XBRL-CET and BEDES

Buildings University Innovators And Leaders Development (BUILD) - 2015 FOA-0001167

Page 1 of 3

Appendix B: Examples of Standards Implementations with Scientific and Technical Merit

Following are examples of various standards implementations that demonstrate scientific and technical merit, particularly in enhancing the seamless exchange and processing of data between constituents using a range of highly diverse commercial software applications:

- Process Convergence (Small and Medium Institutions):
 - MicroFinance Exchange XBRL Case Study¹ The MicroFinance Exchange ("MIX") delivers data services, analysis, research and business information on the institutions that provide financial services to the world's poor. They used XBRL to standardize data and enhance their analytical processes and capabilities lowering the value of lending values thereby reaching a broader market audience. The findings of their implementation included:
 - o XBRL can be implemented quickly and easily by non-technical users;
 - XBRL helps to organize these data across countries, legal forms and accounting standards, while still providing sufficient context to maintain key distinctions; and
 - O Data-driven approaches and open reporting frameworks present challenges, but deserve consideration. The use of a data-driven model allows us to adapt to changes in the global microfinance sector and captures core benefits of XBRL. Adapting this framework can be complicated, but reveals useful information for comparisons over time and across countries.
 - MACPA Case Study² The Maryland Association of CPAs ("MACPA") has used XBRL to populate its financial information and key performance indicator reports. Their project provides a blueprint of sorts for how private companies and nonprofit organizations can take advantage of XBRL's power.
 - "Our ability to take this in-house, implement it, and see benefits fairly quickly at a pretty low cost made us realize that XBRL is real and can really help," Thomas Hood said, and
 - o "The key to our success has been to start our mapping using XBRL's Global Ledger taxonomy—or XBRL GL, as it is called. This allowed us to easily connect the data from our Association Management System to our General Ledger accounting system."

С

- Process Convergence (Large Institutions):
 - FFIEC/FDIC Central Data Repository Program convergence of Call Report compliance across banking regulators was implemented through outreach to a broad range of enabling vendors facilitating program adoption within a few months for all federally insured banks in the U.S.

¹ http://www.themix.org/sites/default/files/MIX%20XBRL%20Case%20Study%2003.03.10.pdf

² http://www.journalofaccountancy.com/Issues/2012/Jun/MACPA-XBRL-project.htm

XBRL-CET and BEDES

Buildings University Innovators And Leaders Development (BUILD) - 2015 FOA-0001167

Page 2 of 3

- Dutch Standard Business Reporting ("SBR") convergence of legal entity compliance across the broad range of federal, regional and local regulatory agencies in the Netherlands provides a decrease in compliance burden. The Dutch SBR program³ is considered to be a compliance best practice and is a useful example of the processing standardization and convergence general benefit of supply chain standardization.
- Australian Standard Business Reporting similar to the Dutch SBR program the Treasurer has implemented an Australian SBR program⁴ to reduce compliance burden across all legal entities in the country.

• More Timely Reusable Information:

- SEC Interactive Data Program The exposure via RSS feed of structured data company filings enhances the reusability of these disclosures and provides more timely reusable information for stakeholder analysis. Further, the structured data is freely available.
- FFIEC/FDIC Central Data Repository The exposure of Call Report data for most U.S. banks is available via Web Service at the FFIEC Central Data Repository's Public Data Distribution web site⁵. Further, the structured data is freely available.

• Enhanced Compliance Processes:

International Adoption - Examples of international market adoption of the XBRL standard are included on the consortium web site here. Adoption methods vary; however, a common implementation theme is the enhancement of compliance processes and the reduction of compliance burden through the migration from unstructured to structured disclosures/data.

• Broad Semantic Standards Support:

- There are a range of semantic standards expressed in XBRL in markets around the world that are included in Appendix A: "Examples of Semantic Standards Articulated in XBRL" including financial, non-financial and subject independent semantics.
- The XBRL International Global Ledger Framework Taxonomy⁷ is the subject-matter independent, holistic, generic and standardized central data hub for representing the files found globally in ERP, operational, business and accounting systems, quantitative and qualitative, enabling the expression of a broad range of financial, non-financial and other data elements in a highly relational context. It can be used to articulate a broad range of accounting ledgers, budgetary data and other concepts commonly stored in relational tables.

³ http://www.sbr-nl.nl/english/

⁴ http://www.sbr.gov.au/

⁵ <u>https://cdr.ffiec.gov/public/</u>

⁶ https://www.xbrl.org/the-standard/why/who-else-uses-xbrl/

⁷ https://www.xbrl.org/the-consortium/get-involved/gl/

XBRL-CET and BEDES Buildings University Innovators And Leaders Development (BUILD) - 2015 FOA-0001167

Page 3 of 3

XBRL GL can be used to represent information from first transaction or business event through end reporting. Using the standardized semantics/"common data elements" laid out in XBRL GL to represent the content of the US Standardized General Ledger (USSGL) can facilitate communicating the accounts and definitions, account transactions and cross-walks, which will simplify agencies understanding changes expressed in USSGL versions. The same definitions can then be used as agencies report their details, such as procurement, grants, and allotments. As an holistic and generic representation of ERP systems, the same definitions can be used for the more detailed information found in each organization's sub-systems, facilitating not only the consolidation process, but data integration, data migration and data archival. Leveraging the standard terminology of XBRL GL rather than creating explicit, one-to-one mappings between concepts and data fields promotes reuse of program code and simplifies the process of moving into new areas of standardization.