

XBRL <<<<<<<

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What Is Inline-XBRL?

Most IMA® members have heard of XBRL (eXtensible Business Reporting Language), a markup computer language that's based on XML (Extensible Markup Language). This means that numbers can be marked up or "tagged" so computers can "understand" the tagged information.

Fewer may have heard of Inline-XBRL (iXBRL). In essence, Inline-XBRL is a standard that combines a Web page and embedded XBRL tags. The author of an XBRL document has control over the layout and formatting and can present the document like a traditional paper-based report or an interactive website, including the use of **bold** and *italics*, as well as the order and alignment of facts in a table. Additionally, an ordinary XBRL instance document can be extracted from an iXBRL document for processing by legacy XBRL solutions.

In contrast, a traditional XBRL document needs to be "read" by the computer and converted to a human-viewable format. These standard rendering solutions often fall short because they are largely unable to replicate the normal look and feel of printed financial statements. Most rendering

solutions struggle when preparers need to extend the published taxonomies to include facts, such as fuel usage in the airline industry, that weren't predefined by creating a company-specific Extension Taxonomy.

This ability for the author to control the presentation of the report makes the data far more readable for you and me and provides rich data that computers can consume natively. Figure 1 illustrates the difference between a computer rendering of XBRL data and the formatting applied by the author of the reports in iXBRL.

In traditional XBRL, all information presented needs to be tagged. In iXBRL, a preparer tags only those facts that are required, such as the specific information required for a tax return, leaving other facts untagged but still visible in the report. iXBRL documents can also include unstructured data, such as a picture of the chairman of the board next to the Chairman's Statement, a chart or graph to support a table of numbers, and text sections of the report that aren't tagged, such as a glossary.

XBRL taxonomies can include internal checks and business rules such as Calcula-

tion Linkbases (relationships between files) and Formula Linkbases to validate the internal consistency and integrity of the data. Unfortunately, these internal checks break down where only a subset of facts is tagged within an Inline-XBRL document. To understand this, imagine a table of numbers with a total row at the foot. To validate that the totals are correct, the software must see all of the values in the table as tagged data.

Illustrating the use of iXBRL in the U.K., Her Majesty's Revenue and Customs (HMRC) were the first adopters of iXBRL. They identified a list of data points (concepts) that they needed for their purposes—known as the Minimum Tagging Set. Filers are currently required to file their statutory tax filings in iXBRL, but they tag only those facts that also appear in this reduced set wherever they might appear in the report. The final iXBRL document is readable online by filers who are used to paper-based statements. It includes all of the supporting tagged data that they use for their filing.

One of the advantages of iXBRL over traditional XBRL comes from maintaining the document-centric approach that

Figure 1

A. <snippet of XBRL code>

```
<abc:Revenue id="1" decimals="0"
contextRef="y2012"
unitRef="EUR">1000</abc:Revenue>

<abc:CostOfSales id="2" decimals="0"
contextRef="y2012"
unitRef="EUR">800</abc:CostOfSales>

<abc:GrossProfitLoss id="3" decimals="0"
contextRef="y2012"
unitRef="EUR">200</abc:GrossProfit>
```

XBRL instances only contain structured data that must be rendered for human readers to consume.

B. <XBRL rendered>

	01/01/2012–31/12/2012
Revenue	€1,000
Cost of Sales	€-800
Gross Profit (Loss)	€200

The layout and presentation of rendered XBRL data is controlled by the tool used by the end user of the data rather than by the author of the data.

C. <iXBRL>

**Income Statement
For the 12 months ending 31 Dec 2012**

	2012	2011
	€	€
Revenue	1,000	1,000
Cost of Sales	(800)	(800)
Gross Profit	200	200

Presented as the author of the iXBRL document intended. In the example above, only 2012 values are tagged.

authors of reports are used to, with one key advantage. Analyzing and comparing data in paper-based and PDF-based reports often requires rekeying data, but desktop solutions for the analysis of iXBRL documents eliminate the need for rekeying, just as XBRL does. If required by end users of the report, unstructured or untagged facts within an Inline-XBRL document can be read as structured data by adding additional tags to this data.

Much like copying and pasting from a Web page, end users can copy and paste from an iXBRL document and preserve the layout and formatting of a table of data they blocked. This includes use of single lines and double lines to identify totals, alignment of numbers, and indentation of subheadings. Unlike copying and pasting from a Web page, software tools that can import data from an iXBRL document can also use the embedded

XBRL tags, for example, to understand that “40” as printed is really €40,000 related to Cost of Sales.

The visual layout and presentation within an iXBRL document isn’t entirely bound by or validated against the XBRL tags. For example, visually you can read the tax report’s line-item description “Gross Revenue” in the Web browser presentation view, but the underlying XBRL tag could represent “Sales Revenue” in the taxonomy. Because iXBRL natively presents a view of the data, preparers don’t need to review the iXBRL rendering and compare it to the Web browser presentation view.

The advantages of structured data are becoming clearer and clearer since we all work in a world where most financial reports are still paper-based. Both traditional XBRL and iXBRL provide the major advantage of structuring and tagging

the data. Recognizing that financial reports aren’t just analyzed by computers, but also by you and me, may give an edge to iXBRL over traditional XBRL. **SF**

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