Continuous Accounting
XBRL Representation

Connecting accounting, reporting, auditing, and analysis using a best practices-based global standard method implemented using XBRL and SBRM

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"You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete." *R. Buckminster Fuller*[1]

Executive summary:

- This document supplements the Common Elements of Financial Statement XBRL representation by adding financial report line items, a roll forward of each balance sheet line item, type-subtype associations.

[1] Good Reads, https://www.goodreads.com/quotes/13119-you-never-change-things-by-fighting-the-existing-reality-to

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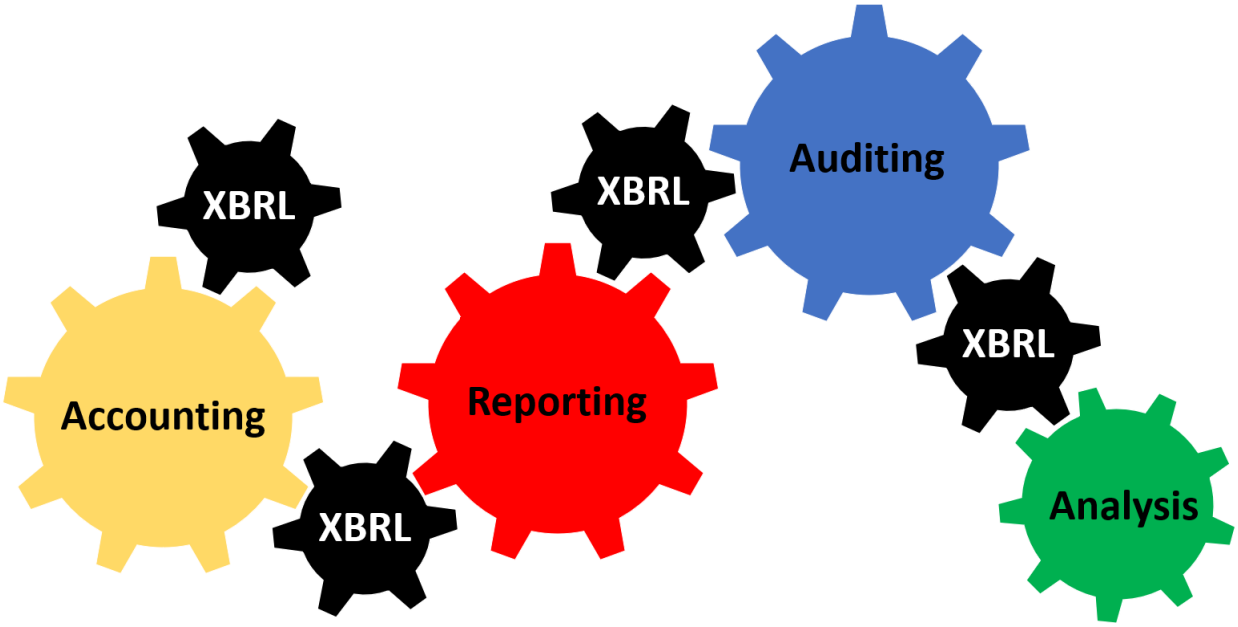
Before you work through this document, please read the SFAC 6 representation.

You can download a zip file that contains all of the XBRL examples or the human-readable representation of the example. The home page for this information can be found here. Files can be downloaded from here:

http://xbrlsite.azurewebsites.net/2020/master/continuous-accounting/

Continuous Accounting

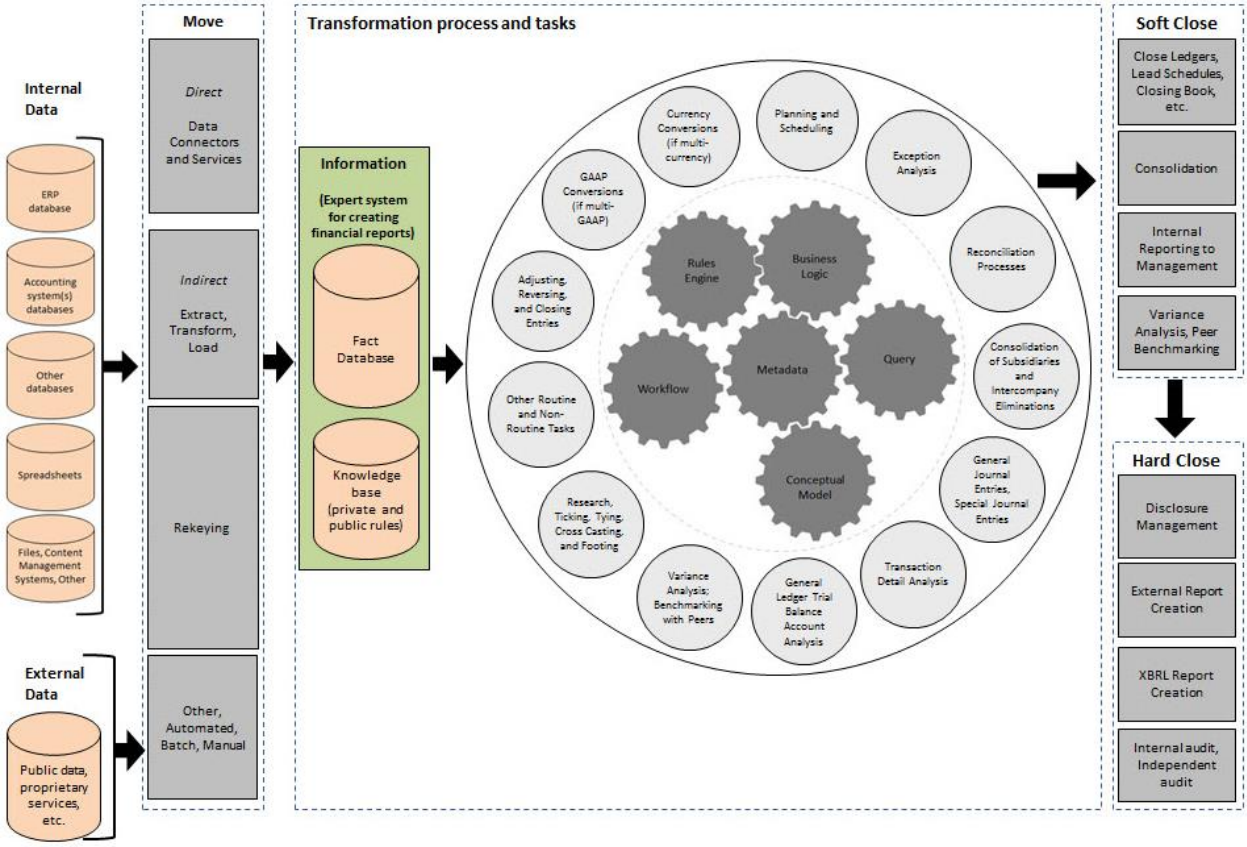
Coming soon! For more information, see this blog post, *Connecting Accounting, Reporting, Auditing, and Analysis*[2].



[2] Charles Hoffman, CPA, *Connecting Accounting, Reporting, Auditing, and Analysis*, http://xbrl.squarespace.com/journal/2020/5/29/connecting-accounting-reporting-auditing-and-analysis.html

Financial Report Creation Tasks and Processes

The following graphic depicts the tasks and processes that are involved in the creation of an external and internal financial report:



Overview of Working Proof of Concept

This summary narrative provides an overview of this working proof of concept. Working through this narrative and visiting the links will help you understand this working proof of concept. (The best way to use this is to right click on a link, copy the link, then paste the link into a browser window to view the information provided by the link.)

1. Take a set of journal entries. Here they are in machine readable XBRL Global Ledger format and Plain Text Accounting format. Here is the same information in human readable Excel and PDF.
2. Import the journal entries into an accounting system such as Ledger, hledger, my Microsoft Access Database, or any other accounting system for that matter. You can then do things with that information.

3. Within the accounting system you can generate things like a trial balance of accounts (status of each account), a roll forward for each account (impact of transactions on account), filter information using the information provided in the journal entries.
4. But, the accounts are a flat list.
5. You can get a trial balance of accounts. You can get a summary of the changes grouped by the type of change. You can put those two together and get a roll forward of each and every balance sheet account: Cash and cash equivalents; Receivables; Inventories; PPE; Accounts payable; Long-term debt; Retained earnings.
6. However, if you use information such as that provide in an XBRL taxonomy, about the model of a report; you can both organize the accounts into a hierarchy and control the process of creating such a hierarchy. Here is that XBRL taxonomy schema in machine readable form.
7. Using only the journal entries and the XBRL taxonomy for the report you can generate a machine readable report; here is that XBRL instance. (Less than 100 lines of code were used to generate the information that makes up the XBRL instance, mainly a bunch of SQL INSERT statements.)
8. A software application can turn that XBRL instance into a human readable report. Here is that same report formatted as Inline XBRL. The report could be static like a traditional financial report or dynamic (think pivot table).
9. If you don't like the auto-generated human readable report you can do a little more work to specify formatting; then you can generate a pixel perfect human readable rendering that is also machine readable. You can also generate PDF (that is from another example) if you desire using a similar process. (I don't have an example, but you could also generate a Microsoft Word document in this manner.)
10. Both the Inline XBRL and the Raw XBRL enable information to be reliably extracted from the reports for down stream processes such as analysis of the information.
11. This entire process is **controlled and monitored** by machine readable rules that will point out any mistakes in the information to the extent that machine-readable rules exist. Mathematical computations are monitored by rules, rules, and more rules. Structural rules monitor the information structure. Disclosure rules (i.e. reporting checklist) monitor what is disclosed as contrast to what is required. The more machine-readable rules, the more work can be automated.
12. Quality control checks and third-party checks can be done using the machine-readable journal entries and reports to automate a portion of those processes.
13. Professional accountants can focus on value-add activities such as financial analysis and less on the gruesome, grueling, monotonous, repetitive tasks.

Investing in the Cost of Prevention

Martin Doyle differentiates prevention cost, correction cost, and failure cost in the article *WHY DATA SHOULD BE A BUSINESS ASSET – THE 1-10-100 RULE*[3]. Essentially this describes what George Labovitz and Yu Sang Chang came up with in 1992 and is widely used as a tool to describe efficiency. In summary:

- **$1**: Verifying and correcting information at the start is the least expensive way to make sure your information is clean and accurate. This is **prevention cost**.
- **$10**: Identifying and cleaning information after the fact is time consuming and resource intensive. This is **correction cost**.
- **$100**: Bad information may flow between sources, creating a waste of time and resources. This is **failure** cost.

In his article *Bad Data Costs the U.S. $3 Trillion Per Year*[4], Thomas Redman explains how "the hidden data factory" is costing U.S. businesses an astonishing $3 trillion a year.

[3] Martin Doyle, *WHY DATA SHOULD BE A BUSINESS ASSET – THE 1-10-100 RULE*, https://www.dqglobal.com/2014/07/08/why-data-should-be-a-business-asset/
[4] Thomas C. Redman, Harvard Business Review, *Bad Data Costs the U.S. $3 Trillion Per Year*, https://hbr.org/2016/09/bad-data-costs-the-u-s-3-trillion-per-year