

1. Terms

The purpose of this section is to explain the notion of terms and how terms are used to in XBRL-based digital financial reports.

1.1. Introduction to Terms

Terms (a.k.a. report elements) are statements that define ideas, notions, or phenomenon used by the logical theory such as the terms “assets”, “liabilities”, and “equity” which are used by the accounting equation.

A term is a type of statement that specifies the existence of a primitive (a.k.a. simple, atomic) or functional (a.k.a. complex, composite) idea that is used within a universe of discourse. Terms are generally nouns. (Tbox)

There are seven categories of terms: Network, Hypercube, Dimension, Member, Line Item, Concept, and Abstract.

There are two types of terms: simple terms and functional terms.

1.2. Term Categories

The following is a description of the different categories of terms which can exist within an XBRL-based digital financial report:

- **Network:** A Network is a technical artifact that really has no meaning by itself because those creating XBRL-based digital financial reports use networks in different ways. Sometimes networks are called groups.
- **Hypercube:** (a.k.a. Table) A Hypercube simply groups some set of Dimensions, Members, Line Items, Abstracts, and Concepts together to form a structure. Because Hypercubes are used inconsistently, they really have no meaning by themselves. However, they can be given meaning and referred to by their name.
- **Dimension:** (a.k.a. Axis) A Dimension is one approach to representing a characteristic or aspect of a fact. The Entity core aspect and period core aspect¹ are also in essence dimensions. A dimension is used to represent what the SBRM calls an aspect.
- **Member:** A Member is a value of a Dimension.
- **Line Items:** (a.k.a. primary item) A Line Items is essentially a special type of dimension.
- **Abstract:** An Abstract is simply used to organize Concepts and other abstracts within a set of Line Items; they provide no real meaning.
- **Concept:** A Concept is essentially a special type of Member that is used as part of a set of Line Items. A Concept is special in that it can be used to represent a Fact Value. Therefore, Concepts have data types.

¹ XBRL International, *Open Information Model 1.0*, <http://www.xbrl.org/Specification/oim/CR-2017-05-02/oim-CR-2017-05-02.html>

1.3. Simple terms

Simple terms (a.k.a. primitive, atomic) are used to describe the most basic ideas, notions, phenomenon that cannot be broken down further. For example, “Assets”, “Liabilities”, “Equity”, “Revenues”, “Expenses”, and “Net Income (Loss)” are simple terms.

Dimensions, members, line items, concepts, and abstracts are simple terms.

Every simple term has a name, a standard label, perhaps other labels, and perhaps references to authoritative literature or nonauthoritative commentary that describes the simple term.

Concepts also have a data type, a period type, and may have a balance type to indicate if the concept is a debit or a credit.

1.4. Functional terms

Functional terms (a.k.a. complex, composite) are used to describe sets of other terms that are made up of simple terms or other functional terms and represent complex ideas, notions, phenomenon that can be broken down. For example, “Balance Sheet” is a functional term that contains simple terms “Assets”, “Liabilities”, “Equity”; and “Income Statement” is a functional term containing the simple terms “Revenues”, “Expenses”, and “Net Income (Loss)”.

Networks and Hypercubes are functional terms.

1.5. Basic Example of Terms

Below you see a very basic example of the use of terms. The structure itself is a functional term. The fact values are described by terms that describe the aspects of two facts. You see three core aspects: Reporting Entity Aspect, Calendar Period Aspect, and Concept Aspect. The concepts “Revenues” and “Net income” have been used to differentiate the fact values. The dimension “Legal Entity Aspect” has been defined as have the member “Consolidated entity”.

Reporting Entity Aspect	Legal Entity Aspect	Calendar Period Aspect	Concept Aspect	Fact Value
ABC Company	Consolidated entity	Jan 1, 2019 to Dec 31, 2019	Revenues	2,000
ABC Company	Consolidated entity	Jan 1, 2019 to Dec 31, 2019	Net income	1,000

1.6. Example User Interface for Creating Terms

The following is an example interface for using terms (a.k.a. report elements). Note that the interface is dynamic. The form changes based on the “Category” of the term (a.k.a. report element).

This screen shot below shows what the form looks like when you enter a term that is of the category Concept:

Report Elements

ID: 4
Prefix: proof
Name: Assets
Standard Label: Assets

Category: Concept
Data Type: Monetary
Period Type: Instant
Balance Type: Debit

Add Find Delete Close

Record: 1 of 1 Filtered Search

This version of the form is used to enter a Hypercube:

Report Elements

ID: 18
Prefix: proof
Name: ChangesInEquityHypercube
Standard Label: Changes in Equity [Hypercube]

Category: Hypercube

Add Find Delete Close

Record: 17 of 57 No Filter Search

Note two things. First, Hypercubes don't have the properties "Data type", "Period Type" or "Balance Type" so they are not shown for the hypercube, only for the Concept which does have those properties.

Second, you are not dealing with ugly and hard to understand technical information such as "xbrli:monetaryItemType" (which means "Monetary"), substitution group, abstract, and so forth.

The XBRL technical syntax is being generated behind the scenes when you need it. The user of the software application works not with XBRL terminology that they don't understand; rather they work with business report terminology and artifacts which they do understand.

1.7. Power of Agreement

It is only through deliberate, methodical, rigorous and conscious collaboration, cooperation and coordination by the participants of the financial reporting supply chain that XBRL-based digital financial reporting will work safely, reliably, predictably, repeatedly, effectively, and efficiently. This objective will not be achieved by accident.

Consider the definitions of arbitrary and standard:

- **Arbitrary:** based on random choice or personal whim, rather than any reason or system; depending on individual discretion (as of a judge) and not fixed by law
- **Standard:** used or accepted as normal; something established by authority, custom, convention, law, regulation, or general consent as a model or example

US GAAP contains many, many standard terms. For example, Equity, Assets, Liabilities, etc. The US GAAP XBRL Taxonomy names these terms, providing a standard. A common obstacle to creating a working dictionary of concepts and relations between those concepts is disagreement as to those definition and relations. Agreement by all stakeholders through deliberate, methodical, rigorous and conscious collaboration, cooperation, and coordination can help overcome this obstacle.

1.8. Differentiating a Notion/Idea/Phenomenon, a Name, and a Preferred label

It is important to understand and properly differentiate between the following three things:

- **Notion, idea, phenomenon:** something that exists in reality that needs to be represented
- **Name:** helps computers uniquely identify some notion/idea/phenomenon that is a representation of reality within some machine-readable conceptual model
- **Preferred label:** alternative ways used to refer to name

Confusing these three things can cause problems when trying to create a conceptual model. Two things that are genuinely different should have two different names. However, if one thing is given two names when the one thing really is two different preferred labels problems can occur.

1.9. Differentiating the Important from the Unimportant

The following terms help one understand the difference between an important nuance and an unimportant negligible difference.

- **Nuance:** a subtle but important difference in or shade of meaning, expression, or sound; a subtle but important distinction or variation

- **Subtle:** so delicate or precise as to be difficult to analyze or describe but important; hard to notice or see but important; not obvious but important
- **Negligible:** so small or unimportant as to be not worth considering; insignificant; so small or unimportant or of so little consequence as to warrant little or no attention

Business professionals can best differentiate important nuances from unimportant negligible differences. They do not do it perfectly and the only real way to make sure things are right is testing and experimentation.

Ontology-like things are about getting the salient aspects of a problem domain right. One needs to take a pragmatic view of the world because it is impossible to describe every single aspect of the real world in machine-readable form. Logical systems only need to represent the important things and serve as a “wireframe” or a “substrate” of reality. Getting bogged down in unimportant, insignificant, or inconsequential details at best serves no purpose, at worst can cause unnecessary complexity and a false sense of comfort.

1.10. Difference between a Requirement and a Policy

Sometimes things are required, other times things are a choice. Yet in other times setting some policy eliminates certain options which could have been previously considered.

- **Policy:** a course or principle of action adopted or proposed by a government, party, business, or individual; definite course or method of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions
- **Requirement:** a thing that is needed or wanted; something that is essential or that must be done
- **Choice:** an act of selecting or making a decision when faced with two or more possibilities; the act of choosing; the act of picking or deciding between two or more possibilities
- **Option:** a thing that is or may be chosen; the opportunity or ability to choose something or to choose between two or more things

Any time a business professional is presented with an alternative complexity increases because the business professional then must choose between the available alternatives. As the number of choices increases, complexity increases. Choices must be managed. Flexibility when it is not necessary is not a feature, it is a bug.

1.11. Best Practices

A **best practice** is a method or technique that has been generally accepted as superior to any other known alternatives because it produces results that are superior to those achieved by other means or because it has become a standard way of doing things.