


The Disclosure of Recognised and Unrecognised Intangibles: Evidence from New Zealand

Laura Mehnaz , Massey University

Tom Scott , Auckland University of Technology

Zeting Zang , Auckland University of Technology

We examine the reporting of intangible assets and the disclosures on intellectual capital activities by listed companies and public benefit entities in New Zealand and assess the usefulness of these disclosures. Comparing trends in intangible asset disclosure frequency, we note that the most common is capitalised software costs, followed by goodwill. For intellectual capital, we find that qualitative disclosures are more prevalent than quantitative, with disclosure on relational capital being the most frequent. In addition, we find that intangible assets are value relevant, and more intellectual capital disclosures increase the value relevance of goodwill. Finally, we consider intangible reporting by public benefit entities and show that while the rate of intangibles capitalised is similar, they are of less relative economic importance. Overall, our findings provide evidence of divergence in intangible categorisation practice, highlight the absence of reporting digital technologies and call for improved disclosure criteria for recognised and unrecognised intangibles.

Introduction

Accounting for intangibles has long been contentious, with debate around the criteria for capitalising related expenses as an asset, measurement of subsequent expenditures, revaluation of intangibles and the divergence between reported and market value, lack of comparability of internal and externally generated intangibles, and disclosure of information (Barker et al. 2022; EFRAG 2020; Garanina et al. 2021). As the global economy shifts away from an industrial focus and into an era dominated by technology and intellectual property, intangible assets are increasingly seen as a key driver of firm value which is not accurately reflected by financial reporting, termed the missing intangibles gap (Lev 2018). This gap is attributed to deficient reporting of intangibles (Lev 2019), including strategic investments in future value creation such as digital technology, human capital, research and development (R&D), and brand awareness being expensed rather than recognised as assets. This can lead to an understatement of earnings and assets for intangible-driven firms and an overstatement for firms with a tangible asset base. Moreover, intangible expenses (with the notable exclusion of R&D expenditure) are often aggregated within broad categories, such as cost of sales and sales and general and administrative expenses, leaving stakeholders with no insights into specific expenditure areas potentially relating to uncapitalised intangibles. These lead to a declining relevance

of reported earnings, particularly for firms with high intangibles intensity (Lev 2018, 2019). Addressing concerns (e.g., EFRAG 2021), the IASB has added intangible assets to its research project pipeline (IASB 2022). Furthermore, a recent review by Hussinki et al. (2024) emphasised the need for contemporary evidence on intangibles disclosure practices, noting its relevance to engaging with regulators, and calling for further research in this area.

We draw upon these concerns and current regulatory interests to drive our research objectives: to examine the disclosures on recognised and unrecognised intangibles and assess the usefulness of these disclosures. First, we report on the frequency of capitalised intangibles and expenditures that relate to future internal value creation. By outlining the current state of what is recognised on either the balance sheet or income statement, insight is provided about current trends in recognised intangible assets and, by their absence, unrecognised intangibles. Second, we examine whether there is any disclosure of information relating to intangibles that could result in future value creation, that is, intellectual

Correspondence

Tom Scott, Accounting Department, Auckland University of Technology, Private Bag 92006, Auckland 1142, New Zealand; email: thomas.scott@aut.ac.nz

Accepted for publication 3 May 2024.

capital disclosures. Considering the rapid changes in intangible assets, these research questions provide an update on the work of Austin (2007), who examined the frequency of different intangible assets in New Zealand. They also broaden prior research by providing a more comprehensive examination that includes expensing and intellectual capital disclosure to contribute to research in other settings (Hussinki et al. 2024). Third, we confirm recent research into the usefulness of capitalised intangible assets by assessing whether they are related to stock prices (e.g., Cordazzo and Rossi 2020; Dahmash et al. 2009; Mazzi et al. 2022); our study extends this literature by examining the impact of the extent of unrecognised intangible disclosure. Last, we utilise a further advantage of the New Zealand setting to examine intangibles in the public benefit entity sector, where International Public Sector Accounting Standards (IPSAS) are followed in New Zealand, contributing to an economically important but under-researched area in intangible assets (Guthrie and Dumay 2015).

Our main sample is based on 226 observations from listed New Zealand companies between 2016 and 2021. New Zealand is a strong setting for our research as it provides generalisable insights by using IFRS and International Standards on Auditing (ISA). Large charities and public benefit entities (e.g., councils, government departments, etc.) also use standards based on IPSAS. Beyond accounting standards, policy implications from New Zealand are highly generalisable as New Zealand is ranked in the upper middle in terms of accounting enforcement (Preiato et al. 2015). Furthermore, New Zealand's Exchange (NZX) is mid-sized globally (CIA 2023). As our main sample is based on the whole population of listed companies, it includes both large and very small companies (our median sample company has total assets of NZ\$253 million).¹ Sampling the whole population of a mid-sized stock exchange provides important evidence on companies that would be excluded from samples of the largest US or UK listed companies and is generalisable to other countries without a large stock exchange or smaller companies in larger markets.

We find that 88% of the companies report intangibles and their average size stands at 20.50% of total assets, almost double the 10.60% reported in 2005 by Austin (2007). While the most frequently 'capitalised' intangibles are software, website and database costs, followed by goodwill and patents and trademarks and rights, the largest intangible asset category in terms of size remains goodwill (Austin 2007), followed by capitalised intellectual property and R&D costs. Data is also collected on expenditures relating to the development of intangibles. We find 31% of companies disclose an advertising expense, relative to 23% and 17% that have capitalised customer contracts & relationships or brands, respectively.

Our analysis of the data provides policy implications for unrecognised intangible assets. We first note that the divergence in categorisation by companies supports calls by the European Financial Reporting Advisory Group (EFRAG 2021) for a common terminology and IFRS taxonomy. Second, our descriptive evidence shows a lack of 'digital technologies' being capitalised or expensed as intangibles, consistent with the missing intangibles gap. If the gap is considered as reflected by the market-to-book (MTB) ratio, capitalised and expensed intangibles are much smaller, although allowing the capitalisation of intangibles-related expenditures such as advertising expenses would reduce the gap. One further reason for this gap, besides lack of recognition, is likely the lack of ability to determine a fair value for intangibles, including those that would appear close to having an active market, such as the fishing quota.² Therefore, our third insight is to argue that aligning the fair value requirements for intangibles to IFRS 13 *Fair Value Measurement* may be a relatively low-cost solution to partially reduce the gap.

We next examine unrecognised intangible assets by collecting intellectual capital disclosures based on human, relational and structural capital examples outlined by Li et al. (2008).³ Qualitative disclosures are much more common than quantitative, provided by almost half of the sample relative to a third. We note that many of these disclosures are found in extended external reports (EER) (i.e., Integrated Report, Sustainability Report, Global Reporting Initiative). Thus, our fourth implication is that one potential avenue for disclosure of information about EFRAG (2021) category C intangibles (i.e., those with few control rights and no market) is the integration of EER to include more indicators that relate to future value creation. Developments in the Global Reporting Initiative (GRI) or International Sustainability Standards Board (ISSB) partly meet the information needs of unrecognised intangibles.

We conclude our examination of listed companies by showing that capitalised intangible assets are associated with market valuation. This confirms prior findings (e.g., Cordazzo and Rossi 2020; Dahmash et al. 2009; Mazzi et al. 2022) that current capitalisation practices are viewed as 'useful' by market participants. We find a stronger association between goodwill and market value for companies with greater disclosures of unrecognised intangibles. This highlights that additional disclosures are complementary to recognition, as they provide further insight into future value creation for market participants via connecting financial and non-financial information. Thus, our fifth key policy contribution is that greater disclosure of unrecognised intangibles facilitates a better understanding of capitalised intangible assets via improved connectivity.⁴

Last, we examine intangible assets in a random sample of municipal councils and large charities (not-

for-profits) to provide insights for the public benefit entity sector. We find that the frequency of intangibles capitalised is similar to that for-profit sector. As New Zealand councils must prepare a statement of service performance (SSP), including disclosures about their outcomes, they have 100% reporting of relational and structural capital. Thus, our sixth insight is that intellectual capital disclosures would appear to overlap with SSPs in the public benefit entity space and discharge information requirements about unrecognised intangible assets.

Our study contributes to the existing literature in several ways. First, we add to the growing body of research on intangibles (Castilla-Polo and Gallardo-Vázquez 2016; Ritter and Wells 2006) and intellectual capital disclosures (Brennan 2001; Duff, 2018; Parshakov and Shakina 2020; Sonnier 2008; Whiting and Miller 2008). Prior studies predominantly examine specific intangible assets (e.g., R&D, goodwill), with a recent trend emerging towards investigating intellectual capital disclosures, whereas our study focuses on the frequency of capitalised, expensed and intellectual capital disclosures, aiming to outline the current state of recognised intangible assets, and by their absence shed light on the unrecognised intangibles. Additionally, our study responds to the call for more research on current disclosure practices by Hussinki et al. (2024). Our contribution lies in providing evidence regarding the issues surrounding the disclosure of major categories of intangibles and addressing the intangibles gap. Second, our study documents that intangible disclosures are value relevant, consistent with extant studies (Aboody and Lev 1998; Bauman and Shaw 2018; Chalmers et al. 2008; Higson 1998). We offer further insights into how enhanced disclosures on intellectual capital activities can benefit by improving the relevance of goodwill to capital market participants. Therefore, our findings are of interest to standard setters, policymakers, managers and investors.

The rest of this paper is structured as follows. The next section provides background to the study, leading to identification of the research issues. We discuss the current standard-setting developments and prior research literature and develop our research questions. Then the results are presented followed by discussion of intangible assets in public sector entities. The paper then concludes and discusses the study's limitations.

Background and Research Question Development

Background

Intangible assets are defined as 'an identifiable non-monetary asset without physical substance' in IAS 38 *Intangible Assets* (IAS 38, para 8) and IPSAS 31 *Intangible*

Assets (IPSAS 31, para 16). This highlights a distinction in accounting based on tangibility that is not grounded in the conceptual framework (Lev 2018). With the increasing pace of innovation in the area of intangible assets in the 'information age,' there has been further pressure placed on IAS 38 to remain relevant for unforeseen technological developments such as accounting for the blockchain (Grant Thornton 2018; Jackson and Luu 2023). Broadly speaking, IAS 38 adds an additional requirement for the recognition of intangible relative to tangible assets – that they are identifiable. An intangible asset is identifiable if it is separable or arises from contractual rights. Thus, there is a strong emphasis on recognised intangibles having transferability or exchangeability, while tangible assets appear to carry the presumption of transferability or exchangeability.

IAS 38 notes that it can be 'difficult to assess whether an internally generated intangible asset qualifies for recognition' (IAS 38, para 51) due to issues with identifiability, the realisation of future economic benefits and measuring costs reliably. For some intangible assets, directly measured costs arguably can never be distinguished from the overall business costs. Thus, their recognition is prohibited, including brands, mastheads, publishing titles and customer lists. Furthermore, even for recognised internally generated intangible assets, costs can only be capitalised if they are directly attributable since it meets the recognition criteria. This may mean that a substantial portion of the 'related' costs cannot be recognised but rather only a fee to register a legal right. This is highlighted in the requirements for R&D expenditure, where research expenses cannot be capitalised and development expenses only after a set of criteria that highlights the feasibility of the project are met, resulting in only a small proportion of the total expenditures being recognised. However, identifiable intangible assets arising from acquisition can be recognised at the cost of their acquisition. Furthermore, goodwill, the difference between the acquisition price and identifiable assets of the acquiree, is recognisable. Accordingly, there is a large difference in the accounting for internally generated versus externally acquired intangibles, with internally generated goodwill not being recognised.

After their recognition at cost, a further complication is that some intangibles may not have finite lives and thus are not amortised. Those with indefinite lives (e.g., goodwill or brands) should be instead tested for impairment annually and disclose supporting information. In contrast to tangible assets, there is only the option to use prices from an active market to fair value, as opposed to the hierarchy of fair value measurements outlined in IFRS 13 *Fair Value Measurement*, which for tangible assets includes unobservable inputs to allow for the use of discounted cash flows to arrive at net present value. IFRS 13 Appendix A defines an active market

as sufficient frequency and volume of transactions to provide prices, and IAS 38 itself notes that 'It is uncommon for an active market to exist for an intangible asset, although this may happen.' (IAS 38, para 78)

Literature review

Considering their importance, there is extensive literature examining attributes of intangible assets, including several literature reviews (see Barker et al. 2022; Castilla-Polo and Gallardo-Vázquez 2016; EFRAG 2020; Garanina et al. 2021; Hussinki et al. 2024; Wyatt 2005). One stream of research notes the general issue of non-disclosed intangible assets, with a decline in the usefulness of accounting information in relation to market value (Lev and Gu 2016; Lev 2018). However, using Australian data, Davern et al. (2019) do not find a decline to the same extent. Other research highlights the value relevance of key non-financial information in specific industries, including telecommunications (Amir and Lev 1996), semiconductors (Chandra et al. 1999) and biotech (Guo et al. 2004). Thus, on balance, intangibles seem to be the 'gap' on the balance sheet.

A second stream of research shows that disclosed intangibles are generally value relevant (Ritter and Wells 2006; Wyatt 2005). For example, Oliveira et al. (2010) show that disclosed intangible assets are value relevant in Portugal and suggest a slight increase in their value relevance after the adoption of IFRS. In Australia, goodwill is more value relevant post-IFRS, although there is no change in other identified assets (Chalmers et al. 2008). Other studies on specific intangibles, such as capitalised software costs (Aboody and Lev 1998), goodwill (Higson 1998) and R&D (Lev and Sougiannis 1996), also highlight their value relevance. However, linking the two streams of research it is evident that external estimates of intangibles can be more value relevant than disclosed amounts, such as in the case of brands (Barth et al. 1998).

A related question is whether intangible assets are more value relevant when they are capitalised and thus recognised as an asset or when they are immediately expensed. This has been examined in the context of R&D expenditures, where there have been changes to the rules on what could or could not be capitalised. Dargenidou et al. (2021) show that capitalisation of development expenditure is more value relevant than expensing under UK GAAP than IFRS. They infer that the result is driven by the uncertainty of realising capitalised costs. Mohd (2005) documents that firms that opt to capitalise their software development costs experience lower information asymmetry compared to those that directly expense such costs, leading to reduced financing costs. Further, the practice of capitalising software development costs can reduce investors' uncertainty regarding

their associated future benefits. For a sample of French listed firms, Cazavan-Jeny et al. (2011) find that when firms both capitalise and expense R&D expenditures, the expensed portion exhibits a stronger and negative relationship with future performance. Wyatt (2005) examines the pre-IFRS setting in Australia, where capitalisation of applied development expenses was possible but not mandated, and finds they are not value relevant. Wyatt's (2005) study also shows that the capitalisation decision is affected by the quality of the technology and the ability to derive benefits. Other pre-IFRS Australian evidence shows that goodwill is more value relevant than other identified intangible assets, while capitalised R&D is not (Godfrey and Koh 2001). The shift to an impairment-based approach for goodwill is argued to increase discretion, allowing managers to delay the recognition of bad news (Li and Sloan 2017).

A final stream of research examines the disclosure of information that relates to the generation of intangible assets – sometimes termed 'intellectual capital' disclosures. Reliability of the measurement of unrecognised intangible assets is often questioned due to their 'sunk' nature and 'spillover' attributes (Lev 2019; Wyatt 2008). Yet, most studies find that unrecognised intangibles have the potential to generate future economic benefits and enhance financial performance of firms. For example, Nadeem et al. (2018) demonstrate that proxies for intellectual capital are associated with firm performance. Ittner and Larcker (1998), Deng et al. (1999) and Smith et al. (2010) document that favourable brand image can bolster a company's financial performance and reduce its capital costs. Moreover, most studies show that information on unrecognised intangible assets is value relevant (Barth et al. 1998; Lev 2019; Raithel and Schwaiger 2015) and that a higher level of disclosure on them increases the value relevance of earnings and equity (Vafaei et al. 2011).

With the global increase in Integrated Reporting (IR) and non-financial disclosures generally via either management key performance indicators, GRI reporting or sustainability reporting, there has also been a growth in the disclosure of information that relates to the generation of intangible assets (de Villiers and Sharma 2020). Thus, with the rise in these reports, there has been an increase in the disclosure of uncapitalised intangibles, albeit in a different format and with a different emphasis than in the past.

Research question development

Following feedback on the IASB's third agenda consultation, intangible assets were added to the IASB's research project pipeline (IASB 2022). Respondents noted that the standard covered a variety of assets that were not envisaged when the standard was developed and that it

was restrictive in regard to internally generated assets, resulting in differences between companies that grew organically or via acquisition (IASB 2021). Accordingly, intangible assets were mooted in the IASB (2022) staff paper as having several options for improvement, ranging from smaller issues, such as enhanced disclosures and software as a service, to reviewing the fundamental principles of recognition, valuation and how to account for digital intangible assets (Jackson and Luu 2023). EFRAG (2021) expressed similar concerns and highlighted that intangible asset reporting could decrease financial statement comparability and performance assessment. EFRAG (2021) discusses the pros and cons of asset recognition and different measurement basis options and outlines three options moving forward: (1) amending recognition and measurement requirements for intangibles; (2) providing information on specific intangibles; and (3) providing information on future-oriented expenses and risk/opportunity factors that may affect future performance. The last approach echoes Wyatt and Abernethy's (2008) view on reporting disaggregated intangible investment expenditure across the value chain and IASB management's comment and developments in IR. A survey of users by the AASB (2022) shows that the majority of respondents believe there is a problem with the usefulness of financial statements, with the prohibition of the internally generated asset recognition, although a majority still agree with the prohibition. Furthermore, respondents were split between a recognition or disclosure driven solution.

We use these issues to motivate our research, which we state as research questions, considering the exploratory nature of our paper. First, despite the concerns outlined above that there is a 'gap', there is a paucity of evidence on what intangibles are currently capitalised and disclosed. By outlining the current state of what is recognised on the balance sheet (or notes), we provide insight into recognised intangible assets, and by their absence unrecognised intangibles. Although there is prior research that documents the frequency of specific intangibles across a market, or frequency of specific categories, research that seeks to note the frequency of all intangibles is often dated and predates the emergence of 'digital technologies', including in New Zealand (Austin 2007). This leads to our first research question.

RQ1: What is the frequency of reported capitalised intangibles?

If expenditure relating to the development of intangible assets is not capitalised, it is recognised as an expense when they are material (IAS 1, para 97). Examining expensed intangibles affords insight into unrecognised intangibles as EFRAG (2021) outlines an approach where information about intangibles is also provided by a focus on future-oriented expenses and risk factors.

Thus, we next examine the frequency of expensed intangibles.

RQ2: What is the frequency of reported expenditures that relate to future internal value creation?

Third, entities can make disclosures about intangibles not capitalised in the balance sheet or disaggregated and reported as an expense in the income statement (or notes). Outlining what types of information, if any, are being disclosed can provide insight into how companies are currently disclosing to bridge the gap, and what categories of information are disclosed in current practice. Furthermore, as there are suggested disclosures for specific intangibles by EFRAG (2021) and the AASB (2022), we provide initial evidence on whether this information is currently provided. This includes a description of the asset, the reason it is considered to play a key role in the pursuit of the entity's objectives, the reason it failed the recognition criteria in IAS 38, the operating segments in which it is used and any legal restrictions on its title and relation to the business models and strategies.

RQ3: What is the frequency of unrecognised intangible disclosures in the annual report?

Last, we investigate if intangible assets are value relevant, contributing to a long stream of literature on the usefulness of intangibles (e.g., Cordazzo and Rossi 2020; Dahmash et al. 2009; Mazzi et al. 2022). Research also suggests that goodwill is more value relevant than other capitalised intangibles assets (Chalmers et al. 2008; Godfrey and Koh 2001). However, it is important to confirm results still hold in the New Zealand context. Furthermore, we utilise the unrecognised intangible disclosures to provide evidence on whether such information can 'connect' the importance of capitalised intangibles or change their value relevance.

RQ4: Are intangible disclosures value relevant?

Results

Sample

Our main sample is based on all companies listed on the NZX. To be included, companies must use New Zealand IFRS, which excludes several large Australian-based companies that are dual-listed on the NZX.⁵ We include financial companies and real estate property companies in our sample but exclude listed funds. For each company, we download the 2016 and 2021 annual reports, and hand-collect recognised intangible assets and other related information.⁶ For the sample period, we choose the year 2021 as the most recent year at the time of the study, which is of interest to standard set-

Table 1 Sample selection process.

Industry	<i>N</i>
Population at 2021 (per Refinitiv)	146
Less: ETFs	-20
Manged funds	-13
Shells/No data	-2
2021 Sample	111
Listed post-2016	-11
Delisted post-2016	+15
2016 sample	115
Total observations	226

Table 1 outlines the sample selection process.

Table 2 Sample distribution by investor industry

Industry	<i>N</i>	%
Energy & materials	14	6%
Consumer	73	32%
Industrials	33	15%
Fin. & property	25	11%
IT & Comm.	40	18%
Utilities & Health	41	18%
Total	226	

Table 2 provides the sample distribution by industry groupings.

ters as well. Considering that disclosure patterns do not change significantly from year to year, we then select the year 2016 to allow us capture any changes in the disclosure trend over the 5-year period. Companies can be listed in either 2021 or 2016 to avoid survivorship bias. This process is shown in Table 1 and results in a final sample of 226 observations. Table 2 shows the sample breakdown by Global Industry Classification Standard (GICS). The most common industries are consumer (32%), while energy & materials (6%) are the least common.

Analysis of capitalised intangible disclosures

For each company, we hand collect capitalised intangible assets from the financial statements and notes. We then report the frequency with which companies disclose a capitalised intangible asset for each category in Table 3 to provide evidence for our first research question.⁷ In regard to more common intangible assets, some may report 'Patents' and some 'Trademarks', while others may report both or combine with 'Rights'.⁸ For uncommon intangibles, a power company is the only one to report 'Grid connections' as an intangible asset. Thus, although we believe there is value in our categorisation, our process for doing so suggests that calls for a common terminology in intangible assets tied to IASB work on an accounting taxonomy would result in improved understandability for users, as long as there was

still sufficient flexibility for material or entity specific uncommon intangible assets to be reported.

Table 3 shows that 88% of the sample has at least one capitalised intangible asset. The most common intangible asset is capitalised software, website and URLs or database expenditure (65%), followed by goodwill (59%). Other common intangibles are patents, trademarks & rights (31%), customer contracts, relationships & acquisitions (23%), and brands (17%).⁹ 'Other intangibles' category include both infrequent intangibles, which are specific to an individual company (e.g., syllabus materials by Evolve Education group, restraint of trade by Accordant Group, capacity by Spark, capitalised employee benefit by Ikeggs Group, Bartercard Trade dollars by General Capital), and unspecified intangibles. We characterise our recognised intangibles as 'traditional' intangibles that, besides emissions & carbon units, would be similar to those reported in the past. Thus, our investigation of current recognised intangible assets highlights the unrecognised intangible gap as digital technologies are not currently recognised (Jackson and Luu 2023).

We also consider trends in disclosure frequency among different industry groups, and while there are no distinct sector-wide patterns, it appears that the IT & communication and utilities & health sectors tend to have the highest frequency of capitalising intangibles, particularly software, patents, WIP and R&D-related intangible assets. The consumer industry frequently reports goodwill and brands, while industrials commonly report customer contracts and acquisitions. Emissions and carbon units are predominantly reported by the IT & communication sector, followed by energy & materials. Moreover, the financial and property sector appears to have the lowest frequency of capitalising intangibles. However, what is the unrecognised intangible asset gap? The average MTB ratio for our sample companies is 3.3, increasing from 3.1 to 3.5 from 2016 to 2021. This suggests that the market considers there is a greater value than recognised for our sample companies – which is potentially the gap of unrecognised intangibles. For companies with capitalised intangibles, intangible assets average 28% of market capitalisation (untabulated), highlighting that the gap as per the MTB ratio is bigger than currently capitalised intangibles. Moreover, the range in the importance of capitalised intangibles is shown by Evolve Education Group having 80% intangibles in 2016, with 77.23% of total assets being goodwill,¹⁰ while NZME, a media company, reports 43% of total assets as a brand, while Truscreen, a healthcare manufacturing company, has 51% of total assets as intellectual property.

Another reason that might explain the gap is that the vast majority of capitalised intangibles are recorded at cost, and they can only be revalued if there is an active market.¹¹ This can create a significant mismatch

Table 3 Recognised intangible asset frequency

	Sample (226)		Industry					
	N	%	Energy & Materials %	Consumer %	Industrials %	Fin. & Property %	IT & Comm. %	Utilities & Health %
Intangible assets	198	88%	93%	92%	79%	60%	95%	95%
Software, website, URLs & database	146	65%	14%	66%	67%	44%	75%	80%
Goodwill	134	59%	43%	68%	64%	52%	45%	63%
Patents, trademarks & rights	69	31%	21%	42%	15%	8%	45%	27%
Customer contracts, relationships & acquisition	53	23%	14%	21%	42%	16%	25%	37%
Brands	38	17%	14%	23%	21%	16%	5%	15%
WIP intangibles	25	11%	0%	7%	9%	8%	10%	27%
Capitalised development	23	10%	7%	4%	9%	0%	18%	22%
Licenses	15	7%	7%	7%	3%	4%	0%	17%
Intellectual property	14	6%	21%	4%	6%	0%	8%	7%
Emissions & carbon units	10	4%	14%	3%	0%	0%	15%	0%
Franchise network & agency agreements	7	3%	0%	4%	6%	0%	5%	0%
Other	53	23%	21%	16%	39%	8%	30%	27%

Table 3 shows the frequency of intangible categories for the whole sample. Frequencies are also by industry groupings.

between recognised and economic value. For example, the seafood company Sanford recognises the fishing quota, but upon selling part of its lobster quota for \$52.7 million, it recorded a gain of \$43.7 million, suggesting it was recognised at less than a fifth of its economic value – a greater difference than the average MTB ratio in our sample. The fishing quota and the rights to quota can be and are traded in New Zealand; however, it would not appear to meet the definition of an active market as the prices are not publicly available. We suggest that considering the growing use of over-the-counter markets to trade rights, there could be a relaxing of the strict requirements for an active market for intangibles to be publicly available.¹² Thus, aligning the fair value requirements for intangibles to IFRS 13 may be a relatively low-cost solution to reduce the gap.

What is the quality of information disclosed alongside recognised intangibles? We consider this question by focusing on goodwill, where disclosing additional quantitative information is more straightforward. Untabulated results show that, of the 134 firm-years with goodwill, 100 (75% of those with goodwill) disclose the discount rate, while 90 (67%) disclose the growth rate. However, when we investigate a subsample of companies with a recent material acquisition, we find there is typically no clear disclosure of what the goodwill represents. Acquisitions are often described as ‘strategic’, with reference to access to markets, customers or technologies, but without accompanying information or details. Thus, the majority of companies provide useful quantitative disclosures about the impairment of goodwill, but there is still room for market-wide improvement.

Analysis of expensed intangible disclosures

If expenditure relating to the development of intangible assets is not capitalised, any expenditure relating to it would be recognised as an expense, with IAS 1 *Presentation of Financial Statements* requiring the separate disclosure of expenses when they are material (IAS 1, para 97). Examining expensed intangibles affords insight into unrecognised intangibles as EFRAG (2021) outlines an approach where information about intangibles is also provided by a focus on future-oriented expenses and risk factors. Thus, to address our second research question we next examine the frequency of expensed intangibles. Based on prior research on New Zealand expense disclosure (Crawford et al. 2014) and our pilot sampling, we focus on five expense categories that are directly related to a capitalised intangible asset category in Table 4, namely: donation, sponsorship or community expenses (brands or customer contracts & relationships); advertising, marketing expenses (brand); R&D, research or development expenses (capitalised development); IT, ICT, software expenses (software, website & database assets); and entertainment or business-related expenses (customer contracts & relationships).

The most common expense disclosed is donations (46%), which is a mandated expense in New Zealand, followed by advertising (31%), R&D (16%) and IT expenses (14%). Would capitalising expensed intangible-related activities resolve the gap of unrecognised intangibles? Untabulated results show that advertising (the largest expense) is on average under 6% of market capitalisation. If we assumed a 10-year life, this would not

Table 4 Expensed intangible asset frequency.

	Sample (226)		Industry					
	N	%	Energy, materials %	Consumer %	Industrials %	Fin. & property %	IT & comm. %	Utilities & health %
Donation, Sponsorship or Community Expenses	103	46%	43%	51%	42%	52%	45%	37%
Advertising, Marketing Expenses	71	31%	21%	38%	21%	20%	18%	51%
R&D, Research or Development Expenses	37	16%	29%	16%	3%	0%	28%	22%
IT, ICT, Software Expenses	32	14%	14%	8%	6%	24%	10%	29%
Entertainment or Business-related Expenses	4	2%	0%	1%	0%	0%	0%	7%

Table 4 shows the frequency of intangible categories for the whole sample. Frequencies are also shown by industry groupings.

offset the MTB gap we document above but allowing the capitalisation of intangible-related expenses would reduce the gap, especially as a brand may have an indefinite life. However, Crawford et al. (2014) and our own evidence does not show that future-oriented expenses, as outlined by EFRAG (2021) are being disclosed. We infer that current practice in expenses related to intangibles does not offset the gap from unrecognised intangible assets. As we find the highest disclosure in the mandated donations category, if standard setters choose to go down an expense driven approach such as outlined by EFRAG (2021), expenses may need to be specifically mandated to ensure they are disclosed at a sufficiently disaggregated level (Crawford et al. 2014).

Analysis of unrecognised intangible disclosures

Next, we address our third question on the disclosure of unrecognised intangible assets. We piloted data collection based on suggested disclosures for specific intangibles by EFRAG (2021) and the AASB (2022), namely, a description of the asset, the reason it is considered to play a key role in the pursuit of the entity's objectives, the reason it failed the recognition criteria in IAS 38, the operating segments in which it is used, and any legal restrictions on its title and relation to the business models and strategies. However, in our pilot sampling of 20 companies, we found no instances of these disclosures. Thus, our first observation on unrecognised intangible assets is that there is a large disconnect between proposed approaches at the higher end of required disclosures and current practice.

Instead, we draw on the intellectual capital literature. Garanina et al. (2021) note that the intellectual capital and intangibles literature have developed concurrently, discussing similar issues but with different terms, and attempt to synthesise the findings from these two streams. Furthermore, differences in meaning per-

sist across disciplines with knowledge assets more common in economics and intellectual capital in management, while intangible assets are in the financial reporting literature. Stewart (1998) conceptualises intellectual capital as value creating knowledge resources, broadly categorised as human, structural and relational (Petty and Guthrie 2000). Thus intellectual capital disclosures would incorporate the IAS 38 definition of intangible assets as 'an identifiable non-monetary asset without physical substance' (IAS 38, para 8), which is also conditional on meeting the asset being identifiable and under the entities control. Thus, companies could comply with accounting standard intangible asset criteria without making intellectual capital disclosures (Vergauwen and van Alem 2005). However, both would seem to meet the definition proposed by Lev (2001) of 'future benefits that are not embodied materially'. Thus, for the purposes of this study we consider intangible assets and intellectual capital to be related terms, and, for the sake of clarity, intangibles currently recognised in the financial statements, while intellectual capital are additional disclosures in the annual report not incorporated into the financial statements.

Table 5 shows that almost half of the companies disclose qualitative information in each category, while around a third disclose a quantitative measure. This suggests that Whiting and Miller's (2008) observation in 2006 that New Zealand companies predominantly make qualitative disclosures on intellectual capital remains relevant to date. Structural capital appears to be the least common area for quantitative disclosures. For human capital, common qualitative and quantitative disclosures are about employees and, in particular, quantitative metrics around workforce diversity (e.g., gender, age and ethnicity) and numbers. Qualitative disclosures are most frequent for relational capital, particularly in the areas of customer relationships, community involvement and market presence. This aligns with recent trends that prioritise optimising

Table 5 Intellectual capital disclosures.

	Sample (226)		Industry					
	<i>N</i>	%	Energy, materials	Consumer	Industrials	Fin. & property	IT & Comm.	Utilities & health
			%	%	%	%	%	%
Human Capital – Qualitative	100	44%	36%	40%	61%	32%	63%	32%
Human Capital – Quantitative	84	37%	36%	33%	33%	24%	53%	41%
Relational Capital – Qualitative	114	50%	50%	48%	45%	32%	75%	46%
Relational Capital – Quantitative	76	34%	21%	36%	27%	32%	43%	32%
Structural Capital – Qualitative	106	47%	36%	38%	52%	48%	65%	44%
Structural Capital – Quantitative	66	29%	43%	23%	36%	24%	48%	15%
Awards	48	21%	7%	22%	6%	20%	30%	29%

Table 5 shows the frequency of intellectual capital disclosures for categories for the whole sample. Frequencies are also shown by Industry groupings.

distribution channels, reconfiguring value chains, reevaluating customer value and placing a strong emphasis on expanding and segmenting global markets to increase market share (Guthrie and Petty 2000). Lastly, structural capital is often about improvements in carbon or waste. Full examples are shown in Appendix B. Moreover, the IT & communication sector has a greater frequency of intellectual capital disclosures across all categories when compared to any other sector, confirming extant findings that tech industries tend to disclose more than traditional industries (Boesso and Kumar 2007; Sonnier 2008; Whiting and Miller 2008).

We also observe that many intellectual disclosures are related to the GRI, sustainability reports or integrated reports. Many of the disclosures would be due to GRI requirements and, in particular, the emphasis on future value correction and connectivity in integrated reports would result in disclosures particularly relevant to intangibles such as brands, customer relationships and intellectual properties. Thus, we observe that calls for reporting across the value chain have been subsumed by the increase in EER. As we note poor disclosures currently based on the suggested disclosures for specific intangibles by EFRAG (2021) and the AASB (2022), we suggest that one potential avenue for disclosure of information about EFRAG (2021) category C intangibles is the integration of EER to include more specific indicators that relate to future value creation. Thus, we suggest that any future intangible standard carefully considers whether developments by the GRI or the ISSB partly meet information needs around unrecognised intangibles.

As another measure, we also separately collect whether the company has won an award. Awards are an external validation of a value creation activity that is likely to lead to future value (Xia et al. 2016; Zhang et al. 2014), and thus may partly reflect the gap of unrecognised intangibles. About a fifth of our sample disclose winning an award, with many winning multiple (see examples in Appendix C). The most common award

type would be a winning product, followed by the most trusted brand/best customer service. These two types of awards would appear to relate directly to product innovation and brand/customer relationships, highlighting that awards can provide insight into unrecognised intangibles. Other awards can be about infrastructure, efficiency gains, or team focus. In general, we observe that companies tend to make useful disclosures about awards. Awards would appear to disclose good news about EFRAG (2021) category C disclosures that users would view as credible (based on the awarding organisation), can verify and are understandable relative to the suggested disclosures for specific intangibles by EFRAG (2021) and the AASB (2022). Considering we observe that awards are an area in which companies are currently disclosing making future value creation, we encourage standard setters to consider if there are other examples of where useful disclosures can be made about unrecognised intangibles in a similar manner.

Value relevance of intangible assets

We next test whether recognised intangible assets are value relevant using the Ohlson (1995) model to address our fourth research question. We specify Equation 1 as follows:

$$Price_i = \beta_0 + \beta_1 NI_i + \beta_2 BVE_i + \beta_3 Loss_i + \varepsilon \quad (1)$$

where $Price_i$ is the share price of firm i three months after its balance date, NI_i is the reported net profit after tax, and BVE_i is the book value of equity. Consistent with prior literature that highlights the importance of the deflator (Barth and Clinch 2009; Easton 1999), variables are scaled by the number of shares outstanding, and we include the binary variable $Loss_i$ to control for losses (Burgstahler and Dichev 1997; Hayn 1995). We then separate the intangible assets (IA) from BVE and

Table 6 Tests of value relevance.

Panel A. Descriptive statistics						
Variable	Mean	Median	SD	Min	Max	
<i>Price</i>	3.452	1.955	4.871	0.004	31.120	
<i>NI</i>	0.146	0.099	0.324	-0.762	1.868	
<i>BVE</i>	1.599	1.124	1.795	-0.043	8.360	
<i>Loss</i>	0.283	0	0.452	0	1.000	
<i>IA</i>	0.504	0.100	1.039	0	6.448	
<i>I/A</i>	0.174	0.034	0.328	0	1.960	
<i>GW</i>	0.299	0.022	0.764	0	5.480	
<i>HIGHIC</i>	0.195	0	0.397	0	1.000	
Panel B: Value relevance regressions						
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Constant</i>	-0.592 (-1.103)	-0.672 (-1.310)	-0.669 (-1.314)	-0.762 (-1.446)	-0.815 (-1.577)	-0.360 (-0.715)
<i>NI</i>	5.877*** (5.594)	5.691*** (5.710)	4.791*** (4.743)	5.910*** (5.917)	4.907*** (4.857)	4.697*** (4.838)
<i>BVE</i>	1.197*** (6.822)	0.873*** (4.865)	0.986*** (5.518)	0.799*** (4.373)	0.920*** (5.118)	0.892*** (5.148)
<i>Loss</i>	0.901 (1.564)	0.901 (1.634)	0.796 (1.470)	1.136** (1.995)	1.114** (2.006)	0.791 (1.472)
<i>IA</i>		1.958*** (8.238)		1.754*** (5.544)		
<i>I/A</i>			2.197*** (3.264)		1.855 (1.636)	1.536** (2.217)
<i>GW</i>			2.523*** (7.549)		2.525*** (7.361)	1.907*** (5.196)
<i>HIGHIC</i>				0.989 (1.534)	1.581** (2.369)	0.668 (1.126)
<i>HIGHIC*IA</i>						
<i>HIGHIC*I/A</i>					-0.493 (-0.359)	
<i>HIGHIC*GW</i>						1.990*** (3.657)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
F	34.90	36.31	36.12	30.91	31.74	34.74
Adjusted R-squared	0.576	0.611	0.632	0.615	0.640	0.661
N	226	226	226	226	226	226
<i>BVE = IA</i>		-1.084*** (-4.58)				
<i>I/A = GW</i>			-0.554 (-0.68)			

Table 6 presents the descriptive statistics and analysis of the value relevance. Panel A reports sample descriptive statistics and Panel B shows value relevance regressions. Two-tailed tests of significance: *** = <0.001, ** = <0.01 and * = <0.05. Where *Price* is the share price of firm *i* three months after its balance date in year *t*, *BVE* and *NI* are the book value of equity and reported net profit after tax of firm *i* as in the annual report of year *t* scaled by the number of shares outstanding of firm *i*, *Loss* is a binary variable equal to one if net profit after tax is negative, *IA* is intangible assets scaled by the number of shares outstanding. *GW* is goodwill and *I/A* is *IA* less goodwill scaled by the number of shares outstanding. *HIGHIC* is a binary variable equal to one for companies in the highest quartile in terms of intellectual capital disclosures each year.

include them as a separate component of the model. All market data is sourced from Refinitiv.

Table 6 Panel A presents descriptive statistics for the variables used in this analysis. The average share price is \$3.452, while the median is \$1.955. The book value of equity is on average \$1.599 per share, with average earnings per share (*NI*) \$0.146.

Table 6, Panel B presents the value relevance regressions. Column (1) presents the base regression without separating intangible assets from the book value of equity. The book value of equity and net income are both significantly positively associated with higher market value. In Column (2), we separate intangible assets from the book value of equity and find that it is also

significantly associated with market value. Thus, currently capitalised intangible assets are relevant to the stock market. An equality test of coefficients between book value of equity (excluding intangibles) and intangibles shows that the two coefficients are statistically different, indicating that the market values intangibles higher than tangible assets. Next, we separate intangibles into goodwill (*GW*) and other recognised intangibles (*IIA*) in Column (3). We find that both are value relevant, and a test of equality of coefficients is insignificant. Thus, the market does not value goodwill and other intangible assets differently. Our result that intangible assets are value relevant is consistent with prior literature (e.g., Cordazzo and Rossi 2020; Dahmash et al. 2009; Mazzi et al. 2022).

To address whether capitalised intangible assets are valued differently by the market based on unrecognised intangibles, we include a binary variable equal to one if the company is in the top quartile of intellectual capital disclosures (*HIGHIC*) - per Table 5. While we find no significant coefficient estimates for *HIGHIC*IA* or *HIGHIC*IIA* in Models (4) and (5), respectively, results in Model (6) shows a positive and significant coefficient for *HIGHIC*GW*. Prior literature finds that goodwill is more value relevant than other identified intangible assets (Godfrey and Koh 2001) and that this difference increased post-IFRS (Chalmers et al. 2008), our results suggest that this is driven by intellectual capital disclosures that explain the value drivers of the goodwill, or its 'connectivity' to market value. This highlights the complementary role disclosures about goodwill have in facilitating the market's understanding of capitalised intangibles and that an additional benefit of greater disclosure of unrecognised intangibles is improved valuation of capitalised intangible assets. We also examine (un-tabulated) if any component of intellectual capital drives the results. We find the strongest results for quantitative structural capital disclosures, suggesting that these best facilitate understanding of goodwill.

International Public Sector Accounting Standards

Public sector entities in New Zealand must use accrual accounting that complies with accounting standards based on either IFRS or IPSAS.¹³ Furthermore, there is an alignment between the standards for intangible assets (IAS 38 and IPSAS 31). Financial statements are audited in accordance with the Office of the Auditor-General's Auditing Standards, which incorporate ISA. Thus, an additional benefit of examining intangibles in the New Zealand setting is that it facilitates comparison between public and private sector entities through the investigation of public sector intangibles. Considering the public sector is one of the least addressed areas of intangibles

research (Guthrie and Dumay 2015), we consider this an exploratory investigation and, thus, randomly select ten municipal councils and ten Tier 1 not-for-profit charities for 2016 and 2021.¹⁴

The results in Table 7 show the entities have a similar frequency of capitalised intangibles to the for-profit sector; 85% and 80%, respectively. Again, the most frequent intangible asset is capitalised software, website and database costs. Public sector entities have a much lower rate of goodwill recognition than for-profits, although it is disclosed by 15% of the council sample. Municipal councils can operate council-controlled organisations that can acquire other entities resulting in goodwill (e.g., events management/tourism companies or rubbish collection services). Unsurprisingly customer-related intangibles are absent, and there are intangibles that would be unusual to separately recognise in the for-profit sector, such as e-book licences or easement rights. Additional information disclosed is typically less than in the for-profit sector, and it can be difficult to know what some intangibles are exactly – for example, one charity disclosed an internally generated intangible asset with no further information. We also find that there is a much lower frequency of expensed-related intangibles, as we observe no separate disclosures in the council sector and the expense disclosures in the charity sector being driven by one entity that manages and researches farm animal diseases.

However, the magnitude of intangibles is much smaller in councils than in our listed company sample above, with the average being below 0.21% of total assets. This is driven by both the intangibles being smaller and the tangible assets base being much larger, with mean total assets of NZ\$2,400 million from substantial infrastructure assets (e.g., road and water services). Intangibles are a larger proportion of total assets in the charity sector, although this is driven by a few outliers. For example, intangible assets arising from the fishing quota and treaty settlements managed on behalf of the impacted Iwi,¹⁵ made up a third of Kahungunu Asset Holding total assets, shrinking in proportion to 27% in 2021. This decrease reflects the inability to apply fair value to the fishing quota despite likely rises in value. As recognised intangible frequency is similar to the for-profit sector, but capitalised intangibles are a smaller proportion of total assets, we infer that the magnitude of the gap of intangibles in the public sector is at least equivalent to for-profits.

New Zealand councils must also report a SSP, which aims to provide qualitative and quantitative information on an entity's performance with regard to its supply of goods and services and to communicate the effects an entity has on the community. Reporting entities are required to apply the qualitative characteristics identified in the Public Benefit Entities' Conceptual Framework, and their reports should provide a mix of

Table 7 Recognised intangible assets under IPSAS.

	Council sample (N = 20)		Charity sample (N = 20)	
	N	%	N	%
Capitalised				
Intangible Assets	17	85%	16	80%
Software, Website, URLs & Database	14	70%	12	60%
Goodwill	3	15%	2	10%
Patents, Trademarks & Rights	6	30%	4	20%
Brands	3	15%	0	0%
WIP Intangibles	4	20%	1	5%
Emissions & Carbon units	4	20%	4	20%
Other	2	10%	1	5%
Expensed				
Donation, Sponsorship or Community Expenses	0	0%	0	0%
Advertising, Marketing Expenses	0	0%	0	0%
R&D, Research or Development Expenses	0	0%	2	10%
IT, ICT, Software Expenses	0	0%	1	5%
Entertainment or Business-Related Expenses	0	0%	0	0%

Table 7 shows frequencies and size (as scaled by total asset) of intangibles for a random sample of councils and charities.

Table 8 Intellectual capital disclosures under IPSAS.

	Council sample (N = 20)		Charity sample (N = 20)	
	N	%	N	%
Human Capital – Qualitative	0	0%	1	5%
Human Capital – Quantitative	0	0%	1	5%
Relational Capital – Qualitative	20	100%	2	10%
Relational Capital – Quantitative	20	100%	2	10%
Structural Capital – Qualitative	20	100%	2	10%
Structural Capital – Quantitative	20	100%	2	10%
Awards	0	0%	2	10%

Table 8 shows frequencies of intellectual capital disclosures for a random sample of councils and charities.

quantitative and qualitative performance measures and qualitative descriptions (XRB 2016). The Public Benefit Entities' Conceptual Framework defines elements of service performance as inputs, outputs and outcomes. Inputs are resources used to produce outputs, outputs are the goods and services produced and outcomes are the impacts an entity has on the community (XRB 2016). Considering this, it is unsurprising that there is 100% reporting of structural and relational capital (Table 8). However, we note that councils do not appear to disclose information about an important attribute that generates value for the community under this framework – its own workforce. Our finding is consistent with that of Schneider and Samkin (2008), who noted the absence of human capital reporting within the New Zealand local government sector.

In contrast, Tier 1 Charities in our sample were not required to prepare SSP and thus have relatively poor intellectual capital disclosures. However, some charities may view the financial statements from a compliance lens rather than an accountability lens (Yang and Northcott 2019). Many of the charities in our sample fulfil accountability through other reports, which include

intellectual capital disclosures, although we are unable to source an accurate count through not keeping historic versions online. As Tier 1 charities in New Zealand are required to produce SSP after 2022, we argue that charities' disclosures about unrecognised intangible assets via the SPP will improve. Specifically, Public Benefit Entity Financial Reporting Standard 48 Service Performance (PBE FRS 48, Para. 20) notes 'The service performance information needs to be linked to the financial statements to convey a coherent picture about the performance of an entity'. Put another way, SSP reporting reduces the gap by providing information about the achievement of its goals through quantitative and qualitative information. We conclude that any intangible asset revisions in the public benefit entities space should also bear in mind SSP reporting as there is the reporting of future orientated key value creation activities in this area already.

Conclusion and Limitations

In this paper, we examine the disclosure of recognised and unrecognised intangibles and assess the usefulness

of such disclosures, using a sample of all NZX listed companies and a random sample of public benefit entities in New Zealand for 2016 and 2021. This study is motivated by the IASB's upcoming agenda consultation on intangibles, concerns raised regarding the discrepancies between the accounting for acquired and internally generated intangibles by EFRAG (2021), and the recent call for research by Hussinki et al. (2024) emphasising the relevance of evidence on the current disclosure practices on intangibles to the regulators. We believe, the findings of this study are timely, add to the understanding of disclosure on recognised and unrecognised intangibles in several ways, and therefore, are of interest to the standard setters, policymakers, managers and investors.

First, as we identify the major categories of intangibles capitalised or expensed, we grapple with the issue that a wide array of terminologies is used in categorisation of intangibles. While some may report 'software', some 'website' or 'URL' others may report both or combine with 'databases'. Such variations emphasise the need for a standardised terminology and taxonomy within the IFRS framework. Adoption of digital reporting formats like Core & More reporting, which offer structured approaches to enhance consistency in financial reporting, could be one potential solution to this issue.

Second, our descriptives show a lack of capitalisation or expensing of digital technologies, consistent with the gap in the recognition of intangibles. We note that implemented blockchain technologies, cybersecurity systems and other emerging technologies are yet to be incorporated in financial reporting. While an expense disclosure approach would require mandating specified categories to ensure disclosure, capitalising currently expensed intangible-related activities would reduce but not offset this gap. We suggest that aligning the fair value requirements for intangibles to IFRS 13 *Fair Value Measurement* could be a relatively low-cost solution to reduce the gap.

Next, analysing the disclosures on intellectual capital activities, including human, relational and structural capital, we provide evidence that qualitative disclosures are more prevalent than quantitative, with almost half of the sample providing qualitative disclosures compared to a third that provide quantitative disclosures. We note that many of these disclosures are found in EERs, that is, IR, sustainability reports and those developed in line with the GRI. Consistent with the views of Adams et al. (2016) and Melloni et al. (2017), we see the wider adoption of IR as a promising way forward, which allows companies to identify and disclose their non-balance sheet intangibles and how they create value more completely. Given the recent findings suggesting the deficiency of IR in assessing firm value (Garanina et al. 2021), we propose a more detailed analysis in the different parts of IR with particular emphasis on the performance of IR content.

Finally, Higson we show that capitalised intangible assets are viewed as 'useful' by market participants (Aboody and Lev 1998; Chalmers et al. 2008; Higson 1998). However, goodwill is more value relevant than other intangible assets, suggesting that it captures the unrecognised intangibles of the acquired firm at the time of acquisition. Furthermore, we find that companies with greater disclosures on unrecognised intangibles have a stronger association between goodwill and market value, highlighting the complementary nature of additional disclosures to recognition. This indicates that increased disclosure of unrecognised intangibles can improve market participants' understanding of capitalised goodwill and facilitate insight via connecting financial and non-financial information.

Additionally, we examine intangibles disclosures by public benefit entity sector based on a random sample of municipal councils and large charities and document that the frequency of capitalised intangibles is similar to that of the for-profit sector. Interestingly, the SSP prepared by councils includes disclosures about their outcomes, resulting in 100% reporting of relational and structural capital and serving as a way to provide information about unrecognised intangible assets. Overall, our findings provide initial evidence in this under-researched area and highlights the potential for greater disclosures in this sector.

The results and interpretation of this study must be considered alongside its limitations. Firstly, our findings are constrained by our reliance on the New Zealand sample. The small number of firm-year observations in our analyses, stemming from our focus on only 2016 and 2021 sample years, reduces the statistical power of our tests. We acknowledge that our extensive reliance on hand-collected data limits our sample size. Therefore, we advocate for further research on intangible disclosures across diverse institutional contexts with more coverage of years. Secondly, our study exclusively addresses investors as financial statement users. Future research could broaden its focus to include other stakeholders such as creditors or financial analysts, thus enhancing our understanding of the usefulness of intangible disclosures. Thirdly, in the public benefit entity sector, our observations are drawn from a random sample comprising municipal councils and large charities. Consequently, these findings may not be generalisable to smaller entities or public entities operating under different regulatory environments.

Acknowledgements

We thank our editor Yaowen Shan and reviewer for their helpful comments. For comments on earlier versions, we thank Carly Berry, Michael Bradbury, Carolyn Cordery, Charis Halliday and Richard Smyth. We thank

the New Zealand External Reporting Board for funding this work.

Notes

- 1 This is equivalent to US\$169 million or EUR€145 million.
- 2 Under the quota system, a total catch of fish is set. Individuals or organisations are allocated the right to catch certain quantities of a species. Quotas then could be leased, bought, sold or transferred.
- 3 This checklist overlaps with examples of disclosures for specific unrecognised intangibles provided by EFRAG (2021).
- 4 The IFRS Foundation places importance on the idea of ‘connectivity’ in reports, emphasising that the connectivity between financial statements and sustainability-related financial disclosures can offer a holistic, comprehensive and coherent picture of the company (IFRS Foundation, n.d.).
- 5 This ensures a more comparable enforcement regime between companies.
- 6 We translate all financial variables into New Zealand dollars using Inland Revenue Department | Te Tari Taake exchange rates when available.
- 7 Categories for intangibles are based on aggregation and categories found in our pilot sampling of 20 observations. Pilot sampling was conducted by all researchers, with the remainder carried out by one researcher and with random checks and any flagged areas of concern discussed with the research team.
- 8 We note there is significant diversity in how companies disclose both what we found to be common and uncommon intangible assets. Companies also use different headings to report common intangibles. For example, ‘customer relationships’ are reported as ‘customer lists’, ‘customer retention assets’, ‘customer acquisition costs’, ‘customer contracts’ and so on.
- 9 Only seven of the 38 observations with brands have amortisation expenses (untabulated).
- 10 This reflected a growth strategy of acquiring other childcare centres and recognising large amounts of goodwill.
- 11 One exception is Seeka, an agriculture company that provides fair value for irrigation water rights. Based on the purview of the Victorian Water Register these assets would meet the criteria (see <https://www.waterregister.vic.gov.au/>).
- 12 This could include situations whether entities swap, sell or rent the use of their rights between one another via a market mechanism. A further example of an intangible asset that would fit under this criterion is airport landing slots or rights.
- 13 The Public Finance Act (1989) requires government entities to prepare financial statements in accordance with generally accepted accounting practices (which include IFRS and IPSAS). The move to accrual accounting in 1990 was part of a set of financial reforms of the government, including the flow of private sector talent, experience and resources (Warren, 1994).
- 14 Tier 1 not-for-profit charities are defined as those with over NZ\$30 million in expenses in New Zealand (see <https://www.charities.govt.nz/reporting-standards/tier-1-and-tier-2/>).
- 15 Iwi are the largest social units in Māori society, often translated as tribe or nation.

References

- Adams, C. A., Potter, B., Singh, P. J., and York, J. (2016). ‘Exploring the implications of integrated reporting for social investment (disclosures)’, *The British Accounting Review*, 48 (3), 283–296.
- Australian Accounting Standards Board. 2022, *Intangible Assets: Reducing the financial statements information gap through improved disclosures*. https://aasb.gov.au/media/ykep1cvb/sp_intangibleassets_03-22.pdf
- Austin, L. 2007, ‘Accounting for Intangible Assets’, *University of Auckland Business Review*, 9 (1): 63–72.
- Aboody, D. and Lev, B. 1998, ‘The Value Relevance of Intangibles: The Case of Software Capitalization’, *Journal of Accounting Research*, 36: 161–91.
- Amir, E. and Lev, B. 1996, ‘Value-relevance of Nonfinancial Information: The Wireless Communications Industry’, *Journal of Accounting and Economics*, 22 (1–3): 3–30.
- Barker, R., Lennard, A., Penman, S. and Teixeira, A. 2022, ‘Accounting for Intangible Assets: Suggested Solutions’, *Accounting and Business Research*, 52 (6): 601–30.
- Barth, M.E., Clement, M.B., Foster, G. and Kasznik, R. 1998, ‘Brand Values and Capital Market Valuation’, *Review of Accounting Studies*, 3 (1): 41–68.
- Barth, M.E. and Clinch, G. 2009, ‘Scale Effects in Capital Markets-based Accounting Research’, *Journal of Business Finance & Accounting*, 36 (3–4): 253–88.
- Bauman, M.P. and Shaw, K.W. 2018, ‘Value Relevance of Customer-related Intangible Assets’, *Research in Accounting Regulation*, 30 (2): 95–102.
- Boesso, G. and Kumar, K. 2007, ‘Drivers of Corporate Voluntary Disclosure: A Framework and Empirical Evidence from Italy and the United States’, *Accounting, Auditing & Accountability Journal*, 20 (2): 269–96.
- Brennan, N. 2001, ‘Reporting Intellectual Capital in Annual Reports: Evidence from Ireland’, *Accounting, Auditing & Accountability Journal*, 14 (4): 423–36.
- Burgstahler, D.C. and Dichev, I.D. 1997, ‘Earnings, Adaptation and Equity Value’, *The Accounting Review*, 72 (2): 187–215.
- Castilla-Polo, F. and Gallardo-Vázquez, D. 2016, ‘The Main Topics of Research on Disclosures of Intangible Assets: A Critical Review’, *Accounting, Auditing & Accountability Journal*, 29 (2): 323–56.
- Cazavan-Jeny, A., Jeanjean, T. and Joos, P. 2011, ‘Accounting Choice and Future Performance: The Case of R&D Accounting in France’, *Journal of Accounting and Public Policy*, 30 (2): 145–65.
- Chalmers, K., Clinch, G. and Godfrey, J.M. 2008, ‘Adoption of International Financial Reporting Standards: Impact on the Value Relevance of Intangible Assets’, *Australian Accounting Review*, 18 (3): 237–47.
- Chandra, U., Procassini, A. and Waymire, G. 1999, ‘The Use of Trade Association Disclosures by Investors and Analysts: Evidence from the Semiconductor Industry’, *Contemporary Accounting Research*, 16 (4): 643–70.
- Central Intelligence Agency. 2023, *Market value of publicly traded shares – The World Factbook - CIA*. <https://www.nationsencyclopedia.com/WorldStats/CIA-Market-value-of-publicly-traded.html>

- Cordazzo, M. and Rossi, P. 2020, 'The Influence of IFRS Mandatory Adoption on Value Relevance of Intangible Assets in Italy', *Journal of Applied Accounting Research*, 21 (3): 415–36.
- Crawford, L., Lont, D. and Scott, T. 2014, 'The Effect of More Rules-based Guidance on Expense Disclosure Under International Financial Reporting Standards', *Accounting & Finance*, 54 (4): 1093–124.
- Dahmash, F.N., Durand, R.B. and Watson, J. 2009, 'The Value Relevance and Reliability of Reported Goodwill and Identifiable Intangible Assets', *The British Accounting Review*, 41 (2): 120–37.
- Dargenidou, C., Jackson, R.H., Tsalavoutas, I. and Tsofigkas, F. 2021, 'Capitalisation of R&D and the Informativeness of Stock Prices: Pre-and Post-IFRS Evidence', *The British Accounting Review*, 53 (4): 100998.
- Davern, M., Gyles, N., Hanlon, D. and Pinnuck, M. 2019, 'Is Financial Reporting Still Useful? Australian Evidence', *Abacus*, 55 (1): 237–72.
- de Villiers, C. and Sharma, U. 2020, 'A Critical Reflection on the Future of Financial, Intellectual Capital, Sustainability and Integrated Reporting', *Critical Perspectives on Accounting*, 70: 101999.
- Deng, Z., Lev B. and Narin F. 1999, 'Science and Technology as Predictors of Stock Performance', *Financial Analysts Journal*, 55 (3): 20–32.
- Easton, P.D. 1999, 'Security Returns and the Value Relevance of Accounting Data', *Accounting Horizons*, 13 (4): 399–412.
- European Financial Reporting Advisory Group. 2020, *Academic report: A literature review on the reporting of intangibles*. <https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FsiteAssets%2FA%2520literature%2520review%2520on%2520the%2520reporting%2520of%2520intangibles.pdf>
- European Financial Reporting Advisory Group. 2021, *Discussion paper: Better information on intangibles: Which is the best way to go?* <https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FsiteAssets%2FBetter%2520information%2520on%2520intangibles%2520-%2520which%2520is%2520the%2520best%2520way%2520to%2520go.pdf&AspxAutoDetectCookieSupport=1>
- External Reporting Board (XRB). 2016, *Public Benefit Entities' Conceptual Framework*. <https://www.xrb.govt.nz/dmsdocument/1825>
- Garanina, T., Hussinki, H. and Dumay, J. 2021, 'Accounting for Intangibles and Intellectual Capital: A Literature Review from 2000 to 2020', *Accounting & Finance*, 61 (4): 5111–40.
- Godfrey, J. and Koh, P.S. 2001, 'The Relevance to Firm Valuation of Capitalising Intangible Assets in Total and by Category', *Australian Accounting Review*, 11 (24): 39–48.
- Grant Thornton. 2018, *IFRS Viewpoint: Accounting for cryptocurrencies-the basics*. <https://www.grantthornton.co.nz/globalassets/1.-member-firms/new-zealand/pdfs/ifrs-viewpoints/ifrs-viewpoint-issue-9.pdf>
- Guo, R.J., Lev, B. and Zhou, N. 2004, 'Competitive Costs of Disclosure by Biotech IPOs', *Journal of Accounting Research*, 42 (2): 319–55.
- Guthrie, J. and Dumay, J. 2015, 'New Frontiers in the Use of Intellectual Capital in the Public Sector', *Journal of Intellectual Capital*, 16 (2): 258–66.
- Guthrie, J. and Petty, R. 2000, 'Intellectual Capital: Australian Annual Reporting Practices', *Journal of Intellectual Capital*, 1 (3): 241–51.
- Hayn, C. 1995, 'The Information Content of Losses', *Journal of Accounting and Economics*, 20 (2): 125–53.
- Higson, C. 1998, 'Goodwill', *The British Accounting Review*, 30 (2): 141–58.
- Hussinki, H., King, T., Dumay, J. and Steinhöfel, E. 2024, 'Accounting for Intangibles: A Critical Review', *Journal of Accounting Literature*, <https://doi.org/10.1108/JAL-05-2022-0060>
- IFRS Foundation. n.d., *Connectivity—what is it and what does it deliver?* Retrieved October 19, 2023 from <https://www.ifrs.org/news-and-events/news/2023/03/connectivity-what-is-it-and-what-does-it-deliver/>
- International Public Sector Accounting Standards Board (IP-SAS). 2013, International Public Sector Accounting Standard 31: *Intangible Assets*.
- International Accounting Standards Board (IASB). 2020, International Accounting Standard 1: Presentation of Financial Statements. IFRS Foundation.
- International Accounting Standards Board (IASB). 2014, International Accounting Standard 38: Intangible Assets. IFRS Foundation.
- International Accounting Standards Board. 2021, *Request for information: Third agenda consultation*. <https://www.ifrs.org/content/dam/ifrs/project/third-agenda-consultation/rfi-third-agenda-consultation-2021.pdf#RFI2021-1-gb49-B53>
- International Accounting Standards Board. 2022, *IASB Staff paper: Third Agenda Consultation*. <https://www.ifrs.org/content/dam/ifrs/meetings/2022/april/iasb/ap24a-projects-to-add-to-the-work-plan.pdf#page=11>
- Ittner, C.D. and Larcker, D.F. 1998, 'Are Non-Financial Measures Leading Indicators of Financial Performance? An Analysis of Customer Satisfaction', *Journal of Accounting Research*, 36: 1–35.
- Jackson, A. and Luu, S. 2023, 'Accounting For Digital Assets', *Australian Accounting Review*.
- Lev, B., 2001, *Intangibles: Measurement, Management and Reporting*. Brookings Institution, Washington, DC.
- Lev, B. 2018, 'The Deteriorating Usefulness of Financial Report Information and How to Reverse It', *Accounting and Business Research*, 48 (5): 465–93.
- Lev, B. 2019, 'Ending the Accounting-for-intangibles Status Quo', *European Accounting Review*, 28 (4): 713–36.

- Lev, B. and Gu, F. 2016, *The End of Accounting and the Path Forward for Investors and Managers*. John Wiley & Sons.
- Lev, B. and Sougiannis, T. 1996, 'The Capitalization, Amortization, and Value-relevance of R&D', *Journal of Accounting and Economics*, 21 (1): 107–38.
- Li, J., Pike, R. and Haniffa, R. 2008, 'Intellectual Capital Disclosure and Corporate Governance Structure in UK firms', *Accounting and Business Research*, 38 (2): 137–59.
- Li, K.K. and Sloan, R.G. 2017, 'Has Goodwill Accounting Gone Bad?', *Review of Accounting Studies*, 22 (2): 964–1003.
- Mazzi, F., Slack, R., Tsalavoutas, I. and Tsofigkas, F. 2022, 'Exploring Investor Views on Accounting for R&D Costs Under IAS 38', *Journal of Accounting and Public Policy*, 41 (2): 106944
- Melloni, G., Caglio, A., and Perego, P. (2017). 'Saying more with less? Disclosure conciseness, completeness and balance in Integrated Reports', *Journal of Accounting and Public Policy*, 36 (3), 220–238.
- Mohd, E. 2005, 'Accounting for Software Development Costs and Information Asymmetry', *The Accounting Review*, 80 (4): 1211–31.
- Nadeem, M., Gan, C. and Nguyen, C. 2018, 'The Importance of Intellectual Capital for Firm Performance: Evidence from Australia', *Australian Accounting Review*, 28 (3): 334–44.
- New Zealand Accounting Standards Board. 2017, Public Benefit Entity Financial Reporting Standard 48: Service Performance Reporting. External Reporting Board.
- Ohlson, J.A. 1995, 'Earnings, Book Values, and Dividends in Equity Valuation', *Contemporary Accounting Research*, 11 (2): 661–87.
- Oliveira, L., Rodrigues, L.L. and Craig, R. 2010, 'Intangible Assets and Value Relevance: Evidence from the Portuguese Stock Exchange', *The British Accounting Review*, 42 (4): 241–52.
- Parshakov, P. and Shakina, E. 2020, 'Do Companies Disclose Intellectual Capital in Their Annual Reports? New Evidence from Explorative Content Analysis', *Journal of Intellectual Capital*, 21 (6): 853–71.
- Preiato, J., Brown, P. and Tarca, A. 2015, 'A Comparison of Between-country Measures of Legal Setting and Enforcement of Accounting Standards', *Journal of Business Finance & Accounting*, 42 (1–2): 1–50.
- Raithel, S. and Schwaiger, M. 2015, 'The Effects of Corporate Reputation Perceptions of the General Public on Shareholder Value', *Strategic Management Journal*, 36 (6): 945–56.
- Ritter, A. and Wells, P. 2006, 'Identifiable Intangible Asset Disclosures, Stock Prices and Future Earnings', *Accounting & Finance*, 46 (5): 843–63.
- Schneider, A. and Samkin, G. 2008, 'Intellectual Capital Reporting by the New Zealand Local Government Sector', *Journal of Intellectual Capital*, 9 (3): 456–86.
- Smith, K.T., Smith, M. and Wang, K. 2010, 'Does Brand Management of Corporate Reputation Translate into Higher Market Value?', *Journal of Strategic Marketing*, 18 (3): 201–21.
- Sonnier, B.M. 2008, 'Intellectual Capital Disclosure: High-tech Versus Traditional Sector Companies', *Journal of Intellectual Capital*, 9 (4): 705–22.
- Stewart, T.A. 1998, *Intellectual Capital: The New Wealth of Organizations* (1st ed.). Crown Business.
- Vafaei, A., Taylor, D. and Ahmed, K. 2011, 'The Value Relevance of Intellectual Capital Disclosures', *Journal of Intellectual Capital*, 12 (3): 407–29.
- Vergauwen, P. and Van Alem, F. 2005, 'Annual report IC disclosures in the Netherlands, France and Germany', *Journal of Intellectual Capital*, 6 (1): 89–104.
- Warren, K. 1994, *Implementing accrual accounting in government: The New Zealand experience*. IFAC Occasional Paper, 1, 1–19. <https://www.ifac.org/publications/no-1-implementing-accrual-accounting-government-new-zealand-experience>
- Whiting, R.H. and Miller, J.C. 2008, 'Voluntary Disclosure of Intellectual Capital in New Zealand Annual Reports and the "Hidden Value"', *Journal of Human Resource Costing & Accounting*, 12 (1): 26–50.
- Wyatt, A. 2005, 'Accounting Recognition of Intangible Assets: Theory and Evidence on Economic Determinants', *The Accounting Review*, 80 (3): 967–1003.
- Wyatt, A. 2008, 'What Financial and Non-financial Information on Intangibles is Value-relevant? A Review of the Evidence', *Accounting and Business Research*, 38 (3): 217–56.
- Wyatt, A. and Abernethy, M. 2008, 'Accounting for Intangible Investments', *Australian Accounting Review*, 18 (2): 95–107.
- Xia, Y., Singhal, V.R. and Peter Zhang, G. 2016, 'Product Design Awards and the Market Value of the Firm', *Production and Operations Management*, 25 (6): 1038–55.
- Yang, C. and Northcott, D. 2019, 'How Can the Public Trust Charities? The Role of Performance Accountability Reporting', *Accounting & Finance*, 59 (3): 1681–707.
- Zhang, G.P., Yu, J. and Xia, Y. 2014, 'The Payback of Effective Innovation Programs: Empirical Evidence from Firms That Have Won Innovation Awards', *Production and Operations Management*, 23 (8): 1401–20.

Appendix A: Research instrument – intellectual capital checklist

Human capital	Relational capital	Structural capital
Number of employees	Customers	Intellectual property
Employee age	Market presence	Process
Employee diversity	Customer relationships	Management philosophy
Employee equality	Customer acquisition	Corporate culture
Employee relationship	Customer retention	Organisation flexibility
Employee education	Customer training & education	Organisation structure
Skills/know-how/expertise/knowledge	Customer involvement	Organisation learning
Employee work related competences	Company image/reputation	Research & development
Employee work-related knowledge	Company awards	Innovation
Employee attitudes/behaviour	Public relation	Technology
Employee commitments	Diffusion & networking	Financial dealings
Employee motivation	Brands	Customer support function
Employee productivity	Distribution channels	Knowledge-based infrastructure
Employee training	Relationship with suppliers	Quality management & improvement
Vocational qualifications	Business collaboration	Accreditations (certificate)
Employee development	Business agreements	Overall infrastructure/capability
Employee flexibility	Favourite contract	Networking
Entrepreneurial spirit	Research collaboration	Distribution network
Employee capabilities	Marketing	
Employee teamwork	Relationship with stakeholders	
Employee involvement with community	Market leadership	
Other employee features		

Source: Li et al. (2008)

Appendix B: Intellectual capital examples

Human capital – qualitative	Human capital –quantitative	Relational capital – qualitative	Relational capital – quantitative	Structural capital – qualitative	Structural Capital - Quantitative
Our People Learning and Development programmes which aim to lift our overall capability, improve the quality of service we offer our customers and improve our resilience as a business	Total Recorded Injury Frequency Rate	The company has donated a significant amount of mine timber to the Department of Conservation to assist with refurbishment of the Windows Walk	90% of respondent tenants believe Argosy is very professional in its dealings	We have teamed up with a laptop supplier that works directly with the Nelson Environmental Centre, a local business that recycle electronic waste, keeping it out of landfill	GHG Total Scope 1, 2 and 3 emissions were 43,464 tonnes CO2e, a 7.0% increase on last year and broadly in line with the 6.1% increase in cargo throughput Emissions
We have invested considerable resource to review all of our health and safety policies and practices, employing experienced external advisors to ensure we implement best practice safety standards	Percentage of people say they are encouraged to be innovative	Produce has been donated to various events promoting healthy food and exercise for New Zealand children	With over 530 content provider relationships across Sport and Entertainment, Sky is the largest aggregator of content in the New Zealand market	Developing new products and services has underpinned Masport's transformation from being a vacuum pump distributor to becoming a vacuum systems supply partner, says Vacuum Systems Group General Manager Guy Meuli	Seeka is rolling out more than one million kWh of savings by converting existing lighting to LED with sensors. It is estimated this will reduce Seeka's carbon emissions by 167 tonnes, equivalent to the emissions from 239 houses
SKYCITY is an award-winning business not only through our restaurants and hotels, but also with our talented staff winning many individual and team awards in their own right	% of employees by age and gender	We say 'hi' to 71,000 customers every day	Number of calls to call centre	Efforts to reduce the volume of waste sent to landfill include Sanford sites aiming to outdo each other in finding alternative uses for everything from mussel floats to gumboots, pallets to polypropylene	Between July and September 2020, fleet idling dropped by more than 68% and overspeeds by 48%

(Continued)

Human capital – qualitative	Human capital – quantitative	Relational capital – qualitative	Relational capital – quantitative	Structural capital – qualitative	Structural Capital – Quantitative
Pushpaya's two employee resource groups, Women's Leadership Exploration and Development (WLEAD) and the Race and Culture Committee (RAC) had a strong year of growth despite our US offices working remotely	The number of staff at Trade Me has grown considerably from 464 staff (437 FTEs) in July 2015, to 509 (487 FTEs) as at 31 July 2016	We work with thousands of healthcare professionals, including doctors, clinicians and nurses, providing them the products and tools to deliver the best possible care. Our largest markets by revenue are North America, Europe and Asia Pacific	24% more time spent on our websites by customers	For HGH, product stewardship is an approach to managing the environmental impacts of different products and materials throughout all stages of the products' life cycle, including end of life management	Our combined Scope 1 and 2 emissions for FY21 were 1,005 tCO ₂ e. By contrast, the Mānuka forests we have planted and currently manage sequestered 4,085 tCO ₂ e in the same period
Thrive Xcelerate two-day problem solving event, introduction of a SkillShare platform, utilising our High Performance Team coaches, workshops, webinars and e-learning. Topics include Culture, Innovation, Agile, Mental Health Awareness, Unconscious Bias, Resilience, Customer Experience, Cloudbased Platforms, Storytelling and Industry update	We have a strong representation from a wide range of ethnicities. They include New Zealand European (45%), Indian (15%), Samoan (8%), Chinese (4%), Māori (4%), Tongan (2%), Niuean (1%), Cook Island Māori (1%), and 18% of crew from other wide ranging ethnic backgrounds	We have a huge depth and breadth of different customers, from home owners and individuals in the trades and professions, including builders, plumbers, architects, specifiers, designers and engineers to commercial and civic organisations, including group home builders, developers, universities, hospitals and central and local governmental groups	During the financial year we worked closely with our service company partners to almost double the number of fibre field crews from 275 to 524. As a result of this and process improvements, we lifted the number of connections completed in a month from about 6,000 in July 2015 to 12,000 in June 2016	We integrate more closely with popular devices like the iPad and iPhone, as well as widely-used tools like Google Apps for Work, Android and Microsoft Power BI, to make collaboration between small businesses and their accounting partners easier and more efficient	Currently average a 5 Green Star Rating across five rated buildings with a Strategic goal of 50% of the portfolio being green by 2031

Appendix C: Award examples

Two awards at the 2020 Best in Biz International Awards, including two silver awards in the 'Most Customer-Friendly Company of the Year'

Awarded New Zealand's number 1 most trusted vehicle dealership brand two years in a row

Best Choice 'Buy First': Rating by Monterey Bay Aquarium's highly regarded Seafood Watch program for all of our farmed mussels

Xero TaxTouch has only been in the market since early March 2016, but we've already had positive feedback, including receiving an award at the Barlow Research's 2016 Monarch Innovation Awards for the app

Barossa Valley Estate Cabernet Sauvignon 2019 was awarded 95 points and a gold medal at the 2021 International Wine Challenge, London

Australian Reserve Mortgages award Your Mortgage Magazine's 5-star lender award InfoChoice's best reserve mortgage Award

This year, our Predictive Analytics team won the Innovation category at the national Energy Excellence Awards for a project that saw two key people from different teams identify an opportunity to improve the operation of our sites
Deloitte Energy Excellence Award for Health and Safety Initiative of the Year, which recognised Contact's successful culture and Learning Teams as an important enabler

The Sylvia Park solar array and EV charging stations project was awarded a 'Judges' Commendation' in the 'Impact Renewables' category of the 2015 NZI Sustainable Business Network Awards/Our flagship office asset, VE

Best Corporate Treasury 2007, 2008, 2011, 2015
