Digital Reporting Benchmark 2026

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Introduction

External corporate reporting is in the middle of its largest transformation since the move from print to PDF in the 1990s. The change is not cosmetic. It is structural and driven simultaneously by three forces that, until recently, were treated as separate developments: regulation, sustainability, and artificial intelligence.

3,072[01]

EEA IXBRL FILERS

Issuers filing inline XBRL across 30 EEA countries, year-end 2025.

98%[22]

SHOW STRATEGY

Large companies publishing a sustainability-strategy overview online.

3.05[03]

AI CITATION UPLIFT

How much more often ChatGPT cites HTML reports than PDF reports.

On the regulatory side, more than three thousand European issuers now file their annual financial reports in the inline XBRL (eXtensible Business Reporting Language) format prescribed by the European Single Electronic Format (ESEF), with national enforcers running thousands of compliance examinations each year. [1]

On the sustainability side, the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS) have begun to embed non-financial disclosure into the same legal and technical infrastructure as the financial statements. [2]

And on the technology side, large language models such as ChatGPT have quietly become one of the most influential *readers* of corporate disclosure,silently consuming filings, summarising results, and shaping the impressions investors, journalists and employees form of a company before they ever open the document themselves. [3]

Taken individually, these developments may appear incremental. Taken together, however, they point to a more fundamental transformation: the annual report is evolving from a static document into a structured source of corporate information, designed to serve both human and machine users. This shift changes not only how annual reports are consumed, but also how they need to be produced.

About this report

This report is intended for finance, investor relations, sustainability, communications, and reporting professionals who already produce annual reports and are now being asked to determine how these reports should be produced going forward.

The objective of this report is to demonstrate the importance of high-quality digital corporate reporting. To this end, the report provides an overview of the latest trends and developments in the field and presents an analysis of the quality of the most recent iXBRL filings of companies listed on the AEX and AMX, the two principal stock market indices of Euronext Amsterdam.

This report has been prepared with the assistance of artificial intelligence (AI). AI tools were used to support the research, analysis, drafting, and review of the report, including the analysis of iXBRL filings.

While reasonable care has been taken to verify the accuracy and relevance of the information presented, AI-generated content may contain errors, omissions, or inaccuracies. The authors remain responsible for the final content of this report and have reviewed and validated the information to the extent considered appropriate.

The use of AI does not replace professional judgment, independent analysis, or verification of source information.

The production of this report is a collaboration between F19 Digital Reporting, Digital Reporting Services (DRS), and Data for Better.

For the multichannel publication of the report, F19 Digital Reporting's no-code Do It Yourself (DIY) software is used. The report can be viewed in multiple formats:

1. An interactive, responsive website with a vertical navigation menu
2. An interactive, responsive website with a horizontal navigation menu
3. A one-column portrait PDF
4. A two-column portrait PDF
5. A one-column landscape PDF
6. A two-column landscape PDF
7. An interactive iXBRL publication embedded in an inline viewer

The analysis of the iXBRL documents is supported by the AI-driven iXBRL analysis tool developed by DRS, combined with the expertise of Data for Better.

For further information or to request the complete analysis of a specific company, please contact F19 Digital Reporting:

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THE BIGGER PICTURE

The future of corporate reporting

For most of the twentieth century, an annual report was a printed book. It had a cover, a chairman's letter, a set of audited financial statements, and a fixed audience: shareholders and regulators. That model seems to be nearing retirement. What most probably will be replacing it is something more trustworthy and useful: a continuously updated, multi-stakeholder, multi-format, structured data product that happens to take the visual form of a report once a year.

From a printed book to a continuous, structured data flow

EVOLUTION *Reporting has moved from print to PDF to structured data. Each transition changed the audience and the production process.*

The transition from print to PDF in the mid-1990s preserved the underlying logic of the report: a static, paginated artefact designed for human visual consumption. [4]

The current transition is different. Structured digital reporting changes the annual report from a document designed primarily for reading into information that can also be easily accessed and processed by digital systems.

This means that the annual report is no longer just a single document published once a year. The same underlying information can be used across different formats and channels, for different audiences. Investors, regulators, ESG data providers and, increasingly, AI systems can access and analyse this information alongside the people who read the report itself.

The human report still matters: design, storytelling and data visualisation

STORYTELLING *Structure serves the machine. Design, narrative and data visualisation are how the report still earns a human audience.*

The shift to structured, machine-readable data can make it sound as though the designed report is becoming obsolete. The opposite is closer to the truth. As filings turn into commodified data, the parts that remain distinctively human: a clear narrative, a well-chosen chart, an honest photograph willbecome more, not less, valuable. The first year of CSRD reporting is a cautionary example: across 200 first-time reports the average sustainability statement ran to 123 pages, yet reviewers concluded that many fulfil compliance requirements rather than communicate meaningfully. [20]

Research covering three decades of corporate reporting shows that visuals such as graphs, infographics, diagrams and photographs have become an important way to explain complex information and show how a company creates value. At the same time, visuals need to be used carefully. They can make information clearer, but can also emphasise positive messages or distract from less favourable information. This is why researchers argue that visual communication should be considered more explicitly in reporting guidance. [19]

Annual report design has also evolved significantly over the past two decades. Reports are increasingly designed for digital use, with greater emphasis on clear storytelling, visualisation, accessibility and interactive content. [21]

However, there is still considerable room for improvement. A European study found that while 98% of large companies published their sustainability strategy online, only 59% supported it with concrete case studies. This contrasts with the 84% of investors who consider such examples important when assessing a company. Similarly, only one third of first time CSRD reporters used visuals to explain their materiality process. [22]

123pp[20]

AVG CSRD STATEMENT

Average length of a first-year CSRD sustainability statement — long, not always communicative.

32%[20]

VISUALISE MATERIALITY

First-time CSRD reporters that present their materiality process visually.

59%[20]

USE CASE STUDIES

Companies illustrating strategy with case studies — against 84% of investors who want them.

Structured data and effective communication can reinforce each other. The same structured information can be used in an interactive online report, with features such as charts, trends and content tailored to different audiences. This makes information easier to access and explore than in a static PDF.

A well designed digital report therefore serves both machines and people. It provides structured information that can be processed by AI systems, regulators and analysts, while presenting the same information in a clear and engaging way for investors, employees and other stakeholders.

> ***"Structured data answers the machine. Design and story are still how the report answers the human."***

Financial and non-financial reporting are converging

CONVERGENCE *ESG used to sit beside the financial statements. It is now being absorbed into the same legal, technical and assurance infrastructure.*

Sustainability reporting was once a voluntary exercise structured by frameworks like the Global Reporting Initiative (GRI) and the Task Force on Climate-related Financial Disclosures (TCFD). [6]

That world is rapidly disappearing. In the European Union, the Corporate Sustainability Reporting Directive (CSRD), operationalised through twelve European Sustainability Reporting Standards (ESRS), now imposes detailed sustainability disclosure on thousands of public interest entities. [2]

This shift is also becoming visible in regulatory oversight. Sustainability reporting is increasingly subject to the same scrutiny as financial reporting. By the end of 2025, the sustainability statements of around 2,000 issuers were within the scope of European enforcement. [1]

Globally, the same trend is visible. Sustainability information is increasingly becoming part of mainstream corporate reporting, although the pace and regulatory approach differ by jurisdiction.

The International Sustainability Standards Board (ISSB) was established by the IFRS Foundation and strengthened through the consolidation of the Climate Disclosure Standards Board (CDSB) and the Value Reporting Foundation (VRF) in 2022. The ISSB has since issued IFRS S1 and IFRS S2, creating a global baseline for sustainability related financial disclosures.

The consolidation also brought the Integrated Reporting (<IR>) Framework under the IFRS Foundation. The framework promotes integrated thinking and encourages companies to explain how sustainability related risks and opportunities connect with governance, strategy, performance and long term value creation.

Together, the ISSB standards and the <IR> Framework support a more connected approach to corporate reporting. At the same time, collaboration with the European Sustainability Reporting Standards (ESRS) and the Global Reporting Initiative (GRI) aims to improve interoperability between the main reporting frameworks.

While approaches differ across jurisdictions, the overall direction is clear: financial and sustainability reporting are becoming increasingly connected.

This convergence also reshapes who will use the report. Investors are demanding granular carbon-emissions data; customers and suppliers want supply-chain and product-footprint information; employees increasingly treat sustainability as a differentiator in choosing employers. [2]

The overall trend is clear. Financial and sustainability reporting are increasingly becoming part of the same corporate reporting landscape, driven by regulation, global standards and growing stakeholder expectations. But bringing both types of information into the same report is only the first step. Research on integrated reporting shows that meaningful integration requires the underlying systems, processes and governance to connect financial and sustainability information. Without that connection, reporting may look integrated without providing a truly coherent picture of the company. [8]

> ***"Sustainability information is being pulled out of the marketing brochure and into the audited corporate report."***

Key developments shaping corporate reporting

Several developments are shaping the future of corporate reporting. Together, they show how reporting is becoming more integrated, digital, structured and accessible to a broader range of users. The key developments are summarised below.

DIRECTION	LIKELY DEVELOPMENT
ESG integration	ESG merges into mainstream financial reporting.
AI usage	AI drafts, validates and analyses disclosures.
Reporting frequency	Shift from annual to near-real-time reporting.
Format	Structured, machine-readable data replaces PDFs.
Decision usefulness	Reporting increasingly focuses on information that helps investors, management and other stakeholders make informed decisions.
Assurance	ESG assurance becomes standard practice.
Stakeholders	Reporting broadens beyond shareholders.
Data quality & governance	Reliable, consistent and well governed data becomes a prerequisite for reporting and decision making.
Regulation	Global standardisation and interoperability increase.
Platformisation	Reporting becomes part of digital ecosystems and platforms.
Visualisation & storytelling	Design, narrative and data visualisation stay decisive for the human reader.

THE TECHNICAL FOUNDATION

The global rise of inline XBRL

Inline XBRL (iXBRL) embeds machine-readable data tags directly inside a human-readable HTML document. The same file is, simultaneously, a designed report and a structured data source. After two decades as a niche compliance format, iXBRL has quietly become the standard delivery mechanism for corporate disclosure in most of the world's largest economies.

What inline XBRL is, and why it matters

FOUNDATIONS *XBRL is a global standard for tagging business data. Inline XBRL puts the tags inside the readable HTML document.*

Traditional XBRL files were designed for machines rather than people. Inline XBRL combines structured XBRL data with a readable HTML report. This means that people and machines can use the same report. [10]

The main benefit is that the same report works for both people and machines, while the underlying data remains connected to the information presented in the report. XBRL was originally introduced mainly to meet regulatory requirements, but is increasingly used as a foundation for digital corporate reporting. [5]

The adoption of XBRL differs across countries. Research shows that this is influenced not only by technology, but also by national regulation, reporting practices and the role of regulators. [11]

An inline XBRL example

EXAMPLE *What a person sees and what a machine reads are the same file. The tags below sit invisibly inside the readable report.*

The easiest way to understand inline XBRL is to look at a fragment. Below is a fictional Consolidated Income Statement. To a human reader it is an ordinary table. To a machine, in the iXBRL publication each figure also carries a tag that names the accounting concept, its currency, its period and its sign — so the value can be extracted and compared across companies without requiring manual data re-entry.

Example: Consolidated Income Statement

Millions of euros	2025	2024
Revenue	12,000	10,739
Cost of sales	-6,968	-8,076
Gross profit	**5,032**	**2,663**
Sales and marketing expense	-302	-324
Other expenses	-58	-35
Profit (loss) from operating activities	**4,672**	**2,304**
Finance income	1	1
Finance costs	-132	-106
Share of profit (loss) of associates and joint ventures accounted for using equity method	97	110
Profit (loss) before tax	**4,638**	**2,309**
Tax income (expense)	-250	-321
Profit (loss)	**4,388**	**1,988**

To view the example, open this report in the Inline XBRL viewer and navigate to the Consolidated Income Statement: When you click on a number in the table, the corresponding XBRL information will appear on the right-hand side in the Inline XBRL Viewer

The global picture

iXBRL or some form of structured digital filing is now mandatory for listed-company financial reports in most major economies. The table below summarises the current status across roughly forty jurisdictions.

STATUS	JURISDICTIONS (ILLUSTRATIVE SELECTION)
Mandatory (financial)	United States · United Kingdom · Japan · China · India · Australia · South Korea · Singapore · Israel · Indonesia · Philippines · Chile · Türkiye · Malaysia · Saudi Arabia · UAE · Mexico · South Africa — plus all 30 EEA countries via ESEF.
Planned or in transition	Brazil · Switzerland · New Zealand · Thailand · Vietnam · Pakistan · Egypt · Nigeria · Kenya · Morocco · Colombia · Peru · Argentina.
Voluntary or partial	Canada · Russia · Ukraine · Kazakhstan.

Europe and ESEF

EUROPE *ESEF is the European Single Electronic Format. It makes inline XBRL the obligatory annual-report format across the EEA.*

The European Single Electronic Format (ESEF) requires issuers subject to ESEF requirements to publish their annual financial reports in inline XBRL. By the end of 2025, around 3,072 issuers across 30 EEA countries had filed ESEF reports. National regulators conducted around 800 examinations to assess compliance with ESEF requirements. [1]

The table below shows the ten jurisdictions with the largest ESEF filer populations.

COUNTRY	ESEF FILERS
Sweden	379
Germany	338
France	308
Poland	274
Norway	205
Italy	184
Finland	129
Netherlands	127
Bulgaria	124
Spain	121

Sustainability reporting is also becoming part of European regulatory oversight. By the end of 2025, around 2,000 issuers were subject to enforcement of their CSRD sustainability statements. National regulators also started examining the structured digital reporting of sustainability information. [11]

A similar picture is emerging in the United Kingdom. A 2025/26 review by the Financial Reporting Council (FRC) found that structured digital reporting is now well established and that most filings meet the requirements. However, the FRC continues to identify quality issues, particularly around the consistency and accuracy of tagging. Examples include unnecessary company specific tags and errors in reported earnings per share. The FRC therefore sees structured reporting as an area that requires continuous attention and improvement. [12]

> ***"Many researchers no longer see iXBRL as a separate format. They describe it as the underlying language of digital corporate reporting."***

THE NEW AUDIENCE

AI: the new reader of annual reports

Annual reports have traditionally been written for people such as investors, analysts, shareholders, regulators, employees and journalists. Today, they are increasingly also read and analysed by large language models. This creates a new audience for corporate reporting and makes the way information is structured increasingly important.The annual report is becoming an AI interface

AI INPUT *Generative AI is becoming a structural part of how corporate disclosure is consumed.*

Generative AI is increasingly used to find and summarise information from annual reports. As a result, investors, journalists and other stakeholders may encounter information through an AI generated answer before they read the annual report itself. This means that AI is increasingly becoming an intermediary between companies and the people using their corporate information. [3]

A 2025 study of ChatGPT's answers to corporate-reporting questions found that 58.5% of the citations the model produced linked directly to annual reports, making them the largest single source category in its responses. [3]

This shows that annual reports are an important source of information for generative AI. How easily AI can access and interpret a report therefore matters. The FRC notes that AI tools increasingly use the machine readable XHTML version of annual reports and recommends making these files directly accessible, rather than only providing them as part of a download package. [12]

AI performs better with HTML reports

A 2025 study by the University of Applied Sciences St. Pölten, HHL Leipzig Graduate School of Management and reporting agency Nexxar examined how ChatGPT uses annual reports when answering questions about companies. The study compared how effectively ChatGPT finds and uses information from annual reports published in different formats. [3]

58.5%

AR CITATION SHARE

Annual reports are the single largest source category in ChatGPT's answers.

3.05×

HTML VS PDF

HTML reports are cited about three times more often than PDF reports.

71%

ANSWER ACCURACY

AI accuracy on HTML reporters — versus 54% for PDF-only reporters.

<2.7×

SOURCE DISPERSION

PDF reporters generate 2.7× more external sources than HTML reporters.

The findings have a clear implication. When an annual report is available in HTML, AI is more likely to use the report itself as a source. When information is only available in a PDF, AI is more likely to rely on other sources, such as press releases, news articles or analyst reports. Making annual reports easily accessible to AI therefore increases the likelihood that the company's own reporting is used as the primary source.

Structured data improves AI accuracy

The format of corporate reporting also affects how accurately AI can extract financial information. A study covering 5,000 annual reports compared AI results using plain text, HTML and XBRL.

The researchers measured how often AI returned an incorrect financial figure. The overall error rate was 18.24% for plain text and 15.75% for HTML. With XBRL, the error rate fell to 9.19%.

The study also looked at the types of errors AI made. One important source of mistakes was scale. For example, AI could identify the right number but fail to recognise that it was reported in thousands or millions. XBRL largely eliminated these scale errors because this information is included in the structured data.

The findings show that structured reporting does more than make information machine readable. It can also help AI interpret financial information more accurately. [13]

LINE ITEM	NO CONTEXT	PLAIN TEXT	HTML	XBRL
Cash	100%	10.7%	8.4%	6.5%
Inventory	95%	14.2%	9.1%	5.8%
Total assets	92%	12.8%	7.6%	4.9%
Operating cash flow	98%	15.4%	10.2%	6.1%
Hallucination rate	~50%	7.8%	4.2%	<2%

Two things stand out. First, the structure of the input matters more than the model. Second, the gap between XBRL and the best alternative is large enough that, for any disclosure where exact numbers are part of the value of the report, structured data is no longer optional.

Consistent information across the report

COHERENCE *Reports often disagree with themselves. Structure reduces — but does not eliminate — those disagreements.*

Metadata provides context and meaning to digital information. It helps machines understand what information represents, how it is classified and how different pieces of information relate to each other. Good metadata therefore makes corporate information easier to find, compare and analyse.

A 2026 study analysed 700 financial and ESG disclosures from 350 listed companies across five countries. The researchers assessed metadata quality based on completeness, consistency and semantic coherence. These measures were combined into a Metadata Incoherence Score, where a higher score indicates more inconsistencies or missing information.

The results show a clear relationship with reporting format. PDF reports had the highest average incoherence score at 8.43. This fell to 6.39 for HTML and 5.40 for XHTML/XBRL. Reports containing ESG information also showed more metadata inconsistencies than reports without ESG content.

Structured reporting does not guarantee that the information itself is correct. It does, however, make information more consistent and easier for companies, auditors, regulators and AI systems to check and analyse. [14]

From a document for humans to a data source for humans and machines

The direction is clear. Annual reports are evolving from documents primarily designed for people to read into structured sources of information that can be used by both people and machines. [15]

Old world

- Annual report as PDF document.
- Designed for human visual consumption.
- AI is forced to look elsewhere for numbers.
- Errors and hallucinations are common.
- Companies have little control over the narrative AI produces.

New world

- Annual report as semantic data source.
- Designed for humans and machines together.
- AI reads the report directly.
- Errors drop sharply, hallucinations approach zero.
- The company's own filings shape the narrative AI produces.

> *"When the data is structured, the model reads the report. When the data is locked inside a PDF, the model goes elsewhere — and the company loses control of the narrative."*

THE PRODUCTION MODEL

The benefits of a digital-first approach

As corporate reporting becomes more digital, the way reports are produced becomes increasingly important. In practice, there are two main approaches. Companies can create a traditional PDF first and convert it into a digital format afterwards, or they can work digital first, using structured information as the basis for different reporting formats and channels.

The evidence presented in this report suggests that the digital first approach offers clear advantages. It improves accessibility, supports more reliable use by AI and other digital systems, and makes it easier to publish consistent information across different channels.

What digital-first means

MULTICHANNEL *Digital-first means: design the report as structured HTML first, then derive every output channel from it.*

Digital-first reporting is the practice of designing the annual report primarily as a structured, semantic, machine-readable information carrier, from which any number of human-readable outputs can be generated as needed: a website, a microsite, an HTML viewer, an iXBRL filing, a printable PDF, individual landing pages per stakeholder group, a downloadable spreadsheet of KPIs, an API for analysts, or a feed for the company's investor-relations app.[15]

This approach is often referred to as multichannel publishing. The same underlying information is maintained in one central source and then used to produce different outputs, such as an HTML report, an iXBRL filing, a PDF and other digital channels. When information is updated, the change can be reflected across these outputs without having to maintain each version separately. This reduces duplication, improves consistency and makes it easier to ensure that different audiences receive the same underlying information. Digital-first reduces the gap between content and channel. Where a PDF-first process must reconcile every change across multiple disconnected files, a digital-first process publishes everywhere from one updated source.

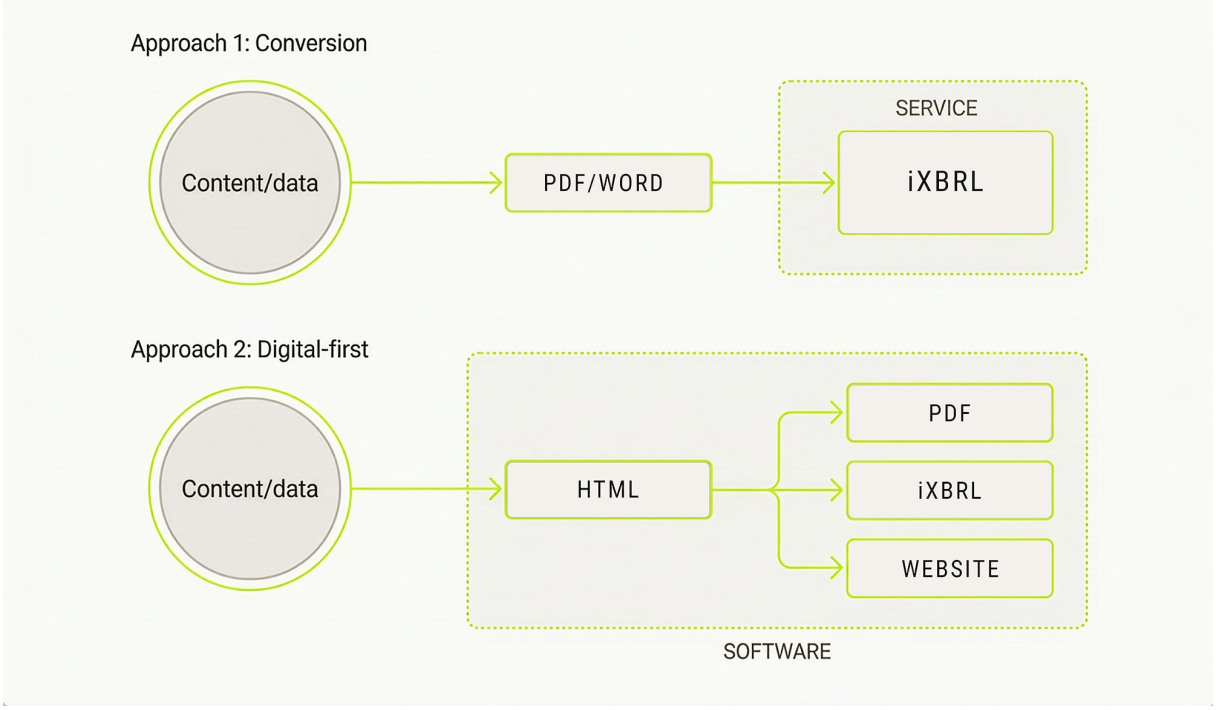
Digital-first versus PDF-first (the conversion or bolt-on approach)

The main difference between the two approaches is what comes first.

In a PDF first approach, the visual report is created first. Digital versions, such as iXBRL and HTML, are produced afterwards.

In a digital first approach, the structured content comes first. From this source, different outputs such as HTML, iXBRL and PDF can be produced.

This also improves the quality of the digital report. Because the HTML and iXBRL are created directly from the structured source, rather than converted from a PDF, the information is easier for digital systems and AI tools to access and interpret.



PDF-first (bolt-on)

- Primarily optimised for human visual layout.
- Designed in InDesign or similar tools.
- Converted to HTML / iXBRL at the end.
- Tagging and structure are an afterthought.
- Errors and drift between formats are common.
- Not AI-optimized

Digital first

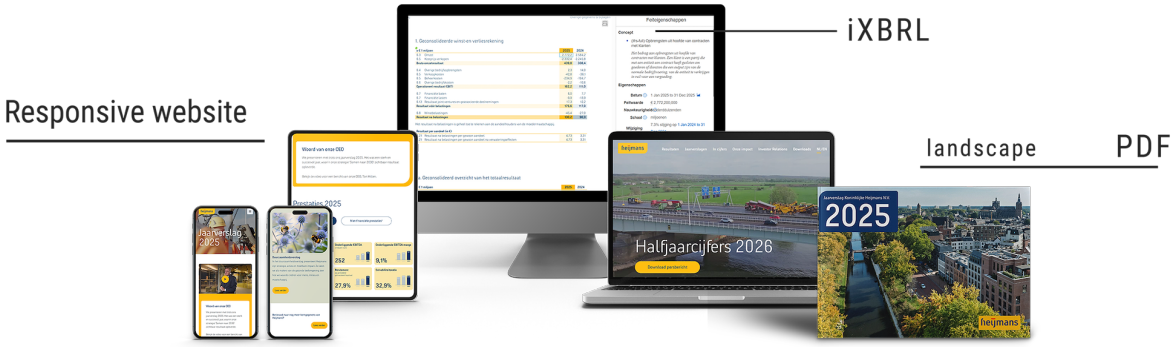
- Optimised for machines and humans together.
- Designed in a web based content / data system.
- PDF, HTML and iXBRL all generated from one digital source.
- Tagging and structure are first-class citizens.
- Single source of truth — outputs stay aligned.
- AI-optimized

Digital-first in practice: multichannel example

CASES *One structured source, many channels. The case below show what that looks like in production.*

The clearest argument for digital-first is a real-live example. The case below shows how a single structured source can be published across an online report, an iXBRL filing, and a glossy PDF.

Heijmans is a leading Dutch construction and infrastructure company, active in housing, buildings and infrastructure. The company generated revenue of €2.77 billion in 2025 and has a workforce of more than 7,000 employees. Since 2022, Heijmans is using the F19 platform to publish its annual report Digital-First as an online report, an ESEF report and a PDF.



For more examples of multichannel annual reports published with F19 go to: https://f19digitalreporting.com/examples/

What the evidence shows

The benefits of digital first reporting are not limited to structured data, accessibility and AI. A digital report can also make corporate information easier for people to find, explore and use.

Research cited by Martin DeVille shows that companies moving from a PDF only annual report to a digital first approach can see significant increases in online reach and engagement. The Friend Studio analysis found strong growth in both visitors and report downloads after companies introduced digital annual reports.

14x

FIRST-YEAR VISITORS

Increase in visitors versus the previous PDF-only annual report.

60x

TWO-YEAR COMPOUND

Compound visitor growth two years after a digital-first launch.

10x

PDF DOWNLOADS

Even PDF downloads tend to rise — the audience grows overall.

↓

MAINTENANCE COST

Multichannel publishing replaces parallel manual workflows.

Why digital-first matters

The evidence presented in this chapter points to a broader advantage of digital first reporting. Corporate information is increasingly used by both people and digital systems. A reporting process therefore needs to support both.

Structured information makes reports easier for AI tools, regulators and other digital systems to access and analyse. At the same time, clear writing, good design and effective visualisation remain important for the people using that information.

A digital-first approach brings these requirements together. It allows companies to produce consistent, structured information for different channels and users, without giving up the quality of the human facing report.

This makes digital first reporting a strong foundation for the next generation of corporate reporting.

> ***"The PDF will not disappear. It will become one of several derived outputs from a digital-first source — not the master."***

BEYOND DIGITAL: WHAT MAKES CORPORATE REPORTING USEFUL?

Good reporting starts with choices

The move towards digital first reporting changes how corporate information is produced, distributed and used. But better technology does not automatically result in better corporate reporting. The value of a report still depends on the quality of the information it contains and on the connections between different parts of the corporate story.

A strong corporate report does more than describe a strategy. It helps the reader understand the choices behind that strategy. Which markets, activities and investments does the company prioritise? What has it decided not to pursue? How are resources allocated as a result?

This distinction matters because ambitions are relatively easy to communicate. Choices are harder. They reveal how management responds to competing priorities, uncertainty and constraints. Reporting becomes more useful when these choices can be followed through to targets, investments, risks and financial performance.

Connectivity matters as much as completeness

Corporate reports have become broader. Financial performance, sustainability, governance, risk, strategy and stakeholder impacts increasingly appear in the same reporting package. But simply including all of these topics does not make a report integrated.

The more important question is whether the information is connected. Can a reader move from a material issue to the related strategic priority, target, KPI, investment, risk and financial consequence? Are financial and sustainability information based on consistent definitions, scopes and reporting periods? And can the reader understand how these considerations influence management decisions?

A report can therefore be comprehensive while still being fragmented.

The next challenge is financial integration

One of the most important developments in corporate reporting is the growing connection between sustainability and financial information. This goes beyond reporting sustainability KPIs alongside financial results.

Useful reporting explains how material sustainability risks and opportunities affect the economics of the business. This may include capital expenditure, operating costs, asset values, provisions, financing, margins or expected future cash flows. It should also show how these effects influence investment decisions and capital allocation.

This is where corporate reporting moves from describing sustainability performance to explaining its relevance to business performance and long term value.

Data quality is becoming a reporting issue in its own right

As reporting becomes more data driven, companies also need to explain how reliable that information is. This is particularly relevant for sustainability information, where companies often depend on estimates, proxies, supplier data and information collected from different systems and business units.

High quality reporting is transparent about these limitations. It explains definitions, reporting boundaries, estimation methods and changes in methodology. More mature organisations also demonstrate how non financial data is governed and controlled.

Over time, the distinction between the governance of financial and non financial information is likely to become less pronounced. If both types of information are used for external reporting and internal decision making, users will increasingly expect comparable levels of reliability and control.

Reporting should support decisions, not simply disclosure

Ultimately, the purpose of corporate reporting is not to maximise the amount of information disclosed. It is to help users understand the company, its performance, its choices and its prospects.

Digital first reporting can make information easier to find, analyse and reuse. Structured data can improve consistency and machine readability. But these are enablers. The quality of corporate reporting depends on whether the underlying information is relevant, reliable, connected and useful for decision making.

The benchmark in the next section assesses companies from this broader perspective.

BENCHMARK RESULTS

About the benchmark 2026

To assess the maturity of digital corporate reporting among listed companies in the Netherlands, we analysed the iXBRL filings published for the 2026 reporting year.

Rather than focusing solely on compliance or the amount of information disclosed, we assessed how effectively companies explain their strategy, performance, and prospects, and how well the different elements of the corporate story connect.

In addition, we assessed the quality of the report's digital and machine-readable format. The analysis focused specifically on iXBRL quality, distinguishing between the xHTML and XBRL layers. We evaluated data comparability and readability by assessing mapping quality, tagging consistency, the appropriate use of XBRL properties, and the overall xHTML structure of the file.

Together, these areas provide a broad view of the digital corporate reporting quality of listed companies in the Netherlands in 2026. It is our ambition to learn from this first year of conducting the benchmark and to publish an improved version in 2027.

More information

If you are interested in receiving the full analysis of your company, please contact F19 Digital Reporting at info@f19.nl

Digital Reporting Benchmark 2026

Leading	●●●
Strong	●●
Developing	●

Company	Content	iXBRL	Overall
AEGON	●●●	●●●	●●●
Fagron	●●●	●●●	●●●
Shell	●●●	●●	●●●
ABN AMRO	●●●	●●	●●●
ING	●●●	●●	●●●
Vopak	●●●	●●	●●●
KPN	●●	●●●	●●●
SBM Offshore	●●	●●●	●●●
NN Group	●●	●●●	●●●
Ahold Delhaize	●●	●●	●●●
Signify	●●	●●●	●●●
CVC Capital	●●●	●●	●●
Unilever	●●●	●	●●
Air France KLM	●●	●●	●●
ASR Nederland	●●	●●	●●

Company	Content	iXBRL	Overall
Heineken	●●	●●	●●
Fugro	●●	●●	●●
RELX	●●	●●	●●
IMCD	●●	●●●	●●
BAM	●●	●●●	●●
Arcadis	●●	●●●	●●
Heijmans	●●	●●	●●
Adyen	●●	●●	●●
Corbion	●●	●●	●●
Aalberts	●●	●●	●●
HAL Trust	●	●●●	●●
ASM International	●●●	●	●●
Philips	●●●	●	●●
ASML	●●●	●	●●
Randstad	●●	●●	●●
TKH Group	●●	●●	●●
CTP	●●	●●	●●
AkzoNobel	●●	●	●●
dsm firmenich	●●	●	●
Wolters Kluwer	●●	●	●●
BESI	●●	●●	●●

Company	Content	iXBRL	Overall
Van Lanschot Kempen	●●	●●	●●
The Magnum Ice Cream Company	●●	●●	●●
Basic Fit	●	●●●	●●
AMG Critical Materials	●	●●	●●
Havas	●	●●	●●
Allfunds	●	●●	●●
Pharming	●	●●	●
Flow Traders	●	●●	●
CSG	●	●●	●
Aperam	●	●●	●
WDP	●●	●	●
Eurocommercial Properties	●●	●	●
Universal Music Group	●●	●	●
EXOR	●●	●	●
Lakefront Biotherapeutics	●	●●	●
InPost	●	●●	●

LOOKING FORWARD

Conclusion: what good corporate reporting looks like in 2026

Corporate reporting is changing on several fronts at the same time. Regulation is increasing the demand for structured and machine readable information. Sustainability is becoming more closely connected with mainstream corporate reporting. AI is changing how corporate information is found and analysed. And companies are expected to explain not only their performance, but also the strategy, choices and data behind it.

Together, these developments are changing what we should expect from a good corporate report.

The research and analysis in this report point to a broader definition of reporting quality. A good report is not simply compliant, comprehensive or well designed. It brings together good information, clear communication and the technology needed to make that information accessible and usable.

Several characteristics stand out.

Strategic and company specific

A good report explains where the company is going and why. It goes beyond general ambitions and makes strategic choices visible. The reader should be able to understand what management prioritises, how resources are allocated and how those choices affect performance and long term value creation.

Connected

Strategy, risks, opportunities, material issues, targets, KPIs, investments, governance and financial performance should not appear as separate stories. A good report makes the connections between them visible. This is particularly important for sustainability information, which increasingly needs to be connected to financial consequences and business decisions.

Based on reliable data

Reporting quality depends on data quality. Definitions, scopes and methodologies need to be clear and consistent. Estimates, proxies and uncertainties should be transparent. As non financial information becomes more important for both reporting and decision making, the systems and controls behind that information will also need to mature.

Integrated across financial and sustainability information

Putting financial and sustainability information in the same report is not enough. Good reporting shows how material sustainability risks and opportunities affect investments, costs, assets, financing and future performance. It also shows how these considerations influence management decisions and capital allocation.

Structured and digital-first

Corporate information should increasingly be created in a structured form that can be used across different reporting formats and channels. A digital first process makes it easier to produce consistent HTML, iXBRL, PDF and other outputs from the same underlying information.

Accessible to people and machines

Corporate reports now have different types of users. Investors, employees, regulators and other stakeholders still need clear writing, effective design and useful visualisation. At the same time, AI systems, data platforms and analytical tools increasingly access the same information. Good reporting needs to work for both.

Useful for decision making

Ultimately, reporting should help users understand the company and make informed decisions. More disclosure does not automatically create better reporting. Information needs to be relevant, reliable and connected. The same principle applies internally. The strongest external reporting should increasingly be based on information that management itself uses to understand performance and make decisions.

What this means in practice

These developments have consequences across the organisation.

For finance and reporting teams, corporate reporting becomes less of an annual production exercise and more of an information process. Data definitions, controls and connections need to be established before the final report is produced.

For sustainability teams, the challenge is moving beyond disclosure. Sustainability information increasingly needs to connect with strategy, risk management, financial planning and investment decisions.

For investor relations and communications teams, the audience is changing. People remain important, but corporate information is increasingly found, summarised and analysed by AI and other digital systems before users reach the report itself.

For technology and data teams, reporting becomes part of a broader information architecture. Structured data, consistent definitions and reliable source systems make it possible to use the same information across reporting, analysis and decision making.

And for management and boards, perhaps the most important change is that the quality of external reporting increasingly reflects the quality of internal information and decision making. A company cannot easily produce a truly integrated report if strategy, finance, sustainability and risk are still managed as separate information streams.

From better reports to better information

The next stage of corporate reporting is therefore not simply about replacing PDF with HTML, adding more disclosures or making reports readable by AI. It is about creating a stronger information foundation.

Digital-first technology can make corporate information easier to publish, access and analyse. Structured data can make it easier for machines to interpret. Good design can make complex information understandable for people. But these elements only create value when the underlying information is relevant, reliable and connected.

The direction of travel is towards corporate reporting that is more integrated, more structured and more closely connected to the information companies use to run their business.

The annual report will remain an important publication. But increasingly, it will be one expression of a broader corporate information system that serves people, machines and decision making throughout the year.

> ***"The future of corporate reporting is not more information, but better information: connected, reliable, structured and designed to be used."***

APPENDIX

Appendix: Benchmark criteria

The benchmark criteria are divided into two parts: the content quality of the report and the quality of the iXBRL filing. Both components were given equal weight in the final score.

Part 1: Content quality criteria

1. Strategy and value creation

We looked at whether the report clearly explains the company's strategic direction, business model and approach to long term value creation. This includes the choices and priorities behind the strategy, the external developments influencing those choices and the way financial and broader stakeholder value are connected.

2. Materiality and external environment

We assessed how well companies identify and explain the issues that matter most to their business and stakeholders. This includes material sustainability impacts, risks and opportunities, as well as broader market, regulatory and societal developments that could affect the company.

3. Financial integration

We looked at whether material sustainability issues are connected to their financial consequences. This includes effects on areas such as revenue, costs, investments, assets, financing and future performance, as well as how these considerations influence capital allocation and financial planning.

4. Targets and performance

We assessed whether strategic and sustainability ambitions are translated into clear targets and meaningful KPIs. We also looked at whether companies report progress over time, explain changes in performance and provide sufficient context to understand whether they are on track.

5. Transparency and credibility

We looked at how openly companies report both positive and negative developments. This includes explaining underperformance, uncertainties, limitations and changes in assumptions or methodology, rather than presenting only the positive side of the story.

6. Governance, data quality and assurance

We assessed whether responsibilities for reporting and performance are clearly defined and whether the information is supported by appropriate systems, processes and controls. We also considered the transparency of data quality, estimates and limitations, and the scope and level of external assurance.

7. Connectivity and integrated thinking

We looked at whether the different parts of the report form one coherent story. Material issues should connect with strategy, risks, targets, KPIs, investments, governance and financial performance. We also looked for evidence that these connections exist in management decision making, not only in the published report.

Part 2: iXBRL quality criteria

1. Currency consistency

It is important that the correct currency has been used for all the different facts within the report. Wrong currencies can lead to different valuations of certain facts which impacts machine analysis greatly.

2. Tag consistency

This means that same types of values have been tagged with the same concept throughout the years. This consistency is important for data comparability. When different concepts are used for the same types of values throughout reporting periods, it becomes very difficult to analyse trends over time.

3. Value consistency

Reports contain the values of multiple years, which means that throughout time there is an overlap of the same values between different reports. (e.g. the 2025 report contains values from both 2025 and 2024). These overlapping values should be exactly the same within the different reports, because if they differ, it becomes unclear which value is correct and which one is false.

5. Precision

Within XBRL validation it is possible to set a rounding margin. This is important to prevent false positive calculation errors. It is possible however to set this rounding margin so high, that false negatives can occur, which influences the quality of the tagged values. A high quality XBRL file contains the proper rounding margins per tagged value.

6. Sign consistency

Signs can be used to mark a tagged value as a negative value. In XBRL, however, most concepts already carry a debit/credit property, which defines if the value should be interpreted as positive or negative. Adding a negative sign in most cases means that an already negative value is marked as negative again, resulting in a double negative, which affects machine analysis.

6. Validation errors

XBRL Taxonomies contain validation rules. Any reporting package needs to be compliant against these validation rules. When a report triggers validation errors, there are likely either technical or content mistakes within the report, which affects machine analysis.

7. HTML quality

A report can contain a lot of different types of html styling to ensure maximum human readability. Machines however look at the actual html tags being used within the report. Most html tags contain semantic value that the machine can use as context to better understand the context. The more of these semantic tags are used, the higher the machine readable quality of the file.

8. Extension and anchoring quality

Extensions are necessary to ensure the proper data accuracy of values and anchoring ensures the possibility for data comparability. It is important that extensions are only used when absolutely necessary and the anchoring needs to be correct to prevent any misinterpretation of the values meaning.

9. Tagging quality

It is important that values are tagged to the right concept, so that the machine interprets a value exactly the same as a human would do. Tagging to a wrong concept greatly affects the difference in interpretation between a human reader and a machine. It also affects comparability between different reports.

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