

Research article

Developing a framework for assessing the readiness of entities in the construction industry in addressing modern slavery

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ABSTRACT

Australia's Modern Slavery Act 2018 (Cth) requires entities with at least AU\$100 million annual consolidated revenues to submit annual modern slavery statement. The construction industry is considered as one sector most vulnerable to modern slavery. This research aims to identify the policies, systems and processes that will affect an organisation's approach to modern slavery risk and propose a framework for assessing the readiness of entities in the construction industry to address modern slavery in their operations and supply chains. Semi-structured interviews were used as the main research method to glean industry experts' insights and perspectives on key themes and topics. The research finds that a successful modern slavery approach includes governance, risk assessment and ongoing due diligence, risk mitigation, grievance and remediation, performance monitoring and reporting, and education and capability building. This paper details the first academic research examining the implications of modern slavery legislation on construction businesses in Australia. The research contributes to existing body of knowledge by highlighting issues and concerns specific to modern slavery in an organisation's operation and supply chains. Focusing on the construction industry, this research opens up a dialogue on taking sector-specific approach in modern slavery risk detection and remediation. The research results offer practical reference for entities in the construction industry to plan, formulate and implement policies, systems, and processes to identify and mitigate modern slavery risk, so as to satisfy legislative requirements and to achieve social sustainability goals.

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1. Introduction

Slavery is usually viewed as an obsolete form of human rights infringement that is not relevant to today's more enlightened society. However, the Global Slavery Index (GSI) 2018 estimates that more than 40 million people around the globe are victims of modern slavery (Walk Free Foundation, 2018). Modern slavery refers to cases of serious human exploitation where the victim cannot refuse or leave. The *Criminal Code Act 1995* (Cth) further describes it as exercising ownership over another person, including through debt or contract (Australian Government, 2020). It persists in many forms and contexts in modern businesses, including human trafficking, forced labour, debt bondage and other slavery-like practices (Quirk, 2006). In Australia, it is believed that about 15,000 people are living in modern slavery conditions (Walk Free Foundation, 2018). Australian supply chains are closely related to coun-

tries located in the Asia Pacific region which are most affected by modern slavery practices (KPMG, 2020).

Several international jurisdictions have introduced new legislation, such as the *California Transparency in Supply Chains Act* of 2010 (State of California, 2010) and the UK *Modern Slavery Act 2015* (UK Government, 2015), to increase transparency of companies' supply chains and push them to take responsibility for human exploitation in their supply chains. In Australia, the *Modern Slavery Act* (the Act) was enacted in 2018 and came into effect on 1 January 2019. Entities with at least AU\$100 million annual consolidated revenues are required to report annually on the risks of modern slavery in their operations and extended supply chains, the actions taken to assess and address these risks, and the effectiveness of their response (Department of Home Affairs, 2021). Under the Act, entities whose tax reporting aligned with the Australian financial year ending 30 June 2020, were required to submit their modern slavery statements for the 2019/2020 financial year by 31 December 2020. Because of the disruption caused by the Covid-19 crisis, this deadline was extended to 31 March 2021 (Department of Home Affairs, 2021). The introduction of new leg-

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isolation brings modern slavery to public attention and requires action by organisations.

The construction industry is considered as one of the sectors most vulnerable to modern slavery (Hedwards et al., 2017). One reason is its high demand for low-skilled, migrant workers with high social-economic vulnerability. The complex and multi-tiered supply chains of construction projects can also lead to low visibility and limited control over employment practices of suppliers and subcontractors (CIOB (The Chartered Institute of Building), 2018). Even when projects are located in a low-risk country, such as Australia, companies may unintentionally support modern slavery through the provision of building materials originating from higher risk countries, or labour hire that is vulnerable to exploitation. Given the industry's high propensity to modern slavery risk, along with the legislative requirements imposed by the Act, it is of great importance for entities in the construction industry to detect and respond to modern slavery risks and provide stakeholders with insights into their modern slavery footprint. However, since the Act is relatively new in Australia, the industry's level of awareness and understanding is still limited. Entities from both public and business sectors are uncertain about what they should do to prepare for compliance with legislative requirements on addressing modern slavery.

Modern slavery has been studied from areas of social sciences and humanities, such as law, geography, politics and international development, with a primary focus on victims (Gold et al., 2016). The literature addressing modern slavery from business and management perspective is nonetheless relatively limited (Crane, 2013; New, 2015). The management research of modern slavery is predominately pertinent to supply chain management (SCM) and corporate social responsibilities (CSR). Gold et al. (2015) highlighted the connections between modern slavery and supply chain management and presented a framework conceptualising the challenges of slavery to supply chain management. New (2015) focused on modern slavery issues in supply chains and argued that traditional thinking and practices in corporate social responsibility are not sufficient for managing social issues along the supply chain, such as modern slavery. Crane (2013) maintained that the persistence of modern slavery by identifying the external institutional conditions and internal capabilities for sustaining slavery in businesses. New (2015) and Barrientos (2013) claimed that focal firms should take substantial responsibilities to avoid human exploitation as they usually require short lead time and low prices, which lead to considerable pressure on suppliers or subcontractors to reduce costs, thereby giving rise to forms of modern slavery.

Despite the increasing interests in modern slavery in management research, it remains uncertain what practices, initiatives and processes should be adopted by large construction companies in order to address modern slavery in their operations and supply chains. There is also a lack of a framework that can be used for evaluating and benchmarking an organisation's performance in addressing modern slavery. CSR research offer meaningful insights into the practices and processes that firms should adopt to govern its internal functions (Formentini and Taticchi, 2016). However, since the modern slavery risks mainly exist in construction companies' extended supply chains, only focusing on corporate social responsibilities is not enough to manage the complexities that beyond the organisational boundaries and the extended downstream supply chains. SCM literature offers a multitude of theories and practices in tackling social issues in supply chains (Caruana et al., 2020). However, prior SCM theories usually focus on formal, relatively transparent, product supply chains (New, 2015; Stevenson and Cole, 2018). Due to the fact that modern slavery is always illegal and hidden, and involves labour market intermediaries, extant SCM literature has limited ability to sufficiently conceptualize modern slavery issues (Crane et al., 2019). Prior research

cannot provide sufficient and practical reference when an organisation embarks on practices and initiatives in addressing modern slavery.

This research aims to develop a framework for assessing the readiness of entities in the construction industry in addressing modern slavery in their operations and supply chains. In order to achieve the overall aim, the research questions to be asked are: (1) What are the practices (e.g., policies, systems and processes) that will affect an organisation's readiness in addressing modern slavery? (2) How the identified practices form the themes and sub-themes in the proposed framework for modern slavery readiness assessment? A qualitative research approach was adopted in this research as it offers rich and in-depth information about a subject matter with little prior knowledge, which particularly suit the exploratory nature of the research (Walker et al., 2021; Hackley, 2019). A comprehensive desktop research was first conducted to identify the themes and topics that are relevant to an entity's readiness to address modern slavery. Semi-structured interviews were then undertaken to glean industry experts' insights and perspectives on key themes in relation to modern slavery. This research is one of the first academic research that examines the implications of the modern slavery legislation on construction businesses in Australia. The research contributes to existing body of knowledge in CSR and SCM by highlighting issues and concerns specific to modern slavery in an organisation's operation and supply chains. Focusing on the construction industry, this research opens up a dialogue on taking sector-specific approach in modern slavery risk detection and remediation. The research findings provide a framework for evaluating the readiness of an organisation in addressing modern slavery. The results of this research offer practical guidance for entities in the construction industry to plan, formulate and implement policies, systems, and processes to identify and mitigate modern slavery risk, so as to satisfy legislative requirements, and to achieve social sustainability and corporate social responsibility goals.

The following sections of the paper are organised as follows: Section 2 summarises the fundamentals of modern slavery, including the definition, forms and the global moves on combating modern slavery. The modern slavery practices in the construction industry are then discussed and the theoretical underpinnings of the current research are presented in the Literature Review section. In Section 3, the qualitative research method is explained with more details, focusing on the semi-structured interviews. Section 4 presents the results from the semi-structured interviews and elaborate on the identified policies, systems and processes that are deemed critical to a construction organisation's approach to address modern slavery in their operations and supply chains. The paper then discusses the research findings against existing literature in Section 5. The last section concludes the paper, highlights the theoretical and practical contributions and points out the limitations and future research avenues.

2. Literature Review

2.1. Fundamentals of modern slavery

2.1.1. Definition and types of modern slavery

The definition of "modern slavery" is often debated as it is derived from the heinous conventionalities of slavery. Modern slavery encompasses a myriad of exploitative slavery-like measures, such as forced labour, human trafficking, child labour and forced marriage. Essentially, the Global Slavery Index (GSI) has defined modern slavery as the exploitation circumstances in which a person is unable to resist or leave due to threats, intimidation, bullying, misuse of force, or deceit (Walk Free Foundation, 2018). Although some scholars maintained that the term "modern slavery"

cannot fully represent the problem of severe labour exploitation (LeBaron, 2018), it is still the most widely used term in the business and management field (Canuana et al., 2021).

According to a study conducted by the International Labour Organization, Walk Free Foundation, and the International Organization for Migration, over 40 million people around the globe are victims of modern slavery and over 60 per cent of the them are forced labour (ILO, 2017; Walk Free Foundation, 2018). Moreover, more than 50 per cent of forced labour victims are entrapped by debt bondage when working for the private sector and are forced to pay off a debt by working for low wages or even no wage (ILO, 2017; Landman and Silverman, 2019). It becomes a continuous cycle of abuse as the workers would not be able to escape such circumstances due to threats of violence and incarceration by the controlling body in charge. State-imposed forced labour is another major form of modern slavery which causes state authoritative bodies to coerce citizens into military, prison, or public works related labour (Silverman, 2020; ILO, 2017). In light of the critical and complex nature of modern slavery, it is of great importance that governments, private sectors, non-government organisations (NGOs) and civil societies work collectively and take collaborative effort in combating modern slavery (Crane, 2013; LeBaron and Crane, 2019).

2.1.2. Global calls of actions on modern slavery

Globally, there are recent moves towards legislative developments to combat modern slavery. An early example of legislation designed to address modern slavery in businesses was the *California Transparency in Supply Chains Act* introduced in 2010 (State of California, 2010). It requires businesses operating within the state of California with an annual revenue of USD \$100 million or more to release an annual statement on their webpage showcasing the measures taken to eradicate modern slavery across five domains, namely (i) auditing procedures, (ii) operational certification, (iii) verification of sources, (iv) internal systems, and (v) coaching. The UK released the *Modern Slavery Act* in 2015, which requires UK-based businesses to report on the procedures taken to reduce the occurrence of modern slavery and human trafficking in their business and operational supply chains (UK Government, 2015). In 2018, Parliament of Australia introduced the *Commonwealth Modern Slavery Act*, requiring businesses with an annual consolidated revenue of AUD \$100 million or more to publish an annual modern slavery statement to highlight the processes taken to tackle modern slavery (Commonwealth of Australia, 2018). It is notable that under both UK and Australia's Modern Slavery Act, financial penalties have not been implemented for non-compliance or failure to submit modern slavery statements (Rees et al., 2021). New Zealand also actively contributes to international efforts towards the elimination of modern slavery and incorporates laws prohibiting slavery, human trafficking and forced labour in a number of international treaties. Whether to enact modern slavery legislation will come into public consultation in 2022 (New Zealand Government, 2021).

2.2. Modern slavery in construction

The construction industry is considered to be one of the most exploited markets for forced labour due to the reliance on low skilled, cheap, and quick labour (CIOB (The Chartered Institute of Building), 2018; Hedwards et al., 2017; KPMG, 2020). According to Elgg (2016), the construction and mining industries hire 7 per cent of the international labour force, which generates USD \$34 billion annually from the estimated USD \$150 billion profits made from exploitative means. In addition to the direct labour employment, another component that is highly susceptible to modern slavery in the construction industry is the procurement of raw materials

such as brick and coal that are produced with a high risk of forced labour (JSCFADT, 2017; Elgg, 2016).

In Australia, modern slavery victims in the construction industry are typically migrant workers, temporary visa holders, and international students. It was reported that amongst the migrant workers, around 3% have their passports confiscated by their employers; 5% have paid a recruitment fee to have a job; and 4% have been in a variant version of debt bondage situation, where the victims are forced to pay their employers in cash after receiving their wages (Berg and Farbenblum, 2017). Berg and Farbenblum (2017) have also found that a percentage of victims in relation to the construction and building industry in Australia are paid below the minimum wage. Hence, there is a need to focus anti-slavery measures on the construction industry as it can have many affiliations of discriminatory nature that can extend its severity. With COVID-19 placing additional pressure on businesses, conditions leading to modern slavery practices may become more prevalent as companies may cut corners in relation to the payment of goods and services; may terminate contracts or working arrangements without proper cause; and exploit vulnerable people working in compromised conditions.

2.3. Theoretical underpinnings

A review of extant literature identifies a spectrum of key dimensions and sub-dimensions that are likely to affect an entity's readiness in addressing modern slavery, which form the theoretical underpinnings for this research. An overview of the theoretical underpinnings is provided in Table 1 and then discussed in detail under following sub-headings.

2.3.1. Governance initiatives

From a resource-based view, prior research suggested that commitment to sustainability in global value chains lies at the heart of governance initiatives (Lund-Thomsen and Lindgreen, 2013). Leading upstream businesses are generally more incentivised and better resourced to set up and implement effective governance initiatives to promote sustainability performance. However, lower-tiered suppliers tend to be less capable of committing to governance initiatives due to financial and business operational constraints. According to Gold et al. (2015), the clandestine business models practiced by slave-holders overtime make it difficult to detect instances of modern slavery in a cascading multi-tier supply chain. Many companies suffer from this issue as it generates an environment that is controlled by incentivized corruption with a deteriorative management role.

Drawing on the institutional theory, formal institutions and normative pressure, such as the use of code of conduct, serves as an effective means of prohibiting companies and suppliers to adopt human exploitation practices (Barrientos, 2008; Jiang, 2009). The codes of conduct are issued by companies to their employees and suppliers as a method to monitor, manage, and audit their processes. It nurtures a sense of commitment to the inclusion of clauses that draw attention to the standards of labour work, minimum wages, legal working hours, and occupational health and safety schemes (Barrientos, 2008). Despite the availability of the codes of conduct, researchers have argued that they have little benefit to vulnerable workers who experience labour abuse (Jiang, 2009; Crane, 2013; Lund-Thomsen and Lindgreen, 2013; LeBaron and Rühmkorf, 2017). This is because that these workers often lack comprehension and awareness of their rights due to their limited knowledge and constant exposure to such abuse overtime (Lund-Thomsen and Lindgreen, 2013). This insinuated that companies do not regularly monitor or conjointly discuss with their suppliers about the importance of code compliance.

Table 1

An overview of theoretical underpinnings in addressing modern slavery.

No.	Key Dimensions	Sub-dimensions	Underlying Theory	Main Arguments	Refs.
1	Governance initiatives	Resource commitment	Resource-based view	Competitive advantages can be achieved by harnessing committed resources.	Lund-Thomse and Lindgreen (2013), Gold et al. (2015), Vachon and Klassen (2016), Gold et al. (2010) Barrientos (2008), Jiang (2009), Crane (2013), LeBaron and Rühmkorf (2017) Gimenez and Tachizawa (2012), Hall and Matos (2010), Ketchen and Hult (2007)
		Code of conduct	Institutional theory	Formal institutions and normative pressure can drive firms to take new actions or initiatives.	
2	Risk identification	Supplier auditing	Agency theory, information asymmetry	There are costs arising from conflicts of interests between the principals and agents. The effectiveness and robustness of supplier auditing is questionable. Unequal information exists between focal firms and suppliers, which makes supplier auditing particularly challenging.	Grimm et al. (2016), (Müller et al., 2009), Vachon and Klassen (2006)
		Supplier chain mapping	Complexity theory	It is difficult to implement supplier auditing and mapping due to the complexities associated with broader organizational complexities.	
3	Risk mitigation and responses	Stakeholder engagement	Stakeholder theory	Companies produce externalities that affect many parties (stakeholders) which are both internal and external to the firm. Maximisation of sustainability performance requires balancing the interests of stakeholders.	Stiller and Gold (2014), Sancha et al. (2015), Sarkis et al. (2011)
		Collaborative approach	Resource-dependence theory, social embeddedness theory	Firms should depend and collaborate to seek long-term mutual gains rather than pursuing short-term benefits at the expense of others. Focal firms and suppliers have ongoing networks of social relationships. The level of social embeddedness has implications on the implementation of risk mitigation strategies.	
4	Modern slavery reporting	Modern slavery information disclosure	Legitimacy theory	Business organizations can fulfil the 'social contract' and gain the support of society to obtain legitimacy by focusing on non-financial sustainability performance and proper disclosure of sustainability performance.	(Hahn and Kühnen, 2013), Tate et al. (2010), Rezaee (2018)
5	Education and training	Collaboration and knowledge sharing	Relational theory	Inter-organisational collaboration on environmental and social issues can develop joint valuable and rare resources and capabilities.	Lund-Thomsen and Lindgreen (2013), Stevenson and Cole (2018), Russell et al. (2018), Gold et al. (2010)

2.3.2. Risk identification

In order to govern modern slavery issues in construction companies' operations and supply chains, it is important to set out management tools and indicators to detect the modern slavery risks. Literature in supply chain management presents a suite of theories and practices for detecting social risks in supply chains (Gimenez and Tachizawa, 2012; Hall and Matos, 2010). Supplier audit is a commonly used practice for detecting social problems in supply chains. For example, some focal firms undertake supplier monitoring with an aim to reduce social risks in the provision of goods and services (Seuring and Müller, 2008). Grimm et al. (2016) suggested using supply chain mapping in order to understand the structure of the entire supply chain. Third-party standards and certifications are usually opted for to increase the transparency and accountability in business activities and traceability of goods and services along the supply chain (Müller et al., 2009).

Existing supply chain management research provides useful references for detecting social risks in supply chains. However, the commonly used practices may not be suitable in addressing mod-

ern slavery issues in construction supply chains. For example, from information asymmetry view, unequal information exists between focal firms and suppliers, which makes supplier auditing particularly challenging. In addition, New (2015) was of a view that modern slavery involves criminal acts and active deceit. It is likely that mechanisms, such as supplier self-assessment questionnaires and standard supply audits are not effective in detecting modern slavery risks due to the intention to hide criminal actions. Given the special challenges of modern slavery issues, it is of great importance to establish effective tools and systems to facilitate the detection of modern slavery risks for construction businesses.

2.3.3. Risk mitigation and responses

Prior research has outlined a range of responses if social issues are detected in supply chains (Gimenez and Tachizawa, 2012; Stiller and Gold, 2014). For example, firms may seek supplier development first and establish a remediation plan to improve the social performance of the suppliers (Sancha et al., 2015). Measures, such as more frequent auditing and training can serve as useful practices to alleviate social problems in supply chains. In addition,

Gimenez and Tachizawa (2012) concluded that collaborative approaches, such as knowledge sharing, shared responsibilities and trust can contribute to improve suppliers' social performance. In some cases, in order to minimise the social risks, focal firms may look to suspend or terminate the relationships with the suppliers, albeit this approach is not preferred as it does not necessarily solve the problem of modern slavery in that area and may worsen the situation (Gold et al., 2015).

The approaches and measures used for mitigating supply chain social risks may sometimes fail to address the challenges posed by modern slavery in construction supply chains. For example, most of these remediation focuses on first-tier suppliers. It is difficult to have much impact on sub-tiers due to a lack of direct contractual relationships (Grimm et al., 2016). Construction businesses have complex and multi-tiered supply chains, comprising of contractors who provide services, as well as suppliers who supply products whose own supply chains may extend domestically or internationally. Traditional mechanisms to cope with social risks are not applicable to address their modern slavery risks. It is essential to explore appropriate responses to modern slavery risks that suit the special features of construction supply chains.

2.3.4. Modern slavery reporting

Under the Act, large companies are required to provide modern slavery statements and disclose information on how they detect and respond to modern slavery over the reporting periods. It is critical for construction companies to develop effective strategies on the disclosure of their modern slavery information. Previous research on information disclosure was mainly undertaken in the field of financial accounting (Hahn and Kühnen, 2013). Studies on the reporting of corporate social responsibility found that there has been a lack of standardised approach towards reporting, and the disclosure content varies depending on industry sectors, firm size, and geographical locations (Tate et al., 2010). Since modern slavery legislation regarding supply chains and operations is relatively new to businesses, it remains unclear how construction companies will cope with the legislative requirements.

2.3.5. Education and training

A critical part of the modern slavery initiatives is offering training and education programs to staff and suppliers (Lund-Thomsen and Lindgreen, 2013; Stevenson and Cole, 2018). These programs enable employees to recognise and criticise their working environments in relation to contractual agreements, thus preventing them from succumbing to certain adverse situations as a result of continuous exposure overtime. Training can be undertaken externally through partnerships with certified non-government organisations (NGOs). For example, an industry peak body, the Supply Chain Sustainability School provided industry partners and members to have free access to helpful resources related to modern slavery (Russell et al., 2018). Recent research by Benstead et al. (2020) has shown that NGO-affiliated training has vastly encouraged labourers to confidentially voice their maltreatment through whistleblowing grievance reporting channels.

3. Methods

This research aims to identify the policies, systems and processes that will affect an organisation's approach to modern slavery risk and propose a framework for assessing the readiness of organisations in the construction industry in addressing modern slavery in their operations and supply chains. A qualitative research methodology was chosen to achieve the research objectives as it is suitable for research of exploratory nature (Hancock, 2002). Since the Act was recently introduced in Australia, few prior studies have been undertaken in this topic area. The industry gener-

ally lacks knowledge about the implications of the Act on their operations and supply chain management. In addition, a qualitative approach was selected in this research as it provides an in-depth way to solicit experts' insights on the subject matter and offers in-depth knowledge on the elaboration and refinement of concepts and best practices (Eisenhardt and Graebner, 2007). Also, a qualitative approach offers a useful means to identify management processes and systems, which can be applicable elsewhere by adjusting to different institutional, cultural and contextual situations.

The research began with a systematic desktop review of relevant extant literature from journal articles, conference papers and research reports and internet information to understand the state of the art of the modern slavery research and explore basic themes relevant to an organisation's approach to address modern slavery. We also retrieved and reviewed 54 Modern Slavery Statements submitted by Australian entities in the construction industry to further identify key themes and topics on modern slavery. The objective of the desktop review was to establish the overall framework for the research, to form the theoretical basis for the subsequent empirical investigation and to prepare a template for interviews (Denzin and Lincoln, 2017).

Semi-structured interviews were then conducted to elicit insights and perspectives from senior industry practitioners, so as to identify the policies, processes and systems that are critical to the readiness for addressing modern slavery. Interviews were chosen as the main research method due to its ability to elicit rich and in-depth information from interview participants with the knowledge, expertise and experiences in the subject matter (Cardano, 2020; Patricia, 2020). Semi-structured interviews are suitable for this research as they allow probing and follow-up discussions, which not only provide facts and phenomenon, but also facilitate the understanding of contexts and underlying reasons (Denzin and Lincoln, 2017). The interview participants were selected following a purposeful sampling procedure, as it allows the choice of information-rich individuals for in-depth investigation (Liamputtong and Ezzy, 2005). The participants were selected based on (1) extensive experience in human resource management, procurement, contract, and supply chain management within their organisation, (2) familiarity with the modern slavery legislative requirements and implications, and (3) their positions in their organisations. The detailed information of the interview participants is provided in Table 2.

A total of fifteen interviews were conducted in this research. The relatively limited number of interviewees may be because that the Act is very new to Australia and only a limited number of industry practitioners have relevant experience and adequate knowledge to comment on the modern slavery issues. Adopting a purposeful sampling method helps to make sure that participants who can provide rich and in-depth information are involved in commenting on the issues of concern, which contributes to ensure the reliability and validity of the research. In this research, the number of interviewees is deemed to be sufficient as the information collected can provide adequate data to reach meaningful and insightful conclusions, which satisfies the sampling criteria that is commonly accepted in qualitative research, "reaching theoretical saturation" (Marshall et al., 2013; Patricia, 2020). Both face-to-face and online interviews were undertaken due to the impact of COVID-19 pandemic. Pilot interviews were conducted prior to the formal ones. Also, during the interviews, the interviewees were given a chance to sum up and clarify the points they made. These measures were adopted in order to improve the validity and reliability of the research (Creswell, 2009; Alshenqeeti, 2014). The interviews ranged from one hour to one and a half hours. The interviews were recorded, transcribed, and further analysed.

Content analysis was used in this research to analyse the qualitative data as this method can offer systematic and ob-

Table 2
Background information of interview participants.

No.	Interviewee code	Position in the organisation	Type of the organisation	Years of professional experience
1	P1	Procurement manager	Local government	Over 20
2	P2	Procurement governance officer	State-owned enterprise	11 - 20
3	P3	Chief executive	Software company	Over 20
4	P4	Procurement policy advisor	State government	11 - 20
5	P5	Procurement manager	Property company	Over 20
6	P6	Sector leader	Construction and engineering firm	Over 20
7	P7	Procurement manager	Tertiary education	5 - 10
8	P8	Chief executive	Education and training organisation	Over 20
9	P9	Strategic procurement manager	Construction company	Over 20
10	P10	Strategic procurement manager	Construction company	Over 20
11	P11	Procurement manager	Local government	Over 20
12	P12	Procurement manager	Property company	11 - 20
13	P13	Procurement manager	Asset management company	11 - 20
14	P14	Financial controller	Construction company	Over 20
15	P15	Human resource manager	Construction company	5 - 10

jective means to make inferences from data, to describe and quantify specific phenomena with minimal information loss (Krippendorff, 2013). As suggested by Vaismoradi et al. (2013), content analysis can be used for analysing data derived from documents or open-ended survey, which fits in with the data collection protocol in this research. The Modern Slavery Statements submitted by Australian entities in the construction industry provide important reference for analysing current practices taken by reporting entities in identifying and mitigating modern slavery risk. The insights and comments from semi-structured interviews also offer rich information for the subsequent content analysis. The content analysis was assisted by the qualitative data analysis software, NVivo 12. The software enables the development of themes emerging from the interviews and the Modern Slavery Statements reviewed. It also allows for a comparative analysis of text codes under the same category to ensure consistent coding and interpretations (Bazeley and Richards, 2000). Based on the qualitative data analysis, this paper proposes a framework for assessing entities' readiness for addressing modern slavery and further develops a questionnaire to provide a practical tool to assist the readiness assessment.

4. Research results

A review of the submitted Modern Slavery Statements in Australia and semi-structured interviews identify the policies, processes, systems, and practices that are deemed critical to an organisation's approach to address modern slavery in their operations and supply chains. These can be categorised under five groups: (1) governance, (2) risk assessment and ongoing due diligence, (3) risk mitigation, grievance, and remediation, (4) performance monitoring and reporting, and (5) education and capability building. These five groups will be presented and discussed in below sections.

4.1. Governance

4.1.1. Policies in relation to modern slavery

The interview participants highlighted the importance of effective governance in combating modern slavery. Amongst the various governance mechanisms, policies are considered critical in guiding an organisation's actions in addressing modern slavery risk. As argued by Interviewee P1, modern slavery is an integral part of Environmental, Social, and Corporate Governance (ESG) and Corporate Social Responsibility (CSR). Most organisations embed the provisions and procedures on modern slavery in existing policies on ESG and CSR. The policies that are relevant to modern slavery, albeit varying in their titles, can generally be grouped

under two categories, internal and external. Internal policies refer to policies, systems, and processes to be implemented within the organisation. These usually include Procurement policy, Child Labour policy, Migrant Worker Policy, Human Rights Policy, Recruitment Policy, Whistle-blower Policy and Grievance Policy. For example, (SGS Australia 2021) implemented a publicly available Human Rights Policy, which mandates SGS affiliates to protect and respect human rights in selecting and managing employees, suppliers, and business partners. Some entities updated their Code of Business or Code of Integrity, applicable to their employees and representatives, which include clear prohibition on child labour and forced labour. Externally, organisations focus on updating their Supplier Code of Conduct by incorporating clauses and expectations on their suppliers' approach to modern slavery issues and ethical behaviours in their operations and supply chains.

Some reporting entities introduced new policies specifically focusing on modern slavery. For example, (Kane Constructions 2021) developed and introduced a Modern Slavery Policy to create an integrated and consistent approach with organisations the company works alongside to minimise the modern slavery risks. The (FDC Group 2021) developed and implemented an initial Modern Slavery Policy and also created and distributed the FDC Modern Slavery Charter for Suppliers and Service Providers. Lendlease (2021) introduced a new global Risk Appetite Framework that sets defined boundaries for the organisation and its employees, within which all business activities must be carried out and modern slavery risk is recognised and referenced in the Framework.

Whilst recognising the importance of the establishment of relevant policies on modern slavery, Interviewees P2, P8 and P10 emphasised the extent to which the policies are well communicated and implemented in the organisation. Interviewee P8 pointed out:

There is a gap between the theory and practice. It is a good start (to have the policies), but how are they enforced? The building sector is an interesting example. We have regulations in Australia about energy efficiency. But how many homes are actually built to that level? It is not only regulations needing improvements. It is enforcement. Who is checking? Who is measuring?

4.1.2. Certification/compliance in relation to modern slavery

Five interviewees (P1, P2, P4, P8, P9) reinforced that modern slavery is not an isolated issue. Instead, it is intricately associated with health, safety, quality, environmental and social sustainability issues. There are a wide range of existing international and national certifications or standards on these issues, including ISO 9001:2015 Quality management systems, ISO 14,001:2015 Environmental management systems, ISO 45,001:2018 Occupational health and safety management systems, ISO 20,400:2017 Sustainable procurement, ISO 26,000:2010 Guidance on social responsibility and

SA8000 Social accountability. For example, in compliance with the ISO 45,001, Lendlease sets out the Global Minimum Requirements (GMRs), which specifies minimum requirements for worker welfare and accommodation facilities, working hours and operational approaches for mitigating injury risks on site. Delta Group relies upon their certified Quality (ISO9001), Safety (ISO45001), Environmental (ISO14001), and Risk (ISO31000) Management Systems to maintain policies, procedures, and practices in addressing modern slavery risks (Lendlease Group, 2021). The interviewees agreed that if organisations can demonstrate compliance or certification with international and national standards, they are generally at a better position in addressing modern slavery risks.

4.1.3. Committed resources and effective governance structures

All interviewees were of a view that the commitment to ESG/CSR/modern slavery within the organisation, especially from executive levels, is critical to driving initiatives and actions to combat modern slavery. This is reflected by the Act requiring that Modern Slavery Statements be signed off by the principal governing body of the reporting entity, which will likely be the Board for most organisations. Interviewee P1 stated:

When conducting the readiness assessment (for combating modern slavery), it will initially be directed at Boards or Executives. This would help understand the organisational readiness from a governance perspective. Selected staff could be included to assess the readiness of organisations, but unless they have buy-in from executive levels, then it is not going to be effective.

In addition to executive-level commitment, it is important to have committed resources on modern slavery initiatives. According to interviewees P1, P2, P3, P5, and P15 the committed resources can be reflected in a range of aspects: (1) The organisation provides appropriate budget for meeting ESG/CSR/modern slavery requirements; (2) The organisation has senior appointments responsible for ESG/CSR/modern slavery; (3) The organisation has clearly allocated accountabilities for identifying and managing risks of modern slavery; and (4) The organisation sets up effective governance for addressing modern slavery. Indeed, different organisations have varied levels of commitment and governance structures on modern slavery, due to different business sizes, operation structures and strategic directions. For large construction and property companies, such as Lendlease, the businesses cover different regions and countries. A core supply chain risk team was established at group level overseeing and coordinating effort and initiatives on modern slavery and related issues. At regional level, Lendlease established regional Modern Slavery Communities of Practice, which include representatives from legal, risk, sustainability, operations, and supply chains across eight countries, focusing on raising the awareness of modern slavery risk and establishing a baseline of regional activities being performed. As for relatively smaller construction companies, a cross functional modern slavery working group is usually formed, including staff from procurement, OHS, legal, sustainability, risk and process improvement and human resource departments. The working group usually reports directly to the Board of Directors.

4.2. Risk assessment and ongoing due diligence

4.2.1. Stakeholder engagement and systematic modern slavery risk assessment

All interviewees acknowledged that risk assessment is the current focus of the modern slavery initiatives. This is also in line with the findings from the content analysis of the submitted Modern Slavery Statements. Being aware of the legislative requirements, the initial response from most organisations was to engage the stakeholders (e.g., major suppliers, independent or third-party consultancy) to conduct a thorough supply chain mapping and system-

atic modern slavery risk assessment. For example, (Mirvac 2021) undertook an independent risk assessment of the products and industries where they purchase and spend. This includes an initial risk scanning, detailed risk mapping, developing a risk matrix, and tracing high-risk categories. The detailed supply chain mapping helped them to identify risks at a material and subcontractor level and then developed a risk matrix based on materials, location and known risk areas. The (FDC Group 2021) separately undertook the risk assessments of corporate expenditures and project-based expenditures and identified high-risk materials/services and high-risk countries possibly sourced from.

Interviewees pointed out the major barriers hindering an in-depth risk assessment lie in the complex and dynamic nature of construction businesses and supply chains. Conducting thorough supply chain mapping is highly challenging due to the large volume of transactions. For example, Interviewee P10 asserted:

We've got huge number of data points. We had 50,000–70,000 individual transactions every year. We did three years' mapping of those things, but the data was too confusing to allow us to get meaningful results. So instead of looking at transactions, we look at categories that we work on and where the suppliers are from.

It is thus common to see construction organisations classify their spending under a number of categories and prioritise their effort and in-depth investigation into high-risk areas. For example, Interviewee P10 listed the three categories in which modern slavery risks may exist: (1) direct employment, (2) employment due to subcontracting and (3) global supply chains on material supply. Given that most direct employment occurs within Australia under the organisation's directions, it is usually deemed a low-risk area. However, since construction projects are often subjected to tight timeframes, when the deadline is approaching it is difficult to make sure that modern slavery practices are not involved. In these circumstances, there is a heightened risk of modern slavery practices as workers could be forced to work longer hours, and there maybe the temptation to employ migrants on lower wages to help meet budget pressures. The material supply chains receive most attention as a wide variety of material is sourced from high-risk regions and areas. Based on this analysis, organisations can prioritise their effort and focus on the material types and sourcing countries that are of high risk.

4.2.2. Ongoing due diligence and auditing

In addition to initial supply chain mapping and risk assessment, the interview participants asserted that ongoing due diligence and auditing is of equal importance in detecting and addressing modern slavery risk. They noted that in the UK, when the Modern Slavery Act 2015 was introduced, many reporting entities endeavoured to identify and assess their modern slavery risk to fulfil the legislative requirements. However, the ongoing due diligence and auditing was sometimes not performed in a timely and effective manner. Drawing on the lessons learned from the UK, the interviewees highlighted the need for requiring suppliers/sub-contractors to use tools/questions, such as self-assessment questionnaires and pre-qualification questionnaires to continually monitor modern slavery risks. Also, it is useful to update their contracts with clauses that allow access to sites, documentation, and evidence to verify information and identify risk.

Interviewees called for an integrated online platform or software system to automate the management process. The platform is desired to have features that can filter the raw data into the portal, cleanse, classify and aggregate sector spend data, perform risk assessment, and action coordination. The interviewees believed that such an automated system can significantly improve the effectiveness and efficiency of the practices in assessing and addressing modern slavery risk. Interviewee P7 introduced an initiative taken by the Australian Universities Procurement Network (AUPN) in ad-

addressing modern slavery. AUPN represents the Australian and New Zealand higher education sector, who work together to improve excellence in procurement practice. In the modern slavery initiative, AUPN engaged with an external organisation to develop a platform to help member organisations conduct their risk assessments by providing technological support. The AUPN initiative could possibly be introduced to the construction industry.

4.3. Risk mitigation, grievance and remediation

4.3.1. Risk mitigation focusing on supplier engagement

Under the Act, reporting entities are required to report on their efforts in mitigating modern slavery risk. According to interview participants P4, P5, P9 and P10, current risk mitigation measures are mainly concerned with supplier/sub-contractor engagement. It is a common practice that organisations performed a preliminary screening of their suppliers and administered a questionnaire survey targeting their Tier-1, or possibly Tier-2 suppliers to gain an understanding of their approach in engaging their suppliers and sub-contractors. Interviewees P9 and P10 stated that right after they started the modern slavery initiative, they had a series of round-table discussions with key suppliers. Interviewee P10 elaborated:

We looked at where we consume. From there we identified the high-risk inputs. We decided to focus on bitumen and PPE (Personal Protective Equipment). We first went to speak to our major suppliers and then minor suppliers. Some of the major suppliers were very positive and formally filled out the questionnaire. The minor suppliers were happy to speak to us but did not formally fill out the questionnaire, partly because they were not particularly well educated about the modern slavery requirements.

A collaborative approach is advocated to be an instrumental approach in mitigating modern slavery risk. The collaboration can be achieved by closely engaging and communicating with suppliers. Information sharing and knowledge transfer serve as catalysts for improving the practices in supplier engagement and sourcing activities. Thus, Interviewee P8 highlighted that supplier/business relationship management is the core of modern slavery risk management. Building collaborative relationships with suppliers helps to proactively mitigate potential risk. Interviewee P10 and P5 further commented:

50% of our major suppliers have very detailed and strong requirements in this area and they share the information and are transparent about the whole processes they went through (P10).

(If modern slavery risk is identified), terminating the contract will only make things worse. The people will end up being in a worse situation. We need to hold their (suppliers) hands to help them. We need to build a positive relationship and share knowledge (P5).

4.3.2. Grievance and remediation mechanisms

All interview participants accepted that most organisations are at an early stage in developing and implementing their practices in combating modern slavery. A review of the submitted Modern Slavery Statements clearly showed that the current focus of the modern slavery initiatives centres on risk assessment and policy setting. However, the interviewees maintained that the focus will gradually shift to grievance and remediation in coming years. There are a variety of grievance and remediation measures and mechanisms that were recommended by the interviewees and identified from reviewing the submitted Modern Slavery Statements: (1) Organisations need to set up clear grievance channels, such as via expanding on existing whistle-blower hotlines for employee and supplier use in managing modern slavery risk; (2) Organisations have clearly defined or articulated consequences/actions if modern slavery practices are detected; (3) Or-

ganisations set out clear processes for remedial actions if modern slavery practices are detected; (4) Organisations have established internal and external reporting channels for monitoring and reporting on modern slavery risk management; and (5) Organisations implement remedial mechanisms that aid in building trust and ensuring dialogue and feedback.

4.4. Performance monitoring and reporting

4.4.1. Performance evaluation, monitoring and certification

It is evident that organisations' current practices on modern slavery focus on risk assessment and risk mitigation. This is understandable because the Act was recently introduced in Australia and most organisations are at an early stage in addressing modern slavery risk. However, the interviewees mentioned that under the legislation, reporting entities are required to assess the effectiveness of the risk mitigation measures taken. Clearly, performance evaluation and monitoring is an essential element in fulfilling the legislative requirements. The Interviewee from one of the largest construction companies (P9) stated that they are in the process of formulating a series of qualitative and quantitative measures, as well as Key Performance Indicators (KPIs) in relation to the management of modern slavery. A suite of lead indicators (e.g., targeted percent of personnel trained, number of suppliers audited) and lag indicators (e.g., number of discovered instances of modern slavery remediated) may be adopted in performance evaluation and monitoring.

The interviewees generally acknowledge that initiatives in combating modern slavery are primarily aimed at legal compliance. In the meantime, interviewees P6, P11 and P13 maintained that incentive mechanisms should be in place to encourage better performance in addressing modern slavery. They were of a view that third-party certification concerning modern slavery can be an effective means of incentivising suppliers and organisations to commit more resources to combating modern slavery. For example, a certification system, called CM³ was developed by Greencap to assist the collection of information about sub-contractors and suppliers on issues concerning work health and safety and modern slavery. Certification and recognition can help organisations to improve their reputation and thus can be a catalyst for better performance.

4.4.2. Modern slavery reporting

It is interesting to note that the interviewees generally feel that the overall quality of the first Australian Modern Slavery Statements are of a higher standard than the first Modern Slavery Statements submitted in the UK after their Modern Slavery Act was introduced in 2015. As indicated by interviewees, this may be attributable to thoroughness, depth and clarity of the guidance document, *Commonwealth Modern Slavery Act 2018 Guidance for Reporting Entities (the Guidance)*, released by the Australian Boarder Force. The *Guidance* sets out clear expectations and directions that were critical to preparing Modern Slavery Statements. Again, the interviewees (P7, P11, P13 and P14) maintained that the modern slavery reporting could be better supported by an automated system or platform that can aggregate, filter, and analyse the data, and further present the results (e.g., in the form of dashboard).

4.5. Education and capability building

4.5.1. Awareness level of modern slavery

The themes mentioned most in the interviews are education and capability building. Modern slavery is a new topic and the industry's level of awareness is relatively low. Indeed, large reporting entities, and organisations that intend to submit Modern Slavery Statements on a voluntary basis, such as state government departments, are familiar with the legislative requirements and have

taken initiatives, such as training and education in capability building. However, lower tier suppliers or sub-contractors generally lack the required knowledge and capability to systematically assess the modern slavery risk and adopt mitigation measures. For example, Interviewee P14 pointed out that most construction businesses, especially the sub-contractors, are small to medium size enterprises, which have not met the threshold for legislative compliance. Their awareness level of modern slavery is generally low. Interviewees P10 and P12 reinforced that the Tier-2 and Tier-3 construction companies tend to have less knowledge about what modern slavery constitutes and how to address modern slavery risk but are keen on developing capability in this area.

4.5.2. Training, education, and informal information sharing

All interviewees agreed that training and education is the key in raising awareness and capability building. Industry peak bodies, such as the Infrastructure Sustainability Council of Australia, Supply Chain Sustainability School and Australian Constructors Association, need to play an important role in training and education. A collaborative approach is preferred, with organisations in the same industry forming an alliance through which information sharing and knowledge transfer is achieved. Large property and construction firms, such as Mirvac and Lendlease collaborated with peers through the Property Council of Australia (PCA). The PCA established a Supplier Engagement Platform through engaging with a third-party organisation named Informed 365. Interviewee P12 highlighted that the PCA's initiative in modern slavery helped members and suppliers gain a better understanding of the legislative requirements on modern slavery and provide them detailed assistance on modern slavery risk detection, mitigation, and reporting. Another industry association, the Supply Chain Sustainability School developed a series of training modules on modern slavery, which have been adopted by some organisations. Interviewees P9, P10, and P12 found that these training modules largely facilitate education and capability building, so that they do not need to "reinvent the wheel".

It is important to note that education and training on modern slavery is part of wider training programs in relation to social sustainability issues, such as ethical sourcing and workplace health and safety. In Lendlease, modern slavery training is embedded in toolbox meetings on Australian project sites. Similarly, other organisations incorporate modern slavery requirements in their annual training modules, such as workplace health and safety training (Lendlease, 2021). In addition to the formal training and education approach, Interviewee P11 emphasised that the informal information sharing and knowledge transfer within organisations, usually has more influence on the awareness, knowledge, and capability on modern slavery. Thus, it is instrumental that organisations create mechanisms, such as informal staff meetings, case studies and discussions to facilitate information sharing.

Based on the research results, we developed a framework for assessing entities' readiness for addressing modern slavery, as shown in Fig. 1. We further developed a series of questions that can be used for readiness assessment (see Appendix 1).

Our research findings, as presented in the framework, highlight the critical themes and sub-themes that determine an entity's readiness for addressing modern slavery. Since the Modern Slavery Act 2018 (Cth) is relatively new, the industry's awareness and understanding of modern slavery is still limited. With regards to the legislative requirements, it is important that governance mechanisms, such as policies and committed resources are in place, which will lay a solid foundation for other initiatives in addressing modern slavery. Current modern slavery initiatives largely centre on risk assessment and due diligence as it lies at the heart of the modern slavery approach and it is also a pre-condition for setting out commensurate and targeted risk mitigation strategies.

Although grievance and remediation mechanisms have not been heavily emphasised in first modern slavery statements, the interviewees in this research acknowledged their increasing importance in next reporting periods. The performance of the initiatives and practices in addressing modern slavery need to be tracked, evaluated and monitored in order to ensure continual improvements. Amongst the five identified themes, education and capability building is seen as important enablers and fundamental means of achieving goals in combating modern slavery.

5. Discussion

Modern slavery is a globally prevalent problem affecting predominantly workers in labour-intensive markets, where such issues linger within multiple tiers of a supply chain (Reed et al., 2018). The construction industry is considered as one of the sectors most vulnerable to modern slavery risks (Hedwards et al., 2017). Based on semi-structured interviews conducted with senior human resource management, procurement and contract management professionals and experts in the construction industry, along with a review of submitted Modern Slavery Statements, this research empirically identified the policies, systems and processes that affect an organisation's approach to modern slavery risk and propose a framework for assessing the readiness of entities in the construction industry in addressing modern slavery in their operations and supply chains (as shown in Fig. 1).

This research reinforces previous research findings that governance largely determines an entity's readiness in combating modern slavery (Lund-Thomsen and Lindgreen, 2013; Gold et al., 2015; Barrientos, 2008). Amongst the various governance initiatives, policies lie at the heart in guiding an organisation's actions in addressing modern slavery risk. This research echoes with prior arguments that the degree to which the policies, such as the code of conduct are communicated and enforced largely impacts on the effect of the policy instruments (Jiang, 2009; Crane, 2013; Lund-Thomsen and Lindgreen, 2013). This research also highlights that modern slavery is part of the organisation's overall ESG strategies, and thus the compliance and certification with existing standards relevant to ESG also contributes to better performance in addressing modern slavery. In addition, in line with prior studies (Jiang, 2009; Crane, 2013; LeBaron and Rühmkorf, 2017), this research confirms the necessity of having committed resources, and more importantly, the executive buy-in the modern slavery initiatives.

It is not surprising to find that the current approach on modern slavery focuses on risk identification and assessment. As opposed to common approaches dealing with social risks, such as supply chain mapping and supplier auditing (Seuring and Müller, 2008; Grimm et al., 2016), this research highlights the challenges in conducting a systematic supply chain mapping in the construction, including the complicated and opaque supply chains and a lack of data management platform that is aligned with modern slavery risk identification, assessment and reporting purposes. Therefore, in addition to suppliers' self-assessment, this research promotes a stricter approach in regulating supplier' ethical behaviours, such as incorporating modern slavery requirements in pre-qualification questionnaires, contract provisions and compliance monitoring. Also, in order to address the data management problems, this research calls for an integrated online platform or software system to automate the information management process. The platform can filter the raw data into the portal, cleanse, classify and aggregate sector spend data, perform risk assessment and action coordination. The use of this platform enables a systematic and automated supply chain mapping and facilitates dynamic monitoring and management of modern slavery risks.

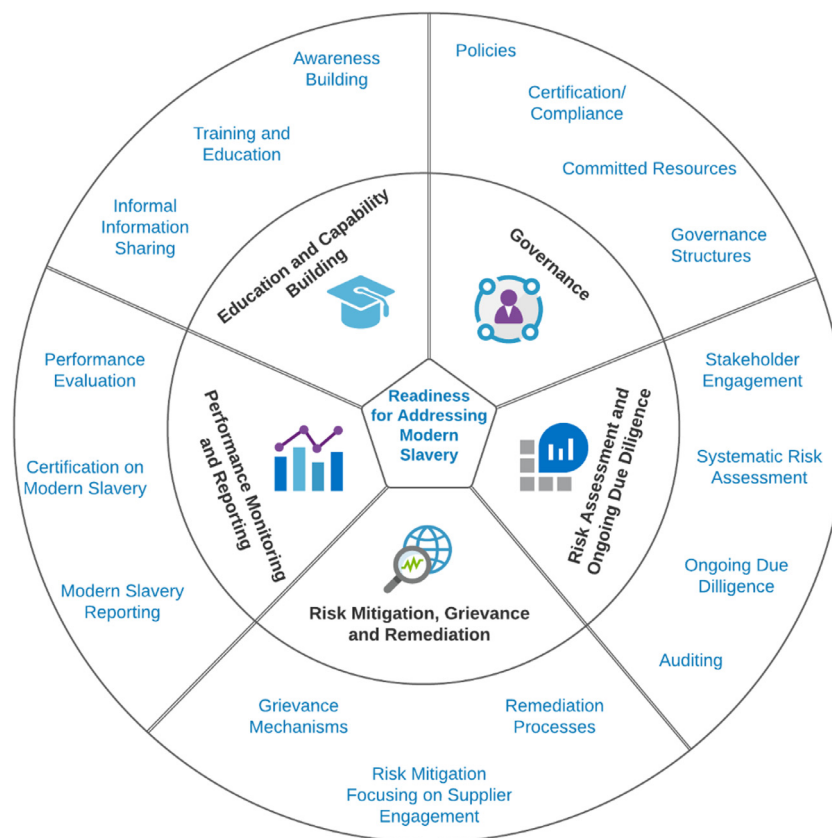


Fig. 1. Framework for assessing entities' readiness for addressing modern slavery.

This research recognises that the main risk mitigation measures are targeted at tier 1 or tier 2 suppliers. This is in line with Grimm's et al. (2016) findings that for businesses that has multi-tiered, complicated supply chains (e.g., construction), it is difficult to have much impact on sub-tiers due to a lack of direct contractual relationship. This can explain why some construction businesses currently take a staged and prioritised approach in suppliers' engagement by first focusing on high-risk and heavy spending areas. However, with the framework developed from this research, there may be flow-on effects to sub-tiers as tier 1 and 2 suppliers become more aware how to identify and address modern slavery risk. Instead of being strict and harsh during supplier engagement, this research advocates a collaborative approach in mitigating modern slavery risk. The collaboration can be achieved by closely engaging and communicating with suppliers, information sharing and knowledge transfer. It is understandable that grievance and remediation has not raised major concern at this stage. It is important that clear grievance channels, reporting lines and remedial measures are in place to respond to potential modern slavery instances detected.

Undoubtedly, the guidance document issued by the Australian Government sets out clear expectations and directions in modern slavery reporting. The interviewees of this research generally believe that Australia's first Modern Slavery Statements are of good quality. However, similar to other CSR reporting (Tate et al., 2010), there is a vast disparity in the depth of analysis and the level of due diligence between different statements. It is difficult to evaluate the performance in addressing modern slavery based on the statements. In addition, legal compliance is usually concerned with minimum requirements, and do not necessarily represent "good practices". Hence, an independent, third-party certification system is desired to provide a common language and standardised ap-

proach to evaluate the performance in addressing modern slavery, to establish a benchmark framework for comparison and set out the baseline for continuing improvement.

Education and training has been a focal effort in the new CSR/ESG initiatives. This research recognises the importance of education and training in increasing the awareness level and capability building. An effective vehicle is to create an industry or sector-specific alliance, as it demonstrates a coordinated and collaborative approach in raising the industry's capability in addressing modern slavery. Besides, informal information sharing and tacit knowledge transfer is of equal importance in capability building.

6. Conclusions

Modern slavery is a contemporary and important phenomenon that has a significant impact on construction supply chains around the globe. With the introduction of the Act to Australia, construction companies are facing increasing legislative challenges to address modern slavery in their operations and supply chains. This research is a timely endeavour to examine the implications of modern slavery on construction businesses in Australia. Based on semi-structured interviews, along with a review of submitted modern slavery statements, we identify the policies, processes, systems, and practices that are deemed critical to an organisation's approach to address modern slavery in their operations and supply chains. They categorised under five groups: (1) governance, (2) risk assessment and ongoing due diligence, (3) risk mitigation, grievance, and remediation, (4) performance monitoring and reporting, and (5) education and capability building.

Based on our research results, we recommended that a data analytics and automation platform is needed for modern slavery risk assessment and ongoing due diligence. A 3rd party certification in modern slavery is desirable to measure modern slavery perfor-

mance and create a baseline or benchmark for further improvement. Education and training are the key to increasing the awareness level of modern slavery, and information sharing serves as an effective mechanism to improve capability in addressing modern slavery. A collaborative approach is preferred in these endeavours.

This research is one of the first academic research that examines the implications of the modern slavery legislation on construction businesses in Australia. It is an exploratory attempt to investigate the key themes relevant to an entity's readiness in addressing modern slavery, which lays a foundation for further investigations into the modern slavery field. By conceptualising various themes about modern slavery in the context of Australian construction businesses, this research adds to the modern slavery research from the business and management perspective, which is often overlooked and limited in the modern slavery research landscape (Crane, 2013; Caruana et al., 2020). This research opens up a dialogue and potentially ongoing discussions on how to evaluate and continue to improve the performance in addressing modern slavery. For example, currently, the first modern slavery statements have been submitted with thousands of documents stored in the publicly accessible database, the Modern Slavery Registry (Department of Home Affairs, 2021). Given the large volumes of text data, there is a need to evaluate the quality of the modern slavery statements and assess their performance based on the submitted statements based on machine learning-based big data analytics, such as text mining. The readiness assessment framework developed from this research can provide important and useful references in the development performance evaluation indicators to be used in text classification.

Indeed, modern slavery is a cross-disciplinary subject area, with theoretical underpinnings from CSR and SCM research. The research contributes to existing body of knowledge in CSR and SCM by highlighting issues and concerns specific to modern slavery in construction businesses' operation and supply chains. Unlike other social issues in supply chain, modern slavery has its unique nature, such as illegal, hidden and embedded in multi-tier of complicated supply chains (Gold et al., 2015; Caruana et al., 2020). By highlighting issues and topics specific to modern slavery, this research adds to the body of knowledge by offering new insights into solving social issues in operations and supply chains. For example, given the complicated and opaque nature of supply chains, our research suggests an automated online platform for performing procurement data collection, filtering and data analytics to perform modern slavery risk assessment and ongoing due diligence, which allows for targeted and deep-dive of modern slavery risk analysis and enables a systematic supply chain mapping.

In terms of practical contributions, the readiness assessment framework proposed in this research provides a basis for evaluating an entity's performance in addressing modern slavery, which can subsequently be used to establish a benchmark framework for comparison and set out the baseline for continuing improvement. With the framework in place, construction businesses are better prepared in formulating and prioritising their business strategies

with regard to modern slavery legislative requirements. The government, investors, clients and customers will be better informed about how to assess an entity's maturity level in terms of addressing modern slavery. In addition, the results of this research offer practical guidance for entities in the construction industry to plan, formulate and implement policies, systems, and processes to identify and mitigate modern slavery risk, so as to satisfy legislative requirements, and to achieve social sustainability and corporate social responsibility goals.

It is important to acknowledge the limitations of the research. The opinions and insights from the fifteen interview participants may not accurately mirror the topics and issues concerning construction businesses in addressing modern slavery, raising concerns about the generalizability of the readiness assessment framework developed. Also, this research focuses on the practices and approach taken by construction businesses in Australia. It is thus essential that contextual and sector-specific factors need to be accounted for when applying the research findings in other sectors or countries. In addition, for most construction businesses, they are at the early stage in developing their approach in addressing modern slavery. The themes and sub-themes may become irrelevant or more important as the level of readiness or maturity increases. For example, some current "good practices" may become "business as usual" in a few years. Modifications, adjustments and enrichments to the readiness assessment framework will be needed as construction businesses' approach in addressing modern slavery matures.

Despite the limitations of this research, it lays a solid foundation for further research attempts in this field. Based on the themes and sub-themes identified, an industry-wide questionnaire survey (an example is shown in Appendix 1) can be developed and administered to gain a better understanding of organisations' readiness in addressing modern slavery. Given that a large volume of modern slavery statements have been submitted, the framework from this research forms a basis for developing performance evaluation framework when performing data analytics of the statements. As the practices in modern slavery develop, a third-party certification of modern slavery is likely to emerge. The research findings can then be further incorporated in developing the certification system.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix 1. Practical questionnaire for assessing entities' readiness for addressing modern slavery

Group	Key areas	Practical questions
Governance	<ul style="list-style-type: none"> • Policies • Certification/compliance • Committed resources • Governance structures 	<ul style="list-style-type: none"> • Does your organisation have policies that are relevant to the prevention of modern slavery (e.g., Supplier code of conduct, Migrant worker policy, Child labour policy, Human rights policy, Recruitment policy, Procurement policy)? • Does your organisation have any certifications/compliance in relation to sustainability (e.g., ISO 14001, ISO 20400, and other standards)? • Is your organisation committed to ESG/CSR? • Does your organisation provide appropriate budget for meeting ESG/CSR requirements? • Has your organisation clearly allocated accountabilities for identifying and managing risks of modern slavery? • Do your organisation's executive contracts include KPIs/responsibilities for addressing ESG/CSR? • Does your organisation's compliance with ESG/CSR get reported to the Board/Executive? • Is senior management in your organisation responsible and accountable for ESG/CSR/Modern slavery?
Risk assessment and ongoing due diligence	<ul style="list-style-type: none"> • Stakeholder engagement • Systematic modern slavery risk assessment • Ongoing due diligence • Auditing 	<ul style="list-style-type: none"> • Does your organisation collaborate with external experts to assist with better management of modern slavery risks? • Has your organisation updated their contracts with clauses that address modern slavery? • Has your organisation updated their contracts with clauses that allow access to sites, documentation, and evidence to verify information and identify risks? • Does your organisation have software to assist in capturing and analysing data in relation to modern slavery? • Is your organisation aware of the key modern slavery risk factors for their business and industry sector? • Has your organisation included modern slavery risks on its risk register? • Has your organisation established accountabilities for identifying modern slavery risks? • Has your organisation assessed how the organisation's purchasing practices may create pressures on their suppliers that could lead to modern slavery? • Does your organisation require suppliers/contractors to use tools/questions (e.g., self-assessment questionnaire / pre-qualification questionnaire) for identifying modern slavery risks? • Does your organisation refer to the Australian Government's Online Register for Modern Slavery Statements when assessing suppliers/contractors? • Has your organisation examined the current recruitment practices, work conditions, hours of work, wages & overtime in their operations? • Has your organisation mapped the supply chain end to end or identify all tiers of suppliers and subcontractors? • Does your organisation follow up with suppliers and contractors that provide insufficient information on their modern slavery risks?
Risk mitigation, grievance and remediation	<ul style="list-style-type: none"> • Grievance mechanisms • Risk mitigation • Remediation processes 	<ul style="list-style-type: none"> • Does your organisation have established clear grievance channels, such as via expanding on existing whistle-blower hotlines, for employee and supplier use in managing modern slavery risk? • Does your organisation have clearly defined or articulated consequences/actions if modern slavery practices are detected? • Does your organisation have established internal and external reporting channels for monitoring and reporting on modern slavery risk management? • Does organisation set out clear processes for remedial actions if modern slavery practices are detected? • Has your organisation implemented remedial mechanisms that aid to build trust and ensure dialogue and feedback?
Performance monitoring and reporting	<ul style="list-style-type: none"> • Performance evaluation • Certification on modern slavery • Modern slavery reporting 	<ul style="list-style-type: none"> • Does your organisation support transparent modern slavery reporting for the benefit of business and the people at risk of harm in line with Government objectives? • Does your organisation assess both qualitative and quantitative measures and KPIs in relation to management of modern slavery? • Does your organisation monitor lead indicators (e.g., targeted percent of personnel trained, number of suppliers audited)? • Does your organisation monitor lag indicators (e.g., number of discovered instances of modern slavery remediated)? • Does your organisation assess continuous improvement against targets for elimination of modern slavery in operations and supply chains? • Does your organisation consider achieving third-party certification around modern slavery? • Has your organisation established internal and external reporting channels and processes for reporting on modern slavery risk management?
Education and capability building	<ul style="list-style-type: none"> • Awareness building • Training and education • Informal information sharing 	<ul style="list-style-type: none"> • Is your organisation obliged to submit a Modern Slavery Statement in compliance with the Modern Slavery Act 2018? • Does your organisation understand what constitutes 'modern slavery' and how it can impact Australian businesses and society? • Are your organisation's relevant employees aware of the Modern Slavery Act 2018 and its requirements? • Has your organisation made sure their suppliers understand their modern slavery obligations and the organisation's expectations of them? • Does your organisation train all relevant personnel (e.g., procurement officers, human resources, legal officers) on Modern Slavery Act 2018 requirements and your organisation's approach? • Does your organisation provide training on Modern Slavery Act 2018 requirements and your organisation's approach to your suppliers' staff? • Do your organisation's strategic and operational procedures promote information sharing in relation to modern slavery? • Does your organisation's culture promote information sharing in relation to modern slavery?

References

- Australian Government (2020), "Criminal code act 1995", Available at: <https://www.legislation.gov.au/Details/C2020C00245>.
- Alshenqeeti, H., 2014. Interviewing as a Data Collection Method: A Critical Review. *English Linguistics Research* 3 (1), 39–45.
- Bazeley, P., Richards, L., 2000. *The NVivo Qualitative Project Book*. SAGE Publications, London.
- Barrientos, S., 2008. Contract labour: the "achilles heel" of corporate codes in commercial value chains. *Dev. Change* 39 (6), 977–990.
- Barrientos, S.W., 2013. Labour chains: analysing the role of labour contractors in global production networks. *J. Dev. Stud.* 49 (8), 1058–1071.
- Benstead, A.V., Hendry, L.C., Stevenson, M., 2020. Detecting and remediating modern slavery in supply chains: a targeted audit approach. *Prod. Plann. Control* 32 (13), 1136–1157.
- Berg, L. & Farbenblum, B. (2017), "Wage theft in australia: findings of the national temporary migrant work survey, migrant worker justice initiative", Available at: https://static1.squarespace.com/static/593f6d9fe4fcb5c458624206/t/5a11ff31ec212df525ad231d/1511128887089/Wage+theft+in+Australia+Report_final_web.pdf.
- CIOB (The Chartered Institute of Building) (2018), "Construction and the modern slavery act tackling exploitation in the UK", Available at: https://www.ciob.org/sites/default/files/Construction%20and%20the%20Modern%20Slavery%20Act_0.pdf.
- Cardano, M. (2020). *Defending Qualitative Research Design, Analysis, and Textualization*. Routledge.
- Caruana, R., Crane, A., Gold, S., LeBaron, G., 2021. Modern Slavery in Business: The Sad and Sorry State of a Non-Field. *Business and Society* 60 (2), 251–287.
- Commonwealth of Australia, 2018. *Modern Slavery Act 2018*. Commonwealth of Australia, Canberra, Australia.
- Crane, A., 2013. Modern slavery as a management practice: exploring the conditions and capabilities for human exploitation. *Acad. Manag. Rev.* 38 (1), 49–69.
- Crane, A., LeBaron, G., Allain, J., Behbahani, L., 2019. Governance gaps in eradicating forced labor: From global to domestic supply chains. *Regulation and Governance* 13, 86–106.
- Creswell, J.W., 2009. *Research design: Qualitative, quantitative, and mixed methods approaches*, 3rd ed. Sage Publications.
- Denzin, N.K., Lincoln, Y.S., 2017. *The SAGE Handbook of Qualitative Research*. Sage Publications, Thousand Oaks.
- Department of Home Affairs (2021), "Modern Slavery", Available at: <https://www.homeaffairs.gov.au/criminal-justice/Pages/modern-slavery.aspx> (accessed 19 May 2021).
- Eisenhardt, K.M., Graebner, M.E., 2007. Theory building from cases: opportunities and challenges. *Acad. Manag. J.* 50 (1), 25–32.
- FDC Group (2021), "FDC modern slavery statement 2020", Available at: <https://modernslaveryregister.gov.au/statements/file/9fd06f3b-dc29-405d-8c9f-6a71cb7b4aef/>.
- Formentini, M., Taticchi, P., 2016. Corporate sustainability approaches and governance mechanisms in sustainable supply chain management. *J. Clean. Prod.* 112, 1920–1933.
- Gimenez, C., Tachizawa, E.M., 2012. Extending sustainability to suppliers: a systematic literature review". *Supply Chain Manag. Int. J.* 17 (5), 531–543.
- Gold, S., Seuring, S., Beske, P., 2010. Sustainable supply chain management and inter-organizational resources: a literature review. *Corp. Soc. Responsib. Environ. Manag.* 17 (4), 230–245.
- Gold, S., Trautrim, A., Trodd, Z., 2015. Modern slavery challenges to supply chain management". *Supply Chain Manag. Int. J.* 20 (5), 485–494.
- Grimm, J.H., Hofstetter, J.S., Sarkis, J., 2016. Exploring Sub-suppliers' compliance with corporate sustainability standards. *J. Clean. Prod.* 112, 1971–1984.
- Hahn, R., Kühnen, M., 2013. Determinants of sustainability reporting: a review of results, trends, theory, and opportunities in an expanding field of research. *J. Clean. Prod.* 59, 5–21.
- Hall, J., Matos, S., 2010. Incorporating impoverished communities in sustainable supply chains. *Int. J. Phys. Distrib. Logist. Manag.* 40 (1/2), 124–147.
- Hackley, C., 2019. *Qualitative Research in Marketing and Management: Doing Interpretive Research Projects*. Taylor & Francis Group.
- Hancock, B., 2002. *An Introduction to Qualitative Research*. University of Nottingham, Nottingham.
- Hedwards, B., Andreovski, H., Bricknell, S., 2017. *Labour Exploitation in the Australian construction industry: Risks and Protections For Temporary Migrant Workers*. Australian Institute of Criminology AIC reports Research report 02, Available at <https://www.aic.gov.au/sites/default/files/2020-05/r002.pdf>.
- ILO (2017), "Global Estimates of Modern Slavery: forced Labour and Forced Marriage, International Labour Organization, Walk Free Foundation, & International Organization for Migration", Available at: https://www.ilo.org/wcmsp5/groups/public/-dgreports/-dcomm/documents/publication/wcms_575479.pdf.
- Jiang, B., 2009. Implementing supplier codes of conduct in global supply chains: process explanations from theoretic and empirical perspectives. *J. Bus. Ethics* 85 (1), 77–92.
- JSCFADT, 2017. *Hidden in Plain sight: An inquiry Into Establishing a Modern Slavery Act in Australia*. Joint Standing Committee on Foreign Affairs, Defence and Trade, Canberra, Australia Available at https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Foreign_Affairs_Defence_and_Trade/ModernSlavery/Final_report.
- Kane Constructions (2021), "Kane modern slavery statement FY2019–2020", available at: <https://modernslaveryregister.gov.au/statements/1383/>.
- Ketchen, J.D.J., Hult, G.T.M., 2007. Bridging organization theory and supply chain management: the case of best value supply chains. *J. Oper. Manag.* 25, 573–580 Iss. 2.
- KPMG (2020), "Modern slavery in Australian property, construction and infrastructure supply chains", Available at: <https://assets.kpmg/content/dam/kpmg/au/pdf/2020/property-construction-modern-slavery-practical-guide.pdf>.
- Krippendorff, K., 2013. *Content Analysis: An Introduction to its Methodology*. SAGE Publications.
- Landman, T., Silverman, B.W., 2019. Globalization and Modern Slavery. *Polit. Gov.* 7 (4), 275–290 Iss.
- Liamputtong, P., Ezzy, D., 2005. *Qualitative Research Methods*. Oxford University Press, South Melbourne, Victoria.
- LeBaron, G., 2018. *The Global Business of Forced Labour: Report of Findings*. Sheffield Political Economy Research Institute, The University of Sheffield.
- LeBaron, G., Crane, A., 2019. Methodological challenges in the business of forced labour. In: *Researching Forced Labour in the Global economy: Methodological challenges and Advances*. Oxford University Press, pp. 25–43.
- LeBaron, G., Rühmkorf, A., 2017. Steering CSR through home state regulation: a comparison of the impact of the UK bribery act and modern slavery act on global supply chain governance. *Glob. Policy* 8 (S3), 15–28.
- Lund-Thomsen, P., Lindgreen, A., 2013. Corporate social responsibility in global value chains: where are we now and where are we going? *J. Bus. Ethics* 123 (1), 11–22.
- Lendlease (2021). *Setting the foundations for change Modern Slavery Statement Financial Year 2020*. Available at: <https://www.lendlease.com/au/-/media/llcom/documents/ll9567-grp-modern-slavery-statement-fa-v2.pdf>.
- Lendlease Group (2021), "Setting the foundations for change. Modern Slavery Statement Financial Year 2020", Available at: <https://modernslaveryregister.gov.au/statements/file/df3f0973-ce09-424a-b28f-c3d557ce2269/>.
- Mirvac (2021), "Modern slavery statement", Available at: <https://modernslaveryregister.gov.au/statements/753/>.
- Müller, M., Gomes dos Santos, V., Seuring, S., 2009. The contribution of environmental and social standards towards ensuring legitimacy in supply chain governance. *J. Bus. Ethics* 89 (4), 509–523.
- New, S.J., 2015. Modern slavery and the supply chain: the limits of corporate social responsibility? *Supply Chain Manag. Int. J.* 20 (6), 697–707.
- New Zealand Government (2021), "Combating modern slavery", Available at: <https://www.mfat.govt.nz/en/trade/nz-trade-policy/combating-modern-slavery/>.
- Quirk, J.F., 2006. The Anti-Slavery Project: linking the historical and contemporary. *Hum. Rights Quart.* 598.
- Reed, S., Roe, S., Grimshaw, J., & Oliver, R. (2018), "The economic and social costs of modern slavery". Available at: <https://www.antislaverycommissioner.co.uk/media/1258/the-economic-and-social-costs-of-modern-slavery.pdf>.
- Rees, G., Ichilick, H., Grassi, P., & Pong, S. (2021), "Modern slavery in financial services: no room for complacency", Available at: [https://uk.practicallaw.thomsonreuters.com/w-029-7730?transitionType=Default&contextData=\(sc.Default\)&firstPage=true](https://uk.practicallaw.thomsonreuters.com/w-029-7730?transitionType=Default&contextData=(sc.Default)&firstPage=true).
- Russell, E., Lee, J., Clift, R., 2018. Can the SDGs provide a basis for supply chain decisions in the construction sector? *Sustainability* 10 (3), 629.
- Sancha, C., Gimenez, C., Sierra, V., Kazeminia, A., 2015. Does implementing social supplier development practices pay off? *Supply Chain Manag. Int. J.* 20 (4), 389–403.
- Seuring, S., Müller, M., 2008. From a literature review to a conceptual framework for sustainable supply chain management. *J. Clean. Prod.* 16 (15), 1699–1710.
- SGS Australia (2021), "SGS Australia modern slavery statement 2019", Available at: <https://modernslaveryregister.gov.au/statements/file/e226afc5-4a69-4103-85b1-f46264bab064/>.
- Silverman, B.W., 2020. Multiple systems analysis for the quantification of modern slavery: classical and Bayesian approaches. *J. R. Stat. Soc. Ser. A* 183, 691–736 Part 3.
- State of California (2010), "California transparency in supply chains act", Available at: https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=CIV§ionNum=1714.43.
- Stevenson, M., Cole, R., 2018. Modern slavery in supply chains: a secondary data analysis of detection, remediation and disclosure". *Supply Chain Manag. Int. J.* 23 (3), 81–99.
- Stiller, S., Gold, S., 2014. Socially sustainable supply chain management practices in the Indian seed sector-a case study. *Supply Chain Forum Int. J.* 5 (1), 52–67.
- Tate, W.L., Ellram, L.M., Kirchoff, J.F., 2010. Corporate social responsibility reports: a thematic analysis related to supply chain management. *J. Supply Chain Manag.* 46 (1), 19–44.
- UK Government (2015), "Modern Slavery Act 2015", Available at: www.legislation.gov.uk/ukpga/2015/30/pdfs/ukpga_20150030_en.pdf.
- Vachon, S., Klassen, R.D., 2006. Green project partnership in the supply chain: the case of the package printing industry. *J. Clean. Prod.* 14, 661–671.
- Vaismoradi, M., Turunen, H., Bondas, T., 2013. Content analysis and thematic analysis: implications for conducting a qualitative descriptive study. *Nurs. Health Sci.* 15, 398–405.
- Walker, A.M., Opferkuch, K., Lindgreen, E.R., Simboli, A., Vermeulen, W., Raggi, A., 2021. Assessing the social sustainability of circular economy practices: industry perspectives from Italy and the Netherlands". *Sustain. Prod. Consum.* 27, 831–844.
- Walk Free Foundation, 2018. "Global Slavery Index 2018". Walk Free Foundation.
- Werdmuller Von Elgg, J. (2016), "Hidden in plain sight: modern slavery in the construction industry", Available at: <https://corporateaccountabilityproject.weblogs.anu.edu.au/hidden-in-plain-sight-modern-slavery-in-the-construction-industry/>.