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A study of human capital reporting in the United Kingdom

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ABSTRACT

Recently, there have been attempts at increasing human capital (HC) reporting in the United Kingdom (UK) through the introduction of government legislation and other initiatives. This paper assesses the current state of HC reporting in the UK by analysing the annual reports of the Financial Times Stock Exchange 100 companies before and after relevant amendments to the Companies Act 2006. The findings show that most of the companies analysed have been increasing their HC reporting, going beyond their statutory duties and moving away from wider intellectual capital disclosures to focus more on HC issues. However, these changes were not universal.

1. Introduction

It could be argued that one of the fundamental roles of an accountant is to record, measure and report a company's assets, but in an increasingly complex and turbulent environment many organisations do not know the value of their most valuable asset, human capital (HC). The market value of leading organisations has for several decades been far higher than the value of their physical assets and this has led to calls for HC, along with other intangible items, to be included on balance sheets to give a more accurate impression of organisational value (Seetharaman, Bin Zaini Sooria, & Saravanan, 2002). HC is a subset of intellectual capital (IC), and includes the stock of attributes that employees provide, such as skills, knowledge, experience, commitment and leadership, in exchange for wages and salaries (Roslender, Stevenson, & Kahn, 2012). Given the above, at a strategic level, it is clear that understanding and leveraging HC effectively includes focussing on the aforementioned attributes that were previously referred to as human resources. Ultimately, finding an effective way to record and report HC issues will help firms identify critical sources of value, which in turn should allow them to better manage their HC effectively to gain competitive advantage (Abhayawansa & Abeysekera, 2008; Hatch & Dyer, 2004; Ployhart, Nyberg, Reilly, & Maltarich, 2014; Russ, 2014).

As the developed world has moved away from an industrial to a service and knowledge-based economy, an increasing number of organisations will depend on HC assets, as opposed to physical assets, to add value to their services (Adler, 2001). From an accounting perspective, where the need for precise metrics is important, the measurement of HC has proved challenging, and some have argued that the lack of internationally accepted accounting standards for the disclosure of HC has undermined the credibility of corporate accounting reports (Eckstein, 2004; Khan & Khan, 2010). Kim and Taylor (2014: 66) state "this gap in reporting will eventually lead to an underfunding problem for knowledge intensive firms and, at the same time, create an information asymmetry problem for investors". Furthermore, Molloy and Barney (2015) believe that organisations need to be able to understand the issue of HC to assess the full value of their workforce. Therefore, the issue of HC reporting has not only become a key issue for organisations and shareholders, but also for potential investors and current and potential employees.

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With this in mind, many organisations have been voluntarily disclosing HC data in their annual reports by including narrative sections relating to HC strategy and performance metrics (Wisniewska & Yekini, 2015). HC reporting studies have been undertaken in various countries around the world including Ireland, Canada, Sri Lanka, Australia, Bangladesh and Denmark (see Abeysekara & Guthrie, 2004; Brennan, 2001; Bontis, 2003; Khan & Khan, 2010; Nielsen, Roslender, & Schaper, 2016). Although HC reporting has been increasing in Scandinavia, Australia and some Pacific Rim countries, the UK has been lagging behind in comparison with its international competitors (Fincham & Roslender, 2003; Roslender et al., 2012).

However, more recently there have been a number of initiatives by industry bodies as well as government regulation to enhance HC narrative reporting in the UK, including statutory attempts to make HC disclosures mandatory. In particular, a number of amendments were made in 2013 to the Companies Act 2006 to provide better guidelines for reporting on progress towards addressing environmental issues, employee issues, such as diversity and human resource development, and social and community issues. The aim of this paper is to investigate the current state of HC reporting in the UK by analysing the annual reports of the Financial Times Stock Exchange (FTSE) 100 companies before and after the above amendments to the Companies Act 2006. The research also identifies best practice in HC reporting amongst the companies analysed.

The findings show that most of the FTSE 100 companies in the UK have been increasing their HC reporting, and are doing more than simply fulfilling their statutory duties in terms of reporting. The findings here are consistent with some of the findings from studies of HC in other countries, with the companies reporting strongly in areas of employee training, health and safety, career development and leadership (Abeysekara & Guthrie, 2004; Khan & Khan, 2010). The findings also show that companies are moving away from wider IC disclosures to focus more on human resources issues, which was particularly evident in the analysis of HC reporting best practice. However, it was also found that there are significant differences in the levels of reporting for certain HC items. Another key finding was that information relating to HC was placed in various sections of the annual report and that a wide variety of terms were used to describe essentially the same phenomenon. It is argued that companies should continue to enhance their narrative disclosures, but some form of standardisation might enhance the value to users of the annual report. A number of areas for further research are identified, including how HC could be better reported to benefit investors and employees, and the need to understand more fully why there are significant differences in the levels of HC reporting by certain companies.

The remainder of the paper is structured as follows. In the next section an overview of the literature related to HC reporting is provided before the methodology is outlined. This is followed by the research findings, and finally a discussion of the findings and suggestions for further research.

2. Human capital reporting literature review

2.1. Background to HC reporting

The origins of HC reporting date back as far as the early 1960s when Hermanson (1963) attempted to incorporate employees on a company's balance sheet. This was justified by arguing that human assets produced monetary value for an organisation in the same way as physical assets; moreover, Hermanson (1964) felt that these assets were not owned by the company, but were operational assets. For these reasons, Hermanson believed that such assets should be accounted for in financial statements; therefore the focus of his work was external reporting. Hekimian and Jones (1967) agreed that human assets should appear on a company's balance sheet, but also emphasised the importance of managers being aware of the value of their employees. In the 1970s, the subject of human resource accounting became an area of increasing academic interest; however by the end of this decade this had waned considerably (Roslender & Dyson, 1992). At the beginning of the 1970s, Flamholtz (1971) introduced the Stochastic Model of HC, which highlighted the value of the employee's contribution in the period they are employed as being important. However, authors such as Andrade and Sotomayor (2011) criticised this model, as they felt it failed to truly capture the fact that individuals who operate in a group may have a higher organisational value. Nonetheless, Flamholz was a very important figure with regard to accounting for the worth of employees and considered this issue from both a financial and managerial perspective. Accordingly, the financial reporting of human assets was important as it provides investors with information about the building and depletion of such assets; whereas from a managerial viewpoint, appreciating the value of employees would assist in recruitment, planning and operations (Flamholtz, 1974). However later, Flamholz (1975) felt that a fixation on reporting human assets externally was giving the false impression that human resource accounting was only concerned with treating people as financial objects and that, whilst important, external reporting was not the most significant aspect of human resource accounting. It was clear therefore, that he was beginning to place a greater emphasis on the managerial perspective; a standpoint that aligned with the focus of IC, which was never concerned with accounting for human assets on financial statements. Nevertheless, it could be argued that the failure to move beyond viewing HC as something that has to be given a financial valuation, has made the task of those advocating the importance of ascertaining the underlying value of employees more difficult.

The interest in IC began in the late 1980s and has continued to this day; although arguably this interest reached a peak in the 1990s and early 2000s. Initially IC was deemed to consist of organisational capital, customer capital and HC (Wall, Kirk, & Martin 2003), however these classifications have kept evolving (Tan, Plowman, & Hancock 2008; Massingham & Tam 2015); for example, Abeysekera and Guthrie (2005) retained the term HC but referred to structural (as opposed to organisational) and relational (as opposed to customer) capital. Nonetheless, there is no doubt that IC led to renewed efforts to account for, and report on, the value of HC (Nahapiet & Ghoshal, 1998; Roslender 2009). In this regard, Scandinavia led the way in HC reporting during the 1980s and 1990s with the introduction of IC and HC indicator models such as the Skandia Navigator, Ericsson's Cockpit Communicator, Celemi's Intangible Assets Monitor and Ramboll's Holistic Company model (Edvinsson & Malone, 1997; Wall et al., 2003). For example, the

Skandia Navigator represented a collection of critical measurements and indicators that comprised a holistic view of performance and goal achievement; however it was criticised for being subjective and of little use for organisations in different industries to Skandia (Roos, Roos, Dragonetti, & Edvinsson 1997). Notwithstanding, this period was an important milestone for HC, as it heralded a shift in reporting practices by linking HC to organisational value creation and strategic decision-making (Roslender & Dyson, 1992).

The above developments helped to highlight the potential value of HC reporting for companies. For example, the provision of additional, relevant non-financial information can influence the cost of equity capital (Verrecchia, 2001), as increased disclosure can reduce investor uncertainty about a company's future prospects and allow them to obtain a more precise company valuation. Moreover, research by Farooq and Nielsen (2014) demonstrated that the most important IC disclosures for analysts are those related to employees and strategic statements. Research has also linked HC disclosures with enhanced financial performance in terms of improved share price, particularly in the mid- to long-term (Gamerschlag, 2013). Therefore, in an era of both integrated and narrative reporting, where the aim is to provide a detailed picture of a company's ability to produce value over time for different stakeholders, HC reporting can enhance accountability and provide greater visualisation to a firm's stakeholders (Hughen, Lulseged, & Upton, 2014). For example, a poor health and safety record or environmental performance may negatively impact an organisation's bottom line through corporate fines. Conversely, firms that can demonstrate that they are dedicated to employee health and safety and have a good relationship with stakeholders in their annual reports may be seen as a safe investment, thereby enhancing the firm's corporate reputation (Dominguez, 2011; Hughen et al., 2014).

2.2. HC reporting studies in the literature

As a result of the growing importance of HC reporting, a number of studies have been carried out since the 1990s examining HC reporting practices internationally. Initial efforts to disclose HC data were examined by studies that focused primarily on IC. For example, Brennan (2001) conducted a content analysis of Irish listed companies and examined human data relating to employee competencies, which included only a very limited number of HC indicators, namely: employee knowledge, education, work related knowledge and competencies and entrepreneurial spirit. She found that HC reporting disclosures were very low, with only employee experience being referenced occasionally in the annual reports. A study of Canadian firms by Bontis (2003) also found low levels of HC reporting and that there were several companies that did not even disclose the number of employees.

Research by Abeysekera and Guthrie (2004) was more insightful in terms of the broad array of HC indicators used, particularly as it focused largely on HC disclosures as opposed to wider IC ones. The research was undertaken to provide insights into HC reporting in Sri Lanka and also to facilitate a cross-cultural comparison with Australia. The indicators used in the content analysis were far more expansive than previous studies and included 25 items relating to HC, including employee competencies, health and safety, employee diversity, career development and innovation. The authors found that HC reporting increased over the years examined in both countries with differing levels of importance attached to certain items, such as employee entrepreneurship and work-related knowledge. Khan and Khan (2010) examined the contents of company annual reports in Bangladesh and, in a similar fashion to the Abeysekera and Guthrie (2004) study, a comprehensive HC indicator framework was utilised to examine HC reporting in areas such as employee leadership, job rotation, employee health and safety and employee competencies. The study found that the HC reporting practices of leading Bangladeshi firms were not as low as projected in relation to the total list of items reported. The most commonly disclosed HC items were information on employee training, number of employees, career development and opportunities that firms provide and employee recruitment policies. Finally, Nielsen et al. (2016, 2017) evaluated the success of the Danish Guideline Project (DGP) and its main output, the IC statement. The authors felt that the DGP had 'only a very modest success' (Nielsen, Roslender, & Schaper, 2017: 54) with Danish companies tending to move away from wider IC disclosures to focus on human resources.

2.3. HC reporting in the UK

In contrast to the growing prevalence of HC reporting in Scandinavia, Australia and some Pacific Rim countries, studies have shown that the UK has been lagging behind other countries in HC reporting (Fincham & Roslender, 2003; Roslender et al., 2012). In 2001 the Kingsmill Review concluded that not enough information on HC was being reported (Pensions and Lifetime Savings Association, 2015). Furthermore, a study by Vandemaale, Vergauwen, and Smits (2005) examined IC reporting in Sweden, the Netherlands and the UK, and found that the UK lagged behind the other countries in terms of HC reporting. This study was one of the few to take a UK perspective in terms of HC disclosures, with others, including Striukova, Unerman, and Guthrie (2008) and Li, Pike, and Haniffa (2008), finding similar results. Campbell and Slack (2008) found evidence of 'boiler-plateing', where UK companies were using exactly the same words in their HC reporting, and more recently, Bassi, Creelman, and Lambert (2015) found high levels of variations in HC reporting in the UK. Steen, Welch, and McCormack (2011) have argued that the level of HC reporting in the UK has not been at an optimal level, with some organisations reporting minimal information and failing to link HC to value creation. Moreover, there have been a lower number of HC reporting studies in the UK in comparison with the number conducted internationally (Roslender et al., 2012).

There have been a number of reasons suggested for the poor record of HC reporting in the UK. Through an exploratory study of accounting for IC in the UK, Fincham and Roslender (2003) found that UK companies had not fully understood how to effectively integrate HC into accounting practice. Moreover, although companies have been aware of the potential contribution of HC, they have tended to implement it in an ad-hoc and unstructured manner. A further related reason for poor HC reporting in the UK is an inconsistent, fragmented and half-hearted stance on HC, which has resulted in related initiatives by the government and other bodies failing to gain momentum (Roslender & Stevenson, 2009).

Since the early 2000s there have been a number of attempts to make HC disclosures mandatory for UK listed companies. In 2003 the former Department of Trade and Industry launched their Accounting for People initiative (DTI, 2003a, 2003b); however, in 2005 the accountancy profession thwarted this move before it could be passed into law, and some argued that a major opportunity for HC reporting was lost (Roslender & Stevenson, 2009). In 2002 it was announced that the Operating and Financial Review (OFR), which had been voluntarily disclosed by the majority of UK companies since the early 1990s, would become a legal requirement (Rowbottom & Schroeder, 2014); however, this decision was reversed in 2005. Following the Companies Act of 2006, listed companies were required to produce an enhanced Business Review, which included information relating to the environment, employees and social and community issues. The 2006 Companies Act was subsequently amended so that from October 2013 there were new regulations covering a company's strategic and directors' reports, which were only slightly different to the disclosure requirements of the Business Review. Consequently in 2014, the Financial Reporting Council (FRC) developed guidelines for reporting to include information on environmental matters, employees and social, community and human rights issues. However, the guidance provided a number of caveats that could lead to limited reporting. For example, there is only an obligation to report on employees to provide 'an understanding of the development, performance or position or future prospects of a company's business' (FRC, 2014: 6) and if information is seen as immaterial to this objective, there is no requirement to report it.

Whilst these various changes were taking place, in 2009, largely due to the economic recession, there was a focus on risk management and expanding HC to account for environmental and social risks. For example, Roslender et al. (2012) suggested that the concept of IC should be expanded in the UK to account for employee wellbeing and that the value of a healthy workforce should be underlined to management. A more recent and, at the time of writing, ongoing HC reporting initiative is 'Valuing Your Talent', which is a collaborative movement involving a number of partners that was funded by the UK Commission for Employment and Skills. These partners include the Chartered Institute of Management Accountants, the Chartered Institute of Personnel and Development (CIPD), the Chartered Management Institute and Investors in People. The initiative also has a research advisory group. It was set up in order to gain better insights into the connection between HC and organisational growth and value, as it was felt the accounting profession had been slow in recognising the increasing importance of people in today's businesses. Its aims therefore included creating a practical framework and proposing a number of measures that would be of benefit to various stakeholders. These include: employers, who as a result should invest more strategically in their workforce; investors, who should recognise the importance of HC; and employees, who should be offered greater opportunities and find work more fulfilling (Valuing Your Talent, 2017). This initiative has benefited from the move toward integrated reporting (see Dumay, Bernardi, Guthrie & Demartini, 2016; International Integrated Reporting Council, 2016), which involves firms reporting on key elements of value creation such as corporate governance, sustainability and HC. Indeed, the motivation for this study came from a call for more research into this area from the Valuing Your Talent partners. However, the Valuing Your Talent initiative has been subject to some criticisms. For example, Hickman (2014) reported that there had been problems in the way it had been communicated and interpreted by stakeholders. Furthermore, there had been scepticism from certain quarters about its framework, how it will work in practice and how rigidly it will be applied. Moreover, the subject of a recent research project that was put out to tender by CIPD (2017), one of the Valuing Your Talent partners, was the risk reporting of HC; this could suggest that interest in the initiative is beginning to wane. Finally, other national and global initiatives have also had an impact on HC reporting. These would include the Davies Report (2011), which set a target for female board membership in FTSE 100 companies, and the Global Reporting Initiative (GRI) (2016), which encouraged organisations to report on critical sustainability issues, including human rights.

3. Research methodology

Given the paucity of studies on HC reporting in the UK and recent initiatives to improve this practice, it seems timely to undertake a study of this issue. With the changes to the Companies Act introduced in 2013 and more recent initiatives, there is a need for research to examine whether there has been an increase in HC reporting, and whether firms are including more narrative-based reporting sections in their annual reports. Insights are required into the type of HC data that UK firms are reporting, and whether they are embracing and reporting new metrics based on employee wellbeing, human rights and sustainability (Roslender et al., 2012). Moreover, it would be of interest to identify evidence of good practice in UK companies given the recent impetus in the UK to improve HC reporting. Such research would provide important insights into key aspects of HC reporting that would benefit both practice and academia, and support the agenda of those who have argued that there should be a concerted educational effort to ensure the accountancy profession embraces HC (Bassi et al., 2015; Fincham & Roslender, 2003; Roslender et al., 2012). Therefore, the research questions (RQs) of this study are as follows:

RQ1. Has the level of HC reporting in the UK increased between 2012/13 and 2014/15?

RQ2. Is there evidence of good practice in HC reporting by UK firms?

In order to answer these questions, the research progressed through a number of stages. The first stage involved selecting the annual reports of the FTSE 100 companies as the focus of the study. Annual reports are an important communication opportunity for firms, and allow them to go beyond simple financial reporting to include HC elements in order to reflect the firm's value and position (Clackworthy, 2000). Therefore, these documents were chosen as the unit of analysis in this study, as they are regarded as a valuable means of understanding a firm's HC reporting practices. The research analysed the annual reports of the FTSE 100 companies as of December 2015, specifically those immediately before the 2013 amendment to the UK Companies Act 2006 and those produced following the amendment. Therefore, these could be reports produced in 2012 or 2013 and 2014 or 2015, depending on where each

Table 1
Analytical framework.

Category	HC item	Supporting literature
KSA	Commitment, entrepreneurship, expertise, flexibility, leadership, motivation and innovation	Walton (1985), Teece (1987), Kanfer and Ackerman (2014), Fornes et al. (2008), Marvel et al. (2016).
HRD	Apprenticeships, career development, graduates, internships, succession planning, talent management and training	McCracken and Wallace (2000), Lewis and Heckman (2006), Shaw and Fairhurst (2008), Worthen and Berchman (2010).
Employee welfare	Corporate social responsibility (CSR), employee engagement, ethics, health and safety, employee relations, employee turnover and employee wellbeing	Porter and Steers (1973), McGuire et al. (1988), Carroll (1991), Schaufeli et al. (2008), Gallie et al. (2012), Tricker (2015).
Organisational justice and equity	Diversity, equality, human rights and employee rewards	Adams and Freedman (1976), Alexander and Ruderman (1987), Greenberg (1990), O'Driscoll and Randall (1999), Burke (2000), Catalyst (2011), Massingham and Tan (2015), Schlechter et al. (2015), Sealy et al. (2016).

company's year-end fell. The FTSE 100 companies were chosen for a number of reasons. It is acknowledged in the literature that firms with the largest market capitalisation, a common characteristic of the FTSE 100 companies, are likely to be leaders in the voluntary reporting of HC (Abeysekera & Guthrie, 2004). It was felt therefore that such organisations should be setting an example to those further down the FTSE listing. Moreover, it is likely that these companies would be fully aware of both the statutory requirements for HC and initiatives by government and industry bodies promoting HC reporting.

The next stage involved developing an analytical framework to conduct the analysis of the annual reports as shown in Table 1. The HC elements of this framework were developed after: undertaking a comprehensive review of the literature relating to the most vital people management and HC factors in organisations; and liaising with the Valuing Your Talent partners. Consequently four main categories, knowledge, skills and abilities (KSA), human resource development (HRD), employee welfare and organisational justice and equity, as well as their related HC items, were used as a basis for investigating the prevalence of HC reporting in the FTSE 100 companies. The rationale for including these four categories is now outlined.

3.1. KSA

KSA includes the knowledge, skills, and abilities that employees need to possess to participate effectively in the workplace. Knowledge is needed to be able to perform a job and is the theoretical or practical understanding of a subject; skills are developed through training or experience, and refer to the application of knowledge; and abilities are linked to the qualities needed to be able to do something effectively (Fornes, Rocco, & Wollard, 2008). This category therefore contains elements that an employee either brings with them when they begin to work for an organisation or that they develop as they mature (Kanfer & Ackerman, 2014). Walton (1985) has noted that to truly leverage KSA in employees, organisations must ensure that they create the conditions that allow for employee commitment to thrive. Similarly, other authors (Teece, 1987; Marvel, Davis, & Sproul, 2016) have called for organisations to create the conditions that can ensure that innovation and entrepreneurship flourishes.

3.2. HRD

HRD is concerned with understanding how organisations develop and enhance the KSA of their employees. As well as recruiting externally from the labour market, the key method for an organisation to develop the most important KSA, which enables individuals to perform current and future jobs, is through offering planned learning and development activities and opportunities (McCracken & Wallace, 2000). Moreover, to be effective in fully developing individuals, groups and ultimately the organisation, HRD activities should be well integrated and designed to address tactical, short term skills requirements, as well as more strategic, longer-term career development for employees. Hence organisations need to ensure that a suite of development activities like apprenticeships (Worthen & Berchman, 2010), graduate development schemes (Shaw & Fairhurst, 2008) and other talent management programmes (Lewis & Heckman, 2006) can enhance the KSA and future prospects of all employees.

3.3. Employee welfare

Employee welfare is closely linked to the notion of the organisation acting as a good citizen (Carroll, 1991; Tricker, 2015). It refers to how the organisation acts within its environment, and therefore includes issues such as CSR, health and safety, employee wellbeing and ethics (McGuire, Sundgren, & Schneeweis, 1988). In order for any organisation to enhance its HC, it needs to ensure that employees are treated well and employee welfare is enhanced (Schaufeli, Taris, & van Rhenen, 2008; Gallie, Zhou, Felstead, & Green, 2012). Organisations should therefore be aware of the importance of looking after employees, and be in a position to report on the benefits that accrue as a result of the welfare policies and practices that are in place. For example, a high turnover can indicate poor working conditions and low job satisfaction (Porter & Steers, 1973).

3.4. Organisational justice and equity

Organisational justice and equity involves organisations treating employees in a fair and equitable way and offering equal access to opportunities (Adams and Freedman, 1976; Greenberg, 1990). Where organisations give consideration to employee justice and equity, employees are more likely to seek to grow and develop their KSA and display their commitment to the organisation (Massingham & Tam, 2015). Organisations have a duty of care to their workforce and must therefore ensure they are transparent in how they treat their staff. Furthermore, the composition of the workforce should reflect the community from which it is drawn, both quantitatively and qualitatively, and the benefits of diversity, particularly that relating to females, have been well documented (see for example Burke, 2000; Catalyst, 2011; Sealy, Doldor, & Vinnicombe, 2016). Additionally, employees should be furnished with information about what benefits and rewards (not just monetary) they will receive (Alexander & Ruderman, 1987; O'Driscoll & Randall, 1999; Schlechter, Thompson, & Bussin, 2015).

3.5. Data analysis

To analyse the change in HC reporting, content analysis, a form of textual analysis, was employed, which allows both qualitative and quantitative data to be assigned to predefined categories and analysed to identify patterns in the information reported (Guthrie, Petty, Yongvanick, & Ricceri, 2004). This research method has been used in several IC reporting studies (e.g. Abeysekera & Guthrie, 2004; Beattie & Thompson, 2007; Brennan, 2001; De Silva, Stratford, & Clark, 2014). When searching the two sets of annual reports for each of the FTSE 100 companies (pre and post the amendment to the Companies Act 2006), any sentence containing the elements (or similar terms) listed in the analytical framework (Table 1) was counted. The sentence count was chosen as the context unit instead of the word, paragraph or page for two main reasons: sentences are more easily identifiable wholes (Carney, 1972); and to ensure that units were measured in a way that precisely established their meaning. Moreover, according to Gray, Kouhy, and Lavers (1995) sentences are given preference in written communication if the aim is to infer meaning. The sentence count method also makes the quantification of charts, tables and photographs easier, as it converts them into equivalent lines (Abeysekera & Guthrie, 2004). However, the practice of splitting sentences, whereby different groupings or words are treated as text units (see Beattie, McInnes, & Fearnley, 2004a, 2004b), was only used for different elements contained in the same sentence. Therefore, if a company referred to diversity twice in the same sentence, it would only be counted once; whereas a reference to diversity and human rights in the same sentence would lead to each element being counted once. Furthermore, no account was taken of the length of the sentence, the size of the font or whether or not bold typeface was used (Beattie & Thompson, 2007). Accordingly, each HC element was recorded by sentence count under the appropriate category. Subsequently, the sentence count for each element was aggregated for the 100 companies in order to analyse the change in HC reporting over the two time periods under review. To reduce subjectivity, two individuals, using the analytical framework shown in Table 1, independently and separately conducted the content analysis of both sets of annual reports before discussing and agreeing the results.

To highlight evidence of good practice, the results of the content analysis were used to identify companies that had high instances of HC reporting across items in the analytical framework. An analysis of the annual reports of the companies identified was then conducted to identify examples of good practice with regard to HC reporting. In identifying good practice, particular attention was paid to organisations that appeared to have heavily invested, both financially and in other ways, to innovations linked to HC. For example, fostering good relationships with key stakeholders, such as education providers, or championing their employees in terms of innovation or entrepreneurial endeavours.

4. Findings

4.1. Overview of results

Overall there was an encouraging increase of 17% of HC reporting over the two periods; however as can be seen in Table 2, there was a wide range across the four categories with the reporting of elements in the HRD category increasing by a substantial 26%, whilst those in the employee welfare category only increased by 7%.

The changes in HC items across the four categories will now be considered in more detail. Table 3 shows the changes across the KSA items, and it can be seen that there was a positive change in the reporting of all elements, with the exception of motivation. Furthermore, the changes in the entrepreneurship (26%), innovation (41%) and leadership (21%) elements were significant. As the

Table 2
Changes across the HC categories.

HC category	2012/13 annual report, n = 100 Sentence count	2014/15 annual report, n = 100 Sentence count	Change
KSA	3522	4080	16%
HRD	3833	4827	26%
Employee welfare	4201	4482	7%
Organisational justice and equity	2561	3198	25%
Total	14,117	16,587	17%

Table 3
Changes across the KSA category.

	2012/13 line count	2014/15 line count	Change (%)
Commitment	311	351	13%
Entrepreneurship	70	88	26%
Expertise	1912	2166	13%
Flexibility	25	30	20%
Innovation	54	76	41%
Leadership	1073	1298	21%
Motivation	77	71	-8%
Total	3522	4080	16%

line count figures show, employee expertise, at 1912 and 2166 for 2012/13 and 2014/15 respectively, dominated the KSA category over both time periods, with leadership at 1073 and 1298 being another important element in this category. Therefore, whilst employee expertise only increased by 13%, it is clearly an element organisations are keen to report upon as it is central to whole concept of HC.

Table 4 shows the changes across the two time periods in the HRD category items, and, as has already been noted, there was a substantial change of 26% in the reporting of these items across the 100 companies sampled. The talent management element showed a significant change of 42% over the two time periods. Moreover, the apprenticeships (32%), career development (38%), internships (39%) and succession planning (32%) elements also saw large increases in reporting. It was encouraging to see large increases in the reporting of talent management and succession planning amongst the general increase of HRD elements. Many companies appeared to be focused on these two elements at all organisational levels, and reported that they had succession plans that are inclusive and ensure all employees have a well-developed career path, with particular attention being given to having succession policies in place for younger employees and graduates. As Table 4 shows, training was by far the most reported HRD element showing a line count of 1571 and 1785 over the two time periods. Moreover, the terms talent management and succession planning were also referred to in a large number of sentences.

Table 5 shows the changes across the two time periods in the welfare category items, and it is clear that there was generally a positive change in the reporting of the employee welfare elements with ethics (22%) and employee wellbeing (21%) showing the strongest increases in reporting. The increase in the reporting of employee wellbeing is of interest, as Roslender et al. (2012) suggested that the value of a healthy workforce should be emphasised to management, and a greater array of employee wellbeing indicators and metrics would need to be introduced and disclosed in annual reports. Employee wellbeing was also highlighted by the Valuing Your Talent (2017) initiative, as was innovation, which also showed a considerable increase in the KSA category. However, CSR showed a decline in reporting of -16%, which, in light of other increases under the employee welfare category that might have been influenced by UK Corporate Governance Codes (see Tricker, 2015), may seem unexpected. Following an analysis of the annual reports, no major differences were found with regard to CSR reporting across both time periods with approximately 95% of organisations favouring a separate/specialised CSR section within their annual reports. However, 42% of the firms had a longer CSR section in 2014/15, whilst in 39% of cases the section was shorter. In the remaining 19% of cases, the sections were around the same length.

Furthermore, 35% of the firms preferred to use the term 'corporate sustainability' as opposed to CSR, and labelled the appropriate section accordingly. A small number of organisations (5%) published a separate CSR report on their company websites in addition to written sections within the annual reports; however this percentage could be greater as some firms may not have reported the existence of the separate document in their annual reports. Finally, some organisations (5%) had integrated CSR and sustainability issues into the company's operating strategy sections, rather than having a separate report or section with CSR or sustainability headings. Notwithstanding, it should be highlighted that if one refers to the line counts in Table 5, CSR was still one of the most reported items in the employee welfare category. Employee engagement, ethics and health and safety were also of high relative importance in this category.

Table 6 shows the changes across the two time periods in the organisational justice and equity category items, and it can be seen there has been a substantial change of 25% in the reporting of these items. The human rights item demonstrated a very significant

Table 4
Changes across the HRD category.

	2012/13 line count	2014/15 line count	Change (%)
Apprenticeships	171	225	32%
Career development	89	123	38%
Graduates	204	232	14%
Internships	38	53	39%
Succession planning	880	1160	32%
Talent management	880	1249	42%
Training	1571	1785	14%
Total	3833	4827	26%

Table 5
Changes across the employee welfare category.

	2012/13 line count	2014/15 line count	Change (%)
CSR	969	815	-16%
Employee engagement	974	1083	11%
Ethics	908	1105	22%
Health and safety	963	1033	7%
Employee relations	149	170	14%
Employee turnover	103	112	9%
Employee wellbeing	135	164	21%
Total	4201	4482	7%

Table 6
Changes across the organisational justice and equity category.

	2012/13 line count	2014/15 line count	Change (%)
Diversity	1165	1508	29%
Equality	131	175	34%
Human rights	194	441	127%
Employee rewards	1071	1074	1%
Total	2561	3198	25%

change of 127%, whilst diversity and equality also displayed positive changes. In contrast, employee rewards showed no substantial change in the level of reporting, although it was still an element that was widely reported. The significant change in human rights reporting is perhaps understandable given the main change between the Business Review and the reporting requirements following the amendment to the Companies Act 2006, which included the addition of human rights issues. Notwithstanding, one could gain the impression that companies were demonstrating a certain level of compliance with the requirements by clearly referring to human rights in their 2014/15 annual reports. Conversely, the increase in the reporting of the equality and diversity elements could be linked to the [Davies Report \(2011\)](#), which recommended increasing the number of female board members, and the various UK Corporate Governance Codes (see [Tricker, 2015](#)), which have advocated increased narrative reporting in these and other areas. The relative importance of each item in the organisational justice and equity category in the two time periods involved is also demonstrated in [Table 6](#). Employee rewards and diversity maintained a strong position over both time periods; however, although human rights increased in relative importance, it was still significantly less important from a reporting perspective, as was equality.

It must be highlighted that not all companies increased their HC reporting following the amendment to the Companies Act 2006, with some demonstrating no change in the number of elements disclosed and others actually disclosing less. These findings are displayed in [Table 7](#).

Clearly those companies that appeared to demonstrate no change in their HC reporting may have reported more on certain elements and less on others in the second period, but the overall level remained the same. Again employee welfare is the category containing elements about which the most companies (42) decreased the amount of HC disclosures. However, as was seen above, this was mainly due to a reduction in the reporting of CSR. There are two possible explanations for the decrease in reporting by some companies. The first is that in the early period, certain organisations engaged in segmental reporting and thus HC elements were reported on multiple occasions. Consequently, by changing to reporting in a more holistic nature in the second period, the number of times an element appeared in an annual report would naturally decrease. Secondly, some organisations focussed on a specific area of HC, for example employee engagement, in their 2012/13 report, which was not replicated in the 2014/15 one.

4.2. Good practice cases

There were a number of exemplars of good practice amongst the FTSE 100 companies and these are summarised in [Table 8](#). It should be noted that the company sector has been ascertained using standard industry classification codes. In line with the emphasis on innovation in the Valuing Your Talent initiative (2017), one company in the property sector had formed a committee to look at this area. The aim of the committee, which consists of a number of senior personnel, is to encourage staff members to share their ideas

Table 7
Change in HC reporting across the two periods (number of companies).

HC category	Increase	No change	Decrease
KSA	65	2	33
HRD	76	3	21
Employee welfare	58	0	42
Organisational justice and equity	74	3	23

Table 8
Exemplars of good practice.

HC category	Company sector	Initiative
KSA	Property	Innovation committee
HRD	Defence	Graduate and apprenticeship schemes
Employee welfare	Financial services	Talent management programme
	Manufacturing	Global zero harm
Organisational justice and equity	Mining	Behavioural compass
	Financial services	Unconscious bias programme
	Other	Diversity council
	Information and communications technology (ICT)	Human rights steering group

of where the organisation can grow and provide input to the existing corporate culture. The committee has three principal responsibilities: to agree what aspects of innovation are important for the organisation; to encourage staff to offer their ‘blue sky thinking’; and to focus on exploring and prioritising new ideas. Another company in the defence sector had extensive graduate and apprenticeship schemes and had even linked up with a local university to develop their own Masters in Business and Administration, which is undertaken by 25 high-potential employees each year. Furthermore, as part of its partnership with the university this organisation has its own academy, which provides a structured framework for its managers to improve their expertise and strategic awareness. An organisation in the financial services sector had a talent management programme that was aimed at developing internal staff, as opposed to recruiting externally for senior positions. It focussed specifically on three aspects of talent management: investment and retention of existing talent; the development and succession of female talent; and pipeline development for the next generation of future talent.

Notable examples of good practice in the employee welfare category include a company in the manufacturing sector that has introduced a ‘global zero harm’ initiative and another in the mining sector that has developed a behavioural compass to assist employees with ethical decision making. The former initiative is designed to ensure all employees return home safely each day, no matter where in the world they are based. It therefore emphasises that health and safety is not just a priority in the workplace, but also outside it. The latter example involves all employees and key contractors participating in ethics training workshops, which are designed to mitigate the risk of employee misconduct and to challenge employees to do the right thing, even when not under direct supervision. The organisation also aims to integrate ethics and integrity considerations into the criteria used in the key processes of hiring, promotions and performance reviews.

An organisation in the financial services sector had rolled out a company-wide unconscious bias programme for all employees. The focus of such programmes is normally senior managers or those who sit on interview panels. The stated aim of this programme is to eliminate bias and discrimination in the workplace and to ensure both potential and existing employees are equally positioned with regard to recruitment and promotion. A company that came under the ‘other’ classification also demonstrated how seriously it took diversity. It had established a diversity council to promote a culture of diversity and inclusion and regularly depicted personnel from many different ethnic backgrounds in photographs in both sets of annual reports; thereby portraying an image of an organisation that is proud of its diverse workforce. In line with the emphasis on human rights following the amendment to the Companies Act 2006, one organisation in the ICT sector had set up a human rights steering group and also monitored breaches of human rights in its supply chain. In order to ensure its human rights policies are comprehensive, this company consults with a wide range of stakeholders, including employees, consumers, trade unions, a law firm and a global, non-profit, human rights consultancy organisation. With regard to its supply chain, the company is seeking to protect its brand from adverse events such as corrupt practices, the sourcing of conflict minerals or human rights abuses. This involves regular on-site supplier assessments and, if necessary, follow-up visits.

5. Concluding discussion and further research

The findings presented above demonstrate that most of the UK’s FTSE 100 companies have been increasing their HC reporting, and are doing more than simply fulfilling their statutory duties in this regard. It is therefore clear that recent initiatives to promote HC reporting in the UK have had a positive impact, as the companies appear to have been influenced by the [FRC \(2014\)](#) guidance and various corporate governance codes ([Tricker, 2015](#)). These codes often include requirements for companies to have enhanced communication as well as more effective relationships with their employees, suppliers and customers, and to behave ethically with regards to the environment and society as a whole. Moreover, it was found that there were significant increases in HC reporting in some areas, such as human rights. This is one of the elements which can clearly be linked to the amendment to the Companies Act 2006, while other increases such as those in diversity reporting and equality could be due to other reasons, such as the [Davies Report \(2011\)](#), which recommended increasing the number of female board members, and the various UK Corporate Governance Codes (see [Tricker 2015](#)), which have advocated increased narrative reporting.

The findings here are also consistent with some of those from studies of HC reporting in other countries. The companies in this study reported strongly in areas of employee training, health and safety, career development and employee leadership, which is similar to the findings of [Khan and Khan \(2010\)](#) and [Abeysekera and Guthrie \(2004\)](#). There was also clear evidence that organisations are reporting extensively on succession planning, and there were examples of some of the FTSE 100 companies linking succession planning with workforce risk. Examples were also found illustrating how companies give particular attention to the risk of executive

or board member turnover, which involved linking workforce risk performance measures with succession planning programmes. The results also show that the FTSE 100 companies are moving away from wider IC disclosures to focus more on human resources issues, which is consistent with the findings of Nielsen et al. (2016) in their study of IC reporting in Denmark. This was particularly evident in the analysis of HC reporting best practice across a number of human resources issues. For example, a number of companies gave significant attention to reporting health and safety issues, and how they are integrated into company culture and across all their operations. Moreover, a number of companies reported how they benchmark their employee engagement initiatives with other organisations, which also involves employing consulting firms. Additionally, metrics were employed to monitor employee engagement initiatives, and examples of these metrics include average sick days per employee, training hours per full-time employee and the percentage of employees in the appraisal process.

Notwithstanding, the findings have revealed significant differences in the levels of reporting for HC items, and this is also consistent with studies in other countries (see Abeysekera & Guthrie, 2004). Although HC items such as entrepreneurship, innovation, and employee wellbeing have increased in prominence, this contrasts significantly with more widely reported items such as expertise, employee training and health and safety, which demonstrated more modest increases in the sentence count. The results also provide some evidence that companies are taking heed of Roslender et al.'s (2012) view that UK companies should place more emphasis on employee wellbeing and recognise the value of a healthy workforce. There were some instances of 'boiler-plate' by the companies analysed, which is consistent with findings from other studies (e.g. Campbell and Slack, 2008). Therefore, whilst companies should be encouraged not to simply replicate the narrative used by other organisations, users of annual reports might benefit from both a common terminology and layout of relevant information. For example, some companies used the term 'employee communication' as opposed to 'employee engagement'. This finding is similar to that of Bassi et al. (2015), who found little consistency with the nomenclature used for the employee sections of annual reports, which had a range of titles including 'our people', 'investing in employees', 'winning with people', 'human capital report' and 'labour practices'. The results have also revealed that there was no common pattern to annual reports, with sections dedicated to employees appearing in various places. Whilst this may be less of a problem in an age where most users will read annual reports on digital media, it compares unfavourably with financial statements and notes to the accounts that follow a standard layout and position.

However, generally the findings of this study were encouraging and therefore both of its RQs could be answered in a positive manner. The overall reporting of HC items has increased by 17% over the two periods, with substantial increases in the HRD and organisational justice and equity categories. Furthermore, as the cases outlined above have demonstrated, there is clear evidence of good practice in HC reporting by UK firms. It was also evident that even where the overall level of reporting of a particular element had not increased by much, or decreased in the case of CSR, these elements were often referred to many times in an annual report or company website. Notwithstanding, with the wide number of initiatives encouraging increased HC reporting, which apart from the amendment to the Companies Act 2006 include Valuing Your Talent (2017), the GRI (2016) and various UK Corporate Governance Codes (Tricker, 2015), it could be stated that this is a practice that is occurring in a piecemeal manner and still lags behind that of other countries. Moreover, if one of the aims of HC reporting is to provide a better overview of organisational value, it is debatable whether investors and other stakeholders will be able to make informed decisions based on what are generally positive reports on a variety of HC issues.

This research focussed on the FTSE 100 companies as at 2015, on the assumption that such organisations should be setting an example to those further down the FTSE listing. However, this may not be the case and thus future research could use the analytical framework to ascertain how the HC reporting practices of other listed companies compare with the top 100, and whether there are further examples of good practice. Future research could also look at HC reporting from the aspect of the main users of annual reports, including investors and potential employees. It would be useful to understand how much emphasis such users place on the information contained in such documents and what further HC elements they would like to see reported. This could also lead to further development of the analytical framework. The research has also highlighted inconsistencies and weaknesses in HC reporting. Further research is therefore required to understand why companies have different approaches in this area. Consequently, an in-depth case study analysis of the FTSE 100 companies that are both strong and weak in HC reporting should be undertaken to identify enablers and barriers to effective HC reporting.

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References

- Abeysekera, I., & Guthrie, J. (2004). Human capital reporting in a developing nation. *The British Accounting Review*, 36(3), 251–268.
- Abeysekera, I., & Guthrie, J. (2005). An empirical investigation of annual reporting trends of intellectual capital in Sri Lanka. *Critical Perspectives in Accounting*, 16(3), 151–163.
- Abhayawansa, S., & Abeysekera, I. (2008). An explanation of human capital disclosure from the resource based perspective. *Journal of Human Resource Costing & Accounting*, 12(1), 51–64.
- Adams, J. S., & Freedman, S. (1976). Equity theory revisited: Comments and annotated bibliography. In L. Berkowitz, & E. Walster (Vol. Eds.), *Advances in experimental social psychology*: 9, (pp. 43–90). New York: Academic Press.
- Adler, P. S. (2001). Market, hierarchy, and trust: The knowledge economy and the future of capitalism. *Organization Science*, 12(2), 214–234.
- Alexander, S., & Ruderman, M. (1987). The role of procedural and distributive justice in organizational behaviour. *Social Justice Research*, 1(2), 177–198.
- Andrade, P., & Sotomayor, A. M. (2011). Human capital accounting – measurement models. *International Journal of Economics and Management Sciences*, 1(3), 78–89.

- Bassi, L., Creelman, D., & Lambert, A. (2015). Advancing the HR profession: Consistent standards in reporting sustainable human capital outcomes. *People-Strategy Journal*, 38(2), 71–75.
- Beattie, V., & Thompson, S. J. (2007). Lifting the lid on the use of content analysis to investigate intellectual capital disclosures. *Accounting Forum*, 31(2), 129–163.
- Beattie, V., McInnes, W., & Fearnley, S. (2004a). *Through the eyes of management: Narrative reporting across three sectors*. London: ICAEW.
- Beattie, V., McInnes, W., & Fearnley, S. (2004b). A methodology for analysing and evaluating narratives in annual reports: A comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum*, 28(3), 205–236.
- Bontis, N. (2003). Intellectual capital disclosure in Canadian corporations. *Journal of Human Resource Costing & Accounting*, 7(1), 9–20.
- Brennan, N. (2001). Reporting intellectual capital in annual reports: Evidence from Ireland. *Accounting, Auditing & Accountability Journal*, 14(4), 423–436.
- Burke, R. J. (2000). Women on corporate boards of directors: understanding the context. In R. J. Burke, & M. C. Mattis (Eds.). *Women on corporate boards of directors: International challenges and opportunities*. Dordrecht: Springer.
- Chartered Institute of Personnel, & Development (2017). *Understanding how organisations report on human capital* <https://www.cipd.co.uk/about/research-tender-invitations/human-capital-disc>. [Accessed 05 October 2017].
- Campbell, D., & Slack, R. (2008). *Narrative reporting: Analysts' perceptions of its value and relevance. Research report 104*. London: ACCA.
- Carney, T. F. (1972). *Content analysis, a technique for systematic inference from communications*. Winnipeg: University of Manitoba Press.
- Carroll, A. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Catalyst (2011). *The bottom line: Corporate performance and women's representation on boards (2004–2008)*. New York: Catalyst.
- Clackworthy, S. (2000). The value of reporting in the information age. *Management Accounting*, 78(3), 38–39.
- Department of Trade and Industry (DTI) (2003a). *Accounting for people – report of the task force on human capital management*. London: DTI.
- Department of Trade and Industry (DTI) (2003b). *Accounting for people – A consultation paper*. London: DTI.
- Davies, E. M. (2011). *Women on boards*. London: Department for Business, Innovation and Skills.
- De Silva, T.-A., Stratford, M., & Clark, M. (2014). Intellectual capital reporting: A longitudinal study of New Zealand companies. *Journal of Intellectual Capital*, 15(1), 157–172.
- Dominguez, A. A. (2011). The impact of human resource disclosure on corporate image. *Journal of Human Resource Costing & Accounting*, 15(4), 279–298.
- Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P. (2016). Integrated reporting: a structured literature review. *Accounting Forum*, 4(3), 166–185.
- Eckstein, C. (2004). The measurement and recognition of intangible assets: then and now. *Accounting Forum*, 28(2), 139–158.
- Edvinsson, L., & Malone, M. (1997). *Intellectual capital: realizing your company's true value by finding its hidden roots*. New York: Harper Business.
- Financial Reporting Council (2014). *Guidance on the strategic report*. London: Financial Reporting Council.
- Farooq, O., & Nielsen, C. (2014). Improving the information environment for analysts: Which intellectual capital disclosure matters the most? *Journal of Intellectual Capital*, 15(1), 142–156.
- Fincham, R., & Roslender, R. (2003). Intellectual capital accounting as management fashion: A review and critique. *European Accounting Review*, 12(4), 781–795.
- Flamholtz, E. G. (1971). A model for human resource valuation: A stochastic process with service rewards. *The Accounting Review*, 46(2), 253–267.
- Flamholtz, E. G. (1974). *Human resource accounting*. California: Dickenson Publishing Company.
- Flamholtz, E. G. (1975). *Human resource accounting* (2nd ed.). San Francisco: Jossey-Bass.
- Fornes, S. L., Rocco, T. S., & Wollard, K. K. (2008). Workplace commitment: A conceptual model developed from integrative review of the research. *Human Resource Development Review*, 7(3), 339–357.
- Gallie, D., Zhou, Y., Felstead, A., & Green, F. (2012). Teamwork: Skill development and employee welfare. *British Journal of Industrial Relations*, 50(1), 23–46.
- Gamerschlag, R. (2013). Value relevance of human capital information. *Journal of Intellectual Capital*, 14(2), 325–345.
- Global Reporting Initiative (2016). *Introducing the GRI standards – presentation* <https://www.globalreporting.org/standards/resource-download-center/#userdetails>. [Accessed 12 October 2016].
- Gray, R., Kouhy, R., & Lavers, S. (1995). Methodological themes: Constructing a research database of social and environmental reporting by UK companies. *Auditing & Accountability Journal*, 8(2), 78–101.
- Greenberg, J. (1990). Organizational justice: Yesterday today and tomorrow. *Journal of Management*, 16(2), 399–432.
- Guthrie, J., Petty, R., Yongvanich, K., & Ricceri, F. (2004). Using content analysis as a research method to enquire into intellectual capital reporting. *Journal of Intellectual Capital*, 5(2), 282–293.
- Hatch, N. W., & Dyer, J. H. (2004). Human capital and learning as a source of sustainable competitive advantage. *Strategic Management Journal*, 25(12), 1155–1178.
- Hekimian, J. S., & Jones, C. (1967). Put people on your balance sheet. *Harvard Business Review*, 43(2), 105–113.
- Hermanson, R. H. (1963). *A method for recording all assets and the resulting accounting and economic implications*. Michigan: Michigan State University [PhD dissertation].
- Hermanson, R. H. (1964). *Accounting for human assets. Occasional paper No. 14*. Michigan: Bureau of Business and Economic Research, Graduate School of Business Administration, Michigan State University.
- Hickman, A. (2014). *Valuing your talent: The story so far*. HR Magazine <http://www.hrmagazine.co.uk/article-details/valuing-your-talent-the-story-so-far>. [Accessed 29 September 2017].
- Hughen, L., Lulseged, A., & Upton, D. R. (2014). Improving stakeholder value through sustainability and integrated reporting. *The CPA Journal*, 84(3), 57–61.
- International Integrated Reporting Council (2016). *Integrated reporting* <http://integratedreporting.org/>. [Accessed 12 October 2016].
- Kanfer, R., & Ackerman, P. L. (2014). Aging, adult development, and work motivation. *Academy of Management Review*, 29(3), 440–458.
- Khan, M. H. U. Z., & Khan, M. R. (2010). HC disclosure practices of top Bangladeshi companies. *Journal of Human Resource Costing & Accounting*, 14(4), 329–349.
- Kim, S., & Taylor, D. (2014). Intellectual capital vs the book-value of assets: A value-relevance comparison based on productivity measures. *Journal of Intellectual Capital*, 15(1), 65–82.
- Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human Resource Management Review*, 16(2), 139–154.
- Li, J., Pike, R., & Haniffa, R. (2008). Intellectual capital disclosure and corporate governance structure in UK firms. *Accounting and Business Research*, 38(2), 137–159.
- Marvel, M. R., Davis, J. L., & Sproul, C. R. (2016). Human capital and entrepreneurship research: A critical review and future directions. *Entrepreneurship Theory and Practice*, 40(3), 599–626.
- Massingham, P. R., & Tam, L. (2015). The relationship between human capital, value creation and employee reward. *Journal of Intellectual Capital*, 16(2), 390–418.
- McCracken, M., & Wallace, M. (2000). Towards a redefinition of strategic HRD. *Journal of European Industrial Training*, 24(5), 281–290.
- McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. *The Academy of Management Journal*, 31(4), 854–872.
- Molloy, J. C., & Barney, J. B. (2015). Who captures the value created with human capital? A market-based view. *Academy of Management Perspectives*, 29(3), 309–325.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *The Academy of Management Review*, 23(2), 242–266.
- Nielsen, C., Roslender, R., & Schaper, S. (2016). Continuities in the use of the intellectual capital statement approach: Elements of an institutional theory analysis. *Accounting Forum*, 40(1), 16–28.
- Nielsen, C., Roslender, R., & Schaper, S. (2017). Explaining the demise of the intellectual capital statement in Denmark. *Auditing & Accountability Journal*, 30(1), 38–64.
- O'Driscoll, M. P., & Randall, D. M. (1999). Perceived organisational support, satisfaction with rewards, and employee job involvement and organisational commitment. *Applied Psychology*, 48(2), 1464–1597.
- Pensions and Lifetime Savings Association (2015). *Where is the workforce in corporate reporting?* <http://www.plsa.co.uk/PolicyandResearch/DocumentLibrary/?/media/Policy/Documents/0439-Where-is-the-workforce-in-corporate-reporting-An-NAPF-discussion-paper.pdf>. [Accessed 12 October 2016].
- Ployhart, R. E., Nyberg, A. J., Reilly, G., & Maltarich, M. A. (2014). Human capital is dead: Long live human capital resources! *Journal of Management*, 40(2), 371–398.
- Porter, L. W., & Steers, R. M. (1973). Organizational, work, and personal factors in employee turnover and absenteeism. *Psychological Bulletin*, 80(2), 151–176.
- Roos, J., Roos, G., Dragonetti, N. C., & Edvinsson, L. (1997). *Intellectual capital: Navigating the new business landscape*. London: Macmillan Press.
- Roslender, R., & Dyson, J. R. (1992). Accounting for the worth of employees: A new look at an old problem. *British Accounting Review*, 24(4), 311–329.

- Roslender, R., & Stevenson, J. (2009). Accounting for people: A real step forward or more a case of wishing and hoping? *Critical Perspectives on Accounting*, 20(7), 855–869.
- Roslender, R., Stevenson, J. E., & Kahn, H. (2012). Towards recognising workforce health as a constituent of intellectual capital: Insights from a survey of UK accounting and finance directors. *Accounting Forum*, 36(4), 266–278.
- Roslender, R. (2009). The prospects for satisfactorily measuring and reporting intangibles: Time to embrace a new model of (ac)counting? *Journal of Human Resource Costing & Accounting*, 13(4), 338–359.
- Rowbottom, N., & Schroeder, M. A. S. (2014). The rise and fall of the UK operating and financial review Accounting. *Auditing & Accountability Journal*, 27(4), 655–685.
- Russ, M. (2014). *Value creation, reporting, and signaling for human capital and human assets: building the foundation for a multi-disciplinary, multi-level theory* New York: Palgrave Macmillan.
- Schaufeli, W. B., Taris, T. W., & van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology*, 57(2), 173–203.
- Schlechter, A., Thompson, N. C., & Bussin, M. (2015). Attractiveness of non-financial rewards for prospective knowledge workers. *Employee Relations*, 37(3), 274–295.
- Sealy, R., Doldor, E., & Vinnicombe, S. (2016). *The female FTSE board report 2016. Women on boards: Taking stock of where we are* Cranfield: Cranfield University School of Management.
- Seetharaman, A., Bin Zaini Sooria, H. H., & Saravanan, A. S. (2002). Intellectual capital accounting and reporting in the knowledge economy. *Journal of Intellectual Capital*, 3(2), 128–148.
- Shaw, S., & Fairhurst, D. (2008). Engaging a new generation of graduates. *Education and Training*, 50(5), 366–378.
- Steen, A., Welch, D., & McCormack, D. (2011). Conflicting conceptualizations of human resource accounting. *Journal of Human Resource Costing & Accounting*, 15(4), 299–312.
- Striukova, L., Unerman, J., & Guthrie, J. (2008). Corporate reporting of intellectual capital: Evidence from UK companies. *The British Accounting Review*, 40(4), 297–313.
- Tan, H. P., Plowman, D., & Hancock, P. (2008). The evolving research on intellectual capital. *Journal of Intellectual Capital*, 9(4), 585–608.
- Teece, D. J. (1987). *The competitive challenge: Strategies for industrial innovation and renewal*. Ballinger Cambridge, MA: Harper and Row.
- Tricker, B. (2015). *Corporate governance: Principles, policies and practices* (3rd ed.). Oxford: Oxford University Press.
- Valuing Your Talent (2017). *Valuing your talent: Home page*. <http://www.valuingyourtalent.com>. [Accessed 23 May 2017].**
- Vandemaele, S., Vergauwen, P., & Smits, A. (2005). Intellectual capital disclosure in The Netherlands, Sweden and the UK: A longitudinal and comparative study. *Journal of Intellectual Capital*, 6(3), 417–426.
- Verrecchia, R. (2001). Essays on disclosure. *Journal of Accounting and Economics*, 32(1–3), 91–180.
- Wall, A. P., Kirk, R. J., & Martin, G. (2003). *Intellectual capital: Measuring the immeasurable*. Oxford: Elsevier.
- Walton, R. E. (1985). From control to commitment in the workplace. *Harvard Business Review*, 63(2), 77–84.
- Wisniewskia, T. P., & Yekini, L. S. (2015). Stock market returns and the content of annual report narratives. *Accounting Forum*, 39(4), 281–294.
- Worthen, H., & Berchman, M. (2010). Apprenticeships: What happens in on-the-job training (OJT)? In S, Billett, & S (Eds.). *Learning through practice* (pp. 222–239). Dordrecht: Springer.