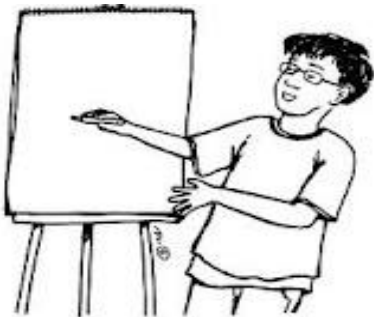


Dimensions : A Primer

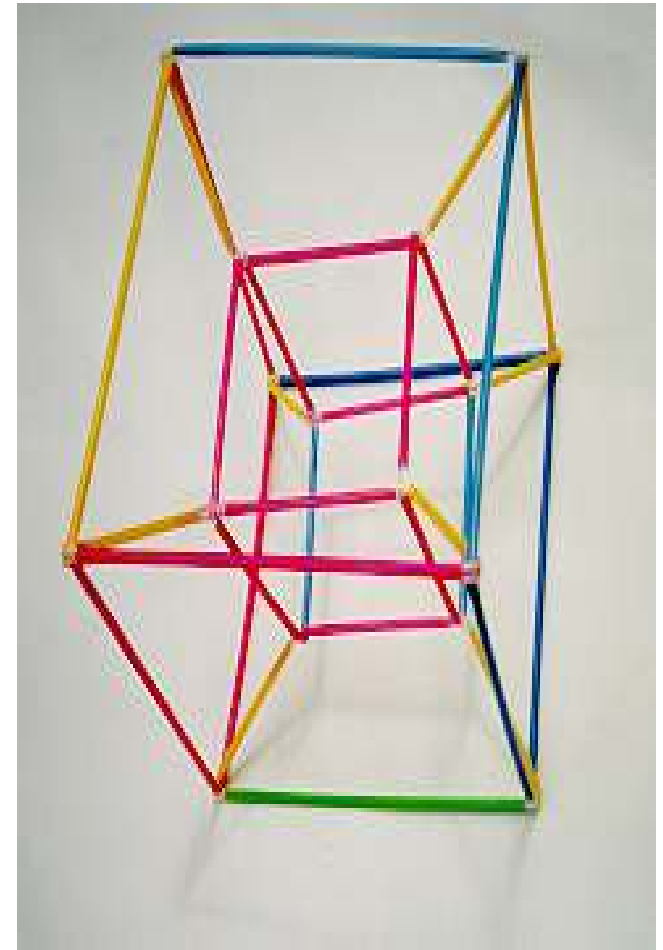


CA. NIRMAL GHORAWAT
B. Com (Hons), ACA



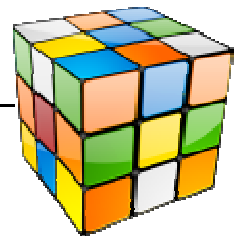
Session Overview

- What is an XBRL Dimension?
- Tagging an XBRL Dimension in an Instance Document



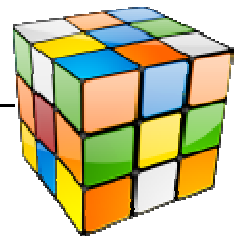
What is an XBRL Dimension?

- Simply Stated – “Dimension” is a Technical Term in XBRL used to [Tag The Tables](#) Typically found in Financial Reports.
- However, XBRL Dimension are [more versatile](#) – in as much – they can be used to [represent multi-dimensional Data](#) (2D{Table}, 3D, etc) in XBRL.



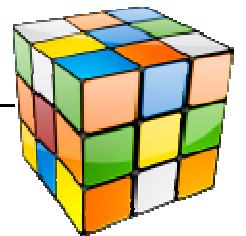
What is an XBRL Dimension?

- Ability to add multiple / additional identifiers to a piece of data / information
- Use of Dimension in non-forms-based Reporting [SIMPLIFY Tagging](#) and reduces no. of elements in Taxonomy
- Capability added to XBRL by XBRL Dimension 1.0 (18 September, 2006) (Technical Specification)



The XBRL Dimension 1.0 Specification

- Modular eXtension to the XBRL Specification (XBRL 2.1)
- Enables Developers to add additional semantic meaning to XBRL Taxonomies representing multi-dimensional reports programmatically

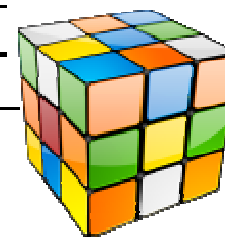


A Normal Table Feature in Financial Reports

Sales breakdown, by product and region

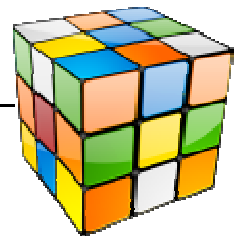
Product	Region	(INR Thousands Only)	
		2012	2011
Food and Beverages	Asia	3037	4009
	Africa	4572	1220
	Europe	1383	2559
	Americas	4739	4623
	Others	3584	3637
	Total	17315	16048
Home and Personal Care	Asia	3985	1643
	Africa	1250	697
	Europe	680	704
	Americas	99	1964
	Others	4146	2080
	Total	10160	7088
	Grand Total	27475	23136

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Terms Used in Dimensions

Dimension (=Axis)	is a manner in which data might be presented or say a categorization of facts. eg. Sales can be presented by way Region or Products.
Domain	The range of valid values for a Dimension is called its Domain. eg. Products or Region are both Domain.
Domain Member	is a concept that is part of a domain. For example, “Food and Beverages” is a Domain Member in the “Product” Domain.



Terms Used in Dimensions

Hypercube
(= Table)

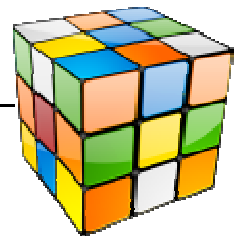
A hypercube is a possible dimensional representation.

eg., Products and Regions form 2 Hypercubes.

Primary Item
(=Line Items)

is a simple concept, or item, defined in an XBRL schema that is part of a substitution group, and can therefore be represented in a multi-dimensional manner.

eg. Sales



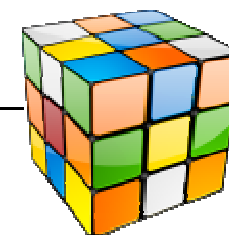
Terms Used in XBRL Dimensions

Sales breakdown, by product and region



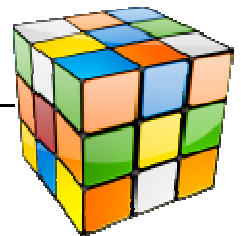
(INR Thousands Only)

	2012	2011
facts		
	3037	4009
	4572	1220
	1383	2559
	4739	4623
	3584	3637
Total	17315	16048
	3985	1643
	1250	697
	680	704
	99	1964
	4146	2080
Total	10160	7088
Grand Total	27475	23136



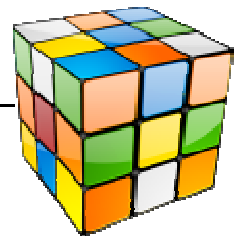
Why XBRL Dimensions?

- Enables computer applications to consume and process dynamic associations of Data
- Automated processing of Multi-Dimensional Data for a more complete analysis
- Enables Developers to add additional semantic meaning to XBRL Taxonomies representing multi-dimensional reports programmatically



Tuples v/s Dimensions

- Tuples and Dimensions are both technical features in XBRL Taxonomies which allow “Data” that is often reported in the form of Tables in Financial / Business Reports to be handled efficiently in XBRL.



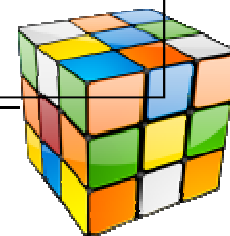
Tuples v/s Dimensions

Tuples

- Only 2-Dimensional. Not possible to represent multi-dimensional data using Tuples
- Not as functional as Dimensions
- Inhibit Extensibility

Dimensions

- Versatile. Can be used for representing multi-dimensional data [2D/ 3D/ (n)D]
- Dimensions are more Versatile and cover all functional aspects of Tuples and more
- Exhibit Extensibility



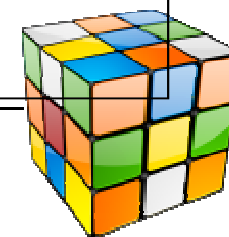
Tuples v/s Dimensions

Tuples

- Higher No. of Elements in the Taxonomy (roughly: Domain Members X Line Items)
- No effect on Contexts.

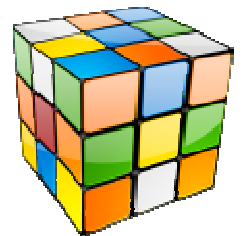
Dimensions

- Lower No. of Elements in the Taxonomy (roughly: Domain Members + Line Items)
- Higher No. of Contexts in Instance Documents.



TAGGING AN XBRL DIMENSION IN AN INSTANCE DOCUMENT

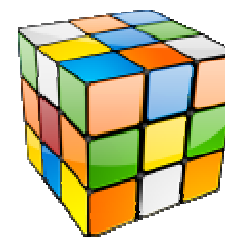
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xbrldi :: NameSpace

The instance document must contain reference for the “xbrldi” namespaces

xbrldi	http://xbrl.org/2006/xbrldi
--------	---



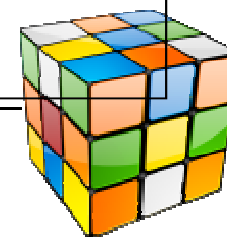
Explicit v/s Typed Dimension

Explicit

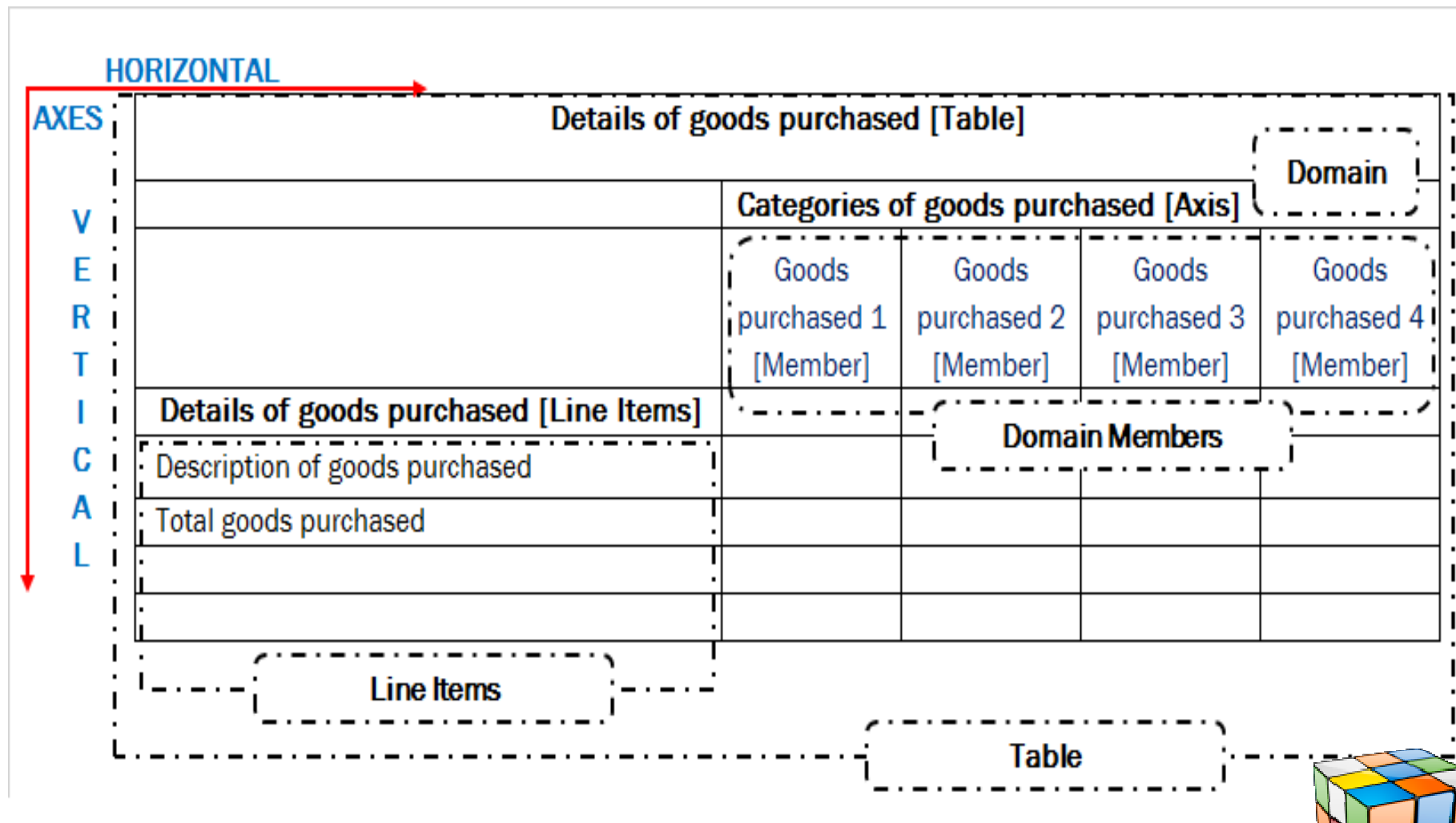
- You know exactly what are the Dimension Members (i.e., the Domain explicitly names its members)
- There is a FINITE and MANAGEABLE number of members

Typed

- You don't know the values but you know enough to define the members (i.e., not possible to explicitly name its members)
- There may be an INFINITE (UNMANAGEABLE) number of (possible) members.



Example : Explicit Dimension - Simple



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Tagging an Explicit Dimension-Simple Type

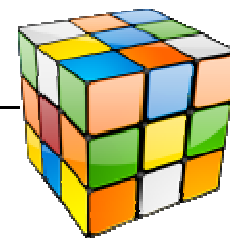
```

<xbrli:context id="GoodsPurchased1Member_D2012">
  <xbrli:entity>
    <xbrli:identifier
      scheme="www.mca.gov.in/CIN">CIN</xbrli:identifier>
    <xbrli:segment>
      <xbrldi:explicitMember dimension=
        "in-gaap_CategoriesOfGoodsPurchasedAxis">
        in-gaap_GoodsPurchased1Member
      </xbrldi:explicitMember>
    </xbrli:segment>
  </xbrli:entity>
  ... (<xbrli:period> ... </xbrli:period></xbrli:context>)

```

Domain Axis

Domain Member



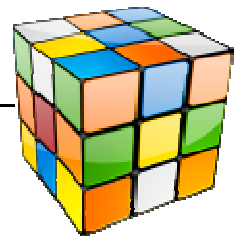
Data items for Table

...

```
<in-gaap_DescriptionOfGoodsPurchased  
  contextRef="GoodsPurchased1Member_D2012">Cement  
</in-gaap_DescriptionOfGoodsPurchased>
```

```
<in-gaap_GoodsPurchased  
  contextRef="GoodsPurchased1Member_D2012"  
  unitRef="INR" decimals="INF">40000 </in-  
gaap_GoodsPurchased >
```

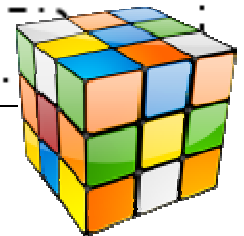
...



Example : Explicit Dimension - Complex

HORIZONTAL		Classification of borrowings [Table]			
AXES		(Multiple) Domain(s)	Domain Members		
V E R T I C A L	Classification based on time period [Axis]		Long Term Member		
	Classification of borrowings [Axis] (by Nature)		Term Loan From Bank		
	Subclassification of borrowings [Axis] (by Security)		Secured Member		
	Details of borrowings [Line Items]				
	Borrowings				
	Nature of security	Nature of security			
		Details of personal security given by			
	Details on loans	Aggregate amount of loans guarantee			
		Aggregate amount of loans guarantee			
	guaranteed [Abstract]	Particulars of any redeemed			
	Details on defaults on borrowings	Terms of repayment of long-term			
		Beginning date of continuing default fo			
		Outstanding amount of continuing def			
		Outstanding amount of continuing def			
		Line Items	Table		

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Tagging an Explicit Dimension-Complex Type

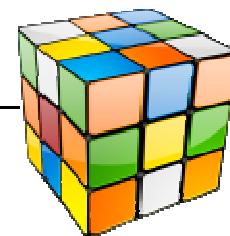
```

<xbrli:context id="LongTerm_INRTermLoanBank_Secured_I2012">
  <xbrli:entity>
    <xbrli:identifier scheme="www.mca.gov.in/CIN">CIN</xbrli:identifier>
    <xbrli:segment>
      <xbrldi:explicitMember dimension=
        "in-gaap_ClassificationBasedOnTimePeriodAxis">
        in-gaap_LongTermMember</xbrldi:explicitMember>
      <xbrldi:explicitMember dimension=
        "in-gaap_ClassificationOfBorrowingsAxis">
        in-
        gaap_RupeeTermLoansFromBanksMember</xbrldi:explicitMember>
      <xbrldi:explicitMember dimension=
        "in-gaap_SubclassificationOfBorrowingsAxis">
        in-gaap_SecuredBorrowingsMember</xbrldi:explicitMember>
    </xbrli:segment>
  </xbrli:entity>
  ... (<xbrli:period> ... </xbrli:period></xbrli:context>)

```

Domain Axis

Domain Members

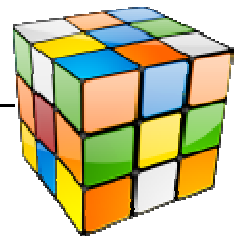


Data items for Table

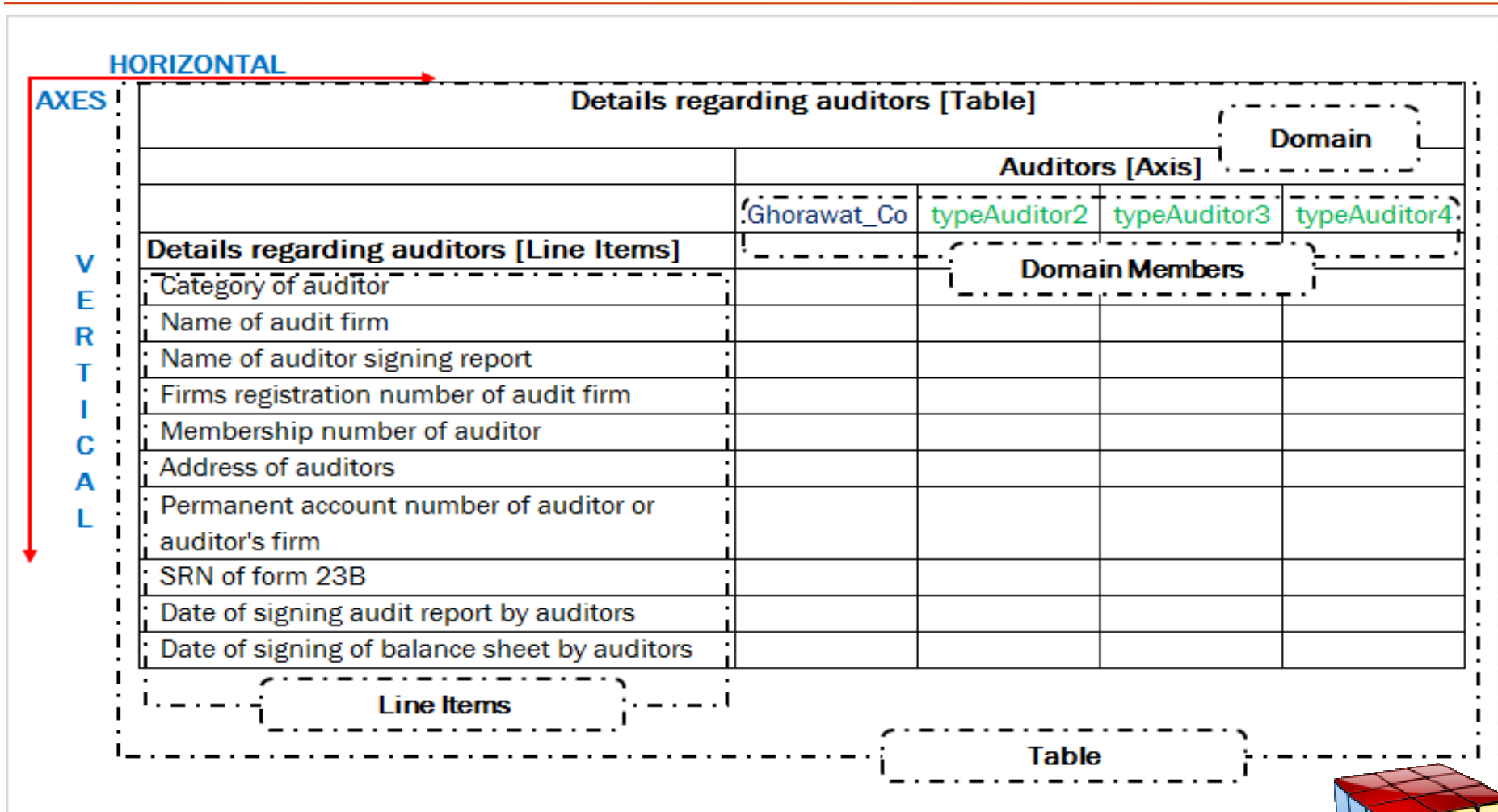
...

```
<in-gaap_Borrowings  
  contextRef="LongTerm_INRTermLoanBank_Secured_I2012  
  " unitRef="INR" decimals="INF">100000</ in-  
gaap_Borrowings >
```

...



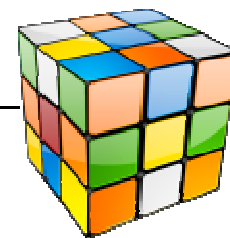
Typed Dimension



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Tagging a Typed Dimension

```
<xbrli:context id="AuditorAxis_GhorawatCo_D2012">
  <xbrli:entity>
    <xbrli:identifier
      scheme="www.mca.gov.in/CIN">CIN</xbrli:identifier>
    <xbrli:segment>
      <xbrldi:typedMember dimension="in-ca_AuditorsDomain">
        <in-ca_AuditorsDomain>Ghorawat And Company</in-
          ca_AuditorsDomain>
      </xbrldi:typedMember>
    </xbrli:segment>
  </xbrli:entity>
  ... (<xbrli:period> ... </xbrli:period></xbrli:context>)
```



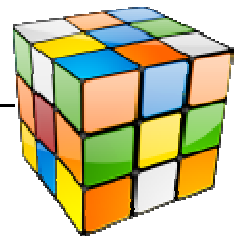
Data items for Table

...

```
<in-ca_CategoryOfAuditor  
  contextRef="AuditorAxis_GhorawatCo_D2012">Individual</  
  in-ca_CategoryOfAuditor>
```

```
<in-ca_NameOfAuditFirm  
  contextRef="AuditorAxis_GhorawatCo_D2012">Ghorawat  
  & Co</in-ca_NameOfAuditFirm >
```

...



Thank
you

Presented By:

CA. Nirmal Ghorawat

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Web: <http://www.canirmalg.wordpress.com> www.ghorawat.in