

Understanding Disclosures

by

Charles Hoffman, CPA

Helpful insights into representing business and financial information using XBRL.

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<https://digitalfinancialreporting.blogspot.com/2024/12/master-class-in-representing-financial.html>

<https://seattlemethod.blogspot.com/p/resources.html>

1.Introduction

This document builds on the document, *Understanding Networks, Hypercubes, Components, and Information Blocks*¹.

To summarize, in that first document we examined the technical artifacts associated with representing information using XBRL (e.g. network, hypercube, component) and we pointed out the logical artifact which I refer to as the “block” or the “information block”.

As I pointed out; you can represent blocks of information using different technical approaches but the information represented, the block of information, does not change based on the technical representation approach used to represent that information.

Block and disclosure are higher level or assemblies or complex information objects constructed using other primitive atomic and molecular level logical artifacts. A block is a useful unit of a report that makes doing certain things significantly easier and other things which were simply impossible; possible.

I am not going to repeat that examination of the ten different technical representations here. I will point out that the technical representation approach chosen does have consequences and that there are good practices and bad practices within the spectrum of different technical representation approaches.

This document focus on the logical artifacts of the information block or simply Block and the Disclosure.

The XBRL technical specification never refers to the notion of the information block or block or the disclosure. Per the perspective of Atomic Design Methodology², the XBRL technical syntax tends to describe the “molecules” (element, association, fact, rule) that are then used to construct the logical “organisms” (information block, disclosure) used within an area of knowledge such as financial reporting.

This document explains the logical organisms of “information block” (a.k.a. Block) and “disclosure”, explains the relation between those two logical components, and compares and contrasts different information blocks and disclosures to help the reader understand the capabilities of XBRL to represent financial and nonfinancial (i.e. general business) information.

Before we get to the logical notion of the disclosure, we will want to make sure we have a crystal-clear understanding of the notion of the information block or simply the block.

¹ *Understanding Networks, Hypercubes, Components, and Information Blocks*,
<http://www.xbrlsite.com/2025/Library/UnderstandingNetworksComponentsHypercubes.pdf>

² *Atoms, Molecules, Organisms, and Designing Systems*,
<https://digitalfinancialreporting.blogspot.com/2025/01/atoms-molecules-organisms-and-designing.html>

1.1. Information Block (a.k.a. Block)

Situation Theory treats information as a commodity. In my view, The XBRL Open Information Model (OIM) and the Standard Business Report Model (SBRM)³ likewise do, or should, treat information as a commodity.

Per Situation Theory, an "infon" is a unit of information. An infon is arbitrary in that an entire report is an infon, a part of that report you might refer to as the "balance sheet" is also an infon, or a fragment of the balance sheet such as the line item "assets" from the balance sheet are also an infons. Basically, any arbitrary fragment of a financial report might be considered an infon.

Per my Seattle Method, a "Block" of information is also an infon. But a Block of information has a more precise definition and is in no way arbitrary. The following screen shot shows a block of information:

Property, Plant and Equipment, by Component [Line Items]	Period [Axis]	
	2010-12-31	2009-12-31
Property, Plant and Equipment, by Component [Roll Up]		
Land	1,000,000	1,000,000
Machinery and equipment, gross	2,000,000	2,000,000
Furniture and fixtures, gross	6,000,000	6,000,000
Accumulated depreciation	(1,000,000)	(1,000,000)
Property, plant and equipment, net	8,000,000	8,000,000

A block⁴ is defined as an assembly of report elements, facts, associations, and rules. Those Block artifacts are bonded together by the logic of the logical pattern of information. Again, a Block is a logical artifact, a logical abstraction, that makes working with a report easier.

Every block has a type or information model (a.k.a. concept arrangement pattern⁵ plus member arrangement pattern⁶). The following are the different types or categories of blocks: set, roll up, roll forward, arithmetic, adjustment (a.k.a. restatement), variance (a.k.a. difference), text block, roll forward info. Every type is also described by the arrangement of the members of a set of dimensions which describes the aggregation pattern of the set of members of a dimension. Every information model is identifiable⁷ and therefore every block of information is identifiable.

³ Standard Business Report Model (SBRM) Study Group,
<https://digitalfinancialreporting.blogspot.com/2025/06/standard-business-report-model-sbrm.html>

⁴ Blocks, http://www.xbrlsite.com/mastering/Part02_Chapter05.E2_Blocks.pdf

⁵ Concept Arrangement Pattern,
http://www.xbrlsite.com/mastering/Part02_Chapter05.I_ConceptArrangementPatterns.pdf

⁶ Member Arrangement Pattern,
<http://www.xbrlsite.com/mastering/InformationModelIdentification.pdf>

⁷ Information Model Identification,
<http://www.xbrlsite.com/mastering/InformationModelIdentification.pdf>

To obtain a precise understand of what is and is not a block you can use the PROOF and in particular the master class information⁸ provided in the prior document which I referenced at the beginning of this document. The PROOF has exactly 19 blocks of information:



How blocks work is explained by the *Theory of Information Blocks*⁹ which is part of the explanation of *Financial Statement Mechanics and Dynamics*¹⁰.

Each of those 19 blocks of information can be viewed in different ways. The following shows an example of that different view of the information block using off-the-shelf software; in this case Auditchain Labs AG's Luca Suite:

⁸ Master Class in Representing Financial Statement Logic Using XBRL, <https://digitalfinancialreporting.blogspot.com/2024/12/master-class-in-representing-financial.html>

⁹ *Theory of Information Blocks*, <https://digitalfinancialreporting.blogspot.com/2024/12/theory-of-blocks.html>

¹⁰ *Financial Statement Mechanics and Dynamics*, <https://digitalfinancialreporting.blogspot.com/2024/12/theory-of-blocks.html>

Information block rendering for information input or editing:

Rendering | Model | Facts | Rules | Verification | Terms

Reporting Entity [Aspect] GH259400TOMPUOLS65II | <http://standards.iso.org/iso/17442>

Concept [Aspect]	Period [Aspect]
	2022-01-01 2022-12-31
Comprehensive Income [Roll Up]	
Revenues	7000
(Expenses)	3000
Gains	1000
(Losses)	2000
Net Income	3000

Information block rendering for information viewing:

Rendering | Model | Facts | Rules | Verification | Terms

Reporting Entity [Aspect] GH259400TOMPUOLS65II | <http://standards.iso.org/iso/17442>

Concept [Aspect]	Period [Aspect]
	2022-01-01 2022-12-31
Comprehensive Income [Roll Up]	
Revenues	\$ 7,000
(Expenses)	(3,000)
Gains	1,000
(Losses)	(2,000)
Net Income	\$ 3,000

Information block model:

Rendering | Model | Facts | Rules | Verification | Terms

Label	Category	DataType	Period	Balance	PreferredLabelRole	Name
▼ Comprehensive Income Statement [Hypercube]	Hypercube					proof:ComprehensiveIncomeStatementHypercube
▼ Comprehensive Income Statement [Line Items]	LineItems					proof:ComprehensiveIncomeStatementLineItems
▼ Comprehensive Income [Roll Up]	Abstract					proof:ComprehensiveIncomeRollUp
Revenues	Concept	Monetary	Duration	Credit		proof:Revenues
(Expenses)	Concept	Monetary	Duration	Debit	Negated	proof:Expenses
Gains	Concept	Monetary	Duration	Credit		proof:Gains
(Losses)	Concept	Monetary	Duration	Debit	Negated	proof:Losses
Net Income	Concept	Monetary	Duration	Credit		proof:NetIncome

Information block facts:

Rendering

Model

Facts

Rules

Verification

Terms

+ Add

Search

ReportingEntityAspect	CalendarPeriodAspect	Concept	FactValue	Units	Rounding	ParentheticalExplanations	Sequence	Edit
GH259400TOMPUOLS65II	http://standards.iso.org/iso/17442 2022-01-01 2022-12-31	proof:Revenues	7000	iso4217:USD	INF	ParentheticalFormatter	33	
GH259400TOMPUOLS65II	http://standards.iso.org/iso/17442 2022-01-01 2022-12-31	proof:Expenses	3000	iso4217:USD	INF	ParentheticalFormatter	86	
GH259400TOMPUOLS65II	http://standards.iso.org/iso/17442 2022-01-01 2022-12-31	proof:Gains	1000	iso4217:USD	INF	ParentheticalFormatter	41	
GH259400TOMPUOLS65II	http://standards.iso.org/iso/17442 2022-01-01 2022-12-31	proof:Losses	2000	iso4217:USD	INF	ParentheticalFormatter	90	
GH259400TOMPUOLS65II	http://standards.iso.org/iso/17442 2022-01-01 2022-12-31	proof:NetIncome	3000	iso4217:USD	INF	ParentheticalFormatter	50	

Showing 1 to 5 of 5 rows

Information block rules: (this has a flaw, it should be showing the roll up rule)

Rendering	Model	Facts	Rules	Verification	Terms
<div> <div>Search</div> </div>					
RuleType	RuleCode	Rule	Concept	StructureIdentifier	
No matching records found					

Information block rules verification result:

Rendering	Model	Facts	Rules	Verification	Terms
<div> <div>Search</div> </div>					
RuleType	Expression	Period	StructureIdentifier	Result	
+ RollUpRule	Net Income==+Revenues-Expenses+Gains-Losses	2022-01-01 2022-12-31	ComprehensiveIncome	true	

Information block terms (a.k.a. report model elements):

Rendering	Model	Facts	Rules	Verification	Terms
<div> <div>Search</div> </div>					
Label	Category	Period	Balance	Name	
Comprehensive Income Statement [Hypercube]	Hypercube	-	-	proof:ComprehensiveIncomeStatementHypercube	
Comprehensive Income Statement [Line Items]	LineItems			proof:ComprehensiveIncomeStatementLineItems	
Comprehensive Income [Roll Up]	Abstract			proof:ComprehensiveIncomeRollUp	
Revenues	Concept	Duration	Credit	proof:Revenues	
(Expenses)	Concept	Duration	Debit	proof:Expenses	
Gains	Concept	Duration	Credit	proof:Gains	
(Losses)	Concept	Duration	Debit	proof:Losses	
Net Income	Concept	Duration	Credit	proof:NetIncome	

With that we end our brief refresher course on information blocks or simply “blocks”. Information blocks are used to construct disclosures which is the primary area of interest for this document and which we will discuss next.

2. Disclosures

A disclosure¹¹ is another logical artifact of a financial report. The notion of a disclosure is explained by the *Theory of Disclosures and Disclosure Mechanics*¹² which is also part of the *Financial Statement Mechanics and Dynamics*.

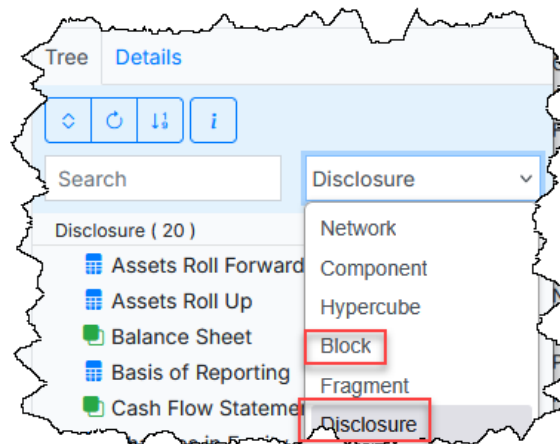
A disclosure is simply something that is disclosed within a financial statement. For example, here is an example of a disclosure:

Property, Plant and Equipment, Net [Roll Up]	Period [Axis]	
	2020-12-31	2019-12-31
Property, Plant and Equipment, Net [Roll Up]		
Land	5,347,000	1,147,000
Buildings, Net	244,508,000	366,375,000
Furnitures and Fixtures, Net	34,457,000	34,457,000
Computer Equipment, Net	4,169,000	5,313,000
Other Property, Plant and Equipment, Net	6,702,000	6,149,000
Property, Plant and Equipment, Net	295,183,000	413,441,000

You might be thinking that a disclosure looks a lot like an information block, and you would be correct.

In fact, a disclosure is made up of information blocks. To understand disclosures lets take a look at the disclosures of the PROOF¹³:

(NOTE: To move between the Block and Disclosure views of the PROOF report use the combo box on the right side of the form in Luca Suite's basic viewer)

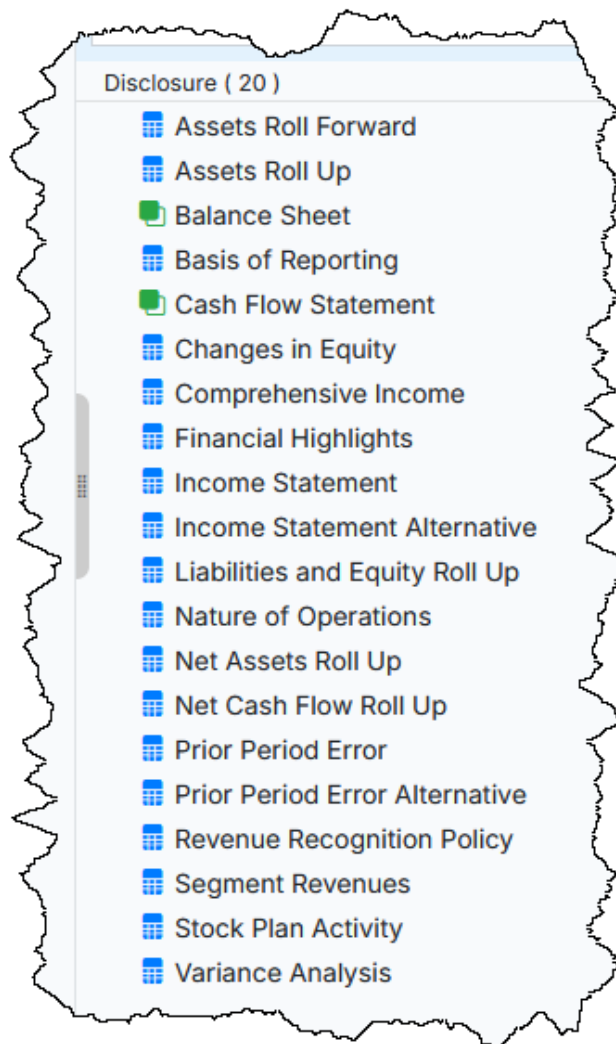


¹¹ Disclosure, http://www.xbrlsite.com/mastering/Part02_Chapter05.E3_Disclosures.pdf

¹² *Theory of Disclosures and Disclosure Mechanics*, <https://digitalfinancialreporting.blogspot.com/2024/12/theory-of-disclosures-and-disclosure.html>

¹³ You can use Auditchain Labs AG's Luca Suite basic report viewer to have a look at both the blocks and the disclosures in the PROOF report using this link, <https://luca.pacioli.ai/luca/view/0f24fd35e961e167a727b663c75a4c5ec9fb7eb86730d6292f46e6e180fc2018625fff43/index>

In the screen shot below you see the Disclosures view of the PROOF report. Contrast that to the previous screen shot of the information blocks. Notice that there are 19 information blocks but there are 20 disclosures in that PROOF report:



So why is there a difference between the 19 blocks of information and the 20 disclosures? Two things account for this difference. First, notice the "Balance Sheet" disclosure and the "Cash Flow Statement" disclosure which are shown in the list of disclosures but are not shown in the list of blocks.

Both the Balance Sheet and Cash Flow Statement are made up of not one, but two blocks. A balance sheet is made up of an Assets Roll Up (also considered a disclosure) and a Liabilities and Equity Roll Up (likewise a separate disclosure).

Every information block can be identified as being a specific disclosure. But in addition, multiple disclosures can be combined to form a complex disclosure which is defined as a disclosure which is made up of a combination of two or more other disclosures.

Similarly, the Cash Flow Statement is made up of two separate disclosures. First, the Net Cash Flow Roll Up; then second, in the example of this proof, the Assets Roll Forward. (Note that this would actually be a roll forward of Cash and Cash Equivalents in a real financial report, but the PROOF does not have that level of detail).

And so, if you look at the Balance Sheet or the Cash Flow Statement you will notice that they are made up of separate information blocks that are also disclosures in their own right. Here is the “Liabilities and Equity [Roll Up]” and “Assets [Roll Up]” which make up the “Balance Sheet” disclosure: (they are out of order, that is a software bug)

Reporting Entity [Aspect]	AAAAAAAAAA http://xbrlsite.com/id
Unit [Aspect]	iso4217:USD

Concept [Aspect]	Period [Aspect]	
	2023-12-31	2022-12-31
Liabilities and Equity [Roll Up]		
Liabilities [Roll Up]		
Current Liabilities	\$ 0	\$ 0
Noncurrent Liabilities	0	0
Liabilities	0	0
Equity [Roll Up]		
Equity Attributable To Controlling Interests	3,000	0
Equity Attributable to Noncontrolling Interests	500	0
Equity	3,500	0
Liabilities and Equity	\$ 3,500	\$ 0

Reporting Entity [Aspect]	AAAAAAAAAA http://xbrlsite.com/id
Unit [Aspect]	iso4217:USD

Concept [Aspect]	Period [Aspect]	
	2023-12-31	2022-12-31
Assets [Roll Up]		
Current Assets	500	0
Noncurrent Assets	3,000	0
Assets	\$ 3,500	\$ 0

So, if you add the two complex disclosures, the Balance Sheet and Cash Flow Statement, to the 19 information blocks; you get 21. Shouldn't there be 21 disclosures and not just 20?

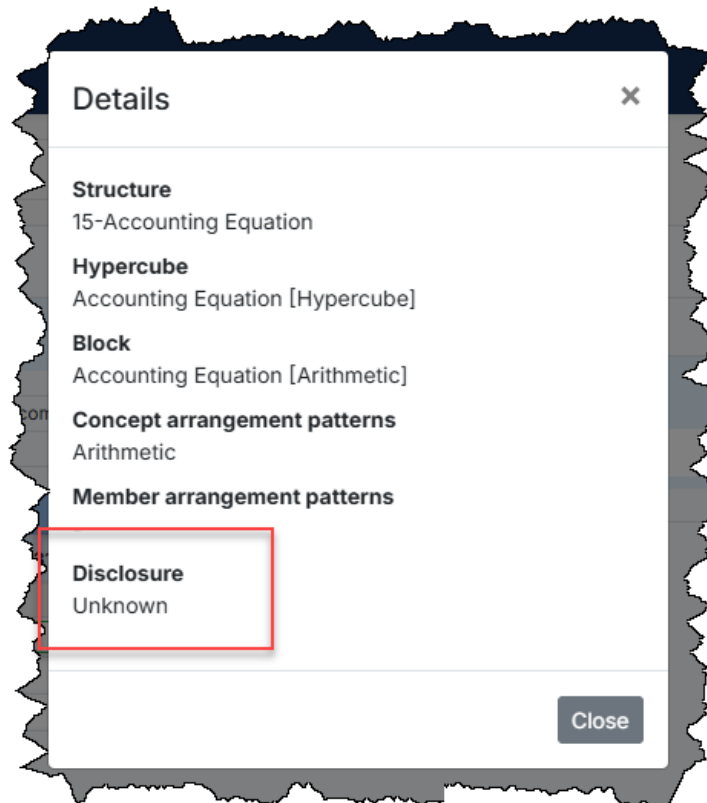
Yes, that would make sense and is a good observation. But there is one other thing that accounts for the discrepancy between the 19 information blocks and the 20 disclosures. That discrepancy is another software bug.

If you go back to the list of Blocks you will notice the information block labeled “Accounting Equation [Arithmetic]”. But if you go to the list of disclosures, you don't see that information block, “Accounting Equation [Arithmetic]”.

Why is that? The reason is another software bug. Obviously every information block should be contained with the list of disclosures because the disclosures is a list of

everything that is disclosed in a report and obviously the “Accounting Equation [Arithmetic]” information block exists within the report.

If you look closely, there is no set of disclosure mechanics rules that defines the Accounting Equation as a required disclosure for the PROOF reporting scheme. That is supplemental information provided by the report creator. This is easier to see if you are using the more advanced viewer which lets you see those details:



But there you have a reconciliation between the 19 information blocks and the 20 disclosures:

- 19 information blocks
- + 2 complex disclosures (Balance Sheet, Cash Flow Statement)
- - 1 missing disclosure (Accounting equation) caused by a software bug
- = 20 disclosures

The point is, there is a known and explainable relationship between the number of information blocks that you would find in a report and the number of disclosures you would also find in a report.

2.1. Conclusion

While an information block is not a typical artifact that an accountant would think about when working with something like a financial statement; it is a necessary logical artifact when it comes to figuring out the disclosures that are contained in a financial report.

Think about something. Point software at the US GAAP XBRL taxonomy or the IFRS XBRL Taxonomy and ask the software to return to you a list of the disclosures in each of those XBRL taxonomies.

If you do this the results will be unsatisfying. It simply will not work. Why is that? The creators of the US GAAP and IFRS XBRL taxonomies provided no such list of disclosures in either of those XBRL taxonomies.

Could they have? Absolutely. For example, I took the IFRS for SMEs XBRL taxonomy which likewise did not contain a list of disclosures and added such a list¹⁴.

Using those disclosure mechanics rules¹⁵ and using information blocks¹⁶ which are always discoverable; you can work around the fact that XBRL taxonomy creators to not provide explicit identifiers for disclosures.

Should the creators of XBRL taxonomies provide explicit lists of disclosures? Personally, I think so. But, you cannot control those creating every XBRL taxonomy. But you can work around this fact and create your own list of an XBRL taxonomy creator did not provide such a list of disclosures.

¹⁴ *IFRS for SMEs XBRL Taxonomy 2024 + Enhancements*, <https://digitalfinancialreporting.blogspot.com/2025/05/ifrs-for-smes-xbrl-taxonomy-2024.html>

¹⁵ Disclosure Mechanics Rules, <https://auditchain.infura-ipfs.io/ipfs/QmdX6R2xbDhmcUnqGnHLQExRbXmGDAjSxvPHSrLxpMu3YA/disclosures.html>

¹⁶ Blocks, <https://auditchain.infura-ipfs.io/ipfs/QmdX6R2xbDhmcUnqGnHLQExRbXmGDAjSxvPHSrLxpMu3YA/blocks.html>