



# Digital Financial Reporting XRB Position Paper

May 2024

## 1. The External Reporting Board's position on digital financial reporting

Digital financial reports are machine-readable. They allow investors and other users to extract and compare information using modern technology. Most of our main trading partners have made digital financial reporting mandatory. It is not mandatory in New Zealand.

Our key messages are that:

- mandatory digital financial reporting has the potential to support more informed decision making and better outcomes for New Zealand
- the XRB would welcome the Government consulting on the possible introduction of mandatory digital financial reporting for entities that participate in financial markets and potentially other classes of reporting entity
- digital corporate reporting should be implemented and regulated in technologically neutral ways to future-proof against rapid technological change.

## 2. What is digital reporting?

Information in a digital financial report is machine-readable, allowing investors and other users to extract and compare information efficiently and in a format that meets a user's requirements. Analysis platforms can be used to search digitalised data. Results can be exported to spreadsheets or linked directly to investor models and be traced back to the underlying financial report.<sup>1</sup>

In many jurisdictions, Extensible Business Reporting Language (**XBRL**) or inline Extensible Business Reporting Language (**iXBRL**) is the preferred technology for creating digital reports. Machine reading is achieved by embedding XBRL 'tags' throughout the financial statements. Reports using XBRL are machine readable only. iXBRL is a subsequent development of XBRL in which the XBRL data are embedded in an HTML document. This means that iXBRL caters to the needs of both humans and machines.

## 3. Who decides whether to introduce mandatory digital reporting

The Government and Parliament would decide whether to introduce mandatory digital reporting because:

- legislative changes would be needed to specify which entities must lodge financial reports in digital form. The Government would also need to decide whether a Bill would:
  - also require some or all climate reporting entities to lodge climate reports in digital form
  - add an express power to the Financial Reporting Act 2013 for the XRB to prepare and issue digital taxonomies.
- there are potential fiscal issues. The Companies Office would need to make changes to the Disclose Register, Companies Register and possibly other registers to accept digitally formatted reports.

## 4. Demand for digital reporting

A Retail Investor Confidence Survey conducted by Chartered Accountants Australia and New Zealand (**CA ANZ**) includes information about the potential demand among retail investors for mandatory digital reporting in both countries. In New Zealand, 68% of the 524 respondents supported or strongly supported making digital reporting mandatory in 2023 (up from 60% in 2022). 28% were indifferent and 4% were

opposed or strongly opposed.<sup>2</sup> The results were similar in the survey of Australian retail investors: 70%, 25% and 5% respectively.<sup>3</sup>

A survey undertaken in 2023 by the United Kingdom Financial Reporting Council on the use of digital reports asked 160 investment professionals about their sources for company-level financial data.<sup>4</sup> The survey findings report states that main sources were:

- commercial data aggregator services: 81%
- PDFs from company websites: 78%
- spreadsheets from company websites: 63%
- structured data from reports in XBRL format: 36%.

The survey findings report also noted that:

- 26% of respondents frequently use XBRL data and 58% use it occasionally.
- data aggregators' services may also be based on XBRL data. The survey results do not capture this indirect usage.

These findings show that structured digital reports are an important data source in support of investor decision making alongside more traditional sources.

## 5. Digital reporting overseas

### 5.1. Voluntary digital reporting

Entities will voluntarily disclose information in digital form if the benefits exceed the costs. However, it is clear from overseas experience that reporting entities consider that the costs of voluntary digital reporting outweigh the benefits. In countries adopting voluntary digital reporting, uptake is limited unless firms expect that mandatory reporting is forthcoming.<sup>5</sup>

The Australian Securities and Investments Commission (**ASIC**) has permitted companies to lodge digital financial reports in accordance with ASIC's financial reporting taxonomy since 2010.<sup>6</sup> No companies have taken up this option.<sup>7</sup> Only 25 Canadian-listed reporting entities have voluntarily filed their financial statements in XBRL format since it was made available over a decade ago. The last filing in XBRL format was in 2018.<sup>8</sup>

### 5.2. Mandatory digital reporting

Some form of digital financial reporting is required in countries that account for more than 90% of global market capitalisation. The world's largest economies (United States, China, European Union, Japan, India and United Kingdom) contribute approximately 90% of the 90%.<sup>9</sup>

Many other economies have imposed mandatory digital financial reporting. For example:

- the Republic of Korea has required digital filing by public companies since 2011<sup>10</sup>
- The Singapore Accounting and Corporate Regulatory Authority has required digital filing by companies since 2007.<sup>11</sup>

The classes of entity required to report digitally differ by jurisdiction. The obligations are mainly imposed on listed entities, banks and insurers by governments, conduct regulators, stock exchanges and prudential regulators. Some jurisdictions require digital reporting for other purposes. For example, it has been

compulsory in the United Kingdom to send company tax returns and the accompanying accounts in XBRL format since 2010.<sup>12</sup>

### 5.3. The situation in Australia and New Zealand

There is no legal requirement in Australia or New Zealand to lodge financial statements in digital form. Voluntary digital financial reporting is permitted in Australia, but not New Zealand.

### 5.4. Digitalisation of sustainability reports

Digitalisation is being developed for other forms of corporate reporting including sustainability reports.

- In April 2024, the International Sustainability Standards Board (IFRS) published an IFRS Sustainability Disclosure Taxonomy for digital reporting to reflect the requirements in IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and IFRS S2 *Climate-related Disclosures*.<sup>13</sup>
- The European Financial Reporting Advisory Group is developing an XBRL taxonomy for the European Sustainability Reporting Standards that were adopted by the European Commission on 31 July 2023.<sup>14</sup>

## 6. Problem definition

The underlying issue of digital reporting adoption is a typical financial reporting problem: the costs are largely borne by reporting entities whereas most of the benefits accrue to users. Many existing and potential investors, lenders and other users of financial statements cannot require reporting entities to provide information directly to them and must rely on general purpose financial reports for much of the financial information they need.<sup>15</sup>

## 7. The benefits and costs of digital financial reporting

We are not aware of any New Zealand-specific cost benefit analysis of digital financial reporting. However, in 2023, Deloitte Access Economics found that the Australian economy would be roughly A\$7.7 billion larger per year by 2030 if all large businesses adopted digital financial reporting.<sup>16</sup>

Several papers have been published overseas on the specific benefits and costs of digital financial reporting. Their insights are summarised below.

### 7.1. Benefits

Research papers published overseas have found that digital reporting has benefits to reporting entities, investors, regulators, other users and standard setters.

Benefits to reporting entities include:

- increased access to capital and lower cost of capital<sup>17</sup>
- a reduction in the degree to which company returns co-move with market returns by providing better information to investors about individual company performance<sup>18</sup>
- increased productivity through a reduction in manual processes such as data processing, proofreading, footnoting and consolidating<sup>19</sup>
- the facilitation of continuous audit, decreased audit lags, auditor efficiency gains, and reduced audit costs and fees.<sup>20</sup>

Benefits to primary users (i.e., investors, lenders and other creditors) include:

- more efficient and effective decision making in capital markets because manual extraction of data can be expensive, slow and prone to error<sup>21</sup>
- improved financial reporting quality<sup>22</sup>
- reductions in the cost of gathering information, and opportunities to analyse financial statements more easily<sup>23</sup>
- reduced information gaps between reporting entities and primary users<sup>24</sup>
- overcoming the limitations in human cognitive ability to analyse financial statements which have become longer and more complex in recent years.<sup>25</sup>

Other beneficiaries include:

- secondary users (e.g., government departments, researchers and academics) because they can obtain some of the benefits to primary users
- regulators because machine analysis of digital financial reports can make it easier to target areas of risk through more detailed, informed and powerful modelling and benchmarking.<sup>26</sup> The Financial Markets Authority has stated that New Zealand should adopt digital financial reporting as soon as possible<sup>27</sup>
- standard setters because they can better assess the scope of a reporting issue and the potential impact of proposed changes on reporting entities.<sup>28</sup>

## 7.2. Costs

Most of the costs of digital financial reporting are borne by reporting entities, particularly in the set-up phase. Deloitte Access Economics states that the costs are significantly higher when an entity prepares its first digital report to account for software licensing, training for accounting staff and tagging all information. These costs reduce each year, as fewer staff will need training and only new additions to reports will require tagging.<sup>29</sup>

The nature of the costs varies depending on whether reporting entities fully integrate iXBRL into their accounting systems or prepare PDF financial statements and then tag the final set of information. The latter is less expensive, but it lacks the benefits of a fully integrated digital reporting system.<sup>30</sup> In the United Kingdom, most companies that file digital reports for tax purposes use a bolt-on approach applying a PDF-to-XBRL conversion because it minimises changes to their existing processes and costs.<sup>31</sup>

There would also be costs for the Government if digital reporting were to be adopted in New Zealand:

- to modernise the Companies Office's business registries to accept reports in digital format
- to establish and maintain a New Zealand accounting taxonomy. The New Zealand Taxonomy would be largely the same as the IFRS Foundation's accounting taxonomy. A small number of additions for New Zealand-specific disclosures would be required.

## 8. The importance of technology neutrality

It is essential to implement and regulate digital financial reporting technologically neutrally<sup>32</sup> because it is rapidly evolving and in ways that are very difficult to predict.

XBRL/iXBRL is the predominant digital financial reporting technology. However, it is unclear whether this

will continue because Artificial Intelligence (**AI**) has the potential to revolutionise financial statement preparation and analysis. AI can streamline preparing financial statements by automating data aggregation, categorisation and report generation. AI-powered algorithms can analyse vast amounts of financial data in real time.<sup>33</sup>

However, ledger level coding and classifications are currently much better than AI. AI is unable to achieve fully reliable outcomes because errors can arise when converting documents into an AI-compatible format, and AI cannot be fully trusted to carry out classification tasks consistently. AI models can 'hallucinate' (i.e., create and rely on false data) or make decisions in a 'black box', meaning there may be no way for users to understand exactly how the AI has made its decisions.<sup>34</sup>

The survey of 160 investment professionals undertaken in 2023 by the United Kingdom Financial Reporting Council referred to above showed that opinions are divided about the future direction. In response to a question about which of two statements best describes their opinion:

- 43% agreed or strongly agreed that structured data in XBRL format will remain valuable, regardless of developments in AI
- 25% agreed or strongly agreed that structured data in XBRL format will become obsolete due to developments in AI
- 31% did not agree with either statement.<sup>35</sup>

## 9. Conclusion

We conclude that:

- there is significant investor use of structured data from reports in a digital format overseas
- New Zealand is an outlier by not mandating digital financial reporting for entities that participate in financial markets.

We would welcome the Government consulting on the possible introduction of mandatory digital financial reporting for entities that participate in financial markets and potentially other classes of reporting entity. Topics that may usefully form part of the consultation include:

- the one-off and ongoing costs of digital reporting and who will incur those costs
- the benefits of digital reporting and who will obtain the benefits
- how the costs of digital reporting to the Government can be sustainably funded
- the implications for preparers and auditors relating to digitally tagged information, such as the statutory deadlines for lodging audited financial statements.

## References

- Accounting and Corporate Regulatory Authority, March 2020, [Filing Financial Statements in XBRL Format \(acra.gov.sg\)](#).
- Amin, K., Eshleman, J.D., and Feng C., 2018, The effect of the SEC's XBRL Mandate on Audit Report Lags, *Accounting Horizons*, (2018) 31(1):1-27.
- Australian Accounting Standards Board, 28 October 2019, [Submission to the Parliamentary Joint Committee on Corporations and Financial Services – Inquiry into the Regulation of Auditing](#).
- Australian Securities and Investments Commission, 20 October 2014, [Digital financial reports | ASIC](#).
- Chartered Accountants Australia and New Zealand, October 2023, [Australia Retail Investor Confidence 2023, https://www.charteredaccountantsanz.com/-/media/56335aa102d94a51bd303f9b5be34a04.pdf](#).
- Chartered Accountants Australia and New Zealand, October 2023, [New Zealand Retail Investor Confidence 2023, https://www.charteredaccountantsanz.com/-/media/a2d88e06579f413086633bc8a249405d.pdf](#).
- CPA Australia, 22 February 2022, [Make digital financial reporting mandatory, accountants urge | CPA Australia](#).
- Deloitte Access Economics, July 2023, [Embracing the power of digital corporate reporting: A mandate for change, https://images.content.deloitte.com.au/Web/DELOITTEAUSTRALIA/%7Bead78b2d-d844-4661-87b4-a95e41e878a5%7D\\_au-audit-embracing-power-of-digital-reporting-2023-report.pdf](#).
- Dong, Y., Li, L.O., Lin, Y., and Ni, C., 2016, Does Information-Processing Cost Affect Firm-Specific Information Acquisition? Evidence from XBRL Adoption, *Journal of Financial and Quantitative Analysis*, 51(2):425-462.
- Efendi, J., Park, J.D., and Smith, L.M., 2014, Do XBRL filings enhance informational efficiency? Early evidence from post-earnings announcement drift, *Journal of Business Research*, (2014) 67(6):1099-1105.
- EFRAG, 8 February 2024, [Public consultation on the draft XBRL taxonomy for ESRS Set 1](#).
- External Reporting Board, 2012 (updated 2024), [New Zealand Accounting Standards Framework](#).
- External Reporting Board, 2015 (incorporating amendments to 29 February 2020), [XRB A1: Application of the Accounting Standards Framework](#).
- External Reporting Board, 2018, [New Zealand Equivalent to the IASB Conceptual Framework for Financial Reporting](#).
- Financial Markets Authority, 27 November 2023, [Briefing to the Incoming Minister of Commerce and Consumer Affairs](#).
- Financial Reporting Council, September 2022, [Structured digital reporting: Improving quality and usability](#).
- Financial Reporting Council, December 2023, [Structured\\_data\\_investor\\_survey\\_2023.pdf \(frc.org.uk\)](#).
- Fourati, J.M., Masmoudi, S., and Boujelbene, N., 2018, The Effect of Voluntary XBRL Adoption on Audit Fees: Evidence from Belgium, *Journal of Accounting and Finance*, 18(9):98-116.
- HM Revenue and Customs, 8 April 2020, [XBRL guide for businesses - GOV.UK \(www.gov.uk\)](#).
- IFRS Foundation, October 2022, IFRS Advisory Council Agenda Paper 7B, [Progressing our digital financial reporting strategy](#).
- IFRS Foundation, 2024, [IFRS Sustainability Disclosure Taxonomy](#).

Liu, C., Wang, T., and Yao, L.J., 2013, XBRL's impact on Analyst Forecast Behavior: An Empirical Study, *Journal of Accounting and Public Policy*, 33(1):63-82, [document \(psu.edu\)](#).

Minter Ellison Rudd Watts, 15 February 2024, [Navigating the legal minefield: Generative AI and its implications for businesses and directors \(minterellison.co.nz\)](#).

New Zealand Productivity Commission, June 2014, [Regulatory Institutions and Practices](#).

Parker, D., 20 November 2020, [Digital reporting: The way forward for financial reports | INTHEBLACK \(cpaaustralia.com.au\)](#).

Parliamentary Joint Committee on Corporations and Financial Services, 11 November 2020, [Regulation of Auditing in Australia, Chapter 5 – Parliament of Australia \(aph.gov.au\)](#).

Ra, C.Y., and Lee, H.Y., 2018, [XBRL Adoption, Information Asymmetry, Cost of Capital and Reporting Lags](#), *iBusiness*, 10:93-118.

Shan, Y.G., and Troshani, I., 2014, [Does XBRL benefit financial statement auditing?](#) *Journal of Computer Information Systems*, 54(4):11-21.

Shan, Y.G., and Troshani, I., 2016, [The effect of mandatory XBRL and IFRS adoption on audit fees: Evidence from the Shanghai Stock Exchange](#), *International Journal of Managerial Finance*, 12(2):109-135.

Shan, Y.G., Troshani, I., and Richardson, G., 2015, [An empirical comparison of the effect of XBRL on audit fees in the US and Japan](#), *Journal of Contemporary Accounting and Economics*, 11(2):89-103.

Sreseli, N., 2023, [Use of Artificial Intelligence for Accounting and Financial Reporting Purposes: A Review of the Key Issues](#), *American International Journal of Business Management*, 6(8):72-83, [1687283.pdf \(aijbm.com\)](#).

Troshani, I., and Rowbottom, N., 2022, [Digital Corporate Reporting: Global Experiences from the G20 and implications for policy formulation](#), [digital-corporate-reporting-report.pdf \(cpaaustralia.com.au\)](#).

Wells, P., Ghandar, A., and Mehmood, M., March 2023, [Can digital reporting tame the corporate reporting beast?](#) <https://www.charteredaccountantsanz.com/-/media/8c48429e4933401d8a8056dc6ebca903.pdf>.

XBRL, 1 July 2022, [Digital reporting innovation to foster transparency in Korea | XBRL](#).

Zhang, Y., Guan, Y., and Kim, J., 2019, [XBRL adoption and expected crash risk](#), *Journal of Accounting and Public Policy*, 38(1):31-52, [XBRL adoption and expected crash risk - ScienceDirect](#).

## Endnotes

---

- <sup>1</sup> IFRS Foundation, 2022, p. 7.
- <sup>2</sup> Chartered Accountants Australia and New Zealand, October 2023 (New Zealand), p.8.
- <sup>3</sup> Chartered Accountants Australia and New Zealand, October 2023 (Australia), p.8.
- <sup>4</sup> Financial Reporting Council, 2023, pp.8-10.
- <sup>5</sup> Troshani & Rowbottam, 2022, pp.3 & 20.
- <sup>6</sup> Australian Securities and Investments Commission website, 20 October 2014.
- <sup>7</sup> Parliamentary Joint Committee on Corporations and Financial Services. 2020, paragraph 5.47; Troshani & Rowbottam, 2022, p.4.
- <sup>8</sup> Troshani and Rowbottam, 2022, p.7.
- <sup>9</sup> IFRS Foundation, 2022, p.16.
- <sup>10</sup> XBRL, 1 July 2022.
- <sup>11</sup> Accounting and Corporate Regulatory Authority website, March 2020.
- <sup>12</sup> HM Revenue and Customs, 8 April 2020.
- <sup>13</sup> IFRS Foundation, 2024.
- <sup>14</sup> EFRAG, 8 February 2024
- <sup>15</sup> External Reporting Board, 2018, paragraph 1.5.
- <sup>16</sup> Deloitte Access Economics, July 2023, p.I.
- <sup>17</sup> Ra & Lee, 2018.
- <sup>18</sup> Dong, Li, Lin and Ni, 2016.
- <sup>19</sup> Deloitte Access Economics, 2023, p.9.
- <sup>20</sup> Amin, Eshleman & Feng, 2018; Shan & Troshani, 2014; Fourati, Masmoudi & Boujelbene, 2018; Shan, Troshani & Richardson, 2015; and Shan & Troshani, 2016.
- <sup>21</sup> CPA Australia, February 2022.
- <sup>22</sup> Liu, Wang & Yao, 2013; Efendi, Park & Smith 2014; Troshani & Rowbottam, 2022.
- <sup>23</sup> Zhang, Guan & Kim, 2016.
- <sup>24</sup> Ra & Lee, 2018.
- <sup>25</sup> Wells, Ghandar & Mehmood, March 2023, pp.4 & 9.
- <sup>26</sup> Parliamentary Joint Committee on Corporations and Financial Services, paragraph 5.53.
- <sup>27</sup> Financial Markets Authority, 27 November 2023, p.10.
- <sup>28</sup> Australian Accounting Standards Board, 28 October 2019, p.13.
- <sup>29</sup> Deloitte Access Economics, 2023, p.9.
- <sup>30</sup> CPA Australia, 20 November 2020.
- <sup>31</sup> Financial Reporting Council, September 2022, p.6.
- <sup>32</sup> New Zealand Productivity Commission, 2014, p.226, Finding 9.6.
- <sup>33</sup> Sreseli, 2023.
- <sup>34</sup> Minter Ellison Rudd Watts, 15 February 2024.
- <sup>35</sup> Financial Reporting Council, 2023, p.13.