

## Article

# The Human Capital Risk Reporting of Listed South African Companies: Exploring a Reporting Framework to Support Corporate Governance

Monique Bruwer, Salomé Elizabeth Scholtz \*, Leon Tielman De Beer  and Johanna Christina Rothmann

WorkWell Research Unit, Faculty of Economic and Management Sciences, North-West University, Potchefstroom 2520, South Africa

\* Correspondence: 22308563@nwu.ac.za

**Abstract:** Despite the importance and requirement of integrated reporting on human capital (HC), research indicates a lack of reporting frameworks and adequate disclosure in organization reports. Thus, a unique research opportunity is created for researchers to determine what is being presented in reports and how it correlates with human resource management. This article investigates HC reporting practices and proposes a risk reporting framework in support of corporate governance. A qualitative method utilizing qualitative document analysis was followed to analyze a purposive sample (n = 39) of Johannesburg Stock Exchange top 40 listed companies' annual integrated reports of 2020. Overall, companies followed a widely accepted risk management approach, with inconsistencies in the phases and methods of reporting the risk management phases directed at HC. The magnitude of the risk to the companies is also not understood. The most commonly reported HC risks were employee growth and development, diversity and inclusion, career paths, and employee turnover and turnover intention. Employee work-related well-being was largely neglected. An interesting finding is that the reported risks were metrics-deprived. Current HC practices are backward-looking instead of forward-looking, and they are fragmented. Therefore, an HC reporting framework is suggested for future research that addresses the gaps in integrated reports.

**Keywords:** human capital; human capital risk management; human capital risk reporting; corporate governance; reporting framework



**Citation:** Bruwer, Monique, Salomé Elizabeth Scholtz, Leon Tielman De Beer, and Johanna Christina Rothmann. 2022. The Human Capital Risk Reporting of Listed South African Companies: Exploring a Reporting Framework to Support Corporate Governance.

*Administrative Sciences* 12: 123.

<https://doi.org/10.3390/admsci12040123>

Received: 15 August 2022

Accepted: 15 September 2022

Published: 22 September 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Well-established organizational human governance systems can promote current and future stakeholders' confidence in organizations' long-term value, stability, and sustainability (International Organisation for Standardization (ISO 2016; Walsh and Resch 2020)). According to the International Integrated Reporting Council (IIRC (2021)), organizational stability and sustainability require integrated thinking and reporting. Integrated thinking considers, but is not limited to, how the various capitals within an organization affect—or are affected by—business activities. Integrated reporting is about transparent communication to internal and external stakeholders, focusing on strategy and future direction for value creation, a holistic representation of financial and non-financial aspects, and is mainly influenced by corporate governance (Nwachukwu 2022; Vitolla et al. 2019). In the past, the assumption was that value creation depends on the performance of financial and manufactured capital (Hoffmann 2018). However, with the efforts from a range of international bodies such as the IIRC, it is not realized that value creation is, in fact, also dependent on the integration of a broader range of capital resources as part of organizations. The developing country of South Africa has also included integrated reporting in its unique national organization reporting frameworks (Wachira et al. 2019). The King codes were employed in 1994 after the end of Apartheid; the codes require integrated reporting from

South African organizations on social, transformational, and human capital (HC) issues in addition to their financial aspects (Wang et al. 2020).

Over time, these King codes have been adapted and developed, but they still require integrated reporting, where social, environmental, governmental, and financial information is holistically presented in a report (IoDSA 2016; Wachira et al. 2019). In line with the IIRC, it is argued that more expansive integrated thinking and reporting on all capital resources (IIRC 2021) will become the corporate norm in the future. One such intangible capital that requires integrated thinking and reporting is HC, which contributes to organizational and market value (Çam and Özer 2022; Dumitru and Guşu 2017). The IIRC (2013) requires organizations to disclose the capabilities, competencies, experience, and innovation motivations of people and their alignment with the organization's risk management process, governance framework, and ethics. Additionally, people's ability to lead and manage others, their understanding, development, and implementation of the organization's strategy, and their loyalty towards improving organizational processes and services are considered part of HC (IIRC 2013). Thus, HC refers to every aspect of an individual, such as competence, experience, and motivation, that can contribute economic value to an organization (Flair 2022; Nwachukwu 2022) and be transformed into a strategic resource for value creation and sustainable development (Sollosy et al. 2016). The vitality of HC plays a central role in the competitiveness and success of organizations and countries (Flair 2022). Consequently, the economic growth and organizational outcomes of South African companies have also been significantly linked to HC (Ngepah et al. 2021). Management and analysis of risks to this vital resource is thus imperative and seen as one of the most important conditions for maintaining company performance (Necula and Micu 2021). Therefore, organizations should determine and report on how business activities influence or are influenced by HC and the mitigating and response measures.

Annual organization reports aim to inform readers of a business's financial and non-financial performance (Saitua et al. 2015). Due to the importance of HC to organizations, stakeholders, and investor interests, the reporting of HC has increased over the years (Bulut Sürdü et al. 2020) and, consequently, the pressure on organizations to provide more HC information (Adelowotan 2021a). This is highlighted in a study by Wild and van Staden (2013) that shows that in a sample of 58 integrated reports, of which 14 were South African organizations, 90% indicated HC. However, previous research indicates that these reports often lack useful disclosures (Kravet and Muslu 2013) and a clear framework (Chander and Mehra 2011). According to Saitua et al. (2015), this is especially true in the case of reporting HC, which is often presented biasedly and haphazardly by managers. Adelowotan (2021a) adds that annual organization reports lack reporting models that allow for comprehensive HC reports (Adelowotan 2021b). Additionally, despite being seen as a leading tool for corporate reporting, integrated reporting also seems to be in the beginning phase of reporting (Dumitru and Guşu 2017) and requires more research on its impact on the various capital resources, such as HC, within developing economic contexts (Nwachukwu 2022). Inadequate reports on HC management practices influence analyst and stakeholder interpretations of the contribution of human resources to the organization (Lajili 2022).

According to Lajili (2022), the lack of available and consistent public data on human resources in organizations allows for a unique research opportunity to explore what information is presented in annual reports and how these disclosures correlate with available human resource management indicators. Previous research has explored HC reporting by utilizing annual organization reports in specific organizations within different geographical locations such as India, Spain, Canada, and the USA (see Chander and Mehra 2011; Kravet and Muslu 2013; Lajili 2022; Saitua et al. 2015). A systematic review by Nwachukwu (2022) identified four recent studies that focused on integrated organization reports in South Africa. The first study by Terblanche and De Villiers (2018) reported that a sample drawn in 2013 of companies from the Johannesburg Stock Exchange (JSE) had integrated reports with more information on HC, which was lowered by international capital market pressures.

Wang et al. (2020) found that mechanisms of traditional governance are positively related to integrated report quality, based on 2012–2015 JSE reports and credibility-enhancing mechanisms. Integrated reporting was also found to have a positive effect on corporate environmental performance in a JSE sample from the period 2014–2018 (Omran et al. 2021). The last of the included studies by Nwachukwu (2022) indicated that integrated reporting increases change and sustainability embeddedness (Le Roux and Pretorius 2019). A recent study by Adelowotan (2021b) surveyed managers and directors on the usefulness of HC disclosures in the annual reports of the top 60 JSE-listed companies in South Africa. The study indicated that there are variances between the HC aspects deemed important by human resources for disclosure and those reported by financial directors (Adelowotan 2021b).

From the presented literature, it is clear that previous South African studies have focused on various aspects in JSE reports. Adelowotan (2021b) did not include JSE published annual reports in their analysis. This gap for further research, as well as the importance of HC for organizations, prompted the aim of this study to explore the current risk management approaches directed at human capital, the risks reported, and how they are represented in the 2020 annual integrated reports of the top Johannesburg Stock Exchange (JSE)-listed companies. To our knowledge, this is the first study to analyze the 2020 collected sample for these purposes within the South African context. Results from this study show that human risk reporting practices are key performance indicator (KPI)-driven as opposed to key risk indicator (KRI)-driven and are fragmented approaches instead of comprehensive and holistic approaches. Based on the current findings of this study, as well as the need identified in the above literature, an HC risk reporting framework is proposed to address the identified gaps in reporting and support of sustainable corporate governance and human resource management practices and policies.

## 2. Literature Review

Previous studies on risk reporting have mainly focused on quantity, quality, types, and determinants. Salem et al. (2019) measured the quality of reporting with attributes such as relevance (forward-looking), faithful representation (explanation), understandability (tables and graphs), and comparability (space and time) and concluded low-quality reporting. However, according to a systematic literature review conducted by Mbithi et al. (2022), the definition and measurement of risk reporting quality differ substantially in the research. Research also found that factors such as firm characteristics, board characteristics, institutional leadership, board independence, audit committee independence, gender diversity, family on the board, and managerial ownership affects risk disclosure and the quality thereof (see Alshirah et al. 2020; Raimo et al. 2022; Salem et al. 2019; Seebeck and Vetter 2022). Research findings by Nel et al. (2022) also support the aforementioned, specifically for JSE-listed organizations, and further add that certain characteristics (e.g., board diversity) could improve corporate governance and transparency and benefit stakeholders. It is evident from the research that the characteristics of corporate governance affect risk disclosure. Research further evolves through the focus on (1) risk reporting of the various capital resources required for sustainability and (2) non-financial risks. Multiple studies have investigated the quality and factors influencing environmental disclosure (e.g., Solikhah and Maulina 2021; Panfilo and Krasodomska 2022). A study by Leopizzi et al. (2020) reported an increase from 2016 to 2017 in the non-financial risk reporting of Italian organizations. The risks reported were mostly related to the environment, health and safety, and, to a lesser extent, compliance and operations. Interestingly, the risks reported mostly reflected a present and past outlook with a positive or neutral approach. However, Bek-Gaik and Surowiec (2021) reported forward-looking risk disclosure, especially on strategy, growth opportunities, and industry risks.

With a particular focus on HC risk disclosure, there is still a need for further research in support of more comprehensive information disclosed on: how organizations manage their HC, the contributions of HC to organizational outcomes, as well as HC risks and opportunities and the organizations' efforts for risk mitigation (Adelowotan 2021a). Despite

an increase in HC disclosure dating back to 2006 (Wagciengo and Belal 2012), the risks reported from then to the study of Adelowotan in 2021b remain similar. These risks include training and development, equity, remuneration, employee relations, workforce measurements, and health and safety. It could be argued at an early stage of this research paper that most of the HC disclosures are for legal compliance (e.g., the Employment Equity Act and the Skills Development Act). The ISO (2018a) framework supports HC disclosure that goes beyond the typical HC risk disclosures. Therefore, this study aims to enhance HC risk disclosure as part of integrated reporting in support of corporate governance and sustainable development.

Even though this study is descriptive in nature, its outcome is supportive of various disclosure motivations and is, therefore, rooted in multiple theories (i.e., agency dependence, resource dependence, and stakeholder theory). The agency theory suggests the relationship between two parties (i.e., agent and principal), where the agent acts in the best interest of the principle (Bryant and Davis 2012). Agency theory, in the context of corporate disclosure, aims to reduce information asymmetry between the relevant stakeholders (e.g., the organization and investors/future employees). It is also important to consider that the intended audience for corporate disclosure includes current and future private and institutional shareholders, current and future employees, financial analysts, regulatory authorities, and stock exchanges (Courtis 1987). At the most basic level, the agency theory is appropriate as this study suggests comprehensive HC risk disclosure for organizational transparency and commitment in support of sustainable corporate governance. However, an outcome of sustainable corporate governance is alignment in the interests of the organizations, their shareholders, stakeholders, and managers, and society (European Commission; EC 2020). The stakeholder theory supports the aim of sustainable corporate governance since it suggests that value is created from the interaction between various stakeholders (Freeman et al. 2007). An organization that focuses on one stakeholder at the expense of others is not sustainable (Freeman et al. 2007). Even though the stakeholder theory is arguably not to be applicable to one stakeholder (Barney and Harrison 2020), it is in the aim of the study (by means of a disclosure framework) that HC be linked to the value of organizations at large as HC interacts interchangeably with other capital resources within the organization and has the ability to create value to a larger external stakeholder community (investors as well as future investors and employees). Moreover, effective HC governance and disclosure have the potential to retain and attract employees (Branco and Rodrigues 2006). Employees are considered valuable, difficult to imitate, and a resource that is vital for strategy execution (Branco and Rodrigues 2006). As such, the resource-dependence theory also motivates corporate disclosure. The resource-based theory in the domain of HC provides a framework for organizations to understand how value and sustainable competitive advantage are reached through people (internal stakeholders) (Barney 1991). This will be further explored in the literature review. For the purpose of this study, it is important to position: (1) HC in the governance system, (2) how HC governance can be supported by risk management practices and ultimately reported in support of integrated reporting, and (3) a comprehensive theoretical framework that considers HC-related factors that are supportive of improved integrated reporting.

### *2.1. Corporate and Human Governance for Sustainable Development and Value Creation*

Corporate governance frameworks vary across countries. However, the governance objectives are similar, and some countries' governance frameworks are rooted in shared legal frameworks. South Africa was one of the leading countries outside the United Kingdom to adopt a code for corporate governance (ECGI 2020). The King IV code of corporate governance regulates governance principles and practices in South Africa, aligned with the Companies Act (IoDSA 2016). Corporate governance directs organizations' capability for sustainable development and long-term value creation, which builds all stakeholders' confidence and mitigates the risks and costs of capital resources (KPMG 2016). Broadly, there are two reasons why corporate governance fundamentals are applied: either (1) to serve the

needs of shareholders and stakeholders for value creation or (2) for the sake of compliance (“tick-boxes”) (FRC 2020). However, good corporate governance has gained momentum in recent years as corporate scandals (Mohamad 2018) (e.g., Amnesty International, Foxconn, France Télécom, the South African government, Steinhoff) and unprecedented challenges (e.g., COVID-19) (Khatib and Nour 2021) emerge. In the face of such adversities, it can be expected that organizations and their steering committees will move the focus from shareholder primacy (which generates short-term value and sustainability) to stakeholder primacy (which generates long-term value and sustainability) (Bonsu 2020). Stakeholder primacy would allude to sustainable corporate governance. Sustainable corporate governance requires organizations to consider the business impact on various stakeholders (i.e., social-, environmental-, and human capital) and the economy and is focused on long-term sustainable value creation (EC 2020). Stakeholders refer to a range of both internal and external stakeholders (Jaffe 2021).

Internal stakeholders, including employees, are regarded as material stakeholders and refer to those aspects within an organization that substantially affect an organization’s ability to create value over time (short-, medium-, and long-term) (IoDSA 2016; IIRC 2021). Although it is recognized that employees’ performance affects organizations’ performance, it is even more important to acknowledge that employees’ performance is affected by organizations’ business activities in return (IIRC 2021; IoDSA 2016; Westermann-Behaylo et al. 2014). This relationship highlights the importance of responsible management of HC and, effectively, its role in sustainable corporate governance. Every business strategy is dependent on HC in the execution and realization of the strategy thereof (Wright 2020). One of the King IV corporate governance principles focuses on the inseparability of an organization’s business model, strategy, purpose, risks and opportunities, performance, and sustainability for value creation. The recommended practices for this principle include board responsibility to challenge organizations regarding the risks and opportunities linked to the triple bottom line, the dependency on all capital resources to achieve strategies, the needs, interests, and expectations of material stakeholders, as well as the effects of the execution of business strategies on capital resources (IoDSA 2016).

There is a great need to move beyond figures and show responsible management by defining, monitoring, and disclosing critical information regarding the ability of HC to deliver on strategic and operational intent (O’Kelley and Goodman 2020). Additionally, a growing need from investors regarding the disclosure of organizational culture and HC is evident (O’Kelley and Goodman 2020). Brown et al. (2009) recommended that risk management committees are extended to also focus on non-financial risks. The recent developments (i.e., COVID) that have intensified the need for governance on HC issues (e.g., workplace experiences and well-being versus company culture and diversity and inclusion) provide a golden opportunity for the previously mentioned recommendation. As this topic advances, some of the challenges would be for boards to integrate HC as a strategic imperative in all sustainable corporate governance practices, including the governance of risk management approaches directed at HC.

## 2.2. Human Capital Risk Management and Risk Reporting

There is no dispute on the relevance and importance of risks within organizations. In fact, organizations’ governing and management bodies are primarily focused on risk and opportunities as this is a requirement for corporate governance (Deloitte 2013; IoDSA 2016). On the contrary, research findings show that boards only allocated nine percent of their time to risk management (Gius et al. 2018). However, that does not include HC risk management to the extent one would expect (HR Future 2019). The International Organisation for Standardization (ISO) best describes HC as “... the cumulative knowledge, skills and abilities of an organization’s people and the impact on an organization’s long-term performance, as well as competitive advantage through optimizing organizational outcomes”. (ISO 2018a, pp. v–page quote ends). Add risk to HC, and it gives a whole new perspective. Risk is considered the uncertainty regarding a certain topic, which includes uncertainty regarding

the outcome thereof (Hagigi and Sivakumar 2009). Thus, HC risk considers the uncertainty regarding employees' skills, knowledge, and abilities, their ability to provide organizations with a competitive advantage, and its effect on organizational performance and outcomes. Ultimately, risk informs strategy (Dang et al. 2020), as HC risks should inform human resource management practices and policies, which should be linked to business strategy (Stein 2007). From the aforementioned reasoning, it can be deduced that risk, and its management thereof, can be transformed into opportunity.

Risk management practices involve risk identification, evaluation, response, monitoring, and reporting. Risk identification requires that the appropriate risk measurement should have the capability to consider both lag and lead indicators (Mouatassim and Ibenrissoul 2015). Lag indicators are backward-looking (what has already happened), whereas lead indicators are forward-looking (future risks and outcomes) (Marr 2020). Typical examples of lag indicators are culture, turnover, and absence rates. Suppose that organizations can move beyond the measurement and reporting of lag indicators and focus on lead indicators in conjunction with lag indicators. In that case, it enables proactive risk identification, mitigation, monitoring, and, ultimately, risk reporting.

ISO (2018b) has published HC risk reporting guidelines that could be invaluable to organizations if implemented. The suggested risks to be reported include compliance and ethics; costs; diversity; leadership; organizational culture; health, safety, and well-being; attraction, retention, and turnover; skills and capabilities; succession planning; and workforce availability. Research papers by Becker and Smidt (2016) and Meyer et al. (2011) have identified HR risks similar to the suggested ISO guidelines. Additionally, the ISO standard makes recommendations regarding internal or external reporting for each risk presented. Interestingly, culture was suggested for internal reporting as opposed to external reporting. The disclosure of cultural risks and opportunities could be a value-add factor for skills and investor attraction. The WEF (2020) stated that future employees and investors will increasingly focus on the governance practices related to HC. Ultimately, King IV's requirement for governance is to "apply and explain" (IoDSA 2016). Even though diversity is included in the guidelines, it does not speak to inclusion. Moreover, culture is focused on commitment, satisfaction, and engagement. It is evident from the above that risk management approaches related to HC primarily consider lag factors, with little consideration for lead factors.

### 2.3. Strategic Intent versus the Human Capital Capability to Act

The job demands–resources theoretical framework (JD-R) provides sound empirical evidence for the interaction between lead and lag factors (Bakker and Demerouti 2017). There are three crucial perspectives regarding the JD-R model. First, it considers the work climate (job demands and resources), employee work-related well-being, employee outcomes, and organizational outcomes. Moreover, it provides evidence for the work climate's impact on employee well-being, which affects employee outcomes in return and, ultimately, impacts organizational outcomes. As such, factors such as burnout, engagement, commitment, turnover, productivity, absence, and culture are proven to be lag factors, and the workplace is considered a lead factor. Findings from Kotze (2018) show relationships between employee experiences (regarding job resources) and burnout and work engagement. However, work-related well-being can also serve as a lead factor to employee outcomes and organizational outcomes. Soelton et al. (2020) found a relationship between role conflict and turnover intention and burnout and employee turnover intention. Another perspective is that there are two processes: the motivational and health impairment processes (Bakker et al. 2014). The motivational process indicates that job resources influence organizational commitment, mediated by work engagement. Job demands lead to health impairment through burnout (De Beer et al. 2016).

Job demands are summarized as the physical, mental, and emotional energy employees need to exert during the execution of work-related activities (Bakker and Demerouti 2007). Job resources are the workplace support factors necessary for employees to deal with job

demands (Bakker and Demerouti 2007). Demands include dimensions such as workload, mental load, and emotional load. At the same time, job resources consider dimensions such as supervisory/leadership support and relations, management style/job control, performance management/job information, role clarity, fairness, communication, and digital enablement (Bakker and Demerouti 2007; Bakker et al. 2014; Guenzi and Nijssen 2021; Kotze 2018). The demands–resources ratio enforces the health impairment and motivational process. More importantly, adequate job resources act as a buffer against health impairment processes (Bakker and Demerouti 2007; Xanthopoulou et al. 2007). As such, high job demands coupled with high job resources are able to fuel the motivational process and prevent health impairment. Therefore, a supportive work climate presents an opportunity to employee and organizational functioning, while risk is mitigated if sustained. However, a demanding and unsupportive work climate presents risks to employee and organizational functioning and prevents opportunity. Burnout, as part of the health impairment process, is classified as an “occupational phenomenon” and included in the ICD-11 code by the World Health Organisation (WHO). Burnout is primarily composed of the components of exhaustion and cynicism (De Beer and Bianchi 2019). As a motivational counterpart, work engagement comprises vigor, dedication, and absorption (Schaufeli 2013). Organizational commitment is considered an employee outcome and reflects an employee’s motivational and psychological connection with the organization (Meyer and Allen 1997). Bakker et al. (2014) found various job demands and resources associated with organizational commitment.

Additionally, organizational culture affects organizational commitment, which significantly impacts employee performance (Adam et al. 2020). Research from Jenny et al. (2020) showed that a high demand–low resource ratio contributes to a nine percent loss in productivity and four more days lost in working days (in a year). From a theoretical perspective, leading factors would provide enormous insights into HC risks and opportunities. Considering the aim of this study and the JD-R model’s ability to account for leading and lagging factors, the JD-R model forms the foundation of this study.

### 3. Materials and Methods

#### 3.1. Research Approach

This study implemented a qualitative research method utilizing a qualitative document analysis design (QDA) through an interpretivist paradigm (Antwi and Hamza 2015; Graneheim et al. 2017). QDA is a valuable method for deriving meaning from documents and is considered a design in its own right (Bowen 2009; Morgan 2022). Within the context of the qualitative method, this design allows for careful and systematic investigation of written documents (Wach and Ward 2013) in order to describe explicit textual meaning (Morgan 2022). This design is especially applicable to the current study’s aim as it effectively analyzes documents such as written policies and institutional reports collected from the public domain (Wach and Ward 2013). The interpretive paradigm aligns with the QDA design as the researcher filters through documents using an interpretive lens; interpretive paradigms are ideal for studies where the only data source is documents (Bowen 2009). Therefore, as this study aimed to explore the current risk management approaches directed at HC, the risks reported, and how they are represented using annual integrated reports, the QDA design was deemed appropriate.

#### 3.2. Document Sampling

Purposive sampling was used to collect data, i.e., documents for QDA were selected based on criteria derived from the study aim (Flick 2018; Sherif 2018). This sample was confined to the South African context due to the country’s unique historical context, a gap in the current literature on the identified aim, and a need for insight into integrated organization reporting in developing economies (Adelowotan 2021b; Nwachukwu 2022; IoDSA 2016; Wachira et al. 2019). The factors for including documents identified by Flick (2018), namely, document authenticity, credibility, representativeness, and meaning, were consulted in cre-

ating the purposive inclusion and exclusion criteria. Document authenticity was ensured by downloading documents directly from organization websites, thereby collecting documents in their primary form (Morgan 2022). The credibility of documents was based on the honest representation of companies while considering potential company bias (Morgan 2022). Representativeness of the documents was based on the country of sampling's mandates to report certain aspects of corporate governance. Lastly, the meaning of the documents was based on the extent to which document information is clear and understandable (Morgan 2022). Based on these factors and the study aim, documents were only included if they: were from Johannesburg Stock Exchange (JSE)-listed organizations and published for the year 2020. Lastly, only South African organizations required to publish their annual reports in the public domain and subsequently mandated to comply with the King IV code of corporate governance were included (Wang et al. 2020). Smaller private organizations have fewer requirements regarding disclosure and transparency (as per the Companies Act 2008) and were thus excluded.

### 3.3. Document Collection

Annual integrated reports for JSE-listed companies are published in the public domain. The 2020 reporting year's reports were obtained and downloaded in PDF format from the respective organizations' websites. The sample was collected between March 2021 and June 2021 and comprised the top 40 listed organizations' annual integrated reports. However, one organization had to be excluded as a general partner manages it, and, in effect, it has no directors, executive management, or employees. The final sample used for analysis consisted of 39 organizations. This sample size concurs with previous similar studies (see Terblanche and De Villiers 2018). The documents were, on average, 163 pages in length (SD = 82).

### 3.4. Data Analysis

Data were analyzed using content analysis (Bowen 2009), which allows for the examination of content in a deductive and inductive manner (Altheide et al. 2008; Elo et al. 2014) and is commonly used in analyzing organizational reports in research (see Möller et al. 2011; Nwachukwu 2022). To conduct the content analysis, priori codes were created from two broad categories for data selection, i.e., risk management approaches and information related to HC. The sub-categories for the risk management approaches were based on the ISO risk management model (ISO 2018b). Additionally, the reported sub-categories for HC risks were based on the JD-R theoretical model (Bakker and Demerouti 2017). The anticipation was that the data would represent the core dimensions of the frameworks. However, HC-related information was further split (inductively) between the risks reported and how HC is generally presented in the annual reports. The categories and their dimensions/phases for data selection, in accordance with these frameworks, are listed in Tables 1–4.

**Table 1.** Category 1: Risk management approach.

Approach	Phase	<i>n</i>	%
<b>Risk management approach</b>	Risk identification	39	100
	Risk response	27	69
	Risk evaluation	33	85
	Risk monitoring	22	56
	Risk reporting	24	62
	Risk reporting	39	100



**Table 2.** Category 1: Risk management approach—Risk management phases.

Approach	Phase	Summary
Risk management practices	Risk identification	Pulse, engagement, remote worker experiences, work environment, climate, diversity and inclusion, and culture surveys; 360-degree assessments; focus groups; employee data tracking; performance discussions; talent assessments; individual engagements.
	Risk evaluation	External and internal benchmarking (metrics): industry benchmarks; differentiated between employee groups. HC relationship/risk status (icons): sustained/progress made/unchanged/stable/reduced/constructive. The impact of HC on capital/value creation, business, or operational strategies (qualitative statements).
	Risk response	Culture interventions; evolving working models (onsite/remote/hybrid); revision and improvement of remote work practices; strategies and initiatives to promote a diverse and inclusive workplace; transformation strategies; leadership/management/line function development; skills development for scarce and evolving skills (data science, IT, AI, ML), talent and skills analysis; online/self-led training and development platforms; role clarification; talent management/pipeline strategies, revise remuneration and reward strategies/structures; employee well-being programs; performance management strategies; communication initiatives; address communication channels; unfair treatment/discrimination/harassment/bullying policies; digital enablement/transformation.
	Risk monitoring	Changes in HC risks (presented in metrics and qualitative data).

**Table 3.** Category 2: Risks reported.

Dimension	Sub-Dimension	M		QS		Total	
		n	%	n	%	n	%
Work climate	Career paths	0	0	16	41	16	41
	Colleague support	2	5	3	8	5	13
	Communication	1	3	9	23	9	23
	Demands	0	0	1	3	1	5
	Digital enablement/transformation	1	3	10	26	10	26
	Diversity and inclusion	2	5	17	44	18	46
	Growth and development	3	8	29	74	30	77
	Job information/performance management	4	10	11	28	14	36
	Management style	2	5	2	5	4	10
	Remote working	2	5	17	44	17	44
	Remuneration	0	0	14	36	14	36
	Role clarity	0	0	1	3	1	3
	Supervisory support	8	21	9	23	14	36
Work-life balance	0	0	2	5	2	5	
Employee work-related well-being	Burnout	0	0	1	3	1	3
	Work engagement	0	0	4	10	4	10
Employee outcomes	Organizational commitment	6	15	2	5	8	21
	Turnover intention	1	3	22	56	22	56
Organizational outcomes	Absence	5	13	2	5	6	15
	Productivity	0	0	6	15	6	15
	Turnover	22	56	3	8	23	59
HC risk-related costs					0	0	

Notes: M = metrics; QS = qualitative statements.

**Table 4.** Category 2: Risks reported—Metrics and qualitative statements.

Dimensions and Sub-Dimensions	Metrics Summary	Qualitative Statement Summary
<b>Work climate</b>		
Career paths	none	<i>Business risk:</i> job insecurity and losses; career development and opportunities (also <i>employee needs</i> ); challenged talent pipeline that could impact business sustainability (also <i>impact</i> ); within risk tolerance.
Colleague support	Team collaboration (%); relationship health (%)	<i>Employee needs and concerns:</i> teamwork and trust; disconnection from colleagues—amplified by remote working.
Communication	Communication quality (scaled score)	Rapid information flow and decision-making could lead to change fatigue, retention risks ( <i>impact; value creation risk</i> ); management reporting systems ( <i>people risk</i> ).
Demands	none	New business strategies and the pace thereof, coupled with current business strategies, increased employee pressure ( <i>value creation risk</i> ).
Digital enablement/transformation	Digital organization rating (%)	<i>Business risk:</i> the ability to respond may be constrained by the limitations of legacy systems, scarcity of talent with key capabilities; digital transformation is required to maintain a competitive position; digital transformation and skill redundancy; digital transformation requires the development and attraction of skills, and the failure thereof can impact investors, employees and regulators (also <i>impact</i> ); risk status is unchanged.
Diversity and inclusion	Company approach to D&I (%); age discrimination incidents (number)	<i>Business risk and employee concerns:</i> An inclusive and diverse work environment for all and at all levels; risk status is modest.
Growth and development	Training opportunities rating (scaled score/ %); training quality feedback (scaled score); change rating in growth and development opportunities (%)	<i>Business and people risks:</i> Future-fit skills development; talent pool skills gap; internal skills pipeline; shortage of skills poses a risk for sustainability (also <i>impact</i> ); within risk tolerance.
Job information/performance management	Availability of job information rating (%); performance reviews and discussions (%)	<i>People risk:</i> articulation of expected deliverables. <i>Employee needs:</i> recognition; performance management. <i>Business risk:</i> risk status is modest.
Management style	Employee input rating (%/scaled score)	<i>Employee needs:</i> opportunities for innovation; flexibility in the execution of work. Flexibility at work is a key driver of talent attraction and retention ( <i>value creation risk; impact</i> )
Remote working	Remote work adjustment rating (%); experiences (%); work model preference (%)	<i>People risk:</i> remote working poses risks to the required skills for sustainable development (also <i>impact</i> ); risks resulting from remote working include long hours, work–life balance, and social isolation. <i>Business risk:</i> programs aimed at leadership and culture are challenged by remote work arrangements.
Remuneration	none	<i>Business and people risk/concern/priority:</i> Fair and competitive remuneration and rewards; unchanged risk status.
Role clarity	none	Clarity relating to roles and responsibilities is a pivotal contributor to employee engagement and commitment ( <i>people risk</i> ).
Supervisory support	Line function support and perceptions (%), change in line function/management capabilities.	Leadership/line function capabilities and efficiencies ( <i>business risk/people risk, employee concerns</i> ), management skills ( <i>people risk</i> ); risk status sustained.

Table 4. Cont.

Dimensions and Sub-Dimensions	Metrics Summary	Qualitative Statement Summary
Work–life balance	none	Work–life balance risks as a result of digital transformation, remote working, and the flexibility coupled with it ( <i>employee concerns/priority; business risk</i> ).
<b>Employee work-related well-being</b>		
Burnout	none	As a result of new work models (i.e., remote/hybrid) and digital transformation, emotional burnout represents a challenge ( <i>business risk</i> ).
Work engagement	none	<i>Business risk</i> : disengaged workforce; engaged/motivated employees are key to strategy execution; rapid change can impact employee engagement; morale can affect business sustainability, performance, value creation, and skills attraction (also <i>impact</i> ).
<b>Employee outcomes</b>		
Organizational commitment	Metrics (%/scaled score, comparisons to previous years)	Room for improvement is evident in employees' emotional connection with the organization ( <i>people- and business risk</i> ); commitment and morale can impact business sustainability and performance ( <i>business risk; impact</i> ).
Turnover intention	Metrics (%)	<i>Business and value creation risk and impact</i> : inability to retain key skills/talent, which could affect business strategy; organizational change and culture shifts can increase turnover risks. An unsupportive work environment drives turnover risks ( <i>business risk; impact</i> ).
<b>Organizational outcomes</b>		
Absence	Metrics (%/days, comparisons to previous years, internal and external benchmarks)	Absence (as a result of low morale/satisfaction) can impact business sustainability and performance ( <i>people risk; impact</i> ).
Productivity	none	<i>Business risk</i> : workforce productivity; employee well-being, health, and changes in the workplace pose a risk to productivity ( <i>strategic and operational risks and impact</i> ); productivity impacts strategic goals. Productivity (as a result of low morale/satisfaction) can impact business sustainability and performance ( <i>people risk; impact</i> ).
Turnover	Metrics (% , comparisons to previous years, internal and external benchmarks)	Loss of key personnel ( <i>linked to a business risk</i> ); high turnover affects organizational performance and financial position ( <i>business risk; impact</i> ).

Deductive analysis was used to identify the number of organizations reported in each phase (Category 1) and sub-dimension (Category 2). Inductive analysis was continuously implemented to (1) select and analyze for enhanced understanding of the HC risk management processes and risks reported, as well as the representation of HC, and (2) check for emerging categories. A qualitative software package (MAXQDA; see [Gizzi and Rädiker 2021](#)) was used for coding. The data analysis process adopted the following phases ([Altheide and Schneider 2013](#); [Elo and Kyngäs 2008](#)): (1) document collection and data familiarisation through reading and re-read strategies, (2) deductive and inductive coding supported by line-by-line reading, lexical searches (including proxy terms) for quality control, summary grids per coded segment, and audit trails, and (3) detailed and multiple code reviews.

### 3.5. Strategies for Ensuring Quality Data

In addition to the factors ensuring sampling quality (Flick 2018), the following strategies were applied to promote data quality in accordance with the strategies identified by Korstjens and Moser (2018) and Lincoln and Guba (1985). First, credibility (represented truth of the data) was ensured through prolonged engagement with the data (Korstjens and Moser 2018) and co-coding. A thick description of the data and its origins was provided, thus indicating the transferability. An audit trail and a thorough description of the research process are provided to show that the data supports the recommendations and conclusions made by the researcher (dependability). Lastly, the researcher was reflexive of preconceptions and biases regarding the research aim by keeping notes of her own subjective experiences throughout the research process and documenting the collection and analysis process. Additionally, all items relevant to a research method provided by the Standards for Reporting Qualitative Research (SRQR) were implemented in this study, and O'Leary's (2017) and Bowen's (2009) recommendations for conducting QDA were considered.

## 4. Results

### 4.1. Category 1: Risk Management Approach

Data analysis indicated that all the organizations reported their approach to risk management (Table 1; 39, 100%), and the approach mainly involved risk identification, risk evaluation, risk response, risk monitoring, and risk reporting. For example, Organization 30 stated that they "... apply a defined, structured approach to identifying, assessing, analyzing and responding to risk and opportunities".

The application of this approach, directed at HC, is described below and presented in Table 2.

**Risk identification:** Twenty-seven (69%) organizations reported approaches that could serve as risk identification methods. The approaches ranged between qualitative (e.g., "... identified initiatives identified through employee focus groups ...", Org. 31) and quantitative methods (e.g., "... in 2019 we ceased our traditional annual People Survey and introduced more frequent 'pulse surveys' ...", Org. 38). The types of quantitative risk identification methods that were reported were surveys (pulse, employee engagement, work climate, diversity and inclusion, remote worker experiences) and employee data tracking (this could be company-specific software where employee data are captured). Qualitative methods consisted of focus groups and individual engagements. In contrast, talent and 360-degree reviews could be seen as a mixed-method (quantitative and qualitative) approach.

**Risk evaluation:** Twenty-two (56%) organizations provided information based on risk evaluation. The applied methods varied between benchmarking, HC relationship/risk status indicators, and risk impact. Benchmarking, represented by metrics (e.g., Org. 03 and Org. 04 provided the absenteeism rates per region of operations), involved internal benchmarking (comparison between employee groups) and external industry benchmarking. Company-specific icons reflected the relationship with/status of HC risks. These icons indicated the stability, progress, direction, and importance of risks. Finally, impact evaluation considered the interactions between HC risks and business/value creation risks, which was reflected by qualitative statements. An example of such statements is: "... culture shift to create an environment conducive to rapid information flow and decision-making could result in change fatigue and increased retention risk ...", Org. 01).

**Risk response:** The response strategies and initiatives linked to HC risks across the organizations (33; 85%) primarily focused on growth and development (for leadership, line functions, scarce and future skills), talent management and pipelines, organizational culture, employee engagement, digital transformation, work models (remote/hybrid), diversity and inclusion, and communication.

**Risk monitoring:** The primary method of risk monitoring was analyses of change. Most of the organizations (24, 62%), reported the change of risks that occurred from the previous year/s (e.g., “14.6% employee turnover (2019: 17.11%)”, Org. 18).

**Risk reporting:** All the organizations (39; 100%) reported HC-related risks. Risk reporting was further analyzed and established as Criteria 2.

#### 4.2. Category 2: Risk Reporting

It was important to analyze the employee and workplace risks in the organizational reports, considering their impact on employee performance, value creation, and organizational effectiveness (Burton 2010). However, inconsistencies were found in the risk reporting format. Some risks were reported in metrics (M) and others in qualitative statements (Qs). Table 3 presents the total number of organizations that reported the relevant risk and distinguishes between risks reported in metrics (M) and in qualitative statements (Qs).

**Work climate risks (i.e., job demands and job resources dimensions):** Collectively, most organizations reported work climate factors as risks compared to the other sub-categories. Growth and development is the highest reported risk (30; 77%). However, only three organizations (8%) reported growth- and development-related risk metrics (e.g., “an 8% improvement in how our people rate their opportunities for development and career growth”, Org. 37) and 29 (74%) presented it as a risk in qualitative statements. Diversity and inclusion was the second-highest work climate risk reported (18, M = 2; QS = 17). Another risk shared across 16 organizations (41%) was career paths (M = 0; QS = 16). Remote working is considered a risk for 17 organizations (44%), of which 2 organizations (5%) reported risk metrics. The work climate risks reported the least are: remuneration-related matters, supervisory support/relations, job information/performance management, communication, colleague support/relations, management style, work–life balance, demands, and role clarity. Surprisingly, only 10 organizations (26%) considered digital enablement/transformation as an HC-related risk (M = 1, 3%; QS = 10, 26%) (e.g., “Key risks . . . employees are required to navigate organizational changes arising from ongoing efforts towards digitization . . .”, Org. 06).

**Employee work-related motivational risks (i.e., burnout and work engagement risks):** Employee work engagement and burnout were the most negligible reported risks of all dimensions. Burnout was presented as a risk by one organization (3%) through a qualitative statement (i.e., “While flexibility of working time represents an advantage . . . emotional burnout represents a challenge.”, Org. 03).

**Employee outcomes risks (i.e., turnover intention and organizational commitment):** Although turnover intention was the highest reported risk for employee outcomes (56%), only one organization provided the actual risk (e.g., “87% of surveyed employees . . . intend to stay . . .”, Org. 03). Organizational commitment was largely neglected.

**Organizational outcomes risks (i.e., productivity, absenteeism, and actual employee turnover):** Employee turnover rates were mostly presented (59%), whereas one organization reported the “loss of key employees” (Org. 09) as a qualitative statement (3%). Productivity and absence risks were the least reported.

**Cost implications for these risks:** No organization reported cost implications as a result of employee and workplace risks.

As part of the risk reporting criteria, the second step of the analysis was performed to get more insight into the risk metrics and the risks reported as qualitative statements. The metrics and qualitative statement summaries are presented in Table 4.

**Metrics:** For the year 2020, the metrics were mainly percentages obtained from employee ratings and scaled scores representing multiple components. However, there are three exceptions: a diversity and inclusion metric presented as the number of age discrimination incidents reported; absence days/rates; employee turnover, reflecting the percentage of people that left the organization. In addition to the 2020 metrics, changes in risks were also reported for growth and development opportunities, as rated by employees (%), or-

ganizational commitment, absence, and turnover. Turnover and absence metrics were supplemented with internal and external benchmark comparisons.

Qualitative statements: Career development and challenged talent pipelines (i.e., career paths); fit-for-future skills gaps and development (i.e., growth and development); a fair, diverse, and inclusive work environment (i.e., diversity and inclusion); fair and competitive remuneration; digital transformation and impact control; remote working; employee work-related well-being; retention risks (i.e., turnover intention risks); productivity; and employee turnover are all regarded as business risks. Additionally, upholding current business strategies and adapting to new business strategies (i.e., demands), rapid information flow and decision-making (i.e., communication), and retention risks (i.e., turnover intention risks) are risks associated with value creation. People risks/needs/concerns involve management reporting systems (i.e., communication); teamwork and colleague support; a diverse and inclusive work environment; growth and development opportunities; opportunities for innovation and flexibility in work execution (i.e., management style); remote working practices, arrangements, and challenges; fair remuneration; role clarity; supervisory support and capabilities; work–life balance; and organizational commitment.

As part of the risks reported, organizations also reported the impact of these risks at various levels. Business sustainability and performance drivers were considered, such as: absence, productivity, organizational commitment, employee morale, discrepancies between digital transformation and the required skills, challenges regarding growth and development, and career paths. Those mentioned above could influence shareholder and employee confidence as well as regulations. Additionally, organizational change, culture shifts, unsupportive work environments, and rapid flow of communication can increase turnover risks. Should turnover risks transform into turnover, value creation could be affected. Another critical driver of value creation is talent retention and attraction, which is influenced by flexible working conditions. Employee turnover affects business performance and financial position. Lastly, risk status/tolerance was indicated for risks related to career paths, digital enablement/transformation, growth and development, remuneration, performance, and supervisory support/relations.

#### 4.3. Category 3: Human Capital Reporting Representation

The focus of Category 3 was to explore the representation of HC in annual reports. Only the information reported under the HC sections (including the remuneration reports) was considered. Table 5 provides a summary of HC representation in annual reports.

**Table 5.** Category 3: HC reporting representation.

Dimension	Sub-Dimension	Summary
Work climate	Career paths	Talent management strategy involves the development of a strategic workplace and talent pipeline with comprehensive talent planning; people success is measured by career paths.
	Colleague support	Respect is key to building stronger teams; an organizational model that ensures team effectiveness.
	Communication	Prioritized communication to keep employees well-informed because of the change in the way of work; communication is promoted through regular management interaction and clear communication structures; the flow of important business-related communication.
	Digital enablement/transformation	Digital training platforms for fourth industrial revolution preparedness; robotics process automation technology has replaced and automated traditional people services (creates efficiencies and reduces costs).
	Diversity and inclusion	Workforce distribution (gender, race, age); diversity and inclusion initiatives at different levels: leadership, behavioral, structural; a fair and supportive workplace for all; transformation is enhanced through career opportunities.

Table 5. Cont.

Dimension	Sub-Dimension	Summary
	Growth and development	Amount of money invested; number of training and development opportunities provided (sessions/days/hours/employee attendance); future-fit HR systems that enable growth and development opportunities; self-led development planning.
	Job information/performance management	Performance reviews and development; pay-for-performance.
	Management style	Strategies to empower employees to execute work creatively and work in more rewarding ways; work practices stimulate innovation and creativity.
	Remote working	Remote working could impact employee well-being over the long-term; remote working could further intensify already existing inequalities; swift response to the rapid changes and implementing remote working while providing the required support and tools for productivity; remote work is dependent on increased utilization of technology—increases the risk for cyber-attacks.
	Remuneration	Detailed remuneration policies; investigated pay parity between different levels and groups; fair pay and market-related benefits; reward policies and structures are designed to attract, retain, and motivate the workforce.
	Role clarity	Role clarification for operational integrity; supported by technology solutions.
	Supervisory support	Results from assessments—reflecting leadership capabilities—are used for development purposes; programs are in place to empower line functions to build trust with their teams and promote a culture of inclusivity.
	Work–life balance	HR/organizational systems should support appropriate work–life balance; ongoing implementation of fit-for-future work arrangements to promote work–life balance; develop a hybrid working model to promote work–life balance.
	Employee engagement	Methods and initiatives to obtain and address staff input.
Employee work-related well-being	Burnout	None.
	Work engagement	None.
Employee outcomes	Organizational commitment	Committed employees are of great value to the organization; strive for a committed workforce; updated HR policies and practices for enhanced commitment.
	Turnover intention	In a competitive environment, turnover risks (especially senior staff) increase; retention of talent for strategy delivery requirements.
Organizational outcomes	Absence	Health and safety concerns impact absence at work.
	Productivity	A constant drive to keep employees productive; in the evolving world of work, developing innovative people practices are essential to promoting productivity; productivity is a key enabler of strategy execution.
	Turnover	Could leave critical positions vacant and adversely affect business strategy delivery and the organization’s financial position.

The HC sections mainly focused on outputs and initiatives implemented that were substantiated with the importance of each (e.g., learning and development is “more important than ever”, Org. 08). The most notable findings are those related to: (1) diversity and inclusion that is represented by workforce distribution figures by age/gender/race and initiatives at different levels to promote diversity and inclusion; (2) the amount of money invested in training and development as well the number of opportunities provided. It is noteworthy that employee work-related well-being was the most under-represented, namely, not represented at all. In contrast, matters related to turnover and turnover intention were shared across multiple organizations.

## 5. Discussion

### 5.1. Human Capital Risk Management Reporting Practices

Risk management is critical to organizations, especially in developing markets that force numerous changes and challenges (Culp 2020). Establishing a risk management approach allows for the effective and proactive governance of operational and strategic risks (ISO 2018a). The importance of the risk management approach is supported by the current study's findings, as all organizations reported their general management approach. The approach generally embraced five phases in line with the ISO 31,000 (2018b) standard. However, the second side of the previous finding is that not all organizations reported each risk management phase, and the methods applied are challenged by inconsistencies (see Table 2). Based on this finding, it can be possible that HC risk management practices are still a limited focus, which concurs with the research findings by Becker and Smidt (2016).

Risk identification sets the foundation for risk management, which should also be the case for HC risk identification and, subsequently, HC risk management (Rothmann and Bruwer 2020). Although some organizations reported risk identification practices, the methods differ significantly (see Tables 1 and 2). The Human Capital Management Coalition (HCMC) wrote a petition to the US Securities and Exchange Commission (SEC) requesting mandatory and consistent HC reporting (HCMC 2017). This study shows that methods for HC risk identification vary between qualitative and quantitative methods. Qualitative methods such as focus groups and individual engagements were typically used; however, the use of these methods can pose numerous challenges for risk identification unless combined with quantitative methods (mixed-method approaches) (Emblemsvåg and Kjølstad 2006). The challenges include the reliability of the responses, sustained consistency of the implementation approach, integrity of the data, representative sampling, and quantification of the results (Korombel and Tworek 2011; Radu 2019).

Even though quantitative risk identification methods allow for measurement, they could face similar challenges to qualitative methods. However, these challenges stem from pre-requisites not met by the measurement tool (Rothmann and Bruwer 2020). The pre-requisites include a theoretical foundation, validity and reliability, psychometric properties (e.g., to control for acquiescence bias, single item measurements versus multiple item measurements), evaluation of results (e.g., norm benchmarking, internal and external benchmarking), and statistical analysis (e.g., impact analyses, longitudinal analyses). The most common quantitative methods utilized are provided in Table 2. The findings suggest immense opportunity in the risk identification measures reported. Pulse surveys, as a supplement (not a stand-alone tool) to comprehensive employee and workplace risk diagnostic tools, could provide meaningful and factual insights for businesses, employees, future talent, and relevant stakeholders. Such a measurement model allows for a complete diagnosis of people and workplaces while engaging with employees frequently. Scharp et al. (2021) found daily employee in-role and extra-role performance fluctuations due to hindrance demands. These findings build a strong case for regular employee engagements. Considering the HC risk identification methods: if the above requirements are not met and challenges overcome, the results generated from these methods could pose a challenge for risk evaluation and monitoring (Korombel and Tworek 2011).

Interestingly, this study found risk evaluation and monitoring to be the most under-reported risk management phases. Both these phases were mostly reported where metrics were available (Table 4). It was surprising that impact analysis, as part of risk evaluation, was reflected by qualitative statements. This finding makes sense when a measurement model combines quantitative and qualitative strategies (Hammarberg et al. 2016). However, employee engagement, retention, and productivity risks would be exceptions as these were not expressed in metrics, meaning that the impact reported was primarily qualitative. The lack of metrics could pose a challenge to HC risk management processes. Ideally, subsequent to these phases, organizations should be able to determine the appropriate risk response.



The current research found that fewer organizations reported risk identification measures as opposed to risk response strategies. This finding could result from HC risk identification challenges and the unavailability of HC risk measurements/appropriate risk management practices. Additionally, the information reported is mainly qualitative and corroborates well with the findings of the format risks reported in Table 3. Similarly, the risk responses indicated (Table 2) are primarily directed at work climate risks reported the most (Table 3). The responses directed at organizational culture concurred with previous research in that business models are becoming increasingly flexible and technology-driven due to the COVID pandemic (IBM Institute for Business Value 2020). These changes mean that (1) culture transformation is required, and (2) HR must drive the risks and elements associated with these models. The extent to which organizations transform strategies and operations to be future-fit is also how HC practices and initiatives should be converted to be future-fit. The future of HR involves culture and value transformations that are centered on employee and workplace experiences (McKinsey & Company 2020a). HR plays a critical role in preparing organizations for the future. At face value, the response strategies reported in this sample align with the future of HR, which could position HR and people as strategic partners (McKinsey & Company 2020b).

The final step of a risk management approach is risk reporting; the scope of HC risks and the credibility of information provide for enhanced and continuous governance (IIRC 2021; HCMC 2017). Despite the predetermined dimensions, based on the JD-R model, the contents of the reports directed at HC cover numerous model dimensions. However, the results indicate significant HC risk reporting inconsistencies and challenges. The reporting inconsistencies were reflected by some risks reported in metrics and other risks reported in qualitative statements. The most probable reason for this could be the risk identification methods. Additionally, HC risks were identified at different levels (Table 4). Risks such as work-related well-being (both work engagement and burnout), organizational commitment, absence, and productivity are under-reported and metrics-deprived, considering their risk to business sustainability and performance. Another notable finding was the risks of employee retention and actual turnover. These risks are fairly reported, with one difference: actual employee turnover is metrics-rich, whereas retention risks are content-rich. Measuring talent retention by the number of talent/employees that have left the organization is a reactive approach. A significant predictor of turnover is the intention of employees to stay or leave (Cho and Lewis 2012). A more proactive approach could include measuring turnover intention, which allows for preventative risk responses. In theory, workplace experiences affect employee work-related well-being, impacting employee effectiveness and, ultimately, affecting organizational outcomes (Demerouti and Bakker 2011). The interactions between these factors were hardly reported. ISO (2018b) recommends the evaluation of interdependencies internal to organizations. However, there were exceptions (Table 4). It is clear that HC risks are acknowledged; however, the magnitude of people's experiences is not understood. More importantly, HC risk-related costs were not reported. Rothmann (2017) presented the costs related to the loss in productivity and turnover intention due to employee work-related well-being risks and organizational commitment. These costs were estimated at ZAR 12,581,748.30 in a given month. The risks and costs of low organizational commitment were estimated at ZAR 30,582,789.14 per month.

People matters were dispersed across the documents (i.e., company profile and business model, group risks and opportunities, material matters, governance, performance overview, and stakeholder engagement), which makes sense in the light of integrated reporting (IIRC 2021). However, a comprehensive risk profile under the HC section, summarized in other relevant areas of the report, could add significant value as proof of organizations valuing their HC. Thus, it was important to investigate the designated HC sections for an enhanced understanding. The information presented varied between elaborations on HC risks, risk responses, and HR inputs and outputs. This finding is in line with García-Sánchez et al. (2020), who referred to HC inputs and outcomes. Moreover, interesting results regarding growth and development, diversity and inclusion, and

remuneration were produced (Table 5). In particular, information on diversity and inclusion represents diversity more than inclusion, which raises the question: is it reported for legislative compliance only? There is immense opportunity in obtaining staff input regarding the inclusiveness of their work environments. McKinsey & Company (2020b) found that diverse organizations outperform others at the financial level. They further state that inclusion goes beyond diversity (the make-up of an organization): it is also about workplace experiences. The same goes for all other workplace- and employee-related aspects.

In line with research indicating a lack of a comprehensive and transparent reporting framework for HC (Adelowotan 2021b), as well as the current study findings and aim, a reporting framework is suggested. This framework is designed to support good corporate governance, has a quantitative risk identification phase that complies with the pre-requisites mentioned earlier, and can be enforced with qualitative methods. As such, the framework allows for objective risk evaluation, monitoring, and evidence-based risk responses, which may address the need for clear, integrated reporting on HC with regard to risk reporting, as indicated in the current findings. The framework can be integrated with other risk identification approaches, measures, and employee-related data and metrics.

### 5.2. Reporting Framework

The proposed reporting framework (Table 6) aims to add rigor based on the risk management practices required in HC reporting and its comprehensiveness. Furthermore, this framework will demonstrate how HC risk management outcomes can be achieved. More specifically, the results are generated through risk identification, evaluation, response, monitoring, and reporting. If these presented outcomes are achieved, it could provide evidence of corporate governance regarding HC. The risk identification approach requires quantitative measurements grounded in theory and, consequently, high-level statistical analysis that can generate business insight. Such measurements can be obtained from existing products in the market. The proposed risk identification approach allows for objective risk evaluation, monitoring, and response strategies. The outcomes that can be achieved at large are: (1) aligned people and business strategies, (2) the ability of organizations to respond to business and people needs, (3) narrow disparities between organizational culture, values (what we strive for), and people and workplaces (the reality), (4) anticipation of risks and responding accordingly, (5) proactive identification and management of the costs associated with people and workplace risks, and (6) increased performance at all levels.

The primary factors of the HC risk reporting framework include workplace and employee risks. The workplace risk factors should be ranked based on their impact on employee and organizational outcomes via statistical interventions that determine causality between these factors. In essence, whatever the employee risks, the reasons for risks will evidently be known and can be addressed accordingly for risk mitigation. Ideally, the risk identification measurement tool should have this capability. Additionally, a summary of workplace risk factors could be provided, e.g., employee experiences concerning the inclusiveness of the workplace (presented in metrics). Furthermore, employee risks (i.e., work-related well-being and employee outcomes) reflect the percentage of staff at risk/benchmarks/risk status. It is essential to report the impact of these risks, i.e., the effect on turnover intention, absence, and productivity, coupled with cost estimations. For example, how many more absence days are reported for employees who experience low work engagement as opposed to those who experience high work engagement? Organizational outcomes reflect the employee turnover and absence rates and an estimate of the loss in productivity. An integral aspect of this framework is to report the change and how these risks differ for employees, especially diverse groups. All the information above is considered key risk indicators. HC risk profiles should also reflect the HC KRIs in relation to KPIs. Moreover, the following are critical aspects of reporting: the link between key risk indicators and the organizational culture, value proposition, business, and people

risk. Lastly, an overview of risk responses should be provided. The risk responses can be qualitative as the metrics will substantiate them.

**Table 6.** The proposed human capital risk reporting framework.

Key Risk Indicators								Strategic Alignment
Workplace risk factors	KPI Status (Icon, etc.)	Work-related well-being risks	KPI Status (Icon, etc.)	Employee outcomes	KPI Status (Icon, etc.)	Organizational outcomes	KPI Status (Icon, etc.)	Culture (status icon, etc.)
Current		Current year	Baseline	Current year	Baseline	Current year	Baseline	
Work climate risk factors (demands and resources) ranked based on impact (presented in index, etc.)		Burnout and work engagement risks. (Percentage of staff at risk/benchmarks/status icon, etc.)		Organizational commitment and turnover intention. (Percentage of staff at risk/benchmarks/status icon, etc.)		Turnover rate; absence rate; productivity.		Costs per outcome
Summary of employee experiences (risk factors)		Impact		Impact		Drivers		Values (status icon, etc.)
Additional qualitative statements		% Loss in working days/productivity. Estimated cost to company of increased absence or reduced productivity.		% Loss in working days/productivity. Estimated cost to company of increased absence or reduced productivity. Estimates cost to company should turnover intention transfer to turnover.		e.g., Employee risks (work-related well-being/outcomes), workplace factors.		
Risk evaluation								People and business performance (status icon, etc.)
Group differences in dominant risks, especially diversity groups.								
Risk response								
Response strategies directed at the people and workplace risks.								

### 5.3. Limitations and Recommendations

The first limitation is that our study utilized a small sample of documents pertaining to a specific geographical context. Thus, the information obtained could be regulated by the laws and governance principles relevant to South Africa only, limiting the generalizability of our findings to other contexts. Additionally, this study only considered annual integrated reports and not social responsibility/ESG reports. It could be that more information on HC is included in those reports. Another limitation is that organizations might be hesitant to report certain proposed information and metrics, as they could perceive them as threats to their reputations. The current findings are, therefore, only a representation of what organizations have stated; further research can be conducted on the applied practices that are not reported through, for example, conducting interviews with organizations. Furthermore, researchers are encouraged to test the effectiveness of the suggested framework in organizations not only in South Africa but globally in the applicable contexts. Moreover, the framework is limited in application due to the conditions set for HC risk management approaches. Risk diagnostic tools adhering to these approaches might not be freely available and could incur additional costs, although their adoption could provide long-term returns on short-term investments. Lastly, despite its effectiveness, the use of QDA in research is still limited (Morgan 2022); the current research contributes to the growth of this design, and further research using this qualitative design is encouraged.

### 6. Conclusions

This study aims to investigate current HC risk reporting practices and establish a risk reporting framework. This study found gaps in how HC is represented, which could be attributed mainly to the lack of human capital risk management processes and a drive towards legislative compliance. The findings on HC reporting practices can be summarized as follows. (1) These practices are more key performance indicator (KPI)-

driven (backward-looking) than key risk indicator (KRI)-driven (proactive practices and forward-looking). (2) They are fragmented approaches instead of comprehensive and holistic approaches, making it challenging to identify the value-added component of HC to organizations' sustainability. The most prominent findings on HC reporting, directed at value creation, relate to talent attraction and fit-for-future skills and talent development while maintaining a fair, supportive, and inclusive work environment. It could be that these are underwritten by the Employment Equity Act and the Skills Development Act. The ideal situation is that the risk reporting framework serves a purpose beyond legal compliance and informs strategic and governance decisions on HC. It could also inform the HC sections within annual reports. In light of the findings and the proposed risk reporting framework, it is argued that more insights and transparency related to HC risks are required. Insights involve metrics, impact analyses, internal and external benchmarking, and the continuous monitoring of the risks. Transparency refers to the communication of objective HC risks. HC risk management should consider employee and workplace experiences and their impact on organizational performance and sustainability. It should also provide for more objective and measurable risks based on evidence-based models, which could provide more insight into board, management, and employee considerations and, if reported, shareholder and future talent considerations. Therefore, organizations are encouraged to adjust their current HC risk management approaches and reporting by adopting and customizing the proposed reporting framework while continuing to comply with the country's labor and company laws. Therefore, the proposed framework contributes to practice and could benefit organizations for multiple reasons: enhancing corporate governance, attracting and retaining talent and investors, and ensuring an inclusive and supportive place of work. Finally, the reporting framework developed by this research via the risk management practices can be tested by human resource practitioners/organizational development specialists, from which research on the impact of this framework on corporate disclosure and corporate governance can then stem.

**Author Contributions:** Conceptualization, M.B., J.C.R., S.E.S. and L.T.D.B.; Writing—original draft, M.B.; Writing—review and editing, M.B., S.E.S., J.C.R. and L.T.D.B.; Analyses, M.B. and S.E.S.; Supervisors, L.T.D.B., S.E.S. and J.C.R. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** The Economic and Management Sciences Research Ethics Committee of the North-West University (EMS-REC-NWU) approved this study as a minimal risk study with the following reference number: NWU-00799-20-A4.

**Informed Consent Statement:** This study was a review and analysis of documentation, and, as such, it involved no contact with human participants and, therefore, did not require any consent procedure.

**Data Availability Statement:** Data are available upon request from the corresponding author.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Adam, Adam, Tjutju Yuniarsih, Eeng Ahman, and Kusnedi Kusnendi. 2020. The Mediation Effect of Organizational Commitment in the Relation of Organization Culture and Employee Performance. Paper presented at 3rd Global Conference on Business, Management, and Entrepreneurship (GCBME 2018), Bandung, Indonesia, August 8.
- Adelowotan, Michael. 2021a. Developing a Framework for Human Capital Disclosure in Corporate Annual Reports. *The Journal of Accounting and Management* 11: 19–26. Available online: <https://dj.univ-danubius.ro/index.php/JAM/article/view/310/1259> (accessed on 13 January 2022).
- Adelowotan, Michael Olajide. 2021b. The usefulness of Human Capital Disclosures: Perspectives of Human Resource managers. *African Journal of Business and Economic Research* 16: 331–60. [CrossRef]
- Alshirah, Malek Hamed, Azhar Abdul Rahman, Ifa Rizad Mustapa, and Ahmad Farhan Alshira'h. 2020. The Effect of Firms Characteristics on Corporate Risk Disclosure: Empirical Evidence from Amman Stock Exchange. *International Journal of Academic Research in Accounting, Finance and Management Sciences* 10: 336–48. [CrossRef]
- Altheide, David L., and Christopher J. Schneider. 2013. *Qualitative Media Analysis*. Thousand Oaks: Sage Publications.

- Altheide, David, Michael Coyle, Katie DeVriese, and Christopher Schneider. 2008. Emergent qualitative document analysis. In *Handbook of Emergent Methods*. Edited by S. N. Hesse-Biber and P. Leavy. New York: Guilford Press, chap. 6. pp. 127–51.
- Antwi, Stephen Kwadwo, and Kasim Hamza. 2015. Qualitative and quantitative research paradigms in business research: A philosophical reflection. *European Journal of Business and Management* 7: 217–25.
- Bakker, Arnold B., and Evangelia Demerouti. 2007. The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology* 22: 309–28. [CrossRef]
- Bakker, Arnold B., and Evangelia Demerouti. 2017. Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology* 22: 273–85. [CrossRef]
- Bakker, Arnold B., Evangelia Demerouti, and Ana Isabel Sanz-Vergel. 2014. Burnout and Work Engagement: The JD–R Approach. *Annual Review of Organizational Psychology and Organizational Behavior* 1: 389–411. [CrossRef]
- Barney, Jay. 1991. Firm resources and sustained competitive advantage. *Journal of Management* 17: 99–120. [CrossRef]
- Barney, Jay B., and Jeffrey S. Harrison. 2020. Stakeholder theory at the crossroads. *Business & Society* 59: 203–12. [CrossRef]
- Becker, Karen, and Michelle Smidt. 2016. A risk perspective on human resource management: A review and directions for future research. *Human Resource Management Review* 26: 149–65. [CrossRef]
- Bek-Gaik, Boguslawa, and Anna Surowiec. 2021. Forward-looking Disclosures in Integrated Reporting: Evidence from Poland. *European Research Studies* 24: 952–81. [CrossRef]
- Bonsu, Samuel. 2020. Stakeholder Primacy: The Sustainability Schema of Business. *Journal of Finance, Accounting & Management* 11: 36–52.
- Bowen, Glenn A. 2009. Document Analysis as a Qualitative Research Method. *Qualitative Research Journal* 9: 27–40. [CrossRef]
- Branco, Manuel Castelo, and Lucia Lima Rodrigues. 2006. Corporate social responsibility and resource-based perspectives. *Journal of business Ethics* 69: 111–32. [CrossRef]
- Brown, Ian, Adam Steen, and Julie Foreman. 2009. Risk Management in Corporate Governance: A Review and Proposal. *Corporate Governance: An International Review* 17: 546–58. [CrossRef]
- Bryant, Phil, and Charlotte Davis. 2012. Regulated change effects on boards of directors: A look at agency theory and resource dependency theory. *Academy of Strategic Management Journal* 11: 1–16.
- Bulut Sürdü, Fatma, Arzu Özsözgün Çalışkan, and Emel Esen. 2020. Human Resource Disclosures in Corporate Annual Reports of Insurance Companies: A Case of Developing Country. *Sustainability* 12: 3452. [CrossRef]
- Burton, Joan. 2010. *WHO Healthy Workplace Framework and Model: Background and Supporting Literature and Practices*. Geneva: World Health Organization, February. Available online: [https://apps.who.int/iris/bitstream/handle/10665/113144/9789241500241\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/113144/9789241500241_eng.pdf?sequence=1&isAllowed=y) (accessed on 16 July 2021).
- Çam, İlhan, and Gökhan Özer. 2022. A Detailed Investigation of the Effects of Human Capital on Firm Value: An Application on Bist. *NEU Journal of Social Sciences* 15: 5–37.
- Chander, Subash, and Vishaka Mehra. 2011. A study on intangible assets disclosure: An evidence from Indian companies. *Intangible Capital* 7: 1–30. [CrossRef]
- Cho, Yoon Jik, and Gregory B. Lewis. 2012. Turnover Intention and Turnover Behavior: Implications for Retaining Federal Employees. *Review of Public Personnel Administration* 32: 4–23. [CrossRef]
- Courtis, John K. 1987. Fry, smog, lix and rix: Insinuations about corporate business communications. *The Journal of Business Communication* 1973 24: 19–27. [CrossRef]
- Culp, Steve. 2020. Why Risk Management Is More Important Than Ever. *Forbes*, October 1. Available online: <https://www.forbes.com/sites/steveculp/2020/10/01/why-risk-management-is-more-important-than-ever> (accessed on 14 June 2021).
- Dang, Quyen Thao, Pavlina Jasovska, and Hussain Gulzar Rammal. 2020. International business-government relations: The risk management strategies of MNEs in emerging economies. *Journal of World Business* 55: 101042. [CrossRef]
- De Beer, Leon Tielman, and Renzo Bianchi. 2019. Confirmatory Factor Analysis of the Maslach Burnout Inventory: A Bayesian Structural Equation Modeling Approach. *European Journal of Psychological Assessment* 35: 217–24. [CrossRef]
- De Beer, Leon Tielman, Jcao Pienaar, and Sebastiaan Rothmann. 2016. Work overload, burnout, and psychological ill-health symptoms: A three-wave mediation model of the employee health impairment process. *Anxiety, Stress, & Coping* 29: 387–99. [CrossRef]
- Deloitte. 2013. Exploring Strategic Risk. Available online: <https://www2.deloitte.com/global/en/pages/governance-risk-and-compliance/articles/exploring-strategic-risk.html> (accessed on 4 July 2021).
- Demerouti, Evangelia, and Arnold B. Bakker. 2011. The Job Demands–Resources model: Challenges for future research. *SA Journal of Industrial Psychology* 37: 1–9. [CrossRef]
- Dumitru, Mădălina, and Raluca Gina Gușe. 2017. The Legitimacy of the International Integrated Reporting Council. *Accounting and Management Information Systems* 16: 30–58. [CrossRef]
- EC (European Commission). 2020. Inception Impact Assessment: Sustainable Corporate Governance. Available online: <https://ec.europa.eu/info/law/betterregulation/have-your-say/initiatives/12548-Sustainable-corporate-governance> (accessed on 9 September 2022).
- ECGI (European Corporate Governance Institute). 2020. Corporate Governance in South Africa. Available online: <https://ecgi.global> (accessed on 4 August 2021).
- Elo, Satu, and Helvi Kyngäs. 2008. The qualitative content analysis process. *Journal of Advanced Nursing* 62: 107–15. [CrossRef]

- Elo, Satu, Maria Kääriäinen, Outi Kanste, Tarja Pölkki, Kati Utriainen, and Helvi Kyngäs. 2014. Qualitative Content Analysis: A Focus on Trustworthiness. *SAGE Open* 4: 1–10. [CrossRef]
- Emblemsvåg, Jan, and Lars Endre Kjølstad. 2006. Qualitative risk analysis: Some problems and remedies. *Management Decision* 44: 395–408. [CrossRef]
- Flair, I. 2022. Human Capital. Salem Press Encyclopedia. Available online: <https://eds-s-ebSCOhost-com.nwulib.nwu.ac.za/eds/detail/detail?vid=4&sid=0403c943-5442-4e40-bd51-ee76e56d2cde%40redis&bddata=JnNpdGU9ZWRzLWxpdmU%3d#AN=89677569&db=ers> (accessed on 1 July 2022).
- Flick, U. 2018. *An Introduction to Qualitative Research*. Thousand Oaks: Sage.
- FRC (Financial Reporting Council). 2020. Annual Review of Corporate Reporting 2019/20. Available online: <https://www.frc.org.uk/getattachment/d20135f8-c888-4300-a4ad-4ea0c17c1269/2020-Annual-Review-of-Corporate-Reporting.pdf> (accessed on 30 June 2021).
- Freeman, R. Edward, Jeffrey S. Harrison, and Andrew C. Wicks. 2007. *Managing for Stakeholders: Survival, Reputation, and Success*. New Haven: Yale University Press.
- García-Sánchez, Isabel-María, Nicola Raimo, Arcangelo Marrone, and Filippo Vitolla. 2020. How Does Integrated Reporting Change in Light of COVID-19? A Revisiting of the Content of the Integrated Reports. *Sustainability* 12: 7605. [CrossRef]
- Gius, Daniela, Jean-Christophe Mieszala, Ernestos Panayiotou, and Thomas Poppensieker. 2018. *Value and Resilience through Better Risk Management*. London: McKinsey & Company. October 1. Available online: <https://www.mckinsey.com/business-functions/risk-and-resilience/our-insights/value-and-resilience-through-better-risk-management> (accessed on 4 July 2020).
- Gizzi, Michael C., and Stefan Rädiker, eds. 2021. *The Practice of Qualitative Data Analysis*. Berlin: MAXQDA Press. Available online: <https://doi.org/10.36192/978-3-948768058> (accessed on 19 September 2021).
- Graneheim, Ulla H., Britt-Marie Lindgren, and Berit Lundman. 2017. Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today* 56: 29–34. [CrossRef] [PubMed]
- Guenzi, Paolo, and Edwin J. Nijssen. 2021. The impact of digital transformation on salespeople: An empirical investigation using the JD-R model. *Journal of Personal Selling & Sales Management* 41: 130–49. [CrossRef]
- Hagigi, Moshe, and Kumar Sivakumar. 2009. Managing diverse risks: An integrative framework. *Journal of International Management* 15: 286–95. [CrossRef]
- Hammarberg, Karin, Maggie Kirkman, and Sheryl de Lacey. 2016. Qualitative research methods: When to use them and how to judge them. *Human Reproduction* 31: 498–501. [CrossRef]
- HCMC (Human Capital Management Coalition). 2017. 2017 SEC Rulemaking Petition Urging Stronger Human Capital Disclosure. Available online: <https://www.sec.gov/rules/petitions/2017/petn4-711.pdf> (accessed on 18 July 2021).
- Hoffmann, André. 2018. The Purpose of Business? It's Not Just about Money, Global Environment Facility. May 10. Available online: <https://www.thegef.org/news/purpose-business-its-not-just-about-money> (accessed on 18 June 2021).
- HR Future. 2019. Impact of Human Capital Risks on Performance. Available online: <https://www.hrfuture.net>.
- IBM Institute for Business Value. 2020. COVID-19 and the Future of Business. Available online: <https://www.ibm.com/thought-leadership/institute-business-value/report/covid-19-future-business> (accessed on 30 June 2021).
- IIRC (International Integrated Reporting Council). 2013. The International Framework. Available online: <https://integratedreporting.org> (accessed on 3 February 2021).
- IIRC (International Integrated Reporting Council). 2021. The International Framework. Available online: <https://integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf> (accessed on 21 June 2021).
- IoDSA (Institute of Directors in Southern Africa). 2016. King Report on Corporate Governance for South Africa (King IV). Available online: [https://cdn.ymaws.com/www.iodsa.co.za/resource/collection/684B68A7-B768-465C-8214-E3A007F15A5A/IoDSA\\_King\\_IV\\_Report\\_-\\_WebVersion.pdf](https://cdn.ymaws.com/www.iodsa.co.za/resource/collection/684B68A7-B768-465C-8214-E3A007F15A5A/IoDSA_King_IV_Report_-_WebVersion.pdf) (accessed on 15 June 2021).
- ISO (International Organization for Standardization). 2016. ISO 30408-Human Resource Management-Guidelines on Human Governance. Available online: <https://www.iso.org/standard/63492.html> (accessed on 21 June 2021).
- ISO (International Organization for Standardization). 2018a. ISO 30408-Human Resource Management-Guidelines for Internal and External Human Capital Reporting. Available online: <https://www.iso.org/obp/ui/#iso:std:iso:30414:ed-1:v1:en> (accessed on 21 June 2021).
- ISO (International Organization for Standardization). 2018b. ISO 31000-Risk Management. Available online: <https://www.iso.org/obp/ui/#iso:std:iso:31000:ed-2:v1:en> (accessed on 21 June 2021).
- Jaffe, Dennis. 2021. From Shareholder Primacy to Stakeholder Primacy: How Family Businesses Lead the Way. *Forbes*, February 24. Available online: <https://www.forbes.com/sites/dennisjaffe/2021/02/24/from-shareholder-primacy-to-stakeholder-primacy-how-family-businesses-lead-the-way/?sh=3477a4cf21ed> (accessed on 24 June 2021).
- Jenny, Gregor J., Georg F. Bauer, Désirée Fülleemann, Sylvia Broetje, and Rebecca Brauchli. 2020. “Resources-Demands Ratio”: Translating the JD-R-Model for company stakeholders. *Journal of Occupational Health* 62: e12101. [CrossRef]
- Khatib, Saleh F. A., and Abdalnaser Nour. 2021. The Impact of Corporate Governance on Firm Performance During The COVID-19 Pandemic: Evidence from Malaysia. *The Journal of Asian Finance, Economics and Business* 8: 943–52. [CrossRef]
- Korombel, Anna, and Piotr Tworek. 2011. Qualitative risk analysis as a stage of risk management in investment projects: Advantages and disadvantages of selected methods—theoretical approach. *Journal of Interdisciplinary Research* 1: 51–54.

- Korstjens, Irene, and Albine Moser. 2018. Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice* 24: 120–24. [CrossRef]
- Kotze, Martina. 2018. How job resources and personal resources influence work engagement and burnout. *African Journal of Economic and Management Studies* 9: 148–64. [CrossRef]
- Klynveld Peat Marwick Goerdeler. 2016. King IV Summary Guide. Available online: <https://assets.kpmg/content/dam/kpmg/za/pdf/2016/11/King-IV-Summary-Guide.pdf> (accessed on 17 June 2021).
- Kravet, Todd, and Volkan Muslu. 2013. Textual risk disclosures and investors' risk perceptions. *Rev Account Stud* 18: 1088–122. [CrossRef]
- Lajili, Kaouthar. 2022. Human capital disclosure and the contingency view. *Personnel Review* ahead-of-print. [CrossRef]
- Le Roux, Catherine, and Marius Pretorius. 2019. Exploring the nexus between integrated reporting and sustainability embeddedness. *Sustainability Accounting, Management and Policy Journal* 10: 822–43. [CrossRef]
- Leopizzi, Rosella, Antonio Iazzi, Andrea Venturelli, and Salvatore Principale. 2020. Nonfinancial risk disclosure: The “state of the art” of Italian companies. *Corporate Social Responsibility and Environmental Management* 27: 358–68. [CrossRef]
- Lincoln, Yvonna S., and Egon G. Guba. 1985. *Naturalistic Inquiry*. Beverly Hills: Sage Publications.
- Marr, Bernard. 2020. What's the Difference between Lagging and Leading Indicator? *Forbes*, October 23. Available online: <https://www.forbes.com/sites/bernardmarr/2020/10/23/whats-the-difference-between-lagging-and-leading-indicator> (accessed on 2 July 2021).
- Mbithi, Erastus, Tankiso Moloi, and David Wangombe. 2022. Corporate risk disclosure: A systematic literature review and future research agenda. *Cogent Business & Management* 9: 2105569. [CrossRef]
- McKinsey & Company. 2020a. How COVID-19 Has Pushed Companies over the Technology Tipping Point—And Transformed Business Forever. Available online: <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever> (accessed on 5 July 2021).
- McKinsey & Company. 2020b. The New Possible: How HR Can Help Build the Organisation of the Future. Available online: <https://www.mckinsey.com/business-functions/organization/our-insights/the-new-possible-how-hr-can-help-build-the-organization-of-the-future> (accessed on 2 July 2021).
- Meyer, John P., and Natalie Jean Allen. 1997. *Commitment in the workplace: Theory, research and application*. Thousand Oaks: Sage.
- Meyer, Marius, Gert Roodt, and Michael Robbins. 2011. Human resources risk management: Governing people risks for improved performance. *SA Journal of Human Resource Management* 9: 1–12. [CrossRef]
- Mohamad, Shafi. 2018. Why Effective Corporate Governance Matters. *Taylor's Business Review* 7: 1–17.
- Möller, Karin, Ramin Gamerschlag, and Finn Guenther. 2011. Determinants and effects of human capital reporting and controlling. *Journal of Management Control* 22: 311–33. [CrossRef]
- Morgan, Hani. 2022. Conducting a Qualitative Document Analysis. *Qualitative Report* 27: 64–77. [CrossRef]
- Mouatassim, Hajar, and Abdelmajid Ibenrissoul. 2015. Proposal for an Implementation Methodology of Key Risk Indicators System: Case of Investment Management Process in Moroccan Asset Management Company. *Journal of Financial Risk Management* 4: 187–205. [CrossRef]
- Necula, Ramona Valentina, and Angela-Eliza Micu. 2021. Approaching The COVID-19 Pandemic From The Perspective Of Human Capital Management And Risk Management In The European Union. *The USV Annals of Economics and Public Administration* 21: 96–105.
- Nel, George, Henriette Scholtz, and Waldette Engelbrecht. 2022. Relationship between online corporate governance and transparency disclosures and board composition: Evidence from JSE listed companies. *Journal of African Business* 23: 304–25. [CrossRef]
- Ngepah, Nicholas, Charles S. Saba, and Ntombomzi G. Mabindisa. 2021. Human capital and economic growth in South Africa: A cross-municipality panel data analysis. *South African Journal of Economic and Management Sciences* 24: 1–11. [CrossRef]
- Nwachukwu, Chijioke. 2022. Systematic review of integrated reporting: Recent trend and future research agenda. *Journal of Financial Reporting and Accounting* 20: 580–98. [CrossRef]
- O'Kelley, Rusty, and Anthony Goodman. 2020. 2020 Global and Regional Corporate Governance Trends, Harvard Law School Forum on Corporate Governance. January 18. Available online: <https://corpgov.law.harvard.edu/2020/01/18/2020-global-and-regional-corporate-governance-trends> (accessed on 19 June 2021).
- O'Leary, Zina. 2017. *The Essential Guide to Doing Your Research Project*, 2nd ed. Los Angeles: SAGE.
- Omran, Mohammed SY, Mohammad AA Zaid, and Aladdin Dwekat. 2021. The relationship between integrated reporting and corporate environmental performance: A green trial. *Corporate Social Responsibility and Environmental Management* 28: 427–45. [CrossRef]
- Panfilo, Silvia, and Joanna Krasodomska. 2022. Climate Change Risk Disclosure in Europe: The Role of Cultural-Cognitive, Regulatory, and Normative Factors. *Accounting in Europe* 19: 226–53. [CrossRef]
- Radu, Valentin. 2019. Qualitative Research: Definition, Methodology, Limitation, Examples, Omniconvert. April 3. Available online: <https://www.omniconvert.com/blog/qualitative-research-definition-methodology-limitation-examples> (accessed on 16 July 2021).
- Raimo, Nicola, Giuseppe Nicolò, Paolo Tartaglia Polcini, and Filippo Vitolla. 2022. Corporate governance and risk disclosure: Evidence from integrated reporting adopters. *Corporate Governance: The International Journal of Business in Society* ahead-of-print. [CrossRef]

- Rothmann, Johanna Christina. 2017. The cost of not knowing: The importance of employee and workplace risk management. Paper presented at SIOPSA Conference, Pretoria, South Africa, July 25–27.
- Rothmann, Johanna Christina, and Monique Bruwer. 2020. HR Risk Management. In *Human Resource Management in the New World of Work: Meeting the Challenges of Industry 4.0*. Edited by D. Kokt. Pretoria: Van Schaiks, pp. 130–46.
- Saitua, Ainhoa, Eneka Albizu, and Lorea Andicoechea. 2015. Human capital information in management reports: An analysis of compliance with the characteristic of the relevance of disclosure. *Intangible Capital* 11: 223–48. [CrossRef]
- Salem, Issal Haj, Salma Damak Ayadi, and Khaled Hussainey. 2019. Corporate governance and risk disclosure quality: Tunisian evidence. *Journal of Accounting in Emerging Economies* 9: 567–602. [CrossRef]
- Scharp, Yuri Santino, Kimberley Breevaart, and Arnold B. Bakker. 2021. Using playful work design to deal with hindrance job demands: A quantitative diary study. *Journal of Occupational Health Psychology* 26: 175–88. [CrossRef]
- Schaufeli, Wilmar. B. 2013. What is engagement? In *Employee Engagement in Theory and Practice*. Edited by Catherine Truss, Kerstin Alfes, Rick Delbridge, Amanda Shantz and Emma Soane. London: Routledge.
- Seebeck, Andreas, and Julia Christine Vetter. 2022. Not just a gender numbers game: How board gender diversity affects corporate risk disclosure. *Journal of Business Ethics* 177: 395–420. [CrossRef]
- Sherif, Victoria. 2018. Evaluating preexisting qualitative research data for secondary analysis. *Forum: Qualitative Social Research* 19: 26–42.
- Soelton, Mochamad, Putri Ayu Lestari, H. Arief, and Ratyuhono Linggarnusantra Putra. 2020. The effect of role conflict and burnout toward turnover intention at software industries, work stress as moderating variables. Paper presented at 4th International Conference on Management, Economics and Business (ICMEB 2019), Jakarta, Indonesia, June 26–27.
- Solikhah, Badingatus, and Ukhti Maulina. 2021. Factors influencing environment disclosure quality and the moderating role of corporate governance. *Cogent Business & Management* 8: 1876543. [CrossRef]
- Sollosy, Marc, Matjorie Lynn McInerney, and Charles K. Braun. 2016. Human Capital: A Strategic Asset Whose Time Has Come to Be Recognised on Organisations' Financial Statements. *Journal of Corporate Accounting & Finance* 27: 19–27. [CrossRef]
- Stein, Volker. 2007. Human capital management: The German way. *German Journal of Human Resource Management* 21: 295–321. [CrossRef]
- Terblanche, Wendy, and Charl De Villiers. 2018. The influence of integrated reporting and internationalisation on intellectual capital disclosures. *Journal of Intellectual Capital* 20: 40–59. [CrossRef]
- Vitolla, Filippo, Nicola Raimo, and Michele Rubino. 2019. Appreciations, criticisms, determinants, and effects of integrated reporting: A systematic literature review. *Corporate Social Responsibility and Environmental Management* 26: 518–28. [CrossRef]
- Wach, Elise, and R. Ward. 2013. *Learning about Qualitative Document Analysis*. Falmer: Institute of Development Studies, August. Available online: <https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/2989/PP%20InBrief%2013%20QDA%20FINAL2.pdf?sequence=4&isAllowed=y> (accessed on 26 July 2021).
- Wachira, Mumbi M., Thomas Berndt, and Carlos Martinez. 2019. The adoption of international sustainability and integrated reporting guidelines within a mandatory reporting framework: Lessons from South Africa. *Social Responsibility Journal* 16: 613–29. [CrossRef]
- Wagiciengo, Maina Michael, and Atuar R. Belal. 2012. Intellectual capital disclosures by South African companies: A longitudinal investigation. *Advances in Accounting* 28: 111–19. [CrossRef]
- Walsh, Andrea, and Ryan Resch. 2020. *6 Ways the COVID-19 Pandemic Could Change Our Approach to Human Capital*. Cologne: World Economic Forum, August 6. Available online: <https://www.weforum.org/agenda/2020/08/6-ways-covid-19-will-advance-human-capital-strategies-and-governance> (accessed on 14 July 2021).
- Wang, Ruizhe, Shan Zhou, and Timothy Wang. 2020. Corporate Governance, Integrated Reporting and the Use of Credibility-enhancing Mechanisms on Integrated Reports. *European Accounting Review* 29: 631–63. [CrossRef]
- WEF (World Economic Forum). 2020. Human Capital as an Asset: An Accounting Framework to Reset the Value of Talent in the New World of Work. Available online: <https://www.weforum.org/reports/human-capital-as-an-asset-an-accounting-framework-to-reset-the-value-of-talent-in-the-new-world-of-work> (accessed on 21 June 2021).
- Westermann-Behaylo, Michelle, Shawn L. Berman, and Harry J. Van Buren. 2014. The Influence of Institutional Logics on Corporate Responsibility Toward Employees. *Business & Society* 53: 714–46. [CrossRef]
- Wild, Susan, and Chris van Staden. 2013. Integrated Reporting: Initial Analysis of Early Reporters—An Institutional Theory Approach. Available online: <http://www.sakaueelab.org/archives/apira2013/proceedings/pdfs/K236.pdf> (accessed on 21 June 2021).
- Wright, Patrick M. 2020. Rediscovering the “Human” in strategic human capital. *Human Resource Management Review* 31: 100781. [CrossRef]
- Xanthopoulou, Despiona, Arnold B. Bakker, Evangelia Demerouti, and Wilmar B. Schaufeli. 2007. The role of personal resources in the job demands-resources model. *International Journal of Stress Management* 14: 121–41. [CrossRef]