Reporting to Machines

Diffusion and adoption of XBRL among Austrian publicly listed companies

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Table of Contents

- Financial Reporting
  - Status Quo & Challenges
- XBRL – eXtended Business Reporting Language
- Study on XBRL diffusion and adoption
  - Sample
  - Results
- Conclusion, Limitations and Outlook
Financial Reporting
Status Quo & Challenges

Investors and regulators in focus

Heterogeneity of the audience is neglected (i.e. employees, analysts or data providers).

Standardized annual reports – “one size fits all”

No interactive data! Web-based communication of financials is an extension of print documents as pdf or html.
XBRL – eXtended Business Reporting Language

- XML scripting language (XBRL Consortium - [https://www.xbrl.org/](https://www.xbrl.org/))

- Represents data in a **standardized, machine processable** form, thus allowing maximum flexibility in the **reuse** and **contextualization** (Graning et al, 2011)

- Intended for **modelling**, **exchanging**, and automatically **processing** business and financial **information** (Garcia & Gil, 2010: 103)

- **Application Areas**: Accounting, Internal Reporting, External Reporting

- **Users**: Regulators, Companies, Governments, Data Providers, Analysts, Investors, Accountants, Developers


XBRL – eXtended Business Reporting Language

International Accounting Standards Committee Foundation

IFRS - General Purpose Taxonomy
2006 Final


http://apps.indigotools.com/IR/IAC/?Ticker=CRM&Exchange=NYSE

http://www.virtuaresearch.com/
XBRL – Benefits & Pitfalls

**Benefits**

- **Interoperability**
  - a universally accepted information sharing tool.
  - open standard – no vendor lock-in

- **Flexibility**
  - *contextualisation*: enriching information
  - *customisation*: targeted communication
  - *automation*: cost reduction in data processing

- **Persistence**
  - transparency, validation, and reusability.

**Pitfalls**

- **Complexity**
  - customization increases technical complexity
  - productivity paradox

- **Security**
  - facilitates near real-time disclosure.
  - increases the potential for error.
  - may increase information abuse.
**XBRL – Worldwide View**

**Mandatory:**

- **Brazil** - SICONFI - Public Sector Account. & Fiscal Inf. System
- **Belgium** - NBB Annual Financial Statement
- **Chile** - SVS Listed Company Filing
- **Columbia** - Financial Supervision & Business Registrar
- **Denmark** - Danish Business Authority
- **EU** - European Banking Authority COREP/FINREP
- **Germany** - German E-Bilanz
- **Indonesia** - Banking Regulatory Reporting System
- **Japan** - Financial Services Agency Next Generation EDINET
- **Mexico** - Mexican Securities Regulation
- **Panama** - Panama Banking Supervision
- **Peru** - Peru Superintendency of Securities (VPS)
- **Spain** - Spanish Business Register
- **UAE** - ESCA Securities Filings
- **USA** - SEC Interactive Data & FFIEC Call Reports

**Voluntary (Europe):**

Austria, Czech Rep., France, Greece, Ireland, Italy, Luxembourg, Norway, Poland, Portugal, Sweden, Turkey

Sources:
- [https://www.xbrl.org/the-consortium/about/jurisdictions/](https://www.xbrl.org/the-consortium/about/jurisdictions/)
Study on XBRL diffusion and adoption
Population and Methodology

Austrian listed companies
Equity Market

- Prime Market 68% [39]
- Standard Market 16% [9]
- Mid Market 16% [9]

25 evaluable responses
37 total responses
57 companies
Online questionnaire for 2 weeks (Nov. 2015)

Source: http://en.wienerborse.at/marketplace_products/segmentation/
Study on XBRL diffusion and adoption
Sample (N=25)

Market segmentation
- 24% [7] Prime Market
- 76% [18] Mid & Standard Market

Respondents
- Investor Relations: 18
- Controlling: 3
- Misc.: 2
- Public Relations: 1
- Executive Board: 1

Industries
- Industrial Goods and Services: 8
- Basic Industries: 6
- Financials: 3
- Consumer Products: 3
- Technology and Telecom: 2
- Misc.: 1
- Utilities: 1
- Consumer Services: 1
- Health Care: 0

Management Level
- Middle: 9
- Top: 7
- Lower: 4
- Staff section: 3
- Misc.: 2
Role of Financial Reporting in the companies (N=25)

For 68% of all companies, Financial Reporting plays a crucial role in the corporate communication, and goes far beyond the fulfillment of legal requirements.

FR is important not only in the communication to investors and regulators, but also to other stakeholders affected by the financial prosperity of a company.
Trends in Financial Reporting (N=25)

- The need for financial information will increase: 7 (fully agree), 12 (somewhat agree), 6 (disagree)
- The reporting frequency will increase: 2 (fully agree), 6 (somewhat agree), 11 (rather disagree), 6 (disagree)
- FR requires new forms of presentation: 5 (fully agree), 14 (somewhat agree), 5 (rather disagree), 1 (disagree)
- FR requires new forms of narration: 9 (fully agree), 9 (somewhat agree), 5 (rather disagree), 2 (disagree)
- FR will be more target group-oriented: 7 (fully agree), 14 (somewhat agree), 4 (disagree)
- Technical standardisation will increase: 9 (fully agree), 14 (somewhat agree), 2 (disagree)

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Future relevance of technical reporting standards (N=25)

88% estimate the relevance of technical reporting standards high or very high.
Challenges of the implementation of technical reporting standards (N=25)

- Education and training for staff in charge: 22
- Adjustment of existing workflows and reporting conventions: 22
- Data safety and data security: 20
- Inestimable follow-up costs: 9
- Development of a new financial data policy: 9
- Missing IT expertise: 5

The two main hurdles seem to be related to staff and processes.

The technical challenge concerns the **data safety** (volatility, corruption) and **data security** (accessibility, reliability).
Do you know XBRL?

No 68% [17]  
Yes 32% [8]

What is your level of expertise?

- middle [1]
- low [6]
- non-existent [1]

The gap between the high technical future standards and the poor preparedness of Austrian listed companies emphasizes the chance that companies might benefit from XBRL at many different levels, but are in danger to miss, if not reacting.

None of the respondents who knows XBRL describes himself as an expert.
Adoption of XBRL (N=8)

To what extent has XBRL been implemented in your company?

- We already use XBRL: 12% [1]
- We plan to adopt XBRL within the next 5 years: 25% [2]
- We won’t adopt XBRL: 13% [1]
- We have no plans to adopt XBRL for the time being: 50% [4]

Only 12% use the new technical standard.
25% of the companies planing to adopt XBRL.
The vast majority of 63% is indifferent to the topic.
Advantages of XBRL (N=8)

- Reusability of financial data: 2 known and adopted, 1 known, but not adopted
- Comparability of financial data: 3 known and adopted, 1 known, but not adopted
- Acceleration of data processing and reporting processes: 0 known and adopted, 1 known, but not adopted
- Higher flexibility and analytical capabilities: 1 known and adopted, 2 known, but not adopted
- Improved findability of data: 0 known and adopted, 1 known, but not adopted
- Improved data portability between data systems: 1 known and adopted, 1 known, but not adopted
- Improved cross-system integrity of data: 0 known and adopted, 0 known, but not adopted
- Trustworthiness of the data source: 0 known and adopted, 0 known, but not adopted
- Decrease of reporting costs: 2 known and adopted, 0 known, but not adopted
- Decrease of processing errors: 1 known and adopted, 2 known, but not adopted
- Misc.: 0 known and adopted, 1 known, but not adopted

Reusability and comparability of financial data, higher flexibility and analytical capabilities, and decrease of processing errors are seen as the main advantages of XBRL.
The main disadvantages seen by the respondents are the occurring costs for the XBRL software and its implementation.

The current technical development of XBRL which is accompanied by volatility of the software or the complexity of XBRL are not considered as a disadvantage at all.
Conclusion, Limitations and Outlook

- Studies in other European countries show that XBRL is promoted and adopted by governmental institutions / banking sector mainly.
- Privat sector lies behind with respect to the level of adoption of XBRL, presumably due to the missing internal / external incentive.
- There is a considerable awareness of the need and impact of new information technologies in the context of financial communication.
- The estimated relevance is contrary to the level of the knowledge, level of expertise, diffusion and adoption of new technical standards (XBRL) among Austrian listed companies.
- Currently, the disadvantages related to the implementation of XBRL are stronger perceived than the benefits which are not visible immediately.

→ Limitations:
  - Small sample – purely descriptive analysis

→ Future work:
  - Extend survey to other industries / stakeholders (govt, banks, analysts)
  - Qualify results – expert interviews


Escobar-Rodriguez, Tomas; Gago-Rodriguez, Susana (2012). "We were the first to support a major innovation". Research into the motivations of Spanish pioneers in XBRL. Revista de Contabilidad, vol. 15/1, 2012, pp. 91-108. http://www.redalyc.org/articulo.oa?id=359733642003


Thank you for your attention, comments and feedback. We will very much appreciate it!
Reasons for the adoption of XBRL (N=3)

**Reasons for the implementation of XBRL**

- XBRL was part of new reporting routines: 1
- XBRL came in the course of a technological upgrade: 1
- We deliberately adopted XBRL: 0
- Misc.: 2

**Reasons against the implementation of XBRL**

- XBRL is no issue: 5
- Implementation costs: 1
- Misc.: 0
- Security issues: 0
- Missing expertise: 0
- We use other standards: 0
- No need for XBRL: 0

If XBRL was adopted, then within adjustments of reporting practices or technical upgrades. For the majority, XBRL doesn’t seem to be an issue at all.