Corporate Social Responsibility and Sustainability:

Environmental and social online disclosure by Australian gold mining companies

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A thesis submitted to the University of the Sunshine Coast in fulfilment of the requirements for the degree of Doctor of Philosophy

School of Business
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Queensland, Australia

April 2016
This thesis is dedicated to my parents,

Egon and Gisela Helling,

for their love, support and encouragement
Abstract

For many years, corporate social responsibility (CSR) has been under critical observation, particularly in environmentally sensitive industries such as mining. In response, mining companies voluntarily provide environmental and social information on their corporate websites. However, Australian investors do not make appreciable use of websites as their preferred source of information due to their general mistrust in corporate online information. In the light of national expectations and international requirements with regard to CSR online information, four research questions were developed. The first research question seeks to identify what Australian investors expect from environmental and social corporate initiatives and correspondent online disclosure. The second and third research questions deal with CSR information Australian gold mining companies disclose online and the differences in online disclosure related to leadership characteristics in the field. Finally, the fourth research question seeks to identify CSR online information needs of Australian investors.

Using an exploratory sequential mixed methods research design, the thesis comprised qualitative interviews and website analysis as well as a quantitative survey. In-depth semi-structured interviews explored investors’ expectations of CSR and sustainability initiatives in the Australian gold mining industry with regard to environmental and social disclosure on corporate websites. Corporate website sections were analysed using a linguistic approach to identify online communication strategies and the companies’ stage of online disclosure. Finally, a survey was conducted to identify Australian investors’ online information needs with regard to environmental and social disclosure, and demographic, descriptive and hierarchical cluster analyses were undertaken.

It was found that Australian investors’ understanding and expectations of CSR focus on social rather than environmental aspects. Furthermore, a paradigm shift from CSR to sustainability discourse was identified together with a generic rather than narrative format of online disclosure. A tendency of smaller companies in the field to imitate the industry leaders’ communication strategies emerged. Moreover, the gold mining companies analysed in this thesis were classified to be at an adolescent or matured stage of online disclosure. Finally, it was found
that Australian investors generally mistrust corporate online disclosure unless supported by third party assurance.

This thesis is part of a growing body of research on the understanding of how CSR and sustainability is communicated in the Australian context. Further research is recommended in sensitive industries other than mining, different cultural settings other than Australia and specific gender and age-related preferences with regard to CSR and sustainability online communication. Practical implications focus on assuring non-financial online information to overcome investors' mistrust, preparing for a new generation of investors who embrace sustainability rather than CSR and providing additional non-financial information to differentiate from other companies in the light of coercive isomorphism in relation to online disclosure.
Declaration of Originality

The work contained in this thesis has not been previously submitted for a degree or diploma at any other higher education institution. The thesis describes original research by the author since the official commencement date. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

........................................

Annette Helling-Benze

April 2016
Acknowledgements

I would not have been able to prepare and complete this thesis without the invaluable assistance and guidance of certain individuals.

I gratefully acknowledge Professor David Gadenne, who encouraged me to focus on CSR communication as a thesis topic and guided me with expertise through the application process until he retired from USC late in 2012.

I would like to express my gratitude to Executive Dean Professor Joanne Scott for supporting my application for a USC International Research Scholarship. Many thanks go also to Professor Roland de Marco for approving it.

I am heartily thankful to my principal supervisor Associate Professor Don Kerr for his competent guidance, encouragement, support and thoughtful comments throughout my entire doctoral journey, as well as his support in terms of financial approvals.

It is also a pleasure to offer my appreciation to my co-supervisor Dr Peter Innes for his supervision, support, experienced advice and helpful contributions with regard to research methods and structuring my thesis. I also like to express my appreciation to my second co-supervisor Professor Michael Clements for his support and helpful feedback.

Many thanks go to Associate Professor Monty Wynder and Dr Bishnu Sharma for providing excellent feedback on my ethic applications before submission. I would also like to thank Greg Kiorgaard and his team for answering all my questions in relation to ethically conducting interviews and surveys.

My deep appreciation goes to faculty librarian Courtney Moran, who taught me to develop successful strategies to search online for relevant papers. She also helped me to effectively and properly use Endnote for citations according to USC guidelines.

Many thanks go to IT staff who provided trouble-free access to all kinds of software relevant to my research.

I would like to thank USC disability advisors who helped me to travel smoothly through my doctoral journey despite some trouble with my health conditions.
It is also a pleasure to offer my appreciation to USC staff from FAB Research, FAB Finance and the Office of Research for their helpful recommendations and competent support.

I gratefully acknowledge all my interviewees and respondents to the survey for participating in my research.

I also thank Dr Janene Carey for editorial assistance with this thesis, which took the form of formatting, copyediting and proofreading, as specified in Standards D and E of the Australian Standards for Editing Practice.

Many thanks go to Dr Monika Kriner for her guidance and assistance in successfully applying SPSS.

It is also a pleasure to offer my appreciation to Emeritus Professor David Potts for his helpful feedback after peer reviewing my thesis before submission. Also many thanks to Dr Jane Williams for peer reviewing parts of my thesis.

I am heartily thankful to my friends for their patience during my doctoral journey and their understanding for my limited timeframe to foster our friendship. Many thanks go to my friend and fellow student Terry Keene who helped me to schedule interview appointments over the phone and lent me his voice for the final presentation of my thesis when my voice was gone. I also thank my friend Thomas Teschler for sharing his excellent knowledge in using and formatting Microsoft Word documents.

Last but not least, I gratefully acknowledge my husband Paul Benze for his endless support, thoughtful comments and sincere encouragement throughout my entire doctoral journey.
Publications associated with this thesis


Helling-Benze, A, Kerr, D, Innes, P & Clements, M 2015, 'Corporate social responsibility and sustainability: Stage of online disclosure of Australian gold mining companies', paper presented to Academy of International Business Australia and New Zealand (AIB-ANZ) Annual Symposium, Brisbane, Australia, 21.11.2015
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<td>ACA</td>
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<td>AGM</td>
<td>Annual general meeting</td>
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<td>Not-for-profit organisation</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>NSW</td>
<td>New South Wales</td>
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<td>NSWMC</td>
<td>New South Wales Minerals Council</td>
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<td>OE</td>
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<td>OH&amp;S</td>
<td>Occupational health and safety</td>
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<td>OPBT</td>
<td>Operating profit before tax</td>
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<td>Statistical package for the social sciences</td>
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<td>WMI</td>
<td>Whitehorse Mining Initiative</td>
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1 Introduction

This chapter describes the background of the thesis, with reference to the researcher's German cultural background. The research problem is then delineated with examples from stakeholder groups, reporting patterns in relation to non-financial information, and industry responses in terms of sustainable stock indices. Subsequently, the rationale for the research is presented, referring to the Australian gold mining industry and providing a brief literature review from which the research questions are drawn. Finally, the methodology is introduced and the structure of the thesis is presented.

1.1 Background

After migrating from Germany to Australia in 2010, the researcher's interest in the topic was sparked by the realisation that regulatory and/or legal regimes in Australia did not routinely consider corporate social responsibility (CSR) as a requirement for businesses.

In contrast, German enterprises have voluntarily engaged in environmental and social CSR dimensions far beyond legal requirements for quite some time. Today, corporate social responsibility and sustainability are inherent parts of the corporate culture in Germany.

For example:

- Daimler-Benz, one of the established German automobile manufacturers, have anchored the concept of sustainability as a component of their business activities. They demand and promote responsibility for sustainable behaviour as an indispensable mental attitude from all management staff and employees throughout the group. In doing this, they also include their business partners and engage in continuous dialogue with their stakeholders. Annually, the company provides an online sustainability report based on Global Reporting Initiative (GRI) guidelines (Daimler AG 2013).

- Furthermore, for 200 years, sustainable and responsible business practice has been an inherent part of the corporate culture of ThyssenKrupp, a diversified German industrial group. The company
has embedded sustainability and corporate responsibility in their corporate strategies and, therefore, set the target of sustainable value creation for the company and their stakeholders. Furthermore, ThyssenKrupp provide integrated reporting on their website which is also based on GRI guidelines (ThyssenKrupp 2013).

Moreover, in April 2013, the European Commission required amendments of accounting and reporting guidelines for large (> 500 employees) EU corporations. The goal is to increase the transparency among these companies in terms of social and environmental disclosure. In the future, corporations should report principles, risks and results of environmental, social and employee issues as well as on human rights, corruption and bribery (CSR communication 2013).

In 2010, 27 out of 30 corporations listed in the German DAX 30 offered a stand-alone sustainability report or at least provided CSR-related information in a specific sustainability section on their corporate websites (Einzinger 2010). In 2014, the annual and corporate responsibility reports of 188 European companies listed in both, Fortune 500 and Europe 500 were analysed. It was found that 50% of these companies provide corporate responsibility online reports in PDF format and 34% in HTML format (Boier 2015).

However, in Australia, neither businesses nor the broader community appear to show genuine concerns about CSR as a factor in business activities. There is a noticeable silence in respect of CSR and CSR-related reporting (CAER 2005; Parliament of Australia 2010). Hence, this thesis focuses on the extent to which CSR and CSR-related online communication is important in Australia, with a specific focus on the gold mining industry.

The choice of the mining industry as an industry of interest, and the gold mining sector in particular, appeared obvious because of the importance of mining to the Australian economy as a whole, as mining was the largest contributor to operating profit before tax (OPBT) in 2011–12, accounting for 23% or $83.7b respectively (Australian Bureau of Statistics 2013a). The Australian mining industry as a whole has experienced substantial growth during the past ten years due to strong demand from developing countries such as China (Measham et al. 2013). In remote areas, where new mining sites are most often established, the industry
helps to create additional employment that can generate a substantial increase in income for the region (Basu et al. 2015).

Moreover, mining, given its extractive nature, is a considerably unsustainable industry (Peck & Sinding 2003) with a high potential for environmental problems; for example, in the fields of mineral exploration, mining operations, chemical pollution or erosion and sedimentation (Australian Bureau of Statistics 2013b). The use of legislative mechanisms in the development, operation and subsequent rehabilitation of mine sites is part of environmental management; and “the mining industry has also introduced its own code for self-regulation” (Australian Bureau of Statistics 2013b), as the mining industry is a “highly visible, politically sensitive industry” (Herbohn, Walker & Loo 2014, p. 455). Due to State and Federal legislative requirements, the mining industry is clearly associated with different stakeholder groups and possible stakeholder relationships (Herbohn, Walker & Loo 2014).

1.2 Research problem

Overall, the awareness of CSR in the Australian mining industry is relatively low among stakeholder groups, as is the stage of voluntary CSR reporting. Sustainable stock indices in Australia are small and company membership is widely ignored as a marker for responsible investing.

1.2.1 Stakeholders

Arguably, media reports about mining issues tend to focus on protest activities. Stakeholder groups seem to confine themselves to protests about specific problems rather than taking a broader view of the concepts involved in CSR.

For example:

- Farmers and environmentalists have protested against Rio Tinto and the NSW State Government’s plans to expand the Warkworth mine in the Hunter Valley in order to protect and retain the Warkworth Sands Woodlands (Locke 2013).
- Environmental groups, traditional owners and local residents protested against a government proposal to expand sandmining
operations on North Stradbroke Island in Queensland beyond 2019 (Michail 2013).

Generally, Australian Federal and State Governments have supported the mining industry in terms of extending leases or approving new mines. Governments tend to favour mining companies in order to promote economic advancement rather than considering environmental concerns of residential communities, as the following examples will demonstrate.

For example:

- The South Australian Government cleared the hurdle of gaining Commonwealth approval for the ‘Four Mile’ project in the far north-east. The $110m uranium mine was officially opened in 2014 (ABC news 2014). The Mineral Resources Minister, Mr Koutsantonis, mentioned that South Australia was set to have four of Australia’s five active uranium mines once ‘Four Mile’ joined ‘Olympic Dam’, ‘Beverley’ and ‘Honeymoon’ (ABC news 2013b).

- The Queensland Government has approved an $8.8b thermal mine and rail project near Alpha in central Queensland. The approval encompasses an 8,000 hectares reserve of the Bimblebox Nature Refuge, which opponents say would be destroyed by the development. The area is currently used for bird migration research (ABC news 2013c).

- After the Tasmanian Government had given approval to another iron ore mine in the Tarkine region, Federal approval was given to the project by Federal Environment Minister Mark Butler. The mine will contribute to the state economy with about $40m per year and will operate for two years (ABC news 2013a).

In September 2013, the coalition of conservative Liberal and National Parties won the national election. The new Australian Prime Minister, Tony Abbott, reportedly had a close relationship to the mining industry. Consequently, the Abbott Government’s support for a new mining boom could be expected (iMINCO 2013).
Since September 2015, Malcolm Turnbull has been Australia’s new Prime Minister, and he also supports mining in Australia (Crowe & Kelly 2015).

Furthermore, mining lobby groups constitute another important stakeholder group. The big two lobby groups — the Australian Coal Association (ACA), and the Minerals Council of Australia (MCA) along with their state-based spin-offs, the New South Wales Minerals Council (NSWMC) and the Queensland Resources Council (QRC) — are advocating the interests of the mining industry as a whole (Burton 2013).

Investors, as the major stakeholder group, seem to be the central interest for mining companies. Even the smallest mining companies caters for them, as there is detailed investor information available on their websites. Annual reports, half year and quarterly reports as well as other financial information including specific information about the stock price development are easily accessible online.

Besides the full range of legally required financial information, annual reports also provide brief sections of voluntary environmental and social disclosure to give interested investors an idea of the company’s CSR and sustainability initiatives during the financial year in question.

However, now that mining companies operate internationally, institutional, international investors intending to invest ethically are increasingly interested in a broader picture about the company’s general approach and commitment to CSR and sustainability. They expect to find easily accessible non-financial information disclosed online, but in Australia disclosing non-financial information voluntarily is in its initial stage (Parliament of Australia 2010).

1.2.2 Reporting

Figure 1.1 shows that CSR is related to the “understanding that (1) business is wholly dependent for its continuing success on people (society) and resources (environment) and (2) that business has a significant impact on society and environment.” (Moss 2011, webpage: CSR vs. Sustainability),
On the other hand, the concept of sustainability focuses on the endurance of systems and processes as demonstrated in Figure 1.2. The idea was first introduced in the Brundtland report in 1987. The following definition is close to the explanation of sustainability used in the report.

Based on an ethical principle that gives future generations the same rights as today’s population, sustainability can be applied to any activity and calls on us to test that meeting the needs of today does not compromise the needs of future generations (Moss 2011, CSR vs. Sustainability).

Figure 1.2: Resource-focused definition of sustainability
Adopted from Moss (2011)
Possibly due to the comprehension of a mutual success (Moss 2011), the terms are often used synonymously.

Certified Practising Accountants Australia (CPA Australia) found in its report *Sustainability reporting — practices, performance and potential 2005*, a noteworthy relationship “between sustainability reporting and low probability of corporate distress” (Parliament of Australia 2010, Sustainability reporting). Hence, reporting on sustainability issues is recommended (Parliament of Australia 2010). However, examination of mining company websites, and gold mining company websites in particular, revealed that the concept of CSR is widely ignored, although most annual reports do slightly touch on the major issues, such as environmental impact, and health and safety issues. Very few of the major companies among the top 100 stocks listed on S&P/ASX 300 Metals and Mining provided a stand-alone sustainability report in 2012. These companies used the Global Reporting Initiative (GRI) guidelines as a framework to report on their environmental and social performance and impacts based on GRI indicators.

In Australia, reporting on sustainability is completely voluntary (Parliament of Australia 2010). In its report, entitled *The State of Sustainability Reporting in Australia 2005*, the Centre for Australian Ethical Research (CAER) nominated the following stakeholder groups to be mainly addressed in terms of sustainability information: “shareholders (74%), institutional investors (54%), analysts (51%)” (CAER 2005, p. 31).

Furthermore, CAER (2005) reported that only 24% of the 500 largest public and private companies in Australia voluntarily reported on sustainability in 2005 (CAER 2005, p. 9). Compared to Japan (81%), South Africa (81%) and the UK (71%), the “uptake of sustainability reporting in Australia is relatively low” (CAER 2005, p. 9). Given the relative silence about specific environmental and social disclosure and reporting, Australian companies appear to be at an early stage of voluntary sustainable communication, indicating a high level of shareholder commitment rather than performing stakeholder engagement. However, Australian reporting rates are expected to increase. The CAER report estimated that all of Australia's top 500 companies would be voluntarily reporting by 2035 (Parliament of Australia 2010).
However, shareholders tend to gradually invest more into companies doing their business with a focus on ethical behaviour, as will be demonstrated with reference to the European context.

1.2.3 Industry responses

Globally, a new generation of investors is increasingly interested in investing ethically into companies that behave socially responsibly and report on their environmental and social performance. In order to rank such companies, sustainability indices have emerged worldwide (Parliament of Australia 2010).

For example:

- Natur-Aktien-Index (Germany / Austria) This index was launched 1997. (7,458.97 Pts as at 05.12.16)
- Dow Jones Sustainability Index (USA). This index was launched 1999. (1,192.66 Pts as at 06.12.16)
- Jantzi Social Index (Canada). This index was launched in 2000. (11,696.76 Pts as at 01.12.16)
- FTSE4 Good (United Kingdom). This index was launched in 2001. (6,905.31 Pts as at 06.12.16)

Subsequently, in Australia sustainability indices were also launched. However, these are much smaller than their international equivalents (Parliament of Australia 2010) due to the small number of sustainably operating companies listed in these indices.

For example:

- Corporate Responsibility Index (CRI). This Index was launched in 2004. (2,336.08 Pts as at 05.12.16)
- Australian SAM Sustainability Index (AuSSI). This index was launched in 2005. (1,391.57 Pts as at 05.12.16)

Superannuation funds also offer global investment opportunities in companies actively addressing environmental challenges globally and contributing to environmentally friendly economies (UniSuper 2012).
1.3 Research rationale

There seems to be a considerable difference between the European way of defining and conducting CSR and how Australian companies understand and administer their corporate social responsibilities. According to their ‘renewed EU strategy 2011-14 for Corporate Social Responsibility’, the European Commission explicitly integrated ‘impacts on society’, ‘social and environmental concerns’ as well as ‘close collaboration with stakeholders’ in their CSR definition (European Commission 2011, 2015), whereas in Australia, no generally accepted definition is provided nor could a definition be identified encompassing country-specific or cultural particularities.

Searching for equivalent CSR concepts on Australian company websites and generally in the mass media retrieved very little information. In addition, the degree of interest among financial stakeholders in the full scope of possible initiatives in the CSR concept appeared to be quite low.

Furthermore, European companies are in constant competition for the foremost places in various annual rankings in terms of conducting the most efficient and effective CSR initiatives (Kirchhoff Consult AG 2013; Lundquist 2013). In contrast, most Australian companies tend to limit their CSR activities to philanthropy, and reliable and frequent non-financial reporting seems to be a long-term objective (Parliament of Australia 2010).

Most of the European companies across all industrial sectors base their sustainability reporting on Global Reporting Initiative (GRI) guidelines, which are constantly amplified and adjusted in order to cover the full scope of CSR initiatives in almost every industry, to meet stakeholder requirements and to allow industry and company comparisons on a general level. In contrast, in Australia, GRI guidelines are less popular and very few companies use these guidelines for non-financial reporting.

Moreover, in Europe, commodity extracting companies held the foremost places in CSR rankings in 2011-12 but fell back in 2013 due to less successful financial performance in 2012-13 (Kirchhoff Consult AG 2013). As the mining industry in Australia contributes substantially to the gross national product (GNP) (Australian Bureau of Statistics 2013a) and the current Federal Government plans a new
boom of the mining sector (iMINCO 2013), interest was drawn to the Australian gold mining industry. However, initial examinations of a random selection of gold mining companies' websites revealed that scant attention was given to comprehensive CSR online communication in terms of appropriate CSR activities. In addition, a dearth of specific sustainability reports was also identified. Hence, the interest in CSR, and in particular CSR online communication, moved from a general to an academic level of interest in the topic in terms of the Australian gold mining industry.

1.3.1 Australian gold production

The world production of gold from mining in 2012 was 2,660 tonnes, or about 5% of estimated current world economic resources of 54,300 tonnes (Whitaker 2012). In the same year, Australia contributed to world gold production with 251 tonnes, or 9.4%, which was second to that of China with 370 tonnes, but ahead of the USA with 230 tonnes (Whitaker 2012).

Based on estimates provided by the U.S. Geological Survey (2014), in 2013, Australia remained the second largest gold producer with 255 tonnes and again, was second to China with 420 tonnes, but ahead of the USA with 227 tonnes (Goldreporter 2014; U.S. Geological Survey 2014).

From a business point of view, gold mining in Western Europe is negligible and compared with the Russian (205 tonnes), South African (170 tonnes), and US gold mining industry, the Australian gold mining industry contributes more to the world gold production to a major extent.

1.3.2 Gold versus coal mining

Gold mining has a particular impact on the environment; therefore, the industry has a core fundamental interest in corporate social responsibility.

Gold is a very important noble metal, primarily used "as an investment instrument for governments, central banks and private investors" (Whitaker 2012, webpage 'Gold'). The electronics industry uses gold as an essential industrial metal mainly due to its "high conductivity and corrosion-resistance properties" (Whitaker 2012, webpage 'Gold').
Gold mining requires primarily cyanide as a chemical auxiliary substance for dissolving the metal from rocks (Marsden & House 2006). Cyanide leaching is a very effective method and is still being practised globally by the gold mining industry, because it allows the washing of gold from the rocks even if the concentration of gold is very low (Marsden & House 2006; Reimer & Müller 2011). Cyanide is acutely poisonous and so if there were a breach in a tailings dam, an environmental disaster would result (Reimer & Müller 2011).

For example:

- “On 30 January 2000, following a breach in the tailing dam of the Aurul SA Baia Mare Company, a major spill of cyanide-rich tailings waste was released into the river system near Baia Mare in north west Romania. The contaminant travelled via tributaries into the river Somes, Tisza and finally into the Danube before reaching the Black Sea” (UN Environment Programme 2000).

Coal mining, instead, requires large areas of land which can be rehabilitated after being temporarily disturbed (World Coal Association 2014). The two major impacts on the environment are land consumption and later subsidence damages. Environmental challenges for the coal mining industry include erosion, dust and noise. It can also impact on local biodiversity (World Coal Association 2014). However, environmental pollution, such as CO₂ emissions, do not occur during the coal extracting process, but only later through power generation in coal fired power plants.

Consequently, the risk of environmental damage and social concern about health and safety issues during the extracting process in the gold mining are specifically higher than in the coal mining industry. Thus stakeholders’ expectations and information needs in terms of CSR initiatives in the gold mining industry and its corresponding CSR disclosure with a special focus on environmental and social activities is considered to be important. Therefore, this research focuses on gold mining companies.

1.3.3 Literature

Initial reading of academic papers on corporate social responsibility with a specific focus on stakeholders found comprehensive research published on
consumer behaviour (Morsing & Schultz 2006) and appropriate recommendations for companies to respond to consumer requirements and pressure (Preuss & Barkemeyer 2011; Visser 2010). These publications describe company–consumer relationships in an B2C (business to consumer) environment.

However, the literature contains little about company–stakeholder relationships in a B2B (business to business) context. There is a dearth of literature on key financial stakeholders of the (gold) mining industry in Australia.

In order to understand and respond to stakeholders' expectations of companies’ CSR initiatives, Amaladoss and Manohar (2013) recommend further research on stakeholders' expectations and attitudes. Particularly in terms of CSR disclosure on company websites, the authors call for future research on stakeholders' information needs in order to allow improved informed decisions about credible CSR online information (Amaladoss & Manohar 2013). Moreover, Du and Vieira (2012) call for further research on the “quality of CSR disclosure on websites in general” (p. 425).

In addition, Bouten et al. (2011) call for further research on detailed information demands of a broader scope of stakeholder groups beyond environmental disclosure. They also recommend exploring the extent to which stakeholder information needs are fulfilled.

As the importance of investing ethically is growing globally (Dembinski et al. 2003), there is an increasing awareness of social corporate responsibility among different industries and stakeholders' expectations of better transparency in CSR disclosure (Dando & Swift 2003). Companies are encouraged to make use of non-financial reporting frameworks such as GRI guidelines to disclose information about their environmental and social initiatives (Fonseca 2010; Legendre & Coderre 2013; Lodhia 2012; Ortiz & Marin 2014).

Some big companies, including BHP, have been found to disclose non-financial information comprehensively, whereas other companies' environmental and social disclosure was limited or not provided at all (Chen & Bouvain 2008).
The mining industry globally was among the first of businesses to disclose environmental issues (Jenkins & Yakovleva 2006) and to produce stand-alone environmental reports (Fonseca 2010; Mutti et al. 2012) most often based on GRI guidelines in accordance with the Minerals and Mining supplement, which allows for specific reporting requirements of the mining industry sector.

The global mining industry has been found to cooperate closely with the GRI guidelines as indicated by the GRI sector supplement for Mining and Metals (MMSS) (Guenther, Hoppe & Poser 2006). However, the authors identified a quantity gap as well as a quantity–quality gap in terms of reported environmental GRI indicators. According to Jenkins (2004), "the mining industry has started to pay serious attention to its environmental and social impacts" (p. 23).

On the other hand, an investigation of the ten largest mining companies' CSR-related reporting has shown that "there is considerable variation in the maturity of reporting content and styles of these companies" (Jenkins & Yakovleva 2006, p. 271). In addition, there is no method available to measure the overall CSR performance and progress towards sustainability in the global mining industry (Jenkins & Yakovleva 2006).

However, the Australian mining industry does not make extensive use of sustainability reporting based on GRI guidelines (Parliament of Australia 2010). Very little research has been done on GRI guidelines being used in the mining industry (Murguía & Böhl 2013).

Literature about CSR-related reporting, and online disclosure in particular, could not be identified for the Australian gold mining industry. Therefore, this study seeks to contribute to the academic literature in the field of CSR reporting in the mining industry in the Australian context.

Company websites have been examined in terms of CSR online communication in Europe (Moreno & Capriotti 2009) and the US (Du & Vieira 2012) but very few studies have been conducted to examine CSR online communication strategies in Australia (Brennan et al. 2011; Parker, Fraunholz & Zutshi 2009; Pomering & Dolnicar 2009) and, in particular, on (gold) mining companies in Australia (Lodhia 2012, 2014).
Furthermore, O'Connor and Gronewold (2012) recommend to “focus on a single industry and specific sections of CSR reports at one point in time” in order to “begin a process of cross-industry comparison” (p. 230).

Weber, J and Marley (2010) also call for further research on a “single industry's reporting practices in detail” (p. 213).

1.3.4 Research questions

As a result of the literature examined above, the following research questions emerged:

- (RQ1) What do Australian investors expect in terms of environmental and social corporate initiatives and correspondent online disclosure?
- RQ2a) What information do Australian gold mining companies disclose online on their environmental and social activities?
- (RQ2b) What are the differences in online disclosure of Australian gold mining companies?
- (RQ3) To what extent do Australian investors demand online information in terms of environmental and social CSR-related activities to satisfy their information needs?

1.3.5 Significance and innovation

As indicated in the previous sections, there are no studies available linking CSR (in its environmental and social dimensions as disclosed on gold mining companies' corporate websites) to investors' expectations and information needs in the Australian context. In addition, no research has been done to analyse Australian gold mining companies' corporate websites in order to determine characteristics of their CSR online disclosure and practices to enhance the overall effectiveness of their CSR online communication.

The present study is therefore innovative in that it examines these issues through environmental and social dimensions. It seeks to contribute to the existing literature in the area of CSR-related voluntary, non-financial online disclosure within the Australian context and to enhance the understanding of how CSR and sustainability is communicated in the Australian mining industry.
In Germany, private investors tend to avoid investing in shares in favour of low-risk investments such as account books, term deposits or fixed-interest securities, whereas in Australia the culture of investment at the individual level favours investing in shares. The pension scheme in both countries is also considerably different. In Germany, the federal government takes monthly a certain percentage of wages and salaries to pay the pension of today's pensioners, whereas Australian people can choose the risk level and mix of their superannuation investments. These differences may well make an Australian model of investment-related key stakeholders, such as private, organisational and institutional investors, important to study.

In addition, the significance of the study may well be to make visible, in the Australian context at least, directions for better non-financial reporting, online disclosure and greater consultation. This study seeks to identify the stage of CSR online disclosure of Australian gold mining companies.

Furthermore, the study will investigate investors' expectations about gold mining companies' environmental and social activities. The results may indicate, as basic information, the importance of each dimension to these stakeholders. The study may allow the gold mining industry to concentrate on specific expectations more effectively and invest in CSR more efficiently. Gold mining companies may be encouraged to redefine their CSR strategies and practices according to investors' expectations through the two dimensions.

Moreover, the study will also explore investors' information needs. The results may enable Australian gold mining companies to specifically adjust their non-financial disclosure to their most important stakeholder groups and therefore enhance the overall effectiveness of their CSR online communication, and help to embrace key stakeholders rather than increase their scepticism about mining. Data about key stakeholders' information needs may make Australian gold mining companies aware of additional key aspects in terms of CSR-related online communication.

Finally, the results of the study will contribute to academic and managerial knowledge about the current scope and quality of CSR online disclosure in the Australian context. If gold mining companies take some action in response to the
results of the study and acknowledge voluntary, non-financial online disclosure as a strategic advantage, others might follow and adjust their attitude towards CSR-related communication on websites.

1.3.6 Summary

To conclude, research in a single industry (Australian gold mining industry) on particular stakeholders’ (investors’) CSR expectations and information needs, and on specific sections of CSR online disclosure (environmental and social information) at one point in time would contribute to the academic literature and may deliver insights into the communication strategies and stage of online disclosure of gold mining companies in the Australian context.

1.4 Methodology

According to Creswell (2014), combining qualitative and quantitative research methods translates into a comprehensive understanding of the research problem while emphasising the strengths and balancing the weaknesses of both traditional research methods. Hence, an exploratory sequential mixed methods research design has been chosen for this study, using interviews (RQ1) and website analysis (RQ2a, RQ2b) in the qualitative part followed by a survey (RQ3) as the quantitative contribution to the findings of this thesis. Content analyses will be applied to interviews and website analysis using Leximancer as a supportive analysing software. Additionally, discourse analysis will be applied to websites analysis in a second step using a linguistic approach. The survey will be analysed using descriptive and cluster analyses, supported by SPSS as analysing software.

1.5 Structure of the thesis

This thesis provides nine chapters which will guide the reader through the theoretical considerations and practical conduct of the research study.

Chapter 1, representing the introduction of this thesis, offers information on the background of the research, the research problem and the reasons for the research. Four resulting research questions were developed followed by a methodology section which briefly outlined the research methods.
The literature review in Chapter 2 provides literature on corporate social responsibility, strategic management and CSR as a strategic management tool. The predominant part of the literature review deals with CSR in the mining industry, referring to environmental and social impacts, and mining specific CSR strategies to overcome stakeholders’ scepticism. Stakeholders’ concerns and perceptions are looked at, followed by literature on corporate communication, and online disclosure in particular, in relation to CSR and sustainability. The literature review concludes with an outlook on future mining in Australia and a brief summary.

Chapter 3 outlines the theoretical framework, including the presentation of the researcher’s standpoint and the introduction of two business theories working as guidelines for the research.

Chapter 4 deals with the methodology chosen for this study and covers philosophical and practical considerations in relation to the research design. The research methods and analysing tools are also introduced. Furthermore, the chapter provides information on each Low Risk Ethics Approval necessary to conduct research involving people.

Chapter 5 provides the analysis and findings with regard to interviews conducted as the first part of the qualitative phase I. Content analysis was applied to explore investors’ opinions about drivers for conducting CSR, their understanding of CSR, and their expectations with regard to online disclosure on company websites.

Chapter 6 outlines analyses and findings in terms of website analysis of nine Australian gold mining companies as the second part of the qualitative phase I. Content analysis reveals what information was provided on environmental and social aspects. In addition, discourse analysis was applied using a linguistic approach. The companies’ online communication strategies were identified, the tendency of coercive isomorphism was revealed, and the stage of the companies’ online disclosure was determined.

Chapter 7 delineates the analysis and findings of the survey as the part of the quantitative phase II. A brief survey was conducted as a pilot study and revealed insights in terms of investors’ online information needs.
In chapter 8 the findings are discussed. Contributions from the interviews, website analysis and survey are made to triangulate the results with regard to each of the four research questions. The findings are aligned to the literature and a conclusion is provided in relation to each research question.

Finally, Chapter 9 provides the overall conclusion of the thesis.

### 1.6 Summary

This chapter covered the background of the thesis and outlined the research problem focusing on stakeholders (particularly investors), non-financial reporting and online disclosure, and industry responses to CSR demand. Moreover, the reasons for the study were delineated, providing initial literature and the research questions, followed by delineating the significance and innovation of the thesis. Subsequently, the methodology and methods were introduced and an overview was provided of how this thesis is structured.

The following chapter introduces relevant literature with regard to theoretical perspectives of CSR and strategic management as well as academic publication on CSR and sustainability in the mining industry, stakeholders’ expectations and CSR communication.
2 Literature review

The previous chapter provided information on the background of this study, outlined the research problem, covered the reasons for this study and included a brief literature review from which the research questions were derived. Finally, an overview of the methodology and methods was provided.

In this chapter, a managerial approach is used to outline CSR concepts and ideas as well as to provide various CSR definitions. Subsequently, the concept of strategic management and the application of CSR as a strategic management tool is introduced. The literature review continues with a survey of CSR in the mining industry and the examination of stakeholders' expectations about CSR activities, followed by an outline of online communication strategies and a brief overview of future mining in Australia. The section concludes with a short summary, linking the literature review to the research questions.

2.1 Introduction

Corporate Social Responsibility is a vibrant and dynamic movement (Visser 2010). Over the last decade, CSR has gained importance in many industries (Claydon 2011; Kraus & Britzelmaier 2012), at least in terms of a company's external presentation (Preuss & Barkemeyer 2011). Those investors who select their investments according to the extent of a firm's engagement in sustainability, and other stakeholders such as customers, employees and NGOs, are now more likely to insist on corporate participation in sustainable community development (Maltz, Thompson & Jones-Ringold 2011).

Therefore, organisations are expected to be increasingly responsible to certain stakeholder groups in terms of environmental and social consequences arising from their business activities (Maltz, Thompson & Jones-Ringold 2011; Michelon, Boesso & Kumar 2013; Preuss & Barkemeyer 2011). Some companies engage in social issues only upon pressure from opponents or if they see a short-term financial advantage emerging from their social engagement (Preuss & Barkemeyer 2011; Visser 2010). Many companies, however, are voluntarily engaging in social responsibility because they believe this is the right thing to do in order to secure a long-term competitive advantage (Preuss & Barkemeyer 2011). Therefore, the concept of CSR is broadly accepted as a success factor.
that strengthens the competitive position of a company and one that will be of increasing significance in the future (Preuss & Barkemeyer 2011).

However, there is an insufficient understanding of the term CSR, which often results in problems with its practical implementation as a management strategy (Claydon 2011). The term CSR is often used by politicians and managers with different meanings. This results in controversy about what actually constitutes CSR with regard to content (McWilliams, Siegel & Wright 2006; Preuss & Barkemeyer 2011; Vaaland, Heide & Grønhaug 2008).

2.2 CSR concepts and ideas

The concept of corporate responsibility emerged during the 1950s in the USA, when there was a shift from social responsibility being associated with personal duties to corporate responsibility that could be measured as corporate social performance. The idea of corporate social responsiveness considered stakeholders’ expectation of corporate responsibility from the 1980s.

2.2.1 Social responsibility

The foundation of the contemporary understanding of CSR in companies was laid when Bowen used the concept in his book Social Responsibilities of the Businessman in 1953. Bowen suggested that managers of large companies were not only economically but also socially responsible for their corporate decisions due to their wide range of power within societal structures (Preuss & Barkemeyer 2011). Bowen's stance was supported by Drucker (1954), who reasoned that managers' decisions have major influence on society, and therefore, apart from their corporate responsibility, they are also socially responsible (Drucker 1954). Early publications such as Barnard (1968) saw managers as personally responsible and the term ‘social responsibility’ was used.

In the 1960s, additional views of societal responsibility emerged. Davis (1960) defined responsibility, still in a personal management context, as “businessmen's decisions and actions taken for reasons at least partially beyond the firm's direct economic and technical interest” (Davis 1960, p. 70). However, McGuire’s (1963) statement that “the idea of social responsibilities supposes that the corporation has not only economic and legal obligations but also certain responsibilities to
society which extend beyond these obligations" comes much closer to today's understanding of CSR (McGuire 1963, p.144).

### 2.2.2 Corporate responsibility

McGuire’s conception was the first time that the understanding of CSR was extended beyond legal and societal minimum requirements. Furthermore, McGuire shifted the focus from personal to corporate responsibility (Carroll 1999). In 1967, Walton published his book *Corporate Social Responsibilities*, which uses the extended understanding of the concept explicitly as a book title (Preuss & Barkemeyer 2011). Walton provides the following definition: “In short, the new concept of social responsibility recognizes the intimacy of the relationships between the corporation and society and realizes that such relationships must be kept in mind by top managers as the corporation and the related groups pursue their respective goals” (Walton 1967, p.18). The definition encompasses the idea that companies are ‘voluntarily’ responsible (Carroll 1999).

From the 1970s, a variety of CSR concepts emerged from the academic community, such as Johnson, HL (1971), Ackerman (1973), Eilbert and Parket (1973), Sethi (1975) as well as Fitch (1976). However, the CSR concept was also considerably excoriated. Milton Friedman (1970) titled his article about corporate responsibility provocatively: “The Social Responsibility of Business is to Increase its Profits!” He suggests that managers are only agents of company owners and as such they are merely responsible for corporate duties, whereas the owners of the company, its shareholders, have a societal responsibility. Consequently, managers and companies respectively are only economically responsible. Thus he disapproved of the CSR concept (Claydon 2011; Preuss & Barkemeyer 2011).

Currently, there is no unique definition of CSR as a concept which can be used throughout various stages of implementation, different modes of application and numerous types of industries.

### 2.3 CSR definitions

Due to its diverse paths of development, as well as overlapping content with other concepts, the idea of CSR is only a weak overarching term. This becomes obvious from the huge variety of definitions which have been in use to date
(Dahlsrud 2008; Preuss & Barkemeyer 2011). Academics and organisations who have been addressing CSR have defined and explained the term differently (Idowu 2011). For more than four decades, researchers and practitioners have failed to agree on a common definition of CSR (Hamidu, Haron & Amran 2015; Taneja, Taneja & Gupta 2011; Turker 2008; Weber, M 2008).

The definitions in the 1950s and 1960s focused on philanthropic activities with regard to societal welfare and development. In those days, academics referred to CSR as voluntary and contributing to social welfare. At a second stage, the interpretation of the CSR concept centred around workers' rights, consumer protection, stakeholder satisfaction, regulated CSR activities, and relationship management. Currently, the final stage focuses on CSR as a strategic management tool with regard to sustainability and instrumentality. Current theories all favour implementing CSR as one of the company's core business strategies to obtain corporate objectives (Hamidu, Haron & Amran 2015).

However, according to Dahlsrud (2008), and as shown in Table 2.1, most of the existing CSR definitions are congruent to a large extent and encompass five major dimensions; namely stakeholder, social, economic, voluntariness, and environmental. Stakeholder means either individual stakeholders or stakeholder groups. The term social is used, when the relationship between business and society is covered, whereas economic describes socio-economic or financial aspects, including delineating CSR in terms of a business operation. The term voluntariness outlines a situation where actions are not prescribed by law, and finally, environmental stand for the natural environment.

The uncertainty about CSR relates to how the term is used in a particular context and how it is considered with regard to business strategy development, rather than the definition itself (Dahlsrud 2008). As CSR definitions are often subject to bias in terms of specific interests, constraints tend to exist in developing and implementing certain concepts of CSR (Van Marrewijk 2003).
<table>
<thead>
<tr>
<th>Author / Institution</th>
<th>Definition</th>
<th>Dimensions addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carroll (1999)</td>
<td>The obligation of businessmen to pursue policies, to make those decisions, or to follow those lines of action that are desirable in terms of objectives and values of our society</td>
<td>Economic Social</td>
</tr>
<tr>
<td>World Business Council for Sustainable Development (2000)</td>
<td>Corporate social responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large</td>
<td>Voluntariness Stakeholder Social Economic</td>
</tr>
<tr>
<td>European Commission (2011)</td>
<td>“The responsibility of enterprises for their impacts on society”. To fully meet their social responsibility, enterprises “should have in place a process to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders”.</td>
<td>Voluntariness Stakeholder Social Environmental Economic</td>
</tr>
<tr>
<td>Van Marrewijk (2003)</td>
<td>In general, corporate sustainability and CSR refer to company activities – voluntary by definition – demonstrating the inclusion of social and environmental concerns in business operations and in interactions with stakeholders.</td>
<td>Voluntariness Stakeholder Social Environmental Economic</td>
</tr>
<tr>
<td>Piacentini, MacFadyen and Eadie (2000)</td>
<td>CSR is the voluntary assumption by companies of responsibilities beyond purely economic and legal responsibilities.</td>
<td>Voluntariness Economic</td>
</tr>
<tr>
<td>McWilliams and Siegel (2001)</td>
<td>Corporate social responsibility can be defined as a principle stating that corporations should be accountable for the effects of any of their actions on their community and environment.</td>
<td>Stakeholder Social Environmental</td>
</tr>
<tr>
<td>Government of Canada (2013)</td>
<td>CSR is defined as a company’s environment, social and economic performance and the impacts of the company on its internal and external stakeholders.</td>
<td>Stakeholder Social Environmental Economic</td>
</tr>
<tr>
<td>ISO (2013)</td>
<td>Social responsibility is the responsibility of an organisation for the impacts of its decisions and activities on society and the environment, through transparent and ethical behaviour that: - contributes to sustainable development, including the health and the welfare of society - takes into account the expectations of stakeholders - is in compliance with applicable law and consistent with international norms of behaviour - is integrated throughout the organization and practiced in its relationships.</td>
<td>Social Environmental Stakeholder</td>
</tr>
</tbody>
</table>

Adapted from Dahlsrud (2008, p. 7)
2.4 Strategic management

Strategy seeks to create a unique and valuable competitive position where the chosen set of operational activities is different from those of competitors (Porter 1996). Successful strategies depend on a tailored fit among the chosen set of activities, which then contributes to profitability and sustainability. A fundamental issue of developing a winning strategy is to make the decision regarding which group of stakeholders to target and in which way — or which one not to focus on. Therefore, implementing strategies requires persistent management discipline and a straightforward kind of internal communication to employees to guide them in their day-to-day operations. Consistency in implementing a strategy helps to communicate the idea to internal and external stakeholders, such as employees, customers and shareholders (Porter 1996). A productive organisational environment allows for the required employee behaviour and understanding to support successful corporate strategies and operations (Markides 2004).

The essence of corporate strategy is to either perform activities differently or conduct different activities compared to competitors, rather than to undertake the same activities in a better manner (Porter 1996). A unique and distinctive strategic position ensures any competitive advantage. However, as no attractive strategy remains the same forever, flexibility is important to respond to aggressive rivals’ imitations. It is essential to develop new strategic positions over time as necessary (Markides 2004).

Moreover, a strategy needs to be distinguished from operational effectiveness (OE). While strategy is about combining activities, OE seeks to obtain excellence in individual operations or functions. Both managerial approaches seek to achieve exceptional corporate performance as a primary business goal, but they are maintained differently (Porter 1996). Furthermore, strategy is associated with competitive positioning, which is meant to represent the heart of strategy. In order to achieve competitive advantage, a strategy has to encompass a different set of activities compared to rivals and to “deliver a unique mix of value” (Porter 1996, p. 64). Also, trade-offs are an important component to strategy because they avoid copying successful strategies from competitors. In particular, trade-offs in terms of positioning are pervasive and ensure a long-term competitive advantage (Porter 1996).
Furthermore, it is essential that functional policies match. Fit is a central part of competitive advantage. A competitive position's exclusivity can be increased by a fit of activities specific to the strategy, although some fit among other activities applies to many organisations and is seen as generic (Porter 1996). A company's individual set of activities, which have to be a market requirement, frame an interrelated system and must fit with and be in balance with each other (Markides 2004).

In summary, strategy is a core competence of general management as it defines and communicates the firm's unique competitive position, determines trade-offs, and maintains important fit among business operations (Porter 1996).

2.5 CSR as a strategic management tool

According to Porter and Kramer (2006) CSR approaches “are so fragmented and so disconnected from business and strategy as to obscure many of the greatest opportunities for companies to benefit society” (Porter & Kramer 2006, p. 4). Most companies invest in social issues as a short-term strategy to fight loss of reputation. Consequently, they engage in CSR activities as a “haphazard, reflexive response to short-term challenges” (Werbel & Wortman 2000, p. 125). Many companies that neglect to consider the economic part of CSR initiatives assess them as dead cost-factors (Murray & Montanari 1986). In order to gain long-term competitive advantage Porter and Kramer (2006) suggest focusing on the interdependence of corporate financial goals and CSR activities and as a result, implementing CSR initiatives in the company's strategies and operations. Furthermore, responding to stakeholder preferences and implementing CSR initiatives accordingly as a company core strategy will translate into positive corporate impact (Peloza 2006). According to Michelon, Boesso and Kumar (2013) companies that implement their CSR initiatives on a strategic basis will achieve excellent bottom line results.

From a company's perspective it is important to know which activities are essential to put its corporate social responsibility into practice in an effective and efficient way (Carroll 1991; Lantos 2001). Therefore, in order to implement CSR in a company it is reasonable to differentiate between non-strategic and strategic CSR. Both forms can be distinguished by either a low or high degree of
integration into the business model. In addition, the company's behaviour also provides a differentiator in terms of CSR activities because a company might either fulfil the legal requirements, as well as respond to pressure from selected stakeholder groups, or proactively conduct CSR initiatives on a voluntary basis. Both criteria translate into a matrix as shown in Figure 2.1, encompassing four areas that indicate individual types and concepts of CSR (Preuss & Barkemeyer 2011).

![Figure 2.1: Types of CSR](image)

**Adapted from Preuss and Barkemeyer (2011, p. 12)**

### 2.5.1 Non-strategic CSR

Non-strategic CSR is basically characterised by a missing link between CSR activities and the business model. In terms of this type of CSR Lantos (2001) distinguishes between altruistic (philanthropic) CSR and ethical CSR.

**Ethical CSR**

Ethical CSR describes the corporate social responsibility for stakeholders who are potentially at risk of being harmed by the company's business activities in a physical, mental, economic and emotional way (Lantos 2001). Therefore, ethical
CSR is supposed to be a standard social obligation of a company, albeit that the profitability of the organisation will be limited thereby (Lantos 2001). This is constituted through a social contract that the organisation and the society have concluded implicitly (Preuss & Barkemeyer 2011).

In his CSR pyramid Carroll (1991) defines ethical CSR similarly as a component of the CSR approach where legal requirements represent the minimum of societal responsibility. Furthermore, ethical CSR stands for responsible corporate behaviour with regard to non-codified norms and values (Schwartz & Carroll 2003). Examples of ethical CSR activities are expenses for product safety and the avoidance of self-induced pollution (Preuss & Barkemeyer 2011).

**Altruistic CSR**

Altruistic CSR denotes activities that a company conducts beyond societal norms as a ‘Good Corporate Citizen’ (CC) (Lantos 2001). Also Porter and Kramer (2008b) assign CC to the area of non-strategic / altruistic CSR. Furthermore, Corporate Philanthropy (CP) can also be seen as non-strategic / altruistic CSR due to its congruence in terms of content (Preuss & Barkemeyer 2011). In the literature, this classification is occasionally evaluated critically. On the one hand there are further approaches that consider CP as belonging to ethical CSR because it emerges from ethical motivation (Schwartz & Carroll 2003), whereas CP is allocated into a strategic corporate context (Porter & Kramer 2008a). However, CP is subsumed to non-strategic / altruistic CSR because it is not linked to a company's specific business model. With regard to altruistic CSR, companies use part of their capabilities and resources to solve societal problems on a voluntary basis (Lantos 2001); for example, partnerships with educational institutions. Compared to ethical CSR, altruistic CSR does not require the moral obligation to execute appropriate initiatives (Carroll 1991). This is the reason why companies following altruistic CSR activities do not respond to the pressure of individual stakeholders but conduct CSR proactively parallel to their traditional business activities (Preuss & Barkemeyer 2011).

Accordingly, performing altruistic CSR does not imply following a direct company goal (Lantos 2001). Therefore, both ethical and altruistic CSR are not directly linked to a company's business model and the conflict between CSR and corporate profitability becomes obvious to a certain extent (Carroll 1991). From a
corporate perspective, ethical and altruistic types of CSR often indicate additional expenditures. Furthermore, non-strategic CSR initiatives are not clearly determined with regards to content and may cause substantial inefficient allocation of resources, which often translates into total omission in times of a poor economic climate (Preuss & Barkemeyer 2011). Against cost-oriented perspectives, the social licence to operate (SLO) and social acceptance represent the only way for a company to remain socially responsible on a voluntary basis (Porter & Kramer 2008b).

### 2.5.2 Strategic CSR

Contrary to non-strategic CSR, any type of strategic CSR is defined as an integral part of a company's core strategies to obtain competitive advantage by differentiation (Porter & Kramer 2006). Therefore, CSR is not primarily classified as a cost driver but seen as a long-term investment (Heugens & Dentchev 2007; McWilliams, Siegel & Wright 2006). Baron (2001) suggests that companies that voluntarily engage in CSR will be rewarded through increasing demand. Thus a corporation that invests in CSR, will enhance both societal and corporate benefits at the same time. Accordingly, CSR contributes to the company’s competitive advantage by following a strategy of profit maximisation that is partly self-interested (Baron 2001). Baron defines strategic CSR as follows: “redistribution to appeal to a stakeholder group for the purpose of increasing demand for its products or reducing its costs” (Baron 2001, p. 12). Apart from the societal benefit, this type of CSR is characterised by the chance of increasing corporate effectiveness (increasing demand for its products) or efficiency (reducing its costs) (Preuss & Barkemeyer 2011).

Strategic CSR seeks to implement social responsibility in a way that not only the society, and particularly relevant stakeholders, but also the organisation will benefit from specific CSR initiatives (Baron 2001; Lantos 2001; Porter & Kramer 2008b). Consequently, CSR activities are strategic if they generate not only societal benefits but also corporate advantages (a win-win situation) (Preuss & Barkemeyer 2011). Strategic CSR seeks to overcome the trade-off between profit maximisation and social responsibility by linking societal benefit with economic incentives (Handelman & Arnold 1999; Kraft 1991; Preuss & Barkemeyer 2011). While conducting strategic CSR, the organisation can also behave reactively or
tactically if specific CSR activities are implemented only after a corporate misbehaviour or after stakeholder pressure. Whereas reactive CSR responds to specific problems, strategic CSR seeks to proactively find opportunities for social corporate engagement that refer to the company’s value chain as well as the competitive environment (Porter & Kramer 2008b; Preuss & Barkemeyer 2011; Wagner, Lutz & Weitz 2009).

Vaaland, Heide and Grønhaug (2008) define strategic CSR as follows: “Corporate social responsibility is management of stakeholder concern for responsible and irresponsible acts related to environmental, ethical and social phenomena in a way that creates corporate benefit” (p. 931). Compared with the generic CSR definition, this approach explicitly highlights that corporate responsibility toward individual stakeholders in terms of economic, environmental and social aspects will be implemented at its best, if specific CSR initiatives include an additional benefit for the organisation (Preuss & Barkemeyer 2011). Strategic CSR is no zero-sum game but represents a corporate motivation to generate additional societal wealth through profit incentives (Lantos 2001). In addition, strategic CSR seeks to achieve long-term profit orientation instead of short-term profit maximisation (Preuss & Barkemeyer 2011).

### 2.5.3 Strategic implementation of CSR

In order to offer both social benefit and economic advantages for the organisation, the scope and content of CSR initiatives must be implemented as an integral part of the company’s core strategies (Porter & Kramer 2008b). Against this background, Porter and Kramer (2008b) suggest a management framework for CSR implementation based on two different perspectives. The first step seeks to identify existing value activities that have already a positive effect on the socio-ecological environment of the company or are subject to appropriate modifications. This procedure is based on an inside-out perspective. The second step requires an analysis of the competitive surroundings indicating how the company may benefit from proactively influencing its environment. This procedure is based on an outside-in perspective. (Porter & Kramer 2008b).

The double-sided approach is required for implementing CSR in order to position appropriate CSR activities in both the corporate core strategies and the
environment. Obviously, both the company and the society benefit from a high level of strategic CSR implementation (Porter & Kramer 2008b).

2.6 CSR and sustainability in the mining industry

It is the nature of mining industry operations to have a life span of about forty years (Cronjé & Chenga 2009), including the scope of examination and development during operating the mine and extending corporate activities after the mine is closed (Heath 2009). Depending on the expected outcome, a gold mining site may have a considerable shorter life span, e.g. seven years (Validakis 2014). In general, mining has a very bad reputation in terms of social responsibility over this life span (Lambert 2001; Sandbroke & Mehta 2002).

2.6.1 Environmental impacts

Large environmental degradation is a concern, and is usually finite and irreversible (Cowell et al. 1999; Mutti et al. 2012). In addition, it may include disastrous industrial accidents.

For example:

- “the collapse in Copiapó (Chile, August 2010)” (Vintró et al. 2012, p. 119),
- the Pike River Mine disaster, a coal mining accident near Greymouth in the West Coast region of New Zealand's South Island (Harvey 2010),
- the coal mine explosion in Eastern China at the Gaokeng Coal Mine in Jiangxi, province Pingxiang in 2012 (The Independent 2012).

Environmental impacts affecting the air, water and soil (Vintró et al. 2012) are the most important concerns included in the CSR policies of mining companies (Heath 2009).

For example:

- in 2011, Centennial Coal, a NSW mining company, committed to pay $1.45m after causing damage to a nationally threatened ecological community (Australian Government 2011),
- Shenhua Watermark Coal, a subsidiary of Chinese mining giant Shenhua, located near the Liverpool Plains in Northern NSW, has been accused of failing to meet environmental standards (Santhebennur 2013),

- “Rio Tinto has been fined for a breach of environmental regulations while releasing water from its Hail Creek mine during recent floods” (Heber 2013).

Balancing environmental issues with the goal of profitability has been a challenge within the global mining industry for a long time.

Mining in Australia, more than in any other industry, is associated with the business case for CSR that emphasises profitability over moral or social reasons for CSR (Trebeck 2008). There is a clear preference among mining managers for financial bottom line rather than investing in environmental and social initiatives (Altman & Martin 2009).

Apart from environmental issues, the mining industry is also well known for its harmful social impacts, encompassing health and safety concerns, violations of human rights and impact on the livelihood of local communities (Mutti et al. 2012).

### 2.6.2 Social impacts

Social concerns are much more than problems with local communities, and encompass also governance and regulations, Indigenous and developer perspectives, native title and agreement making as well as internal governance, labour relations and industry culture. As continuing new drivers for the social part of CSR engagement emerge, such as the industry's self-regulation, mining companies support the idea of “developing formal accredited qualifications for practitioners in the community relations sector” (Solomon, Katz & Lovel 2008, p. 147).

Moreover, corporate community involvement encompasses activities that seek to improve the livelihood of local communities, fight poverty and reduce illiteracy. In response to the circumstances organisations meet in proposed mining areas, they usually begin with an approved set of CSR activities that “include building schools and health facilities, providing infrastructure like roads, wells and water-
pipes, sanitary facilities, access to electricity and a number of other initiatives” (Lange & Kolstad 2012, p. 134). In developing countries, costs for investing in sustainable development to the benefit of indigenous people’s health and safety, education and basic infrastructure are being carried by the mining firm itself, whereas in developed countries the costs are being shared with different suppliers (Vintró et al. 2012).

However, specialists and scholars have critised companies for targeting corporate objectives that sometimes may prove harmful to communities rather than engaging in supportive community involvement (Lange & Kolstad 2012). It has been observed that mining companies tend to engage more with environmental issues rather than social concerns (Vintró et al. 2012). Therefore, mining firms would be well advised to analytically move toward a differentiated stakeholder approach in order to obtain beneficial community development (Esteves 2008; Lange & Kolstad 2012). If management systems are implemented to handle sustainability concerns, systematisation of business procedures will most likely improve strategic CSR management (Vintró et al. 2012).

The mining industry, with its comprehensive fields of corporate responsibilities, such as economic, environmental, and social concerns, is in the unique position of pioneering CSR in the context of sustainable development (Heath 2009; Hilson 2011).

### 2.6.3 Sustainable development

The Brundtland Report (1987) identified that social CSR activities were not included until after sustainable development came into play. The report defines the paradigm of ‘sustainable development’ as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland 1987; Heath 2009).

Canada, which “contributed an estimated 34% of the world's total exploration budget” (Fitzpatrick, Fonseca & McAllister 2011 p. 376), is also the pioneer in terms of creating international sustainability initiatives. In 1993, the Mining Association of Canada (MAC) created the Whitehorse Mining Initiative (WMI) which, as an industry-led initiative, outlined voluntary environmental regulations. Its core outcome, the Leadership Council Accord, set up a policy framework for
“dealing with issues related to mining in Canada in a cooperative and collaborative manner” (WMI 1994). The WMI aimed to approach mining in Canada in accordance with sustainability. Subsequently, multi-stakeholder consultative initiatives were undertaken in order to find solutions for concerns about contentious questions of how to exploit the land. The WMI worked as a blueprint for similar approaches to stakeholders in Brazil and South Africa (Fitzpatrick, Fonseca & McAllister 2011).

In 2004, MAC shifted from the ambitious and holistic approach of WMI to their initiative Towards Sustainable Mining (TSM), which focuses on four specific areas in terms of performance indicators and principles guidelines. Energy efficiency and reduction of CO₂ emissions, external outreach, crisis and tailings management came to the fore. Furthermore, concerns related to indigenous people and biodiversity conservations were addressed. Contrary to WMI, TSM now includes monitoring, verification and reporting. However, even though many other initiatives dealing with sustainability initiatives have been launched in the mineral sector from the beginning of the 21ˢᵗ century, and although some academics portray the positive impact of CSR initiatives (Walker & Howard 2002; Wheeler, Fabig & Boele 2002), ‘mining and sustainability’ are still incompatible bedfellows in the mind of numerous academics and practitioners (Cowell et al. 1999; Fitzpatrick, Fonseca & McAllister 2011; Lambert 2001; Sandbroke & Mehta 2002; Vintró et al. 2012; Young & Septoff 2002) and seem to be an oxymoron for some critics (Heath 2009).

Mining companies in developing countries, such as Tanzania, that engage in community development as part of their CSR activities, are most likely to face unfavourable results if they disregard the often complex distribution of power within local communities. Instead of improving development prospects by conducting appropriate corporate community involvement activities, a firm might fail totally and abet dysfunctional political behaviour at the local level by unintentionally "adding to the power of unaccountable local elites“ (Lange & Kolstad 2012, p.135). As a result, distrust between members of the local community may have a noteworthy impact on the development of the entire community (Garnaut 2015; Lange & Kolstad 2012).
Only during the last decade has a new paradigm in addition to ‘sustainable development’ emerged, namely ‘social licence to operate’.

2.6.4 Social licence to operate

The term ‘social licence to operate’ was coined with regard to the mining industry. It works “as a metaphor for the power of communities to impose conditions on, or to completely reject the advancement of mineral exploration or the operation of an existing mine” (Boutilier 2014, p. 270). Indigenous and First Nation people are the preferential beneficiaries of SLOs and ILUAs (Indigenous Land Usage Agreements), which is the preferred term in Australia.

Increasingly, local communities have become the most important group of stakeholders as governance actors. The previous distribution of conventional CSR activities is no longer sufficient to protect mining companies from opposing stakeholder groups as they demand a “greater share of benefits and increased involvement in decision-making” (Prno & Slocombe 2012, p. 354). Local communities progressively seek to negotiate private benefit agreements with mining companies to achieve a tailored set of companies' CSR activities.

For example:

- Rio Tinto agreed to “traditional owners' involvement in land and environmental management; cultural heritage management and protection; and how the operation will create local and regional economic benefits. Regional economic benefits typically include employment, training, and business opportunities, as well as revenue sharing” (Rio Tinto 2013, sub-page 'community agreements').

In return, local communities give the licence to operate and give up on preventing mining development (Prno & Slocombe 2012). This approach to social responsibility is pragmatic as it indicates exactly those social demands that matter for close stakeholders and enables the company to address them. In addition, SLO allows for constructive dialogues with governments, community members and activists, which makes it a favoured approach for permission-dependent industries such as mining and extracting industries (Porter & Kramer 2006).
However, there is no single definition of what social licence should encompass, as it is understood as not materially available (not registered) compared to regulatory licences for mining affairs. Instead of engaging in long-term development by means of CSR activities, sustainable mining companies tend to use SLO to minimise stakeholders’ resistance for short-term profitability purposes (Owen & Kemp 2013; Porter & Kramer 2006). The mining industry takes SLO as a label to demonstrate its efforts to meet stakeholders' expectations. There is evidence that companies' expectations of what is essential and preferable in terms of sustainable development differ clearly from those of stakeholders. Therefore, by way of SLO an ‘expectation gap’ emerges because companies presume to hold approval for their requirements, whereas the demands of their stakeholders may be notably different (Owen & Kemp 2013).

Although the Mining Association of Canada recommends appropriate and proven sets of CSR activities based on the paradigm of sustainable development, which is evidence of a broad awareness of social, cultural and environmental needs, this advanced understanding of CSR is not necessarily accepted among mining companies. Instead, Canadian mining companies operating in Mexico negotiate private benefit agreements with local communities adjacent to their proposed mining site, in order to ensure a supportive corporate–community relationship embedded in a social contract. Instead of targeting potential stakeholders and applying unspecific CSR activities to the community, the companies respond to assessments of needs established by the local community and align these to the mine’s economic success (Weaver 2012). The social licence to operate seems to become an effective model that works through various social, political, and economic contexts (Prno & Slocombe 2012).

A social licence to operate used as a strategic tool by highly influential stakeholders compels mining companies to respond to stakeholder demands. The fear of failing to enhance their reputation, losing employee attraction, retention and motivation, failing to improve stable market conditions for suppliers and consumers as well as demands from institutional investors, are the strongest drivers for adopting comprehensive CSR activities (Trebeck 2008; O’Faircheallaigh 2013).
However, Australian mining managers see SLO as a real and important aspect that must be considered in planning and operational initiatives, although its results are very difficult to verify. SLO as a management instrument to respond to stakeholders' expectations about resource development is difficult to achieve but easy to lose. Regarding SLO, local communities are stakeholders with top priority. In addition, the concept of SLO may expand the scope of contractual partners, encompassing important complementary stakeholder groups. As a result, various SLOs with different stakeholder groups may exist at the same time. Mining managers closely associate SLO with other concepts of corporate duties, namely sustainable development and corporate social responsibility (Lacey, Parsons & Moffat 2012). They classify SLO either as a supplement nestled between the other concepts or as a less important element in the hierarchical order of CSR concepts. It can be distinguished from CSR by its specifically local characteristics rather than bureaucratic and procedural elements of CSR. Finally, mining managers consider SLO as a dialogue-driven instrument to maintain future freedom to operate the mine (Lacey, Parsons & Moffat 2012).

In addition, over the last thirty years, 75% of mining closures have been premature, and in times of global economic instability the number of unplanned closures almost doubles (Laurence 2011). In times of global economic crises, the risk of unplanned mine closure becomes an important issue for mining companies and affects reliable CSR behaviour. Particularly in Australia, remote residential mining communities, due to their specific dependency on mining companies, rely on guaranteed certainty in terms of community development, employment, and participation in decision-making and wealth through giving a social licence to operate. Therefore, an unplanned premature mine closure that has not been negotiated as part of SLO leaves these communities with massive social, economic, and environmental problems. In order to remain responsible rather than becoming irresponsible, Browne, Stehlik and Buckley (2011) suggest that mining companies provide for the risk of sudden mine closure as part of their CSR strategies with regard to negotiations for social licence to operate.

Once a mining company has breached an existing SLO by poorly conducting their environmental and social obligations, they have to re-establish their legitimacy far beyond any former compliance in relation to CSR activities. Most often this
includes rebuilding legitimacy for the entire industry and their reputation (Sarker & Munro 2015).

2.6.5 CSR strategies

In Argentina particularly, the mining industry is in opposition to a broad front of mining-rejecting stakeholders, such as Indigenous people, environmental activists, and human rights movements who have experienced broken promises. However, mining companies, such as BHP Billiton (BHP Billiton 2012), Rio Tinto, (Rio Tinto 2012) or Oz Minerals (Oz Minerals Limited 2012), agree that CSR is a key strategic tool to preserve a favourable co-existence with local communities. Therefore, companies demonstrate their corporate responsibility by conducting a mix of three major CSR strategies (Mutti et al. 2012), as explained in the following paragraphs.

Ethical CSR

The major objective of ‘ethical CSR’ is to maintain fair and transparent procedures. The companies aim to maintain social stability and respect norms and values. Ethical CSR serves the first three of Carroll’s (1991) four levels of responsibility, namely economical, legal, and ethical. By focusing on not harming their stakeholders in terms of health and safety issues as well as applying ethical employment policies and contracting local and Indigenous staff, the companies only follow their own codes of conduct, whereas critics demand performance of social responsibility more actively (Mutti et al. 2012).

Distributional CSR

The second strategy, ‘distributional CSR’, also achieves the fourth level according to Carroll (1991), philanthropic responsibility. The primary goal of distributional CSR within the mining industry is to maintain a noticeable stream of benefits from the company to local communities by building schools and health care facilities, and other infrastructure. The strategy also uses a short-term approach to balance inadequacy of income streams between mining workers and non-mining employees of the local communities. Distributional CSR activities are supposed to breach the rejection of mining in local areas due to considerable disappointments in terms of missing compensations for environmental and social
impacts. In Argentina in particular, the Catholic Church acts as one of the most insistent stakeholders against mining projects (Mutti et al. 2012).

**Developmental CSR**

‘Developmental CSR’ as the third major strategy seeks to achieve long-term sustainability to the benefit of the company and local communities at the same time. Social responsibility within this strategy proactively engages in diversification of the local community in terms of supporting local businesses and other sectors, such as food and agriculture, as well as skills development. These CSR activities are planned to go far beyond the life span of a mining project and indemnify long-term welfare for future generations in the area. Developing CSR activities are also known as community involvement (Mutti et al. 2012).

Nowadays, sustainable company activities span widely from philanthropic to entrepreneurial, including environmental and social issues, and covering broad areas such as suppliers, contractors, own operations, and product-related sustainability activities. Furthermore, in the mining industry, exchange across corporate functions has become a success factor with regard to advanced corporate sustainability (Fuisz-Kehrbach 2014).

Implementing and conducting CSR strategically in a global mining context depends on specific local stakeholder groups and their demand for the level of CSR activities. Hence, the scope of CSR initiatives is determined by the local context in which the mine site is operating. Stock exchange-listed larger companies tend to develop communication strategies disclosing their commitment to CSR principles on their websites and in annual sustainability reports due to international stakeholder pressure. Thus, mining companies have to combine international investors’ ethical expectations with domestic requirements in relation to their CSR strategies (Kotilainen et al. 2015).

### 2.6.6 Government’s duties and responsibilities

According to Heisler and Markey (2013), Canada, and the province of British Colombia in particular, demonstrates that political circumstances are responsible for the uneven distribution of benefits among different Aboriginal First Nation rural communities. As the government has the responsibility to ensure a fair distribution of benefits to all rural communities from tax and royalties, the transfer
of responsibilities to private mining and exploration companies in terms of CSR-related benefits creates inadequate distribution (Heisler & Markey 2013). More and more, governments of host countries demand corporate initiatives that will improve the local communities’ environment (Newenham-Kahindi 2010).

In Australia, due to cost sharing (Cheshire, Everingham & Pattenden 2011), the state increasingly shifts its own responsibilities in terms of community development on to mining companies, which are supposed to provide key services and development opportunities for local communities adjacent to the mining site in remote areas. Mining companies often welcome the transfer of governance due to substantial growth alongside demand for soft and hard infrastructure development which otherwise could not be delivered in time by the state (Cheshire, Everingham & Pattenden 2011). This causes more paternalistic partnerships with local communities and bears the risk of dependency both during operation and after closing the mine, rather than developing self-determination. Mining companies find themselves ‘filling the gap’ in public services (Cheshire 2010, p. 19) while building corporate–community partnerships in terms of delivering basic infrastructure, providing health care and education as part of their CSR policies to achieve the social licence to operate. Experts clearly regard the state and local governments as bearing the responsibility to maintain the development of remote Indigenous communities, but the jurisdiction is yet unresolved (Cheshire 2010). However, if costs and benefits of the resource community development are to be spread equally, both state and federal governments on the one hand and mining companies and local communities on the other hand must take their responsibilities (Cheshire, Everingham & Pattenden 2011).

2.7 Stakeholders’ expectations

Transforming the landscape and changing socio-economic patterns are closely associated with the extracting industry. Mining activities affect countries and communities likewise (Fitzpatrick, Fonseca & McAllister 2011). Due to its obvious impact on the environment and population, the mining industry faces strong demands for voluntary target-oriented initiatives by society (Kepore & Imbun 2011). There are also increasing social and legal demands on issues related to occupational health and safety, waste and pollution (Vintró et al. 2012). As large
companies are more likely to be under public surveillance (Liu & Anbumozhi 2009) and due to stakeholders' expectations, mining companies were among the first to implement codes of conducts in their environmental management strategies on a voluntary level (Mutti et al. 2012).

In developing countries, which are supposed to have the most valuable natural resources, organisations of the extracting industry often face ongoing stakeholder problems, although the companies engage in CSR focusing on social issues. In spite of conducting CSR initiatives in terms of environmental concerns, poverty, and unemployment, various stakeholder groups, such as local communities, activist groups, and not-for-profit organisations (NFP) tend to remain unsatisfied with the company's activities (Newenham-Kahindi 2010).

Creating new job opportunities within local communities adjacent to mining sites, which will allow for self-sufficient food production along with a reliable market to sell their excess crops, participating in rice growing, rubber planting and fishing projects will help to generate alternative income streams (Kepore & Imbun 2011). Also facilitating social services for education and health care, and engaging in local partnerships with mutual respect are progressively the fields of social corporate activities of the mining industry in developing countries (Newenham-Kahindi 2010).

2.7.1 Environmental and social concerns

Environmental concerns are given top priority (Mutti et al. 2012). Most mining companies face a ‘love–hate relationship’ (Kepore & Imbun 2011p. 230) with local communities, where most often resentment and disappointment are expressed about the environmental impacts on their livelihood but locals want the mining companies to remain and fix the problems (Kepore & Imbun 2011).

Stakeholders want mining firms to concentrate on the communities' social needs followed by demands for involvement in sustainable development (Cronjé and Chenga; 2009; Mutti et al., 2012), particularly for developing alternative approaches to present income opportunities. Furthermore, stakeholders desire mining firms to support their communities by purchasing from local suppliers and implementing efficient health and safety principles. In addition, stakeholders expect favourable job opportunities (Kepore & Imbun 2011) and wish information
about the companies’ CSR activities to be communicated with transparency (Mutti et al. 2012). Physical infrastructure such as roads, schools (Kepore & Imbun 2011), libraries and museums are also among stakeholders’ expectations (Mutti et al. 2012).

Community members near mining fields often suffer from social problems. This stakeholder group perceives that most of their problems are caused by the mining corporation and therefore, the company is responsible for solving their problems. Although most of the community members are directly dependent on the mine, some want to overcome the dependency, but need and expect initial help to do so. In order to balance the major differences between perceptions and expectations in terms of CSR and sustainable development among mining companies, and government and communities as stakeholders, Cronjé and Chenga (2009) recommend initiating a long-term strategic process towards sustainable development in the neighbourhood of mines. Aligning the expectations and activities of all parties involved should be prioritised (Cronjé & Chenga 2009).

2.7.2 Stakeholders’ perceptions

The products of the extracting industry, such as minerals and noble metal, are essential for the mining industry’s economic results, but most often these products can only be found in sensitive environments (Heath 2009; Kepore & Imbun 2011). However, complex and adverse environmental circumstances in these areas often challenge even the best intentions of companies’ CSR activities in terms of environmentally and socially friendly digging (Heath 2009). In many countries there are prevalent perceptions among various stakeholder groups that CSR activities of mining companies are only ‘window dressing’ and have no real intention to provide local communities with long-term benefits. They either experience CSR as a lip service or perceive it as a manipulative tool that enables mining companies to achieve their business goals rather than maintaining community involvement on an ethical level. Thus there is a considerable difference between stakeholders’ CSR expectations and what they think mining companies actually do. Therefore, CSR of mining companies is an ongoing debate from which some major stakeholder expectations and demands emerge (Mutti et al. 2012). Accordingly, it is imperative for a company to tailor its CSR
communication to the specific needs of different stakeholder groups (Du, Bhattacharya & Sen 2010).

2.8 Communication strategies

There is an “increasing prominence of CSR for a wide range of stakeholders, from consumers and employees to legislators and investors” (Dawkins & Lewis 2003). In addition, other researchers enlarge the main stakeholder groups by adding the local community and the environment (Lepoutre & Heene 2006; Wulfson 2001). Even a single person can have various stakes in a company; for example, as a customer, a prospective employee or investor (Neville & Menguc 2006). Furthermore, these different audiences vary in terms of their expectations of businesses, and in information needs, and may thus respond differently to the various communication channels of CSR.

However, the primary target addressees are analysts, investors and the business press. Nevertheless, there is public interest in receiving reliable information as to companies’ responsibilities (Bowd, Bowd & Harris 2006). Research has suggested that companies communicate information about their CSR initiatives “in line with what their key stakeholders expect” (Sweeney & Coughlan 2008).

Social responsibility disclosure refers to the disclosure of information about organisations’ interaction with stakeholders (Branco & Rodrigues 2006). Messages about corporate ethical and socially responsible activities are likely to provoke strong and often positive reactions among stakeholders. Research has established that the more companies expose their ethical and social objectives, the more likely they are to attract critical stakeholder attention (Ashforth & Gibbs 1990).

Most companies use a corporate social responsibility focused communication strategy to provide information on their websites rather than a corporate ability communication strategy which would promote the quality of products and services. Most often companies provide both internal CSR information, such as information on the environment, health and safety, and codes of ethics, and external CSR information in terms of employee voluntarism, and philanthropic donations (Haigh 2014).
Although globally operating mining companies face different environmental and social conditions, including heterogeneous pressure groups, their pattern of CSR reporting is very similar. The companies face isomorphic pressures with regard to institutional environments and capital markets and mimetic isomorphism applies in terms of benchmarking business practices. BHP Billiton, as the largest member of the field, sets the standards in CSR reporting. Globally, similar accounting standards, stock exchange requirements, and the structure of the capital market are very similar and allow coercive isomorphism to be applied. These mechanisms directly influence the companies' communication strategies with regard to environmental and social online disclosure, in particular when reporting structures based on GRI guidelines are used (de Villiers & Alexander 2014).

In times of corporate crises, it is important for companies to have a clear understanding of where they stand in their stakeholders' opinion. Stakeholders’ expectations with regard to CSR communication should not be underestimated and should be well considered when deciding what crisis response strategy to follow. Accommodative strategies, where the company accepts crisis responsibility, apologises for the crisis, and/or attends to needs of possible victims are preferable over defensive communication strategies where the company denies responsibility or claims there is no crisis at all. In case of a crisis, companies need to seriously communicate their responsibility and care taking as a minimum to avoid unfavourable stakeholder evaluation (Janssen, Sen & Bhattacharya 2015).

2.8.1 Drivers of CSR disclosure

The most effective driver of non-financial corporate reporting in the mining industry is criticism from civil society organisations (Perez & Sanchez 2009), as well as external pressure, risk and reputation management, moral matters and support of better investor relation and corporate performance (Fonseca 2010; Spence & Gray 2007).

In the 1990s (Perez & Sanchez 2009) the mining industry was among the first businesses to communicate environmental issues (Jenkins & Yakovleva 2006), due to increasing societal pressure. Mining companies were also among the first to introduce stand-alone environmental reports (Fonseca 2010; Mutti et al. 2012).
The industry is now moving towards a leadership role of communicating social and environmental information (Jenkins & Yakovleva 2006).

Therefore, sustainability reports have evolved as an important tool for mining companies to demonstrate their commitment to a triple bottom line, appropriate CSR initiatives and local community relations (Jenkins & Yakovleva 2006). In addition, O'Connor and Gronewold (2012) found that global companies in the petroleum industry use environmental sustainability reports to emphasise their competitive advantage (Vintró et al. 2012), as well as their commitment to CSR to buffer opposing stakeholder behaviour. Specific types of communicating CSR-related information are used dependent on CSR activities conducted, the company's position within the industry, and particularly intra-industry regulations and pressures. As such, sustainability communication is specifically influenced by industry values, norms, and corporate idiosyncrasies (O'Connor & Gronewold 2012). However, sustainability reports, instead of minimising clashes, can have a paradoxical effect if community concerns are not properly communicated in the report (Murguía & Böhling 2013).

Within the mining sector in particular, mineral associations such as the Mining Association of Canada, the Mineral Council of Australia and the International Council on Mining and Metal (ICMM) are insisting their members disclose sustainability reports according to their specific frameworks, guidelines and indicators. In contrast, the GRI provides principles for voluntary sustainability reporting in their Mining and Metals Sector Supplement (Fonseca 2010; Murguía & Böhling 2013).

In Australia, companies tend to report on sustainability because they seek to disclose information about possible impacts on the firm's performance and different strategies to stakeholders other than shareholders. Furthermore, they report information about the company's financial performance and how well they deal with non-financial and financial risks (Parliament of Australia 2010).

Global investors are increasingly concerned about the social performance of the companies they are investing in with regard to company reputation (Friedman, AL & Miles 2001). Therefore, social rather than environmental disclosure is on
the agenda of companies in order to respond to their investors’ demand for CSR information (Qiu, Shaukat & Tharyan 2014).

In the Australian context, socially responsible investors tend to be middle-aged and have a tertiary education. They consider positive or negative environmental and social issues equally within a rigorous financial assessment. Responsible investors in Australia expect financial returns as well as non-financial benefits (Pérez-Gladish, Benson & Faff 2012).

### 2.8.2 Types of CSR disclosure

There are different types of corporate disclosure communicating information about the social and environmental issues of mining companies. Less detailed information, which is quantitative in nature rather than qualitative, can be found in mandatory reports, such as financial reports and annual reports. However, because these types of disclosure are required by legislation and published by all companies, the information is spread widely (Jenkins & Yakovleva 2006).

In contrast, stand-alone environmental reports usually encompass information about the mining company's “environmental policy, their principal problems, their performance and information on the environmental consequences of the companies' activities” (Jenkins & Yakovleva 2006, p. 273). By communicating environmental issues via a stand-alone report, the company shows its commitment to a wide range of stakeholders and its attitude towards environmental management strategies. Apart from environmental topics, contemporary stand-alone sustainability reports cover areas such as health and safety, employee, and community matters (Jenkins & Yakovleva 2006). It has been found that companies in the mining industry use different approaches to communicate their non-financial information, most likely influenced by stakeholder demands for specific information, company resources and advisors with expertise in sustainability reporting (Perez & Sanchez 2009).

### 2.8.3 Stages of CSR disclosure

Mining companies all over the world are in different stages of voluntary communication development. They are either matured, adolescent or infant reporters (Jenkins & Yakovleva 2006).
‘Matured’ reporters

In developed countries, organisations are most likely to belong to the group of ‘matured reporters’, which classifies them as having a long history of sustainability reporting. The communication of CSR-related information is more and more sophisticated in terms of nature and style (Jenkins & Yakovleva 2006; Perez & Sanchez 2009). The content of their disclosure, which they seek to obtain external assurance for, usually encompasses health and safety issues as well as environmental and community information as stand-alone reports according to GRI guidelines (Jenkins & Yakovleva 2006). The GRI reporting guidelines offer a reporting supplement for the minerals and mining industry, where, among other specific indicators, it is required to report on ‘Indigenous Rights’. Specific indicators for reporting in the minerals and mining sector are implemented in economic, environmental, and social dimensions.

For example:

- The aspect of biodiversity is extended by indicator MM2 (Minerals and Mining) to report on: “The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place” (GRI 2000-2011).

The GRI Reporting Framework allows reporting on different levels, to meet the needs of beginners, advanced reporters, and those somewhere in between. There are three levels in the system titled C, B, and A. The reporting criteria at each level reflect a measure of the extent of application or coverage of the GRI Reporting Framework. A ‘plus’ (+) is available at each level (ex., C+, B+, A+) if external assurance was utilized for the report” (GRI 2000-2011).

The language that mining companies use for matured reporting is more associated with sustainability development rather than CSR (Jenkins & Yakovleva 2006). Their style of reporting is called ‘deluxe’ and is classified by the format of disclosure, which encompasses full website, full printed report, summary printed report and brief annual report section (Salterbaxter 2003).
Companies from the Australian resource sector disclose considerably more information on sustainability issues than companies from other sectors (Jones et al. 2007). Information is provided in a corporate context, relevant issues are identified and described, and appropriate indicators are used. Increasingly, the companies provide third party assurance by using internationally accepted reporting frameworks. However, on average their sustainability disclosure is at a low level (Herbohn, Walker & Loo 2014).

**‘Adolescent’ reporters**

‘Adolescent’ reporting companies also use some stand-alone reports but usually they publish only a few pages in their annual reports covering health, safety, environmental and community matters. They communicate in CSR terminology rather than sustainability development. Although these type of reporters seek to follow GRI reporting standards, they are considerably slow in verifying their data externally (Jenkins & Yakovleva 2006). Their style of reporting is known as ‘standard’, encompassing full website, summary printed report, and brief annual report section only (Salterbaxter 2003).

**‘Infant’ reporters**

Companies that are yet to develop stand-alone reports but give a little information about social and environmental issues in their annual reports are clustered as ‘infants’. These companies are not yet familiar with GRI standards and verifying their data externally is not yet an issue. They refer considerably more to CSR activities rather than sustainable development and are supposed to have a long way to go before otherwise usual standards of communication are achieved (Jenkins & Yakovleva 2006). Accordingly, their style of reporting is classified ‘economy’ and includes comprehensive sections in the annual report with the same information available for download from their websites (Salterbaxter 2003).

In Saudi Arabia, as an example for developing countries, increasing awareness of CSR could be observed during 2010 to 2012 among companies listed on the Saudi stock exchange, whereas private companies are still at a very early stage of CSR awareness in relation to integrated policies and CSR strategies. Environmental and social disclosure are in the foreground. However, some have
not updated their CSR information since 2010 or have disclosed information about outdated events (Aldosari & Atkins 2015).

### 2.8.4 Media of CSR disclosure

Over time, a notable variety of media, such as *Mining Australia*, *ECOS magazine Australia*, *The Environmentalist*, *The Green Lifestyle Magazine* and *Landscope*, have begun to be used to disclose social and environmental information. Besides advertisements and articles, booklets and leaflets, specific product labelling, and press releases, a company website has become a favoured communication medium (Jenkins & Yakovleva 2006; O'Connor & Gronewold 2012). The Web enables companies to communicate all types of reports and information (annual report, financial report, site-specific reports, sustainability reports) in a constantly updated version, which makes it an attractive tool for companies and stakeholders alike. However, there is also the risk of negative stakeholder comments if companies perform and report inadequately (Jenkins & Yakovleva 2006).

The highly interactive nature of the Web has led to its proactive use to engage influential stakeholders and foster public consultation to shape policy (Esrock & Leichty 1998). This has precipitated an increase in stakeholders' interest regarding online communication of companies' CSR initiatives. Thus, in order to remain competitive, it is essential that companies use the Web, as it is one of the most cost-effective means of communication in today's world for corporate purposes (Lakatos, Gazdac & Dan 2012). With the advent of the Web and the opportunities offered by online communication, a very low cost mass communication solution is available with permanent access and updating options that make it even more flexible and applicable than standard print media (Dincer & Dincer 2010).

Successful firms use the Internet and their websites to communicate their CSR initiatives. Relationships with internal and external stakeholders are fostered by publishing ethical statements as well as specific CSR activities in terms of environmental policies (Snider, Hill & Martin 2003). The use of websites for communicating CSR initiatives is rising among organisations in response to changing local, national and global societal expectations concerning business practices (Isenmann 2006). For most organisations, the corporate website now
represents an instant and full-blown information hub, an ideal channel through which corporate messages that outline, improve or maintain a company’s corporate identity and reputation are communicated (Rolland & O’Keefe Bazzoni 2009). Nevertheless, although the World Wide Web has emerged as a required medium for corporate communication purposes, its use may be limited to specific contents (Moreno & Capriotti 2009).

The use of websites to communicate CSR and sustainability issues has become a commonly accepted channel. With regard to online communication the aspect of richness in relation to CSR disclosure has become an important factor to improve stakeholders’ perceptions toward the company, in particular within industries regarded with high scepticism such as the mining industry (Saat & Selamat 2014).

Stakeholders prefer corporate websites and CSR-designated websites as company-controlled information channels over uncontrolled media such as experts’ blogs or online news, although the credibility of CSR information drops in case of company initiated disclosure (Kim, S & Ferguson 2014). For companies having a relevant environmental and social impact, CSR and sustainability topics are important to communicate to their stakeholders. Web-based communication tools, such as corporate websites, are increasingly used because they allow better organisation of the flow of information, its management and dissemination. In addition to websites, companies increasingly use social media tools to support and integrate information already issued on their websites (Tomaselli & Melia 2014).

To date, very little research has been undertaken on CSR online communication by Australian companies (Parker et al. 2015; Parker, Fraunholz & Zutshi 2009). Brennan et al. 2011 found that most of the TOP 30 (ASX, 2009) Australian companies seem to be less engaged in communicating CSR issues other than financial information on their websites. It was also found that they miss opportunities to communicate environmentally sustainable practices on their websites and that there is very little evidence of implementation of sustainable business practices beyond the requirements of the legal framework.
According to Pomering and Dolnica (2009), 62% of Australian bank customers who were accustomed to using the Internet were found to trust information communicated on the banks' websites. Forty percent of these customers relied on information about social issues and 58% had confidence in what the banks published about their products. It was also found that Australian financial institutions tend to communicate to specialist audiences, such as shareholders and financial industry analysts, via their websites and special reports (Pomering & Dolnicar 2009).

Parker, Fraunholz and Zutshi (2009) found that there are important differences in how Australian small and medium enterprises (SME) design their websites. Some firms use their website to promote a CSR brand, whereas others introduce their products/services and ‘green’ production processes on their ‘About Us’ page. The extent of information provided varies from very extensive to brief, covering only one or two sentences. Some communicate their CSR activities prominently, while others tend to hide information (Parker, Fraunholz & Zutshi 2009). There is still a gap in the literature how Australian SMEs represent their stakeholder relationships in CSR website communications (Parker et al. 2015).

2.8.5 Quality, credibility and assurance of CSR disclosure

However, lacking credibility is the most important point of critique related to voluntary social and environmental disclosure. In contrast to annual and financial reports, which have to be audited before communication, sustainability reports have no obligatory rules in terms of form, structure and content. As a result, social and environmental information is not yet standardised and therefore hard to measure and quantify unless audited by third party verification (Emel, Makene & Wangari 2012; Jenkins & Yakovleva 2006; Perez & Sanchez 2009). Verifications could also mean audits where external stakeholders participate in the reporting process about community development, such as government inspections, local community members and rigorous accounting standards (Emel, Makene & Wangari 2012). However, the largest global mining companies adhere to GRI standards or follow national industry reporting guidelines (Perez & Sanchez 2009). Furthermore, companies tend to select information they want to communicate, which makes it difficult to compare data either between reports of
different years or even between companies within the same industry (Jenkins & Yakovleva 2006).

The International Council of Mining and Metal launched an assurance procedure based on standards such as the International Standard on Assurance Engagements (ISAE 3000), AccountAbility Assurance Standards (AA1000AS) and G3/G4 GRI guidelines (including ten reporting principles). Although a few companies now report assured information on sustainability, credibility in the assurance procedure is still a matter of concern among stakeholders because the assurors seem to be directed by management. Presently, it is unclear as to whether the ICMM Assurance Procedure might encourage mining companies to report beyond GRI guidelines (Fonseca 2010).

CSR positioning and the size of a company are determinants for voluntary sustainability assurance practices. Pressure from the media representing the public’s expectations, and concerns about legitimacy (Perego & Kolk 2012; Smith, J, Haniffa & Fairbrass 2011) are additional drivers to implement third party assurance procedures in relation to environmental and social disclosure. The main purpose of providing sustainability assurance is to certify the reliability of social disclosure (Gillet-Monjarret 2015).

Although a company’s disclosure may be technically true, by way of omitting important pieces of information its transparency, trustworthiness, and credibility may be undermined. Omitting key pieces of information is referred to as half-truth, as opposed to terms such as lies, untruths or corporate hypocrisy. With regard to completeness and credibility of online information, it is important to consider what to disclose and what to omit (Devin 2015).

Mining companies in China focus on investors as their main target group when disclosing social information online. Although among environmentally sensitive industries in China, such as the mining industry, a relatively high quality of social online information is prevailing, Farag, Meng and Mallin (2014) found that the better the company’s financial performance the worse is their social online disclosure. Consequently, a substantial limitation could still be identified with regard to environmental and social online information (Farag, Meng & Mallin 2014).
Mining companies globally tend to assimilate their disclosure practices in relation to sustainable land management and making information accessible to the public. However, the overall quality of disclosure is still low, showing bias with regard to incomplete presentation of qualitative information and often omitting critical parts of mine operations. Hence, company benchmarking and comparison by analysing information on sustainable land management indicators is hindered or impossible. Most often, information is highly condensed and presented to satisfy the investor’s perspective. GRI guidelines, used by large mining corporations to structure their environmental disclosure, is arguably more suitable for information on global environmental issues rather than local environmental problems, such as land degradation, resettlement or restoration of habitats (Barkemeyer et al. 2015).

Large companies belonging to CSR market indexes and using GRI guidelines to structure their environmental and social disclosure are most likely to provide comprehensive information according to the principles required. These disclosures are more substantive in nature rather than symbolic, which is associated with hiding important CSR information within lots of additional, irrelevant content. Moreover, symbolic CSR disclosure is often related to firms rejecting GRI as their guiding principles. However, adhering to GRI guidelines and providing assurance of CSR information is closely related to higher quality of CSR disclosure (Michelon, Pilonato & Ricceri 2014).

Spanish companies have improved their non-financial disclosure based on GRI guidelines over the past years. The habit of providing environmental and social information is still not homogenous but due to adhering to GRI guidelines it becomes increasingly consolidated. GRI guidelines are now a widely applied reporting framework among Spanish firms. In addition, they include third party assurance with regard to non-financial information as it is an additional value for risks analysts in banks (Ortiz & Marin 2014).

2.8.6 Expectations of CSR disclosure

In order to build good relationships with the communities located near the mining area, Cronjé and Chenga (2009) recommend establishing a strategically organised communication department. This department should encourage stakeholders to participate in communication about the mine’s corporate social
initiatives and also to maintain interaction with the government, communities and activist groups in order to avoid difficulties during acculturation processes (e.g., overcome apartheid in South Africa) and building power relationships (e.g., unequally distributed power of communities, governments and mining companies) (Cronjé & Chenga 2009). Effective CSR communication helps to considerably stabilise trust building, which is essential for the longevity of a successful partnership (McDonald & Young 2012).

Communicating CSR-related information effectively is a major expectation by some stakeholder groups. A reliable communication method is supposed to balance the atmosphere of conflicts between stakeholder groups and mining companies. Over time, the level of communicating CSR initiatives to different stakeholder groups has achieved a higher standard. However, there is still room for improvement in terms of relevance, transparency and maturity of reporting practices (Perez & Sanchez 2009). Furthermore, stakeholders of the mining industry in Argentina argue that inadequate communication, such as complicated access to information as well as deficits in its completeness, transparency and accuracy, is a major reason for rejecting the mining industry and distrusting their CSR engagement (Mutti et al. 2012). Even worse, the situation can escalate to the point where infrastructure is damaged, projects are delayed and corporate reputation is destroyed, resulting in negative financial consequences, or the mining site being closed (Kemp, D. et al. 2011).

For example:

- In July 2012, thousands of protesters from around the country tried to close down BHP Billiton's uranium mine Olympic Dam (Robertson 2012).

- In the USA, protesters blocked mining trucks from entering “Mount Frac” – the Winona, MN dumping site for silica sand mined in Wisconsin – because they wanted to avoid hydraulic fracturing (“fracking”) all over the country (Olzen 2012).

- In March 2013, a protester sitting on a tree platform with ropes attached to the front gate disrupted production at Whitehaven’s Tarrawonga coal mine, NSW. Another twenty people supported the
activist. The action took place mainly to save koalas in the region (takver 2013).

In relation to CSR disclosure, North American stakeholders expect to be provided with a high level of basic CSR information in news jargon and appropriate transparency. They are looking at factual information about a company’s CSR activities revealing the primary beneficiaries of these activities. They also expect information about specific outcomes of previous CSR initiatives (Kim, S & Ferguson 2014).

### 2.9 Future mining in Australia

In Australia, the Minerals Council of Australia anticipated the need of 70,000 additional mining employees by 2015, which implies challenging social, recruitment and business opportunities for the Australian mining industry (Altman and Martin 2009). Although changes in demand due to global climate change policies will likely lead to changes within the mining industry, coal mining, and especially black coal mining, will continue to represent a important resource in energy security long into the future (Australian Coal Association 2013). Against this background, it becomes an increasing challenge for Australian mining companies to expand their CSR activities to broader social dimensions (Solomon, Katz & Lovel 2008).

### 2.10 Summary

This literature review outlined the concept of corporate social responsibility in terms of strategic and non-strategic CSR implementation, different typologies of CSR, such as ethical, altruistic, reactive/tactical or strategic. It also noted the absence of a binding comprehensive definition of the term CSR, and therefore different representations and demonstrations of CSR in the mining industry and among different stakeholders. The following research questions have the potential to clarify the social-organisational meanings and representations of CSR from a specified key stakeholder group of the gold mining industry in the Australian context:
(RQ1) What do Australian investors expect in terms of environmental and social corporate initiatives and correspondent online disclosure? (interviews)

The literature review also delineated different aspects of online communication, such as drivers, types and stages of online communication as well as the increasing demand for comprehensiveness, credibility and assurance for voluntary, non-financial CSR-related disclosure. It was also demonstrated that inadequate corporate communication strategies may be an important factor in rejection of the mining industry. On the other hand, strategically implemented communication may notably support trust building and establishing a reliable company-stakeholder relationship. Therefore, answers to research question 2a and 2b will potentially make a contribution to the growing understanding of how the sustainability of resource companies is communicated.

- RQ2a) What information do Australian gold mining companies disclose online on their environmental and social activities? (website analysis)

- (RQ2b) What are the differences in online disclosure of Australian gold mining companies? (website analysis)

The literature review showed that there are very few studies available about environmental and social CSR activities in the Australian (gold) mining industry and no studies linking CSR-related online disclosure to stakeholders' information needs. The third research question would potentially reveal differences between strategic and non-strategic CSR information stages and to what extent investment-related key stakeholders demand online CSR-related communication.

- (RQ3) To what extent do Australian investors demand online information in terms of environmental and social CSR-related activities to satisfy their information needs? (survey)

This chapter outlined the literature on CSR as a business concept, from its beginning as a social movement in the USA up to CSR as a strategic
management tool in contemporary companies. Furthermore, specific requirements of CSR in the mining industry were discussed, both globally and in the Australian context. The literature review also covered communication strategies, and stakeholders' expectation in relation to CSR online disclosure. Finally, a brief outlook on future mining in Australia was provided. The next chapter will provide information on the theoretical framework of this thesis including the researcher's background and relevant theories.
3 Theoretical framework

The previous chapter canvassed the literature on CSR, providing information on the development of the concept, possible definitions and the status of implementation as a core company strategy. In addition, specific CSR requirements in the mining industry were delineated, both globally and in the Australian context. In particular, stakeholders’ expectations and communication strategies with regard to online disclosure on company websites were covered.

This chapter outlines the theoretical foundation of the thesis. The researcher’s standpoint, specifically the cultural background in relation to the Germanic history of social responsibility, is presented and benefits she gained due to her gender, age and European ancestry when approaching participants are outlined. Furthermore, (new) institutional theory and the modern financial reporting theory as a conceptual framework to guide the research are introduced.

3.1 The researcher’s standpoint

The researcher’s standpoint, including his or her social position, is an important aspect of the methodology chosen for the research. The way the researcher approaches and understands the research is influenced by his or her social position, such as gender, race, cultural background and economic status, as shown in Figure 3.1. The standpoint underpins the questions asked, answers sought, interpretations made and the paradigms considered that make sense to the researcher (Walter 2013).

In Germany there is a well-known tradition of honesty and social responsibility (Antal, Oppen & Sobczak 2009) The term “ehrbarer Kaufmann” (English interpretation: honourable businessman) goes back to the 11th century when in Italy and the North of Europe the concept of “Treu und Glauben” (English interpretation: in good faith, bona fide) emerged (Kaufer 1998). Members of the Hanseatic League (1160–1669) were committed to a certain behavioural pattern as honourable businessmen, which also included preservation of the social balance within the communities by investing a certain part of their profit in appropriate social activities. Honest behaviour and social activities were understood to be part of business life and therefore not worth being disclosed (Burkhart 2006).
That might be the reason why communicating CSR only hesitantly started in Germanic countries when European firms realised that companies in the Anglo-Saxon context used CSR communication as a marketing instrument to shape their business reputation and attract stakeholders (O’Faircheallaigh 2013; Trebeck 2008; Werbel & Wortman 2000). Against this background, the researcher’s interest in terms of CSR communication, specifically online disclosure, was drawn after migrating to Australia in 2010.

Being a female, white European member of the same age group as the interviewees and survey respondents helped to achieve acceptance as a conversational partner on a level playing field among mature investors. Moreover, being a retired self-employed manager allowed the researcher to ask specific questions about the superannuation system in Australia and investors’ preferred investment strategies with regard to stocks. Despite the slightly different cultural background, most interviewees opened up about their personal view in terms of social responsibility and sustainability with regard to the environmental and social aspects of investments.
3.2 Theoretical foundation

Business research involves linking empirical data with social theory. One does not make sense without the other (Walter 2013). The conceptual framework, encompassing a theory or several theories, works as a guideline to analyse and understand the empirical data collected during the research. Operating within a clearly established conceptual framework gives important validity and rigour to the research and leads to the research method as shown in Figure 3.1 (Babbie 2002; Walter 2013).

3.2.1 New institutional theory

New institutional theory is used as a major theoretical perspective when looking at organisational behaviour with regard to the influence of other organisations and wider social forces in the field, including cultural rules and beliefs as drivers for organisational isomorphism. The scope of the theory also covers the transformation and change of organisations alongside the heterogeneity of practices and actors in organisational fields. New institutional theory is closely associated with sociology, management, political science and economics (Lounsbury & Zhao 2015).

As demonstrated in Figure 3.2, new institutional theory expands the idea that organisations are formally structured according to technical demands and resource dependencies by proposing that institutional forces, such as knowledge legitimated through the educational system, and by public opinion, the professions, and the law (Powell 2008) also shape organisational structure (Meyer & Rowan 1977; Meyer & Scott 1983; Zucker 1977). It is the core idea of new institutional theory, also referred to as neo-institutional theory, that organisations are nestled within social and political environments and therefore, structures and practices are influenced by rules, beliefs, and conventions (Powell 2008).

Dimaggio and Powell (1983) contributed to the theory by introducing the concept of coercive, normative and mimetic isomorphism as processes of reproduction. Coercive factors are understood as political pressure, where companies may face formal or informal pressure from cultural societal expectations to develop a similar organisational behaviour. Against the background of new institutional theory, it is
argued that “organisational practices change and become institutionalised because they are considered legitimate” (Matten & Moon 2008, p. 441). International reporting guidelines und principles, such as GRI guidelines are also seen as source of coercive isomorphism that requires firms to adopt appropriate communication strategies. Moreover, increasing ethical investment requirements by international investors set globally operating companies under pressure in relation to similar social corporate initiatives and appropriate disclosure. (Matten & Moon 2008).

Normative isomorphism instead occurs when education influences organisational change. There are also normative isomorphic pressures stemming from professional forces. Increasing tertiary education including awareness about CSR and sustainability concepts and ideas (Dimaggio & Powell 1983; Matten & Moon 2008), may create social pressure for CSR and sustainability practices. Hence, normative pressure increasingly sets the standards for legitimate business practices by well-educated external stakeholders to bring CSR professionals into mining companies to head internal departments such as Institutional Relations and Community Relations (Matten & Moon 2008).

Finally, mimetic isomorphism stems from habitual responses by companies to circumstances of uncertainty (Powell 2008) and external pressures if they look to other successful companies for models. As new companies are organised according to the structure of older firms, managers of young enterprises proactively seek to imitate successful businesses in the field (Kimberly 1980). In terms of adopting other companies' communication strategies on "corporate websites to gain legitimacy and to benchmark against leaders in their respective industries" (Darus, Hamzah & Yusoff 2013, p. 237) mimetic isomorphism is an appropriate approach.
Moreover, Scott (2001) further developed and added three elements to the theory, namely regulative, normative, and cultural/cognitive. The regulative pillar focuses on rules setting and sanctioning, normative processes encompass evaluative and obligatory dimensions, while shared conceptions and frames that help to understand meaning are described as cultural/cognitive elements (Powell 2008). Each of the three elements provides a different rationale for legitimacy by being either legally authorised, morally approved or culturally driven. The ideas of both authors, Dimaggio and Powell (1983) and Scott (2001), emphasise the importance of differentiating the reasons why an organisation accepts change, whether out of advisability, for moral reasons or due to a lack of alternatives (Powell 2008).

Within new institutional theory, the environment for organisational research is the organisational field (Powell 2008). An organisational field as a whole is determined by sharing key business components, such as "key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services and products" (Dimaggio & Powell 1983, p. 148).
In highly structured organisational fields, such as the gold mining industry, a context is provided where individual corporate efforts to solve problems characterised by ambiguity or constraint most often result in homogeneity in structure, culture and output. The best concept to comprehend homogeneity is isomorphism, which is a process that causes one member of the field to imitate other members facing the same business environment. Companies tend to imitate other companies in the field in order to improve their performance or enhance legitimacy by way of either coercive, normative or mimetic approaches (Dimaggio & Powell 1983).

3.2.2 Modern financial reporting theory

Usefulness is an underlying concept of the conceptual framework for financial reporting as shown in Figure 3.3. Anyone who is related to a certain company can be affected by what happens to that company and "hence may find information about its affairs useful (Rutherford 2000, p. 14). Following Freeman (1984) this can be any group or individual "who can affect, or is affected by, the achievements of the organisation's objectives" (p. 46). Current shareholders and also potential equity investors as an important group of investment-related key stakeholders will most likely find financial information useful when published in financial reports (Rutherford 2000).

However, in order to be useful to investors, financial information should be released before events occur. Hence, auditors may worry about possible litigation from financial stakeholders who rely on the 'decision-usefulness approach' in terms of information that may lead to incorrect investment decisions. On the other hand, financial information about past events may be considerably useful to investors and other stakeholders who are seeking to predict future events. The information provided must then have predictive value (Rutherford 2000).
Investors' financial information needs

Before events occur

Past events

Useful financial information

reliable relevant predictive confirmative comparable

Figure 3.3: Modern financial reporting theory

In order to be useful, information must be reliable and relevant. However, consistency or uniformity has the potential to produce unreliable information. In the same way, consistency is no excuse for an accounting policy that was acceptable in the past but will no longer provide useful information at present. Recognition criteria set up by the Statement of Principles result from the objective and qualitative characteristics of financial information. Hence, they represent the framework's objective to provide useful information for evaluating economic decisions and, in doing so, to obtain relevance and reliability. Financial reports most useful for the company management are likely to be also most useful for the users of external financial reports (Rutherford 2000).

The assertion that investors use financial reports and the issues about the sorts of information they will consider to be useful is basically empirical in nature. Empirical evidence about the use of financial information by investors is increasing substantially in size and refinement (Rutherford 2000).

As demonstrated in the previous sections, stakeholders need to have information that is useful for their specific purposes. Investors as an important key stakeholder group need to receive information about the share price of a company they intend to invest in, or have already invested in, as well as about the dividends being paid. Employees may have important information needs in terms of the security of their employment or the level of possible remuneration.
Suppliers need to make decisions about their future relationship with a certain company and allow for extended capacities to meet the particular requirements of their business partner. Other stakeholder groups, such as environmentalists, need information about the company's impact on the environment in order to decide whether to protest or not. All their purposes can be characterised as making economic decisions, and information may be taken from different sources other than the financial statement (Rutherford 2000).

Hence, any particular information source would benefit from supplying specific information depending on previous investigations about the stakeholder groups and empirical analyses of what their information needs are (Rutherford 2000).

Economic decision-making is an essential part of financial stakeholders' information needs. Thus financial reporting focuses on supplying relevant information that should have 'predictive value' as well as 'confirmatory value' (Rutherford 2000).

Furthermore, information also needs to give financial stakeholders the possibility of comparing companies in terms of "similarities in and differences between the nature and effects of transactions and other events taking place over time and across different reporting entities" (Rutherford 2000, p. 43).

In this research, Rutherford’s (2000) reporting theory was adopted and adapted with regard to non-financial online information. Reliability and relevance of online disclosure were explored in relation to investors’ online information needs.

### 3.3 Summary

This chapter outlined the theoretical framework. The social position of the researcher was presented followed by the introduction of the research guiding theories, specifically new institutional theory and modern financial reporting theory. The next chapter will briefly delineate the philosophical perspective of the research, followed by detailed presentation of the research methods, analyses, software tools and validation concepts. In addition, ethical considerations of conducting research involving people will be covered.
4 Methodology

The previous chapter briefly introduced the standpoint of the researcher, covering gender, cultural background and economic status and social position. In addition, the conceptual framework of the research was presented, outlining the new institutional theory and the modern financial reporting theory as guiding theoretical frameworks for this thesis.

This chapter is twofold. Firstly, it outlines the philosophical and theoretical perspective of the thesis, in particular the different approaches to the qualitative phase I and the quantitative phase II, followed by the presentation of a mutually applied paradigm. Secondly, the methodology of a mixed methods research design is described and justified in detail. Interview, website analysis and survey are introduced in detail as research methods, expanded by the presentation of the different analyses applied in the two phases. In addition, two software tools that supported the data analysis digitally, Leximancer and SPSS, are explained. Subsequently, qualitative and quantitative data validation concepts are presented, followed by ethical considerations with regard to ethics approval at low risk level.

4.1 Philosophical perspective

Epistemology is concerned with the following questions:

- What is knowledge?
- What are the sources and limits of knowledge? (Eriksson & Kovalainen 2011, p. 14).

In general, epistemology deals with the production of knowledge and how it is defended. It outlines the criteria that make knowledge possible (Eriksson & Kovalainen 2011). The cultural background is a strong component of knowledge (Walter 2013), embedded in the concept of epistemology, also referred to as theory of knowledge and covers the understanding of – mostly unwritten – rules about what is considered as knowledge, who can have knowledge and who cannot, and which knowledges are valued higher than others (Dooley 1990). The dominant way of knowing, as well as the “dominance of some knowers over others” (Walter 2013, p. 12), are part of the society. Social research, which
includes business research, is undertaken based on these dominant ways of knowing, where factors such as gender or age groups may influence the social environment. In addition, institutional knowledge production in locations such as stock markets, judicial systems, and universities can be challenged by the dominance of strong knowers with powerful positions in the society. Furthermore, over- or under-representation of certain groups of the population, such as women, younger people, minorities or specific societal classes, may have an impact on knowledge production and assessment (Walter 2013).

Epistemology offers a subjectivist and an objectivist approach to knowledge production in business research, as explained in the following sections.

### 4.1.1 Subjectivism

Subjectivism assumes that knowledge is simply subjective and the absence of external or objective truth. The statement is based on René Descartes and his methodic doubt, also referred to as Cartesian scepticism (Eriksson & Kovalainen 2011). Subjectivism as a key concept of the philosophy of science underlies the qualitative phase I of this study covering RQ1, RQ2a and RQ2b as shown in Figure 4.1. The research methodology used an exploratory sequential mixed methods design including personal interviews and corporate website analysis as methods. This epistemological approach focuses on "reality as being socially constructed" (Eriksson & Kovalainen 2011, p. 15) and knowledge being "available only through social actors" (p. 15).

### 4.1.2 Objectivism

In addition, Figure 4.1 shows another theoretical view, objectivism, which was chosen for the quantitative phase II of the study covering RQ3. The method used here was a questionnaire. This objectivist stance allows the researcher to focus on the possibility "that there exists a world that is external and theory neutral" (Eriksson & Kovalainen 2011, p. 17).
Philosophical perspective

Epistemology
“What is knowledge and what are the sources and limits of knowledge?”
(Eriksson & Kovalainen 2011, p. 14)

Qualitative phase I

Subjectivism
Reality is socially constructed and available only through social actors
(Eriksson & Kovalainen 2011)

Quantitative phase II

Objectivism
Possibly, there is a world which is "external and theory neutral"
(Eriksson & Kovalainen 2011, p. 14)

Theoretical perspective

Interpretivism
“Access to shared dynamic and changing and individually constructed reality is only through social construction such as language and shared meaning”
(Eriksson & Kovalainen 2011, p. 19)

Positivism
“The only legitimate knowledge can be found from experience”
(Eriksson & Kovalainen 2011, p. 17)

Reflexivity
How and what sort of knowledge is produced and how the new knowledge can be related to already existing knowledge about the topic in question
(Eriksson & Kovalainen 2011)

Paradigm

Pragmatism
Integrates different perspectives and approaches from both qualitative and quantitative research parts of the study
(Creswell 2014)

Figure 4.1: Philosophical perspective
4.2 Theoretical perspective

This section covers different theoretical perspectives with regard to the qualitative research phase I and the quantitative research phase II.

4.2.1 Interpretivism

Interpretivism was chosen as an appropriate philosophical position for examining RQ1 and RQ2a and RQ2b during the qualitative phase I of this study. The perspective is "concerned with subjective and shared meanings" (Eriksson & Kovalainen 2011, p. 19) and deals with the question of how individuals "interpret and understand social events and settings" (p. 19). According to Alvesson and Willmott (2003), interpretation is important to any analysis of qualitative materials.

Interpretivism works with the assumption that only language and shared meaning as social constructions provide access to a reality, which is shared, dynamic and changing and individually constructed (Eriksson & Kovalainen 2011). It focuses on the content of empirical data and is also interested in "how these contents are produced through language practices" (Eriksson & Kovalainen 2011, p. 20).

4.2.2 Reflexivity

During the process of qualitative data collection and analysis it becomes increasingly important to reflect on how knowledge is produced by the researcher, what sort of knowledge is being produced and how the new knowledge can be related to already existing knowledge about the topic in question. Unlike in deductive research, in inductive research, researchers are integrally part of the research process (Eriksson & Kovalainen 2011). The subjective views of the researcher and the participants alike are part of shaping the interpretations with regard to advanced themes and ascribed meaning to the data (Creswell 2014). Reflexivity represents a way to critically verify the entire research process. At the same time, it is a substantial procedure of validity creation in relation to describing the themes and concepts explored (Schwandt 2001).

Researcher – participant relationship

In qualitative research, one aspect of reflexivity refers to the relationship between the researcher and the participants, e.g. interviewees. The role of the researcher is not defined from the beginning but can change several times during the
research process as can the role of the participants. Along with growing confidence in conducting interviews, the power relationship between the researcher and the interviewees can change. Hence, this has an effect on the study and the results in one way or the other. It is important, to novice researchers in particular, to constantly reflect on how power relationships impact on interpretations and suggestions. This will enable them to produce well-grounded and trustworthy research results (Eriksson & Kovalainen 2011).

4.2.3 Positivism

According to Johnson, P and Duberley (2000), positivism is the most important philosophical view taken in management studies. They suggest that positivism has unified management research, which had previously been classified as diffuse and fragmented. Business and management knowledge is often functional in nature with a requirement for universal truth that would apply "across industries, business, cultures and countries (Eriksson & Kovalainen 2011, p. 17). As firm conclusions in managerial research are often seen as valuable, a positivist approach can be suitable.

The term positivism was coined by Auguste Comte in the 19th century and "refers to the assumption that the only legitimate knowledge can be found from experience" (Eriksson & Kovalainen 2011, p. 17).

Research from a value-free positivist view produces accounts and facts that are consistent with an independent reality. The aim of research using an epistemological positivist approach is to find "causal explanations and regularities" (p. 18) that have relevance in business research (Eriksson & Kovalainen 2011).

4.3 Paradigm

As demonstrated in Figure 4.1, pragmatism has been described as the primary philosophy of contemporary mixed methods research (Creswell 2014; Johnson, RB & Onwuegbuzie 2004; Johnson, RB, Onwuegbuzie & Turner 2007). It is a well-developed and appealing paradigm for integrating different perspectives and approaches from both qualitative and quantitative research parts of a study (Johnson, RB, Onwuegbuzie & Turner 2007). Pragmatism supports the choice of
appropriate methods and techniques from the full range of qualitative and quantitative instruments and it allows the use of various forms of data collection and analysis that translate into the best investigation of the research problem (Creswell 2014; Johnson, RB & Onwuegbuzie 2004).

Personal interviews were selected to allow the production of new knowledge in the field of CSR and sustainability among a limited set of Australian investors in gold mining stocks. Influencing factors such as gender, age groups and types of investors were pragmatically considered when choosing interviewees. In order to identify causal explanations and regularities regarding environmental and social online disclosure, a survey was selected to explore specific online information needs among Australian mining investors.

With regard to reflexivity, the major challenge in the qualitative part of the research was the changing role of the researcher during three increasingly specified interview rounds, where certain subject areas were continuously interpreted in terms of new knowledge and repeatedly questioned until saturation. Pragmatically, the structure of the interviews changed from structured to semi-structured to tackle the interviewees’ opinions. A challenge of the positivist approach in this business research was the expectation to identify new common management knowledge regarding CSR and sustainability online information needs. A survey providing fixed response categories was chosen as a pragmatic quantitative method to investigate the experience of the participants as investors and their attitude towards specific online information.

4.4 Methodology

For this study, exploratory sequential mixed methods research has been chosen as the methodology in two phases. The qualitative phase I uses interviews and website analyses to drive the questionnaire in phase II. Combining qualitative and quantitative research methods emphasises the strengths and balances the weaknesses of both traditional methods. In addition, a mixed methods approach will contribute to a more comprehensive understanding of the research problem than either approach alone (Creswell 2014).
In addition, Lodhia (2012) calls for a mixed methods approach when studying online communication in terms of social and environmental reporting, particularly when interviews will complement website analyses.

### 4.4.1 Definition

Although mixed methods research has become the third most important research approach after qualitative and quantitative, researchers have not yet agreed upon a unique definition. However, Johnson, RB, Onwuegbuzie and Turner (2007) have compiled a comprehensive workable ‘definition’ of mixed methods research from the definitions of nineteen leading mixed methods researchers, placing them against the background of the method’s history.

According to Johnson, RB, Onwuegbuzie and Turner (2007), mixed methods research is a coherent and appropriate synthesis of qualitative and quantitative research, which represents an effective third research methodology providing “the most informative, complete, balanced and useful research results” (Johnson, RB, Onwuegbuzie & Turner 2007, p. 129). The philosophical worldview most suitable for mixed methods research is pragmatism, and it follows its own fundamental logic adapted from qualitative and quantitative logical principles that help to obtain feasible and defensible research findings. With regards to data collection, analysis and viewpoints, mixed methods research uses both qualitative and quantitative research methods. In addition, it is “cognizant, appreciative, and inclusive of local and broader sociopolitical realities, resources, and needs” (Johnson, RB, Onwuegbuzie & Turner 2007, p. 129). Moreover, the method is very helpful for generating essential research questions and providing answers to these questions. It should be chosen when mixed methods research will most likely provide superior research findings and outcomes in relation to the research question(s) compared with qualitative or quantitative research methods alone (Johnson, RB, Onwuegbuzie & Turner 2007).

**Different terms**

Several different terms have been used to denote a research approach which includes quantitative and qualitative methods. For example: *blended research, integrative research, mixed research, multimethod research, multiple methods,*
triangulated research. However, the term mixed methods is now generally accepted (Creswell 2014; Johnson, RB, Onwuegbuzie & Turner 2007).

**Value and rationale**

Several reasons support the choice of mixed methods as a research approach. At a general level, it is a strength of the research approach to rely on both qualitative and quantitative research and reduce the limitations of each (Johnson, RB & Onwuegbuzie 2004). Moreover, if access to both qualitative and quantitative data is provided, the mixed methods approach appeals also at the practical level as it provides a sophisticated and comprehensive methodology. Finally, at a procedural level, it allows a more comprehensive understanding of the research problem and/or the research question(s); for example, because of the capability it brings to compare and contrast different forms of data (interview, text analysis, questionnaire) and to perceive any potential contradictions between them (Creswell 2014).

An exploratory sequential mixed methods design was chosen for this research study, as shown in Figure 4.2.

**4.4.2 Exploratory sequential mixed methods design**

![Exploratory sequential mixed methods design](image)

Figure 4.2: Exploratory sequential mixed methods design
Adapted from Creswell (2014)

The research commenced with a qualitative phase exploring primary data from in-depth interviews to answer RQ1, followed by examining secondary data from
company websites using content and discourse analyses as research methods to answer RQ2a and RQ2b as shown in Figure 4.2. The purpose of the qualitative phase I was to develop a variable design for the quantitative phase II, which was a survey. The purpose of the survey was to obtain information about private, organisational and institutional online information needs in order to respond to RQ3. The design sought to generalise data from a few individuals in the qualitative part to a larger sample of the population in the quantitative part (Creswell 2014).

4.5 Methods

This section covers the qualitative and quantitative methods used in both research phases as indicated in Figure 4.3.
Methodology

Exploratory sequential mixed methods design

Qualitative phase I
RQ1, RQ2a, RQ2b

Method

Interviews
Website analysis

Analysis

Content analysis
Content analysis
Discourse analysis

Software tool

Leximancer

Validation

Trustworthiness

Quantitative phase II
RQ3

Method

Survey

Analysis

Descriptive analysis
Cluster analysis

Software tool

SPSS

Validation

Reliability
Validity
Generalisability

Figure 4.3: Methodology
4.5.1 Interviews (RQ1)

A subjectivist approach to interviews is appropriate as a "pathway to participants’ authentic experiences" (Eriksson & Kovalainen 2011, p. 79) when studying the interviewees’ "perceptions, conceptions, understandings, viewpoints and emotions" (p. 79).

In qualitative interviews, primary data collection is generally gathered through face-to-face or telephone interviews, where the questions are unstructured and usually open-ended. The questions are few in number and intend to reveal the interviewees' opinions and views about the topic (Creswell 2014) in order to "produce empirical materials for the study in question" (Eriksson & Kovalainen 2011, p. 78).

Guided and semi-structured interviews are primarily used in business research. An outline of the overarching topic can be prepared including questions about specific issues and themes. It is an advantage of this type of interviews to allow variation of wording and order of questions in each interview. The major advantage is that the set of questions is systematic and comprehensive to a certain extent but the interview as such is "fairly conversational and informal" (Eriksson & Kovalainen 2011, p. 82). However, it might be difficult to compare the empirical materials collected as interviewees tend to answer according to their own understanding and interpretation of some questions (Eriksson & Kovalainen 2011).

Personal interviews are a well-known method for clarifying ambiguous answers and also provide the opportunity to seek follow-up information where desired (Leedy & Ormrod 2013).

Face-to-face interviews yield the highest response rates as they allow for establishing rapport with interviewees and gaining their cooperation. However, they are time-consuming and might be expensive when travelling is involved (Leedy & Ormrod 2013).

In contrast, telephone interviews are cost- and time-saving and they provide access to everybody with a mobile phone or a landline. However, the response rates are lower because potential participants might cancel an interview appointment at short notice or they may be busy during business hours. There is
also the chance of a sample bias due to people without access to any telephone (Leedy & Ormrod 2013).

**Sample size qualitative interviews**

According to Ritchie, Lewis and Elam (2003), qualitative sample sizes are generally significantly smaller than in quantitative studies because a point will be reached in qualitative research where more data will not necessarily lead to more information.

In qualitative research, the guiding principle to determine an appropriate sample size usually follows the concept of saturation (Glaser & Strauss 1967). Although the concept is used in most PhD studies, it is debated among academics (Mason 2010) because it is difficult to prove the degree of saturation (Morse 1995). There is no clear description of the concept's meaning and achievement (Bowen, GA 2008), and an experienced researcher would probably explore more details from the context than a novice researcher (Charmaz 2006).

Ritchie, Lewis and Elam (2003) suggests additional factors that might have an effect on the sample size other than saturation alone:

- the heterogeneity of the population; the number of selection criteria;
- the extent to which 'nesting' of criteria is needed; groups of special interest that require intensive study; multiple samples within one study;
- types of data collection methods use; and the budget and resources available (p. 84)

This list was amended by Morse (2000) to include "the scope of the study, the nature of the topic, the quality of the data, the study design" (p.4).

Bertaux (1981) states that 15 is the smallest acceptable sample size (p. 35) in all qualitative research, whereas Creswell (1998) suggests that in phenomenology 5–25 samples would be sufficient.

According to Mason (2010), 80% of qualitative PhD theses using interviews as a method to collect data met Bertaux's (1981) suggestions of at least 15 samples, followed by a large number of PhD theses using Charmaz's (2006) guidelines with up to 25 units being a sufficient sample size.
Following the guidelines of qualitative sample size suggested by different authors (Bertaux 1981; Charmaz 2006; Creswell 1998) and taking into account the scope of this study, the nature of the topic and the study design (Morse 2000), a sample size of 25 interviews was regarded as adequate.

**Sample size pilot study**

Baker (1994) also found that 10–20% of the sample size planned for the actual study is appropriate to build a pilot study. The first 8 out of 25 planned interviews were designated to frame the pilot study. This equals 32% of the total sample size but because there were several investor groups as well as different CSR-related aspects that needed to be addressed, it seemed reasonable to expand the scope of the pilot study to about one-third of the total sample.

**4.5.2 Website analysis (RQ2a, RQ2b)**

Examining websites is an unobtrusive method that provides the opportunity to directly share the reality of corporate online disclosure from a secondary data source. However, it may be difficult to interpret the data set (Creswell 2014).

**4.5.3 Survey (RQ3)**

Surveys aim to reach a large sample of potential participants, where distance to the researcher's location is irrelevant. It is a reasonable method of data collection, especially when designed as an online questionnaire. From a participant's perspective, distance might be an additional advantage because to some extent they can be assured that responses will not be traced back to them and therefore, they might answer more truthfully than in a personal interview. However, the response rate is often low; therefore, the returned questionnaires do not necessarily represent the sample as planned. In addition, there might be a lack of accuracy in responding to the questionnaire because it depends on the respondents' reading and writing skills and some questions might be misinterpreted (Leedy & Ormod 2013). As a result, the researcher might be left with only limited, and possible distorted, information (Dowson & McInerney 2001).
4.6 Analyses

The mixed methods research design requires various analyses. This section will present different analyses specifically used in business research within a qualitative and quantitative context.

4.6.1 Qualitative analyses

As the previous sections indicated, the qualitative methods used in this study are related to language (interviews) and textual environment (websites). Hence, the analyses address content and linguistic issues related to the spoken and written word.

**Content analysis**

According to Krippendorff (2004) content analysis can be defined as

>a research technique for making replicable and valid interferences from text (or other meaningful matter) to the contexts of their use (p. 18).

The definition refers to content emerging during the text analysis process within a particular context. Reliability (replicable findings) and validity (withstanding independently available evidence) are methodologically required as particular demands of content analysis (Krippendorff 2004). According to the definition provided above, content analysis applies to different practical situations, including interviews (RQ1) (Krippendorff 2004).

Using a linguistic approach, content analysis can discover emergent patterns while the researcher takes the role of an outsider (Eriksson & Kovalainen 2011; Johnson, P & Duberley 2000). The purpose of content analysis is to identify all recurrent instances in the interview data (e.g. themes or concepts) (Eriksson & Kovalainen 2011, p. 187).

The first step, open coding, classifies the interview data and “involves breaking down, analysing and categorising the data” (Eriksson & Kovalainen 2011, p. 160). According to Strauss and Corbin (1998), open coding describes what is taking place in the data by determining key words, phrases or sentences. Open coding
provides an initial understanding of the material and is descriptive in nature. This is analogous to the initial interview level.

In a second step, axial coding abstracts the findings of open coding and helps to identify non-apparent relations between incidents or events. It links codes together in order to proceed with explanatory categories. Axial coding seeks to discover latent patterns in the texts, expressions and words (Eriksson & Kovalainen 2011; Krippendorf 1989). This represents the advanced interview level.

The third and final step, selective coding, integrates and refines the analysis towards a larger theoretical scheme which might form the basis for a theory (Eriksson & Kovalainen 2011). This equates to the final level of interviews.

Content analysis also applies to analysing website content as shown in Figure 4.3. It is a research technique widely used in the field of communication. Content analysis is interpretive in nature and there is no need for statistics to analyse data (Kim, I & Kuljis 2010). The technique is unobtrusive, unstructured and context sensitive (Krippendorff 2004). In addition, content analysis is a fairly simple and economic approach when analysing websites because data can be collected without engaging with individual interviewees.

However, the possible change of website contents can be problematic. This challenge can be resolved by downloading the web-based content for data collection (Kim, I & Kuljis 2010).

Content analysis is a useful approach to explore communicational trends and patterns on company websites. Applying content analysis to websites provides a convenient way to access and analyse data without time consuming ethics approval procedures (Kim, I & Kuljis 2010). Furthermore, content analysis is recommended as a traditional and dominant method to research corporate sustainability disclosure (Coetzee & van Staden 2011; Fifka 2013).

While content analysis deals more with the content of text bodies, and even frequencies within the text (e.g., number of words and expressions), discourse analysis focuses on the form, structure and meaning of the text (Eriksson & Kovalainen 2011).
Discourse analysis
Fairclough's (1995) three-dimensional critical discourse analysis (CDA) is an appropriate method to analyse CSR communication (Rajandran & Taib 2014). The framework encompasses analysing text, discourse practice and social practice. Analysing text focuses on language features, whereas intertextuality is identified in discourse practice, and ideology is explored in social practice (Rajandran & Taib 2014).

Analysing text is a major part of Fairclough's three-dimensional framework (Rajandran & Taib 2014). For this research, a linguistic approach was used to achieve in-depth information about online communication strategies by looking at tenses and format of disclosure. The linguistic approach explored the companies' way for purposefully disclosing environmental and social information and helped to identify their online communication strategies.

Discourse practice consists of production, distribution and consumption of texts (Fairclough 1995). For this research, production was given priority, which required studying intertextuality. Intertextuality means the insertion of text from other sources into the website sections, which is important to take into account (Fairclough 1995). This research explored the intertextuality of CSR-related terms and sustainability terminology within the website sections environment, communities, and health and safety.

According to Fairclough (1995), social practice is influenced by context and associated with ideology as a major concern. Ideology addresses socially shared beliefs that outline the social identity of groups (van Dijk 2006). As ideology is mainly communicated through text (van Dijk 2006), text analysis of corporate website sections helps to ascertain ideology (Rajandran & Taib 2014).

In the English language, time is basically used in twelve unambiguous grammatical structures, referred to as tenses (Williams 2014). Each of the tenses – past, present and future – can be expressed in four aspects, namely simple, continuous, perfect and continuous perfect form. They tell the reader about specific points in time in relation to states, events and actions (Williams 2014). Past, present and future tense as far as relevant to this thesis are briefly explained in Appendix B.
Language, terminology and discourse are important determinants to the understanding of textual information (Leedy & Ormrod 2013) as "new shared realities are created by fostering social agreement on new discourses" (Marshak & Grant 2008, p. 33). Organisational discourse, where the central focus is on language in organisational settings (Grant et al. 2004), is understood as any form of communication based on language on a macro level and may include boardroom positions, strategic plans, policy documents (Marshak & Grant 2008) or website contents.

One way to analyse textual material such as website content is to arrange the text in thematic units. Originally, the term thematic was associated with analysing story-like verbal material, imagery, and thoughts (Smith, CP 1992). Comparability is an advantage of analysing comprehensive textual units according to thematic distinctions. The technique was used to analyse the achievement motives of subjects (McClelland et al. 1992), letters of appeal (Katz et al. 1969), folkloristic materials (Thompson 1932), and political documents (North et al. 1963).

Krippendorff (2004) suggests that the purpose of an analysis determines the selection of thematic units in the first place. However, content analysts aiming at representation find it attractive to use this technique due to the "descriptive richness of thematic units and their link to readers' understanding" (Krippendorff 2004, p. 108). Furthermore, Krippendorff (2004) raises concerns about the reliability of coding. He states that thematic units are aligned to textual features distributed throughout the text in question and "even carefully trained coders can easily be led in different directions" (Krippendorff 2004, p. 109).

Coding tables were developed following Krippendorff's (2004) thematic distinction and each website section was coded manually by using key words and themes from GRI guidelines and Carroll's (1991) pyramid of corporate social responsibility to identify the extent of concepts and ideas taken from these sources.

4.6.2 Quantitative analyses and tests

There are different levels of statistical analyses. Descriptive analysis is the most basic analysis, which provides a few simple statistics to summarise data from a large number of respondents. Simple yet powerful descriptive sample statistics
are produced to make inferences about properties of the whole population in question (Zikmund et al. 2010).

According to Manning and Munro (2007) it is customary to run descriptive analysis over demographic data requested in a survey and present at least brief information about the demographics to the reader. When running descriptive analysis for categorical data, e.g., gender, calculating frequencies is sufficient. In this case, SPSS provides frequencies in numbers and relating percentages. Any missing data are mentioned in the percent section but graded within the valid percent section as the percentage is only calculated on those participants who answered the question properly (Manning & Munro 2007).

Tabulation refers to a summary format presenting data in an orderly arrangement. Data are presented in a frequency table showing the actual number of responses to each category as a "variable's frequency distribution" (Zikmund et al. 2010, p. 488). The distribution is also shown as percentages.

As long as only one categorical variable is involved to address a research question, tabulation may be the best option. However, if "frequency counts, percentage distributions, and averages" (Zikmund et al. 2010, p. 488) do not provide enough information to see the full potential of the data, cross-tabulation (crosstabs) are an appropriate technique. Crosstabs show results in a combined frequency table (Zikmund et al. 2010) and are used to analyse a categorical variable when participants are grouped on the basis of a second categorical variable, e.g., gender vs. age groups. (Manning & Munro 2007).

Nonparametric statistics have to be conducted to determine significance of results. Chi-square ($\chi^2$) test, also referred to as goodness-of-fit-test, determines "how closely observed frequencies or probabilities match expected frequencies or probabilities" (Leedy & Ormrod 2013, p. 301). A Chi-square test is suitable for nominal, ordinal, interval, and ratio data. Fisher's Exact test is used when the sample sizes are very small (n<30). The test identifies whether two dichotomous variables, nominal or ordinal, are significantly correlated. The test works as an alternative to a $t$-test for Pearson's $r$ (Leedy & Ormrod 2013).
Cluster analysis

Where the researcher wants to check whether natural subgroups exist in relation to the data set of several variables on interval or ratio scales, a cluster analysis can be conducted. The analysis aims at identifying as many similarities of cases within a particular group, while at the same time as many differences between groups should be made visible (Manning & Munro 2007).

One way to identify clusters is to run a hierarchical cluster analysis using squared Euclidean distance to measure distance (similarity). The analysis can determine the number of ‘natural’ groups existing in the sample as well as identify who in the sample belongs to each group (Manning & Munro 2007). As the researcher does not know the number of groups existing within the sample, hierarchical cluster analysis may require various iterations before a stable and meaningful outcome is reached. Therefore, SPSS can be used to run analysis of variance comparing groups or clusters to indicate how meaningful a suggestion is (Manning & Munro 2007).

Analysis of variance

In situations with one variable on an “interval or ratio scale as the dependent variable, and one or more variables on nominal or ordinal scales as the dependent variable(s)” (Manning & Munro 2007, p. 116), an analysis of variance (ANOVA) as a parametric statistics is required. Often, criteria such as age groups or gender are grouped up as independent variables and referred to as ‘grouping variables’ (Manning & Munro 2007).

Where only a single independent variable occurs, the analysis is called one-way ANOVA and seeks to support one of two options. When the two groups are part of the same normally distributed population, it can be concluded that that the two groups are almost the same. In contrast, when the two groups are from different normally distributed populations, with different population means but the same standard deviation, the conclusion is that the two groups differ significantly. (Manning & Munro 2007).

T-tests

An independent samples t-test works as an alternative to ANOVA, when a categorical variable encompasses only two categories. The t-test assumes that
the scores are normally distributed and that the variances of the group scores do not differ significantly. (Manning & Munro 2007; Zikmund et al. 2010). To verify this, Levene’s test for homogeneity of variances is required.

In cases where scores of two interval variables drawn from related population should be compared, the paired samples t-test is required. The assumption is that it is unrealistic that the scores provided are independent (Zikmund et al. 2010).

4.6.3 Software tools

Figure 4.3 shows that for this study, two different types of analysing software were used. Leximancer 4.0 covered the researcher’s needs to identify concepts and themes at different levels in relation to content analysis of interviews and website analysis. SPSS software helped to analyse the survey data for the pilot study, encompassing descriptive statistics for demographics as well as cross tabulations and cluster analysis for questions related to the field of environmental and social online disclosure.

Leximancer

Chen and Bouvain (2008) recommend using Leximancer content analysis software because it "provides a more objective and reliable method of analyzing the content of CSR reports than relying on investigator coding [...] and enables more detailed analysis than can be obtained from simple word counts" (p. 300). Leximancer discovers and extracts thesaurus-based concepts from the body of text by automatically coding the concepts into the text, whereby the thesaurus is used as a classifier.

Leximancer processes word frequency and word co-occurrences to generate the main concepts and themes in a body of text by using an automated, machine-learning technique (Smith, AE & Humphreys 2006). Leximancer as a data mining and visualisation technique facilitates a 'bird's-eye' view of the conceptual configuration. Concept maps and rank-ordered concept lists allow for investigating specific concepts and themes at sentence and paragraph level (Rooney, McKenna & Barker 2011).
Leximancer provides noteworthy reliability in analysing data. Stability and reproducibility are the two ways to assess this feature. Smith, AE and Humphreys (2006) classifies stability as an equivalent of intercoder reliability, as the software is consistent "in the way it automatically codes and recodes concepts in a data set" (Rooney, McKenna & Barker 2011, p. 588). Hence, Leximancer provides a high level of stability.

Given the same coding scheme, Leximancer consistently classifies text and identifies the relationships between concepts as a basis of reproducibility. It generates consistently constructed stochastic concept maps representing the same data (Rooney, McKenna & Barker 2011). Leximancer’s functioning can be related to Glaser’s (1965) constant comparative method (CCM). CCM is designed to support theory building in an integrated, consistent, plausible way which is close to the data (Glaser 1965).

A generated concept map shows the main concepts, which appear within a body of text as grey labels. They "are clustered into higher-level 'themes'" (Leximancer Manual 2011, p. 14). Concepts occurring next to each other in the same sections of text strongly attract each other, which results in settling side by side in the map. Themes are displayed in different colours, built around the concept clusters that allow interpretation of themes and concepts. The colours used for representing the themes follow the colour wheel from red/hot/very important to blue/cold/of little importance. All colours in-between indicate different levels of importance (Leximancer Manual 2011).

According to Smith, AE and Humphreys (2006), Leximancer provides a platform for discourse analysis and qualitative interpretation with its semantic concept maps.

**SPSS**

The acronym SPSS originally stood for 'Statistical Package for the Social Sciences' but nowadays it represents 'Statistical Product and Service Solutions' (Parikshit 2015). The IBM software is best known and often used in business quantitative research (Zikmund et al. 2010) as it is designed to process the most complex data analyses with simple instructions (Parikshit 2015).
4.7 Research validations

Eriksson and Kovalainen (2011) recommend choosing evaluation criteria that will be suitable to the research methods chosen. Thus evaluation criteria that were developed for quantitative research methods "do not necessarily fit qualitative research projects" (Eriksson & Kovalainen 2011, p. 290). The classical concept of reliability, developed to show "the extent to which a measure, procedure or instrument yields the same result on repeated trials" (Eriksson & Kovalainen 2011, p. 292) leaves qualitative researchers at variance regarding whether classic evaluation criteria such as reliability and validity can be used to evaluate the accuracy of qualitative interview accounts (Eriksson & Kovalainen 2011).

In terms of validity, another classic evaluation criterion developed for quantitative research methods, which "refers to the extent to which conclusions drawn in research give an accurate description or explanation of what happened" (Eriksson & Kovalainen 2011, p. 292; Manning & Munro 2007; Zikmund et al. 2010) qualitative researchers are "strongly diversified" (Eriksson & Kovalainen 2011, p. 292) on whether it is appropriate for qualitative research methods.

Generalisability, the third classical evaluation criterion developed for quantitative research shows whether "the research results can be extended in one way or the other into a wider context" (Eriksson & Kovalainen 2011, p. 293). As generalisability requires a large sample as in quantitative research, it will not necessarily fit with qualitative research.

Qualitative approach

According to Lincoln and Guba (1985), the evaluation concepts of reliability and validity have been replaced by a parallel concept called trustworthiness, which covers four aspects. It represents the ‘goodness’ criteria for research. Dependability encompasses the researcher’s responsibility for providing information about a logical and traceable research process and its appropriate documentation. All these activities establish the trustworthiness of research. In addition, transferability commits the researcher to showing the extent of similarity and connection of the inquiry to other research and previous results. It is important to know that this aspect does not refer to replication (like the concept of reliability) but to similarities that can be found in other research contexts.
Furthermore, the aspect of *credibility* evaluates issues of familiarity with the topic, sufficient data collection to merit the researcher’s claim and strong logical links between observations and categories. The aspect examines whether other researchers would come relatively close to the same findings or agree with the conclusions given the same materials. Moreover, the last of the four aspects, *conformability*, implies the idea that data as well as their interpretation are real. It is all about linking findings and interpretation to the data collected, in a manner that should be easily understood by interested readers (Lincoln & Guba 1985). Given this study’s business research design, which includes interviews and website analyses in the qualitative phase I (RQ1, RQ2a, RQ2b), trustworthiness seems to be the appropriate evaluation concept for the research as shown in Figure 4.3.

**Quantitative approach**

However, in terms of the survey, reliability (Cronbach’s α), validity (face validity, item-to-total correlations, inter-item correlations, PCA) and generalisability are three important concepts that should be considered in evaluating quantitative business research (Manning & Munro 2007) as shown in Figure 4.3.

The coefficient alpha, also referred to as Cronbach’s α, measures the internal consistency of items, “that is, their tendency to correlate with one another” (Gregory 2000, p. 85). Cronbach’s α is also a useful estimate of reliability as high internal consistency tends to show stability of scores in a test-retest scenario (Gregory 2000). Coefficient alpha ranges between 0 (no reliability) and 1 (high reliability). Values above .70 are understood as acceptable reliability; they represent good reliability when above .80, and they are excellent when above .90 (Manning & Munro 2007). In an exploratory research environment, scores representing acceptable reliability may be reduced to above .60 (Hair et al. 1998).

It is also important to bear in mind that the sample of the qualitative phase must not be the same as of the quantitative phase. In order to generalise from a sample to a population, the quantitative part needs a much bigger sample than used in the qualitative part. However, it might be a good procedure to recruit both samples from the same population but approach different individuals (Creswell 2014).
4.8 Ethics approval

The University of the Sunshine Coast Human Research Ethics Committee (HREC) is responsible for ensuring that research involving humans is conducted ethically and that the welfare and rights of participants in research are protected. The Committee assesses applications using the National Statement on Ethical Conduct in Human Research as the standard for evaluating applications.

All members of a research team have shared responsibility for the ethical conduct of research, and must be aware of, and satisfied with, the degree to which the conduct of the research meets national requirements and University policy (USC 2015).

4.8.1 Interviews - S/14/672

 Expedited ethics approval at a low-risk level was given for interviews with randomly selected Australian private, organisational, and institutional investors by the Chairperson of the Human Research Ethics Committee (HREC) on 05 September 2014. As the interviews were conducted at three different levels asking different questions, a separate approval was given for the initial, advanced and final stage (Appendix A).

Beauchamp and Childress (2013) suggests four principles of morality that were applied during the entire interviewing process. Firstly autonomy, which means the right of interviewees to make a choice of their own, secondly beneficence, a commitment of keeping in mind the participants’ best interest while conducting the research, thirdly non-maleficence, meaning no harm to any participant at any time and finally justice, which means treating all participants equally and fairly during the research process.

Research Project Information Sheet

In accordance with the research proposal submitted and the ethics approval granted, a Research Project Information Sheet (RPIS) (Appendix A) was made available to potential participants prior to any interview in order to allow for an informed participation decision. The RPIS provided information about the purpose of the research, researchers’ contact details, duration of an interview, risks and benefits as well as participation and consent. Confidentiality and results
as well as complaints and concerns were also addressed. Prior to the beginning of any interview, whether face-to-face or by telephone, all interviewees were again explicitly informed that they could withdraw from the interview at any time without providing any reason or facing any risk or penalty.

**Consent form**

In order to agree to the interview being audio-recorded, every participant signed a consent form (Appendix A) before the interview was conducted. Telephone interview participants were asked verbally for consent after referring to the consent form made available prior to the interview.

In addition, participants were asked to voluntarily provide their preferred email address to receive the summary of the interview results and findings as promised.

**4.8.2 Survey - A/15/703**

A letter of recommendation (Appendix C) was sent to the convenor of the Noosa Mining Conference 2015 in order to gain permission to conduct a survey among private, organisational, and institutional investors in the mining industry during the conference. For the pilot study survey, expedited ethics approval at a low-level risk was given on 19 June 2015 by the Chairperson of the Human Research Ethics Committee (HREC) of the University of the Sunshine Coast (Appendix C).

**Research Project Information Sheet**

In accordance with the research proposal submitted and the ethics approval granted, a Research Project Information Sheet (Appendix C) was made available to potential participants prior to filling in a questionnaire in order to allow for an informed participation decision. The RPIS provided information about the purpose of the research, researchers’ contact details, duration of filling in the questionnaire, risks and benefits as well as participation and consent. Confidentiality and results as well as complaints and concerns were also addressed. On a separate page, as part of the questionnaire form participants were explicitly made aware that participation was voluntary and anonymous and that they could withdraw from the survey at any time without providing any reason or facing any risk or penalty.
**Consent Form**

There was no specific consent form necessary as consent was implied by filling in the questionnaire. The RPIS noted that consent was being given for the use of data provided in the pilot study survey as well as future related research projects.

### 4.9 Summary

This chapter outlined the philosophical and theoretical perspectives of the study, presenting approaches to both qualitative and quantitative research components. Subsequently, exploratory sequential mixed methods design was introduced as the chosen methodology and a definition and rationale was presented in detail followed by outlining the methods (interview, website analysis and survey) and aligned analyses. In terms of the quantitative phase II, additional statistical tests were described. Moreover, the use of Leximancer and SPSS as supporting analysing software tools was explained and qualitative and quantitative research validation concepts were presented. Finally, human research ethics at low risk level were discussed and information with regard to ethics approvals for interviews and the survey was provided. The next chapter will present the finding and analysis of the first part of qualitative research phase I, interviews, in detail.
5 Interviews - Analyses and findings

The previous chapter covered the philosophical positioning of the research, outlined the research design and methods, and described the software tools used. Also, ethics approvals relevant to this thesis were addressed.

This chapter deals with interviews as the first qualitative research method, exploring investors’ expectations of CSR activities and the corresponding online disclosure. It outlines the process of recruiting participants, data collection, and data analysis. Finally, comprehensive findings from semi-structured interviews are presented, enriched with comments from the interviewees.

5.1 Introduction

As indicated in Section 1.3.3, Amaladoss and Manohar (2013) call for further research on stakeholders' expectations and attitudes toward corporate CSR initiatives. In addition, Du and Vieira (2012) recommend investigating the use of reporting frameworks such as GRI guidelines, supported by Murguía and Böhling (2013) who suggest that the use of GRI guidelines as a reporting framework is under-researched in the mining industry. As a result, the first research question emerged:

- **(RQ1) What do Australian investors expect in terms of environmental and social corporate initiatives and correspondent online disclosure?**

Figure 5.1 indicates three levels of interview investigation analogous to open, axial and selective coding according to Strauss and Corbin (1998).
A total of 27 interviews were conducted at three different levels between October 2014 and August 2015. After an interview appointment was made, an email was sent out in order to confirm date, time and location of the appointment with research project information sheet and consent form attached to every email for information purposes prior to every interview.

**Initial interview level**

For the pilot study, 27 potential interviewees were contacted in two rounds using different recruiting instruments, such as emails, telephone calls and recommendations as shown in Table 5.1.

**Table 5.1: Recruiting statistics - initial level**

<table>
<thead>
<tr>
<th>Recruiting Instrument</th>
<th>Contacts</th>
<th>Resulting Appointments</th>
<th>Interviews Conducted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1 - Emails</td>
<td>20</td>
<td>2</td>
<td>31 Oct–21 Nov 2014</td>
</tr>
<tr>
<td>Round 2 - Phone calls</td>
<td>7</td>
<td>6</td>
<td>18 Oct–10 Nov 2014</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
<td><strong>8</strong></td>
<td></td>
</tr>
</tbody>
</table>

Private investors and financial planners could be successfully recruited through personal recommendations, whereas two managers of superannuation funds and responsible investment associations responded to emails with attached RPIS and consent form. Other superannuation managers rejected the interview enquiry.
because of being busy due to their companies' forthcoming AGMs. However, financial journalists, who were also addressed by email, either refused to participate in interviews because some of them felt they would be of little help, others responded that gold mining was not their field of expertise or they wrote that they did not know anything about CSR. Some of the journalists did not respond at all.

**Advanced interview level**

For the advanced level interviews, 35 potential interviewees were contacted via telephone in three rounds as indicated in Table 5.2.

<table>
<thead>
<tr>
<th>Phone calls</th>
<th>Resulting appointments</th>
<th>Interviews conducted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Round 2</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Round 3</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

The participants were randomly chosen from the Yellow Pages by searching for stockbrokers, financial planners/advisors, and superannuation managers located on the Sunshine Coast. A specific appointment sheet was created to record their contact details (Appendix A).

**Final interview level**

Sparked by the assumption of interviewees at the advanced interview level that different age groups would have different opinions in relation to CSR and sustainability in terms of investment decisions, the participants of the final interview round were recruited according to their membership of three different age groups as shown in Table 5.3. Due to age group being a decisive recruiting criterion, the interviewees were approached upon recommendation only.
5 | Interviews - Analyses and findings

Table 5.3: Recruiting statistics - final level

<table>
<thead>
<tr>
<th>Age group</th>
<th>Recruiting instrument</th>
<th>contacts</th>
<th>Resulting appointments</th>
<th>Interviews conducted</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30</td>
<td>Recommendation</td>
<td>1</td>
<td>1</td>
<td>20 Aug 2015</td>
</tr>
<tr>
<td>Over 55</td>
<td>Recommendation</td>
<td>3</td>
<td>3</td>
<td>18 – 28 Aug 2015</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

The definition of age groups was taken from the pilot study survey, where age groups were specified as younger age group (18-30), middle age group (31-55) and older age group (over 55). There was a tendency among the interviewees to recommend further participants of their own age group.

5.2 Data collection

All interviews were audio-recorded using the iPad application *ALON* Dictaphone ©2014 and subsequently transcribed into a Microsoft Word document.

*Initial interview level*

As mentioned in Section 4.6.1, the initial interview level sought to determine key words, phrases and sentences in order to provide an initial understanding of the rich data emerging as the interviewees' own words. The initial interview level reflects the process of open coding according to Strauss and Corbin (1998).

As a starting point, the interview was centred around environmental and social aspects based on GRI guidelines as indicated in Figure 5.2. The initial eight interviews worked as a pilot study ‘on the go’ in order to achieve an overview of understanding, awareness, and expectations in relation to CSR and sustainability among private, corporate and institutional investors.

![Initial interview level](image)

Figure 5.2: Initial interview level - subject areas

A general introduction to the topic commenced the inductive process of exploring the participant’s understanding of CSR, their major sources of information for financial decision-making, and their specific demand for investments with mining...
companies conducting CSR. The core of the interview was based on GRI themes and focused on environmental and social aspects of corporate initiatives as well as conflict resolution. The interview sought to allow each interviewee to freely express their own understanding of environmental and social issues in general and in particular in the mining industry. The initial interview concluded by asking for the participant’s opinion about recommendations and future expectations about sustainability in the mining industry, and finally about the global divesting campaign as well as their best estimation of the percentage of responsible investors, also referred to as ethical investors, in Australia (Appendix A). Table 5.4 shows the participants’ demographics.

**Table 5.4: Initial interview level - demographics**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Gender</th>
<th>Type of investor</th>
<th>Kind of interview</th>
<th>Reference identification code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female</td>
<td>Private Investor</td>
<td>Face-to-face</td>
<td>#1-PI-f-r</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>Private Investor</td>
<td>Face-to-face</td>
<td>#2-PI-m-r</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>Superannuation manager</td>
<td>Face-to-face</td>
<td>#3-SA-m-r</td>
</tr>
<tr>
<td>4</td>
<td>Female</td>
<td>Financial Planner</td>
<td>Face-to-face</td>
<td>#4-FP-f-r</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>Private Investor</td>
<td>Face-to-face</td>
<td>#5-PI-m-r</td>
</tr>
<tr>
<td>6</td>
<td>Male</td>
<td>Investment Association manager</td>
<td>Telephone Interview</td>
<td>#6-IA-m-c</td>
</tr>
<tr>
<td>7</td>
<td>Male</td>
<td>Private Investor</td>
<td>Face-to-face</td>
<td>#7-PI-m-r</td>
</tr>
<tr>
<td>8</td>
<td>Male</td>
<td>Superannuation manager</td>
<td>Telephone Interview</td>
<td>#8-SA-m-c</td>
</tr>
</tbody>
</table>

Six interviews were conducted face-to-face with interviewees on the Sunshine Coast at either the participant’s office or the researcher's home office. Another two interviews were telephone interviews with participants from Sydney and rural NSW respectively. At the initial interview level, the participants were interviewed for 30 minutes on average.

**Advanced interview level**

As mentioned in Section 4.6.1, the advanced interview level, corresponding to axial coding in textual analysis as a second step, seeks to address non-apparent relations between themes and concepts found within the initial round of interviews. Where saturation (Glaser & Strauss 1967) is not yet achieved to a sufficient extent, as indicated in Section 4.5.1, an additional approach to certain subject areas is required in order to obtain satisfactory responses from participants.
As shown in Figure 5.3, the grey-coloured subject areas were found to be sufficiently answered through initial investigations; hence, saturation was achieved with regard to the themes CSR understanding and information sources. However, some findings within the sections environmental and social aspects, conflict resolution, and responsible investment were found to exhibit discrepancies and inconsistencies (Appendix A). They were classified as worth a deeper investigation, including additional perspectives and more time for responses. Consequently, a set of propositions relevant to the subject areas in question was compiled in order to examine investors' in-depth opinions.

In terms of environmental aspects, discrepant and inconsistent concepts of energy and water usage as well as greenhouse gas emission emerged from pilot study responses. The use of energy was associated with financial concerns and reduced bottom line results rather than environmental concerns. On the other hand, water usage was linked to environmental concerns rather than financial results. Greenhouse gas emission was related to the term 'climate change' on a global basis with no further consideration of either local environmental concerns or financial issues.

In addition, the concepts of land use and mine closure were responded to from an environmental perspective, although, according to GRI guidelines, there is also a social component involved which had not been addressed by pilot study interviewees.

Furthermore, conflict resolution as part of the stakeholders' social perspectives centred on corruption as a subliminal business concept inside and outside
Australia. Although corruption was identified as a reason for negative impact on financial results, interviewees associated it with a well-established and tolerated Australian business model still in use, particularly in the mining industry. However, interview participants regarded the existing legal requirements to avoid corruption as being sufficient.

Moreover, it was found that private investors would most likely withdraw from their investments with mining companies in the case of environmental disasters, due to financial rather than environmental reasons, whereas they would remain with their investments in the case of incidents involving people, due to only minor financial risks. Incidents involving people were considered as normal business risks and as non-preventable incidents rather than poor performance of corporate responsibilities. The Global Divesting Campaign, introduced to Australian investors late 2014, was associated with political issues rather than environmental concerns and therefore classified as 'false labelling'.

Consequently, interviews at the advanced level sought to ascertain financial concerns with regard to energy and water usage in terms of environmental aspects. In relation to investment decision making, the importance of greenhouse gas emissions in Australia was also more deeply surveyed. Secondly, social aspects in terms of land use and mine closure were also addressed. A third area of interest covered the level of corruption among Australian companies as a subliminal but tolerated business concept. Finally, reasons for withdrawing from investments were reconsidered with regard to environmental disasters and accidents involving people. In addition, interviewees were asked about their assessment of the global 'divestment campaign' in relation to its political acceptance among investors and the impact on the Australian economy. An interview at the advanced level lasted 47 minutes on average. Table 5.5 shows the demographics of participants at the advanced level.
Every interview was conducted face-to-face at the interviewee's office on the Sunshine Coast, a region spanning from Caloundra to Noosa.

**Final interview level**

Selective coding (Eriksson & Kovalainen 2011), as mentioned in Section 4.6.1, refers to integrating and defining the analysis within a larger context with regard to the final interview level, based on the findings of the initial and advanced level.

At the advanced interview level, the discrepancies and inconsistencies in relation to environmental and social disasters, and conflict resolution with regard to corruption were addressed and discussed to saturation as indicated in Figure 5.4 as additional grey-coloured subject areas.

However, findings related to responsible investment did still not achieve saturation but left room for further investigation. Institutional interviewees expected that different age groups had different views in relation to responsible investment. Hence, participants of younger, middle, and older age groups were asked to talk about their ideas in terms of preferred and rejected industries for investment from an ethical perspective, their investment strategies, and portfolio composition.
As shown in Figure 5.5, the final interview level was additionally enriched with themes based on results from the content analysis of Australian gold mining companies' corporate website sections on environment, community, and health and safety. The interviewees were guided to talk about their expectations with regard to companies’ CSR and sustainability activities and related online information. The discourse analysis of the website sections allowed development of a collection of issues around the companies' different online communication strategies, assumed drivers for online communication, and the possible tendency of investors to use environmental and social corporate information for financial decision-making.

**Figure 5.4: Final interview level - subject areas from interviews**

**Figure 5.5: Final interview level - subject areas from other sources**
5 | Interviews - Analyses and findings

The results from the survey pilot study suggested exploring the usefulness of information asking specifically for reliability and relevance of non-financial online information. The set of final interview question can be found in Appendix A.

The interviews were conducted one-on-one at either the researcher's home office, the participant's home or on USC campus. At the final interview level, an interview lasted 25 minutes on average. Table 5.6 indicates the demographics at the final level.

Table 5.6: Final interview level - demographics

<table>
<thead>
<tr>
<th>Subject</th>
<th>Gender</th>
<th>Age group</th>
<th>Kind of interview</th>
<th>Reference identification code</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Female</td>
<td>31-55</td>
<td>Face-to-Face</td>
<td>#20-f-AGM</td>
</tr>
<tr>
<td>21</td>
<td>Male</td>
<td>Over 55</td>
<td>Face-to-Face</td>
<td>#21-m-AGO</td>
</tr>
<tr>
<td>22</td>
<td>Female</td>
<td>31-55</td>
<td>Face-to-Face</td>
<td>#22-f-AGM</td>
</tr>
<tr>
<td>23</td>
<td>Female</td>
<td>18-30</td>
<td>Face-to-Face</td>
<td>#23-f-AGY</td>
</tr>
<tr>
<td>24</td>
<td>Female</td>
<td>31-55</td>
<td>Face-to-Face</td>
<td>#24-f-AGM</td>
</tr>
<tr>
<td>25</td>
<td>Male</td>
<td>Over 55</td>
<td>Face-to-Face</td>
<td>#25-m-AGO</td>
</tr>
<tr>
<td>26</td>
<td>Male</td>
<td>31-55</td>
<td>Face-to-Face</td>
<td>#26-m-AGM</td>
</tr>
<tr>
<td>27</td>
<td>Male</td>
<td>Over 55</td>
<td>Face-to-Face</td>
<td>#27-m-AGO</td>
</tr>
</tbody>
</table>

As mentioned in Section 4.2.2, the researcher–participant relationship plays an important role with regard to the reflexivity during the knowledge production process. With increasing confidence during conducting interviews on three levels with participants of different investment backgrounds, the power relationship between both parties most likely changed. Therefore, an impact on the interpretations can be implied.

5.3 Data analysis

All interview transcriptions were edited in a specific format which allowed analysing the interviews with Leximancer 4.0. During this first round of analyses, Leximancer default settings were chosen in order to receive an overview of emerging themes and concepts in an unbiased, comprehensive and repeatable way.

As mentioned in Section 4.6.3, Leximancer can be related to Glaser's (1965) Constant Comparative Method which promotes theory building in an inductive research environment. In a few cases, where Leximancer findings were unclear and needed more in-depth reconsideration, the original Word document was
revisited. Subsequently, a second round of Leximancer analysis was conducted using defined themes and concepts to generate specific concept maps (Appendix A).

As Leximancer provides comprehensive references from the text, every emerging theme or concept could be referenced sufficiently to support rich insights from participants’ responses to the interview questions.

5.4 Findings

This section presents the findings from interviews at all levels organised according to the subject areas. The findings are aligned with the initial, advanced or final interview level and the point when saturation was achieved.

5.4.1 CSR understanding

CSR understanding comprises the participants’ opinion in terms of CSR definition as well as the notion of CSR as a cost factor. Saturation for the two subjects was achieved at the initial interview level.

Definition

Investors had different ideas about the concept of CSR. Among institutional investors the term CSR was even out of use and replaced by terms such as ESG (Environmental, Social and Corporate Governance) and responsible investment. The social aspect dominated the understanding, whereas the environmental perspective was less obvious. Ethics was also a term which was used to describe the understanding of CSR, but the term was inaccurately used with regard to its meaning. Companies were expected to engage in charity projects and give back to the society. Consequently, there was no comprehensive and in-depth understanding of the CSR concept among private and institutional investors who even dissociated themselves from the term.

"It’s not a term that we use a lot, corporate social responsibility we use more the term responsible investment and ESG" (#9-SA-m-c)

Cost factor

The Leximancer concept map shown as Figure 5.6 represents the detailed lexical analysis of the question regarding CSR as a cost factor. The main elements are
summarised here. Investors were aware of CSR as a cost factor but they assessed this fact differently. Some regarded CSR as unnecessary and saw a negative impact on their shareholder value, whereas others accepted the costs as necessary to conduct CSR because they saw a positive impact on management and financial performance. A third group of investors tended to ignore CSR in terms of their investment decision.

A number of investors believed that CSR as such is less important to companies and conducting CSR activities is more a mimetic behaviour because all companies do it and will cut back on CSR costs in times of financial uncertainty and global crisis.

Figure 5.6: CSR as a cost factor

“I would imagine it will cost companies more to do these sorts of things. Yes, therefore their profits will maybe not be as great” (#1.PI.f-r)

“I think that in the end it would benefit the company, but maybe the company sees it as something they just have to pretend to do or play along with, rather than something to take seriously” (#4.FP.f-r)

5.4.2 Information sources

Interviewees were asked which information sources they use for their financial decision-making. Private and institutional investors used sources at different levels and looked at online information from general as well as environmental and social perspectives. This subject area was also discussed to saturation at the initial level.
General information
Private investors mainly obtained their information about companies they wanted to invest in from other people such as brokers, accountants or ‘gurus’ who present their personal choice of companies for investment. Only a minority of private investors and financial advisors searched for company information themselves using online research databases such as MSN to evaluate investment opportunities. Corporate and institutional investors, such as superannuation managers, used the full supply of information sources like print media and online information sources including company websites to support their investment decisions.

"I have a guru, if you want to call him that, whom I have followed for, I don't know, 12 years, maybe longer than 12 years now" (PI-f-r)

"I base my decisions on reading the Financial Review and on discussions with my broker [...] and my accountant, [...]. Those are the three sources of my information really that I make the decisions on" (PI-m-r)

Environmental information
Environmental disclosure was an important factor for evaluating a company's overall performance. However, even if investors were interested in information about the environmental performance they did not expect comprehensive statements. Environmental information within companies’ annual reports, which are short and more general in nature, satisfied their expectations. They did not search online for specific environmental disclosure nor did they expect in-depth data on corporate websites. Some private investors were not interested in environmental disclosure at all, whether online or in print form. However, institutional investors used environmental information as an important factor for company performance evaluation, but they did not search for this information on corporate websites. Instead, they relied on information from specialised research companies in the field of ESG.

"I look at the reports, but I don't particularly look at the environmental factors. I get them in print form" (PI-m-r)
**Social information**

Private investors did not indicate a specific interest in social information at all nor did they use the company website to search for social disclosure. In contrast, they often mistrusted company disclosure. As with environmental information, they tended to rely on ready-to-use information collected and stockpiled by experts, such as professional researchers or brokers. Institutional investors tried to achieve comprehensive information first- and second-hand beyond social information. Besides having a lot of other sources, they used also company websites as their information source.

"Why would they tell you the truth?" (#2-PI-m-r)

"We get lots of stuff from brokers" (#8-SA-m-c)

### 5.4.3 Environmental aspects

This section of the research addressed investors’ opinions and expectations in terms of environmental aspects recommended by GRI guidelines. At the advanced stage of interviews, the social aspects of land use and mine closure were explored, initially from an environmental point of view. The topics were reconsidered to saturation at the advanced level.

The topic biodiversity was of less interest to investors and therefore discussed to saturation at the initial level. However, in terms of energy, water, and greenhouse gas emission some discrepancies occurred at the initial level. Hence, these issues were thoroughly reconsidered to saturation at the advanced level.

**Biodiversity**

Biodiversity in terms of species and habitat was less important to investors and they relied on legal requirements or voluntary company commitment rather than aiming at specific requirements.

**Energy**

During the initial interviews, the use of energy was associated with costs and the resulting bottom line rather than with environmental concerns, although the interviewees were also interested in alternative energies or at least ways to cut down the intense use of energy to be more efficient and ecological.
"I assume that they - in their day-to-day work they ensure that their use of energy is minimal. Again, it's a major factor so if their use of energy is controlled then it usually gets a better result financially" (#5-PI-m-r)

The participants at the advanced level agreed with the initial statements in relation to energy costs.

"Energy is also one of the biggest input costs for a lot of businesses" (#18-m-SB-SC)

"It's a significant cost in running any business" (#16-m-SB-SC)

They also identified one major reason for substantially higher costs of energy nowadays as the government's disregard for investing in the maintenance and replacement of necessary infrastructure in the past. However, they felt that after the overdue investments have been done, the costs for energy will settle and become more stable.

"... there's been a big rise in energy prices because of reinvestment in the infrastructure, which has been neglected for many, many years" (#18-m-SB-SC)

"Now logically once the investment has been done and everything's been upgraded, things will settle down and be more stable" (#18-m-SB-SC)

Some interviewees suggested that the mining industry always tries to use the cheapest and most efficient form of energy to keep their costs down, using either diesel/gas turbines or the latest technology in producing energy on mining sites. Otherwise they would be out of business. The companies would not use renewable energies, though.

"They don't normally use renewable" (#9-m-SB-SC)

"Mining companies will always use the cheapest form of energy available because they want to keep their cost of production down" (#11-m-SB-SC)

"I think if anything what effectively happens is the market tends to dictate to some of these industries that you've got to either improve your technology or you're going to be out of business" (#15-m-SB-SC)
It was also stated that companies with a considerably high use of energy are concerned about their energy costs, as will be investors.

"Again, so that is something which particular industries which are heavy energy users are concerned about, and in a way investors are as well" (#18-m-SB-SC)

**Water**

Participants at the initial interview round were aware of the necessity of water usage in the mining industry. However, they ranked water usage to be a critical issue that was related to possible harm to the environment. They expected companies to maintain a responsible handling of water, especially in dry areas where local communities could be affected by careless water usage.

"I believe water usage is very critical in all areas and not only mining. However, with regard to mining, there is no reason that water cannot, and should not, be recycled as much as is feasibly possible" (#7-PI-m-r)

Interviewees of the advanced interviews also associated water issues with environmental concerns in the first place, although they found also costs associated with setting up dams to prevent cyanide and other chemicals from polluting rivers and Artesian basins.

"... that would impact on our artesian basin" (#9-m-SB-SC)

"Gold mining uses a lot. I know heap leaching uses a lot of water and they have to have tailings dams to collect all the cyanide and everything" (#9-m-SB-SC)

"... and that's why it tends to be a very environmental thing"

(#17-m-SB-SC)

They suggested that due to strict government regulations the mining companies improved their setups for tailing dams. In addition, new technologies were put in place for specific water treatment. These activities caused increasing setup costs. These corporate activities to protect the environment also protected the companies' reputation.
"Like gold mining I know it's quite expensive to set up all those sort of things and make sure they - in a flood it doesn't overflow into the river and things like that" (#12-m-FP-SC)

"... because a lot of the work they do with water destroys the value of the water and it has to be treated in some way" (#16-m-SB-SC)

"I think water usage and water distribution has a net cost" (#17-m-SB-SC)

"... that affects their brand so they're really careful that doesn't happen" (#12-m-FP-SC)

Some interviewees suggested that water is a finite resource and therefore the companies have the duty to make most of it with regard to water recycling for either a multiple use in mining or release into the environment, which also resulted in increasing costs. Depending on where the mine is located, companies most often provide their own water supply.

"I think water is a fairly finite asset" (#17-m-SB-SC)

"... a company in the mining industry, a lot of those companies build dams and create their own water supply" (#16-m-SB-SC)

"Where are you going to get it from and then after you've used it what's it going to look like?" (#17-m-SB-SC)

The apparent discrepancy between the use of energy as a cost factor and the use of water as an environmental concern could be solved within the advanced round of interviews. It was found that the use of energy causes ongoing expenses as variable costs that impact on a company's bottom line and therefore impact on the proceeds of investors.

Water as a finite, non-producible resource on earth causes much more environmental than financial concerns because polluted water tends to destroy rivers and artesian waterways, impacting on people and land alike. Compared to monthly expenses for energy, one-off investment costs for tailing dams and modern technology for water treatment impact on the share price rather than profit. Hence, from an investor's perspective, environmental concerns outweigh financial concerns in terms of water issues.
Greenhouse gas emission

At the initial interview level, a difference emerged in terms of evaluating greenhouse gas emissions between private and institutional financial stakeholders. On the private investor level, greenhouse gas emission was more of a global concern with no effect on investment decision-making, whereas on the institutional level, it was an important factor for assessing the overall company performance with regard to responsible management. Furthermore, private investors considered countries other than Australia to be responsible for CO₂ emission.

"But I think Australia's probably one of the lowest emitters of gases and greenhouse gases, but the biggest sufferer from other countries" (#4-FP-I-r)

Interviewees of the advanced round of interviews mainly confirmed this mindset but identified China and India as the major producer of CO₂, mainly due to outdated technology. They blamed also misleading statistical analysis for ranking Australia as a high producer of greenhouse gas emission.

"... our [Australian] production of CO₂ of pollution is very minimal globally" (#12-m-FP-SC)

"... the percentage of our production compared to say China or the US et cetera or India is minimal" (#12-m-FP-SC)

"Well why aren't they using current technology, rather than technology which is 50 years old to bring their industry up to speed?" (#18-m-SB-SC)

"So we are being forced by the world, I think, to accept the fact that we are a significant greenhouse gas producer" (#16-m-SB-SC)

"... labelling Australia as being the highest producer of greenhouse gas per capita in the world or one of the top three depending on who wants to present their argument" (#15-m-SB-SC)

In addition, one interviewee found labelling Australia as one of the biggest CO₂ emitters would impact on the country’s ability to compete globally against China and India due to cost intensive implementation of the latest technology to avoid CO₂ emission.
"If our cost base, if we force companies to do various things which is going to increase their cost base, it's all about competition globally, especially in Asia" (#12-m-FP-SC)

Another participant suggested that Australia as a supplier of coal should not be blamed for greenhouse gas emission produced in Asia.

"Because somebody else uses our coal the greenhouse gas debit comes back to us" (#15-m-SB-SC)

**Land use from an environmental perspective**

Investors of the initial interview round had different perspectives on the environmental requirements of land use for mining. Some investors had concerns about land used for mining adjacent to areas declared World Heritage, whereas others looked at it as a long-term issue. Although nowadays mining companies are supposed to be much more responsible in terms of Indigenous people's land than in the past, some participants demanded equal treatment for non-Indigenous people in terms of land use. Investors were aware of a mine site's limited lifespan. They expected that other stakeholders involved, such as employees, local communities and contractors, were also aware of this fact. In addition, they expected that provisions were made during mine operation for later rehabilitation of the land to proper standards.

"So that's a whole historical aspect which can come to the surface at any stage with any of these mining companies. I think there's still a lot of way to go. The mining companies have to just tread very carefully" (#2-Pl-m-r)

"From what I've seen, most Indigenous communities are very well catered for and cared for, because of the mining activities within the tribal lands. To a degree that I don't believe that the same advantages or benefits accrue to someone who is non-Indigenous and has mining happening on their land" (#7-Pl-m-r)

**Mine closure from an environmental perspective**

Initially, mine closure and rehabilitation of land was an important issue to financial stakeholders. Their concerns were related to the land previously used for mining
from an environmental aspect and also from a financial point of view. On the other hand, problems of communities adjacent to mining sites were less relevant.

"In terms of remote mines being far away from here, rehabilitation and land use is not really an issue because I believe that the use of the land and the rehabilitation of the land is controlled by the local authority"

(5-PI-m-r)

5.4.4 Social aspects

This section of the interview considered complex social issues relating to employment, training and education, occupational health and safety (OH&S), and diversity among the workforce. The subjects were discussed to saturation during the initial interview round. Figure 5.7 shows the lexical representation of the major concepts in relation to social aspects of sustainability.

Figure 5.7: Social aspects
Employment

Initially, investors considered employment of local communities as an important CSR activity in order to achieve social licence to operate, which is a major condition to operate a mine profitably, especially in remote areas. This reflected their attitude towards appropriate yields from their financial investments.

Institutional investors kept the employment of locals also as an important box to tick in terms of responsible investing in mining companies. However, the companies were supposed to hire local community members only for less important jobs in the service industry and keep their trained staff members, such as engineers, on a fly-in, fly-out basis. Financial stakeholders were aware of possible problems resulting from the difference in job quality between local and temporary staff.

"... it costs a lot of money to train staff for their undertaking - to keep them in the area and keep their families happy and occupied" (7-PI-m-r)

"So fly in fly outs permitted by the government regulators then it’s permitted, but there’s certainly enough stories of adverse results for local communities from these fly in fly out type approaches" (8-SA-m-c)

"So I’m not sure if there’s a lot of opportunities beyond that service field for the locals" (4-FP-f-r)

In the opinion of some interviewees, Fortescue Mining was the exception from the rule and was known for their engagement in responsible employment.

Training and education

With regard to local community members, financial stakeholders expected mining companies to provide training and education in order to recruit and retain enough skilled and trained staff on the site to keep the mine operating properly. Furthermore, they expected this to be part of the social licence to operate. However, from an investing point of view staff training and education was less important to some private investors.

"They need to create a community, within the community, of loyal workers whom they have trained to their methods and their requirements" (7-PI-m-r)
**Occupational health & safety**

Corporate OH&S was very important to financial stakeholders whether they expected minimum standards at low level or extended activities that would have an impact on a company's bottom line due to substantial costs. Institutional investors in particular used information about injury rates and fatal incidents as part of their comprehensive OH&S measuring to evaluate a company's management performance. It was also expected that mining companies should try to avoid any accident with staff involved at all although very few private investors saw employees to be responsible for health and safety in their workplace.

"I think the standards in Australia are generally good. So I don't require any additional standards above what's there in Australia" *(#8-SA-m-c)*

"To upgrade health and safety issues and address those issues, it adds an enormous cost to the bottom line of any mining operation" *(#7-PI-m-r)*

"It would be the employee's responsibility to make sure that they work safe in a safe workplace" *(#3-SA-m-r)*

**Diversity**

Financial stakeholders expected mining companies to hire their staff on their merits in the first place but to offer available jobs to everybody who was capable of doing the job regardless of gender, religion or race. Andrew Forrest from Fortescue Mining was a well-known Australian example for employment diversity in terms of Indigenous people. Employment diversity was less important as a measuring instrument to assess company performance.

"I would expect a very open book as far as hiring of employees and staff. Anyone that has the ability, and the capabilities, of filling any vacancies within the company should obviously be considered on their merits, regardless of colour, creed or religion" *(#7-PI-m-r)*

"One of the best examples I see is the initiatives by Andrew Forrest at Fortescue Mining to get the local Indigenous involved right throughout the company" *(#3-SA-m-r)*
Land use from a social perspective

Throughout, participants at the advanced interview level saw a positive impact on local communities from mining in remote areas providing employment and business opportunities.

"I guess in the first instance the land use and the new miners bringing mining jobs to town, feeding the whole town, the local butcher and the local pub will be full and the motels with - there'll be some workers out there" (#9-m-SB-SC)

"From a social point of view, it can bring more people to an area. It can generate additional business to a community. It can provide locals with more employment. I think it has a good social impact" (#10-f-FP-SC)

"Well a lot of - a lot of the locals who own the land may benefit from it as well economically and they might then be able to build schools and things like that" (#12-m-FP-SC)

In relation to the concept of compensation, the interviewees agreed with the provision to either provide infrastructure such as roads, schools and hospitals, or financial adjustments; however, the majority suggested financial compensation as the better, more flexible option.

"So I still think financial compensation, whether it was to a person or to a community, so as they have the opportunity to designate what they specifically require" (#10-f-FP-SC)

"It's probably easier for the mining company just to give them a lump sum of money and be done with it" (#14-m-FP-SC)

"I suspect financial is the best way to go, because the local community, whoever they might be, know what they want" (#16-m-SB-SC)

"I think providing the infrastructure is probably the most critical thing. If you just give people handouts then you're not going to get the maintenance of infrastructure so I think the more sociably responsible thing to do is actually provide the infrastructure and maintain them rather than just giving out free gifts if you like" (#11-m-SB-SC)

"Oh, to help fund infrastructure and - et cetera, yeah. No, I think it should go into improving the community rather than just hand over cash" (#13-m-FP-SC)
Interviews - Analyses and findings

Figure 5.8 represents the detailed lexical analysis of the social aspects in relation to land use and mine closure. Most of the participants in the advanced interviews agreed to the idea of human rights being linked to land use negotiations for mining purposes, in particular in Australia due to its obligations to Indigenous people. It was suggested that human rights in relation to land use are aligned to land ownership all over the world, and so compensation must be a matter of course in contemporary mining. There were also strong statements in favour of the alignment of native land title rights, mining, and corporate obligations to mindfully respect Indigenous people’s rights. A minority suggested that land use does not necessarily imply a right per se, and destroying arable land for mining causes bigger problems in the long run.

"In Australia it is, because of the Indigenous occupation 30,000 or 40,000 years before white settlement. So I think in Australia it certainly is" (#17-m-SB-SC)

"Oh it would be yes all related to human rights I think because if someone owns the land then yeah it would be" (#12-m-FP-SC)

"Yeah, I think they should be compensated" (#13-m-FP-SC)

"Where there's an imposition of a potential mining lease on Indigenous land, oftentimes you've got to seek native title rights" (#15-m-SB-SC)

"Not necessarily, no. I think we're all part owners of the world we live in but at the same time we all benefit from how that land is used by one individual or another. So I don't think it's an actual right per se" (#11-m-SB-SC)

"I think one of the biggest problems we have in land use is arable land, particularly today where they create these massive open cut mine" (#16-m-SB-SC)

In terms of equal treatment of land owners when it comes to mining, most interviewees suggested that Indigenous people are privileged compared to non-Indigenous people due to political concerns. Only a minority of two participants stated that the Indigenous people’s interests are neglected.

"They [Indigenous people] certainly do get much more and have to be negotiated with. There is a difference, yes. So I think it's certainly better for the Indigenous, so yes" (#9-m-SB-SC)
"They [Indigenous people] get a benefit and they get a payment for using their land. Because they know that they will end up down in Canberra in front of the Government House with a whole of placards and there you go" (#10-I-FP-SC)

"I think Indigenous people are treated in a biased way relative to the white population" (#17-m-SB-SC)

"I think there is still a lot of anti-Indigenous feeling around the place" (#18-m-SB-SC)

Figure 5.8: Social aspects of land use and mine closure

"I think if anything Indigenous are probably treated a little bit more equally than non-Indigenous. It's always such a political firestorm, particularly with the Indigenous people that they've got to be seen to be treated fairly in these issues. I think, yeah they probably get more than non-Indigenous" (#11-m-SB-SC)
**Mine closure from a social perspective**

Interviewees at the advanced level suggested that no mining company should be burdened with social responsibility after closing down. They distinguished between moral responsibility, and practical and physical feasibility. Some stated that social responsibility beyond mine closure, whether expected or sudden, should be divided between employees/contractors, the community and the mining operator to balance the burden. It was also questioned when corporate responsibility after mine closure should diminish and how rapidly this should happen. Some interviewees thought of social responsibility to employees who had come to remote areas for mining reasons only, others disagreed with that statement.

"I don't know that we should hit our miners with more social responsibility than anyone else in terms of that, because if it gets some infrastructure out there and provides employment while it can I think that's enough because it's a tough game" (#9-m-SB-SC)

"I think it's very hard to say well that mining company should then be responsible for a township forever and a day" (#11-m-SB-SC)

"I don't see how it can go beyond the end of the mining" (#16-m-SB-SC)

"Morally the answer has to be yes. But practically and physically it's a hard one" (#18-m-SB-SC)

"There is a certain amount of responsibility - I think - which has to go onto the local community and the workers. It's not all on the shoulders of the mine operator" (#18-m-SB-SC)

"But most of them [employees] are getting a premium to be in those environments and to the extent that they don't make hay while the sun shines, is really just their own risk" (#17-m-SB-SC)

However, it was suggested that a mine closure has always a considerable effect on local communities in terms of employment, local businesses, and families.

"Oh it has a lot of - big effect. I mean you've seen what's happened up in the mining towns in Queensland. There's people lose jobs, small business is not as much, not as many people working there so their businesses drop. Companies go - companies struggle and sometimes go out of business. People have to move out of the area to get jobs
somewhere else because they can't get jobs in that area. Families have to move. Families are split because the worker may have to - the income earner may have to move away. Yeah, so there’s a big effect, definitely” (#12-m-FP-SC)

The interviewees could not identify a major difference in terms of any impact on local communities whether it was a sudden or planned closure of the mine site. However, although the consequences are the same, sudden closure decisions have a harder impact on people because they are unable to prepare properly.

"Not really because at the end of the day it's all the same effect. People are going to lose their jobs and the community is going to suffer because of that" (#11-m-SB-SC)

"Oh definitely, yeah, because a sudden one it's not expected and if it's expected businesses and individuals and families can plan ahead” (#12-m-FP-SC)

5.4.5 Conflict resolution

The section of the research dealt with different levels of conflict resolution. On the one hand, it reflected the participants' views of social licence to operate as an ordinary business model to allow operating mines in remote areas, most often on Indigenous people's land. On the other hand, it focused on disputes between contractual partners, and corruption as a subliminal business concept.

Social licence to operate

In terms of social licence to operate, financial stakeholders initially evaluated mining companies’ social activities more conservatively. They doubted whether agreements with Indigenous communities would be successful and benefit the company at all. They had concerns in terms of bottom line limitations. However, they realised that social licence to operate is necessary to do business at all and achieve an appropriate financial return. At least, they expected mutual benefits for both mining companies and local communities.

"So it goes back to, how can you get a social license between a mining company which is very business oriented and it's their money and it's going to make a profit, to all right, we'll build you a hospital but will you be able to use it effectively? Who knows?" (#2-P1-m-r)
"So it has to work both ways. My expectations are that there would be an outcome that was hopefully a win-win situation for the indigenous community and the mining venture itself" (7-Pl-m-r)

Disputes
Initially, disputes between mining companies and local communities were mostly understood as conflicts between mining companies and Indigenous people where the Western understanding of doing business collided with traditional ideas of living. Financial stakeholders expected that community concerns should be clarified in full between the parties before commencing mining in order to avoid later disputes with adjacent communities. Governmental and legal requirements were understood as a third force to justify mining business and avoid conflicts with local communities.

"Maybe we should have made more effort to seek out what they want. But we've tried to do that from a Western point of view, but the two haven't met" (2-Pl-m-r)

"The dispute could arise from the mining company, for instance, breaking the law or breaking a local council bylaw. In that case the local authority would obviously take care of that problem" (7-Pl-m-r)

Corruption
At the initial interview level, financial stakeholders showed different understandings of corruption. Some thought the term included the acceptance and abuse of impacts due to lack of awareness and misunderstanding of business deals, or the abuse of power without necessarily involving money travelling from one person to another. The interviewees were aware of corruption in Australia in past and present, in particular in the mining industry. Investors looked at it more closely if corruption was identified in countries other than Australia, although bribery and corruption most likely would have a negative impact on their investments irrespective of the country of occurrence. However, legal requirements in Australia were expected to minimise corruption.

"I don't doubt that there has been in the past, there will be in the future, avenues of corruption" (7-Pl-m-r)
"Corruption is an issue that you're looking at in mining and in Australia and globally" (§8-SA-m-c)

Interviewees at the advanced level also suggested different understandings of the term corruption. Some were very clear in providing examples of what corruption was in their minds, others had ambiguous perceptions of the concept.

"... falsifying client information, playing with client accounts without authority, moving things around, everything, that is corruption as far as I'm concerned. Changing people's birth dates, making them younger so they've got a longer investment horizon, putting them into high-risk areas when they're nearing retirement, or they retired, that's corruption and not doing your job (§10-f-FP-SC)

Figure 5.9: Concept of corruption
Interviews - Analyses and findings

"Just taking advantage of your position and benefiting financially, pretty much with a - probably with a conflict of interest" (#12-m-FP-SC)

"I don't know - backhanders, doesn't that happen in Russia and so-forth?" (#13-m-FP-SC)

"I don't know, it will happen probably everywhere to some extent, some places worse than others" (#14-m-FP-SC)

Bribery, as shown in Figure 5.9, was another term they used to describe corruption that was associated with company payments in countries other than Australia to do business and win contracts. In particular, the mining industry operating globally was identified to be involved in corruption and bribery in developing countries in Africa and Asia. However, the interviewees suggested that mining companies have to compete globally and therefore bribery is known as a local business concept to win a contract in a different cultural context. They also stated that addressing corruption and bribery using other wording would provide a more tolerable approach.

"So while it can be called a bribe because you paid them money to win the contract, well they would never win a contract unless some form of payment was actually made" (#11-m-SB-SC)

"I think the use of it by journalists suggests that probably people do view it differently when you're using different terminology" (#15-m-SB-SC)

"If you change the wording it'll have a completely different impact on people" (#18-m-SB-SC)

"I think again the word bribe can be misconstrued at times, I'm not saying it doesn't occur but there are some cultures, Asian and probably in the Middle East as well, that's part of the way they've always done business" (#11-m-SB-SC)

"Whenever there's money there's corruption probably there's more corruption in less developed countries" (#12-m-FP-SC)

Basically, most interviewees disagreed with the idea of corruption taking place in Australia nowadays. Some were not sure about corruption happening in Australia, whereas others provided examples of corruption in different industries.
"Certainly I wouldn't think it would be a large part of Australian companies operating in Australia." (#9-m-SB-SC)

"I'm not saying it can't happen but I don't think it's a large prevalence" (#11-m-SB-SC)

"Definitely, and it would be in Queensland rail industry" (#10-f-FP-SC)

"It's like what's happening in New South Wales [...] - certain politicians took advantage of their positions and actually benefited financially from mine leases and things like that down there" (#12-m-FP-SC)

"I refer to them here in Australia, the nepotistic nature of senior management across major companies" (#15-m-SB-SC)

"To my mind the area that's probably most susceptible to that sort of thing would be the public service" (#16-m-SB-SC)

All interviewees rejected corruption as a tolerable business concept in the Australian context. Most of them suggested that legal requirements are of high standards to fight corruption in Australia, whereas a few interviewees were not sure about the effectiveness of the regulations in place.

"Tolerated? No, I don't think so" (#15-m-SB-SC)

"No. No it's not. I don't think so" (#13-m-FP-SC)

"It's not right" (#14-m-FP-SC)

"The Australian Stock Exchange market surveillance division and ASIC they do seem to be looking at a lot of the things that don't look right and they're investigating them and following them up" (#9-m-SB-SC)

"Again I think Australia has got such tight compliance regulations these days" (#11-m-SB-SC)

"I think it's a good starting platform. I think we certainly lead the Western world in certain areas there. Is it enough? No because if it still happens it's obviously not enough" (#19-m-SB-SC)

"But, in a lot of cases it's hard to prove fraud or corruption, which should be evident" (#12-m-FP-SC)
The interviewees suggested that corruption would have an impact on their clients' investments to a certain degree but it would all come down to financial decisions rather than ethical concerns.

"It has an impact for sure and on dividends. Obviously the more money you spend on call them bribes or corruption or whatever it is, that the less money you've got for shareholders to go round" (#14-m-FP-SC)

"Depending on what the share price has done subsequent to that news coming out" (#11-m-SB-SC)

"But certainly corruption has a significant factor for investment considerations" (#17-m-SB-SC)

"That negativity could knock the share price around so they'd probably get out based on what sort of information comes out, but I would think any people I've got in there doing that would get out for financial reasons" (#9-m-SB-SC)

5.4.6 Responsible investment

This section covers general aspects of responsible investment, such as investment strategies, financial decisions following environmental or social disasters, and fundamentals on financial decision-making. Also, specific topics are addressed that deal with investing into the mining industry and particularly in the gold mining industry.

**Gold mining vs. coal mining**

At the initial level, investors were aware of the different extracting processes between gold mining and coal mining. In terms of environmental impact they ranked gold mining to be worse than coal mining due to chemicals being involved in the extracting process.

**Sustainable gold mining**

The interviewees were initially asked about their expectations of sustainable gold mining in Australia. It was thought of as important, as mining is a major factor in the Australian economy in terms of job availability and general prosperity. However, as shown in Figure 5.10, financial stakeholders expected that future mining should be conducted responsibly in terms of environmental and social...
aspects, in particular rehabilitation of land after mine closure. Insofar as investors, whether ethical or mainstream investors, were relying on non-financial information for their investment decisions they expected increasing improvements in terms of environmental and social company disclosure.

"I would hope that it's not just a big boom, rip everything out and that's the end of it, because I think it needs to continue for the prosperity of Australia" (FP-f)

"... that if any new gold mining tenements are granted by state or federal governments, that the outcome is post-mining the land is restored to its original state" (SA-m-r)

**Investing in mining**

At the advanced level, investing in mining companies was found to be not very popular presently. On the one hand, the negative press about mining in general was blamed, on the other hand mining stocks did not fit the investment strategies of retired investors.
"But I wouldn't say that, from my perspective or anyone in this office really, that the environmental concerns form a large part of the discussion in a client's investment decision in a mining company" (#11-m-SB-SC)

"Secondly, about whether I guess the adverse press created by it would be negative for the investment" (#9-m-SB-SC)

"So mining investment is not historically a high yielding experience, it's a high growth experience usually" (#17-m-SB-SC)

However, the mining industry is too big to be ignored. Fund managers tend to invest a certain proportion of their money into mining stocks.

"So the funds - the Australians proportion of their fund is, some of that money is invested directly in these mining companies, and energy companies et cetera. That's how it works" (#12-m-FP-SC)

"The fund managers though certainly go in and out of the mining companies, not dependent upon how much they're polluting the planet or anything like that, it's purely on what part of the economic cycle they see mining companies at" (#14-m-FP-SC)

**Financial decisions due to environmental disasters**

In terms of environmental disasters in Australia, investors of the initial interview round considered withdrawing from their financial engagement but they were more concerned about financial implications than alarmed about the environment. Institutional investors, insofar as they followed the concept of responsible investment, would also divest, but due to environmental reasons. Environmental disasters outside Australia were much better recalled than calamities inside Australia. Although gold mining has the potential to cause severe environmental damage, the industry was outside the scope of investors in terms of environmental problems.

"So I would have thought investors would be more frightened about losing money, but hopefully be upset about the environmental issues as well" (#4-FP-f-r)
"I don't think it’s been you know it’s not the industry of highest concern for institutional investors at the moment. I think there are other sectors in mining that has a greater focus than goldmining" (#8-SA-m-c)

Participants of the advanced stage of interviews confirmed that their clients would probably take an environmental disaster as a reason to at least think about divesting; however, this would be due to financial reasons rather than environmental or ethical concerns, as indicated in Figure 5.11. As the share price drops substantially after an environmental disaster, and depending on its scale is also associated with long-term costs, institutional participants identified three possible ways to respond. Firstly, investors could stay with the investment because they trust in the ability of the company to financially survive the disaster. This would prevent them from suffering a capital loss. Secondly, investors could withdraw from or reduce their investment but make a capital loss. A third answer in relation to dropped share prices would be to invest into that company, hoping for capital gain in a few years' time.

"...certainly the cost of rectifying and possibly the government fines and court cases around an environmental disaster would certainly lead most people to sell, rather than the environmental disaster itself" (#9-m-SB-SC)

"No you wouldn’t want to withdraw because you're just going to be gathering in a big loss" (#10-f-FP-SC)

"... so their profit is going to be less, their dividend is less so that's pretty much why shareholders may sell because it would affect dividends and profit" (#12-m-FP-SC)

"The share price falls to a certain level when all the bad news it out. It can only get better from here. Whether it gets better in three years, four years, five years or 10 years doesn't matter" (#18-m-SB-SC)

"I actually found it went the other way. When BP had that Gulf of Mexico disaster I actually had a number of people asking me to buy BP for them. Funnily enough I think they saw that as an opportunity for a little bit mercenary type behaviour" (#15-m-SB-SC)
Some interviewees suggested that their clients would be triggered to think about divesting due to news in the media. Environmental disasters tended to remain subject to reports for a much longer time than social disasters where people were involved in fatal work accidents.

"The biggest factor that I think which would affect those decisions today is the overplaying of a lot of it in the media. The media is very quick to jump on something and make it an issue without really investigating the root cause of a lot of these problems" (#11-m-SB-SC)

"Something went wrong and he died. That was newsworthy for about two days and then that was it, it had gone. With the environmental things, it’s on the television - on the news - for a much longer period" (#18-m-SB-SC)

**Financial decisions due to social disasters**

Compared to environmental disasters, the participants of the initial interviews were less concerned about accidents involving people. As companies, and mining companies in particular, were supposed to invest considerably in health and safety activities, including comprehensive occupational training, accidents
involving people were seen as a tolerable occupational risk. Investors were less concerned about divesting after such incidents because the financial impact would be reflected in the share price anyway. They did not see the necessity to additionally punish the company through divesting.

"If it was someone that was hurt in the normal course of duty, I wouldn't see that as a reason to not invest in the company. The companies are very, very aware of their accident free periods and their time" (#7-Pl-m-r)

"If it's just had a mining accident and it's found guilty of whatever it's been found guilty of then that would be reflected in the share price and we would have - if we'd have had some shares in that company, we would have lost some money" (#2-Pl-m-r)

During the advanced level of interviews, the participants stated consistently that work accidents in the mining industry were of no concern to their clients in relation to withdrawing from investments. Again, driven by financial considerations, a work accident, although it is emotional, would not have a major impact on bottom line results or dividends. Even when the share price falls after a fatal accident, this would not be a long term issue.

"It's unfortunate but I don't see people getting concerned overly by the loss of a life here or there and those things will happen in a mining scenario when you're moving big machines around or you're operating underground where cave ins do happen" (#9-m-SB-SC)

"If you've got a workplace accident then the impact of it is limited" (#14-m-FP-SC)

"If it's just one or two people getting killed in a truck accident in a mining site, I don't think it matters" (#17-m-SB-SC)

"One man being killed at an open cast mine is unfortunate, but the impact on the investment is nil. I think that's the sad truth of the matter" (#18-m-SB-SC)

"If there is an unfortunate incident at a mine, that won't be a game changer for an investor. That's a very unfortunate incident that is part of the risk factors involved" (#19-m-SB-SC)
Divesting campaign

As described in the initial interviews, some private investors had experienced a divesting campaign in the UK, where environmental aspects due to burning coal led to coal mining closure in the course of divesting. In Australia, financial stakeholders were more concerned about the political scope of the divestment campaign being introduced rather than considering the environmental dimension. As shown in Figure 5.11, some interviewees supposed some sort of 'false labelling' where officially the climate change card was played to mask political influences by certain parties. Furthermore, they thought that overhasty withdrawing from investments in fossil fuels to the benefit of renewable energies would leave Australia with a lack of cost-effective alternatives that could supply the amount of energy needed, and so affect the Australian economy as a whole.

"I'm just wondering here whether there is a political agenda behind that that is trying to drive it down a particular track" (#2-Pl-m-r)

"I think a lot of people just like to put that label ethical on things that aren't really ethical, so I think they try to attract people sometimes with misleading concepts" (#4-FP-l-r)

"I can't really see the alternatives producing the amount of energy necessary to make them say we'll do that one instead of that one. I don't think we've reached that point" (#5-Pl-m-r)

Participants of the advanced interview round consistently agreed that this campaign was politically driven rather than environmentally, and therefore false labelling was implied. This mindset, which emerged from the initial interviews, was confirmed.

"But I think there's more of a scare campaign and I think it's more politicised than it is really a viable alternative" (#11-m-SB-SC)

"There is a political angle to it" (#12-m-FP-SC)

"They think it's a political game" (#13-m-FP-SC)

More precisely, some interviewees blamed left wing political forces, the 'greens' in particular, to push their interests without too much economic knowledge.
"I think unfortunately the Green Party has not displayed themselves to be an economically prudent party" (15-m-SB-SC)

"There's a lot of green people out there that want the coalmines shut down, but they don't I don't think they really understand what effect that would have on the economy" (12-m-FP-SC)

Most of the interviewees suggested that divesting from fossil fuels and coal mining into renewables at this point in time would have a negative impact on the Australian economy as a whole. Some stated that renewable energies would be insufficient compared to contemporary energy and far too expensive to cover Australia’s energy needs. Others suggested that the competitiveness of Australian companies would suffer considerably. However, they would support the development and implementation of renewable alternatives at a later point in time, when the technologies were more reliable and sophisticated.

“The cost of renewables is still much too high. Plus, wind farms can only produce when the wind is blowing. Solar farms can only produce when the sun is shining. It's not 100% reliable. There's a place for it, I think we'd all agree with that, but there's a couple of aspects of it” (11-m-SB-SC)

“I think that the world’s got a long way to go before they need to rely fully on renewable energy sources” (14-m-FP-SC)

“I don't think anybody can achieve it at the moment, primarily because the cost of fossil fuel is far cheaper to produce from than renewables at the moment. But having said that, as renewables become more efficient in their production of energy, I can see that happening, yes” (15-m-SB-SC)

“I think it all comes down to costing and efficiency. If suddenly it's going to cost a lot more then I think it certainly would have an impact on the economy. That all has to be considered, the amount of jobs and the competitiveness of Australia with providing that particular energy source. If it's competitive and it's renewable I certainly would be very supportive of it as would I guess most people” (19-m-SB-SC)
Investment strategies

Institutional interviewees at the advanced level could determine the yield-oriented investment strategies of their clients belonging to the retiree group from their own experience, whereas statements about investment needs of young investors were driven by assumptions.

They ventured the guess that for young investors wealth building stays in the foreground. Thus young investors might be willing to take higher investment risks. As far as responsible investments are concerned, young people's portfolios will be limited due to lower returns.

"... a lot more aggressive in their investments. They will have their portfolio, instead of having it 50/50, if they’re in the 30 or 40 age group they’re prepared to have 100 per cent of it just in share funds"  (#14-m-FP-SC)

“They’re more likely to be building towards a mortgage, considering marriage, having kids, that kind of thing”  (#11-m-SB-SC)

"... whereas younger investors perhaps are willing to take a bit more risk to get a higher return”  (#19-m-SB-SC)

"... they still want the big banks, the big supermarkets, the high-net-worth companies. The green companies are not as valuable, not as high a net worth, limited to 10-20% of their portfolio”  (#10-f-FP-SC)

At the final interview level, it could be confirmed that young investors were interested in a long-term growth-driven investment strategy. They preferred industries to invest in where they had some background knowledge and rejected gambling and tobacco.

“Very much long term growth is where we’re focusing at the moment”  (#23-f-AGY)

“I suppose knowledge base in the industry does play a little bit of a part”  (#23-f-AGY)

Middle-aged participants preferred ethically based industries with responsible supply chains, such as the Australian cotton industry. Looking after the workforce was also a criterion for preferred industries.
“I prefer to invest in industries that are more ethically based” (#20-I-AGM)

“The industries that are sourcing their products from suppliers that use ethical principles, such as the cotton industry in Australia” (#22-I-AGM)

In contrast, middle-aged participants rejected investment in coal seam gas, James Hardie Industries, the overseas clothing industry, weapons, gambling and tobacco. Due to environmental considerations, the mining industry was also among rejected investment options.

“Coal seam gas is one of the ones that I won't invest in” (#20-I-AGM)

“I would not invest in James Hardie Industries” (#22-I-AGM)

“Yeah, weapons, obviously – and certain mining industries; certain mining companies that have a bad track record in environmental management. I wouldn't invest in tobacco” (#26-M-AGM)

In terms of their investment strategies, the middle-aged group was consistent in their investment pattern. The strategy could be classified as conservative wealth building with less speculative elements, mostly based on Australian financial assets.

“I like Australian based companies preferably to overseas based companies” (#20-I-AGM)

“Yes, wealth building more so than anything else” (#24-I-AGM)

“I would have probably three-quarters of my investments in property. The other quarter would be in shares. I think that our strategy's been essentially a small amount of speculative investment” (#26-M-AGM)

At the advanced level, the older age group was identified as having a long-term proceeds-oriented investment pattern with no or little interest in discussing environmental aspects in relation to their investments.

"... probably more in holding and dividends and having a long term portfolio"(#9-M-SB-SC)

“So it's a more conservative investment approach that we will generally be offered to our clients here. It is more skewed I guess towards
dividend but there is a growth aspect to it but that's not the first priority”  
(#11-m-SB-SC)

"... because when they retire they've probably got 30 years to live. So you've got to take a long-term view"  
(#13-m-FP-SC)

"Money in the bank each month consistently"  
(#14-m-FP-SC)

"They're more concerned about a return and the financial side of things"  
(#9-m-SB-SC)

"Most clients just want a return"  
(#12-m-FP-SC)

The investment strategies of older investors could be confirmed during the final interview round. They did not show specific preferences for particular industries to invest in from an ethical perspective but were quite clear in rejecting some industries for investment due to unethical perceptions.

“I like to spread the investments over as many as possible”  
(#27-m-AGO)

“Betting agencies. Crown Casino. Also, probably, tobacco companies. I wouldn't invest in companies that are involved in gambling”  
(#21-m-AGO)

“I'm certainly not into the oil companies and things like that. I've rejected uranium mining companies, probably also arms manufacturers and so forth”  
(#25-m-AGO)

“I would avoid them [gambling, tobacco]”  
(#27-m-AGO)

They followed conservative, yield-oriented investment strategies with no room for risky opportunities. Even drawing down on reserves turned out to be a feasible option.

“Conservative. No risky companies. I would say yields”  
(#21-m-AGO)

“I've been concentrating more on dividends to ensure that I have an income”  
(#25-m-AGO)

“It'd be conservative. On yield rather than wealth building. Plus also we're drawing down on our reserves now”  
(#27-m-AGO)

**Percentage of ethical investment**

Financial stakeholders at the initial level estimated the proportion of people who effectively invest responsibly as rather low, about 5% or less. Although the
volume of ethical investment was roughly estimated as A$25m, it is still a niche. In super funds, options for ethical investments are still small. Furthermore, investors' interests were aligned to dividends and reinvesting rather than ethical considerations. The concept of ethical or responsible investment was less important or completely negligible to private investors. However, the overall attitude toward investing tends to avoid hurting the planet but did not necessarily result in responsible investment although the demand for ethical investment offers is slightly increasing.

"I don't know, not even five per cent probably" (#1-Pl-f-r)

"It’s always been a bit niche" (#8-SA-m-c)

Interviews at the final level revealed that young investors, belonging to the age group of 18–30, are not willing to accept less financial gain in favour of responsible investments. Consequently, the percentage of ethical investments in their portfolio leans towards zero.

“I probably wouldn't invest at all" (#23-f-AGY)

Members of the middle age group, being 31–55 years of age, tended to accept smaller proceeds due to responsible investments. They were very positive about investing ethically and named noteworthy percentages between 20 and 80% of their portfolios for responsible investments. They either invested directly by buying appropriate shares or indirectly by holding ethically managed superfunds.

“So we've invested a chunk of our money with a lower return for ethically managed funds” (#26-m-AGM)

“I'd love 100 but it's not possible to do 100 per cent, so I think at the moment we're probably looking at about oh, 40 per cent maybe” (#20-f-AGM)

“I would have thought that the bulk of any investment that I would do would be behind the more ethical companies and that are socially responsible. Probably 75:25 per cent I suppose” (#24-f-AGM)

I'd probably have around about 20 per cent in ethical funds, looking to expand that as time goes by (#26-m-AGM)
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Investors who belonged to the older age group over 55 were more negative towards accepting less financial gain. They either rejected the concept of responsible investment at all or linked it to certain financial conditions.

I don’t think I’d even consider it (#27-m-AGO)

“But I think I have a responsibility, myself and my wife, that we have sufficient funds to maintain a lifestyle that we want to” (#25-m-AGO)

Demand and recommendation

Initially, both private and institutional investors tended to prefer bottom line results as the driver for capital investments over CSR-related investments. They suggested that it is in the nature of mining to be unsustainable, because minerals are not renewable; once dug out of the ground they are gone. However, some investors assessed at least the big mining companies as being sustainable. In the long run, only sustainable companies would become good investments and attractive to ethical investors when they manage environmental and social issues responsibly.

"I mean I take note of the reports on their activities and where it occurs I applaud it but I don’t actually involve that in my decision-making"
(#5-PI-m-r)

"If I were to think seriously about it and I had a choice as to whether we went with mining industry or a real sustainable industry then I think you’d have to go with sustainable industries" (#2-PI-m-r)

"But I don’t think it’s worth recommending mining companies with unsustainable practices, because they tend not to be very good investments" (#8-SA-m-c)

In the context of environmental concerns over the use of energy and water, as well as greenhouse gas emissions, no demand for discussion in terms of ethical investment from their clients could be identified by the interviewees in the advanced interview round. Environmental aspects were not found to be of any interest to the older age group in relation to investments into funds or directly into shares.

"I haven’t had any clients bring up environmental issues or wants, what you’d call the green investments…” (#12-m-FP-SC)
"I've never had these types of discussions with clients, to be perfectly honest. [CO2, smog] It's not a concern" (#13-m-FP-SC)

"I find it very rare that we have investors that are wanting to talk about those standards on greenhouse gas emissions or environmental or ethical concerns" (#19-m-SB-SC)

In particular, the use of energy in the mining industry, although impacting on bottom line results, was not talked about in relation to financial decision-making. There was no demand from investors to discuss energy or water issues as a matter of concern with regard to investing in mining companies.

"I can't remember any discussions around energy or water" (#9-m-SB-SC)

"When we're looking where to invest for our clients we're not thinking about how much water a company's using or how much energy they're using" (#14-m-FP-SC)

"I can't recall anybody saying to me, because the electricity prices are going up I don't think we should have investments in this company because..." (#18-m-SB-SC)

As with the use of energy as a cost factor, water and the responsible use of it by mining companies was also of no particular concern with regard to investment decision-making.

"I can't think of a stock or an investment that I've made or recommended in recent times where a client has expressed any sort of concern over water" (#15-m-SB-SC)

Very few institutional interviewees had had some discussions with their clients about responsible investment. Those discussions were about investing in tobacco, alcohol or gambling rather than touching on environmental matters.

"There's been a couple around liquor and about gambling stocks" (#9-m-SB-SC)

"There'd be a handful of those clients that wouldn't want to invest in say, a gambling company or an alcohol or tobacco company" (#11-m-SB-SC)
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"I've had people over the years that don't want to invest in alcohol or tobacco or related stocks" (#18-m-SB-SC)

5.4.7 CSR and sustainability

This subject area was added to the final level of interviews from the website analysis of the nine Australian gold mining companies analysed in this thesis with regard to content analysis. The participants talked about their expectations in relation to corporate CSR activities and sustainability initiatives, and related online disclosure on a company website. The topic was discussed to saturation within the three age groups at the final level.

Young investors expected sustainability initiatives in relation to communities but environmental issues were also considered very important when backed up with contemporary research disclosed on company websites or other online sources. They expected sustainability and CSR to be conducted almost equally. They preferred to find information online about the company’s stance on sustainability and their involvement in the community. In addition, they expected to be provided with online information about third party research results, to ensure reliability.

“I definitely would like to see a bit of both [sustainability and ethical/philanthropic CSR]. Probably […] tipping 60 per cent towards more the ethical responsibilities, definitely” (#23-f-AGY)

Interviewees of the middle age group appeared much more detailed in their expectations with regard to CSR and sustainability. They were interested in the environment and social issues. In particular, giving back to the community was very important to them. In addition, they perceived a respectful treatment of employees including fair wages and safe working conditions as most important. OH&S was seen critically as going too far sometimes. Fair company tax payments were also addressed as an important ethical expectation. With regard to sustainability or ethical/philanthropic corporate initiatives, middle-aged participants had different opinions. They varied from a 50/50 perspective to viewing sustainability as more important than ethical/philanthropic CSR, and vice versa.

“I expect them to treat their employees with respect that a human being is - can - should be treated with” (#20-f-AGM)
“… a company that also gives back to the broader community by paying their taxes and being legally responsible for giving back to the community in their tax as well” (#26-m-AGM)

“So really it’s 50/50” (#20-f-AGM)

“I would prefer the ethical over the sustainability” (#22-f-AGM)

“I would think environmental sustainability would be probably a stronger drive than the philanthropy” (#26-m-AGM)

They expected online disclosure on the company’s website in relation to simple company information, including disclosure about the board of directors and their background, and specific information on the workforce. Furthermore, they liked to find information on sustainability standards in use.

“Information about the company, just the basics of the company and if it could be written simply so that the mum and dad investors could understand it” (#20-f-AGM)

“Who their board of directors are and what they’re involved in in the background, whether they’re accredited” (#24-f-AGM)

“It would be good to get some - you know how companies seek employee feedback on their role and on their job, and how they’re looked after; it would be good to understand that” (#26-m-AGM)

Participants of the older age group expected almost the same CSR activities and sustainability initiatives as middle-aged investors. They referred to employees as an issue they were interested in as well as activities in the community. Moreover, they expected high standards for the environment and OH&S. However, they showed a clear preference for sustainability over ethical/philanthropic CSR activities, which were even blamed to cover some corporate sins of the past. With regard to website content they were interested in information on company history, board of directors and their qualifications, and all kinds of policies being in place.

“I’d want to make sure that they had good workplace conditions in place. Workplace health and safety, anti-discrimination policies, age discrimination policies - all those sort of things in place” (#21-m-AGO)

“I think from an environment point of view they really do need to be extremely careful that they are not only operating within what the
government regulations are for that particular area but in standards that they've set themselves” (#25-m-AGO)

“I think that sometimes companies with their philanthropic activities and so forth can cover up some of the sins that they've committed” (#25-m-AGO)

“Not only environmentally or socially sustainable, but it's also sustainable in terms of the financial status if something goes wrong, so that they have other resources to feed the company from” (#27-m-AGO)

### 5.4.8 Communication strategies

During the final interview round, the participants were provided with two printouts of genuine environmental website content, one representing generic, short bullet-point statements of sustainable initiatives according to GRI reporting guidelines, and the other one showing comprehensive information about CSR activities over several pages. The interviewees were then asked to decide which one they liked more and why.

Young investors were more attracted by the comprehensive, narrative website disclosure because they thought nothing would be obscured, whereas they found the short overview of activities too generalised. Among the middle age group there was a clear preference for the short, more generic version of the website content presentation due to it providing a quick and easy overview of sustainable initiatives, with the option for more details by clicking on the link for a further comprehensive sustainability report. Like young investors, most participants belonging to the older age group preferred the long narrative style of website disclosure due to the specific examples provided, which were seen as evidence for the company's CSR engagement.

“I would prefer to read a lot more on specific animals, specific organisms that are getting affected and also the plants, that's really cool too. Means nothing is getting hidden” (#23-f-AGY)

“So I'd prefer this [short version] because it gives me an overall view and then I'd look into detail about what I needed to” (#26-m-AGM)

“The longer version I think is providing the examples, gives you the opportunity to actually believe that they are putting into practice what they have put on paper” (#25-m-AGO)
Moreover, young investors identified shareholders’ and employees’ requirements as drivers for a company to conduct CSR and sustainability. Middle-aged interviewees added ethical requirements, public demand, and competitive considerations as further reasons. Participants of the older age group also identified shareholders as drivers for CSR and sustainability along with consideration of company reputation, and increasing public demands.

“I wouldn’t say it would be shareholders. Maybe possibly employees as well” (#23-f-AGY)

“... they're supporting their brand by giving the information...” (#24-f-AGM)

“So I think the public are becoming more demanding as we become more aware that our environment's progressively deteriorating” (#26-m-AGM)

“I think it's important not only for the shareholders but for the company's reputation in the community where they're actually working” (#25-m-AGO)

The option to compare companies in relation to their non-financial performance was appreciated by young and middle-aged investors alike, given the opportunity of a specific format for easy comparison of environmental and social performance. Investors of the older age group were not overly excited about the idea of assessing companies by comparing them in terms of their environmental and social performance. However, if a standard format with easy access was provided they would consider a comparison.

“But if there was some sort of program that dictated all of this, yeah, possibly” (#23-f-AGY)

“Well, while this presentation would be similar, the detail would be very different” (#26-m-AGM)

“I don’t think it'd have a big effect really on investing” (#27-m-AGO)

“So if you can quickly see what they're trying to do, what their approach is, in a big spacey format, it might be better” (#21-m-AGO)

5.4.9 Useful online information

Young investors were not overly interested in non-financial information on corporate websites. The level of financial information instead was sufficient to
them. Members of the middle age group were much more interested in online disclosure beyond financial information. They found it useful to be provided with information on communities, environmental impacts, and general corporate values and mission statements. The older generation identified information on a company’s future to be useful as well as disclosure about staff.

“So I suppose for me I don’t need a lot more information. I’m happy with the financial advice that I take and go along with” (#23-f-AGY)

“The values, the corporate values that they hold within the firm, their mission statement, what their involvement is with overseas countries” (#24-f-AGM)

“Perhaps future growth aspirations. Things that they might be looking at, in terms of employees, to make life better” (#21-m-AGO)

Young participants would not use a corporate website to search for sustainability, environmental management, and ethical issues. Instead, they would read newspaper articles and look for negative impacts rather than positive information about the company’s non-financial performance. However, they identified information about the company history as relevant. Middle-aged investors found online information relevant dealing with a company’s ethos and philosophy, sustainability, information on employees, and the environment. In particular, they found information relevant on the future direction of the company. Interviewees of the older age group also found information on company history relevant.

“So not the company website itself, possibly newspaper articles or, yeah, I know it sounds bad but probably looking at the negative stuff coming from outside the source of the company” (#23-f-AGY)

“I think the future direction of the company” (#22-f-AGM)

“Maybe their history, as a benefactor. Maybe their human relations history” (#21-m-AGO)

Young interviewees considered any information on a corporate website to be non-reliable unless backed up by other sources, such as links to third parties involved in company projects in order to verify online statements. Middle-aged investors agreed totally with the view of young investors in terms of reliability of online information. They also demanded verification from third party standards and
considered bare company information as biased. In addition, older participants had the same opinion and demanded cross-referencing for non-financial online disclosure. A deep distrust could be identified among all age groups with regard to online information on corporate websites.

“… if they're claiming that they're helping out local organisations linking to this organisation to see that correlation that's actually happening rather than just making broad statements” (23-I-AGY)

“I don't believe everything that is written online” (20-I-AGM)

“So I mean, if information is being provided by the company without the governance of an external input, I'd be worried” (26-m-AGO)

“It needs to be able to be cross-referenced independently” (25-m-AGO)

5.5 Summary

This chapter provided investors’ views from 27 in-depth interviews at three levels encompassing nine different subject areas. The understanding of CSR and sustainability was discussed, and preferred information resources were identified. Environmental and social aspects of sustainability, based on GRI guidelines, were presented. The use of energy was associated with concerns about costs and bottom line results rather than with environmental aspects. Water usage, however, was assessed to be critical and was primarily associated with environmental concerns rather than financial considerations. Investors’ opinions in relation to conflict resolution were also presented. Furthermore, investors’ preferences for either CSR-related or sustainability online disclosure were explored and related corporate communication strategies discovered. Young and older investors were attracted by a comprehensive and narrative presentation of CSR and sustainability information on mining companies’ websites, whereas middle-aged investors favoured the generic presentation of facts due to it providing a quick and easy overview of the company’s sustainability initiatives. Investors’ attitudes about responsible investment in the Australian mining industry were outlined and specific investment strategies dependent on different age groups were identified. Gold mining was found to be worse than coal mining due to the extracting process. In terms of environmental disasters, private investors tended to divest from mining stocks due to long-term financial aspects,
whereas institutional investors claimed to divest due to environmental considerations. With regard to social disasters in mining involving accidents with people, investors were less concerned as these kind of incidents were seen as part of a tolerable occupational risk. Finally, the usefulness, relevance and reliability of online information were discussed. In the next chapter, the analyses and findings of the second qualitative method, website analysis, will be presented in detail.
6 Website analysis – Analyses and findings

The previous chapter covered results from interviews with private and institutional investors in order to identify their expectations regarding environmental and social corporate activities and the corresponding disclosure online.

This chapter, which refers to RQ2a and RQ2b, presents content and discourse analysis of websites. This website analysis is the second method of the sequential mixed methods research design. The content analysis identifies the main topics disclosed online by Australian gold mining companies in relation to CSR and sustainability, whereas the discourse analysis explores the specific communication strategies and determines the companies’ stage of online disclosure.

6.1 Introduction

As stated in Section 1.3.3, (Du & Vieira 2012) recommend investigating the general quality of CSR information disclosed on corporate websites. Different authors suggest focusing on a single industry (O'Connor & Gronewold 2012; Weber, J & Marley 2010) and "specific sections of CSR reports at one point in time" (O'Connor & Gronewold 2012, p. 230). Jenkins (2004) suggests that "the mining industry has started to pay serious attention to its environmental and social impacts" (p. 23). On the other hand, an investigation of the ten largest mining companies' CSR-related disclosure has shown that "there is considerable variation in the maturity of reporting content and styles of these companies" (Jenkins & Yakovleva 2006, p. 271).

Following the recommendations and suggestions from the literature, a two-fold second research question was developed:

- RQ2a) What information do Australian gold mining companies disclose online on their environmental and social activities?
6 | Website analysis – Analyses and findings

Against the background of organisational field settings, institutional isomorphism, and organisational discourse as mentioned in Section 3.2.1, a third research question emerged:

- (RQ2b) What are the differences in online disclosure of Australian gold mining companies?

6.2 Sample size

The following selection criteria (SC) of Australian gold mining companies applied:

**Selection criteria**

(1) Publicly listed in ASX300 Metals & Mining 2015, Sub-Industry Gold.
(2) Among the TOP 100 stocks of ASX300 according to Fact Sheet 2015.
(3) Companies of different sizes according to market capitalisation (MCAP).
(4) Country of incorporation: Australia.
(5) Providing a website.
(6) Operating gold mines in Australia.
(7) Providing CSR online disclosure in the categories community, environment and health & safety.

In order to identify publicly listed Australian gold mining companies meeting the selection criteria, the ASX300 Metal & Mining Fact Sheet (see Appendix B) was used as a basic source. In the first round, all gold mining companies listed were marked. As the Fact Sheet indicated the TOP 100 stocks of ASX300 of different sizes in relation to MCAP, the second and third selection criterion were investigated at the same time. Another round identified gold mining companies with Australia as country of incorporation. Subsequently, companies providing a website were examined for information about operating gold mines in Australia. As a last step, the websites were analysed with regard to online disclosure in terms of community, environment and health & safety issues.

The research focused on the following nine Australian gold mining companies displayed in green bold letters in Table 6.1:
Table 6.1: ASX 300 Metals & Mining - Sub-industry Gold

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>MCAP (A$) as per 10.12.14</th>
<th>SC 1</th>
<th>SC 2</th>
<th>SC 3</th>
<th>SC 4</th>
<th>SC 5</th>
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</tr>
</tbody>
</table>

(Source: Adapted from Metals & Mining Fact Sheet 2015)

**Eligibility**

From thirty gold mining companies, primarily listed among the TOP 100 stocks of the ASX300 Metals & Mining Fact Sheet 2015, six companies showed a country of incorporation other than Australia, five companies did not operate mining in Australia and ten companies did not provide environmental and social information online at all. Consequently, nine Australian gold mining companies met the selection criteria as indicated in Table 6.1 and were relevant and suitable to answer RQ2a and RQ2b.
6.3 Data collection

The nine eligible websites of the gold mining companies listed in Table 6.1 were searched for disclosure within the categories environment, community, and health and safety. All nine companies provided a specific environment section, eight companies provided specific sections on their websites dealing with community, while one company provided the community section but with no content. Regarding the category health and safety, seven companies provided a specific section on their websites, whereas one company did not display any content in that section and two companies did not provide a section at all.

One company provided an additional stand-alone sustainability report. To maintain comparability of online information within the categories environment, community, and health and safety, this sustainability report was not included in the scope of investigation.

6.4 Data analysis

Each relevant website section was copied and pasted into a Microsoft Word document and saved as text-only format in order to be analysable with Leximancer software 4.0.

Content analysis

Subsequently, the companies were grouped according to their market capitalisation (MCAP) as shown in Table 6.2 in order to identify the preferences of online disclosure by companies with similar MCAP. To address RQ2a, the websites of each group were analysed in cross-section using the categories environment, community, and health and safety.
Table 6.2: Grouping according to market capitalisation

<table>
<thead>
<tr>
<th>No</th>
<th>Company name</th>
<th>MCAP (A$m) as per 10.12.14</th>
<th>Group</th>
<th>Reference Identification Code</th>
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<td>1</td>
<td>Newcrest Mining Ltd</td>
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<td>86.8</td>
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<td>84.9</td>
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<td>ABM Resources NL</td>
<td>62.9</td>
<td>4</td>
<td>#28-62.9</td>
</tr>
</tbody>
</table>

**Discourse analysis**

Following the initial content analysis using Leximancer 4.0, a discourse analysis using a linguistic approach was conducted in two steps.

Step 1 looked at tenses, mood (indicative vs. imperative) and voice (active vs. passive) used within the website sections environment, community, and health and safety. This part of the linguistic approach explored the companies' way of purposefully disclosing environmental and social information and sought to identify specific communication strategies.

The situational context of this research, linguistically referred to as field, was framed by specific website sections of Australian gold mining companies. The field of their website sections environment, community, and health and safety was concordant among the companies and unfolded around CSR-related topics and sustainability information. The tenor of writing represented the relationship between the company and the website reader, who may be a stakeholder who is interested in the company's approach to CSR and sustainability or an investor who, in particular, looked for environmental and social disclosure to make an informed decision for investing or divesting. The mode chosen to provide the information was a website, more specifically different website sections. Therefore, the collection of websites formed a homogeneous text type and, according to the similar meaning, belonged to the same register. When different texts share the same field to a certain extent, they also share "experiential, interpersonal and textual meanings" (Butt et al. 2012, p.27) and so they become part of the same register. Moreover, the various texts within the website sections
showed obligatory structural elements that made them belong to the same genre as well (Butt et al. 2012). The genre here was defined as 'corporate websites' sharing the same general purpose of providing information about a company's CSR and sustainability initiatives.

Each website section was examined with regard to use of tenses and specific formats of information disclosure. The tenses were marked with different colours in order to identify specific tense-related patterns in terms of communication strategies.

Jenkins and Yakovleva (2006) provide attributes to classify types of reporters within the mining industry in terms of voluntary sustainability reporting. For this thesis, the attributes were modified and applied to corporate website disclosure to identify the stage of online disclosure. Table 6.3 indicates the attributes for matured, adolescent and infant stage of online disclosure.

Table 6.3: Stage of online disclosure

<table>
<thead>
<tr>
<th>Stage of online disclosure</th>
<th>Website section provided</th>
<th>Information provided about company policies</th>
<th>Reference to GRI guidelines</th>
<th>% of sustainability topics</th>
<th>% of CSR topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matured</td>
<td>Environmental community health &amp; safety</td>
<td>Environmental policy Community policy Health &amp; safety policy</td>
<td>Yes</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Adolescent</td>
<td>Environmental community health &amp; safety</td>
<td>Partially</td>
<td>Partially</td>
<td>Moderate (moving from CSR to sustainability)</td>
<td>Moderate</td>
</tr>
<tr>
<td>Infant</td>
<td>Partially provided</td>
<td>No company policies on environment, community or health &amp; safety developed yet</td>
<td>No</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: adapted from Jenkins and Yakovleva (2006)

Step 2 of the linguistic approach looked at GRI-required topics of sustainability reporting. These requirements were adopted with regard to online disclosure. According to the concept of thematic distinctions (Krippendorff 2004), the website sections were coded manually for each company and any of the categories. The
first columns of a coding table were based on GRI Reporting Indicators, referring to GRI corresponding aspects and definitions as shown in Table 6.4.

**Table 6.4: Coding example**

<table>
<thead>
<tr>
<th>GRI Reporting Indicator</th>
<th>Commitment Sustainability</th>
<th>Disclosure Sustainability</th>
<th>Goals Sustainability</th>
<th>Training Sustainability</th>
<th>Legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Environmental (EN)</td>
<td>Environmental (EN)</td>
<td>Environmental (EN)</td>
<td>Environmental (EN)</td>
<td>CSR</td>
</tr>
<tr>
<td>Aspect</td>
<td>Policy</td>
<td>Disclosure on management approach</td>
<td>Goals and performance</td>
<td>Training and awareness</td>
<td>CSR pyramid 2nd level</td>
</tr>
<tr>
<td>Definition</td>
<td>Brief, organisation-wide policy (or policies) that defines the organisation's overall commitment related to the Environmental Aspects or state where this can be found in the public domain (e.g. web link) (GRI 2000-2011, p.32)</td>
<td>Provide a concise disclosure on the Management Approach items with reference to Environmental Aspects (GRI 2000-2011, p. 31)</td>
<td>Organisation-wide goals regarding performance relevant to the Environmental Aspects (GRI 2000-2011, p. 32)</td>
<td>Procedures related to training and raising awareness in relation to Environmental Aspects (GRI 2000-2011, p. 32)</td>
<td>Legal responsibilities, Obey the law</td>
</tr>
</tbody>
</table>

The last four columns were based on Carroll (1991) as indicated in Table 6.4, and referred to his pyramid of corporate social responsibilities as shown in Figure 6.1.

**Figure 6.1: CSR pyramid**  
Source: Adapted from Carroll (1991)

The coding tables allowed identification of which sustainability/CSR topics were addressed throughout the sections environment, community, and health and safety.
A three-level evaluation cascade was developed to determine a company’s stage of disclosure. The model used basic evaluation criteria adapted from Jenkins and Yakovleva (2006), topic-related evaluation criteria according to GRI guidelines (sustainability) and Carroll (1991) (CSR), and a sustainability index. The sustainability index was developed to measure the percentage of sustainability-related terminology in relation to the total word count over the website sections environment, community, and health and safety. The index worked as final criterion to determine a company’s stage of disclosure.

In order to examine whether quantitative variables would align with the results from the qualitative discourse analysis in terms of identifying the industry leader among Australian gold mining companies analysed for this research, simple statistical data, namely MCAP and Equity ownership (EO) were collected as shown in Table 6.2 and Table 6.5.

Table 6.5: Equity ownership (as at 20 May 2015)

<table>
<thead>
<tr>
<th>No</th>
<th>Company</th>
<th>Owned by institutions (%)</th>
<th>Owned by funds (%)</th>
<th>Owned by insiders (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Newcrest Mining Ltd</td>
<td>52.13</td>
<td>52.35</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Regis Resources Ltd</td>
<td>18.64</td>
<td>17.75</td>
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</tr>
<tr>
<td>5</td>
<td>Northern Star Resources Ltd</td>
<td>44.40</td>
<td>46.16</td>
<td>0</td>
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<tr>
<td>7</td>
<td>Evolution Mining Ltd</td>
<td>24.84</td>
<td>25.00</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>Resolute Mining Ltd</td>
<td>41.32</td>
<td>41.13</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>Norton Gold Fields Ltd</td>
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<td>0.07</td>
<td>0</td>
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<td>22</td>
<td>Focus Minerals Ltd</td>
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<td>Alkane Resources Ltd</td>
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<td>8.09</td>
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<tr>
<td>28</td>
<td>ABM Resources NL</td>
<td>0.62</td>
<td>0.62</td>
<td>0</td>
</tr>
</tbody>
</table>

*Institutional and Fund-level filings are not mutually exclusive so total % owned may exceed 100%
(Source: adapted from Morningstar Independent Investment Research (2015))

6.5 Findings

This section presents the results from content and discourse analysis of environmental and social online disclosure of nine Australian gold mining companies analysed in this thesis.

6.5.1 Content analysis

The content analysis of the website sections environment, community, and health and safety was conducted cross-sectionally within the company groups according to MCAP as shown in Table 6.2. Where necessary due to advanced clarity of
representation, Leximancer concept maps were adjusted according to the protocols provided in Appendix B.

6.5.1.1 Group 1

<table>
<thead>
<tr>
<th>No</th>
<th>Company name</th>
<th>Group</th>
<th>Reference Identification Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Newcrest Mining Ltd</td>
<td>1</td>
<td>#1-7879.7</td>
</tr>
</tbody>
</table>

The concept map, shown as Figure 6.2, indicated that commitments to health and safety were very important corporate responsibility initiatives in group 1. Managing the health and safety issues of workforce and community members contributed substantially to the achievement of company goals.

"Newcrest understands that to reach our goal, we must engage our people in our approach to health and safety" (#1-7879.7)

The company followed a Target Zero policy, including safety issues related to corporate activities such as reporting, measuring, travelling, and also promoting safety standards to communities adjacent to their mining sites.

"Newcrest has a philosophy of Target Zero for health and safety incidents within our operations" (#1-7879.7)

"We are empowering our people to take the initiative in reporting and developing health and safety measures, ensuring best practice aviation and travel safety, and promoting safety in all areas of the community" (#1-7879.7)

According to the representation of the concept map as shown in Figure 6.2, environmental matters were important to the company, second to health and safety issues.

"Newcrest recognises that environmental performance is a critical component of our business" (#1-7879.7)

The company had implemented an Environment Policy that committed them to comply with environmental laws and regulations, manage environmental risks and overall performance, use natural resources efficiently and reduce pollution, as well as rehabilitate the land after mine closure.
"Environmental matters are considered during all stages of our activities" (#1-7879.7)

"Newcrest is committed to monitoring and managing the environmental impacts of our activities to secure a sustainable environmental future for communities surrounding our sites, even after our operations cease" (#1-7879.7)

Figure 6.2: Group 1 – Environment, communities and health & safety

Communities were third in the row of corporate responsibilities in group 1, as displayed in Figure 6.2, indicating moderate importance. The company had also developed Communities Standards resulting in a Communities Policy and facilitated corporate obligations to respect cultural and religious values of communities.

"... identify the cultural values, traditions and beliefs of the communities and to respect and respond to those values and belief systems" (#1-7879.7)
The concept of long-lasting partnerships worked to sustain a licence to operate aiming at corporate and societal benefits equally.

"... long term partnerships that are mutually beneficial over a life of mine time scale" (#1-7879.7)

"... to harmonise our approach to community relations and social objectives" (#1-7879.7)

The company had committed to execute the abovementioned important environmental principles on existing mining sites; however, in relation to future mergers or acquisitions, environmental principles were less important.

"In addition, environmental due diligence is conducted as part of our mergers and acquisition process" (#1-7879.7)

The company's management was using corporate social responsibility standards throughout the categories environment, community, and health and safety for any feasibility checks for, and operations of, future mining projects on a moderately important basis.

"Environmental and social impact assessments are undertaken as part of the feasibility process for new projects and are used as the basis for planning should the project develop into an operation" (#1-7879.7)

### 6.5.1.2 Group 2

<table>
<thead>
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<th>Company name</th>
<th>Group</th>
<th>Reference Identification Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Regis Resources Ltd</td>
<td>2</td>
<td>#3-739.7</td>
</tr>
<tr>
<td>5</td>
<td>Northern Star Resources Ltd</td>
<td>2</td>
<td>#5-692.9</td>
</tr>
</tbody>
</table>

At management level, group 2 companies were found to be consistent in the appreciation given to communities for the social basis of mine operations. Respect and protection of human rights, local culture differences and heritage, traditions and values were given a high level of management interest.

"Valuing diversity through the recognition and respect of the different local cultures, values, traditions and customs, and by providing our workforces with location specific cross cultural training" (#5-692.9)
“Regis recognises and respects the traditions and cultures of Indigenous People and this is reflected in the undertaking of our activities in a socially and environmentally responsible manner” (#3-739.7)

“Protecting and respecting human and property rights, and sites of heritage or cultural significance” (#3-739.7)

In addition, both companies put employment and business opportunities for local community members high up on their business agenda.

“Encouraging consultation and provide opportunities for local communities to share in the benefits which flow from mining activities in their regions, including local employment and business opportunities” (#5-692.9)

“Identifying opportunities for the utilisation of local businesses and the employment of Indigenous People” (#3-739.7)

Furthermore, Northern Star implemented management strategies to support local communities to achieve long-lasting economic and social advantages.

“Incorporating sustainable development initiatives in business plans to ensure that the social and economic benefits obtained by communities are safeguarded in the long-term” (#5-692.9)

“The Company regards its reputation amongst the communities in which it operates as a strategic advantage, and seeks to ensure that local communities benefit from its presence” (#5-692.9)

Moreover, the company had a Stakeholder Policy in use, resulting in a community-stakeholder-company partnership.

“Northern Star encourages the participation and feedback of everyone in all matters relating to stakeholder or community issues, and commits to provide adequate resources to enable effective implementation of this policy” (#5-692.9)

“... and actively encourages open and reciprocal dialogue with local communities and key stakeholders” (#5-692.9)
"The Stakeholder Policy applies to all people employed by Northern Star, its subsidiaries, any contractors or visitors interacting in or with our business" (Page 5-692.9)

"Engaging stakeholders on their concerns, aspirations and values regarding the development, operation and closure aspects of our projects" (Page 5-692.9)

Figure 6.3: Group 2 – Environment, communities and OH&S
However, Northern Star gave health and safety a high priority in terms of corporate social responsibility. They demanded the highest safety level for everyone, including their workforce, contractors, communities and visitors as only \textit{zero harm} was an acceptable outcome.

"Northern Star will not compromise safety as it is our number one priority. The only acceptable safety outcome is zero harm to anyone working at, living near or visiting our sites or offices, or travelling on company business" \cite{5-692.9}

"Northern Star has a duty of care to provide a safe workplace so that anyone involved in our business is not subject to reasonably foreseeable hazards" \cite{5-692.9}

"All employees and contractors at Northern Star have a duty of care under occupational health and safety legislation and at common law to ensure the health and safety of themselves and everyone around them by working in a safe manner by complying with all Occupational Health and Safety policies and procedures" \cite{5-692.9}

At the operational level, both companies were committed to legal obligations and requirements of operating mines, at least to a minimum standard, which could be exceeded if applicable.

"Complying with all applicable legal and statutory requirements as a minimum standard, and ensuring prompt and transparent reporting of any non-compliances" \cite{5-692.9}

"As a minimum, Northern Star will honour its duty of care obligations under all applicable legislation and will work to standards which at least meet or exceed these legal obligations" \cite{5-692.9}

"[Regis] complies with all applicable legislation and operating conditions on a sustainable basis" \cite{3-739.7}

Furthermore, Northern Star had developed its own set of corporate values, referred to as STARR Core Values. Workforce and contractors were committed to follow these corporate standards at any time when dealing with the environment, communities, and health and safety requirements.
"All employees and contractors at Northern Star have a duty to ensure that they act in a manner that reflects our STARR Core Values, and that at all times they honour and respect our commitment to our stakeholders and the communities in which the Company operates" (#5-692.9)

"... complies with the Company’s environmental policies and procedures, and they act in a manner that reflects our STARR Core Values" (#5-692.9)

"... to ensure the health and safety of themselves and everyone around them by working in a safe manner by complying with all Occupational Health and Safety policies and procedures. All personnel must also act in a manner that reflects our STARR Core Values" (#5-692.9)

Additionally, the concept map as shown in Figure 6.3 revealed that both companies in group 2 required internal training for their staff in terms of environmental, community, and health and safety matters.

**Environment**

"Develops a culture of sound environmental practice within its workforce by providing information and training on environmental management" (#3-739.7)

"Providing information, instruction, training and supervision to enable everyone to understand and comply with their environmental obligations and responsibilities" (#5-692.9)

**Community**

"Ensuring that employees and contractors receive training in environment, heritage, cultural awareness and community relations" (#3-739.7)

"... by providing our workforces with location specific cross cultural training, and enforcing the adherence to the Company’s core values" (#5-692.9)

**Health and Safety**

"Providing information, instruction, training and supervision to enable everyone to work safely" (#5-692.9)
Furthermore, Northern Star assigned responsibility to its senior management and supervisors by holding them accountable for the company's obligations to communities.

"Holding managers and supervisors accountable for their responsibilities to local communities at all stages of the Company's activities and operations" (#5-692.9)

"Ensuring that managers and supervisors understand their responsibilities" (#5-692.9)

Unlike Northern Star, which prioritised health and safety matters as part of its management level, Regis allocated its health and safety requirements to the operational level.

"Regis Resources is committed to providing a safe and healthy workplace for all personnel associated with the Company’s operations" (#3-739.7)

"Operates under a formal Safety Management System on all operating mine sites" (#3-739.7)

"Ensures compliance with applicable laws, regulations, and other health and safety obligations" (#3-739.7)

Both companies were aware of potential environmental impacts and had developed procedures to identify and manage environmental risks. With regard to environmental responsibility, both companies referred to environmental management plans and best practice to minimise environmental impacts.

"The Company recognises that mining and exploration activities are associated with a range of potential environmental impacts and has developed the culture and procedures to maintain the integrity of the environment associated with these activities" (#3-739.7)

"Through effective management practices, the Company aims to ensure its activities have a minimum impact on the environment" (#5-692.9)

With regard to mining operations, both companies had committed to operate their mines according to the highest standards in terms of corporate social
responsibility. Both sought to achieve community and stakeholder acceptance to a large extent.

"Regis Resources has a social responsibility to identify all stakeholders within its community who may be affected by its operations, directly or indirectly" (#3-739.7)

"Northern Star operates its business built on the belief that it must be guided by a purpose beyond profit, and that the support and endorsement of its activities by the communities in which it operates is fundamental to the long-term success of its business" (#5-692.9)

On the operational level, both companies sought to engage key stakeholders and communities in mutual communication, consultations and participation activities in order to establish long-lasting, beneficial relationships.

"Maintaining a high level of consultation with local landholders and key stakeholders" (#3-739.7)

"Participation in public, community and government forums" (#3-739.7)

"Establishing mutually acceptable methods of communication, consultation and participation processes to create enduring and beneficial relationships built on shared respect and trust" (#5-692.9)

"Engaging in open and honest dialogue with local communities over their concerns about the impacts of the Company’s mining activities in their locality, and incorporating these concerns into studies and business plans" (#5-692.9)

Finally, Northern Star linked relationships with local communities to its commitment to future community generations in terms of operating its mines in an environmentally friendly manner.

"The Company's success in environmental management is underpinned by its belief that business can and must be conducted without degrading the environment, together with a desire that future generations have the right to enjoy and experience the world as it is today" (#5-692.9)
"Northern Star thinks of purpose beyond profit in terms of how it operates in our work regions, and the contribution it makes to a better future for the communities in which it operates" (#5-692.9)

6.5.1.3 Group 3

<table>
<thead>
<tr>
<th>No</th>
<th>Company name</th>
<th>Group</th>
<th>Reference Identification Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Evolution Mining Ltd</td>
<td>3</td>
<td>#7-382.5</td>
</tr>
<tr>
<td>13</td>
<td>Resolute Mining Ltd</td>
<td>3</td>
<td>#13-150.7</td>
</tr>
<tr>
<td>17</td>
<td>Norton Gold Fields Ltd</td>
<td>3</td>
<td>#17-121.1</td>
</tr>
</tbody>
</table>

The environmental aspect of corporate social responsibility was found to be most important to companies in group 3. They developed environmental management plans and databases, assessed and identified whether and how the environment was affected, and maintained environmental risk management including regular environmental reporting. In addition, they continually reviewed and audited their environmental performance. Staff members and contractors were made aware of the environment and their responsibilities accordingly.

"We focused on enhancing environmental stewardship through the development and implementation of Evolution Environmental Protocols and Life of Mine Environmental Management Plans across all project sites" (#7-382.5)

"Development of the environmental database and geographical information system has continued to clarify land management planning and changes" (#7-382.5)

"Site environmental management focused on detailed monthly environmental monitoring and reporting" (#13-150.7)

"Identify and assess the potential environmental effects of our activities and manage environmental risk accordingly" (#13-150.7)

"Continually improve and regularly monitor, audit and review our environmental performance, including the reduction and prevention of impacts and more efficient use of resources" (#13-150.7)

"Promote environmental awareness among our personnel and contractors to increase understanding of their roles and responsibilities in environmental management" (#13-150.7)
Figure 6.4 demonstrated the corporate environmental responsibility of the companies in group 3 in terms of focus on rehabilitation of areas previously used for mining. Planned mine closure and rehabilitation followed appropriate management strategies.

"Rehabilitation planning during the reporting period focused on the comparison of closure strategies in considering potential mine life extensions. It related to the timing for removal of redundant infrastructure and the revegetation of disturbed areas"  (#13-150.7)

"Key components of Norton's environmental management strategy include compliance with regulatory guidelines [in relation to] ongoing rehabilitation of previously mined areas"  (#17-121.1)

Resolute Mining related water management closely to its corporate environmental strategies. It monitored the use of water, the quality of surface water and groundwater, and sought to manage rainfall runoffs. In accordance with monitoring water quality, the company also dealt with different levels of sulphate, iron and salt in groundwater and runoff waters.

"To improve water use efficiency an interception trench and recovery sump was installed downstream of the dam wall"  (#13-150.7)

"A key risk for environmental management at the Ravenswood Mine is the projected rate of improvement of groundwater and surface water quality around the site"  (#13-150.7)

"The main challenge for compliance remains to be levels of sulphate in ground water, suspended solids and iron levels in runoff waters"  (#13-150.7)

"Replenishment with fresh raw water to account for losses of water to storage, evaporation or seepage helps to stabilize the salinity levels in the combined engineered and natural system"  (#13-150.7)

"Dams were constructed to intercept rainfall runoff in the catchments near the villages"  (#13-150.7)
The companies in group 3 focused on building relationships and partnerships with their local community stakeholders based on mutual trust, respect and honesty to the benefit of key stakeholders, communities and employees alike. The companies emphasised mutuality of respect and trust as well as the persistence of their relationships. Consequently, respecting the cultural heritage and diversity was also on their agenda.

"Evolution strives to build relationships with our community stakeholders based on trust, mutual respect and genuine partnership"  (#7-382.5)

"Fostering long term relationships and partnerships with communities is envisaged to develop mutual understanding, co-operation and respect"  (#13-150.7)

"Recognise and respect the value of cultural heritage and cultural diversity"  (#13-150.7)
They had developed company policies and principles to manage their community relations, and working proactively with local communities was part of their company activities with regard to social responsibility

"Evolution has a Community Relations Policy and Community Principles that we expect our people and our contractors to adhere to"  
(#7-382.5)

"support the development and implementation of sustainable social and economic initiatives within the communities through co-operation and participation"  (#13-150.7)

One of their principles was to communicate frequently with local community stakeholders to achieve feedback on their social performance.

"We welcome feedback at any time regarding how we are performing in relation to our Community Policy and Principles and value any suggestions regarding how we can improve"  (#7-382.5)

"Resolute recognises the need to consult proactively and help manage community issues near its operations"  (#13-150.7)

Furthermore, social initiatives encompassed practical help, mostly to support health issues. Resolute Mining, in particular, invested in medical support resulting in health benefits for community members adjacent to its mining sites.

"Indoor walls of houses are being sprayed with residual insecticide and mosquito nets are being distributed in the community. These measures are achieving a measureable reduction of malaria cases"  (#13-150.7)

"Oxygen concentrators to support resuscitation of new born babies were donated to community health centres in Fourou, Bananso and Torokoro"  (#13-150.7)

"Solar power to run vaccine refrigerators and provide light for microscopes was provided to medical centres in Ouatially, Torokoro and Gouene"  (#13-150.7)

Resolute Mining also focused on local community health issues and provided appropriate medical support to doctors and health care workers. Additional
training was provided to the workforce in order to ensure their awareness of health issues on mining sites in relation to their field of responsibility.

"Support was also provided for a paediatrician to train community health care workers" (#13-150.7)

"96 people so far have been provided Peer training for counselling on HIV" (#13-150.7)

"The Resolute Occupational Health, Safety and Security Policy commits the Company to manage programs that [...] train and ensure individual employees and contractors understand their obligations and are held accountable for their area of responsibility" (#13-150.7)

Evolution Mining, instead, facilitated workplace training focusing on safety and incidents rather than local communities' health issues. Furthermore, Norton Gold Fields provided workforce training with a specific focus on mine operations and mine emergency responses.

"Up-skilling of our workforce through workplace training including safety leadership and incident investigations" (#7-382.5)

"Supporting the training of future mining operators" (#17-121.1)

"Mine rescue competitions are a critical part of the training schedule of mine emergency services, allowing teams to benchmark against their peers and to test their preparedness to perform under pressure" (#17-121.1)

Health issues were associated with local community requirements rather than workforces', contractors' or visitors' health needs. Instead, safety principles were followed in relation to injuries and incidents, and the companies sought to implement a safety culture at a no harm level. The management considered the concept of safety to have a higher priority than the concept of health.

"To support our value of "Safety - every job, every day" we operate under a set of Safety Principles" (#7-382.5)

"The priority actions for improvement of the safety culture at the operation were completed" (#13-150.7)
"The health and safety of our people continues to be our highest priority and we aim to ensure staff and contractors return home unharmed at the end of every day"  (#17-121.1)

"We are focused on achieving our goal of zero harm by continuously improving the health and safety culture, processes and systems at all of our operations"  (#17-121.1)

6.5.1.4 Group 4

<table>
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<tbody>
<tr>
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<td>4</td>
<td>#22-86.8</td>
</tr>
<tr>
<td>23</td>
<td>Alkane Resources Ltd</td>
<td>4</td>
<td>#23-84.9</td>
</tr>
<tr>
<td>28</td>
<td>ABM Resources NL</td>
<td>4</td>
<td>#28-62.9</td>
</tr>
</tbody>
</table>

Focus Minerals provided website section content only in the category environment, with no content in the categories community and health and safety, although the website showed section headlines accordingly. Furthermore, Alkane Resources did not provide a website section in the category health and safety. In addition, ABM Resources provided a combined content for both categories community and environment. Therefore, only five website sections were used for Leximancer analysis in group 4.

Figure 6.5 indicates that the companies in group 4 focused on local communities as the most important part of their corporate social responsibility. To ensure strong relationships with their adjacent communities, they implemented various information and communication strategies. They used online disclosure and print media to provide information about new developments and current mine operations to community members. They also maintained personal consultations with stakeholders.

"Maintenance of detailed community-relevant project information on our website, along with the production of regular community newsletters"  (#23-84.9)

Maintain an open consultation process with regulators, the community and stakeholders"  (#28-62.9)

"In order to ensure strong relationships are maintained with local communities, Alkane is also committed to clear and regular
The gold mining companies closely collaborated with local communities and encouraged their workforce to live nearby and engage in local community events. In terms of the environment, the companies sought to consider community interests.

"Alkane is an active and engaged member of the communities in which it operates. The Group’s employees live locally and participate in local community activities" (#23-84.9)

"ABM is committed to responsible exploration, development, operations and closure and is focused on conducting its business in harmony with stakeholders and the wider community’s desire to conserve and protect the natural environment and community interests" (#28-62.9)
Alkane Resources, in particular, engaged in supporting communities around its mining sites by investing in local infrastructure, supporting local businesses, offering training for employees and funding community events.

“The Company also established the TGO Community Fund, which aims to foster close relations between the TGO team and the local Narrumine Shire community by providing support for local infrastructure and events” (#23-84.9)

“As a company, our goal is to support the development of more resilient regional communities through the establishment of permanent infrastructure, the provision of training and career opportunities to local residents, and general investment in local businesses” (#23-84.9)

ABM Resources valued local communities' heritage and cared for the environment in which it operated mines. It also acknowledged Traditional Owners and cooperated closely with land-related authorities.

"Encourage employees to value the heritage and the environment in which we work" (#28-62.9)

"ABM Resources NL acknowledges that it conducts mineral exploration and mining on land owned by Traditional Owners and that ABM's access to this land is guided through processes with the Central Land Council" (#28-62.9)

In addition, Focus Minerals sought to make informed decisions about environmental operations and focused on keeping the environment sound for future generations.

"It is thus important that managing and safeguarding the environment for both present and future generations forms a vital part of our operations" (#22-86.8)

"Understanding future operating environments in order to make informed environmental decisions during project planning and design" (#22-86.8)

Community matters were closely related to environmental issues. The three companies had a vital interest in their environmental performance and had
managerial strategies in place to monitor and improve their environmental outcomes.

"We recognize that strong environmental performance is essential to our success and continued growth of the company and are therefore committed to managing our activities to reduce adverse effects on the environment whilst at the same time balancing the economic and social needs of sustainable development" (#22-86.8)

"Alkane Resources strives to deliver outstanding environmental and social performance in all that we do" (#23-84.9)

"Proactively develop and maintain management systems to measure and continually improve environmental performance" (#28-62.9)

"Periodically audit ABM’s environmental systems and performance to further improve environmental outcomes" (#28-62.9)

"Identifying opportunities to improve environmental management at every stage of exploration, mine development, operation and closure" (#22-86.8)

In operating their mining sites, the companies complied with legal requirements and industry standards with regard to environmental matters.

"Maintaining compliance and integrity throughout our operations with regards to environmental legislation, regulations and industry best practices" (#22-86.8)

"Comply with legislative and regulatory requirements for the environment" (#28-62.9)

Additionally, they focused on using natural resources efficiently and reducing their environmental footprints.

"Working together with stakeholders with a view towards maximizing resource efficiency whilst at the same time minimizing our environmental footprint through careful, practical and cost effective planning and implementation of mitigation measures throughout a projects life cycle" (#22-86.8)

"Alkane seeks to minimise its environmental footprint at all its mining and exploration sites for the lifetime of those sites" (#23-84.9)
Alkane Resources also concentrated on safe workplaces for its staff.

"The Company is keen [...] to provide a safe and rewarding working environment for employees" *(#23-84.9)*

The second important aspect on the concept map shown as Figure 6.5 was mining. Alkane pointed out that it held all required mining leases, licences and approvals to operate mines.

"The Company holds all the required approvals and licences for its mining and processing operations" *(#23-84.9)*

"Alkane has continued to maintain mining leases, an Environmental Protection Licence and a 1993 development approval from Parkes Shire Council, along with 22 approvals and licences for the mining and processing operations" *(#23-84.9)*

To a major extent, the companies in group 4 focused on stabilising the ecosystem adjacent to their mining sites even during mine operations. By maintaining appropriate environmental practices, they sought to improve the biodiversity of species in flora and fauna. ABM Resources, in particular, had set up detailed management plans to save threatened species and vegetation being endangered by its mining projects.

"We work hard to protect the wide variety of species that live in our mining areas. Our aim is to leave our mining sites as stable functioning ecosystems despite the inevitable change in land form" *(#23-84.9)*

"We are committed to safe environmental practices and to the delivery of biodiversity improvement at all our mining and exploration sites" *(#23-84.9)*

"The management plans detail the mitigation and management techniques to minimise the impact of the project on threatened species and associated vegetation communities" *(#28-62.9)*

In contrast to establishing management plans to save flora and fauna during mine operations, the concept of rehabilitation applied after mine closure, when infrastructure previously used for mining was removed. Rehabilitation activities went beyond recultivating the land and planting or replanting trees. The
company's rehabilitation activities had been very successful as there was an increasing number of animals living in areas previously used for mining.

"Today, the rehabilitated final landforms are becoming increasingly species-rich, with several bird and mammal species (absent prior to mining), established as a result of Alkane's rehabilitation (re-greening) of the mining leases and adjoining land" (#23-84.9)

"After the mining process is over, mine infrastructure is removed and the final landform is rehabilitated to be left in a long-term stable condition. This may include replacement habitats to support new animal species" (#23-84.9)

"Alkane is proud to have played a role in the future wellbeing of our native fish, which will please both nature enthusiasts and local anglers alike" (#23-84.9)

"On learning of a local river rehabilitation project requiring a large number of trees, the Company immediately saw an opportunity to get involved, while at the same time find another home for the trees that needed be cleared from the mine site" (#23-84.9)

In order to make information about their environmental responsibility initiatives publicly available, Alkane Resources provided an active mine site that was open to the public to experience contemporary mining and rehabilitation of land.

"The Peak Hill Gold Mine is one of only a few modern gold mines with an active mining lease open to the public, making the OCE a unique experience where visitors can learn about modern mining and land rehabilitation" (#23-84.9)

### 6.5.2 Discourse analysis

The discourse analysis looked at text analysis, ideology, and intertextuality in order to identify similar communication patterns, mimetic corporate behaviour, and the companies’ stage of online disclosure.

#### 6.5.2.1 Text analysis

During the text analysis, it became obvious that companies presented their online information in two major formats, namely information report and narrative continuous text. There were also website sections where both formats were used
in combination. Two major communication strategies could be identified in relation to the use of tenses and the apparent formats. A third minor strategy appeared to be a hybrid.

**Bullet-point strategy (BPS)**

The bullet point strategy introduces the topic in one or two brief paragraphs using present tense in indicative language mood to outline timeless facts (Williams 2014) about the corporate approach to environmental and social initiatives with regard to corporate responsibility and sustainability. Companies express their attitude toward environmental management, responsibilities for local communities, and a safe and healthy working environment. In particular, they use present tense to communicate their recognition and respect for Indigenous people’s cultural heritage and traditions as a factual statement. They also depict their level of environmental performance as a timeless fact and introduce their policies and further management standards and protocols similarly. One company switched to passive voice to emphasise the importance of protocol adherence at all mine sites.

"Northern Star Resources Limited (Northern Star) has a duty of care and legal obligation to protect the environment, and is committed to managing its activities in an environmentally responsible manner”

(#5-692.9; env)

"Regis recognises and respects the traditions and cultures of Indigenous People […]" (3-739.7; com)

"Newcrest values the safety, health and wellbeing of all our people including the communities in which we operate" (1-7879.7; h&s)

"All of our sites and workplaces are required to meet the protocol requirements, which are audited on a regular basis by an independent third party” (7-382.5; env)

Within the body, this online communication strategy uses bullet point statements to present the most important information the company seeks to bring to the reader’s attention. This presentation style is referred to as an information report (Butt et al. 2012) and effectively highlights important aspects of the information (Snooks 2002). The bullet point statements briefly outline the responsibilities and
accomplishments of a company in relation to sustainability and CSR-related corporate ideas. It is the purpose of the format to arrange information in bundles and present information about a specific topic (Butt et al. 2012). An overview is provided to the reader of what to expect and what is most relevant to the company's understanding of responsible mining.

Depending on the introductory sentence leading to the bullet point statements section, various verb forms are used at the beginning of each statement, such as infinitive, gerund, or conjugated verb forms. Once the verb form is chosen, it is consistent over the complete section. A bullet point statement can encompass several verbs to describe a certain responsibility resulting in the same reason or purpose for the activity, but usually only one verb is used. Nouns may also be used at the beginning of a statement.

"Inform and consult with the community about Newcrest’s activities and projects" (#1-7879.7; env)

"Protecting and respecting human and property rights, and sites of heritage or cultural significance" (#3-739.7; com)

"We understand that all injuries are preventable" (#1-7879.7; h&s)

The communication strategy concludes with another one or two paragraph(s) that provide information about ongoing corporate management initiatives using present and future tense, and active and passive voice. Passive voice is used to focus on further corporate activities being undertaken, while verbs in present tense focus on ongoing processes and procedures. Future tense in the context of company activities is used for predictions that are not based on evidence but most often on opinion.

"Environmental matters are considered during all stages of our activities" (#1-7879.7; env)

“As a minimum, Northern Star will honour its duty of care obligations under all applicable legislation and will work to standards which at least meet or exceed these legal obligations” (#5-692.9; env)

Due to its succinct presentation of information with regard to either environment, community, or health and safety, the bullet point strategy suits companies that
seek to address institutional rather than private target groups online. The format allows disclosure of general information on sustainability or CSR-related matters to provide an overview about the company's environmental and social responsibilities. The strategy is generic in nature and is also applied with minor variations in terms of completeness and tenses used within the conclusion paragraph.

**Facts-evidence strategy (FES)**

The facts-evidence strategy follows a systematic pattern that provides timeless facts followed by evidence from the past.

The first paragraphs present information on the company's attitude to sustainability or CSR-related matters with regard to environment, community, and health and safety, using present tense to highlight these statements as being timeless facts.

"Evolution strives to build relationships with our community stakeholders based on trust, mutual respect and genuine partnership" (#7-382.5; com)

"Our Environmental Protocols consist of 11 standards of best practice management in key business risk areas" (#7-382.5; env)

"The health and safety of our people continues to be our highest priority and we aim to ensure staff and contractors return home unharmed at the end of every day" (#17-121.1; h&s)

Within the following paragraphs, past tense and a reference to a certain point of time in the past is used to give evidence of what has been done in relation to the facts presented in the preceding paragraphs. The evidence part can comprise several paragraphs depending on the topics the company seeks to provide evidentiary information for. The facts-evidence pattern may be used several times within one website section following the same logical order.

"In FY14 we focused on enhancing environmental stewardship through the development and implementation of Evolution Environmental Protocols and Life of Mine Environmental Management Plans across all project sites" (#7-382.5; env)
"In November 2014, we launched our first Shared Value Project, a partnership with Gudjuda Reference Group Aboriginal Corporation in Home Hill, near our Mt Carlton site" (73-382.5; com)

This strategy is narrative in nature rather than generic and suits companies with low MCAP to address non-institutional target groups, such as private investors.

**Hybrid strategy (HS)**

A third pattern of presenting online information could be identified that uses both BPS and FES at the same time.

The hybrid strategy is an interim communication strategy that is used when companies are 'on the move' to retire narrative CSR-related online information based on Carroll's pyramid of corporate responsibilities in favour of generic sustainability disclosure according to GRI guidelines. In addition, the hybrid strategy serves to gradually address private and institutional target groups using narrative and generic elements.
Figure 6.6 indicates the use of online communication strategies by the Australian gold mining companies analysed for this research as of June 2015.

**Figure 6.6: Communication strategies**
6.5.2.2 Ideology
When retiring CSR-dominated information based on Carroll's CSR pyramid on their websites and embracing sustainability-related disclosure, companies with low MCAP imitated the online communication strategy of leaders in their respective industry. They changed from facts-evidence strategy to bullet-point strategy, using the hybrid strategy as an interim solution to provide environmental and social information within each of the three website sections. Only one company bypassed the hybrid strategy to enter into BPS right away.

Institutional isomorphism
In a top-down approach, companies with low MCAP and low institutional EO adopted the GRI-related terminology from the industry leaders. In addition, they incorporated GRI-related themes in their online disclosure, such as commitment, goals, human rights or training/awareness. CSR-related topics about ethical and philanthropic initiatives based on Carroll’s (1991) pyramid of corporate social responsibilities were retired in favour of sustainable subjects in terms of environmental and social disclosure according to GRI guidelines.

Furthermore, the companies adjusted the style of presenting their information from narrative to generic. The narrative style (FES) of providing CSR-related information used 1,700 words per website section on average, whereas the generic style (BPS) comprised 250 words per website section on average.

This went along with the shift from nationally to globally operating companies, which also involved an alteration with regard to EO from private to institutional as well as national to international investors. The examination of MCAP and EO of Australian gold mining companies analysed in this thesis showed that companies with low numbers in both categories used FES as online communication strategy, or they were on the move via the hybrid strategy in order to develop website sections that met the requirements of the bullet point strategy.
Figure 6.7 demonstrates key adjustments from CSR information to sustainability disclosure of Australian gold mining companies.

Figure 6.7: Institutional isomorphism

### 6.5.2.3 Intertextuality

CSR-related information and sustainability disclosure were investigated within each website section in terms of intertextuality. Each website section was coded according to Krippendorf’s (2004) thematic distinction with regard to sustainability as well as CSR-related information.

**Sustainability-related topics**

The following key terms, related to GRI guidelines, appeared in the companies’ website sections environment, community, and health and safety, and assisted in determining the extent to which sustainability topics were disclosed online.

**Commitment**

Most of the companies investigated in this research provided information on their commitment to sustainable mining. Some companies disclosed their commitment with regard to their ‘licence to operate’, the management of environmental impacts as well as an outstanding environmental performance. Others stated their engagement in terms of long-term partnerships with local communities, and safety at all mining sites they operated. Although most of the companies disclosed information on their various environmental and social commitments, a few companies did not provide information on their commitment at all.
**Policy**
Only two companies had appropriate policies in place in relation to all three sections – environment, community, and health and safety. The other companies addressed the topic by referring to 'management systems or strategies', 'philosophy', 'condition', 'model' or 'protocol' to make sure that environmental and social issues were approached properly. One company had developed additional company core values and referred to these beside the GRI-required policies.

**Disclosure**
Most of the companies used the keyword disclosure in relation to 'information', 'consultation' and 'reports' with reference to environmental and community matters. In addition, 'dialogue', and 'feedback' as key initiatives to engage stakeholders, communities and workforce were also employed. Some companies expected feedback and suggestions from stakeholders, whereas others briefly gave information about community meetings and provided newsletters. Only one company provided a stand-alone sustainability report beyond its online disclosure on website sections. The report was accessible from one of the environmental website sections via a hyperlink.

**Goals**
Across all companies and all website sections, the topic of goals was addressed very briefly, mostly within half a sentence. GRI guidelines require reporting about environmental and social company goals; however, the companies neglected to provide sufficient information on their website.

**Training/awareness**
Most companies addressed training/awareness in relation to health and safety. They referred to training units for staff and contractors in order to reach their target safety working conditions. One company focused on information about specific training for mining emergency rescue teams. In terms of community, companies provided brief information about training to increase awareness of and respect for Indigenous people’s cultural traditions and heritage. With regard to the environment, companies provided information on specific training units for staff to understand a company's specific environmental strategy.
Natural resources
Within the website section environment, an additional specific subject matter was addressed, namely natural resources, where companies disclosed information on energy, water, waste, biodiversity and rehabilitation of land. One company provided comprehensive information on its environmental initiatives to protect species and habitats in relation to rehabilitation during and after mine operation.

Human Rights
Some companies provided information about human rights in relation to cultural values, beliefs and traditions of Indigenous communities adjacent to their mining sites.

CSR-related topics
Following Carroll's (1991) pyramid, the four corporate responsibilities (economic, legal, ethical and philanthropic) were chosen as keywords to identify the extent to which Australian gold mining companies analysed for this research address such issues in their website sections environment, community, and health and safety.

Economic CSR
Within environmental online information, Economic CSR was referred to as a 'financially sound manner' to operate a mine. One company mentioned 'cost provisions made to outstanding environmental liabilities', while another company suggested doing business beyond profit. Economic CSR was also referred to as environmental performance as part of the company's success, and a reference was made to the availability of the amount of commodities at different mining sites.

Legal CSR
The second tier of Carroll's pyramid was addressed most frequently. The companies provided information on their commitment to the legal requirements of mining. Statements were made in relation to laws and regulations with regard to different environmental and social aspects. Most of the companies mentioned adhering to the minimum legal requirements. Very few companies stated they adhered to legal obligations beyond the minimum.
Ethical CSR
With regard to ethical CSR, some companies provided information on alternative income generation for local communities and improving health and safety performance. The topic was mostly addressed in terms of community support and fostering close relationships. Some companies disclosed information on economic benefits for local communities in relation to social licence to operate, and staff engagement in local lifestyle on their environment and community sections.

Philanthropic CSR
Only two companies addressed philanthropy within their community and health and safety sections. These were the companies using the narrative FES as their preferred communication strategy. Mostly they provided information on the different projects they supported financially. The majority of the companies did not address this topic.

6.5.3 Stage of disclosure
In order to determine a company’s stage of online disclosure, a three-level evaluation cascade was developed shown as Table 6.6.

At the first level, basic requirements adopted from Jenkins and Yakovleva (2006), namely providing appropriate website sections, having environmental and social company policies in place, and disclosing information with reference to GRI guidelines, were considered. One point was given for each item that could be verified and subsequently the number of points per company was tallied. At the basic level, a maximum of seven points could be achieved. At this level, the results were very divergent, totalling between one and six basic points. Newcrest, Northern Star, and Evolution were the companies with the highest score of six basic points. The yellow highlighted line of the evaluation cascade shows the outcome per company.

At the second level, each company’s website section was examined with regard to intertextuality, as presented in Section 6.5.2.3 in terms of their sustainability and CSR-related topics. Points were given for each topic being addressed. At this level, a maximum of 18 topic points could be obtained for sustainability and another 12 points for CSR, resulting in a total of 30 topic points. After adding the
total topic points, a first impression became obvious in favour of sustainability and the extent to which companies had already retired CSR-related subjects. Five companies achieved 20 to 25 points, whereas four companies reached between 9 and 17 points. Newcrest, Northern Star, Evolution, Regis and Resolute scored 20 points or more. The light-blue line of the evaluation cascade indicates the total topics points per company.

At the third level of evaluating the stage of online disclosure, a sustainability index was developed to measure the total percentage of sustainability disclosure in relation to the total word count (Appendix B) used within a company’s website sections environment, community, and health and safety. The sustainability index identified the extent to which a company provided sustainability disclosure rather than CSR-related online information. The index worked as final criterion to determine the stage of online disclosure. A maximum of 100% could be achieved. The companies scored between 58% and 79%. Newcrest, Northern Star, Focus, and ABM obtained 70% and more. The percentages obtained per company can be found in the evaluation cascade printed in bold red numbers.

Finally, all intermediate results were added, at which the sustainability index in percent was converted to ordinary numbers, for example, 77% became 77 points. A matured stage of online disclosure was identified within the range of 89–137 total evaluation points, whereas adolescence was identified between 52 and 88 points, and an infant approach to online disclosure was implied within the range of 0–51 points. As a result, four companies were classified as matured in terms of online disclosure, and five companies were identified as adolescent. No company was ranked as being infant. The penultimate line of the evaluation cascade shows the final stage of online disclosure per company by total evaluation points, while the last line indicates the results in actual terms.
Table 6.6: Evaluation Cascade

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<tr>
<th>Basics</th>
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<th>Group 2</th>
<th>Group 3</th>
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Stage of online disclosure - Evaluation Cascade

Group 2 Group 3 Group 4

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### Sustainability topics

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#### Training/awareness

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| Sustainability points | 15 | 16 | 15 | 14 | 15 | 10 | 6 | 8 | 13 |
### CSR topics

#### Economic

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<th>Community</th>
<th>Health &amp; safety</th>
<th>Environment</th>
<th>Community</th>
<th>Health &amp; safety</th>
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#### CSR points

<table>
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<tr>
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<th>Community</th>
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#### Total topic points

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#### Sustainability Index

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<td>567</td>
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<td>171</td>
<td>23%</td>
</tr>
<tr>
<td>450</td>
<td>262</td>
<td>58%</td>
<td>188</td>
<td>42%</td>
</tr>
<tr>
<td>1,291</td>
<td>945</td>
<td>73%</td>
<td>346</td>
<td>27%</td>
</tr>
<tr>
<td>836</td>
<td>507</td>
<td>61%</td>
<td>329</td>
<td>39%</td>
</tr>
<tr>
<td>5,109</td>
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<td>66%</td>
<td>1,714</td>
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</tr>
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<td>463</td>
<td>294</td>
<td>63%</td>
<td>169</td>
<td>37%</td>
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<tr>
<td>210</td>
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<td>2,033</td>
<td>1,229</td>
<td>60%</td>
<td>804</td>
<td>40%</td>
</tr>
<tr>
<td>924</td>
<td>728</td>
<td>79%</td>
<td>196</td>
<td>21%</td>
</tr>
</tbody>
</table>

#### Total evaluation points

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<th>Ethical</th>
<th>Environmental</th>
<th>Community</th>
<th>Health &amp; safety</th>
<th>Philanthropic</th>
<th>CSR points</th>
</tr>
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<tbody>
<tr>
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<td>101</td>
<td>87</td>
<td>96</td>
<td>80</td>
<td>80</td>
<td>76</td>
</tr>
</tbody>
</table>

#### Stage of disclosure

- Economic: matured
- Legal: matured
- Ethical: adolescent
- Environmental: matured
- Community: adolescent
- Health & safety: matured
- Philanthropic: adolescent
- CSR: matured

<table>
<thead>
<tr>
<th>Economic</th>
<th>Legal</th>
<th>Ethical</th>
<th>Environmental</th>
<th>Community</th>
<th>Health &amp; safety</th>
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<th>Stage of disclosure</th>
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<td>101</td>
<td>87</td>
<td>96</td>
<td>80</td>
<td>80</td>
<td>76</td>
<td>98</td>
<td>matured</td>
</tr>
</tbody>
</table>
Newcrest (105 points), Northern Star (101 points), ABM (98 points), and Resolute (96 points) achieved total evaluation points in the range of 89–137 points, identifying their stage of online disclosure as matured. Evolution (87 points), Regis (83 points), Focus and Norton (both 80 points), and Alkane (76 points) were rated as adolescent with regard to their stage of online disclosure. One company of each group arranged according to MCAP (Table 6.2) achieved the matured stage of online disclosure.

Figure 6.8 demonstrates the stage of online disclosure of Australian gold mining companies analysed for this research.

Moreover, the companies at matured stage of online disclosure, namely Newcrest, Northern Star, and ABM, used BPS as their communication strategy, whereas Resolute applied the hybrid format as an interim communication strategy on their way to BPS.

The companies at the adolescent stage of online disclosure used FES or hybrid as their communication strategy. However, Regis and Focus were identified to be outliers because they used BPS to provide non-financial information on their websites.

As a result of the discourse analysis, Newcrest was identified as the industry leader in the field of Australian gold mining companies analysed in this thesis with
regard to BPS as their communication strategy and matured stage of online disclosure.

6.5.4 Business indicators

MCAP and EO, as two quantitative business indicators, were used to verify the results generated by means of discourse analysis to identify the industry leader in relation to online disclosure.

Table 6.7: Market capitalisation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Newcrest</th>
<th>Regis</th>
<th>Northern Star</th>
<th>Evolution</th>
<th>Resolute</th>
<th>Norton</th>
<th>Focus</th>
<th>Alkane</th>
<th>ABM</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCAP A$m</td>
<td>7,879.7</td>
<td>739.7</td>
<td>692.9</td>
<td>382.5</td>
<td>150.7</td>
<td>121.1</td>
<td>86.8</td>
<td>84.9</td>
<td>62.9</td>
</tr>
</tbody>
</table>

As shown in Table 6.7, Newcrest was confirmed as the industry leader according to MCAP at the first level. However, the company ranking order from second to last place differed clearly from the results generated through discourse analysis in relation to stages of online disclosure as shown in Table 6.6 and Figure 6.8.

Table 6.8: Equity ownership

<table>
<thead>
<tr>
<th>Variable</th>
<th>Newcrest</th>
<th>Northern Star</th>
<th>Resolute</th>
<th>Evolution</th>
<th>Regis</th>
<th>Alkane</th>
<th>Focus</th>
<th>ABM</th>
<th>Norton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity ownership</td>
<td>104.48%</td>
<td>90.56%</td>
<td>82.45%</td>
<td>49.84%</td>
<td>36.39%</td>
<td>16.18%</td>
<td>2.96%</td>
<td>1.24%</td>
<td>0.14%</td>
</tr>
</tbody>
</table>

At the second level, Newcrest was again confirmed as the industry leader by applying EO as a measurable variable as shown in Table 6.8, followed by Northern Star at second place. This mirrors the ranking order with regard to stage of online disclosure. Resolute was ranked 3rd place applying EO, which is close to their 4th position in relation to stage of online disclosure. However, according to EO, ABM was ranked second last, whereas the company was ranked 3rd place in relation to stage of online disclosure due to their considerably high sustainability index of 79%.

6.6 Summary

This chapter outlined the core content areas of Australian gold mining companies’ online disclosure on their website sections of environment, community, and health and safety, according to their group membership determined by MCAP. The company with the highest MCAP (A$m 7,879.7) considered health and safety
issues as a very important matter of corporate responsibility, whereas companies belonging to group 2 (MCAP A$m 692.9 – 739.7) focused on community and OH&S matters. Group 3 companies (MCAP A$m 121.1 – 382.5) focused on environmental and safety aspects in the first place, whereas companies indicating the lowest MCAP (A$m 62.9 – 86.8) focused on communities but did not provide any online information in terms of OH&S. Through a linguistic approach, the subsequent discourse analysis identified two main communication strategies and an interim hybrid strategy. In addition, isomorphism attitudes were revealed in terms of sustainability terminology and disclosure. Companies with higher MCAP used an information format to disclose general information on their sustainability initiatives online. Companies with lower MCAP used a narrative format to present company-related information about specific CSR activities. The companies’ current stage of online disclosure emerged from an evaluation cascade in three steps looking at basic requirements, topics addressed online, and the sustainability index. The leading companies of the four groups indicated a mature stage of online disclosure, providing considerably more sustainability information than CSR-related material. The residual five companies were at an adolescent stage of online disclosure, offering a mix of sustainability and CSR-related information on their websites. Finally, two quantitative business indicators confirmed the industry leader of the field with regard to matured stage of disclosure and communication strategy. The next chapter will present in detail the analyses and findings of the quantitative survey as the last part of the exploratory sequential mixed method design.
7 Survey – Analyses and findings

The previous chapter identified the priorities of the researched gold mining companies from their environmental and social online disclosure. Moreover, the companies’ online communication strategies were identified and their current stage of online disclosure was determined.

This chapter refers to RQ3 and covers the quantitative part of the sequential mixed methods research design. The findings will show to what extent investors’ demand non-financial online information relevant to their investment/divestment decision-making.

7.1 Introduction

As mentioned in Section 1.3.3, Amaladoss and Manohar (2013) recommend research on CSR-related online disclosure on corporate websites in relation to stakeholders’ information needs for improved informed decisions and information credibility. Bouten et al. (2011) suggest exploration of the extent to which a broader scope of stakeholders feel satisfied with regard to their information needs beyond environmental disclosure.

The study draws also on Rutherford’s Modern Financial Reporting Theory (2000) as a conceptual framework focusing on useful information as an underlying concept in terms of financial reporting and explaining the information needs of financial stakeholders. The concept has been adapted to explore investors’ information needs in the context of non-financial online disclosure.

In 1975, the UK Accounting Standards Steering Committee suggested “that corporate reports should seek to satisfy, as far as possible, the information needs of users: they should be useful” (Accounting Standards Steering Committee 1975, p. 15).

As a result, the third research question emerged:

- (RQ3) To what extent do Australian investors demand online information in terms of environmental and social CSR-related activities to satisfy their information needs?
In accordance with RQ3, eight hypotheses were developed that are operationalised in Section 7.5.2.

A questionnaire was developed, based on Rutherford’s (2000) Modern Financial Reporting Theory and GRI guidelines, to investigate online information needs of private, organisational and institutional investors in relation to environmental and social online disclosure for investment/divestment decision-making. The predictive and confirmatory potential of online information, its reliability, usefulness and relevance, the comparability of non-financial company online information, as well as specific environmental and social online information were addressed. General issues, such as Internet access, CSR drivers, reporting channels, and the frequency of Internet-based searches for environmental and social online information were also covered. The questionnaire (Appendix C) concluded with demographic questions asking for gender, age groups, level of education, type of investor, and postal code.

### 7.2 Recruiting participants

The researcher was given the opportunity to introduce her research at the 5th Noosa Mining Conference and conduct a pilot study survey. The conference was held on 16–17 July 2015 and sought to bring together resource developers and private, organisational and institutional investors (Dickinson 2015).

During the two days of the conference, a survey information desk was set up (Appendix C). On a moveable wall behind the desk, a poster explaining the research study, previously produced for USC research week 2014, was presented to attract the investors' attention for participation in the survey. A research project information sheet was also presented on the wall and additional RPISs were provided for participants as requested by Ethics.

In addition, conference staff at the conference registration made the delegates aware of the researcher's information desk. Those participants interested in receiving the results from the survey were asked to leave their preferred email address on a separate mailing list. Six participants left their email address plus the convenor of the conference.
7.3 Data collection

This survey was meant to work as a pilot study in the field of serious investors who attended the conference in Noosa. However, the application to conduct a comprehensive online survey among the clientele of an Australia-wide operating investment company was rejected. Hence, the 60 questionnaires collected during the mining conference was later declared to be the main survey.

During several breaks between company presentations, conference attendees approached the information desk and asked for a questionnaire form to fill in. They were provided with a questionnaire printout (11 pages including cover page) and a pen. Filling in a questionnaire took 10–12 minutes on average.

During the first conference day, 35 questionnaires were filled in, followed by another 25 during the second day, resulting in a total sum of 60 questionnaires suitable for analysis.

7.4 Data analysis

An Excel sheet was designed to collect all data from the questionnaire forms in a suitable form to be transferred into SPSS analysing software. Subsequently, absolute and relative frequencies of all questions and items were calculated.

Using cross tabulation (crosstabs), every question or item was compared with demographic categories, such as gender, age group, type of investor, urbanity and state in order to check independence. The central question was whether the probability of ticking off an item was independent on each of the demographic categories. Chi-square test of independence was conducted. Where more than 20% of the cells had an expected frequency of less than 5, Fisher’s Exact test was applied.

When the application to run an improved main online survey was rejected, the pilot study data base was revisited and a hierarchical cluster analysis was applied on specific questions offering various options to choose from. Items such as don’t know/can’t say or others were disregarded because they were too unspecific. Subsequently, the clusters were compared using summative variables and gender, age groups and types of investors were analysed accordingly. Independent samples t-test was used to analyse gender, paired samples t-test to
analyse clusters, and one-way ANOVA to analyse age groups and types of investors. Before using the $t$-test, homogeneity of variance was checked using Levene’s test for equality of variance.

With regard to $p$-value, a colour scheme was applied. If the null hypothesis had to be rejected because the level of significance dropped under 5% ($p < .05$), the $p$-value was marked green to indicate that the result was significant. Conversely, the $p$-value was marked red, if the result was not significant ($p > .05$)

### 7.4.1 Validations

Validation criteria to evaluate reliability, validity and generalisability were considered and appropriate tests were conducted where possible.

**Cronbach’s $\alpha$**

Coefficient (Cronbach’s) $\alpha$ was calculated to measure the internal consistency of items. Results varied from .208 (no acceptable reliability) to .807 (good reliability).

**Face validity**

Face validity was not applied in terms of the pilot study questionnaire. It could not be conducted with regard to an improved questionnaire because this was no longer in demand after the inquiry for the main online survey was rejected.

**Inter-Item-Correlation**

This was not calculated because the items were coded only between 0 and 1. Hence, a correlation was not correctly interpretable.

**Item-to-total correlation**

This test was not conducted because the test was too sophisticated for a pilot study and the improved questionnaire did not eventuate.

**Principal Component Analysis (PCA)**

This was not conducted because the sample size was too small.

**Generalisability**

Due to the small and specific sample size, it was not appropriate to generalise the survey results.
7.4.2 Limitations

The participants were not selected randomly in a broader sense, but belonged to a group of serious investors and were addressed during a specific mining conference. Hence, selection bias occurred. Moreover, the sample of 60 participants was rather small.

7.5 Findings

This section presents descriptive statistical outcomes in relation to participants’ demographics, hypotheses and information on online inquiries from the survey. In addition, findings from hierarchical cluster analysis applied on specific questions offering multiple answering options to choose from are introduced in detail.

7.5.1 Demographics

As shown in Table 7.1, a significant number of participants (45, or 75%) were male, and 15 (25%) were female. According to the general demographics of the Sunshine Coast population, it could be expected that a significant number of participants would belong to the older age group (RDA Sunshine Coast Inc 2012). This perception was confirmed as 30 participants (50%) were over 55, while 23 (38.3%) of the participants belonged to the middle age group 31–55 years of age. The younger age group 18–30 years contributed to the sample with 7 (11.7%) participants. Within the final crosstabs analysis it was found that significantly more female participants (4 or 57.1%) belonged to the younger age group (Fisher’s Exact Test: $\chi^2 = 6.127$, $(df) = 2$, $p = 0.039$).

The level of education also showed a distinct picture with 53 participants (88.3%) claiming a university degree as their highest level of education, followed by 4 (6.7%) with an education at technical and trades level, and 3 (5%) indicating an education to secondary level. No participant indicated an education less than secondary.

In relation to the type of investor, the results were also unambiguous. Most of the participants were private investors (47, or 79.7%), while organisational and institutional investors contributed equally with 6 participants in each group or 10.2% respectively.
Table 7.1: Demographics

<table>
<thead>
<tr>
<th>Category</th>
<th>Numbers</th>
<th>Category</th>
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</tr>
<tr>
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</tr>
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<td>Female</td>
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</tr>
<tr>
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<td>31-55</td>
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<td>38.3</td>
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<td></td>
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<tr>
<td>Institutional</td>
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<td>10.2</td>
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<tr>
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<tr>
<td>Non-urban</td>
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<tr>
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<td>70.2</td>
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<td>14.0</td>
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<tr>
<td>NSW</td>
<td>5</td>
<td>8.8</td>
</tr>
<tr>
<td>VIC</td>
<td>4</td>
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</tr>
</tbody>
</table>

The postal code revealed that 42 participants (72.4%) came from urban places of residency, while 16 or 27.6% were from non-urban places of residency. However, the 60 participants came from four different states. Most participants (40, 70.2%) came from Queensland, followed by 8 participants (14%) from Western Australia. Participants from New South Wales numbered 5 (8.8%) and 4 (7%) came from Victoria.

7.5.2 Descriptives

The following eight hypotheses cover CSR understanding, drivers for CSR activities, and non-financial online disclosure. Moreover, Rutherford’s (2000) requirements for useful financial information to satisfy investors’ information needs are addressed, namely reliability and relevance of information, company comparison, and predictive and confirmatory properties of information.

7.5.2.1 Hypothesis 1

H1: Investors have different understandings of what to subsume under CSR.

Question 2 of the questionnaire was operationalised to test hypothesis H1.
Q2: What does corporate social responsibility (CSR) mean to you?
(Tick any that apply)

*Cronbach’s alpha*

Cronbach’s α was calculated .755. Therefore, the internal consistency of items in question 2 shows an acceptable reliability.

*Descriptive level*

Most of the investors (51, 85.0%) associated CSR with being socially responsible as indicated in Table 7.2.

Environmental issues were considered to represent the term CSR by 41 investors (68.3%), followed by 38 investors (63.3%) who associated CSR with sustainability. Thirty-six investors (60%) linked the term CSR to health and safety issues.

Table 7.2: Results Q2

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<th>Options</th>
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<td>68.3</td>
</tr>
<tr>
<td>Sustainability</td>
<td>38</td>
<td>63.3</td>
</tr>
<tr>
<td>Health and safety issues</td>
<td>36</td>
<td>60.0</td>
</tr>
<tr>
<td>Water issues</td>
<td>24</td>
<td>40.0</td>
</tr>
<tr>
<td>Energy issues</td>
<td>20</td>
<td>33.3</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>16</td>
<td>26.7</td>
</tr>
<tr>
<td>Global warming</td>
<td>12</td>
<td>20.0</td>
</tr>
<tr>
<td>&quot;green&quot;</td>
<td>8</td>
<td>13.4</td>
</tr>
<tr>
<td>Don’t know/can’t say</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Water issues were associated with CSR by 24 investors (40%), and 20 participants (33.3%) linked energy issues to the term.

Biodiversity was associated with CSR by 16 investors (26.07%), while 12 investors (20%) linked global warming to CSR understanding.

Only 8 people (13.4%) understood CSR by thinking of "green".
Statistical level

Significantly more of the male (41/45, 91.1%) than female investors (10/15, 66.7%) associated being socially responsible with CSR (Fisher’s Exact Test: $\chi^2 = 5.272, (df) = 1, p = .036$).

However, significantly more of the female investors (14/15, 93.3%) linked sustainability to the term CSR than male participants (24/45, 53.3%) (Chi-Square-Test: $\chi^2 = 7.751, (df) = 1, p = .005$). In addition, it was found that investors of the younger age group 18–30 (7/7, 100%) associated sustainability significantly more often with CSR compared to the middle age group 31–55 (17/23, 73.9%) and the older age group over 55 (14/30, 46.7%) (Fisher's Exact Test: $\chi^2 = 8.599, (df) = 2, p = .011$).

Participants (6/7, 85.7%) who belonged to the younger age group also associated water issues significantly more often with CSR than the middle (10/23, 43.5%) and the older age group (8/30, 26.7%) (Fisher's Exact Test: $\chi^2 = 8.081, (df) = 2, p = .014$).

Furthermore, younger investors (5/7, 71.4%) linked biodiversity significantly more often to CSR than investors of the middle (9/23, 39.1%) or older age group (2/30, 6.7%) (Fisher's Exact Test: $\chi^2 = 15.011, (df) = 2, p = .001$).

The younger age group (4/7, 57.1%) also significantly more often associated global warming with CSR compared to the middle (6/23, 26.1%) and older age group (2/30, 6.7%) (Fisher's Exact Test: $\chi^2 = 9.229, (df) = 2, p = .007$). Moreover, investors from VIC (3/4, 75.0%) linked global warming significantly more often to the term CSR than investors from QLD (6/40, 15.0%), NSW (0/5, 0%) and WA (3/8, 37.5%) (Fisher's Exact Test: $\chi^2 = 8.574, (df) = 3, p = .019$).

The term "green" was significantly more often used to describe CSR by investors of the younger age group (3/7, 42.9%) than investors from the middle (4/23, 17.4%) and the older age group (1/30, 3.3%) (Fisher's Exact Test: $\chi^2 = 7.487, (df) = 2, p = .017$).

7.5.2.2 Hypothesis 2

H2: Investors have different perceptions of what drives companies to conduct CSR.
Question 4 of the questionnaire was operationalised to test hypothesis H2.

**Q4:** What do you think are the most important factors driving companies on corporate responsibility/sustainability (Tick any that apply)

**Cronbach’s alpha**

Cronbach’s α was calculated .403. Therefore, the internal consistency of items in question 4 did not show an acceptable reliability.

**Table 7.3: Results Q4**

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public concerns over environmental issues</td>
<td>35</td>
<td>58.3</td>
</tr>
<tr>
<td>Public concerns over social issues</td>
<td>34</td>
<td>56.7</td>
</tr>
<tr>
<td>Regulation</td>
<td>34</td>
<td>56.7</td>
</tr>
<tr>
<td>Governments</td>
<td>28</td>
<td>46.7</td>
</tr>
<tr>
<td>Investors</td>
<td>26</td>
<td>43.3</td>
</tr>
<tr>
<td>Business considerations (cost cuttings, competition)</td>
<td>17</td>
<td>28.3</td>
</tr>
<tr>
<td>Consumers</td>
<td>17</td>
<td>28.3</td>
</tr>
<tr>
<td>Employees</td>
<td>12</td>
<td>20.0</td>
</tr>
<tr>
<td>Others, please specify:</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>n/a</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

**Descriptive level**

Table 7.3 shows that over 50% of the participants associated public concerns over either environmental (35 investors, or 58.3%) or social issues (34 investors, or 56.7%) as drivers for companies to conduct CSR.

Legal requirements were identified as a second group of CSR drivers. Thirty-four investors (56.7%) associated regulation with a CSR driver, and 28 investors (46.7%) considered governments to be a CSR driver for companies.

Investors were seen as most important factors to be CSR drivers by 26 participants (43.3%).

Business considerations, such as cost cutting and competition, as well as consumers, were found to be important CSR drivers by an equal number of 17 investors or 28.3%.
Only 12 investors (20%) regarded employees as important factors to drive companies to conduct CSR.

There were five additional suggestions for important drivers of CSR, namely, innovation and R&D, people in companies in their role as society members, the idea of prevention rather than cure, SLO, and viability.

**Statistical level**

People from QLD (20/40, 50%) and WA (6/8, 75%) significantly more often associated governments with CSR drivers than NSW (0/5, 0%) and VIC (0/4, 0%) (Fisher's Exact Test: $\chi^2 = 10.068$, ($df$) = 3, $p = .009$).

Investors of the younger age group 18–30 found significantly more often that investors were CSR drivers to companies than middle (7/23, 30.4%) and older age group members (13/30, 43.3%) (Fisher's Exact Test: $\chi^2 = 6.403$, ($df$) = 2, $p = .045$).

Female investors (9/15, 60%) associated business consideration with CSR drivers significantly more often than male investors (8/45, 17.8%) (Fisher's Exact Test: $\chi^2 = .877$, ($df$) = 1; $p = .003$).

Investors from VIC (2/4, 50%) and WA (5/8, 62.5%) found significantly more often that employees were a driver for companies to conduct CSR than investors from QLD (3/40, 7.5%) and NSW (1/5, 20%) (Fisher's Exact Test: $\chi^2 = 13.976$, ($df$) = 3, $p = .001$).

**7.5.2.3 Hypothesis 3**

H3: Investors have specific CSR-related information needs with regard to environmental and social online disclosure.

Question 12 (environmental) and 13 (social) of the questionnaire were operationalised to test hypothesis H3.

**Cronbach's alpha**

Cronbach’s $\alpha$ was calculated .807. Therefore, the internal consistency of items in hypothesis 3 showed a good reliability.
Q12: With regard to environmental information online, in relation to your own investment interests, which of the following do you consider to be most important? (Tick any that apply)

Table 7.4: Results Q12

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on rehabilitation after mine closure</td>
<td>27</td>
<td>45.0%</td>
</tr>
<tr>
<td>Description of environmental management system</td>
<td>25</td>
<td>41.7%</td>
</tr>
<tr>
<td>Performance data</td>
<td>24</td>
<td>40.0%</td>
</tr>
<tr>
<td>Information on land use during mining operations</td>
<td>24</td>
<td>40.0%</td>
</tr>
<tr>
<td>Information on environmental disasters</td>
<td>20</td>
<td>33.3%</td>
</tr>
<tr>
<td>Information on water strategy</td>
<td>15</td>
<td>25.0%</td>
</tr>
<tr>
<td>Information on biodiversity (habitat and species)</td>
<td>14</td>
<td>23.3%</td>
</tr>
<tr>
<td>Information on CO₂ pollution</td>
<td>12</td>
<td>20.0%</td>
</tr>
<tr>
<td>Information on energy usage</td>
<td>12</td>
<td>20.0%</td>
</tr>
<tr>
<td>n/a</td>
<td>2</td>
<td>3.3%</td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Information on major environmental events</td>
<td>1</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

**Descriptive level**

As shown in Table 7.4, particular environmental and management data were found to be most important to investors. Twenty-seven responders (45%) found information on rehabilitation after mine closure most important as online information, followed by descriptions of environmental management systems (25, 41.7%) and information on performance data (24, 40%). Online information on land use during mine operation was found equally important with 24 answers (40%).

A group of 20 investors (33.3%) also found online information on environmental disasters very important.

Online information on water strategy (15, 25%), biodiversity in relation to habitat and species (14, 23.3%), CO₂ emission (12, 20%), and energy usage (12, 20%) were found to be less important as these items were considered important by only 20% to 25% of investors.

In addition to the options offered in the questionnaire, one responder specified information on 'major environmental events' as also important (1, 1.7%).
**Statistical level**

Significantly more investors from QLD (17/40, 42.5%) and NSW (2/5, 40.0%) found online information on environmental disasters most important than investors from VIC and WA (Fisher's Exact Test: $\chi^2 = 7.430$, $(df) = 3$, $p = .039$), while a significant number of investors from QLD (10/40, 25%) and VIC (3/4, 75%) found online information on biodiversity with regard to species and habitat most important (Fisher's Exact Test: $\chi^2 = 8.141$, $(df) = 3$, $p = .023$).

Table 7.5: Results Q13

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on communities adjacent to mine sites</td>
<td>28</td>
<td>46.7%</td>
</tr>
<tr>
<td>Employment data (opportunities, training and education)</td>
<td>26</td>
<td>43.3%</td>
</tr>
<tr>
<td>Information on health &amp; safety initiatives</td>
<td>24</td>
<td>40.0%</td>
</tr>
<tr>
<td>Community/philanthropy investment data</td>
<td>16</td>
<td>26.7%</td>
</tr>
<tr>
<td>Information on conflict resolution</td>
<td>16</td>
<td>26.7%</td>
</tr>
<tr>
<td>Approach to diversity &amp; inclusion</td>
<td>16</td>
<td>26.7%</td>
</tr>
<tr>
<td>Human resources policies</td>
<td>14</td>
<td>23.3%</td>
</tr>
<tr>
<td>Information on social disasters (accidents involving people)</td>
<td>14</td>
<td>23.3%</td>
</tr>
<tr>
<td>Human rights policy</td>
<td>9</td>
<td>15.0%</td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Initiatives undertaken</td>
<td>2</td>
<td>3.3%</td>
</tr>
<tr>
<td>- News</td>
<td>1</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

**Descriptive level**

In terms of social online information shown in Table 7.5, investors found disclosure on communities adjacent to mining sites (28, 46.7%), employment data in relation to employment opportunities, training and education (26, 43.3%), and information on health and safety initiatives most important.

Only 23.3% to 26.7% of investors found social online information important. Community/philanthropy investment data, information on conflict resolution, and the approach to diversity and inclusion also scored poorly, with only 16 investors (26.7%) choosing them. Online information on social disasters involving people as well as information on human resources policies were also equal in numbers (14) and percentages (23.7%) and, as a result, translate into being of less importance to investors.

The least important online information to investors was disclosure on human rights. Only 9 investors (15%) ticked the box.
Two investors indicated other online information was most important to them, namely 'initiatives undertaken' and 'news'.

**Statistical level**

In terms of crosstabs with demographics, no statistically significant results could be identified for the importance of social online information.

### 7.5.2.4 Hypothesis 4

H4: Reliable online information is important to investors in order to achieve information security.

Question 14 of the questionnaire was operationalised to test hypothesis H4.

Q14: Which of the following gives you confidence when assessing companies' online CSR information (Tick any that apply)

**Cronbach's alpha**

Cronbach’s α was calculated .304. Therefore, the internal consistency of items in question 14 did not indicate an acceptable reliability.

#### Table 7.6: Results Q14

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adherence to international principles/guidelines (GRI, Global Compact)</td>
<td>32</td>
<td>53.3</td>
</tr>
<tr>
<td>Performance data</td>
<td>28</td>
<td>46.7</td>
</tr>
<tr>
<td>External assurance</td>
<td>21</td>
<td>35.0</td>
</tr>
<tr>
<td>Quantitative targets</td>
<td>15</td>
<td>25.0</td>
</tr>
<tr>
<td>External experts' perspectives</td>
<td>14</td>
<td>23.3</td>
</tr>
<tr>
<td>Partnership with NGOs</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>Membership with sustainability index</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- How genuine it is</td>
<td>2</td>
<td>3.4</td>
</tr>
<tr>
<td>- Trends year to year</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>n/a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Descriptive level**

As shown in Table 7.6, adhering to international reporting principles and guidelines, such as GRI or Global Compact gave 32 investors (53.3%) most confidence when assessing online information. Performance data ranked second
in favour, with 28 investors (46.7%) indicating it provided confidence in online disclosure, whereas external assurance was found less reliable in relation to assessing online information. Only 21 investors (35%) ticked that box.

Quantitative targets and external experts’ perspectives were considered important by only 25.0% and 23.3% of investors respectively.

Least confidence in relation to assessing online information was placed on partnerships with NGOs and membership with sustainability indices, as these achieved only 8.3% and 5.0% acceptance from investors.

Two investors specified additional options to provide confidence, namely ‘how genuine it is’ and information about the ‘trend from year to year’.

**Statistical level**

In terms of crosstabs with demographics, no statistically significant results could be identified for the importance of social online information.

7.5.2.5 Hypothesis 5

H5: Relevant online information is important to investors for financial decision-making.

Question 3, 11 and 16 of the questionnaire were operationalised to test hypothesis H5.

**Cronbach’s alpha**

Cronbach’s α was calculated .455. Therefore, the internal consistency of items in hypothesis 5 did not show an acceptable reliability.

Q3: How important is information to you about corporate social responsibility in terms of financial decision making? (Tick only one)
Table 7.7: Results Q3

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers</th>
<th>Percentage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>10</td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>18</td>
<td>30.0%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Moderately important</td>
<td>23</td>
<td>38.3%</td>
<td>38.3%</td>
</tr>
<tr>
<td>Of little importance</td>
<td>6</td>
<td>10.0%</td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>3</td>
<td>5.0%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

**Descriptive level**

Due to the relatively small sample of 60 participants, the results were not selective enough to provide an adequate statement. Hence, the scale of five categories was diminished to three, namely very important/important vs. moderately important vs. of little importance/unimportant in order to obtain an appropriate selectivity.

On a general level as shown in Table 7.7, 28 investors (46.7%) found information on corporate social responsibility important with regard to their financial decision-making. For good a third of the sample, (23, 38.3%), CSR was only of moderate importance for their investment decisions, whereas three investors or 15% considered CSR as unimportant for their financial decisions.

**Statistical level**

No statistical significance could be identified in terms of importance of CSR for financial decision making (Q3) and demographic details.

Q11: What would you like to use a corporate website's CSR section for? (Tick any that apply)
### Table 7.8: Results Q11

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading overview of CSR program and objectives</td>
<td>28</td>
<td>46.7</td>
</tr>
<tr>
<td>Getting news</td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>Accessing Key Performance Indicators (KPIs)</td>
<td>17</td>
<td>28.3</td>
</tr>
<tr>
<td>Consulting CSR report (or integrated report)</td>
<td>9</td>
<td>15.0</td>
</tr>
<tr>
<td>Reading case studies</td>
<td>8</td>
<td>13.3</td>
</tr>
<tr>
<td>Drilling down for detailed information about specific topics</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>Finding contact information</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>Seeing comments from stakeholders and experts</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>Posting comments and feedback</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Compliance</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>- Investing in responsible companies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Understanding how other companies handle CSR issues/processes</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>n/a</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

### Descriptive level

Table 7.8 shows that almost half the sample (28, 46.7%) would use a company's CSR website section to get a general idea of their CSR program and objectives.

Nineteen investors (31.7%) would look for news within a corporate website's CSR section, while 17 investors (28.3%) would use this particular section to assess Key Performance Indicators.

Another 9 investors (15.0%) would use the CSR section to read CSR reports and 8 investors (13.3%) would like to read case studies.

Six investors (10%) would like to drill down for detailed information about specific topics, search for contact details, and see comments from stakeholders and experts within the CSR section of a corporate website.

Nobody would use that website section to post comments or feedback.

### Statistical level

Significantly more organisational investors (6/6, 100%) would use the CSR section of a corporate website to read overviews of CSR programs and objectives compared to institutional (4/6, 66.7%) or private investors (18/47, 38.3%) (Fisher's Exact Test: $\chi^2 = 9.133$, ($df$) = 2, $p = .006$).
Investors of the age group over 55 years of age (14/30, 46.7%) showed significantly higher interest in getting news from the CSR website section than investors from the younger (2/7, 28.6%) and the middle age (3/23, 13.0%) groups (Fisher's Exact Test: $\chi^2 = 6.868$, $(df) = 2$, $p = .023$).

Young investors of the age group 18–30 (4/7, 57.1%) marked 'consulting CSR reports' significantly more often than investors of the middle age group (4/23, 17.4%) and older age group (1/30, 3.3%) (Fisher's Exact Test: $\chi^2 = 10.798$, $(df) = 2$, $p = .002$).

Q16: In relation to CSR, what activities would you like to see from companies on their websites? (Tick any that apply)

Table 7.9: Results Q16

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posting news releases</td>
<td>34</td>
<td>56.7</td>
</tr>
<tr>
<td>Answering stakeholders’ questions</td>
<td>32</td>
<td>53.3</td>
</tr>
<tr>
<td>Publishing case studies</td>
<td>18</td>
<td>30.0</td>
</tr>
<tr>
<td>Commenting on relevant topics</td>
<td>16</td>
<td>26.7</td>
</tr>
<tr>
<td>Sharing third-party news, research, opinion, etc.</td>
<td>14</td>
<td>23.2</td>
</tr>
<tr>
<td>Posting videos or other multimedia content</td>
<td>10</td>
<td>16.7</td>
</tr>
<tr>
<td>Requesting comments and feedback</td>
<td>8</td>
<td>13.3</td>
</tr>
<tr>
<td>I’m not interested in what companies disclose on websites</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- reporting on major events relating to their activities</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>n/a</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

**Descriptive level**

As shown in Table 7.9, 24 investors (56.7%) preferred to find information on a company’s website about news releases and 32 investors (53.3%) wanted companies to answer stakeholder questions online.

For 18 investors (30%), publishing case studies were important company activities which they would like to see on corporate websites.

Sixteen participants (26.7%) wanted to see companies comment on relevant topics online, and 14 investors (23.2%) wanted companies to share third-party news, research or opinions online.
Posting videos or other multimedia content online was requested by 10 investors (16.7%) and 8 investors would like to see comments and feedback requested by companies.

Only 4 participants or 6.7% were not interested in any kind of corporate online disclosure.

Two investors suggested reporting on compliance and major events relating to a company's activities (3.3%).

**Statistical level**

In terms of crosstabs with demographics, no statistically significant results could be identified in relation to CSR activities investors would like to see on corporate websites.

**7.5.2.6 Hypothesis 6**

H6: Company comparison using sustainability and CSR-related online information is useful to investors for investment decision making.

Questions 6, 7, 8 and 15 of the questionnaire were operationalised to test hypothesis H6.

**Cronbach’s alpha**

Cronbach’s α was calculated .684. Therefore, the internal consistency of items in hypothesis 6 indicated an acceptable reliability in an exploratory business research study.

Q6: How useful would it be for you to have updates, in relation to your own investments, within the year, on significant environmental and social developments (i.e. between one report and the next)
Table 7.10: Results Q6

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of critical importance</td>
<td>6</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>Very useful</td>
<td>9</td>
<td>15.5</td>
<td>24.1</td>
</tr>
<tr>
<td>Fairly useful</td>
<td>23</td>
<td>39.7</td>
<td>39.7</td>
</tr>
<tr>
<td>Makes no difference to me</td>
<td>21</td>
<td>36.2</td>
<td></td>
</tr>
<tr>
<td>Don't know / no opinion</td>
<td>0</td>
<td>0.0</td>
<td>35.0</td>
</tr>
</tbody>
</table>

**Descriptive level**
As shown in Table 7.10, a minority of 15 participants (24.1%) found it very useful and important to receive additional reports on significant environmental and social developments within the year beyond the normal annual reports, whereas the majority of 23 investors (39.7%) found this only fairly useful. For a comparable number of 21 investors or 35.0% it would not make any difference.

**Statistical level**
In relation to demographics, no statistically significant results could be identified with regard to during the period.

Q7: How useful would it be for you to compare mining companies' CSR activities with regard to investment/divestment decision making?

Table 7.11: Results Q7

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>2</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>15</td>
<td>25.9</td>
<td>29.3</td>
</tr>
<tr>
<td>Moderately important</td>
<td>20</td>
<td>34.5</td>
<td>34.5</td>
</tr>
<tr>
<td>Of little importance</td>
<td>17</td>
<td>29.3</td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>4</td>
<td>6.9</td>
<td>36.2</td>
</tr>
</tbody>
</table>

**Descriptive level**
Table 7.11 shows that comparing mining companies' CSR activities was found useful and important for 17 investors (29.3%), whereas 21 investors or 36.2% considered this to be unimportant and not useful. 20 investors or 34.5% found that comparing CSR activities is moderately important and useful.
**Statistical level**

There are no statistically significant results with regard to comparison of mining companies' CSR activities in relation to demographics.

Q8: What kind of updates would you like to receive from your investment companies between one year's CSR/sustainability report and the next? (Tick any that apply)

Table 7.12: Results Q8

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press release on major developments</td>
<td>30</td>
<td>50.0</td>
</tr>
<tr>
<td>Qualitative comments in quarterly/half year reporting</td>
<td>25</td>
<td>41.7</td>
</tr>
<tr>
<td>Company responses on issues in media/public debate</td>
<td>24</td>
<td>40.0</td>
</tr>
<tr>
<td>Key environmental data</td>
<td>18</td>
<td>30.0</td>
</tr>
<tr>
<td>Once-a-year formal report is fine for me</td>
<td>16</td>
<td>26.7</td>
</tr>
<tr>
<td>Information about local communities adjacent to mining sites</td>
<td>12</td>
<td>20.0</td>
</tr>
<tr>
<td>Information about health &amp; safety activities</td>
<td>12</td>
<td>20.0</td>
</tr>
<tr>
<td>Information about stakeholder events in general</td>
<td>9</td>
<td>15.0</td>
</tr>
<tr>
<td>Information about initiatives and projects for employees</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any material change which affects the share price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly progress updates is a must</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>n/a</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

**Descriptive level**

In relation to updates of periods less than a year, 30 investors (50%) would like to receive press releases on major developments, followed by 24 investors (41.7%) who preferred qualitative comments in quarterly or half yearly reports. As shown in Table 7.12, company responses on issues in media/public debate were considered by 24 investors or 40%.

Eighteen investors (30%) wished to receive additional key environmental data, whereas 16 participants (26.7%) were happy with a once-a-year formal report. Information about local communities adjacent to mining sites, and information about health and safety activities were on the agenda of 12 investors (20%).

The least desired updates were information about stakeholder events in general (9 investors or 15%), and updated information about initiatives and projects for employees.
**Statistical level**

Non-urban participants (10/16, 62.5%) were significantly more interested in receiving updates in relation to company responses on issues in media/public debate than urban investors (13/42, 31%) (Chi²-Test: $\chi^2 = 4.819$, $(df) = 1$, $p = .028$).

Institutional investors (5/6, 83.3%) were significantly more interested in receiving updates with regard to key environmental data than private (13/47, 27.7%) and organisational investors (0/6, 0%) (Fisher's Exact Test: $\chi^2 = 9.356$, $(df) = 2$, $p = .006$).

Male investors (15/45, 33.3%) were significantly more often happy with a once-a-year formal report than female investors (1/15, 6.7%) (Fisher's Exact Test: $\chi^2 = 4.091$, $(df) = 1$, $p = .050$).

Q15: How important is it to you to have access to additional environmental and social corporate online information beyond annual CSR/sustainability reports?

Table 7.13: Results Q15

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>6</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>10</td>
<td>16.9</td>
<td>27.1</td>
</tr>
<tr>
<td>Moderately important</td>
<td>13</td>
<td>22.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Of little importance</td>
<td>22</td>
<td>37.3</td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>8</td>
<td>13.6</td>
<td>50.9</td>
</tr>
</tbody>
</table>

**Descriptive level**

As shown in Table 7.13, this question split the number of participants equally. Thirty investors (50.9%) found it unimportant to have access to additional environmental and social corporate online information beyond annual CSR and sustainability reports. The other half of investors found it important to very important (16 investors or 27.1%) and another 13 investors or 22% found additional information at least moderately important.
**Statistical level**

In terms of crosstabs with demographics, no statistically significant results could be identified in relation to additional environmental and social online information.

### 7.5.2.7 Hypothesis 7

**H7:** Investors are interested in online information with predictive properties.

Question 17 of the questionnaire was operationalised to test hypothesis H7.

**Q17:** How important is it to you to keep in touch with a company and follow its corporate social communication online?

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>4</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>9</td>
<td>15.0</td>
<td>21.7</td>
</tr>
<tr>
<td>Moderately important</td>
<td>19</td>
<td>31.7</td>
<td>31.7</td>
</tr>
<tr>
<td>Of little importance</td>
<td>20</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>8</td>
<td>13.3</td>
<td>46.6</td>
</tr>
</tbody>
</table>

**Descriptive level**

Table 7.14 shows that for almost half of the investors, 28 or 46.6%, keeping in touch with a company and following its corporate social communication online is unimportant, while 19 investors or 31.7% find this moderately important, and 13 investors or 21.7% consider following a company's social online disclosure important to very important.

**Statistical level**

Non-urban investors (9/16, 56.3%) found it significantly more often moderately important to follow keep in touch with a company by following its social disclosure online than urban investors (10/42, 23.8%) (Fisher's Exact Test: \( \chi^2 = 7.125, (df) = 2, p = .031 \)).

### 7.5.2.8 Hypothesis 8

**H8:** Investors find online information useful that has confirmatory properties
Question 9 of the questionnaire was operationalised to test hypothesis H8.

**Q9:** How important is it to you have online access to companies’ annual sustainability reports?

### Table 7.15: Results Q9

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>10</td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>15</td>
<td>25.0%</td>
<td>41.7%</td>
</tr>
<tr>
<td>Moderately important</td>
<td>18</td>
<td>30.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Of little importance</td>
<td>15</td>
<td>25.0%</td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>2</td>
<td>3.3%</td>
<td>28.3%</td>
</tr>
</tbody>
</table>

**Descriptive level**

As shown in Table 7.15, 25 investors or 41.7% found it important to very important to have online access to companies’ annual sustainability reports, whereas 18 investors or 30% found it only moderately important, and 17 investors or 28.3% found it unimportant.

**Statistical level**

Statistically significant results beyond the descriptive level could not be identified in terms of demographics related to the importance of sustainability reports.

### 7.5.2.9 Online inquiry

Three additional questions that did not contribute to hypotheses testing covered topics related to online inquires, such as the investors’ access to internet, companies’ reporting channel and the frequency of investors’ search for information online.

**Cronbach’s alpha**

Cronbach’s α was calculated .208. Therefore, the internal consistency of items with regard to online inquiries did not indicate an acceptable reliability.

**Q1:** Do you have internet access at any time you want?
7 | Survey – Analyses and findings

Table 7.16: Result Q1

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>55</td>
<td>93.2</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>6.8</td>
</tr>
</tbody>
</table>

**Descriptive level**

Table 7.16 shows a clear majority of 55 investors or 93.2% indicated they have access to the Internet at all times they wanted, whereas only 4 investors or 6.8% had only a limited access to the Internet.

**Statistical level**

No statistically significant results in relation to demographics and access to the Internet could be identified.

Q5: If a company uses its corporate website as its primary reporting channel (web-based reporting), how would you rate this choice? (Please tick A and B)

Table 7.17: Results Q5

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers absolute</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very useful</td>
<td>28</td>
<td>48.3</td>
</tr>
<tr>
<td>Quite useful</td>
<td>18</td>
<td>31.0</td>
</tr>
<tr>
<td>No different to other formats</td>
<td>11</td>
<td>19.0</td>
</tr>
<tr>
<td>Don’t know/Can’t say</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Section B</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online information is ok for me</td>
<td>35</td>
<td>70.0</td>
</tr>
<tr>
<td>I prefer an actual document (newsletter, hard copy, etc.)</td>
<td>9</td>
<td>18.0</td>
</tr>
<tr>
<td>It depends on external assurance</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>I don’t trust information published only online</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Descriptive level**

As shown in Table 7.17, almost half of the investors (28/60, 48.3%) found it very useful if a company used its corporate website as its primary reporting channel, and 18 investors or 31.0% found it quite useful, while 11 investors or 19% found no difference to other formats. Only 1 investor or 1.7% had no specific opinion.

Presenting information online was acceptable for 35 investors or 70%, while 9 investors or 18% preferred to have actual documents such as newsletters or hard
copies. Six investors or 12% found that online information as the only channel of disclosure needed external assurance.

**Statistical level**

A crosstab analysis between section A and B revealed that there is a relation between the two. Participants who marked "usefulness" (46/60, 79.3%) significantly more often also marked "online information is ok for me" (35/60, 70.0%) (Fisher's Exact Test: $\chi^2 = 19.428$, $(df) = 1$, $p = .000$).

Q10: How often do you use the internet to search for information, in relation to your own investments, about environmental or social information?

**Table 7.18: Results Q10**

<table>
<thead>
<tr>
<th>Options</th>
<th>Numbers</th>
<th>Percentage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every day</td>
<td>12</td>
<td>20.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Several times a week</td>
<td>4</td>
<td>6.7%</td>
<td></td>
</tr>
<tr>
<td>About once a week</td>
<td>3</td>
<td>5.0%</td>
<td>11.7%</td>
</tr>
<tr>
<td>About once a month</td>
<td>5</td>
<td>8.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Hardly ever</td>
<td>27</td>
<td>45.0%</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>9</td>
<td>15.0%</td>
<td>60.0%</td>
</tr>
</tbody>
</table>

**Descriptive level**

Table 7.18 shows that a clear majority of 36 investors or 60% indicated that they would hardly ever or never search online for environmental or social information, whereas 12 investors or 20% declared that they search for this kind of information online every day. Seven investors or 11.7% stated they would conduct online searches for environmental and social information several times a week or at least once a week, whereas 5 investors or 8.4% suggested they would search online about once a month.

**Statistical level**

No further results could be identified on the statistical level in relation to demographics and the frequency of online search for environmental and social information.
7.5.3 Hierarchical cluster analysis

Hierarchical cluster analysis was applied on suitable questions of the questionnaire, where multiple answering options were available to choose from.

7.5.3.1 Question 2

![Dendogram Q2](image)

Figure 7.1: Dendogram Q2

Figure 7.1 shows that two clusters emerged. They comprised the following items as shown in Table 7.19:

Table 7.19: Q2 - Clusters

<table>
<thead>
<tr>
<th>Item no</th>
<th>General</th>
<th>Item no</th>
<th>Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sustainability</td>
<td>4</td>
<td>“green”</td>
</tr>
<tr>
<td>1</td>
<td>Environmental issues</td>
<td>5</td>
<td>Water issues</td>
</tr>
<tr>
<td>2</td>
<td>Socially responsible</td>
<td>7</td>
<td>Biodiversity</td>
</tr>
<tr>
<td>3</td>
<td>Health and safety issues</td>
<td>8</td>
<td>Energy issues</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>9</td>
<td>Global warming</td>
</tr>
<tr>
<td></td>
<td>Summative variable</td>
<td></td>
<td>Summative variable</td>
</tr>
<tr>
<td></td>
<td>Q2_general = Item1+Item2+Item3+Item6</td>
<td></td>
<td>Q2_specific = Item4+Item5+Item7+Item8+Item9</td>
</tr>
<tr>
<td></td>
<td>= 2.77</td>
<td></td>
<td>= 1.33</td>
</tr>
</tbody>
</table>

What does CSR mean to you?
Cluster comparison

T-test for paired samples: means(Q_general) = 2.77
means(Q_specific) = 1.33
On average, 2.77 items were ticked off with regard to general items, and 1.33 items in terms of specific items.

Test statistics T= 7,761, (df) = 59, p = < .001

Significantly more often the participants ticked off general items (sustainability, environmental issues, socially responsible, and health and safety issues) compared to specific items (“green”, water issues, biodiversity, energy issues, and global warming).

Gender

a) Gender per clusters (independent samples t-test)

Table 7.20: Q2 - Gender vs. clusters

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2_general</td>
<td>male</td>
<td>2.76</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>2.80</td>
</tr>
<tr>
<td>Q2_specific</td>
<td>male</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>1.47</td>
</tr>
</tbody>
</table>

In relation to independent samples t-test, homogeneity of variance was tested using Levene test.

Q2_general: F = 0.765, p = .385

Q2_specific: F = 0.547, p = .463

In relation to gender, the variances are approximately equal.

Q2_general: T = -.133, (df) = 58, p = .895

Q2_specific: T = -.178, (df) = 58, p = .713

As shown in Table 7.20, there are no differences in ticking off general or specific items with regard to gender.
Male and female participants equally often ticked off general items as well as specific items.

Female compared to male participants equally often ticked off general items (2.8 vs. 2.76) but more often specific items than male participants (1.47 vs. 1.29).

b) Cluster per gender (paired samples t-test)

Table 7.21: Q2 - Clusters vs. gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Cluster</th>
<th>Means</th>
<th>Test statistics</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>male</td>
<td>Q2_general</td>
<td>2.76</td>
<td>6.424</td>
<td>44</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>Q2_specific</td>
<td>1.29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>Q2_general</td>
<td>2.80</td>
<td>4.641</td>
<td>14</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>Q2_specific</td>
<td>1.47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.21 shows that male as well as female participants significantly more often ticked off general than specific items.

**Age groups**

Table 7.22 shows that members of the younger age group equally often ticked off general and specific items, whereas the middle and older age group clearly tended to favour general items.

Table 7.22: Q2 - Age groups vs. clusters

<table>
<thead>
<tr>
<th>Means</th>
<th>18 - 30</th>
<th>31 - 55</th>
<th>over 55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2_general</td>
<td>3.43</td>
<td>2.87</td>
<td>2.53</td>
</tr>
<tr>
<td>Q2_specific</td>
<td>3.00</td>
<td>1.65</td>
<td>0.70</td>
</tr>
</tbody>
</table>

It is also obvious that younger participants generally ticked off more items (3.43 and 3.00 respectively) compared to the older age group (2.53 and 0.70 respectively).

a) Age groups per cluster (one-way ANOVA)

Q2_general: F = 2.078, p = .135
Q2_specific: F = 8.201, p = .001

The age groups ticked off general items equally often.
Younger participants significantly more often ticked off specific items than older participants.

b) Cluster per age group (paired samples t-test)

Table 7.23: Q2 - Clusters vs. age group

<table>
<thead>
<tr>
<th>Age group</th>
<th>Cluster</th>
<th>Means</th>
<th>Test statistics</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 30</td>
<td>Q2_general</td>
<td>3.43</td>
<td>0.812</td>
<td>6</td>
<td>0.448</td>
</tr>
<tr>
<td></td>
<td>Q2_specific</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 – 55</td>
<td>Q2_general</td>
<td>2.87</td>
<td>3.801</td>
<td>22</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Q2_specific</td>
<td>1.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>over 55</td>
<td>Q2_general</td>
<td>2.53</td>
<td>8.137</td>
<td>29</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>Q2_specific</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.23 shows that members of the age group 18–30 ticked off general items equally often compared to specific items.

Members of the middle and older age group significantly more often ticked off general items compared to specific items in relation to Q2.

Types of investors

Table 7.24 indicates that the private, organisational and institutional investors showed a similar attitude with regard to ticking off items, although there was a tendency to choose general compared to specific items.

Table 7.24: Q2 - Type of investors vs. clusters

<table>
<thead>
<tr>
<th></th>
<th>Private investors</th>
<th>Organisational investors</th>
<th>Institutional investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2_general</td>
<td>2.72</td>
<td>2.67</td>
<td>3.17</td>
</tr>
<tr>
<td>Q2_specific</td>
<td>1.32</td>
<td>1.00</td>
<td>1.50</td>
</tr>
</tbody>
</table>

a) Types of investors per cluster (one-way ANOVA)

Q2_general: F = 0.433, p = .651

Q2_specific: F = 0.151, p = .860

Private, organisational and institutional investors ticked off general as well as specific items equally often.
b) Clusters per investors (paired samples t-test)

Table 7.25: Q2 - Clusters vs. type of investors

<table>
<thead>
<tr>
<th>Type of investor</th>
<th>Cluster</th>
<th>Means</th>
<th>Test statistics</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private investors</td>
<td>Q2_general</td>
<td>2.72</td>
<td>6.487</td>
<td>46</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>Q2_specific</td>
<td>1.32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational investors</td>
<td>Q2_general</td>
<td>2.67</td>
<td>3.371</td>
<td>5</td>
<td>0.020</td>
</tr>
<tr>
<td></td>
<td>Q2_specific</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional investors</td>
<td>Q2_general</td>
<td>3.17</td>
<td>2.99</td>
<td>5</td>
<td>0.031</td>
</tr>
<tr>
<td></td>
<td>Q2_specific</td>
<td>1.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 7.25, all types of investors significantly more often ticked off general than specific items.

Due to the fact that private investors formed the largest group among the participants, a significantly smaller p-value emerged compared to organisational and institutional investors, although the difference between the means is the lowest in relation to private investors.

7.5.3.2 Question 4

Figure 7.2: Dendogram Q4
Again, as with Q2, Figure 7.2 shows that two clusters emerged. They comprised the following items as shown in Table 7.26:

**Table 7.26: Q4 - Clusters**

<table>
<thead>
<tr>
<th>Item no</th>
<th>Regulatory</th>
<th>Item no</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 5 6 7</td>
<td>Governments Public concerns over environmental issues Public concerns over social issues Regulation</td>
<td>2 3 4 8 9</td>
<td>Consumers Investors Employees Business considerations (cost cuttings etc.) Others</td>
</tr>
<tr>
<td></td>
<td>Summative variable Q4_regulatory = Item1+Item5+Item6+Item7 = 2.18</td>
<td></td>
<td>Summative variable Q4_individual = Item2+Item3+Item4+Item8+Item9 = 1.40</td>
</tr>
</tbody>
</table>

**Cluster comparison**

T-test for paired samples: means(Q_regulatory) = 2.18 means(Q_individual) = 1.40

On average, 2.18 items were ticked off with regard to regulatory items, and 1.40 items in terms of individual items.

Test statistics $T= 3.573$, ($df$) = 59, $p = .001$

Significantly more often the participants ticked off regulatory items (governments, public concerns over environmental issues, public concerns over social issues, regulation) compared to individual items (consumers, investors, employees, business considerations, others).

**Gender**

a) Gender per clusters (independent samples t-test)

**Table 7.27: Q4 - Gender vs. clusters**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4_regulatory</td>
<td>male 2.22</td>
</tr>
<tr>
<td></td>
<td>female 2.07</td>
</tr>
<tr>
<td>Q4_individual</td>
<td>male 1.31</td>
</tr>
<tr>
<td></td>
<td>female 1.67</td>
</tr>
</tbody>
</table>

In relation to independent samples t-test, homogeneity of variance was tested using Levene test.
Q4_general: $F = 0.765, p = .836$

Q4_specific: $F = 0.547, p = .691$

As shown in Table 7.27, variances are equally distributed in relation to gender.

Q4_regulatory: $T = .404, (df) = 58, p = .688$

Q4_individual: $T = -1.009, (df) = 58, p = .317$

With regard to gender, there are no differences in ticking off regulatory or individual items.

Male and female participants equally often ticked off regulatory items as well as individual items.

Female compared to male participants slightly less often ticked off regulatory items (2.07 vs. 2.22) but more often individual items than male participants (1.67 vs. 1.31).

b) Clusters per gender (paired samples t-test)

Table 7.28: Q4 - Clusters vs. gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Cluster</th>
<th>Means</th>
<th>Test statistics</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>male</td>
<td>Q4_regulatory</td>
<td>2.22</td>
<td>3.481</td>
<td>44</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Q4_individual</td>
<td>1.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>Q4_regulatory</td>
<td>2.07</td>
<td>1.031</td>
<td>14</td>
<td>0.320</td>
</tr>
<tr>
<td></td>
<td>Q4_individual</td>
<td>1.67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.28 shows that male participants significantly more often ticked off regulatory than individual items. Female participants did not show a significant difference in how often they ticked off regulatory or individual items in Q4, although they ticked off slightly more often regulatory than individual items. However, firstly the difference is not as big (0.4) as with male participants and secondly, the total number of female participants in the sample is significantly smaller.
Age groups

Table 7.29 shows, that members of the younger age group more often ticked off individual items (2.57) compared to the middle and older age group, who clearly prefer regulatory items to describe drivers for CSR activities (2.26 and 2.17 respectively).

Table 7.29: Q4 - Age groups vs. clusters

<table>
<thead>
<tr>
<th>Means</th>
<th>18 - 30</th>
<th>31 - 55</th>
<th>over 55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4_regulatory</td>
<td>2.00</td>
<td>2.26</td>
<td>2.17</td>
</tr>
<tr>
<td>Q4_individual</td>
<td>2.57</td>
<td>1.22</td>
<td>1.27</td>
</tr>
</tbody>
</table>

Age groups per cluster (one-way ANOVA)

Q4_regulatory: $F = 0.113, p = .894$

Q4_individual: $F = 4.378, p = .017$

The age groups ticked off regulatory items almost equally often.

Younger participants significantly more often ticked off individual items than members of the middle and older age groups.

a) Cluster per age group (paired samples t-test)

Table 7.30: Q4 - Clusters vs. age group

<table>
<thead>
<tr>
<th>Age group</th>
<th>Cluster</th>
<th>Means</th>
<th>Test statistics</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 30</td>
<td>Q4_regulatory</td>
<td>2.00</td>
<td>-1.00</td>
<td>6</td>
<td>0.356</td>
</tr>
<tr>
<td>18 – 30</td>
<td>Q4_individual</td>
<td>2.57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 – 55</td>
<td>Q4_regulatory</td>
<td>2.26</td>
<td>3.668</td>
<td>22</td>
<td>0.001</td>
</tr>
<tr>
<td>31 – 55</td>
<td>Q4_individual</td>
<td>1.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>over 55</td>
<td>Q4_regulatory</td>
<td>2.17</td>
<td>2.645</td>
<td>29</td>
<td>0.013</td>
</tr>
<tr>
<td>over 55</td>
<td>Q4_individual</td>
<td>1.27</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.30 shows that members of the age group 18–30 ticked off individual items slightly more often regulatory items. However, due to the small number of young participants in the sample, there is no significant difference.

In contrast, there is a significant difference in relation to ticking off clusters in relation to Q4. Significantly more often they ticked off regulatory items rather than individual ones.


7 | Survey – Analyses and findings

**Types of investors**

Table 7.31 indicates that the private, organisational and institutional investors showed a similar attitude with regard to ticking off items, although there was a tendency to choose general compared to specific items.

Table 7.31: Q4 - Type of investors vs. clusters

<table>
<thead>
<tr>
<th>Means</th>
<th>Private investors</th>
<th>Organisational investors</th>
<th>Institutional investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4_regulatory</td>
<td>2.13</td>
<td>2.83</td>
<td>2.00</td>
</tr>
<tr>
<td>Q4_individual</td>
<td>1.47</td>
<td>1.33</td>
<td>1.00</td>
</tr>
</tbody>
</table>

a) Types of investors per clusters (one-way ANOVA)

Q4_regulatory: F = 0.858, $p = .430$

Q4_individual: F = 0.415, $p = .662$

Private, organisational, and institutional investors ticked off regulatory items almost equally often. Though there are differences, organisational investors ticked off regulatory items more often than institutional investors but they are not significant due to the small number of cases within the sample.

With regard to individual items, the age groups ticked them off almost equally often.

b) Clusters per investors (paired samples t-test)

Table 7.32: Q4 - Clusters vs. type of investors

<table>
<thead>
<tr>
<th>Type of investor</th>
<th>Cluster</th>
<th>Means</th>
<th>Test statistics</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private investors</td>
<td>Q4_regulatory</td>
<td>2.13</td>
<td>2.726</td>
<td>46</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>Q4_individual</td>
<td>1.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational</td>
<td>Q4_regulatory</td>
<td>2.83</td>
<td>1.695</td>
<td>5</td>
<td>0.151</td>
</tr>
<tr>
<td>investors</td>
<td>Q4_individual</td>
<td>1.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>Q4_regulatory</td>
<td>2.00</td>
<td>1.369</td>
<td>5</td>
<td>0.229</td>
</tr>
<tr>
<td>investors</td>
<td>Q4_individual</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 7.32, private investors ticked off regulatory items significantly more often than individual ones.

Organisational and institutional investors ticked off regulatory items more often than individual ones, but due to the small number of cases within the sample a significant result cannot be identified.
7.5.3.3 Question 8
The items were relatively heterogeneous, such that only small clusters with a maximum of three items could be identified. Therefore, a further analysis using summative variables did not make sense.

7.5.3.4 Question 11
The dendogram showed that the items were absolutely heterogeneous. Hence, no clusters could be identified.

7.5.3.5 Question 12

![Dendogram Q12](image)

**Figure 7.3: Dendogram Q12**

In relation to Q12, two main clusters emerged as shown in Figure 7.3. They comprised the following items as shown in Table 7.33.
Table 7.33: Q12 - Clusters

<table>
<thead>
<tr>
<th>Item no</th>
<th>Environment</th>
<th>Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Information on energy use</td>
<td>Information on land use during mining operations</td>
</tr>
<tr>
<td>3</td>
<td>Information on biodiversity</td>
<td>Information on rehabilitation after mine closure</td>
</tr>
<tr>
<td>5</td>
<td>Information on CO2 emission</td>
<td>Information on environmental disasters</td>
</tr>
<tr>
<td>6</td>
<td>Information on water strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summative variable Q12_environment = Item2+Item3+Item5+Item6 = 0.88</td>
<td>Summative variable Q12_land = Item7+Item8+Item9 = 1.18</td>
</tr>
</tbody>
</table>

The two residual items ‘description of environmental management systems’ and ‘performance data’ were left separately within the cluster analysis because they could not be aligned to any other item. The two items have already been analysed during the descriptive analysis of Q12.

**Cluster comparison**

T-test for paired samples:

\[
\begin{align*}
\text{means}(Q_{\text{environment}}) &= 0.88 \\
\text{means}(Q_{\text{land}}) &= 1.18
\end{align*}
\]

On average, 0.88 items were ticked off with regard to environment-related items, and 1.18 items in terms of land-related items.

Test statistics \(T = -1.875, (df) = 59, p = 0.066\)

The participants ticked off land-related items (information on land use during mining operations, information on rehabilitation after mine closure, information on environmental disasters) slightly more often compared to environment-related items (information on energy use, information on biodiversity, information on CO\(_2\) emission, information on water strategy). However, the distinction is not statistically relevant.

**Gender**

a) Gender per clusters (independent samples t-test)
Table 7.34: Q12 - Gender vs. clusters

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12_environment</td>
<td>male</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>1.27</td>
</tr>
<tr>
<td>Q12_land</td>
<td>male</td>
<td>1.24</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>1.00</td>
</tr>
</tbody>
</table>

In relation to independent samples t-test, homogeneity of variance was tested using Levene test.

Q12_environment: F = 0.765, \( p = 0.617 \)

Q12_land: F = 0.547, \( p = 0.466 \)

In relation to gender, the variances are approximately equal.

Q12_environment: \( T = 1.324, (df) = 58, p = 0.191 \)

Q12_land: \( T = 0.724, (df) = 58, p = 0.472 \)

With regard to gender, there are no differences in ticking off environment-related or land-related items.

However, Table 7.34 shows that female participants tended to tick off environment-related items more often than male participants. Male participants tended to tick off land-related items compared to female participants. Due to the small number of cases in the sample no significant distinction could be identified.

b) Clusters per gender (paired samples t-test)

Table 7.35: Q12 - Clusters vs. gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Cluster</th>
<th>Means</th>
<th>Test statistics</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>male</td>
<td>Q12_environment</td>
<td>0.76</td>
<td>-2.65</td>
<td>44</td>
<td>0.011</td>
</tr>
<tr>
<td></td>
<td>Q12_land</td>
<td>1.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>Q12_environment</td>
<td>1.27</td>
<td>0.939</td>
<td>14</td>
<td>0.364</td>
</tr>
<tr>
<td></td>
<td>Q12_land</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.35 shows male participants significantly more often ticked off land-related items rather than environment-related items, whereas female participants tended to tick off environment-related items more often compared to land-related items.
7 | Survey – Analyses and findings

However, due to the small number of female participants (15) there is no significant distinction.

**Age groups**

Table 7.36 shows that members of the young age group were interested equally in environment-related and land-related items. The older the participants the more clearly they were interested in land-related items.

**Table 7.36: Q4 - Age groups vs. clusters**

<table>
<thead>
<tr>
<th></th>
<th>18 - 30</th>
<th>31 - 55</th>
<th>over 55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12_environment</td>
<td>1.29</td>
<td>0.91</td>
<td>0.77</td>
</tr>
<tr>
<td>Q12_land</td>
<td>1.29</td>
<td>1.00</td>
<td>1.30</td>
</tr>
</tbody>
</table>

a) Age groups per cluster (one-way ANOVA)

Q12_environment: $F = 0.451, p = 0.639$

Q12_land: $F = 0.485, p = 0.618$

In terms of age groups, there was no difference in relation to the frequency of ticking off environment-related and land-related items.

b) Cluster per age group (paired samples t-test)

**Table 7.37: Q12 - Clusters vs. age group**

<table>
<thead>
<tr>
<th>Age group</th>
<th>Cluster</th>
<th>Means</th>
<th>Test statistics</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 30</td>
<td>Q12_environment</td>
<td>1.29</td>
<td>0.000</td>
<td>6</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Q12_land</td>
<td>1.29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 – 55</td>
<td>Q12_environment</td>
<td>0.91</td>
<td>-0.336</td>
<td>22</td>
<td>0.740</td>
</tr>
<tr>
<td></td>
<td>Q12_land</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>over 55</td>
<td>Q12_environment</td>
<td>0.77</td>
<td>-2.504</td>
<td>29</td>
<td>0.018</td>
</tr>
<tr>
<td></td>
<td>Q12_land</td>
<td>1.30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 7.37, members of the young and middle age groups ticked off environment-related and land-related items equally often.

However, the older age group ticked off significantly more often land-related items than environment-related items.
**Types of investors**

It is obvious from Table 7.38 that organisational investors did not tick off environment-related items at all, and in total they ticked off less items in relation to Q12 compared to private and institutional investors.

Table 7.38: Q12 - Type of investors vs. clusters

<table>
<thead>
<tr>
<th>Means</th>
<th>Private investors</th>
<th>Organisational investors</th>
<th>Institutional investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12_environment</td>
<td>1.00</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Q12_land</td>
<td>1.17</td>
<td>1.00</td>
<td>1.67</td>
</tr>
</tbody>
</table>

a) Types of investors per clusters (one-way ANOVA)

Q12_environment: \( F = 1.605, p = 0.210 \)

Q12_land: \( F = 0.618, p = 0.543 \)

In terms of types of investors, there no difference with regard to the frequency of ticking off environment-related items. It is obvious that the small number of cases within the samples plays a significant role because actually there is a significant distinction (1 vs. 0).

In terms of types of investors, there was no difference with relation to the frequency of ticking off land-related items.

b) Clusters per investors (paired samples t-test)

Table 7.39: Q12 - Clusters vs. type of investors

<table>
<thead>
<tr>
<th>Type of investor</th>
<th>Cluster</th>
<th>Means</th>
<th>Test statistics</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private investors</td>
<td>Q12_environment</td>
<td>1.00</td>
<td>-0.929</td>
<td>46</td>
<td>0.358</td>
</tr>
<tr>
<td></td>
<td>Q12_land</td>
<td>1.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational</td>
<td>Q12_environment</td>
<td>0.00</td>
<td>-2.739</td>
<td>5</td>
<td>0.041</td>
</tr>
<tr>
<td>investors</td>
<td>Q12_land</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>Q12_environment</td>
<td>1.00</td>
<td>-1.195</td>
<td>5</td>
<td>0.286</td>
</tr>
<tr>
<td>investors</td>
<td>Q12_land</td>
<td>1.67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 7.39, only organisational investors showed a significant difference in terms of the frequency of ticking off cluster items. They ticked off solely land-related items, one item on average.
7.5.3.6 Question 13
Three clusters emerged, where one cluster encompassed the majority of six items. The residual three items were split between two additional clusters. Therefore, a comparison using summative variables did not make sense.

7.5.3.7 Question 14
The dendogram showed a completely heterogeneous structure. Hence, no clusters could be identified.

7.5.3.8 Question 16
In terms of size, two significantly different clusters emerged. The first cluster encompassed six items, the second contained two items. Hence, a comparison using summative variables did not make sense.

7.6 Summary
This chapter provided various analyses and tests on a data set from 60 questionnaires collected during the Noosa mining conference in 2015. Demographic data of the participants were analysed. Considerably more male than female investors participated in the survey, mainly belonging to the older age group of 55+. Most of the participants claimed a university degree as their highest level of education and a large number of participants were private investors. Eight hypotheses were tested using descriptive analysis. Most investors understood CSR as being socially responsible, followed by environmental and OH&S issues. Public concerns over environmental and social matters were equally identified as drivers for CSR activities. Online information supported by international principles and guidelines was most important to investors in terms of reliable online disclosure and CSR-related information was relevant to most investors with regard to financial decision-making. However, comparing companies by their CSR activities was only moderately important. Moreover, hierarchical cluster analyses on suitable questions were provided. CSR understanding and drivers did not indicate major differences with regard to gender and types of investors, whereas some minor differences emerged in terms of age groups. Clusters on environmental online information were equally distributed among gender, but in terms of age groups and types of investors some minor differences occurred. In the next chapter, the findings of the interviews,
website analysis and survey will be discussed in detail and final results will be presented.
8 Discussion

The previous chapter covered analyses and findings of the quantitative survey. The participants’ demographics were presented, alongside a descriptive analysis of the data set in relation to investors’ information needs. An additional cluster analysis on questions providing multiple answering options to choose from explored the emerging concurrent patterns behind specific choices of online information with regard to gender, age groups and type of investors.

In this chapter, the findings of the qualitative (interviews and website analysis) and quantitative (survey) methods are discussed and linked to the literature in relation to the research questions. Subsequently, this chapter discusses overall corporate cultural distinctions between the European/German and Australian approach with regard to environmental and social online disclosure. Moreover, the importance of non-financial online information in the mining industry, specifically in gold mining, in relation to both the national and international context is addressed.

8.1 Introduction

In this section, the findings are discussed in order to summarise answers and draw out conclusions for each of the research questions. Contributions to the discussion are made from findings of the qualitative research phase I, specifically the interviews and website analysis, and the quantitative survey of phase II. The literature, as presented in the literature review in Chapter 2, is aligned accordingly.

8.1.1 Research question 1

What do Australian investors expect in terms of environmental and social corporate initiatives and correspondent online disclosure?

Drivers

More than half of the private investors regarded regulatory reasons, such as public concerns over environmental issues, social matters and regulations, as the most important drivers for companies to conduct CSR and sustainability initiatives, closely followed by governmental procedures. Individual reasons, such as shareholders’ concerns, business considerations such as competition,
reputation, and cost cuttings, consumers, and employee matters, were of lesser importance.

Young female investors tended to consider individual reasons, whereas older male investors tended to look at regulatory reasons as company drivers for CSR and sustainability.

**Literature alignment**
External pressure groups (Fonseca 2010; Jenkins & Yakovleva 2006; Kotilainen et al. 2015; O'Connor & Gronewold 2012; Perez & Sanchez 2009; Spence & Gray 2007) in the first place, and specifically improvement of shareholder relationships, moral issues, business considerations like risk management (Parliament of Australia 2010) reputation, competition (Vintró et al. 2012), and corporate performance are identified as CSR drivers in the mining industry (Perez & Sanchez 2009). The pattern of results here agrees with the literature but there are minor differences with regard to the significance of CSR drivers among the public and academia.

**CSR understanding**
With regard to understanding and definition, investors described the concept of CSR considerably more often in general terms, such as ‘sustainability’, ‘environmental issues’, ‘socially responsible’, and ‘health and safety issues’, rather than specific ideas like ‘energy and water issues’, ‘biodiversity’, ‘green’ or ‘global warming’. The distinction was made across gender, types of investors and age groups alike, although young investors were more likely to use specific terms in order to describe their CSR understanding.

A surprising result in the context of mining was that with regard to CSR as a concept, the social component rather than environmental aspects were in the foreground. Males predominantly associated ‘socially responsible’ with the term including health and safety issues to a major extent, whereas only two-thirds of the women shared the same understanding of CSR. Private investors primarily thought of ethical behaviour and charity projects, where companies have the responsibility to give back to the community.
The environmental aspect was less obvious with regard to CSR understanding, as shown with a thin dotted black line in Figure 8.1. However, sustainability, as associated with the environmental component of CSR, was the preferred term by most women to describe CSR, compared to only half of the men. Moreover, the specific terms mentioned above were linked to the environment and based on GRI guidelines. Young people included these terms in their CSR understanding; however, sustainability as a general perception dominated the collection of terms used to describe the concept of CSR.

Among institutional investors, the CSR concept consisted of Environmental, Social and Corporate Governance, leading to the term ESG. They also used the expression ‘responsible investment’ when talking about CSR considerations in relation to investment decision-making. By integrating corporate governance into the CSR concept, the aspect of corporate responsibility becomes less relevant and is no longer understood as corporate obligation. This puts the CSR concept at the managerial level, allowing the integration of CSR as a core strategy, but at the same time emphasising the idea of voluntariness. It also indicated that institutional investors reduce the external pressure previously put on companies to conduct CSR initiatives and communicate them accordingly. Hence, ESG refers to the overall voluntariness of communicating environmental and social issues.

In the Australian context, the gold mining companies disclose online information on CSR and sustainability by providing specific website sections for environmental and social information. There was more information available on social issues, as two website sections for community and health and safety matters were provided, but there was only one dealing with environmental topics. This mirrored the priorities among investors in terms of CSR understanding in relation to social disclosure.

As a result, various understandings with regard to the term CSR and the concept could be identified among private and institutional investors representing the general public and professionals respectively. Most of the companies analysed for this research relied on GRI guidelines as their preferred reference to CSR and sustainability subjects. Hence, the dimension of corporate CSR understanding was underpinned by sustainability terminology and ideas.
**Literature alignment**

The findings are consistent with the literature whereby CSR represents an overarching term that allows a huge variety of definitions (Dahlsrud 2008; Preuss & Barkemeyer 2011). Academics as well as organisations who addressed CSR set out different definitions and explanations (Idowu 2011). Although most CSR definitions were found to have stakeholder issues, voluntariness, and social, economic and environmental aspects in common (Dahlsrud 2008), to date, researchers and practitioners have been unable to agree on a mutual accepted definition of CSR (Hamidu, Haron & Amran 2015; Taneja, Taneja & Gupta 2011; Turker 2008; Weber, M 2008). The findings are in line with the literature in terms of social and environmental aspects in outlining CSR understandings. However, the findings are not completely in line with the literature as stakeholder issues, voluntariness, and the economic dimension of CSR were not addressed by investors to define CSR as a term or concept.

Dahlsrud (2008) offers a possible explanation when he suggests that it is not the understanding itself that leads to uncertainty about CSR but the way the term is used in a particular context and how it is considered in relation to the development of a business strategy. This idea is supported by Van Marrewijk (2003) who suggests that CSR definitions are often biased with regard to particular interests. Hence constraints tend to emerge in developing and implementing certain CSR concepts.

**CSR expectations**

The dominance of the social aspect in relation to CSR understanding also appeared with regard to CSR expectations. Private investors expected initiatives in terms of communities and high standards of health and safety commitments. Investors of the middle aged group of 31–55 years of age were very specific about their expectations. On an individual level, they referred to respectful treatment of employees, fair wages and safe working conditions. On a general level, they expected fair company tax payments in order to contribute to the wellbeing of the broader society. Overall, investors expected an equal distribution of CSR and sustainability respectively. Private investors mentioned environmental issues less often in relation to CSR expectations. Institutional investors, however, expected
environmental information because it was an important factor to them in order to evaluate the company performance.

The participants of this research, being interviewees or respondents to the pilot study survey, were grouped in different ways, e.g. by age: over 55 (older), 31–55 (middle), 18–30 (young); by gender (male/female) or by their role as investors (private, organisational, institutional). During the 1950s to 1980s the focus was on social responsibilities. From the 1990s, environmental aspects became more important, particularly in the mining industry, but were retired, at least in the Australian context, after sufficient and effective governmental regulations were set up (Raufflet, Barin Cruz & Bres 2014). Today, older private investors focus on community issues, health and safety matters with regard to CSR, whereas middle aged investors spread their awareness across both CSR and sustainability, and young investors focus primarily on sustainability. Mediating cohort effects, such as education, have an impact on the perception of important societal phenomena such as CSR and sustainability. Moreover, group membership characteristics such as the type of investor influence the focus on corporate responsibility where private investors are more interested in social information and institutional investors focus on both environmental and social disclosure to assess a company’s non-financial performance. Shifting general frameworks imply that things are in a constant flux (Erikson & Goldthorpe 1992), which has an important impact on people’s awareness of societal phenomena depending on specific group membership.

**Literature alignment**

Sweeney and Coughlan (2008) suggest that companies provide CSR-related online information according to their stakeholders’ expectations. Global investors are increasingly concerned about social performance of companies they consider for investment (Friedman, AL & Miles 2001). Hence, social rather than environmental issues are on the companies’ agenda (Qiu, Shaukat & Tharyan 2014). In addition, Pérez-Gladish, Benson and Faff (2012) state that responsible investors in Australia focus on social issues and health and safety concerns in relation to communities, whereas environmental matters are less relevant. This is consistent with the findings of the research. However, some prior research argues that environmental concerns were given priority (Nilsson 2008).
Moreover, the literature introduces an additional aspect of CSR expectation, namely ‘stakeholder communication’ with regard to social initiatives rather than meeting environmental expectations. Cronjé and Chenga (2009) suggest establishing a corporate communication division in order to interact with communities adjacent to mining sites, governments and activist groups. Effective communication is expected to allow trust building between mining companies and their stakeholders in favour of a long lasting partnership (McDonald & Young 2012), whereas a lack of completeness, transparency and accuracy are responsible for negative effects (Kemp, Deanna, Owen & van de Graaff 2012; Mutti et al. 2012; Perez & Sanchez 2009). North American stakeholders expect factual CSR information at a basic level underpinned with transparent information about the beneficiaries of CSR initiatives and the outcome of recently conducted activities (Kim, S & Ferguson 2014). The aspect of ‘stakeholder communication’ in terms of non-financial information could not be identified in this research in relation to a primary CSR expectation among financial stakeholders, although the demand for reliable and transparent online information was present.

**Conclusion**

From the preceding discussion, it is concluded that private investors placed equal importance on environmental and social considerations of CSR drivers equally, as demonstrated by using green-coloured, bold lines in Figure 8.1. In contrast, academics consider external pressure groups as the most important driver. It is somewhat surprising that among private investors environmental and social considerations account for driving companies to perform responsible activities, given the dominating socially coined understanding and expectations of CSR.

Despite a substantial spectrum of possible aspects, the contemporary CSR understanding is clearly dominated by social rather than environmental considerations. However, the term ‘sustainability’, which is more often associated with environmental rather than social discourse, is favoured by young women, whereas older men prefer the term ‘socially responsible’. Moreover, institutional investors even prefer a completely different term, ESG, which equally encompasses environmental and social aspects.

In Figure 8.1, thin and bold blue coloured lines show that Australian investors’ expectations with regard to CSR also focus on social perspectives, whereas
environmental factors are of minor interest. Investors might not explicitly mention environmental expectations in relation to CSR because mining is highly associated with environmental risks and therefore a matter of course within the extractive industry. In addition, environmental responsibilities are governmentally dealt with through comprehensive regulations.

Moreover, it is apparent that the connotation of CSR as a term is about to change from CSR-dominated understanding focusing on CSR-related aspects to sustainability discourse. This reflects the generational change of young and middle aged investors who are starting to replace the group of investors aged over 55 as opinion leaders in the field.

In addition, it can be concluded that the constant flow of changing societal parameters has a notable impact on the awareness of different groups within a society to assess and focus on socially relevant phenomena over time.
Figure 8.1: Final Results RQ1
8.1.2 Research questions 2a and 2b

2a What information do Australian gold mining companies disclose online on their environmental and social activities?

One way to approach qualitative business research is to focus on research interests, more specifically to conduct research by the interest in characteristics of language through methods such as discourse analysis (Tesch 1990). Discourse analysis focuses on “social action that is mediated through language” (Eriksson & Kovalainen 2011, p. 227). Fairclough’s critical discourse analysis was applied on specific corporate website sections, to identify the “vocabulary, expressions, and also the style needed to communicate” (Eriksson & Kovalainen 2011, p. 227) information on environmental and social issues online. The discourse also revealed the way terms and concepts related to CSR and sustainability were understood and communicated by Australian gold mining companies analysed in this thesis. The previous section discussed the findings of interviews and focused on spoken words in an interactive environment. This section, however, discusses “meanings that are produced and mediated textually” (Eriksson & Kovalainen 2011, p. 228).

Environmental disclosure

Information about the environment is fundamental to companies in the extractive industry. The nine gold mining companies examined for this thesis provided specific website sections where environmental information was given. The companies either emphasised CSR-related subject areas, such as rich information on flora and fauna, or focused on specific sustainability topics, such as natural resources.

Investors regarded information on rehabilitation, descriptions of environmental management systems, environmental performance data, and details about land use during and after mining operations as important. Information on environmental disasters and natural resources, such as water and energy, was less interesting to investors.
Today, however, environmental disclosure is becoming less important to the companies (Pérez-Gladish, Benson & Faff 2012; Raufflet, Barin Cruz & Bres 2014) as shown in Figure 8.2 using a thin light brown coloured line, although they make sure on their websites that environmental issues are dealt with seriously at both an operational and a managerial level.

**Literature alignment**

Perez and Sanchez (2009) suggest that in the 1990s mining companies were one of the first businesses to commence communicating environmental issues (Jenkins & Yakovleva 2006). In addition, mining companies were among the first to introduce stand-alone environmental reports (Fonseca 2010; Mutti et al. 2012). The literature confirms the findings of this research, classifying environmental disclosure as the first level of communicating non-financial information.

Although Jenkins and Yakovleva (2006) refer to the content of stand-alone environmental reports with regard to environmental information, the literature is in line with the findings referring to website content. Both sources reference environmental policy and performance data, and environmental consequences from company activities as important subject areas for environmental disclosure.

According to Jenkins and Yakovleva (2006), mining companies take a leadership role with regard to communicating environmental and social information. This confirms the findings in relation to increasing social disclosure following primary environmental information.

**Social disclosure**

At an advanced level of communication, the companies tended to prioritise social information in addition to environmental disclosure, as shown in Figure 8.2 using a light brown coloured bold line. Community-related information represented the second level of online disclosure focusing on SLO, human rights in relation to Indigenous communities, and appropriate infrastructure to communities adjacent to mining sites.

Investors regarded information on communities near mining sites, employment data including training and education, and health and safety initiatives as most
important. Philanthropic investment data, conflict resolution, the approach to diversity and inclusion, human resources policies, information on social disasters, and human rights were of less interest to investors.

It was important to communicate health and safety issues at the top level of online communication. The companies disclosed information about their commitment to health and safety procedures at all corporate levels as shown in Figure 8.2. using a light brown coloured line.

**Literature alignment**

The literature is consistent with the findings in terms of the scope of social disclosure, encompassing health and safety issues, employee matters, and community topics (Jenkins & Yakovleva 2006). Perez and Sanchez (2009) suggest that mining companies use different approaches to environmental and social disclosure, most likely influenced by CSR activities conducted, the company's position within the industry, and particularly intra-industry regulations and pressures (O'Connor & Gronewold 2012). In addition, industry values, norms and corporate idiosyncrasies can have an impact on what companies disclose online (O'Connor & Gronewold 2012). Here, the literature is inconsistent with the findings as most companies based their environmental and social online disclosure on GRI guidelines, independent of stakeholder demands or industry norms.

Moreover, global mining companies use GRI guidelines as their preferred framework, and in particular its Mining and Metals Sector Supplement (MMSS) (Fonseca 2010; Murguía & Böhling 2013) when structuring their disclosure with regard to non-financial information (Jenkins & Yakovleva 2006). As companies in the Australian extracting industry tend to use a more conservative approach to environmental and social online disclosure, GRI guidelines, specifically the MMSM, are needed as practical help in terms of providing non-financial information online (Lodhia 2012). Although disclosing environmental and social information is still heterogeneous, adhering to GRI guidelines helps to consolidate online disclosure (Ortiz & Marin 2014) and is closely related to a higher standard of CSR communication (Michelon, Pilonato & Ricceri 2014). The
literature is in line with the findings, indicating that the website content of Australian gold mining companies is based on GRI guidelines to a major degree.

**Conclusion**

From the preceding discussion it can be concluded that environmental website content is a basic requirement, while providing social information with regard to community issues at an advanced level is essential, followed by information on health and safety matters at the top communication level. This is in line with the findings in relation to CSR understanding and expectations as discussed in Section 8.1.1.

2b) What are the differences in online disclosure of Australian gold mining companies?

**Communication strategies**

In order to provide environmental and social information online, the Australian goldmining companies analysed in this thesis used two different communication strategies, focusing on CSR and sustainability to different degrees. Depending on the communication strategy, specific target groups were addressed. BPS provides an overview of corporate responsible initiatives focusing on sustainability rather than CSR as shown in Figure 8.2 (see page 249) using a bold purple coloured line. The website content was effectively structured according to GRI guidelines and addressed institutional investors to a major extent. On the other hand, FES is about to be retired, as shown in Figure 8.2 using a thin purple coloured line. The strategy is narrative in nature and provides rich information on CSR-related topics based on Carroll's (1991) pyramid of corporate responsibilities. The strategy addresses private rather than institutional target groups. The hybrid strategy works as an interim solution when companies are developing their online communication toward BPS as the preferred strategy used by the leading companies in the field.

Younger and older investors preferred rich CSR-related online disclosure, although for different reasons. Young investors believed comprehensive information would reveal everything rather than hide important facts, whereas older investors preferred FES due to specific examples provided which were seen
as evidence for the company’s CSR engagement. Middle aged investors instead favoured a shorter, more generic presentation for a quick and easy overview including the option for more detailed information in a stand-alone sustainability report, accessible via hyperlink.

**Literature alignment**

Effective CSR communication is essential for trust building and the longevity of a successful stakeholder-company partnership (McDonald & Young 2012). Moreover, communicating CSR issues reliably is supposed to buffer and balance possible conflicts between stakeholder groups and mining companies, allowing a higher standard of communication to be reached (Perez & Sanchez 2009). It is important for companies to adjust their CSR disclosure to the specific needs of different stakeholder groups (Du, Bhattacharya & Sen 2010). According to Haigh (2014), companies use communication strategies based on corporate responsibility rather than ability, providing both sustainability and CSR-related information. In times of crises, companies should be prepared with specific crisis response strategies and use accommodative rather than defensive communication strategies (Janssen, Sen & Bhattacharya 2015). With regard to effective communication strategies addressing different target groups, the literature is in line with the findings. It is also consistent with regard to CSR and sustainability disclosure. This thesis does not provide findings with regard to crisis response strategies in relation to CSR online communication. Hence, the literature cannot be aligned to any findings in this matter.

**Isomorphic pressures**

Smaller Australian gold mining companies in the field tended to imitate the online communication strategy of leading firms in the industry. Following the principles of coercive isomorphism, they sought to adjust their website sections environment, community and health and safety accordingly in a top-down approach. In particular, they retired rich online information on economic, legal, ethical and philanthropic CSR activities in favour of a much shorter, generic overview of sustainability issues based on GRI guidelines. The development involved a change of target groups towards predominantly institutional, international investors and global mining operations.
**Literature alignment**

Companies of different industries tend to align CSR components in relation to CSR reputation in an “upward spiral to either move ahead, or not fall behind” according to Bertels and Peloza (2008, p.70). Although the authors focus on company reputation effects, this also applies to CSR online communication, as disclosure has an impact on stakeholders’ expectations and company awareness. In addition, the authors suggest that CSR norms and standards are first established by industry leaders in specific geographic locations, such as Australia, owing to their higher visibility; and then break down the industry as rules, norms, beliefs and perceptions influencing industry-specific practices and standards. Managerial needs were identified to deliver environmental and social CSR-related impacts (Bertels & Peloza 2008).

Usually, companies from the same industry, dealing with the same political and financial systems, and within the same national boundaries (Matten & Moon 2008) tend to diversify their external appearance in order to attract stakeholders. However, due to coercive isomorphism they may face formal or informal pressure from societal expectations to develop a similar organisational behaviour (Dimaggio & Powell 1983), such as non-financial online disclosure. In the light of new institutional theory, it is argued that “organisational practices change and become institutionalised because they are considered legitimate” (Matten & Moon 2008, p. 441). GRI guidelines are also seen as source of isomorphism that requires firms to adopt appropriate disclosure policies. Moreover, increasing ethical investment requirements by institutional equity owners necessitate improved online disclosure in order to access mainstream investment funds as sources of capital (Matten & Moon 2008).

Today, gold mining companies find themselves in an uncertain environment with decreasing gold prices (Bloomberg 2015) and increasing costs for technological requirements in relation to extracting and processing commodities. Hence, companies tend to imitate the leaders in their organisational field in terms of mimetic processes, assuming the chance of greater success and more legitimacy (Dimaggio & Powell 1983; Matten & Moon 2008). As new companies are organised according to the structure of older firms, managers of young enterprises proactively seek to imitate successful businesses in the field.
(Kimberly 1980). In terms of adopting other companies' communication strategies on "corporate websites to gain legitimacy and to benchmark against leaders in their respective industries" (Darus, Hamzah & Yusoff 2013, p. 237) mimetic isomorphism is an appropriate approach.

There are also isomorphic pressures stemming from professional forces. Due to a more sophisticated tertiary education that includes CSR and sustainability concepts and ideas to an increasing extent (Dimaggio & Powell 1983; Matten & Moon 2008), social pressure for CSR and sustainability practices is noticeable from well-educated external stakeholders. Hence, normative pressure increasingly sets the standards for legitimate business practices and related environmental and social online disclosure.

Globally operating companies face various environmental and social conditions at their mining sites, yet their reporting pattern in terms of CSR is very similar. As the companies face similar institutional environments in relation to international accounting standards, stock exchange requirements and the structure of the international capital market, mimetic and coercive isomorphism in benchmarking business practices applies. This mechanism impacts on communication strategies for non-financial online disclosure, in particular, when GRI guidelines are used as a structuring element (de Villiers & Alexander 2014).

Furthermore, globally operating mining companies are confronted with considerable environmental and social challenges in both developed and developing countries. They have to meet requirements with regard to national, international and industry-wide standards. Consequently, and in the light of coercive isomorphism, practices shared by companies in the same organisational field have been developed as a response to institutional expectations. They are referred to as regulatory scripts (Raufflet, Barin Cruz & Bres 2014).

The literature confirms the findings of the research in relation to coercive, mimetic and normative isomorphism with regard to communication strategies and the use of GRI guidelines as the underlying framework of website content.
**Stage of disclosure**

Environmental and social disclosure in the website sections of Australian gold mining companies analysed in this thesis placed them either at a matured or adolescent level. Depending on providing basic requirements, a mix of CSR and sustainability topics, and finally an important sustainability index, four companies were identified at a matured, and five at an adolescent stage of online disclosure.

Companies at a matured stage of online disclosure provided the basic website sections environment, community and health and safety and reach a sustainability index between 61% and 100% as shown in Figure 8.2 using a bold orange coloured line. They used BPS as their online communication strategy based on GRI guidelines rather than Carroll's CSR pyramid.

As demonstrated in Figure 8.2 using a thin orange coloured line, companies at an adolescent stage of online disclosure provided, partly or completely, the required website sections and obtained a sustainability index between 40% and 60%. They predominantly used either FES or HS as communication strategy on their websites and focused on rich narrative CSR-related discourse rather than brief generic sustainability terminology.

All nine companies failed to provide third party assurance on their websites to verify their non-financial online disclosure to the reader.

**Literature alignment**

Globally, mining companies are at different stages of voluntary non-financial reporting. They are classified as either infant, adolescent or matured reporters (Jenkins & Yakovleva 2006). Matured reporters disclose information about environmental and social issues, including community and health and safety matters according to GRI guidelines. The discourse is related to sustainability development rather than CSR (Jenkins & Yakovleva 2006). Their non-financial communication is sophisticated with regard to nature and style (Jenkins & Yakovleva 2006; Perez & Sanchez 2009). Usually, companies at a matured stage of reporting provide a stand-alone sustainability report and seek to provide third party assurance (Jenkins & Yakovleva 2006).
Companies at the adolescent stage of reporting sometimes provide stand-alone sustainability reports but usually they disclose only a few pages with regard to environment, community, and health and safety. They use CSR-related discourse rather than sustainability terminology, and are less likely to provide third party assurance although they seek to base their non-financial disclosure on GRI guidelines (Jenkins & Yakovleva 2006).

Companies provide information in a corporate context, identify and describe relevant issues, and use appropriate indicators in relation to their sustainability disclosure. Guided by an internationally accepted reporting framework, such as GRI, they seek to provide third party verification. However, on average, their non-financial disclosure is still at a low level (Herbohn, Walker & Loo 2014). In the Australian context, companies from the mining sector disclose considerably more information on sustainability issues than firms from other industries (Jones et al. 2007).

The literature confirms the findings of the thesis with regard to matured and adolescent stages of online disclosure, although the literature focuses on reporting rather than disclosing non-financial information on websites. The literature is also in line with the findings in terms of the quality of online disclosure and missing third party assurance. In addition, the literature is consistent with the findings in relation to emphasising sustainability rather than CSR.

**Paradigm shift**

Australian gold mining companies are increasingly retiring disclosure with regard to CSR in favour of sustainability. Hence, the corporate understanding of the concept is about to shift from CSR as defined by Carroll (1991) to sustainability as referred to by GRI (2000-2011) as demonstrated in Figure 8.2 using a top-down bold red coloured line.

**Literature alignment**

The literature confirms that during its lifecycle, the CSR concept has seen many shifts, alterations and enlargements. When the concept first emerged in the 1950s/1960s, CSR was mostly understood as philanthropic activities associated with voluntary contributions to societal welfare and development (Barnard 1968;
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Bowen, H 1953; Drucker 1954). Later on, CSR encompassed workers’ rights, consumer protection, and stakeholder satisfaction. In addition, CSR activities were regulated and centred around relationship management (Walton 1967). Nowadays, CSR is understood as a strategic management tool with regard to sustainability (Porter 1996) and instrumentality. Academics and practitioners alike favour the idea of implementing CSR as a company core strategy in order to obtain corporate objectives (Hamidu, Haron & Amran 2015; Markides 2004; Porter 1996). Today, environmental and social online disclosure is referred to as sustainability communication (Lodhia 2014).

Conclusion

Presently, Australian gold mining companies analysed in this thesis are using two main communication strategies to disclose non-financial information online. They address and attract different target groups, focusing on either CSR or sustainability. To a certain degree, this reflects the approach to CSR understanding and expectation by investors of different age groups as discussed in Section 8.1.1.

Imitating the online communication strategy of the industry leaders in the field and using a world-wide accepted framework such as GRI guidelines, leads to more sustainability topics and terminology. This also refers to the change of terminology from CSR to sustainability as discussed in Section 8.1.1.

Moreover, with regard to stage of online disclosure, the paradigm shift in the near future can be confirmed. The industry leaders at a matured stage of online disclosure use considerably more sustainability-related discourse based on GRI guidelines than CSR terminology related to Carroll’s pyramid of corporate responsibilities.
Figure 8.2: Final Results RQ2a and RQ2b
8.1.3 Research question 3

3) To what extent do Australian investors demand online information in terms of environmental and social CSR-related activities to satisfy their information needs?

Websites as information source

Although almost all the private investors had unlimited access to the Internet, they obtained information for financial decision-making from sources other than a corporate website. Brokers, accountants or other specialists provided relevant financial and non-financial information to their clients. Only a small number of private investors searched for online information, and they visited MSN instead of specific company websites. Generally, investors found online information acceptable and useful, but only about half of them found a corporate website useful as a company’s primary information channel. Some investors tended to search for company information, including environmental and social disclosure, on a daily or weekly basis, but the majority never visited any specific corporate websites to search for non-financial information. With regard to financial decision-making, 85% of investors found non-financial information important or moderately important, while the remainder regarded this sort of information as unimportant.

Institutional investors used all sources of information including, but not necessarily, a corporate website to search for environmental and social online information. Primarily, they relied on information specialists in the field of ESG.

Beside financial information, Australian gold mining companies provide non-financial information on their websites with regard to environment, community, and health and safety. The website content and specific communication strategies determined the target group; however, the addressee (private or institutional investors) determined to what extent the corporate website was used as a source of non-financial information.

Literature alignment

The literature indicates that the use of websites as a favoured communication medium (Jenkins & Yakovleva 2006; O’Connor & Gronewold 2012) has been primarily examined from the company perspective. The interactive nature of the
Discussion

Snider, Hill and Martin (2003) suggest that successful companies use their websites to provide information on their CSR initiatives. The importance of websites to communicate CSR-related issues arises in response to local, national and global societal expectations concerning business practices (Isenmann 2006) and is now a commonly accepted channel (Saat & Selamat 2014). Stakeholders prefer websites as company-controlled information channels over uncontrolled media such as experts' blogs or online news (Kim, S & Ferguson 2014), although there is a lack of credibility in the case of company initiated information within industries of extractive industries (Saat & Selamat 2014).

From a company perspective, the findings are consistent with the literature as companies used their websites to provide financial and non-financial information. However, from a stakeholder point of view, the literature is inconsistent with the findings because investors at different levels did not make extensive use of corporate websites as a primary source of non-financial information.

**Information needs**

According to Rutherford (2000), needs for financial information only occur when the information is reliable, relevant, comparable and has predictive and confirmatory properties. Reliability and relevance are also important for non-financial online information.

**Reliability**

Investors of all age groups found online information basically unreliable unless confirmed by third party assurance. In addition, members of the middle age group 31–55 years old regarded bare company online information as biased and
needing to be backed up and verified by experts. Older investors demanded cross-referencing for verification before they found online information reliable. Moreover, investors gained confidence when online information adhered to international principles and guidelines, such as GRI or Global Compact. They also found information on performance data and quantitative targets trustworthy. In contrast, company partnerships with NGOs or memberships with sustainability index had no reliable qualities for investors.

Although the industry leaders in the field of Australian gold mining companies use a GRI-based communication strategy demanding third party assurance, the companies in this study did not verify their online disclosure nor did they provide underlying research results or cross-referencing options. Only a stand-alone sustainability report, accessible via hyperlink from their websites, was most likely verified through third party assurance. A large number of investors found it important or at least moderately important to have online access to sustainability reports, while about a quarter did not attach great importance to that.

Figure 8.3 shows a grey coloured, broken vertical line to flag a barrier of deep distrust among private investors in terms of non-financial disclosure, unless assured by third party statements. As financial stakeholders are used to receive assessed and audited financial information in relation to annual reports, they expected transparency, credibility, and reliability of non-financial online information confirmed through experts, auditors or cross-referenced statements.

The Australian gold mining companies studied for this thesis do not yet publish third party assurance with regard to their non-financial website content. However, assurance could be provided in a stand-alone sustainability report as an additional, more detailed source of environmental and social online information based on GRI guidelines or other recommended reporting frameworks and accessible via hyperlink from their corporate websites.

**Literature alignment**

Various academics demand non-financial information disclosure assured by third party verification (Emel, Makene & Wangari 2012; Jenkins & Yakovleva 2006; Perego & Kolk 2012; Perez & Sanchez 2009; Smith, J, Haniffa & Fairbrass 2011).
In particular, Gillet-Monjarret (2015) suggests that third party assurance is essential to certify the reliability of social disclosure. In addition, the International Council of Mining and Metal recommend publishing environmental and social information according to their own assurance standards. However, to date the overall quality of non-financial online information has been low, being biased in terms of incomplete presentation of information and often omitting important contributions with regard to mine operations (Barkemeyer et al. 2015). Here, the literature is also consistent with the findings.

Reliable communication allows a balance of conflicts between stakeholder groups and mining companies (Perez & Sanchez 2009). Beside primary target addressees such as analysts, investors and the business press, the public also demands reliable information on a company’s responsible initiatives (Bowd, Bowd & Harris 2006). Here, the literature is consistent with the findings in relation to the demand for reliable online information.

**Relevance**

Investors of all age groups found information on the company history most relevant, followed by information on the board of directors, their qualifications, and attitude to CSR and sustainability. In addition, middle aged investors were interested in sustainability standards in use and older investors found information relevant on all kinds of policies being in place.

Some companies provided information on the company history and the board of directors but not necessarily with regard to CSR and sustainability issues. When based on GRI guidelines, corporate websites gave information on sustainability standards, and environmental and social policies in use.

In detail, almost half of investors were looking for an online overview of CSR programs and objectives. All organisational investors found this information most relevant, followed by two-thirds of institutional investors and just over one-third of private investors. Almost half of older investors were interested in getting news, whereas only about a quarter of the young and even fewer middle aged investors considered news to be relevant information. Instead, most young investors were interested in consulting CSR reports online, whereas this is of low interest to
middle aged and older investors. Online information such as key performance data was of interest to a quarter of investors, while case studies, detailed information on specific topics, contact information and comments from other stakeholders were less relevant to most investors.

**Literature alignment**
Although the overall quality of CSR communication is on a higher level, there is still room for improvement with regard to relevance and transparency (Perez & Sanchez 2009). Herbohn, Walker and Loo (2014) suggest that relevant information is provided in a corporate context and backed up by appropriate indicators. The literature confirms the findings with regard to quality of relevant online information.

**Conclusion**
The preceding discussion shows that websites are the appropriate medium for companies to disclose their CSR and sustainability information. However, private and institutional investors alike did not make extensive use of corporate websites with regard to non-financial information. Instead they relied on information sources other than websites and preferred information ‘ready-to-use’, provided for them by experts such as financial advisors, accountants and specialists in the field of ESG.

There was a notable demand for reliable and relevant non-financial online disclosure as shown in Figure 8.3 using grey coloured lines. However, it is not surprising that corporate websites, although they provide environmental and social information according to investors’ understanding and expectations, were widely ignored as a primary source of non-financial information due to lacking third party assurance.

Although most of the companies based their environmental and social online disclosure on GRI guidelines, they did not apply recommendations for third party assurance to their website content in order to increase the reliability of non-financial online information. In terms of relevance, it can be concluded that investors looked for company-related information such as company history and
board member attributes, rather than environmental or social disclosure with regard to CSR and sustainability activities.
Figure 8.3: Final Results RQ3
8.2 Overall discussion

In this section, overall findings are discussed and compared to European standards of non-financial online disclosure. Differences in online disclosure referring to national and international settings are also addressed.

8.2.1 Divergent corporate culture

In Australia, the mining industry as a whole has been well supported by Federal and State Governments with regard to extending leases and approving new mines, even in environmentally sensitive areas. As a result, stakeholders in these areas often opposed new mining sites and forced the companies into difficult negotiations in relation to environmentally and socially friendly agreements. In the European context, the EU as an institution, as well as the European governments, supported stakeholders’ requests for environmentally and socially friendly business conduct, rather than putting company requirements in first place. It can be concluded that the two divergent approaches have an important impact on how CSR and sustainability are applied, communicated and embraced as an important factor of corporate culture.

Overall, it can be concluded from the findings and the previous discussion that the level of environmental and social online disclosure by Australian gold mining companies is still rather low in comparison to European disclosure standards. Although still voluntary, the European Commission strongly advise disclosure of information on environmental and, in particular, social issues in order to increase the level of transparency. In contrast, Australian authorities merely make companies aware of there being low probability of corporate distress when disclosing sustainability issues. Obviously, the European mindset focused on a corporate culture with regard to stakeholders’ information needs, whereas corporate culture in Australia predominantly focused on shareholder commitment and business interests.

In Germany, 90% of the companies listed in the DAX 30 index offered stand-alone sustainability reports or provided at least appropriate CSR information on their websites in 2010. In 2014, 84% of the 188 European companies listed in Fortune 500 and Europe 500 provided corporate responsibility reports online,
whereas about a third of the Australian gold mining companies listed in the ASX 300 index were excluded from the research in 2014 because they did not provide any environmental or social online information at all. This was surprising given the likelihood of environmental problems occurring in gold mining that stakeholders would want to be informed about. In addition, only the industry leader in the field of the gold mining companies examined provided a GRI-based stand-alone sustainability report for further information accessible via hyperlink from a specific website section. Therefore, it seems CSR and sustainability communication as an important factor of corporate culture in Europe has reached a high level of saturation, whereas in Australia it is a long-term objective and still underway.

8.2.2 National and international context

Australian investors were aware of and interested in financial disclosure at a high standard, and as financial disclosure is highly regulated, investors knew what information to expect and where to find it. In return, Australian companies provided comprehensive financial information and reports on their websites to their favoured financial stakeholder groups, such as private and institutional investors, and analysts. In contrast, non-financial information is voluntary and unregulated, and the quality and scope of environmental and social online disclosure in Australia was found to be rather low. Australian investors were not overly interested in non-financial online disclosure with regard to financial decision-making. Moreover, company membership in one of the Australian sustainability indices was widely ignored as an investment indicator. Therefore, the supply of and demand for environmental and social online information appeared to be balanced in the national context.

However, in the international context, institutional investors were increasingly interested in ethical investments. Hence, they expected non-financial information presented within a globally accepted framework, such as GRI guidelines, for easy comparison. As a result, large Australian gold mining companies with overseas business activities were seeking to achieve access to international capital investment by improving their communication standards with regards to CSR and sustainability online disclosure, using GRI guidelines to satisfy the information needs of international investors.
It seems that CSR and sustainability online disclosure becomes more important to gold mining companies in an international context when they start operating mines overseas and face increasing demands for transparent non-financial information from international, institutional investors. In the light of globalisation as a driver for advanced CSR communication, the industry leader in the field of Australian gold mining companies may become a role model to other companies in environmental and social online disclosure.

Furthermore, advanced non-financial online disclosure has the potential to attract additional stakeholder groups, both national and international, who might be interested in gold mining companies for reasons other than investing.

### 8.3 Summary

In this chapter, the findings of the interviews and website analyses as part of the qualitative phase I, and the survey as the quantitative phase II were discussed in detail. The findings of the methods applied contributed to the discussion and the literature was linked to the findings where possible. Each research question was addressed separately and a conclusion was drawn out individually in order to provide new insights in relation to the research question. Moreover, corporate cultural distinctions were discussed in the light of sustainability/CSR-related online disclosure in a national/international context. The next chapter will conclude the thesis.
9 Conclusion

The preceding chapters placed this research within an interpersonal and contextual framework and detailed the conduct of interviews, a brief survey and website analyses of Australian investors’ CSR expectations and online information needs as well as corporate online disclosure about CSR and sustainability in the Australian gold mining industry. Academic literature about the theoretical and managerial understanding of CSR described the development, shifts and significance of the concept over time. Further literature about CSR in the mining industry covered the area of conflict between stakeholders and mining companies in relation to CSR and sustainability communication. Literature from the pragmatism paradigm and a sequential mixed methods research design shaped decisions about how to conduct the project. Full details of how the participants were recruited, data collected and analysed, including the use of supportive analysing software, were presented. Furthermore, the findings were discussed in relation to each of the research questions separately and individual conclusions were drawn.

9.1 Introduction

This chapter outlines the strengths and weaknesses of the thesis, including a review and critical appraisal of the multiple and sequential nature of the methodologies employed across the different empirical stages of this thesis. This is followed by a description of the data evaluation processes utilised for the qualitative and quantitative research phases. Subsequently, the limitations of the research are acknowledged and the data evaluation process is justified. In addition, theoretical as well as practical implications are presented and recommendations for further research are provided. Finally, the contributions of this study to theory, practice and society are covered.

9.2 Strengths and weaknesses

This section covers strengths and weaknesses of the thesis with regard to the research design and the methods used to collect and analyse the data during the qualitative and quantitative phases. It also provides information on evaluation of
the data, including information on limitations of the research. Finally, practical and theoretical implications are provided.

9.2.1 Research design

Pragmatism was chosen as the paradigm to guide the exploratory sequential mixed methods research design to the best possible outcome. Under this paradigm, interviews and website analysis were chosen as qualitative methods to form phase I of the research, followed by a quantitative survey as phase II. The choice of these methods facilitated in-depth inductive and deductive research that translated into a rich picture of CSR understanding, expectations, and online information needs. It also enabled exploration into how CSR and sustainability are communicated on company websites. Combining qualitative and quantitative methods emphasised the strengths and balanced the weaknesses of both traditional approaches.

During the interviews, a rich set of primary data was collected. The subsequent content analysis revealed investors’ views and opinions with regard to understanding of the term CSR and expectations of appropriate corporate initiatives. The content analysis on corporate website sections disclosing environmental and social information revealed the priorities of the companies’ non-financial disclosure, while the subsequent discourse analysis identified their communication strategies in relation to CSR and sustainability. Moreover, the tendency of companies with lower MCAP and institutional EO to imitate the industry leaders with regard to their CSR and sustainability discourse was identified. Moreover, by investigating their CSR and sustainability discourse using a linguistic approach, the companies could be classified to be at either a matured or adolescent stage of online disclosure. Finally, the quantitative survey collected data based on the perceptions from the qualitative phase I and revealed investors’ online information needs in terms of CSR and sustainability online disclosure.

9.2.2 Ethical considerations

Expedited ethics approval at a low-risk level was given for conducting interviews and the survey alike which required the presentation of a RPIS before participation. In case of the interviews, a consent form was signed by the
participant before the interview started, while for the survey filling in the survey form implied consent. With regard to interviews, Beauchamp and Childress’ (2013) four principles of morality, namely, autonomy, beneficence, non-maleficence, and justice were applied.

9.2.3 Data evaluation

In order to provide an appropriate data evaluation, the concept of trustworthiness was applied to the interviews and website analysis as the two qualitative methods in this section, and reliability, validity and generalisability evaluation was considered with regard to the quantitative phase II.

Rich information was provided on the qualitative research process, which was well documented in a logical and traceable way. In terms of the interviews, substantial documentation was provided in Chapter 5 on the recruiting process of participants in relation to three subsequent interview rounds at the initial, advanced and final level. In addition, the participants’ demographics were provided in separate tables in order to offer a high level of transparency. The context and scope of the interview questions at all three levels were also well described. Moreover, the processes of data collection and analysis were explained in detail and illustrated by meaningful figures. With regard to the second method used in the qualitative phase I, website analysis, the research process was also documented appropriately. The process of data analysis was described in detail and underpinned with various tables and figures as examples of the analyses applied. Hence, dependability as one requirement of the concept of trustworthiness is fulfilled.

The literature was aligned to the findings of the two qualitative methods. This juxtaposition implied a high degree of similar results and connects to inquiries of other research. The results could be connected to different contexts, such as other industries or research subjects, and inferred from other researchers’ findings. In addition, all three methods conducted in this thesis also pointed in a similar direction. Hence, transferability as another requirement of trustworthiness is demonstrated.

Additionally, the researcher’s familiarity with the topic was evidenced after three years of researching CSR and sustainability in the Australian gold mining
industry. Within the context of business research, the 27 interviews were sufficient in number to underpin the conclusions made. In terms of website analysis, all possible gold mining companies meeting the selection criteria were chosen and their website sections analysed. This enabled sufficient data to be collected for legitimate claims in regard to findings. It could also be argued, based on the often synergistic findings of earlier research, that other researchers given the same materials would agree with the findings to a major extent. Hence, credibility as the third criterion of trustworthiness is also fulfilled.

All data and their interpretation were real. Findings and interpretation were linked to the data collected and they were presented in a way that was easy to understand. This confirms conformability as the fourth requirement of trustworthiness.

With regard to the quantitative survey in phase II, Cronbach's alpha was calculated and showed results between .208 and .807. The numbers indicated that some questions of the survey were at a level of good reliability, whereas other questions needed revision. Subsequent tests for validity, such as face validity, inter-item-correlation, item-to-total correlation, and PCA were to be applied later on the revised main online questionnaire, but were not conducted on the pilot study questionnaire. Due to the limited number of responses (n=60), the findings could not be generalised. Hence, the evaluation of the survey is significantly limited.

9.2.4 Limitations

Only nine out of thirty gold mining companies met the selection criteria of this thesis. That equals about a third of the gold mining companies listed in the ASX 300. Hence, the findings of the website analysis were limited and could not be generalised to the whole of the Australian gold mining industry. However, the findings were close to those of other studies related to the mining industry in the Australian context.

The study was limited by the Sunshine Coast population providing clearly more investors over 55 years of age than middle aged or young participants. This group of investors focused on investing in companies providing a reliable income stream rather than looking for ethical investments. The education of investors over 55 is
associated with CSR rather than sustainability. This implies a sample bias with regard to interview participants and survey respondents and might overemphasise CSR against sustainability.

Moreover, the group of investors recruited as survey respondents at the Noosa mining conference was also biased in terms of the older age group. In addition, the sample was not randomly chosen but very specific in its composition as investors in the mining industry. This also implies a sample bias. Taking into account that the survey was meant to be a pilot study, the sample size was surprisingly high (n=60). However, as a sample size for a main survey it is significantly low. Again, the low number of respondents implies another sample bias and makes it difficult to generalise the results to a larger sample.

Only a limited number of survey questions were suitable to run a cluster analysis and validity checks were applied because the main survey was not developed after the application for a large online survey was rejected by the Queensland based stock broking company due to staff shortage at the time in question.

9.3 Implications

This section outlines options for further research based on the major findings and also presents points for improvement in business practice.

9.3.1 Implications for research

The view through the historical lens on the term CSR and its related concept has shown that there have been dynamic processes with regard to paradigm shifts over the years. Hence, from a research point of view, it is recommended to investigate the future connotation and scope of the concept.

The use of websites as an effective channel to disclose CSR-related information has been widely examined from the company perspective. However, the acceptance of websites as a source of non-financial information from an investor perspective has not been researched extensively to date. Hence, a recommendation for further research is to examine investors’ attitudes to the adoption of websites as a preferred information source for environmental and social disclosure. In addition, it is recommended to investigate stakeholders other
than investors in different contexts, such as other industries and different cultural settings.

Moreover, it might also be interesting to research how social media, such as YouTube, Facebook and Twitter, might be used to communicate non-financial information in order to aid financial decision-making. As the younger generation is very familiar with contemporary social media, it would appear worthwhile to investigate the interactive potential of Facebook, as well as Twitter as a short message provider, with regard to modern investing practices and investor profiles. It is recommended to research social media from both the company and user perspective. It would also be interesting to research whether social media could change investors’ non-financial information needs over time.

Demographically, it seems obvious that the next generation has a deeper knowledge of CSR and sustainability than older people of today. Young, well-educated women, in particular, engaged in sustainability rather than CSR. Further research on this part of the population with regard to investment strategies and demand for sustainable corporate behaviour is recommended. Moreover, it would be interesting to investigate differences and similarities to other countries and cultural settings in terms of the female approach to sustainability.

Private and institutional Investors alike use ‘ready-to-use’ information on non-financial issues in relation to financial decision-making, prepared by third party information providers. It would be interesting to research the mediating and moderating effects on investment practices with regard to company information providers, in particular in the light of young, female, well-educated investors demanding comprehensive information for investment decision-making based on environmental and social online disclosure.

9.3.2 Implications for practice

This research found that private investors did not make extensive use of corporate websites to search for environmental and social information because they mistrusted online information unless verified by third party assurance. While it is very unusual to provide third party assurance for general non-financial online information, companies could call investors’ attention to annual stand-alone
sustainability reports accessible via hyperlink from specific website sections. Based on GRI-guidelines, environmental and social statements made in these reports would be verified by third party assurance. Hence, the most important barrier to overcome investors’ mistrust could be bypassed by increasing credibility and reliability of non-financial online information.

In order to grow, operate mines in overseas markets, and attract institutional, international investors, Australian gold mining companies investigated for this thesis strove to use the same online communication strategy and CSR/sustainability discourse as the industry leaders in the field. This will lead to very similar non-financial online disclosure with no further differentiator. The advantage may be to provide an easy way to compare companies with regard to their non-financial information due to the same format of presenting the information and a very similar discourse. However, the findings revealed that besides environmental and social online information, investors liked to find additional disclosure on company-related information on corporate websites, such as disclosure on the company history and board members in relation to CSR and sustainability. This information could be used to differentiate from other companies in the same industry, attract more investors and also encourage other stakeholder groups to visit the companies’ websites.

The findings indicated a paradigm shift from CSR to sustainability discourse, primarily by young and middle aged investors. This implies a generational change of opinion leaders in the foreseeable future and provides a chance for companies to prepare in time for new types of investors with different expectations about corporate non-financial initiatives, online disclosure and, most likely, modern digital information channels.

### 9.4 Contributions

This study contributes to the limited academic literature about the scope and quality of CSR and sustainability online disclosure in the Australian gold mining industry. It makes contributions to the literature regarding investors’ CSR expectations and attitudes in terms of non-financial online communication and a growing understanding of investors’ profiles and their specific online information needs. Moreover, the findings of this study add insights to the area of GRI
guidelines used as framework for CSR and sustainability disclosure on corporate websites. Finally, the research findings make a contribution in terms of the stage of non-financial corporate online disclosure within the extracting industry in Australia. The findings of this study contribute to theory, practice and society in multiple ways.

9.4.1 Contribution to theory

Findings in relation to CSR understanding contribute to the ongoing efforts of researchers to find a comprehensive, globally accepted definition of CSR, in particular, when the concept of sustainability is involved. The findings also contribute to the growing research in feminist theory due to the noteworthy interest of well-educated women in sustainability. The findings in terms of CSR drivers, in particular the difference between public and academic approaches, contribute to theory about the rationale for CSR and sustainability. The findings in the light of CSR expectations also contribute to awareness theory and research of social aspects in business practices.

In addition, the findings in relation to online communication strategies make a contribution to the growing understanding of how CSR and sustainability of resources companies are communicated. The classification of three stages of online disclosure adds to a growing CSR evaluation in the extractive sector literature and evidence base. In addition, the findings track industry-wide change and the uptake of differing CSR/sustainability schemes that is discussed in recent literature.

Furthermore, findings about online information needs contribute to research of online media as corporate information channels. They build on research about stable website content competing with the fast moving content of social media such as Twitter and Instagram.

9.4.2 Contribution to practice

Information about the findings of this thesis, when presented to extracting industry companies, may contribute to their business conduct of CSR and sustainability.

Information on investors' CSR understanding and expectations contributes to improve a company's business profile which, in turn, supports the development
of business strategies to attract new types of investors in a first mover approach. In addition, knowledge of the public opinion in terms of CSR and sustainability may contribute to increasing budgets for social and environmental expenses beyond minimum legal requirements.

The shift from CSR-dominated corporate behaviour to sustainability-driven approaches contributes to the corporate culture. Instead of favouring short-term business effects, long-term strategic planning becomes part of the business processes.

The knowledge of what is expected as CSR/sustainability online information by the public enables companies to decide what information channel to use. If new social media were preferred over ordinary websites, a range of new jobs for young people would appear to be available. This would contribute to the broad goal of reducing the unemployment rate of young people. Using the latest information technologies could promote the development of unique features in the field of CSR/sustainability online communication.

9.4.3 Contribution to society

Perceptions of CSR understanding and expectation may contribute to the way resources and energy sources are evaluated and appreciated among the public. Efforts to develop and use renewable energies will probably face less resistance from the public, even if prices rise, when the awareness of CSR/sustainability grows in the public mindset. An additional effect may be an increasing demand for socially responsible employers to provide a sustainable working environment.

Providing CSR online information to subscribers contributes to improved investor/customer loyalty. Providing news of how a company is committed to and conducts CSR and sustainability contributes to the public awareness of environmental and social corporate behaviour.

Standardised online communication strategies based on GRI guidelines contribute to people’s independence and facilitate the satisfaction of their information needs. Given the information is 3rd party assured according to GRI guidelines, the public can collect reliable information about CSR and sustainability independent from other investment information providers.
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11 Appendix

11.1 A – Interviews

11.1.1 Ethics approval – initial stage

5 September 2014

Ms Annette Helling-Benze
A/Prof Don Kerr
Dr Peter Innes
Prof Michael Clements
University of the Sunshine Coast

Dear Annette, Don, Peter and Michael

 Expedited ethics approval for research project: Corporate Social Responsibility (CSR): Environmental and Social Online Disclosure by Australian Gold Mining Companies (S’14/672)

This letter is to confirm that on 5 September 2014, following review of the application for ethics approval of the above named research project, the Chairperson of the Human Research Ethics Committee of the University of the Sunshine Coast granted expedited ethics approval for the project.

The Human Research Ethics Committee will review the Chairperson's grant of approval and the conditions of approval at its next meeting and, should there be any variation of the conditions of approval, you will be informed as soon as practicable.

The period of ethics approval is from 5 September 2014 to 31 August 2015. Could you please note that the ethics approval number for the project is HREC: S/14/672. This number should be quoted in your Research Project Information Sheet and in any written communication when you are recruiting participants.

The standard conditions of ethics approval are listed overleaf. If you have any queries in relation to this ethics approval or if you require further information please contact a Research Ethics Officer by email at humaneethics@usc.edu.au or by telephone on +61 7 5430 4574 or 5430 2623.

I wish you well with the success of your project.

Yours sincerely

Michelle Searle
Director, Office of Research

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Appendix

11.1.2 Ethics approval – advanced stage

16 December 2014

Ms Annette Helling-Beno
A/Prof Don Kerr
Dr Peter Irwin
Prof Michael Clements
University of the Sunshine Coast

Dear Annette, Don, Peter and Michael

Expedited ethics approval for amended research project: Corporate Social Responsibility (CSR): Environmental and Social Online Disclosure by Australian Gold Mining Companies (# 14/672)

This letter is to confirm that on 16 December 2014, the Chairperson of the Human Research Ethics Committee of the University of the Sunshine Coast granted expedited ethics approval for an amendment to the above project.

The amendment refers to the use of a revised version of the interview questions.

The conditions for ethics approval for this project as outlined in our letter of 5 September 2014 continue to apply.

If you have any queries in relation to this ethics approval or if you require further information please contact a Research Ethics Officer by email at humanethics@usc.edu.au or by telephone on +61 7 5459 4574 or 5459 5823.

Yours sincerely,

Michelle Searle
Director, Office of Research
11.1.3 Ethics approval – final stage

14 August 2015

Michelle Searle
Director, Office of Research
Tel: +61 7 5459 4574
Email: humanethics@usc.edu.au
F23114

Ms Annette Helling-Benze
A/Prof Don Kerr
Dr Peter Innes
Prof Michael Cements
University of the Sunshine Coast

Dear Annette, Don, Peter and Michael

 Expedited approval for an amendment to an approved research project: Corporate Social Responsibility (CSR): Environmental and Social Online Disclosure by Australian Gold Mining Companies (S/14/672)

This letter is to confirm that on 14 August 2015, the Chairperson of the Human Research Ethics Committee of the University of the Sunshine Coast granted expedited ethics approval for an amendment to the above project.

The amendment refers to the use of a revised version of the interview questions for the final stage of interviews and a minor revision to the duration of the interview in the RPI. This amendment allows the research project to proceed.

The conditions for ethics approval for this project as outlined in our original letter of approval continue to apply.

If you have any queries in relation to this ethics approval or if you require further information please contact a Research Ethics Officer by email at humanethics@usc.edu.au or by telephone on +61 7 5459 4574 or 5430 2823.

Yours sincerely

Michelle Searle
Director, Office of Research
11.1.4 Research Project Information Sheet

Corporate Social Responsibility (CSR): Environmental and Social Online Disclosure by Australian Gold Mining Companies
Ethics Approval Number: S/14/672

Purpose
This research is being conducted to help gather information about the expectations of investment-related key stakeholders in terms of environmental (i.e. how companies invest in their environment impacts) and corporate social (i.e. how companies engage their employees and communities) responsibility (CSR) activities and sources of information about gold mining companies CSR initiatives.

Contacts
The research team consists of Chief Investigator Ms Annette Helling-Benze (Chief Investigator and PhD candidate), Associate Professor Don Kerr, PhD (Faculty of Arts and Business and Principal Supervisor), Dr Peter Innes (Faculty of Arts and Business and Co-Supervisor) and Prof Michael Clements, PhD (Faculty of Art and Business, Head of School and Co-Supervisor), all from the University of the Sunshine Coast, Australia. Please direct questions to Annette Helling-Benze or Prof Don Kerr.

Email: annette.helling-benze@research.usc.edu.au
Email: dkerr@usc.edu.au
Phone: (07) 5459 4860

Participant experience
If you agree to participate in this research, you will be invited to participate in an interview that will last about 25 to 30 minutes. The interviewer is Ms. Annette Helling-Benze.

Risks and benefits
There are no more than minimal risks involved in this interview, (e.g. risk of being recognised due to places/practices/relationships with clients, possible pressure to participate if nominated by employer, contact details have been provided by employer without potential participant’s consent, employer may be able to identify who of the employers have/have not chosen to participate, employers may be unhappy about participation within office hours). While you will not receive any direct benefits for participating, your information will help us improve our processes.

Participation and consent
Participation in the interview is voluntary and can stop at any time without the need of explanation or penalty. As your interview responses will be non-identifiable, it will not be possible to withdraw your responses if you choose to withdraw from the project. A Research Project Information Sheet and a Consent Form will be emailed/sent to you prior to participation. With regard to a face-to-face interview, you will be asked to sign a consent form. In terms of a telephone interview, consent will be asked for verbally, referring to the consent form provided previously to the interview. Consent is for the use of your data in this project as well as future related research projects.

Confidentiality and results
All your answers to the interview will be audio recorded with your permission but kept strictly confidential and only the aggregated results reported. The audio recordings will be deleted when your interview is transcribed. At this point your data becomes non-identifiable. On publication of the results, you will be informed via your contact details provided about the availability of a summary, covering results and findings (1-2 pages in layman's terms) which will be provided upon request (contact details see above) by either email or in paper form.

Complaints / Concerns
If you have any complaints about the way this research project is being conducted you can raise them with the Chief Investigator. If you prefer an independent person, contact the Chairperson of the Human Research Ethics Committee at the University: (c/- the Research Ethics Officer, Office of Research, University of the Sunshine Coast, Maroochydore DC 4558; telephone (07) 5459 4574; email humanethics@usc.edu.au).

The researchers and the University of the Sunshine Coast thank you for consideration of this study.
11.1.5 Consent form

Corporate Social Responsibility (CSR): Environmental and Social Online Disclosure by Australian Gold Mining Companies
Ethics Approval Number: S/14/672

I have read, understood and kept a copy of the Research Project Information Sheet for the above research project.

I realise that this research project will be carried out as described in the Research Project Information Sheet.

Any questions I have about this research project and my participation in it have been answered to my satisfaction.

I agree to participate in the research project, Corporate Social Responsibility (CSR): Environmental and Social Online Disclosure by Australian Gold Mining Companies.

I give consent for data about my participation to be used in a confidential manner for the purposes of this research project.

Do you agree to being audio-recorded during the interview?

☐ I agree
☐ I don't agree

☐ Do you want to receive the research findings? Please provide your email address:__________________________________________________

Participant ____________________________ Date ____________
### 11.1.6 Initial stage – set of questions

<table>
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| 1. Introduction and ice-breaker: | - Understanding of CSR?  
- General information sources?  
- Requirements for ethical investments? |
| 2. Environmental aspects | - Resources/energy used  
- Physical environment and fauna/flora  
- Information sources  
- Critical incidents |
| 3. Social aspects | - Community  
- Employees  
- Indigenous  
- Information sources  
- Critical incidents |
| 4. General final questions | - CSR a cost factor?  
- Responsible investment in mining?  
- Future of CSR and Recommendations  
- Divestment campaign? |

**Ice-breaker and introduction questions**

1. What is your understanding of Corporate Social Responsibility?
2. What are your information sources for financial decision making?
3. Do you (have clients who) specifically require investments into CSR conducting mining companies?
Environmental aspects of gold mining

Energy and water resources

4. What are your expectations about use of energy?
5. What do you think about use of water in the (gold) mining industry?
6. Is emission of greenhouse gas and waste a major concern to you (or your clients)?

Physical environment, biodiversity:

7. How important to you (or your clients) is the land use during mine operation and rehabilitation after mine closure?
8. Do you require specific initiatives about biodiversity in terms of habitat and species?

Information search and sources

9. Do you search company websites or other sources specifically for environmental disclosure for your investment decisions?

Critical environment incidents

10. Given, you become aware of an environmental disaster associated with one of the companies you have invested in, would you withdraw from your engagement?
11. Do you think the extraction process for gold mining is worse than for coal mining?

Social aspects of gold mining

Community Stakeholders

12. What company activities do you expect in terms of employment opportunities for local communities?
13. What are your expectations in terms of training and education for potential employees from local communities?

Employees

14. What company initiatives do you require to ensure and improve occupational health and safety for the workforce?
15. With regard to diversity of employees (gender, age group, minority group membership), what company initiatives do you expect?
Indigenous

16. What company activities do you expect in terms of mine operation in or adjacent to Indigenous people’s land?
17. What company initiatives do you require with regard to formal agreements between the company and Indigenous people’s communities (Social license to operate)?

Information search and sources

18. Do you search for social information on websites for your investment decisions /recommendations?

Community conflict

19. What are your expectations of company activities in terms of disputes between the mining company and local communities?
20. What expectations of company activities do you/clients have with regard to mine closure?
21. Are there environmental and social impacts to do with mine closure which are important to investment decisions?
22. What do you expect of company activities about dealing with corruption?

Critical people incidents

23. In terms of accidents involving people with Australian gold mining companies would this be a reason to withdraw?

General Final Questions

24. Do you think CSR is only a cost factor which decreases the yield of shares?
25. Do you think it is worth recommending sustainable mining companies as investments?
26. What are your future expectations of gold mining in Australia in terms of sustainability??
27. What is your opinion about the “global divestment campaign” launched by the Australian National University? (A global campaign to get funds and investors to sell their shares in fossil fuels and re-invest in renewable energy)
28. To your best estimation, what is percentage of the Australian investors investing ethically, which includes sustainable and environmentally and socially responsible investment.
11.1.7 Initial stage - Renamed concept maps

CSR as a cost factor (Q24)

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Employment (Q13), training&education (Q14), OH&S (Q15), diversity (Q16)

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Sustainable gold mining (Q26)

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### 11.1.8 Advanced stage – Discrepancies and inconsistencies

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11.1.9 Advanced stage – Appointment sheet

Interviewee: _____________________________________________________

Email address: ___________________________________________________

Appointment: _____________________________________________________

Project information sheet: _________________________________________

Consent form: ____________________________________________________

Company: _______________________________________________________

Office address: ___________________________________________________

Phone number: ___________________________________________________

Notes: ___________________________________________________________
11.1.10  Advanced stage – Renamed concept maps

Corruption

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Divesting

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11.1.11 Final interviews – Set of questions

From advanced stage interviews (ethical investment)

1. Apart from dividends and share prices, do you have any preferences for industries to invest in?
2. Apart from dividends and share prices, are there any industries you would never invest in?
3. How would you describe your investment strategy?
4. Would you accept less financial gain due to a high standard of CSR activities / sustainability initiatives beyond legal requirements in relation to dividends and share assets?
5. How much of your portfolio would you like to be socially responsibly invested? Percentage?

From website analysis (content analysis)

6. What do you expect from a company in terms of corporate responsibility and sustainability? (environment, community, health & safety)
7. What activities are most important to you?
8. Would you prefer sustainability over activities related to ethical or philanthropic responsibilities?
9. As an investor, what information would you like to find on a corporate website beyond financial information?

From website analysis (discourse analysis, communication strategies and ideology)

Present website examples:

(Bullet point strategy, generic - Fact-evidence strategy, narrative)

10. What format/style would you prefer and why?
11. What are the reasons for companies to present information about CSR and sustainability?
12. Would you like to compare companies in relation to their environmental/social initiatives?
13. What do you think about disclosure that is very similar in relation to topics and presentation? (communication strategies, ideology).
From pilot study survey (useful information)

14. What kind of non-financial online information would be useful for your investing/divesting decisions?

15. To what extent do you consider online information as being reliable?

16. What non-financial information would be relevant to you?
## 11.2B – Website analysis

### 11.2.1 ASX 300 - Metals & Mining Fact Sheet

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STW STONEWALLS RESOURCES LIMITED 94.3 Gold Australia
FND FINDERRES RESOURCES LIMITED 93.3 Diversified Metals & Mining Australia
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NMY NIMROD RESOURCES LIMITED 84.0 Diversified Metals & Mining Australia
NEW NEWFIELD RESOURCES LIMITED 87.0 Gold Australia
PDO POADEN NICKEL LIMITED 71.1 Diversified Metals & Mining Australia
WMN WESTERN MINING NORWEST LIMITED 76.1 Diversified Metals & Mining Australia
RNO RED OIL LIMITED 68.4 Gold Australia
NPI NAVY PLATINUM LIMITED 68.1 Precious Metals & Minerals Bermuda
HSP HILLSDALE RESOURCES LIMITED 62.9 Diversified Metals & Mining Australia
JAD JADE RESOURCES LIMITED 66.3 Diversified Metals & Mining Australia
ACV RED MINING BOC 64.9 Gold British Virgin Islands
AXG AXMIN RESOURCES NL 64.6 Steel Australia
ABR ABR RESOURCES NL 62.9 Gold Australia
ADD ADIVA ARGILA MINERALS LIMITED 62.7 Diversified Metals & Mining Australia
GDI GREENBUSH MINERALS AND ENERGY LIMITED 59.6 Diversified Metals & Mining Australia
IDM IDSA MINERALS LIMITED 52.9 Gold Australia
CTE CATEP LAURENT RESOURCES LIMITED 56.4 Steel Australia
LUC LUCRAP DIAMOND COMPANY LIMITED 54.6 Precious Metals & Minerals Australia
MMS MAGNAS INDUSTRIES LIMITED 52.4 Diversified Metals & Mining Australia
DSI SOPHIA RESOURCES LIMITED 45.8 Aluminium Australia
HAP HIGHLANDS PACIFIC LIMITED 48.5 Diversified Metals & Mining Papua New Guinea
HCD HOT CHILI LIMITED 46.7 Diversified Metals & Mining Australia
RWB REDCLIFFE LIMITED 47.9 Diversified Metals & Mining Australia
RMB RWOOD MINERALS LIMITED 46.9 Diversified Metals & Mining Australia
DPA DOWIA MINERALS LIMITED 45.8 Gold Australia
PCG PRASIL MINING LIMITED 44.4 Diversified Metals & Mining Australia

*Values quoted are based on the S&P/ASX 300 Metals Index, as of December 2014. Please refer to the index provider for the most current information. The values may be subject to change and are provided for illustrative purposes only. The information is not intended to be a recommendation to buy or sell any security and should not be relied upon for investment decisions.

Value Traded – S&P/ASX 300 Metals and Mining Index

Source: ASX, December 2014

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## 11.2.2 Website content analysis – renamed concept maps

### Group 1

**Leximancer settings**

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<th>Adjustments</th>
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**Renamed concepts in concept map**

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Renamed concepts in concept map

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Group 4

Leximancer settings

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<td>Text Processing</td>
<td>Apply dialogue tags Merge word variants</td>
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Leximancer findings

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Renamed concepts in concept map

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11.2.3 Tenses

**Past tense**

Past tense is normally used to characterise events, actions or states which are finished. It can also be used to describe states, events and action which were interrupted in the past, but do not have a direct effect on the present moment. Past tense can be used to give information about events which are complete, actions that were completed before other actions, and ongoing or interrupted events at a specific point in time before today. Consequently, past tense can be used to describe the past sequentially, relating variable actions and events to one another (Williams 2014).

**Present tense**

Present tense is used when the current moment should be described or events in the past related to the current moment. As such, present tense works as a bridge between past and present actions or events. In addition, it can be used to characterise timeless facts. As such, compared to past tense, present tense is more flexible but also more complicated. It is used to explain timeless facts and rules, "and the past and future in relation to now" (Williams 2014, p. 51).

When using present tense to demonstrate states it is most important to use the correct aspect. In order to emphasise the duration of a state or to describe an action which started in the past, present perfect is used, whereas present simple is used for a state which is true today. Present continuous is used to when a state is temporary and ongoing, but started in the past (Williams 2014).

**Future tense**

Future tense is used to demonstrate events or actions that will happen. It also shows how future and events are related to each other. Future tense is used to demonstrate that "something will happen later, something will be happening at a specific point in time, something will have happened before a specific time later, and something will have been happening for a duration of time later" (Williams 2014, p. 89).
### 11.2.4 Total word count (as per 29.03.15)

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11.3C – Survey

11.3.1 Letter of recommendation

4th May 2015

Mr Phil Dickinson
Convenor, Noosa Mining Conference 2015

Dear Mr Dickinson

I am writing this letter to recommend Annette Helling-Benze to present her research at the Noosa mining conference 2015 exhibition. I am Annette’s principal supervisor for her doctoral studies at the University of the Sunshine Coast. She commenced her PhD in March 2013 and is now in her 3rd year of researching the online disclosure of corporate social responsibility by Australian mining companies.

I recommend Annette as an ethical researcher with good interpersonal skills. She has worked responsibly and reliably and has successfully dealt with interviewees at all levels in the past.

One of her research questions seeks to discover investors’ online information needs in terms of environmental and social disclosure, where the research design requires her to conduct a survey among private, organisational and institutional investors.

Conducting a brief survey, completely voluntary and anonymous, as a pilot study during your conference could be an invaluable chance for her to study investors’ information needs first hand from a serious group of investors. The outcome of the survey, made available to participants after analysis, could be an interesting benefit to mining companies and organisational/institutional financial advisors such as Morgans or Bizzell.

Your acceptance of Annette’s application to introduce her research at your Noosa mining conference 2015 exhibition would be very much appreciated.

Yours sincerely

Don Kerr BSc, GCHigherEd, PhD, MACS (Snr)
Associate Professor
Principal Supervisor

Web: www.usc.edu.au
Telephone: +61 7 5430 1234
Facsimile: +61 7 5430 1111
Sippy Downs Drive
Sippy Downs Qld 4556
Australia

University of the Sunshine Coast
Associate Professor Don Kerr
School of Business
Faculty of Arts and Business
Telephone 07 5459 4800
Facsimile 07 5430 1231
Email dkerr@usc.edu.au
11.3.2 Ethics approval – A/15/703

19 June 2015

Ms Annette Helling-Benze
Asst Prof Don Kerr
Dr Peter Innes
Prof Michael Clements
University of the Sunshine Coast

Dear Annette, Don, Peter and Michael

**Expedited ethics approval for research project: Corporate Social Responsibility (CSR): Environmental and Social Online Disclosure by Australian Gold Mining Companies (Pilot study survey) (A/15/703)**

This letter is to confirm that on 19 June 2015, following review of the application for ethics approval of the above named research project, the Chairperson of the Human Research Ethics Committee of the University of the Sunshine Coast granted expedited ethics approval for the project.

The Human Research Ethics Committee will review the Chairperson’s grant of approval and the conditions of approval at its next meeting and, should there be any variation of the conditions of approval, you will be informed as soon as practicable.

The period of ethics approval is from 19 June 2015 to 19 June 2016. Could you please note that the ethics approval number for the project is HREC: A/15/703. This number should be quoted in your Research Project Information Sheet and in any written communication when you are recruiting participants.

The standard conditions of ethics approval are listed overleaf. If you have any queries in relation to this ethics approval or if you require further information please contact a Research Ethics Officer by email at humanethics@usc.edu.au or by telephone on +61 7 5459 4574 or 5430 2823.

I wish you well with the success of your project.

Yours sincerely,

[Signature]

Michelle Sarle
Director, Office of Research

[Contact information]

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11.3.3 Research project Information Sheet

Corporate Social Responsibility (CSR): Environmental and Social Online Disclosure by Australian Gold Mining Companies
Ethics Project Number: A/15/703

Purpose

This research is being conducted to help gather information about investment-related stakeholders’ online information needs with regard to environmental and social online information.

Contacts

The research team consists of Chief Investigator Ms Annette Helling-Benze (Chief Investigator and PhD candidate), Associate Professor Don Kerr, PhD (Faculty of Arts and Business and Principal Supervisor), Dr Peter Innes (Faculty of Arts and Business and Co-Supervisor) and Prof Michael Clements, PhD (Faculty of Art and Business, Head of School and Co-Supervisor), all from the University of the Sunshine Coast, Australia. Please direct questions to:

Annette Helling-Benze                Prof Don Kerr
Email: annette.helling-benze@research.usc.edu.au Email: dkerr@usc.edu.au
Phone: (07) 5459 4860

Participant experience

If you agree to participate in this research, you will be invited to participate in a questionnaire that will last about 10 to 15 minutes. The facilitator is Ms Annette Helling-Benze.

Risks and benefits

There are no risks involved in this questionnaire, other than possible discomfort due to considering aspects of ethical financial investment. While you will not receive any direct benefits for participating, your information will help us improve our understandings of ethical financial investment.

Participation and consent

Participation in the questionnaire is voluntary and can stop at any time without the need of explanation or penalty. As your questionnaire responses will be non-identifiable, it will not be possible to withdraw your responses if you choose to withdraw from the project. By filling in the questionnaire consent will be implied. Consent is for the use of your data in this project as well as future related research projects.

Confidentiality and results

Aggregated results will be reported. Your data are completely non-identifiable throughout the entire research process. Non-identifiable data may be used in future research projects. Should you wish to provide your email address on a separate mailing list, you will be informed about the results and findings on publication of the results.

Complaints / Concerns

If you have any complaints about the way this research project is being conducted you can raise them with the Chief Investigator. If you prefer an independent person, contact the Chairperson of the Human Research Ethics Committee at the University: (c/- the Research Ethics Officer, Office of Research, University of the Sunshine Coast, Maroochydore DC 4558; telephone (07) 5459 4574; email humanethics@usc.edu.au).

The researchers and the University of the Sunshine Coast thank you for consideration of this study.
11.3.4 Questionnaire

Questionnaire for Pilot Study

(Ethics project number: A/15/703)

Investment-related stakeholders' online information needs

Annette Helling-Benze

Confirmed PhD candidate

SID 1055259
Informed consent section

Please be aware:

- The questionnaire is completely anonymous.
- Participation is voluntary.
- Participation can be stopped at any time without the need for explanation or penalty.
- Consent about participation will be implied by filling in the questionnaire.

If you would like to receive the results and findings of this questionnaire, please leave your preferred email address on the separate mailing list provided.
Social responsibility

1. Do you have internet access at any time you want?
   □ Yes
   □ No

2. What does corporate social responsibility (CSR) mean to you? (Tick any that apply)
   □ Sustainability
   □ Environment issues
   □ Socially responsible
   □ "green"
   □ Water issues
   □ Health and safety issues
   □ Biodiversity
   □ Energy issues
   □ Global warming
   □ Don't know/can't say

3. How important is information to you about corporate social responsibility in terms of financial decision making? (Tick only one)
   □ Very important
   □ Important
   □ Moderately important
   □ Of little Importance
   □ Unimportant
4. What do you think are the most important factors driving companies on corporate responsibility/sustainability (Tick any that apply)

☐ Governments
☐ Consumers
☐ Investors
☐ Employees
☐ Public concerns over environmental issues
☐ Public concerns over social issues
☐ Regulation
☐ Business considerations (cost cuttings, competitiveness, etc.)
☐ Others, please specify_____________________________________________

5. If a company uses its corporate website as its primary reporting channel (web-based reporting), how would you rate this choice? (Please tick A and B)

A

☒ Very useful
☒ Quite useful
☒ No different to other formats
☒ Don’t know/Can’t say

B

☒ I prefer an actual document (newsletter, hard copy, etc)
☒ I don’t trust information published only online
☒ It depends on external assurance
☒ Online information is ok for me
6. How useful would it be for you to have updates, in relation to your own investments, within the year, on significant environmental and social developments (i.e. between one report and the next)

☐ Of critical importance
☐ Very useful
☐ Fairly useful
☐ Makes no difference to me
☐ Don't know / No opinion

7. How useful would it be for you to compare mining companies' CSR activities with regard to investment/divestment decision making?

☐ Very important
☐ Important
☐ Moderately important
☐ Of little importance
☐ Unimportant

8. What kind of updates would you like to receive from your investment companies between one year's CSR/sustainability report and the next? (Tick any that apply)

☐ Press release on major developments
☐ Company responses on issues in media/public debate
☐ Information about local communities adjacent to mining sites
☐ Key environmental data
☐ Information about health & safety activities
☐ Qualitative comments in quarterly/half year reporting
☐ Information about stakeholder events in general
☐ Information about initiatives and projects for employees
☐ Once-a-year formal report is fine for me
☐ Other, please specify______________________________________________
9. How important is it to you have online access to companies' annual sustainability reports?

- Very important
- Important
- Moderately important
- Of little importance
- Unimportant

Searching for corporate responsibility information online

10. How often do you use the internet to search for information, in relation to your own investments, about environmental or social information?

- Every day
- Several times a week
- About once a week
- About once a month
- Hardly ever
- Never

11. What would you like to use a corporate website's CSR section for?
   (Tick any that apply)

- Consulting CSR report (or integrated report)
- Reading overview of CSR program and objectives
- Accessing Key Performance Indicators (KPIs)
- Reading case studies
- Getting news
- Drilling down for detailed information about specific topics
- Finding contact information
- Seeing comments from stakeholders and experts
- Posting comments and feedback
- Other, please specify______________________________________________
12. With regards to **ENVIRONMENTAL** information online, in relation to your own investment interests, which of the following do you consider to be most important (Tick any that apply)

- Performance data
- Information on energy usage
- Information on biodiversity (habitat and species)
- Description of environmental management system
- Information on CO$_2$ pollution
- Information on water strategy
- Information on land use during mining operations
- Information on rehabilitation after mine closure
- Information on environmental disasters
- Other, please specify____________________________________________

13. With regards to providing **SOCIAL** information online, again in relation to your own investment interests, which of the following do you consider to be most important (Tick any that apply)

- Information on communities adjacent to mine sites
- Human rights policy
- Community/philanthropy investment data
- Employment data (opportunities, training and education)
- Human resources policies
- Information on conflict resolution
- Information on health & safety initiatives
- Approach to diversity & inclusion
- Information on social disasters (accidents involving people)
- Other, please specify____________________________________________
14. Which of the following gives you confidence when assessing companies’ online CSR information (Tick any that apply)

- □ Adherence to international principles/guidelines (GRI, Global Compact...)
- □ Performance data
- □ External assurance
- □ Quantitative targets
- □ External experts’ perspectives
- □ Partnership with NGOs
- □ Membership with sustainability index
- □ Other, please specify______________________________________________

15. How important is it to you to have access to additional environmental and social corporate online information beyond annual CSR/sustainability reports?

- □ Very important
- □ Important
- □ Moderately important
- □ Of little importance
- □ Unimportant

16. In relation to CSR, what activities would you like to see from companies on their websites? (Tick any that apply)

- □ Answering stakeholders’ questions
- □ Publishing case studies
- □ Sharing third-party news, research, opinion, etc
- □ Requesting comments and feedback
- □ Posting news releases
- □ Posting videos or other multimedia content
- □ Commenting on relevant topics
- □ I’m not interested in what companies disclose on websites
- □ Other, please specify______________________________________________
17. How important is it to you to keep in touch with a company and follow its corporate social communication online?

- Very important
- Important
- Moderately important
- Of little importance
- Unimportant

Demographics

18. What is your gender?
- male
- female

19. What is your age group?
- 18-30
- 31-55
- over 55

20. What is your highest level of education?
- Less than secondary
- Secondary
- Technical and Trades
- University

21. Which of the following investing roles best describes you?
- private
- organisational (e.g. company investors)
- institutional (e.g. brokerages)

22. What is your postal code? □□□□
11.3.5 Survey information desk