6. Overview of Business Use Cases

The following provides an overview of the business use cases. This overview sets the perspective. The goal of the business use cases is to collect 100% of the things one would ever run across when creating a business report and showing how to express that collection of use cases appropriately in XBRL.

The business use cases tend to be financial reporting related. This is for two reasons. First, that is where the primary use of XBRL is right now and I am a CPA trying to show other CPAs how to work with XBRL. Second, I am a CPA and that is my primary area of expertise. If one understands these business use cases, one will see that they are general and cover many general business reporting use cases. Are their additional business use cases? Quite likely. This is not a problem, they simply get added to the list.

Here is a summary of the business use cases.

#	Title	Description
BUC01	Simple Hierarchy	Accounting use case. One level hierarchy. No calculation relations.
BUC02	Hierarchy	Variation of Hierarchy. Multi-level nested hierarchy.
BUC03	Simple Roll Up	Accounting use case. Computation where A + B + *n* = C. Simple roll up. No nesting of calculations.
BUC04	Nested Roll Up	Variation of Roll Up. Nesting one calculation inside another calculation.
BUC05	Inverted Roll Up	Variation of Roll Up. Multi-level nested calculations.
BUC06	Multiple Roll Ups	Variation of Roll Up. One concept calculated in more than one way forcing calculations to be separated by extended links.
BUC07	Simple Roll Forward	Accounting use case. Computation where beginning balance + changes = ending balance. Simple roll forward analysis. Also known as movement analysis.
BUC08	Complex Roll Forward	Variation of Roll Forward. Movement of more than one concept modelled using items.
BUC09	Simple Compound Fact	Accounting use case. Concepts which make up a set which must go together. This is actually another pattern with at least one more measure (dimension).
BUC10	Repeating Concept	Variation of Compound Fact. Simple compound concept which repeats.
BUC11	Multiple Periods Compound Concept	Variation of Compound Fact. Simple compound concept which has more than one period disclosed within the compound concept.
BUC12	Roll Forward in Compound Concept	Variation of Roll Forward. Variation of Compound Fact. Roll Forward within a compound concept.
BUC13	Nested Compound Concept	Variation of Compound Fact. Compound concept within another compound concept.

#	Title	Description
BUC14	Reconciliation of Balance	Accounting use case. Reconciliation of one instant to another instant. (This is NOT a roll forward as the reconciling items are instants, not durations, and the balance concepts are different concepts, not the same.)
BUC15	Text Block	Accounting use case. Many Facts modelled as a block of text.
BUC16	Restatement	Accounting use case. Restatement of income.
BUC17	Reissue Report	Accounting use case. Reissuance of an entire report.
BUC18	Reclassification	Accounting use case. Reclassification of prior balances on a report to conform to current period classifications.
BUC19	Prose	Accounting use case. Information containing multiple paragraphs, tables, lists, etc. which must appear in a particular order to be meaningful.
BUC20	General Comment	Accounting use case. Using XBRL Footnotes to express general comments. Shows the difference between using standard roles and custom roles.
BUC21	Pivot Table	Accounting use case. One concept used in a number of axis. Common for a segment breakdown. Data is similar to a pivot table. Multiple business segments.
BUC22	Reason Not Reported	Accounting use case. Explaining why a piece of information has not been reported.
BUC23	Simple Roll Forward Using Measure	Alternate technical approach to Roll Forward. Simple movement analysis modelled by Barry Smith's approach. (This is the approach the IFRS is pushing)
BUC24	Complex Roll Forward Measure	Alternate technical approach to Roll Forward. Movement of more than one concept modelled using axis.
BUC25	Escaped XHTML	Alternative technical approach to Text Block. Same as the Simple Compound Fact, but expressed as one table in HTML for better formatting control.
BUC26	Using JSON	Alternative technical approach to Text Block. Same as the Simple Compound Fact, but expressing the compound fact using the JSON syntax.
BUC27	Flow	Accounting use case. Shows the notion of flow within a business report and how the ordering or sequencing is important and can be achieved.
BUC28	Other Relations	Accounting use case. Other more complex computations not covered by Roll Up, Roll Forward, Adjustment, or Variance. Other relations, usually complex computations
BUC29	Variance	Accounting use case. Variance between actual and budgeted.

#	Title	Description
BUC30	Classes	Alternate technical approach to Roll Up. Shows the notion of class. Compare and contrast this to the Simple Roll Up.
BUC31	Add Members Without Extension	Alternate technical approach to creating Measures. Show how extension can be achieve without the need to extend an XBRL taxonomy.
BUC34	Adjustment	Accounting use case. Adjustment of a balance between two report dates. Calendar time remains constant.
BUC35	Grouped Report	Variation of Compound Fact. Fact Group which contains multiple Measures unique to the Fact Group.
BUC99	Non Financial Information	Variation of Compound Fact. Non financial information can be expressed in XBRL as well as financial information.

Are there more business use cases? Quite likely. Someone would have a hard time proving that things on the list above are not business reporting use cases. If there are other business use cases, they can simply be added. The key thing to understand is that business reporting is not random and it is not infinite. If one applies the 80/20 rule, focusing on the 80 percent is a good place to focus.

6.1. Overview of what is Provided for Each Business Use Case

The following is a summary of what is provided for each business use case:

- **Visual Example**: This is a physical rendering of what the business use case might look like on paper.
- **Meta patterns employed**: A summary of the meta patterns employed in the business use case.
- **Description**: A brief description of the important characteristics of the business use case. This provides the big picture.
- **Important characteristics and dynamics**: A summary of the important characteristics and dynamics which you should be focused on when looking at the specific business use case. This provides the intimate details.
- **Intelligent business document**: this is what a meat and potatoes rendering of the information might look like. The intension is to show and explain what the XBRL taxonomy and XBRL instance would look like in order that you will be able to construct them.

6.2. Overview of Additional Information on Web

There is additional information available on the Web for each of the business use cases. See:

http://www.xbrlsite.com/Patterns/2010-08-01/Matrix.html

- **Visualization Example**: PDF rendering of the business use case. Same as the Visual Example in this document.
- **Auto Generated Rendering**: Same as the Intelligent Business Document in this document.

- **XBRL Instance**: The XBRL instance for the business use case.
- **XBRL Taxonomy**: The XBRL taxonomy for the business use case.
- **BRM Measure Relations Info Set**: Measure Relations info set generated by an XBRL processor for the XBRL taxonomy.
- **BRM Fact Groups Info Set**: Fact Groups info set generated by an XBRL processor for the XBRL instance.
- **XBRL Formulas**: Business Rules for the business use case.
- **XBRL Formulas Validation Results**: Validation results against the business rules of this use case.
- **XBRL Calculations Validation**: Business rules for certain computations for the business use case.
- **XSLT to Render XBRL Instance**: The XSLT style sheet used to generated the PDF mentioned above.

6.3. Intention of the Business Use Cases

This document is not intended to show you how to understand the basics of XBRL, it is assumed that you already have a basic understanding. What the information is intended to provide is insights into the intimate details of what you will run across in real world situations when working with XBRL.

That said, the small, simple use cases can in fact be quite helpful in helping one grasp an understanding of the basics of using XBRL. If you are not experienced with XBRL, then your first pass through this material could be focused on the basics. But, then go through it a second or even third time in order to understand the subtleties and intimate details. That is the intent, that should be your real focus.

7. Business Use Cases

In this section we explore common business use cases of reporting. While these use cases tend to be financial reporting oriented, you should look beyond that characteristic and think more in terms of more general business use cases.

The reason financial reporting use cases are used here is that one of the primary uses of XBRL today is for financial reporting and I wanted to address the need to understand financial reporting type business use cases. Also, I am a CPA, financial reporting is my domain of understanding.

Further, look at it this way: Mathematics is used in accounting, engineering, medicine, architecture, science, and other domains. Yet mathematics is exactly the same in each domain, it is only applied solving different domain problems. This is likewise the case for the information modelling of either financial or non financial information.

Keep this information about the business use cases in the back of your mind as you explore the business use cases:

- The business use cases are made up of meta-patterns. The building blocks of each use case is one or more of the fundamental meta-patterns. The fundamental meta-patterns are: *Hierarchy*, *Roll Up*, *Roll Forward*, *Complex Relation*, *Adjustment*, and *Variance*.
- The meta-patterns are common occurrences in business reports. Any business report can be broken down to its essence which is the meta-patterns.
- The meta-patterns have a common base which is the Business Reporting Logical Model. The Business Reporting Logical Model is similar to other logical models, it's role is to make things easier to understand. For example, you are familiar with the electronic spreadsheet such as Excel. Electronic spreadsheets are made up of workbooks, worksheets, columns, rows, cells, etc. These components have relationships, a workbook is made up of worksheets; a worksheet is made up of columns and rows which intersect into cells. The purpose of such a logical model is to make things easier to relate to.
- Presenting information and defining information are two different things. If information is defined or modelled correctly, it can be presented in many different ways, based on the preferences of different users, and it still make sense. Modelling information for presentation alone locks that information into that one presentation.

There are advantages to being able to automatically exchange information between two different business systems. To make such an exchange work one needs some technical stuff (syntax), some business stuff (semantics), and some workflow stuff (processing). Weaving these together correctly (agreement) can make such automated business information exchange work well (effectively and efficiently), and therefore possible. This creates business benefits such as increased effectiveness, increased efficiency, reduced costs, etc.

Not all information can be exchanged in automated processes. Some automated processes will need to have a business person involved in the process workflow. Other information will not.

7.1. BUC01 - Simple Hierarchy

The *Simple Hierarchy* business use case shows how to model information which has no computation type relations, but have some sort of relationship.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC01-SimpleHierarchy/SimpleHierarchy_Landing.html

7.1.1. Visual Example

Sample Company
For Period Ending December 31,
(thousands of dollars, except number of employees)

	2010	2009	2008	2007	2006
Sales, Net	1,500	1,400	1,300	1,200	1,100
Income (Loss) from Continuing Operations	500	400	300	200	100
Net Income (Loss)	51	41	31	21	11
Cash Flow Provided by (used in) Operating Activities, Net	5,000	4,000	3,000	2,000	1,000
Capital Additions	1,000	650	550	450	350
Average Number of Employees	300	290	280	270	260

7.1.2. Meta-pattern(s) employed

Hierarchy

7.1.3. Description

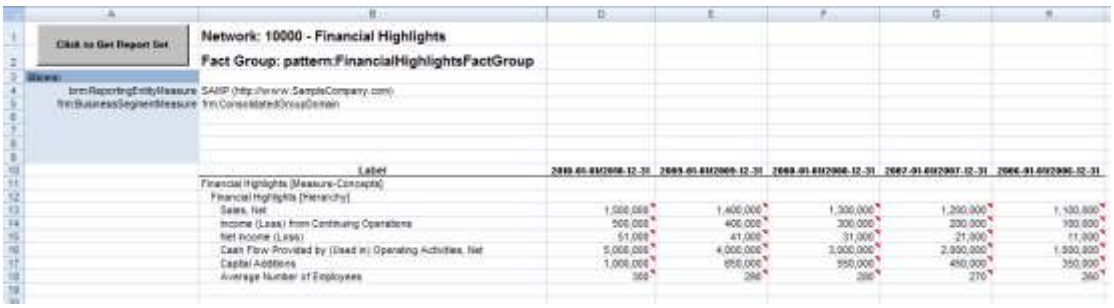
Financial highlights reported by an organization are a good example of a simple hierarchy. The key idea here is to show that pieces of information have relationships, but those relationships can be quite simple in nature.

7.1.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- This use case reports six facts for five periods, a total of 30 pieces of information.
- This use case shows all numeric information, although there are two types of numeric information: monetary and pure values.
- The concepts are for the most part unrelated, coming from different parts of a financial statement. By unrelated we mean no numeric relationship or computation and no deep hierarchy, the information is simply a flat list of facts which are reported.

7.1.5. Extraction

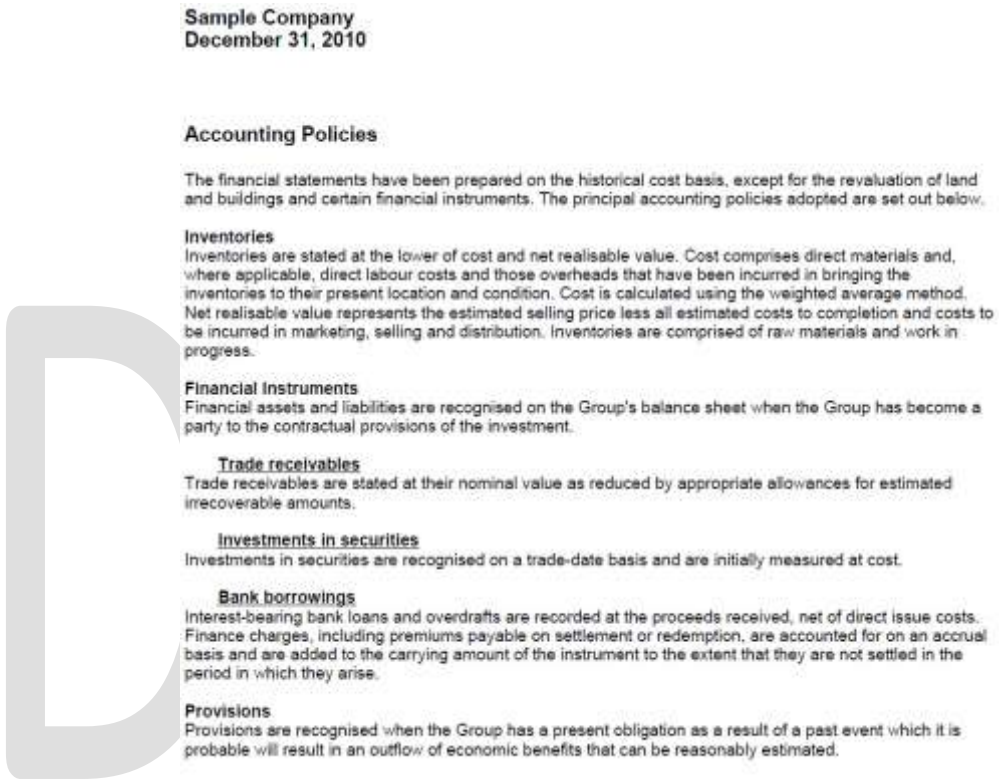


7.2. BUC02 – Hierarchy

The *Hierarchy* business use case shows how to model what is commonly referred to as a hierarchy or a tree of information. Think about how the outline view of a Microsoft Word document.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC02-Hierarchy/Hierarchy_Landing.html

7.2.1. Visual Example



Sample Company
December 31, 2010

Accounting Policies

The financial statements have been prepared on the historical cost basis, except for the revaluation of land and buildings and certain financial instruments. The principal accounting policies adopted are set out below.

Inventories
Inventories are stated at the lower of cost and net realisable value. Cost comprises direct materials and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their present location and condition. Cost is calculated using the weighted average method. Net realisable value represents the estimated selling price less all estimated costs to completion and costs to be incurred in marketing, selling and distribution. Inventories are comprised of raw materials and work in progress.

Financial Instruments
Financial assets and liabilities are recognised on the Group's balance sheet when the Group has become a party to the contractual provisions of the investment.

Trade receivables
Trade receivables are stated at their nominal value as reduced by appropriate allowances for estimated irrecoverable amounts.

Investments in securities
Investments in securities are recognised on a trade-date basis and are initially measured at cost.

Bank borrowings
Interest-bearing bank loans and overdrafts are recorded at the proceeds received, net of direct issue costs. Finance charges, including premiums payable on settlement or redemption, are accounted for on an accrual basis and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Provisions
Provisions are recognised when the Group has a present obligation as a result of a past event which it is probable will result in an outflow of economic benefits that can be reasonably estimated.

7.2.2. Meta-pattern(s) employed

Hierarchy

7.2.3. Description

The *Hierarchy* builds on the *Simple Hierarchy* business use case, introducing the notion that a hierarchy can have sub-hierarchies. There is no way to really distinguish the sub-categories as there is only way to articulate a relation.

7.2.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- The *Simple Hierarchy* shows a flat hierarchy which contains all numbers. In contrast, *Hierarchy* business use case shows a nested hierarchy of text. There is really very little difference between these two use cases.
- A hierarchy can be created to any depth.

- When modelling a hierarchy, ask yourself "Why am I making this a child of this concept rather than a sibling?" Some reason to make a concept a child or a sibling of another concept should exist.

7.3. BUC03 - Simple Roll Up

The *Simple Roll Up* business use case shows how to model what is commonly referred to as a roll up. A roll up is simply two or more concepts which add up to a third concept: Concept A + Concept B = Concept C.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC03-SimpleRollUp/SimpleRollUp_Landing.html

7.3.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	2010	2009
ASSETS		
Property, Plant, and Equipment, Net		
Land	5,347	1,147
Buildings, Net	244,508	366,375
Furniture and Fixtures, Net	34,457	34,457
Computer Equipment, Net	4,169	5,313
Other Property, Plant, and Equipment, Net	6,702	6,149
Property, Plant and Equipment, Net, Total	295,183	413,441

7.3.2. Meta-pattern(s) employed

Roll Up

7.3.3. Description

The *Roll Up* business use case introduces the notion of numeric relations between concepts. In the case of a *Roll Up* computation, several concepts add up to some total concept. Basically, a *Roll Up* builds on a *Hierarchy* in that it adds the business rules of the computation to the hierarchy of concepts.

7.3.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- A Roll Up articulates the relations: A + B + *n* = Total, where *n* means any number of concepts.
- A Roll Up may have only one total concept.
- The relation may be + or – (plus or minus).
- Notice that all of the concepts in this *Roll Up* have a balance type of DEBIT.

7.4. BUC04 - Nested Roll Up

The *Nested Roll Up* business use case is a variation of the *Roll Up* business use case where one or more additional roll ups are contained within another roll up.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC04-NestedRollUp/NestedRollUp_Landing.html

7.4.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	As of December 31,	
	2010	2009
CURRENT		
Foreign	200	250
Domestic	50	250
Current	250	500
DEFERRED		
Foreign	200	250
Domestic	50	250
Deferred	250	500
Income Tax Expense (Benefit)	500	1,000

7.4.2. Meta-pattern(s) employed

Roll Up

7.4.3. Description

A *Nested Roll Up* builds on the *Roll Up* showing that a Roll Up may contain other *Roll Ups*. These are sub totals. In this example, the grand total Income Tax Expense (Benefit) is broken down by the sub totals Current and Deferred. Each of those sub totals is broken down by its Foreign and Domestic components.

Alternatively, the sub totals could have been Foreign and Domestic with those sub totals then broken down by their Current and Deferred components. Or, both of these breakdowns could have been provided, see the *Multiple Roll Ups* use case.

7.4.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- A *Roll Up* can have another *Roll Up* nested within it.
- Any depth of nesting is allowed.

7.5. BUC05 - Inverted Roll Up

The *Inverted Roll Up* business use case points out that roll ups can appear to be inverted. This business use case is really no different than a Roll Up other than it has a number of deeply nested roll ups.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC05-InvertedRollUp/InvertedRollUp_Landing.html

7.5.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	For Year Ended December 31,	
	2010	2009
Revenues, Gross	1,000	2,000
Returns and Allowances	-1,000	-2,000
Revenues, Net	0	0
Cost of Sales	-1,000	-2,000
Gross Profit (Loss)	-1,000	-2,000
Other Operating Expenses	-1,000	-2,000
Other Operating Income	1,000	2,000
Operating Income (Loss)	-1,000	-2,000
Nonoperating Expenses (Income)	1,000	2,000
Income (Loss) from Continuing Operations Before Income Taxes	0	0
Income Tax Expense (Benefit)	1,000	2,000
Net Income (Loss)	-1,000	-2,000

7.5.2. Meta-pattern(s) employed

Roll Up

7.5.3. Description

An *Inverted Roll Up* again builds on the *Roll Up* and *Nested Roll U*p showing what amounts to a more complex nesting which makes the *Roll Up* look inverted, or up-side-down.

The presentation of the information articulated within a Roll Up is dependent on the software application which is generating the presentation. There is nothing in XBRL which says Roll Ups need to be presented up-side-down. However, many software interfaces do work this way.

7.5.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- There is no real difference between a *Roll Up*, a *Nested Roll Up*, and an *Inverted Roll Up* other than the number of nesting levels.
- Notice in this use case that the concepts are both debits and credits. The weight in the XBRL calculations determines whether the relation is abdicative or subtractive in nature.

- There is a relation between the balance type of a concept and the weight which is used. There is no relation between the balance type and the presentation of the concept as positive or negative. Many business users get confused by this and believe that there is a relation.
- Software interfaces are free to present information as positive or negative. Automated processes need clarity about the polarity of numeric values relative to other numeric values.
- Numeric concepts which do not have a balance type must have the polarity of the concept defined within the concept's documentation to make the polarity clear.

7.6. BUC06 - Multiple Roll Ups

The *Multiple Roll Ups* business use case is a variation of a Roll Up where one concept is the total concept of two or more unique Roll Ups.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC06-MultipleRollUps/MultipleRollUps_Landing.html

7.6.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	2010	2009
TRADE AND OTHER RECEIVABLES		
Trade and Other Receivables, Net, by Component		
Trade Receivables, Net	8,790	6,431
Financing Lease Receivables, Net	2,498	1,263
Other Receivables, Net	1,305	1,096
Trade and Other Receivables, Net	12,593	8,790
Trade and Other Receivables, Net, by Net/Gross		
Trade and Other Receivables, Gross	18,280	13,472
Allowance for Doubtfull Accounts	-5,687	-4,682
Trade and Other Receivables, Net	12,593	8,790
Trade and Other Receivables, Net, by Current/Noncurrent		
Trade Receivables, Net, Current	6,340	5,701
Trade Receivables, Net, Noncurrent	6,253	3,089
Trade and Other Receivables, Net	12,593	8,790

7.6.2. Meta-pattern(s) employed

Roll Up

7.6.3. Description

The *Multiple Roll Ups* business use case points out that a concept might have any number of ways to break down a total concept. To avoid conflicts, these different computations need to be separated into different Networks. Networks can be thought of in the same way that broadcast networks send signals using different frequencies in order to separate the different television channels so the signals do not conflict. In this example, Trade and Other Receivables, Net is aggregated in three different ways: by component, by net/gross, and by current/noncurrent.

7.6.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- Different aggregations of the same number need to be put into separate Networks in order to avoid conflicts.
- Be sure to keep the presentation, calculation, and definition Networks synchronized in order to be clear as to which set of aggregations go with which set of XBRL breakdowns (i.e. presentation, calculation, definition).

7.7. BUC07 - Simple Roll Forward

The *Simple Roll Forward* business use case shows how to model a very common information model found in financial reporting: the roll forward or sometimes called a movement analysis. A roll forward is beginning balance + changes to the balance = ending balance.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC07-SimpleRollForward/SimpleRollForward_Landing.html

7.7.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	2010	2009
Roll Forward of Land		
Land, Beginning Balance	1,147	1,147
Additions	1,992	400
Disposals	-193	-200
Translation difference	2,401	-200
Land, Ending Balance	5,347	1,147

7.7.2. Meta-pattern(s) employed

Roll Forward, Roll up

7.7.3. Description

The *Simple Roll Forward* introduces a different type of computation, different from the *Roll Up*. A *Roll Forward* is a reconciliation of a balance between two different points in time (i.e. *Calendar Time [Measure]*). Another term for a roll forward is a movement analysis. The formula is: Beginning balance + Changes = Ending Balance. The beginning and ending balance is always the same concept at two different points in time.

A *Roll Forward* may contain a Roll Up which breaks down the details of the Changes. In the example, the Changes is detailed to be Additions, Disposals, and Translation Difference.

7.7.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- A *Roll Forward* always reconciles a concept balance between two different points in time. The balance is always an instant, the changes is always a duration.
- A *Roll Forward* computation cannot be expressed using XBRL calculations because all XBRL calculations must be within the exact same context. The balance concept is at two different points in time, therefore two different contexts. Further, the changes are in a third context.
- XBRL Formulas can be used to create a business rule to validate a *Roll Forward* computation.

7.8. BUC08 - Complex Roll Forward

The *Complex Roll Forward* business use case shows how to model what amounts to several *Roll Forwards* combined into one set of information.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC08-ComplexRollForward/ComplexRollForward_Landing.html

7.8.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	Land	Buildings, Net	Furniture and Fixtures, Net	Other Property, Plant and Equipment, Net	Property, Plant, and Equipment, Net
Balance at December 31, 2008	1,000	1,000	1,000	1,000	4,000
Additions	1,000	1,000	1,000	1,000	4,000
Disposals	-1,000	-1,000	-1,000	-1,000	-4,000
Translation Difference	0	0	0	0	0
Other Increase (Decrease)	0	0	0	0	0
Balance at December 31, 2009	1,000	1,000	1,000	1,000	4,000
Additions	1,000	1,000	1,000	1,000	4,000
Disposals	-1,000	-1,000	-1,000	-1,000	-4,000
Translation Difference	0	0	0	0	0
Other Increase (Decrease)	0	0	0	0	0
Balance at December 31, 2010	1,000	1,000	1,000	1,000	4,000

7.8.2. Meta-pattern(s) employed

Roll Forward, Roll up

7.8.3. Description

The *Complex Roll Forward* builds on the *Simple Roll Forward*, adding multiple *Roll Forwards* which then aggregate to a *Roll Forward* of the total *Roll Forward*. In the example, *Roll Forwards* for Land; Buildings, Net; Furniture and Fixtures, Net; Other Property, Plant and Equipment, Net aggregate to the *Roll Forward* of the total Property, Plant and Equipment.

7.8.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- The *Roll Ups* for the changes can be expressed and validated using XBRL calculations. In the example, this computation is vertical in nature.
- The *Roll Up* of each concept to the total for Property, Plant and Equipment, Net can likewise be expressed using XBRL calculations. For example, Additions for each category of Property, Plant and Equipment aggregates to the concept for all categories of Property, Plant and Equipment. This relation can be seen horizontally in the example.
- The *Roll Forward* of each balance must be expressed using XBRL Formulas.
- Note that the classes of Property, Plant and Equipment could have been presented in the rows and the different balances and changes expressed in the columns. There is no difference in how the business use case is modelled however. How concepts are presented and how they are modelled are not the same thing. This is true for all business use cases, this use case is points out that general notion.

7.9. BUC09 - Simple Compound Fact

The *Simple Compound Fact* business use case shows how to model what amounts set of information which must go together to make any sense.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC09-SimpleCompoundFact/SimpleCompoundFact_Landing.html

7.9.1. Visual Example

Sample Company
For Period Ending December 31, 2010

Director	Salary	Bonus	Director Fee	Options Granted, at Fair Value
pattern:JohnDoeMember	1,000	1,000	1,000	1,000
pattern:JaneDoeMember	1,000	1,000	1,000	1,000
frm:DirectorsAllDomain	2,000	2,000	2,000	2,000

7.9.2. Meta-pattern(s) employed

Hierarchy

7.9.3. Description

The *Simple Compound Fact* business use case shows the notion of a compound fact. A compound fact is a set of facts which must go together to make sense. A compound fact always has at least one Measure (meaning it could be several measures, see *Grouped Report*) which is what distinguishes one set of facts with another set of facts.

In this example, the *Director [Measure]* is used to distinguish one director from the other and each director from the total for all directors. The Salary; Bonus; Director Fee; and Options Granted, at Fair Value are provided for each director and for the total for all directors.

7.9.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- A compound fact always has at least one Measure which distinguishes the different sets of facts and the aggregate for all the Measures. A compound fact is not a meta pattern.
- A compound fact is like the row of a data base table. The Measure for the compound fact is like the key for the table containing the rows of the compound fact. If more than one Measure is provided, that is like a composite key for the table.
- This Simple Compound Fact business use case introduces the notion of a dimensional aggregation. The computation of the total Salary, as an example, for all directors is NOT a Roll Up as each director and the total of all directors are different XBRL contexts and therefore XBRL calculations cannot be utilized. XBRL Formulas must be used to express this dimensional aggregation. This aggregate value, may or may not tie to some other Fact Value within an XBRL instance.

7.10. BUC10 - Repeating Concept

The *Repeating Concept* business use case shows how to model what amounts to a set of information which repeats an unknown number of times.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC10-RepeatingConcept/RepeatingConcept_Landing.html

7.10.1. Visual Example

Sample Company
For Period Ending December 31, 2010

SUBSEQUENT EVENTS

The following is a summary of events subsequent to the balance sheet date:

Description of subsequent event number 1 which relates to the loss of an uncollectable receivable and occurred on January 16, 2011.

Description of subsequent event number 2 which relates to the purchase of a business and occurred on February 1, 2011.

7.10.2. Meta-pattern(s) employed

Hierarchy

7.10.3. Description

The *Repeating Concept* business use case builds on the *Simple Compound Fact* use case, showing that compound facts repeat.

In this example, the subsequent event repeats. Each subsequent event is uniquely described by the Subsequent Event Description [Measure] value or Member.

7.10.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- Compound facts repeat. You might only have one compound fact in your XBRL instance, but you might also have any unknown number of such compound facts.
- In this case, the Domain of the Subsequent Event Description [Measure] would never be used in an XBRL instance as total or aggregate information is never provided for "Total Subsequent Events". There is no way to distinguish a Domain which is usable and a Domain which is not usable.
- In other cases, compound facts do have dimensional aggregations and the aggregated value ties to some other summary Fact Value within an XBRL instance.

7.11. BUC11 - Multiple Periods Compound Concept

The *Multiple Periods Compound Concept* business use case shows how to model what amounts to a *Compound Concept* which is reported for multiple periods.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC11-MultiplePeriodsCompoundConcept/MultiplePeriodsCompoundConcept_Landing.html

7.11.1. Visual Example

Sample Company
For Period Ending December 31, 2010

The following is a summary of leasehold land and buildings as of December 31, 2010 and 2009:

State	Location	Description	Tenure	Tenure Start Date	Land Area	2010 Value (at Cost)	2009 Value (at Cost)
pattern:WashingtonMember	Tacoma, Washington	Warehouse	Fifteen year lease	2000-01-01	1,000	5,000	4,000
pattern:WashingtonMember	Seattle, Washington	Warehouse	Twenty year lease	2000-01-01	100,000	50,000	40,000
			Total		101,000	55,000	44,000

7.11.2. Meta-pattern(s) employed

Hierarchy

7.11.3. Description

The *Multiple Periods Compound Concept* business use case shows something quite common in financial reporting which is to provide values for both the current and prior period to describe some concept. Understanding why the values for the current period and prior period are contextual information and why they should not be concepts helps make an important distinction when modelling information using XBRL.

7.11.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- Notice that the current period and prior period are contexts provided by the XBRL instance, not concepts of the XBRL taxonomy.
- Compare and contrast this use case with the *Compound Concept* use case.

7.12. BUC12 - Roll Forward in Compound Concept

The *Roll Forward in Compound Concept* business use case shows how to model a *Roll Forward* which is related to some other set of information. This is similar to a *Nested Compound Concept* business use case.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC12-RollForwardInCompoundConcept/RollForwardInCompoundConcept_Landing.html

7.12.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

SHARE OWNERSHIP PLANS

The following is information relating to share ownership plan: pattern:ShareOwnershipPlan1Member .

These are the description, general conditions, and terms of share ownership plan 1. Nam rhoncus mi. Nunc eu dui non mauris interdum tincidunt. Sed magna felis, accumsan a, fermentum quis, varius sed, ipsum. Nullam leo. Donec eros. Maecenas interdum, lectus eget aliquet tincidunt, tellus dolor ultrices tellus, nec hendrerit nunc lectus eget eros. Duis feugiat velit in eros. Curabitur tincidunt aliquet neque. Nulla ac est quis urna luctus elementum. Aliquam erat volutpat. In tincidunt nunc vehicula risus. Praesent dictum arcu sit amet wisi. Praesent ac odio. Donec vestibulum, sem vel facilisis consectetuer, justo arcu tempor sem, vel ultrices turpis leo quis augue.

Reconciliation of Outstanding Balance:

Type	Outstanding 2009	Granted	Forfeited	Exercised	Expired	Outstanding 2010
pattern:ShareOwnershipPlan1Member	0	4,000	-1,000	-1,000	-1,000	1,000

7.12.2. Meta-pattern(s) employed

Roll Forward, Hierarchy

7.12.3. Description

The *Roll Forward in Compound Concept* shows exactly that, a *Roll Forward* use case modelled within a Compound Concept use case. Basically the Roll Forward is part of the set of information which repeats. Specifically in this example, the share ownership plan is required to disclose a certain set of information part of which is the roll forward of the outstanding balance.

7.12.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- The only thing added to this business use case is the *Roll Forward*. A Roll Forward within a Compound Concept is the same as one outside.

7.13. BUC13 - Nested Compound Concept

The *Nested Compound Concept* business use case shows how to model what amounts to two sets of information which are interrelated.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC13-NestedCompoundConcept/NestedCompoundConcept_Landing.html

7.13.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

RELATED PARTY TRANSACTIONS

The following is a summary of related party of the company and transactions with those related parties. (Notice how the Related Party Name [Measure] connects the two tables of information together):

Related Parties:

Name of Related Party	Type of Relationship	Nature of Relationship
pattern:RelatedParty1Member	Parent	This is other descriptive information about the relationship.
pattern:RelatedParty2Member	JointVenture	This is other descriptive information about the relationship.

Transactions with Related Parties:

Party	Transaction Description	Pricing Policy	Amount
pattern:RelatedParty1Member	Transaction 1 description	Cost	1000
pattern:RelatedParty1Member	Transaction 2 description	Cost	1000
pattern:RelatedParty2Member	Transaction 1 description	Cost	1000
pattern:RelatedParty2Member	Transaction 2 description	Cost	1000

7.13.2. Meta-pattern(s) employed

Hierarchy

7.13.3. Description

The *Nested Compound Concept* business use case models a compound fact nested within another compound fact. In this specific case the compound fact related parties has the compound fact transactions with related parties within it. This is because a company may have many related parties and each of those related parties might have from zero to many related party transactions.

7.13.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- Notice that each of the compound facts has at least one Measure which is common to both compound facts which connects to two compound facts. In this example, the Related Party [Member] is what connects the two compound facts.
- Note that XBRL Dimensions hypercubes may not be nested.
- The type of relationship here is common to the "master table" and "detailed" table of a relational database. For example, the invoice master table and the invoice line items detailed table.

7.14. BUC14 - Reconciliation of Balance

The *Reconciliation of Balance* business use case shows how to model a reconciliation of one balance to another balance. Note that this has characteristics of a *Roll Forward* business use case or *Adjustment* business use case, but is different than those use cases.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC14-ReconciliationOfBalance/ReconciliationOfBalance_Landing.html

7.14.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	2010	2009
Cash and Cash Equivalents, per Balance Sheet	1,000	1,000
Reconciling Item A	500	500
Reconciling Item B	-500	500
Cash and Cash Equivalents, per Cash Flow Statement	1,000	2,000

7.14.2. Meta-pattern(s) employed

Hierarchy

7.14.3. Description

The Reconciliation of Balance business use case reconciles two different concepts at the same point in time. In the example shown, Cash and Cash Equivalents per the balance sheet is reconciled to Cash and Cash Equivalents per the cash flow statement. (The example assumes that the two balances are different.)

7.14.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- Contrast this use case with the *Roll Forward*, *Adjustment*, and *Variance* use cases. Each of these are different types of reconciliations.

7.15. BUC15 - Text Block

The *Text Block* business use case shows how to use a text block to articulate a complex set of information as a set, rather than breaking the pieces of information into individual components. Please note the Prose and Escaped XHTML business use cases.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC15-TextBlock/TextBlock_Landing.html

7.15.1. Visual Example

Sample Company
For Period Ending December 31, 2010

DIRECTOR COMPENSATION

The following is a summary of director compensation for the period ended December 31, 2010:

Name of director	Salary	Bonus	Director fees	Fair Value of Options Granted
Jane Doe	1,000	1,000	1,000	1,000
John Doe	1,000	1,000	1,000	1,000
Total	2,000	2,000	2,000	2,000

7.15.2. Meta-pattern(s) employed

Hierarchy

7.15.3. Description

The *Text Block* business use case shows how a complex set of information can be communicated to users of the information, rather than provided details for the components of the complex set. In this example, one concept is used to communicate information about director compensation.

Because of formatting considerations and little control over text other than tabs, spaces, and line feeds; the Escaped XHTML or Prose approaches are preferred over this approach.

7.15.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- One Fact Value is used to articulate a more complex set of information. The up side is that articulating the information is easier. The down side is that the user of the information cannot get to the details, only to the set of information.

7.16. BUC16 – Restatement

The *Restatement* business use case shows how to model an accounting restatement due to a change in accounting policy or the correction of an error.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC16-Restatement/Restatement_Landing.html

7.16.1. Visual Example

Sample Company
December 31,
(dollars)

	2010	2009 (Restated)
Balance Sheet (Fragment)		
Equity		
Common Stock	5,000,000	5,000,000
Retained Earnings	10,850,000	10,700,000
Total Equity	15,850,000	15,700,000

	2010	2009 (Restated)	2009 (Previous)
Income Statement (Fragment)			
Gross Sales	1,500,000	1,000,000	1,000,000
Cost of sales	500,000	200,000	200,000
Net sales	1,000,000	800,000	800,000
Operating expenses (*)	350,000	1,600,000	300,000
Net income (loss)	650,000	-800,000	500,000

Statement of Changes in Equity (Fragment)	2010	2009
Prior Period Adjustment		
Retained Earnings (Accumulated Losses), Originally Stated 2009	12,000,000	
Change in Accounting Policy	0	
Correction of an Error	-1,300,000	
Retained Earnings (Accumulated Losses), Restated 2009 Beginning Balance	10,700,000	
Changes in Equity		
Retained Earnings (Accumulated Losses), Beginning Balance	10,700,000	12,300,000
Net Income (Loss)	650,000	-800,000
Dividends	-500,000	-800,000
Retained Earnings (Accumulated Losses), Ending Balance	10,850,000	10,700,000

7.16.2. Meta-pattern(s) employed

Roll Forward, Roll Up, Hierarchy, Adjustment

7.16.3. Description

The Restatement business use case shows how to model an accounting restatement due to a prior period adjustment from an accounting error or a change in accounting policy. Also see the Adjustment business use case.

7.16.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- Notice how the moving pieces of this use case impact multiple areas of the example including the balance sheet, income statement, and the statement of changes in equity.

7.17. BUC17 - Reissue Report

The *Reissue Report* business use case shows how to reissue a business report for, say, a report which has been recalled because of a major problem.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC17-ReissueReport/ReissueReport_Landing.html

7.17.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	2010	2009
ASSETS		
Property, Plant, and Equipment, Net		
Land	5,347	1,147
Buildings, Net	244,508	366,375
Furniture and Fixtures, Net	34,457	34,457
Computer Equipment, Net	4,169	5,313
Other Property, Plant, and Equipment, Net	6,702	6,149
Property, Plant and Equipment, Net, Total	295,183	413,441

COMMENTS:

(*) BRM Comment: This report has been reissued on March 2, 2011. The original report issued on February 15, 2011 contained a significant mistake. The amounts for Land and Building were transposed.

7.17.2. Meta-pattern(s) employed

Any, example uses Roll Up

7.17.3. Description

The Reissue Report business use case shows how the reissuance of a financial statement can be handled. Note that the entire report is reissued, resulting in a different report date.

7.17.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- To do.

7.18. BUC18 – Reclassification

The *Reclassification* business use case shows how to model information which was reported with one classification in a prior period but has been reclassified in a current report to conform to the current classifications of the information. This is a classic accounting reclassification of, say, balance sheet line items.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC18-Reclassification/Reclassification_Landing.html

7.18.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	2010	2009	*Previous 2009*
ASSETS			
Property, Plant, and Equipment, Net			
Land	5,347	1,147	*1,147*
Buildings, Net	244,508	366,375	*366,375*
Furniture and Fixtures, Net	34,457	34,457	*34,457*
Computer Equipment, Net	4,169	5,313	
Other Property, Plant, and Equipment, Net	6,702	6,149	*11,462*
Property, Plant and Equipment, Net, Total	295,183	413,441	*413,441*

POLICIES:

Prior period classifications have been restated to conform to current period classifications.

7.18.2. Meta-pattern(s) employed

Any, example uses Roll Up

7.18.3. Description

The *Reclassification* business use case shows how to handle an accounting reclassification. In this case, Other Property, Plant, and Equipment, Net previously reported as $11,462 is broken out into its components for the prior period 2009 classification in order to be consistent with the current period 2010 classification.

7.18.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

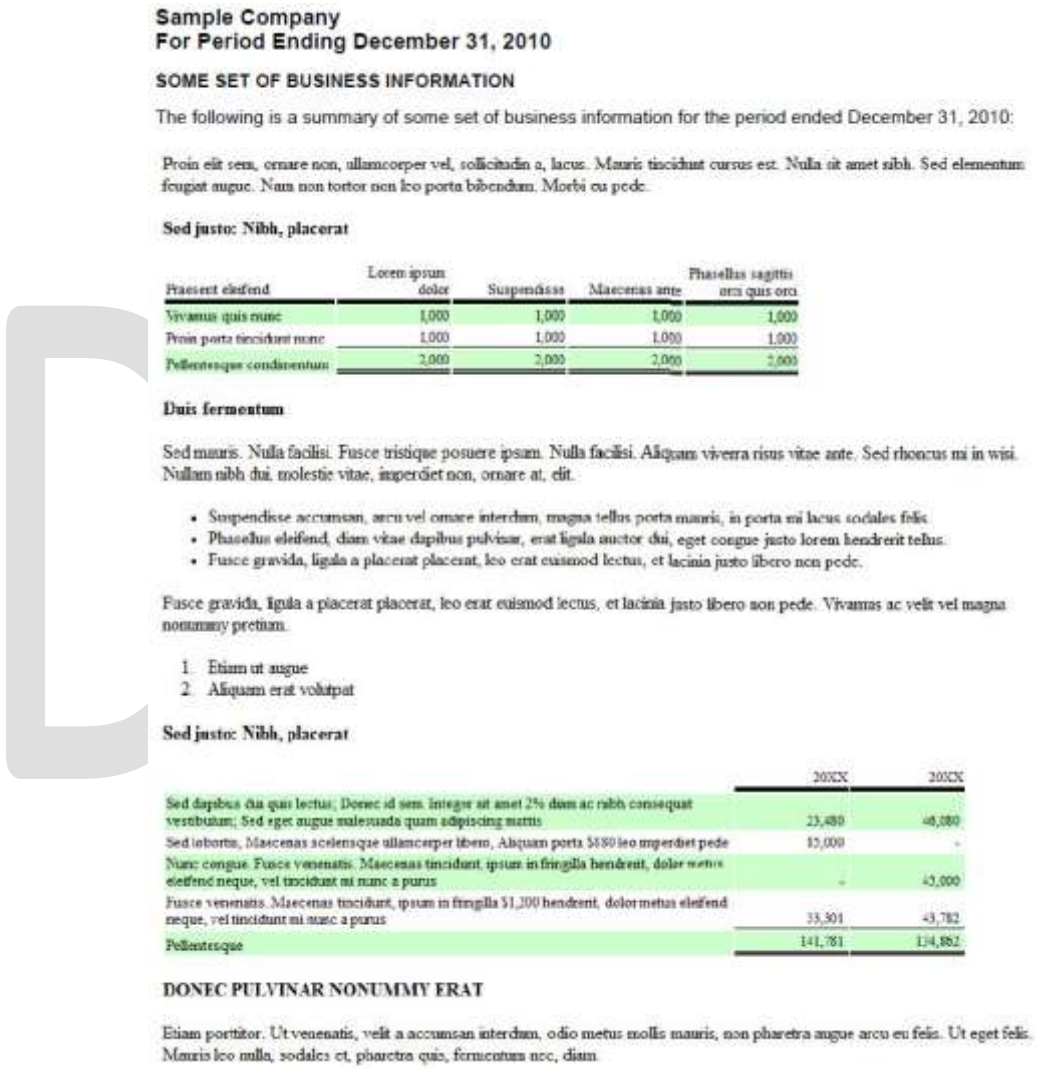
- The reclassification is pointed out using an XBRL footnote which has a specific role which identifies the XBRL footnote as relating to a reclassification.
- If a more general XBRL footnote were used (i.e. no specific role for this category of footnote) then users would need to sift through all other XBRL footnotes to find any reclassifications. Categorization has the advantage of being able to easily identify reclassifications.
- Usually a disclosure of the reclassifications would be made, this use case does not address this issue, rather it focuses on showing how the details of the reclassification can be identified.

7.19. BUC19 – Prose

The *Prose* business use case shows how to model prose or information which has sophisticated formatting such as tables, lists, paragraphs which should be read in a specific order, etc.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC19-Prose/Prose_Landing.html

7.19.1. Visual Example



Sample Company
For Period Ending December 31, 2010

SOME SET OF BUSINESS INFORMATION

The following is a summary of some set of business information for the period ended December 31, 2010:

Proin elit sem, ornare non, ullamcorper vel, sollicitudin a, lacus. Mauris tincidunt cursus est. Nulla sit amet nibh. Sed elementum feugiat augue. Nam non tortor non leo porta bibendum. Morbi eu pede.

Sed justo: Nibh, placerat

Praesent eleifend	Lorem ipsum dolor	Suspendisse	Maecenas ante	Phasellus sagittis arcu quis orci
Vivamus quis nunc	1,000	1,000	1,000	1,000
Proin porta tincidunt nunc	1,000	1,000	1,000	1,000
Pellentesque condimentum	2,000	2,000	2,000	2,000

Duis fermentum

Sed mauris. Nulla facilisi. Fusce tristique posuere ipsum. Nulla facilisi. Aliquam viverra risus vitae ante. Sed rhoncus mi in wisi. Nullam nibh dui, molestie vitae, imperdiet non, ornare at, elit.

- Suspendisse accumsan, arcu vel ornare interdum, magna tellus porta mauris, in porta mi lacus sodales felis.
- Phasellus eleifend, diam vitae dapibus pulvinar, erat ligula auctor dui, eget congue justo lorem hendrerit tellus.
- Fusce gravida, ligula a placerat placerat, leo erat euismod lectus, et lacinia justo libero non pede.

Fusce gravida, ligula a placerat placerat, leo erat euismod lectus, et lacinia justo libero non pede. Vivamus ac velit vel magna nonummy pretium.

1. Etiam ut augue
2. Aliquam erat volutpat

Sed justo: Nibh, placerat

	20XX	20XX
Sed dapibus dui quis lectus. Donec id sem. Integer sit amet 2% diam ac nibh consequat vestibulum. Sed eget augue malesuada quam adipiscing mattis	23,480	46,080
Sed lobortis, Maecenas scelerisque ullamcorper libero, Aliquam porta $180 leo imperdiet pede	15,000	-
Nunc congue. Fusce venenatis. Maecenas tincidunt, ipsum in fringilla hendrerit, dolor metus eleifend neque, vel tincidunt mi nunc a purus	-	45,000
Fusce venenatis. Maecenas tincidunt, ipsum in fringilla $1,200 hendrerit, dolor metus eleifend neque, vel tincidunt mi nunc a purus	33,301	43,782
Pellentesque	141,781	134,862

DONEC PULVINAR NONUMMY ERAT

Etiam porttitor. Ut venenatis, velit a accumsan interdum, odio metus mollis mauris, non pharetra augue arcu eu felis. Ut eget felis. Mauris leo nulla, sodales et, pharetra quis, fermentum nec, diam.

7.19.2. Meta-pattern(s) employed

Hierarchy

7.19.3. Description

The *Prose* business use case shows how information can be disclosed if the ordering of the information matters and if rather than disclosing individual components of information, an entire set of information can be articulated as one Fact Value. This use case is similar to the *Escaped XHTML* and *Text Block* use cases.

7.19.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- Escaped XHTML is used to disclose such prose (rather than normal XHTML) because XBRL items must not contain mark up. To overcome this constraint, the mark up characters are escaped.
- Conversion from escaped XHTML to normal XHTML is a well understood process.
- Note that a specific data type of escaped XHTML is used, rather than string, in order to identify the escaped XHTML and enforce validation.

7.20. BUC20 - General Comment

The *General Comment* business use case shows how to include a comment (implemented as an XBRL footnote) which includes additional information about a piece of information or pieces of information which are reported.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC20-GeneralComment/GeneralComment_Landing.html

7.20.1. Visual Example

Sample Company
For Period Ending December 31,
(thousands of dollars, except number of employees)

	2010	2009	2008	2007	2006
Sales, Net	1,500	1,400	1,300	1,200	1,100
Income (Loss) from Continuing Operations	500	400	300	200	100
Net Income (Loss) (a) (c)	51	41	31	21	11
Cash Flow Provided by (used in) Operating Activities, Net	5,000	4,000	3,000	2,000	1,000
Capital Additions	1,000	650	550	450	350
Average Number of Employees (b) (c)	300	290	280	270	260

COMMENTS:

(a) XBRL Footnote: This is an XBRL footnote, there is no 'categorization' as to what this is for. This indicates that the report is trying to tell you something about the Fact 'pattern:NetIncomeLoss' for a specific context.
(b) XBRL Footnote: This is another XBRL footnote, again, trying to tell you something about the average number of employees.
(c) BRM Comment: This comment is specifically identified as a 'BRM:GeneralComment', rather than an XBRL Footnote. Further, this BRM:GeneralComment hooks two reported Facts together.

7.20.2. Meta-pattern(s) employed

Any, example uses Hierarchy

7.20.3. Description

The *General Comment* business use case shows how a comment of any sort can be associated with any Fact Value being reported. This is achieved using an XBRL footnote.

7.20.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- A specific role and arcrole are used to identify the XBRL footnotes which are of the category general comment.
- See the Reclassification and Reason Not Reported business use cases which show other categories of XBRL footnotes.
- Note that XBRL footnotes can be used to associate one or more Facts to one or more other Facts, effectively expressing a set of related Facts.

7.21. BUC21 - Pivot Table

The *Pivot Table* business use case shows how to model information which would commonly be used within an Excel pivot table.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC21-PivotTable/PivotTable_Landing.html

7.21.1. Visual Example

Sample Company
For Period Ending December 31,
(thousands of dollars)

	2010	2009	2008
Sales, all Business Segments, all Geographic Areas	32,038	35,805	32,465
Breakdown by Business Segment:			
Pharmaceuticals	20,181	18,150	15,275
Generics	2,433	1,973	1,823
Consumer Health	6,675	6,514	5,752
Other Segments	2,749	9,168	9,615
Breakdown by Geographic Area:			
North America	10,214	12,649	10,137
Europe	11,901	10,374	10,396
Asia	5,639	4,371	3,210
Other regions	4,284	8,411	8,722

7.21.2. Meta-pattern(s) employed

Any, example uses Hierarchy

7.21.3. Description

The *Pivot Table* business use case shows information which would commonly populate an electronic spreadsheet pivot table. In this case, although there are 27 Fact Values, only one concept is utilized, "Sales", and ten Members are used, Business Segment and Geographic Area, which break the sales information down into additional detail.

7.21.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- In a spreadsheet pivot table totals are generally not provided, rather the pivot table computes the totals as needed. However, in this example the totals are provided.
- Alternatively, this information could have been modelled as all concepts, rather than use dimensions. That approach would make using the information in a pivot table more difficult.
- Notice that there are three sections of this report: totals, a business segment breakdown, and a geographic area breakdown. Each of these is articulated in different Fact Groups (hypercube) in order to be clear about what information should be reported. Alternatively, one single Fact Group could have been used; however, it would be less clear that two breakdowns were required.

7.22. BUC22 - Reason Not Reported

The *Reason Not Reported* business use case models how to model information which is required to be reported, but for some reason the information is not available, unknown, or for some other reason cannot be determined.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC22-ReasonNotReported/ReasonNotReported_Landing.html

7.22.1. Visual Example

Sample Company
For Period Ending December 31,
(thousands of dollars, except number of employees)

	2010	2009	2008	2007	2006
Sales, Net	1,500	1,400	1,300	1,200	1,100
Income (Loss) from Continuing Operations	500	400	300	200	100
Net Income (Loss)	51	41	31	21	11
Cash Flow Provided by (used in) Operating Activities, Net	5,000	4,000	3,000	2,000	1,000
Capital Additions	1,000	650	550	450	350
Average Number of Employees (*****)	300	290	280	270	*****

(*****) BRM Reason Not Reported: This information unavailable and therefore has not been reported.

7.22.2. Meta-pattern(s) employed

Any, example uses Hierarchy

7.22.3. Description

The Reason Not Reported business use case shows how sometimes information for a Fact might not be reportable. This is different than (a) actually reporting a value such as zero or (b) not providing the Fact in the XBRL instance at all. Rather, here a NIL value is reported. There could be a variety of reasons as to why a NIL value was reported such as the information is unknown, the information is unavailable, the information is required to be reported by it is not applicable, or some other reason. An XBRL footnote with a specific role and arcrole is used to articulate the specific reason a NIL value was reported.

7.22.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- Someone counted 14 different reasons why a Fact might be reported as NIL. (Regretfully, I did not get that list of the 14 reasons.)
- Categorizing XBRL footnotes into specific categories of comment are helpful in identifying specific types of XBRL footnotes.

7.23. BUC23 - Simple Roll Forward Using Measure

The *Simple Roll Forward Using Measure* business use case is a variation of the *Simple Roll Forward* which models aspects of the roll forward using Members rather than Concepts. This is simply a matter of preference or approach, this is not a unique business use case.

7.23.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	2010	2009
Roll Forward of Land		
Land, Beginning Balance	1,147	1,147
Additions	1,992	400
Disposals	-193	-200
Translation difference	2,401	-200
Land, Ending Balance	5,347	1,147

7.23.2. Meta-pattern(s) employed

Roll Forward, Roll up

7.23.3. Description

The *Simple Roll Forward using Measure* use case shows an alternative technical approach to modelling a *Simple Roll Forward*. The business case is identical. In this case Measures are utilized to express the components of the Roll Forward.

7.23.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- This use case shows an alternative technical solution to the same business use case of a *Simple Roll Forward*.
- Determining which technical approach to use is a domain choice which should consider the basket of pros and cons offered by each approach.

7.24. BUC24 - Complex Roll Forward Using Measures

The *Complex Roll Forward Using Measure* business use case is a variation of the *Complex Roll Forward* which models aspects of the roll forward using Members rather than Concepts. This is simply a matter of preference or approach, this is not a unique business use case.

7.24.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	Land	Buildings, Net	Furniture and Fixtures, Net	Other Property, Plant, and Equipment, Net	Property, Plant, and Equipment, Net
Balance at December 31, 2008	1,000	1,000	1,000	1,000	4,000
Additions	1,000	1,000	1,000	1,000	4,000
Disposals	-1,000	-1,000	-1,000	-1,000	-4,000
Translation Difference	0	0	0	0	0
Other Increase (Decrease)	0	0	0	0	0
Balance at December 31, 2009	1,000	1,000	1,000	1,000	4,000
Additions	1,000	1,000	1,000	1,000	4,000
Disposals	-1,000	-1,000	-1,000	-1,000	-4,000
Translation Difference	0	0	0	0	0
Other Increase (Decrease)	0	0	0	0	0
Balance at December 31, 2010	1,000	1,000	1,000	1,000	4,000

7.24.2. Meta-pattern(s) employed

Roll Forward, Roll up

7.24.3. Description

The *Complex Roll Forward using Measures* use case shows an alternative technical approach to modelling a *Complex Roll Forward*. The *Complex Roll Forward Using Measures* business use case builds on the Simple *Roll Forward Using Measures*. It simply adds more *Roll Forward* modelling them leveraging Measures. Contrast this use case to the *Simple Roll Forward* and *Complex Roll Forward*.

7.24.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

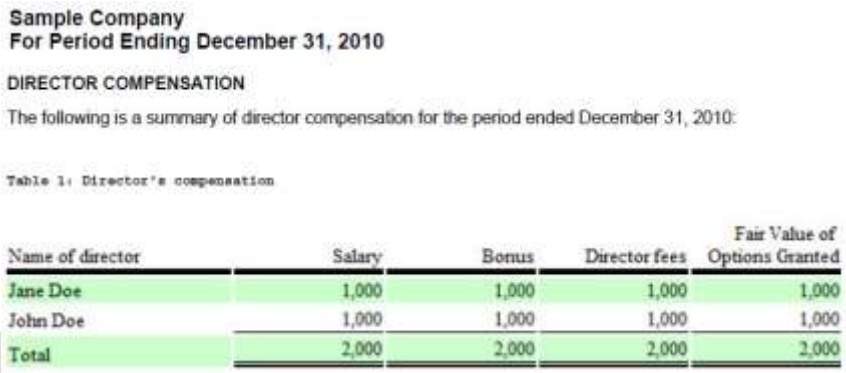
- This is similar to the Classes business use case, showing a more complex example of using Measures to model information rather than concepts.
- Determining which technical approach to use is a domain choice which should consider the basket of pros and cons offered by each approach.

7.25. BUC25 - Escaped XHTML

The *Escaped XHTML* business use case models how one can make use of HTML (hypertext mark up language, the format which Web browsers use) to achieve pixel perfect renderings of information which has complex information structures.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC25-EscapedXHTML/EscapedXHTML_Landing.html

7.25.1. Visual Example



Sample Company
For Period Ending December 31, 2010

DIRECTOR COMPENSATION

The following is a summary of director compensation for the period ended December 31, 2010:

Table 1: Director's compensation

Name of director	Salary	Bonus	Director fees	Fair Value of Options Granted
Jane Doe	1,000	1,000	1,000	1,000
John Doe	1,000	1,000	1,000	1,000
Total	2,000	2,000	2,000	2,000

7.25.2. Meta-pattern(s) employed

Hierarchy

7.25.3. Description

The *Escaped XHTML* business use case is basically the same as the *Prose* business use case. Both show how complex sets of information can be communicated to users of the information. Less detail is provided, but the use case shows how to get users to an information set, even though a computer application will not be able to parse the details. This is very similar to the what the SEC calls a "text block".

7.25.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- While a business user cannot parse the details, this type of an approach can be useful in modelling certain detailed information.

7.26. BUC26 - Using JSON

The *JSON* business use case models how to articulate data primarily for the purpose of exchanging information. JSON (pronounced Jayson) is an approach to formatting data. Think of CSV (comma separated values).

http://www.xbrlsite.com/Patterns/2010-08-01/BUC26-UsingJSON/UsingJSON_Landing.html

7.26.1. Visual Example


```
{"DirectorCompensation":
   [
      {
         "DirectorName":"Jane Doe",
         "Salary":"1,000",
         "Bonus":"1,000",
         "DirectorFees":"1,000",
         "FairValueOfOptionsGranted":"1,000"
      },
      {
         "DirectorName":"John Doe",
         "Salary":"1,000",
         "Bonus":"1,000",
         "DirectorFees":"1,000",
         "FairValueOfOptionsGranted":"1,000"
      },
      {
         "DirectorName":"All Directors",
         "Salary":"2,000",
         "Bonus":"2,000",
         "DirectorFees":"2,000",
         "FairValueOfOptionsGranted":"2,000"
      }
   ]
}
```


7.26.2. Meta-pattern(s) employed

Hierarchy

7.26.3. Description

JSON (Java Script Object Notation, see http://www.json.org) is a data format which is similar to CSV but more powerful because it can express a hierarchy. JSON can be useful in exchanging information, this is how such information can be modelled using XBRL. CSV or other formats can be used in a similar manner.

7.26.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- The *Using JSON* business use case is similar to the *Text Block*, *Prose*, *Escaped XHTML* use cases in that a set of information is modelled as one concept and in an XBRL instance, that one Fact holds the complete set of information.
- This is one approach to modelling detailed information which supports some aggregated value.

7.27. BUC27 – Flow

The *Flow* business use case models how to articulate the sequence or ordering of information within a business report.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC27-Flow/Flow_Landing.html

7.27.1. Visual Example

Sample Company
For Period Ending December 31,
(thousands of dollars)

	2010	2009	2008
Sales, all Business Segments, all Geographic Areas	32,038	35,805	32,465
Breakdown by Business Segment:			
Pharmaceuticals	20,181	18,150	15,275
Generics	2,433	1,973	1,823
Consumer Health	6,675	6,514	5,752
Other Segments	2,749	9,168	9,615
Breakdown by Geographic Area:			
North America	10,214	12,649	10,137
Europe	11,901	10,374	10,396
Asia	5,639	4,371	3,210
Other regions	4,284	8,411	8,722

7.27.2. Meta-pattern(s) employed

Any, example uses Hierarchy

7.27.3. Description

The Flow business use case shows that business reports have an ordering or sequence and how to model that sequence within an XBRL taxonomy by creating what amounts to a hierarchy of Fact Groups (or hypercubes).

7.27.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- How to add a specific sequence or ordering to a set of Fact Groups.
- Extended links cannot express an ordering or sequence. This is overcome by adding numbers or something which can be used to sort a set of extended links to provide ordering.
- Extended links cannot express a hierarchy of Fact Groups, using the Flow approach can.
- Contrast this use case with the *Pivot Table* use case which does not provide the flow information, but everything else is the same.

7.28. BUC28 - Other Relations

The *Other Relations* business use case models how to articulate information which has other types of relations or very complex computations.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC28-OtherRelations/OtherRelations_Landing.html

7.28.1. Visual Example

Sample Company
For Period Ended December 31,

	2010	2009
OTHER INFORMATION		
Earnings Per Share Components		
Net Income (Loss)	10,000,000	20,000,000
Weighted Average Common Shares	100,000,000	100,000,000
Earnings Per Share	0.10	0.20

7.28.2. Meta-pattern(s) employed

Hierarchy, Other Relations

7.28.3. Description

The *Other Relations* shows an example of a computation which cannot be articulated using XBRL calculations and how to model that type of information. Basically any computation can be modelled as a Hierarchy meta pattern, the computations being explained by business rules which are provided with the XBRL taxonomy.

7.28.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- Any information can be modelled as a *Hierarchy*. If computations exist, add business rules to express the computations and you have an *Other Relations* meta pattern.

7.29. BUC29 – Variance

The *Variance* business use case models how to articulate different business reporting scenarios for the same reported concept.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC29-Variance/Variance_Landing.html

[CSH: I am seeing clues that this might not be a meta pattern.]

7.29.1. Visual Example

Sample Company
For Period Ending December 31, 2010

Concept	Actual	Budgeted	*Variance*
Sales	6,000	5,000	*1,000*
Cost of Goods Sold	4,000	3,000	*1,000*
Contribution Margin	1,000	2,000	*-1,000*
Distribution Costs	1,000	1,000	*0*

7.29.2. Meta-pattern(s) employed

Any, example uses Roll Up

7.29.3. Description

In this business use case information is reported for two different reporting scenarios (actual and budgeted). The variance between the two reporting scenarios is also reported.

7.29.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- The *Variance* use case shows how to report concepts for different reporting scenarios.

7.30. BUC30 – Classes

The *Classes* business use case shows how information can be modelled as concepts or as the members of a dimension. Please note the Roll Up business use case.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC30-Classes/Classes_Landing.html

7.30.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	2010	2009
ASSETS		
Property, Plant, and Equipment, Net		
Land	5,347	1,147
Buildings, Net	244,508	366,375
Furniture and Fixtures, Net	34,457	34,457
Computer Equipment, Net	4,169	5,313
Other Property, Plant, and Equipment, Net	6,702	6,149
Property, Plant and Equipment, Net, Total	295,183	413,441

7.30.2. Meta-pattern(s) employed

Any, example uses Hierarchy

7.30.3. Description

This business use case shows an alternative approach to modelling the *Simple Roll Up* business use case. Be sure to look at that use case as you model this business use case.

7.30.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

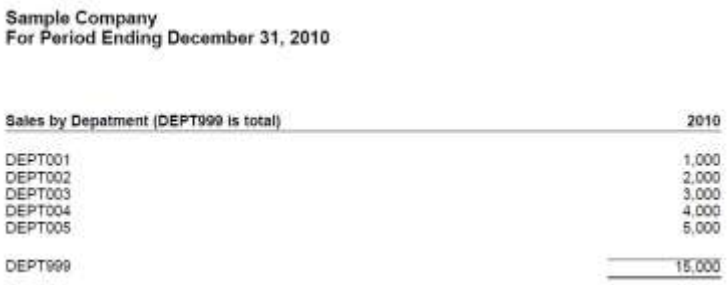
- The *Classes* business use cases points out another way to add information to an XBRL taxonomy. Contrast the approach used in this use case with the *Simple Roll Up* use case to see two approaches to adding taxonomy information: as a concept or as a dimension of a concept.
- Choosing whether to model information "as a concept" or "as a dimension of a concept" should be done consistently with some clear strategy being communicated to taxonomy users.
- Determining which technical approach to use is a domain choice which should consider the basket of pros and cons offered by each approach.

7.31. BUC31 - Add Members Without Extension

The *Add Members Without Extension* business use case shows how to allow users to add information to an XBRL taxonomy, but without physically creating an XBRL extension taxonomy.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC31-AddMembersWithoutExtension/AddMembersWithoutExtension_Landing.html

7.31.1. Visual Example



Sample Company
For Period Ending December 31, 2010

Sales by Depatment (DEPT999 is total)	2010
DEPT001	1,000
DEPT002	2,000
DEPT003	3,000
DEPT004	4,000
DEPT005	5,000
DEPT999	15,000

7.31.2. Meta-pattern(s) employed

Any, example uses Hierarchy

7.31.3. Description

In some cases it is desirable to not require the creator of an XBRL instance to create an XBRL extension taxonomy. This business use cases shows how this can be achieved.

7.31.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- The *Add Members Without Extension* shows how to use a typed Member (also called an implied member) to eliminate the need to create an XBRL extension taxonomy but to still enable certain types of extension.
- Realize that this approach is not allowed by the US GAAP taxonomy or SEC XBRL filings.

7.32. Reserved

Not used at this time.

7.33. Reserved

Not used at this time.

7.34. BUC34 - Grouped Report

The *Grouped Report* business use case is really nothing new, rather it shows that some information can contain a large number of dimensions.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC35-GroupedReport/GroupedReport_Landing.html

7.34.1. Visual Example

Sample Company
For Period Ending December 31, 2010

Investments

Shares	Description	Moody's Rating	S & P Rating	Value
LONG-TERM INVESTMENTS				
Australia				
AUD				
Government				
	Commonwealth of Australia			
8,450	7.50%, 7/15/05	Aaa	AAA	6,201,368
5,000	10.00%, 2/15/06	Aaa	AAA	3,684,856
5,500	6.75%, 11/15/06	Aaa	AAA	4,033,259
16,500	10.00%, 10/15/07	-	AAA	13,491,060
57,000	8.75%, 8/15/08(b)	Aaa	AAA	45,564,846
183,000	7.50%, 9/15/09(b)	Aaa	AAA	141,196,070
85,000	5.75%, 6/15/11	Aaa	AAA	60,270,977
154,000	6.50%, 5/15/13(b)	Aaa	-	114,827,421
28,000	9.25%, 4/15/15	Aaa	-	20,606,308
			Total Australian Government	410,176,285
Quasi/Semi-Government				
	Australia Postal Corporation			
22,000	6.00%, 3/25/09	-	AAA	15,576,319
	Commonwealth Bank of Australia			

7.34.2. Meta-pattern(s) employed

Any, example uses Hierarchy

7.34.3. Description

The *Grouped Report* business use cases shows that additional information is commonly just an additional dimension or dimensions which should be added to a set of information.

7.34.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- The *Grouped Report* business use case simply shows a Fact Group which has a larger number of Measures.

7.35. BUC35 – Adjustment

The *Adjustment* business use case shows how to model an adjustment to a prior period financial statement for a change in accounting policy or correction of an error as defined by financial reporting standards. This same approach can be used for making adjustments to other beginning balances not related to financial reporting.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC34-Adjustment/Adjustment_Landing.html

7.35.1. Visual Example

Sample Company
December 31,
(thousands of dollars)

	2010	2009
Changes in Equity		
Prior Period Adjustment		
Retained Earnings (Accumulated Losses), Originally Stated 2009	4,000	
Change in Accounting Policy	3,000	
Correction of an Error	-1,000	
Retained Earnings (Accumulated Losses), Restated 2009 Beginning Balance	6,000	
Changes in Equity		
Retained Earnings (Accumulated Losses), Beginning Balance	6,000	0
Net Income (Loss)	7,000	5,000
Dividends	-1,000	-1,000
Retained Earnings (Accumulated Losses), Ending Balance	12,000	4,000

7.35.2. Meta-pattern(s) employed

Adjustment, Roll Forward, Roll Up

7.35.3. Description

The *Adjustment* business use case shows how to model an accounting prior period adjustment due to the correction of an error or change in accounting policy which results in a restatement of retained earnings. See the *Restatement business* use case which adds a few additional pieces to this modelling puzzle.

7.35.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

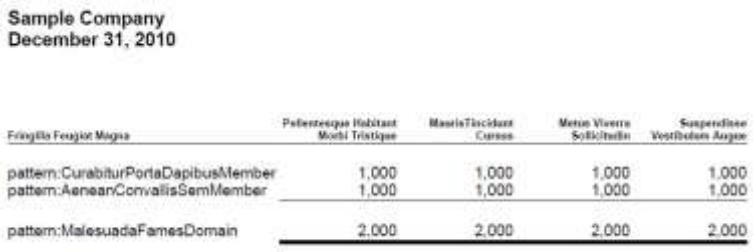
- An *Adjustment* reconciles an two balances at the same point in time to two different report dates.

7.36. BUC99 - Non Financial Information

The *Non Financial Information* business use case is really nothing new, rather it makes the point that the business use cases cover not just financial information, but rather any information: financial or non financial.

http://www.xbrlsite.com/Patterns/2010-08-01/BUC99-NonFinancialInformation/NonFinancialInformation_Landing.html

7.36.1. Visual Example



Sample Company
December 31, 2010

Fringilla Feugiat Magna	Pellentesque Habitant Morbi Tristique	Mauris Tincidunt Cursus	Metus Viverra Sollicitudin	Suspendisse Vestibulum Augue
pattern:CurabiturPortaDapibusMember	1,000	1,000	1,000	1,000
pattern:AeneanConvallisSemMember	1,000	1,000	1,000	1,000
pattern:MalesuadaFamesDomain	2,000	2,000	2,000	2,000

7.36.2. Meta-pattern(s) employed

Any, example uses Hierarchy

7.36.3. Description

The *Non Financial Information* business use case is Simple Compound Fact business use case modelled with meaningless placeholder text. The point is to show that there is nothing special necessary to model non financial information in XBRL. Any non financial use case can be modelled as the financial reporting examples shown. Information is simply text and numbers; whether it be financial or non financial is not a consideration really.

7.36.4. Important characteristics and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

- This use case shows that there is no difference between financial and non-financial information. Both are numbers and text used within a specific business domain.