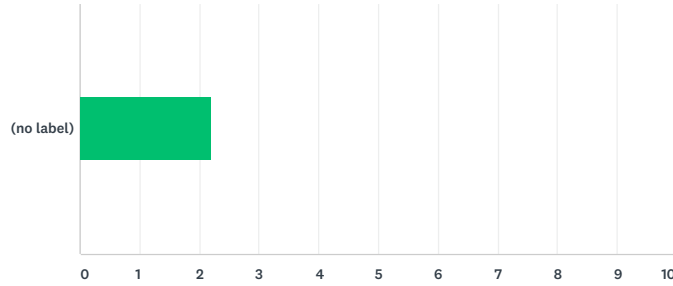|						
Expats looking out for own positions (looking out for each other)	19.61% 20	47.06% 48	16.67% 17	14.71% 15	1.96% 2	102	2.32
Use of international assignments to give expat employees experience	15.69% 16	35.29% 36	28.43% 29	18.63% 19	1.96% 2	102	2.56

Q8 It is possible to develop a national workforce in the early phase of the project so they are better skilled for startup

Answered: 102   Skipped: 0

	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
(no label)	29.41% 30	39.22% 40	13.73% 14	17.65% 18	0.00% 0	102	2.20

Q9 If workforce nationalisation was to occur earlier in projects their would be cost benefits to the company

Answered: 102   Skipped: 0
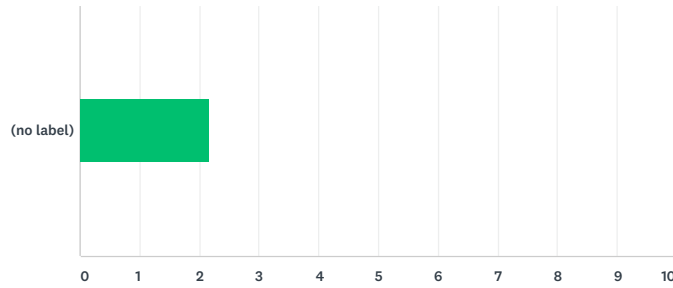
	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
(no label)	33.33% 34	34.31% 35	15.69% 16	14.71% 15	1.96% 2	102	2.18

Q10 If workforce nationalisation were to occur earlier in a project there would be a positive time difference to the project delivery

Answered: 102   Skipped: 0
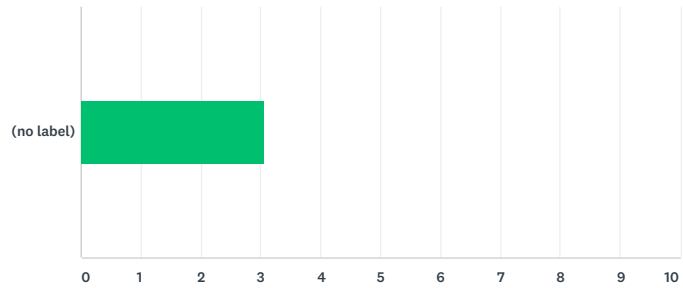
	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
(no label)	10.78% 11	26.47% 27	16.67% 17	39.22% 40	6.86% 7	102	3.05

Q11 If workforce nationalisation were to occur earlier there would be significant reputational benefits to the company

Answered: 102   Skipped: 0
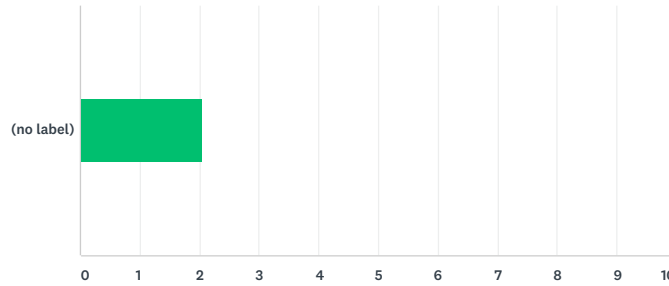
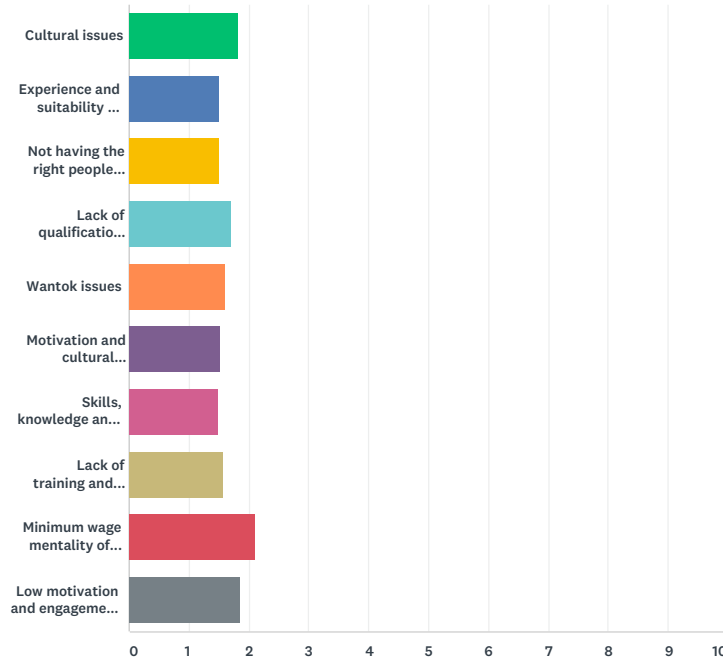|	1. STRONGLY AGREE	2. AGREE	3. NEUTRAL	4. DISAGREE	5. STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
(no label)	30.39% 31	46.08% 47	12.75% 13	10.78% 11	0.00% 0	102	2.04

Q12 What are the key factors that limit the workforce nationalisation of security and logistical workforces in your experience?

Answered: 102   Skipped: 0

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Cultural issues	35.87% 33	48.91% 45	13.04% 12	2.17% 2	0.00% 0	92	1.82
Experience and suitability of managers	51.96% 53	45.10% 46	2.94% 3	0.00% 0	0.00% 0	102	1.51
Not having the right people in roles both national and expat	56.44% 57	37.62% 38	3.96% 4	1.98% 2	0.00% 0	101	1.51
Lack of qualifications even in semi-skilled	46.08% 47	41.18% 42	9.80% 10	1.96% 2	0.98% 1	102	1.71
Wantok issues	55.56% 55	31.31% 31	10.10% 10	2.02% 2	1.01% 1	99	1.62
Motivation and cultural expectations of staff	53.92% 55	42.16% 43	1.96% 2	0.98% 1	0.98% 1	102	1.53
Skills, knowledge and experience of staff	56.86% 58	39.22% 40	2.94% 3	0.98% 1	0.00% 0	102	1.48

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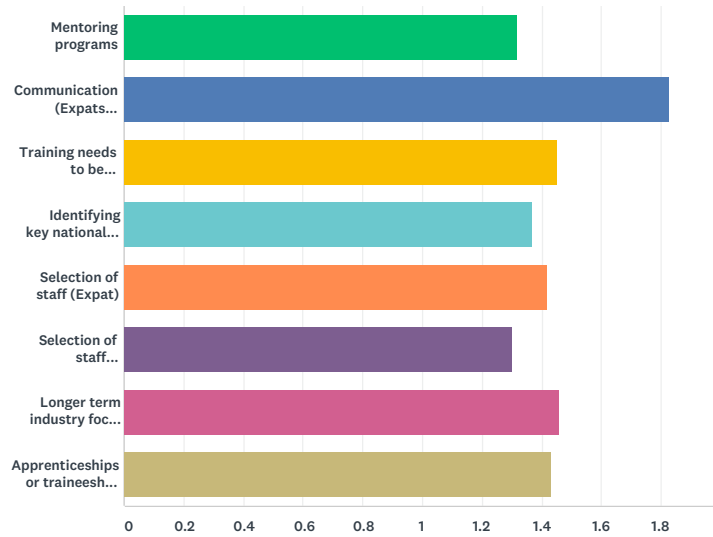|						
Lack of training and development	52.94% 54	41.18% 42	3.92% 4	0.98% 1	0.98% 1	102	1.56
Minimum wage mentality of companies	34.31% 35	35.29% 36	16.67% 17	11.76% 12	1.96% 2	102	2.12
Low motivation and engagement of staff	41.18% 42	39.22% 40	11.76% 12	6.86% 7	0.98% 1	102	1.87

Q13 What factors would enable the early nationalisation of staff please rate the impact of the following

Answered: 102   Skipped: 0

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Mentoring programs	70.53% 67	27.37% 26	2.11% 2	0.00% 0	0.00% 0	95	1.32
Communication (Expats learning language)	39.22% 40	45.10% 46	9.80% 10	4.90% 5	0.98% 1	102	1.83
Training needs to be nationally recognised and ongoing	61.76% 63	32.35% 33	4.90% 5	0.98% 1	0.00% 0	102	1.45
Identifying key national staff early for supervisory and managment	63.73% 65	35.29% 36	0.98% 1	0.00% 0	0.00% 0	102	1.37
Selection of staff (Expat)	67.65% 69	25.49% 26	4.90% 5	0.98% 1	0.98% 1	102	1.42
Selection of staff (National)	72.28% 73	25.74% 26	1.98% 2	0.00% 0	0.00% 0	101	1.30
Longer term industry focus rather than immediate focus	63.73% 65	28.43% 29	5.88% 6	1.96% 2	0.00% 0	102	1.46
Apprenticeships or traineeships pre-company employment	62.75% 64	31.37% 32	5.88% 6	0.00% 0	0.00% 0	102	1.43

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Q14 What factors have you seen being successful in the past please rate the following

Answered: 102   Skipped: 0
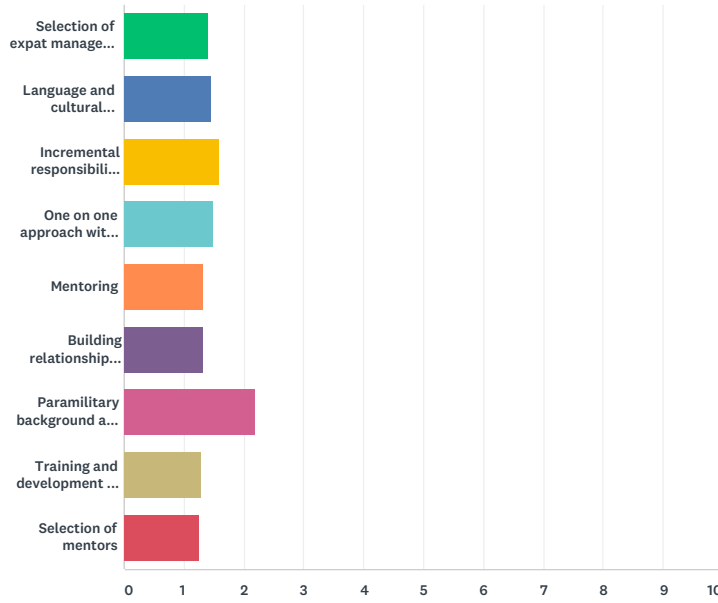
	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Selection of expat managers to mentor local staff	70.59% 72	21.57% 22	5.88% 6	0.98% 1	0.98% 1	102	1.40
Language and cultural understanding	64.36% 65	27.72% 28	4.95% 5	2.97% 3	0.00% 0	101	1.47
Incremental responsibility to build capacity	49.02% 50	45.10% 46	4.90% 5	0.98% 1	0.00% 0	102	1.58
One on one approach with feedback for staff	59.80% 61	34.31% 35	3.92% 4	1.96% 2	0.00% 0	102	1.48
Mentoring	75.00% 75	21.00% 21	3.00% 3	0.00% 0	1.00% 1	100	1.31
Building relationships with staff based on mutual respect	74.26% 75	23.76% 24	0.00% 0	0.99% 1	0.99% 1	101	1.31
Paramilitary background and in country experience	29.70% 30	37.62% 38	17.82% 18	13.86% 14	0.99% 1	101	2.19

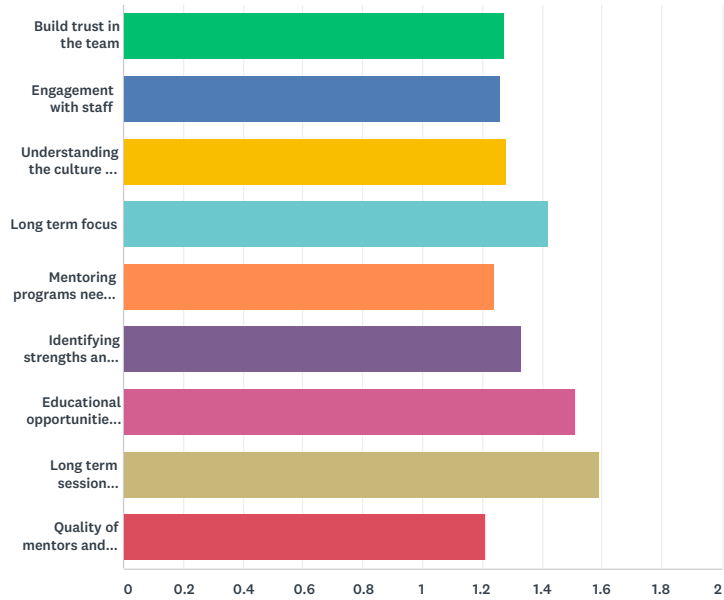|							
Training and development of staff	73.27% 74	24.75% 25	0.99% 1	0.99% 1	0.00% 0	101	1.30
Selection of mentors	77.45% 79	19.61% 20	2.94% 3	0.00% 0	0.00% 0	102	1.25

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Q15 In your experience, what key activities promote a successful mentoring program in a resource company operating in Papua New Guinea?

Answered: 102   Skipped: 0

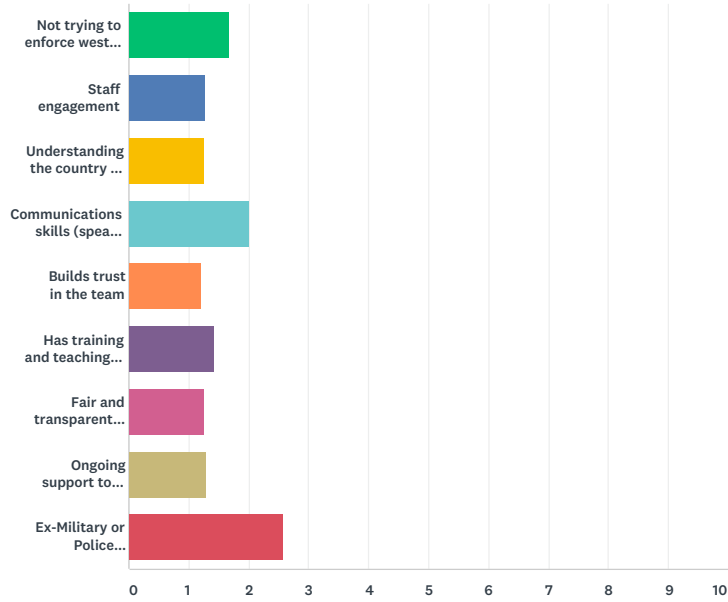|	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Build trust in the team	75.49% 77	21.57% 22	2.94% 3	0.00% 0	0.00% 0	102	1.27
Engagement with staff	76.47% 78	20.59% 21	2.94% 3	0.00% 0	0.00% 0	102	1.26
Understanding the culture and country	73.53% 75	24.51% 25	1.96% 2	0.00% 0	0.00% 0	102	1.28
Long term focus	68.63% 70	22.55% 23	6.86% 7	1.96% 2	0.00% 0	102	1.42
Mentoring programs need full commitment by management and the company	80.39% 82	15.69% 16	3.92% 4	0.00% 0	0.00% 0	102	1.24
Identifying strengths and weaknesses with staff and implement personal development plans	70.59% 72	25.49% 26	3.92% 4	0.00% 0	0.00% 0	102	1.33

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Educational opportunities such as graduate programs to assist promising staff develop	55.88% 57	38.24% 39	4.90% 5	0.98% 1	0.00% 0	102	1.51
Long term session planning (staff can see where the future opportunities are)	51.96% 53	39.22% 40	7.84% 8	0.00% 0	0.98% 1	102	1.59
Quality of mentors and managers	81.37% 83	16.67% 17	1.96% 2	0.00% 0	0.00% 0	102	1.21

Q16 What in your opinion makes a good mentor in PNG?

Answered: 102   Skipped: 0

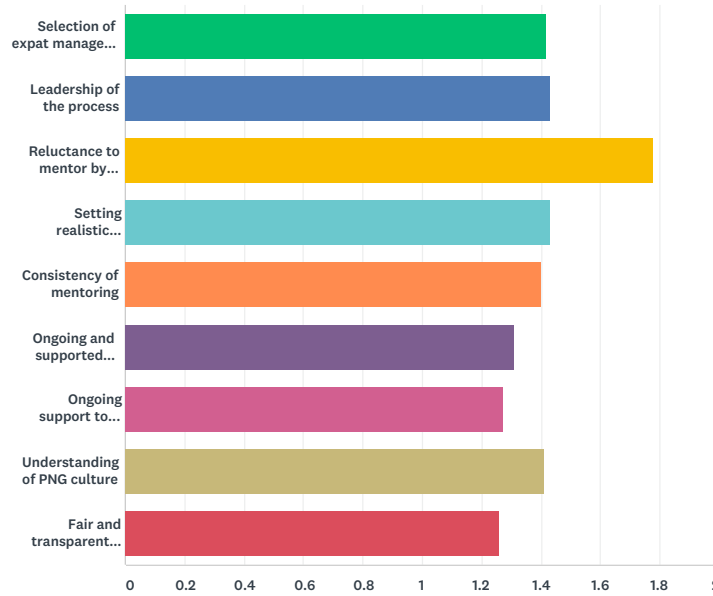|	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Not trying to enforce western values on everything	49.50% 50	38.61% 39	6.93% 7	4.95% 5	0.00% 0	101	1.67
Staff engagement	73.27% 74	26.73% 27	0.00% 0	0.00% 0	0.00% 0	101	1.27
Understanding the country and culture	75.49% 77	24.51% 25	0.00% 0	0.00% 0	0.00% 0	102	1.25
Communications skills (speaks Tok Pison)	35.29% 36	40.20% 41	15.69% 16	6.86% 7	1.96% 2	102	2.00
Builds trust in the team	80.39% 82	18.63% 19	0.98% 1	0.00% 0	0.00% 0	102	1.21
Has training and teaching skills	60.78% 62	35.29% 36	3.92% 4	0.00% 0	0.00% 0	102	1.43
Fair and transparent dealing with staff	76.47% 78	21.57% 22	1.96% 2	0.00% 0	0.00% 0	102	1.25
Ongoing support to national staff and positive performance management	72.55% 74	24.51% 25	2.94% 3	0.00% 0	0.00% 0	102	1.30

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Ex-Military or Police background	18.81% 19	32.67% 33	24.75% 25	18.81% 19	4.95% 5	101	2.58

Q17 What other factors do you think impact workforce nationalisation in a resource company operating in Papua New Guinea?

Answered: 102   Skipped: 0

	VERY IMPORTANT	IMPORTANT	NEITHER	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Selection of expat managers to mentor staff	60.78% 62	36.27% 37	2.94% 3	0.00% 0	0.00% 0	102	1.42
Leadership of the process	60.40% 61	37.62% 38	0.99% 1	0.99% 1	0.00% 0	101	1.43
Reluctance to mentor by managers	42.16% 43	43.14% 44	8.82% 9	5.88% 6	0.00% 0	102	1.78
Setting realistic expectations	56.86% 58	43.14% 44	0.00% 0	0.00% 0	0.00% 0	102	1.43
Consistency of mentoring	61.76% 63	36.27% 37	1.96% 2	0.00% 0	0.00% 0	102	1.40
Ongoing and supported training	70.30% 71	28.71% 29	0.99% 1	0.00% 0	0.00% 0	101	1.31
Ongoing support to national staff and positive performance management	74.51% 76	23.53% 24	1.96% 2	0.00% 0	0.00% 0	102	1.27
Understanding of PNG culture	61.76% 63	35.29% 36	2.94% 3	0.00% 0	0.00% 0	102	1.41

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Fair and transparent dealing with staff	74.51% 76	24.51% 25	0.98% 1	0.00% 0	0.00% 0	102	1.26