

Recognizing that Financial Reports are Comprised of Many Individual Identifiable and Testable Fragments

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Report

A report is made up of many individually identifiable fragments.

We will be looking at the 2017 Microsoft 10-K.

You see the list of report fragments on the left, the balance sheet fragment is selected and you see the rendering of the balance sheet on the right.

The screenshot displays a financial reporting application interface. On the left, a list of report fragments is shown, with the '100040 - Statement - BALANCE SHEETS' fragment selected and highlighted in green. A red box highlights the selected fragment in the list. Below the list, the 'Component Properties' pane shows details for the selected fragment: Network (100040 - Statement - BALANCE SHEETS), Table (Statement [Table]), Disclosure (disclosures:BalanceSheet), Confidence (HIGH), and Status (InProgress).

On the right, the rendered balance sheet is displayed. The report is for the period 2017-06-30 and 2016-06-30. The balance sheet is divided into Assets, Liabilities and stockholders' equity, and Total assets. The data is as follows:

Statement [Line Items]	2017-06-30	2016-06-30
Assets		
Current assets:		
Cash and cash equivalents	7,663,000,000	6,510,000,000
Short-term investments (including securities loaned of \$3,694 and \$204)	125,318,000,000	106,730,000,000
Total cash, cash equivalents, and short-term investments	132,981,000,000	113,240,000,000
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426	19,792,000,000	18,277,000,000
Inventories	2,181,000,000	2,251,000,000
Other	4,897,000,000	5,892,000,000
Total current assets	159,851,000,000	139,660,000,000
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800	23,734,000,000	18,356,000,000
Equity and other investments	6,023,000,000	10,431,000,000
Goodwill	35,122,000,000	17,872,000,000
Intangible assets, net	10,106,000,000	3,733,000,000
Other long-term assets	6,250,000,000	3,416,000,000
Total assets	241,086,000,000	193,468,000,000
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	7,390,000,000	6,898,000,000
Short-term debt	9,072,000,000	12,904,000,000
Current portion of long-term debt	1,049,000,000	0
Accrued compensation	5,819,000,000	5,264,000,000
Income taxes	718,000,000	580,000,000
Short-term unearned revenue	34,102,000,000	27,468,000,000
Securities lending payable	97,000,000	294,000,000
Other	6,280,000,000	5,949,000,000
Total current liabilities	64,527,000,000	59,357,000,000
Long-term debt	76,073,000,000	40,557,000,000
Long-term unearned revenue	10,327,000,000	6,441,000,000

Report fragment

A report is comprised of different individually identifiable report fragments which make up the full report.

The 2017 Microsoft 10-K is made up of:

- 128 Networks
- 128 [Table]s (one Table per Network)
- 194 Fact Sets

Note that the term “Fact Set” and “Block” are synonyms.

Instance (msft-20170630.xml) x Taxonomy (msft-20170630.xsd)

Networks (128)

Rendering Model Structure Fact Table Business Rules Structure Business Rules Validation Results Elements

Component: (Network > Table)

Network: (Network > Table)

Table: (Table)

Fact Set: (Fact Set)

Fact Set: (Fact Set)

	2017-06-30	2016-06-30
Assets		
Current assets:		
Cash and cash equivalents	7,663,000,000	6,510,000,000
Short-term investments (including securities loaned of \$3,694 and \$204)	125,318,000,000	106,730,000,000
Total cash, cash equivalents, and short-term investments	132,981,000,000	113,240,000,000
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426	19,792,000,000	18,277,000,000
Inventories	2,181,000,000	2,251,000,000
Other	4,897,000,000	5,892,000,000
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Current portion of long-term debt	1,049,000,000	0
Accrued compensation	5,819,000,000	5,264,000,000
Income taxes	718,000,000	580,000,000
Short-term unearned revenue	34,102,000,000	27,468,000,000
Securities lending payable	97,000,000	294,000,000
Other	6,280,000,000	5,949,000,000
Total current liabilities	64,527,000,000	59,357,000,000
Long-term debt	76,073,000,000	40,557,000,000
Long-term unearned revenue	10,377,000,000	6,441,000,000

Fact set

A fact set is simply some set of facts that a reporting entity put together for some reason.

Each fact set has:

- A rendering
- A information model structure or description
- A fact table
- Business rules
- Business rules validation results
- Report elements

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Res
Component: (Network and Table)				
Network: 1200 - Statement - BALANCE SHEETS				
Table: Statement [Table]				
Reporting Entity [Axis]		0000789019 http://www.sec.gov/CIK		
Legal Entity [Axis]		Entity [Domain]		
Unit [Axis]		USD		
		Period [Axis]		
Statement [Line Items]		2017-06-30	2016-06-30	
Assets				
Current assets:				
Cash and cash equivalents		7,663,000,000	6,510,000,000	
Short-term investments (including securities loaned of \$3,694 and \$204)		125,318,000,000	106,730,000,000	
Total cash, cash equivalents, and short-term investments		132,981,000,000	113,240,000,000	
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426		19,792,000,000	18,277,000,000	
Inventories		2,181,000,000	2,251,000,000	
Other		4,897,000,000	5,892,000,000	
Total current assets		159,851,000,000	139,660,000,000	
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800		23,734,000,000	18,356,000,000	
Equity and other investments		6,023,000,000	10,431,000,000	
Goodwill		35,122,000,000	17,872,000,000	
Intangible assets, net		10,106,000,000	3,733,000,000	
Other long-term assets		6,250,000,000	3,416,000,000	
Total assets		241,086,000,000	193,468,000,000	

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Results	Elements		
Drag a column header here to group by that column							
#	Reporting Entity	Period	Concept	Legal Entity [Axis]	Fact Value	Unit	Rounding
1	0000789019 http://www.sec.gov/CIK	2017-06-30	Cash and cash equivalents	Entity [Domain]	7663000000	USD	-6
2	0000789019 http://www.sec.gov/CIK	2016-06-30	Cash and cash equivalents	Entity [Domain]	6510000000	USD	-6
3	0000789019 http://www.sec.gov/CIK	2017-06-30	Short-term investments (including...	Entity [Domain]	125318000000	USD	-6
4	0000789019 http://www.sec.gov/CIK	2016-06-30	Short-term investments (including...	Entity [Domain]	106730000000	USD	-6
5	0000789019 http://www.sec.gov/CIK	2017-06-30	Total cash, cash equivalents, and...	Entity [Domain]	132981000000	USD	-6
6	0000789019 http://www.sec.gov/CIK	2016-06-30	Total cash, cash equivalents, and...	Entity [Domain]	113240000000	USD	-6
7	0000789019 http://www.sec.gov/CIK	2017-06-30	Accounts receivable, net of allow...	Entity [Domain]	19792000000	USD	-6
8	0000789019 http://www.sec.gov/CIK	2016-06-30	Accounts receivable, net of allow...	Entity [Domain]	18277000000	USD	-6
9	0000789019 http://www.sec.gov/CIK	2017-06-30	Inventories	Entity [Domain]	2181000000	USD	-6
10	0000789019 http://www.sec.gov/CIK	2016-06-30	Inventories	Entity [Domain]	2251000000	USD	-6
11	0000789019 http://www.sec.gov/CIK	2017-06-30	Other	Entity [Domain]	4897000000	USD	-6
12	0000789019 http://www.sec.gov/CIK	2016-06-30	Other	Entity [Domain]	5892000000	USD	-6
13	0000789019 http://www.sec.gov/CIK	2017-06-30	Total current assets	Entity [Domain]	159851000000	USD	-6
14	0000789019 http://www.sec.gov/CIK	2016-06-30	Total current assets	Entity [Domain]	139660000000	USD	-6
15	0000789019 http://www.sec.gov/CIK	2017-06-30	Property and equipment, net of a...	Entity [Domain]	23734000000	USD	-6
16	0000789019 http://www.sec.gov/CIK	2016-06-30	Property and equipment, net of a...	Entity [Domain]	18356000000	USD	-6
17	0000789019 http://www.sec.gov/CIK	2017-06-30	Equity and other investments	Entity [Domain]	6023000000	USD	-6
18	0000789019 http://www.sec.gov/CIK	2016-06-30	Equity and other investments	Entity [Domain]	10431000000	USD	-6
19	0000789019 http://www.sec.gov/CIK	2017-06-30	Goodwill	Entity [Domain]	35122000000	USD	-6
20	0000789019 http://www.sec.gov/CIK	2016-06-30	Goodwill	Entity [Domain]	17872000000	USD	-6
21	0000789019 http://www.sec.gov/CIK	2017-06-30	Intangible assets, net	Entity [Domain]	10106000000	USD	-6
22	0000789019 http://www.sec.gov/CIK	2016-06-30	Intangible assets, net	Entity [Domain]	3733000000	USD	-6
23	0000789019 http://www.sec.gov/CIK	2017-06-30	Other long-term assets	Entity [Domain]	6250000000	USD	-6
24	0000789019 http://www.sec.gov/CIK	2016-06-30	Other long-term assets	Entity [Domain]	3416000000	USD	-6
25	0000789019 http://www.sec.gov/CIK	2017-06-30	Total assets	Entity [Domain]	241086000000	USD	-6
26	0000789019 http://www.sec.gov/CIK	2016-06-30	Total assets	Entity [Domain]	193468000000	USD	-6

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Results	Elements		
Label			Report Element Class	Period	Balance	Preferred L...	Name
Statement [Table]			[Table]				us-gaap:StatementTable
Legal Entity [Axis]			[Axis]				dei:LegalEntityAxis
Entity [Domain]			[Member]				dei:EntityDomain
Statement [Line Items]			[LineItems]				us-gaap:StatementLineItems
Assets			[Abstract]				us-gaap:AssetsAbstract
Current assets:			[Abstract]				us-gaap:AssetsCurrentAbstract
Cash and cash equivalents			[Concept] Monetary	As Of	Debit		us-gaap:CashAndCashEquivalentsAtCarryingValue
Short-term investments (including securities loaned of \$3,694 and \$204)			[Concept] Monetary	As Of	Debit		us-gaap:AvailableForSaleSecuritiesCurrent
Total cash, cash equivalents, and short-term investments			[Concept] Monetary	As Of	Debit		us-gaap:CashCashEquivalentsAndShortTermInvestments
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426			[Concept] Monetary	As Of	Debit		us-gaap:AccountsReceivableNetCurrent
Inventories			[Concept] Monetary	As Of	Debit		us-gaap:InventoryNet
Other			[Concept] Monetary	As Of	Debit		us-gaap:OtherAssetsCurrent
Total current assets			[Concept] Monetary	As Of	Debit		us-gaap:AssetsCurrent
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800			[Concept] Monetary	As Of	Debit		us-gaap:PropertyPlantAndEquipmentNet
Equity and other investments			[Concept] Monetary	As Of	Debit		us-gaap:LongTermInvestments
Goodwill			[Concept] Monetary	As Of	Debit		us-gaap:Goodwill
Intangible assets, net			[Concept] Monetary	As Of	Debit		us-gaap:FiniteLivedIntangibleAssetsNet
Other long-term assets			[Concept] Monetary	As Of	Debit		us-gaap:OtherAssetsNoncurrent
Total assets			[Concept] Monetary	As Of	Debit		us-gaap:Assets

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Results	Elements		
Roll Ups							
Label	Rendered Value	Op	Reported Value	Calculated Value	Balance	Result	Name
Statement [Line Items]							us-gaap:StatementLineItems
Assets							us-gaap:AssetsAbstract
Current assets:							us-gaap:AssetsCurrentAbstract
Cash and cash equivalents	7,663,000,000	+	7,663,000,000				us-gaap:CashAndCashEquivalentsAtCarryingValue
Short-term investments (including securities loaned of \$3,694 and \$204)	125,318,000,000	+	125,318,000,000				us-gaap:AvailableForSaleSecuritiesCurrent
Total cash, cash equivalents, and short-term investments	132,981,000,000	+	132,981,000,000	132,981,000,000	Debit	Verified	us-gaap:CashCashEquivalentsAndShortTermInv...
Accounts receivable, net of allowance for doubtful	19,792,000,000	+	19,792,000,000				us-gaap:AccountsReceivableNetCurrent
Inventories	2,181,000,000	+	2,181,000,000				us-gaap:InventoryNet
Other	4,897,000,000	+	4,897,000,000				us-gaap:OtherAssetsCurrent
Total current assets	159,851,000,000	+	159,851,000,000	159,851,000,000	Debit	Verified	us-gaap:AssetsCurrent
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800	23,734,000,000	+	23,734,000,000				us-gaap:PropertyPlantAndEquipmentNet
Equity and other investments	6,023,000,000	+	6,023,000,000				us-gaap:LongTermInvestments
Goodwill	35,122,000,000	+	35,122,000,000				us-gaap:Goodwill
Intangible assets, net	10,106,000,000	+	10,106,000,000				us-gaap:FiniteLivedIntangibleAssetsNet
Other long-term assets	6,250,000,000	+	6,250,000,000				us-gaap:OtherAssetsNoncurrent
Total assets	241,086,000,000	+	241,086,000,000	241,086,000,000	Debit	Verified	us-gaap:Assets

<http://xbrlsite.azurewebsites.net/2019/Library/UnderstandingAndLeveragingFactSets.pdf>

Fact set (Fact Table)

A fact set is literally a table of the facts that are contained in the fact set. Each fact has a set of aspects that describe the facts and allows for one fact to be distinguished from another fact.

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Results	Elements		
Drag a column header here to group by that column							
#	Reporting Entity	Period	Concept	Legal Entity [Axis]	Fact Value	Unit	Rounding
1	0000789019 http://www.sec.gov/CIK	2017-06-30	Cash and cash equivalents	Entity [Domain]	7663000000	USD	-6
2	0000789019 http://www.sec.gov/CIK	2016-06-30	Cash and cash equivalents	Entity [Domain]	6510000000	USD	-6
3	0000789019 http://www.sec.gov/CIK	2017-06-30	Short-term investments (including...	Entity [Domain]	125318000000	USD	-6
4	0000789019 http://www.sec.gov/CIK	2016-06-30	Short-term investments (including...	Entity [Domain]	106730000000	USD	-6
5	0000789019 http://www.sec.gov/CIK	2017-06-30	Total cash, cash equivalents, and...	Entity [Domain]	132981000000	USD	-6
6	0000789019 http://www.sec.gov/CIK	2016-06-30	Total cash, cash equivalents, and...	Entity [Domain]	113240000000	USD	-6
7	0000789019 http://www.sec.gov/CIK	2017-06-30	Accounts receivable, net of allow...	Entity [Domain]	19792000000	USD	-6
8	0000789019 http://www.sec.gov/CIK	2016-06-30	Accounts receivable, net of allow...	Entity [Domain]	18277000000	USD	-6
9	0000789019 http://www.sec.gov/CIK	2017-06-30	Inventories	Entity [Domain]	2181000000	USD	-6
10	0000789019 http://www.sec.gov/CIK	2016-06-30	Inventories	Entity [Domain]	2251000000	USD	-6
11	0000789019 http://www.sec.gov/CIK	2017-06-30	Other	Entity [Domain]	4897000000	USD	-6
12	0000789019 http://www.sec.gov/CIK	2016-06-30	Other	Entity [Domain]	5892000000	USD	-6
13	0000789019 http://www.sec.gov/CIK	2017-06-30	Total current assets	Entity [Domain]	159851000000	USD	-6
14	0000789019 http://www.sec.gov/CIK	2016-06-30	Total current assets	Entity [Domain]	139660000000	USD	-6
15	0000789019 http://www.sec.gov/CIK	2017-06-30	Property and equipment, net of a...	Entity [Domain]	23734000000	USD	-6
16	0000789019 http://www.sec.gov/CIK	2016-06-30	Property and equipment, net of a...	Entity [Domain]	18356000000	USD	-6
17	0000789019 http://www.sec.gov/CIK	2017-06-30	Equity and other investments	Entity [Domain]	6023000000	USD	-6
18	0000789019 http://www.sec.gov/CIK	2016-06-30	Equity and other investments	Entity [Domain]	10431000000	USD	-6
19	0000789019 http://www.sec.gov/CIK	2017-06-30	Goodwill	Entity [Domain]	35122000000	USD	-6
20	0000789019 http://www.sec.gov/CIK	2016-06-30	Goodwill	Entity [Domain]	17872000000	USD	-6
21	0000789019 http://www.sec.gov/CIK	2017-06-30	Intangible assets, net	Entity [Domain]	10106000000	USD	-6
22	0000789019 http://www.sec.gov/CIK	2016-06-30	Intangible assets, net	Entity [Domain]	3733000000	USD	-6
23	0000789019 http://www.sec.gov/CIK	2017-06-30	Other long-term assets	Entity [Domain]	6250000000	USD	-6
24	0000789019 http://www.sec.gov/CIK	2016-06-30	Other long-term assets	Entity [Domain]	3416000000	USD	-6
25	0000789019 http://www.sec.gov/CIK	2017-06-30	Total assets	Entity [Domain]	241086000000	USD	-6
26	0000789019 http://www.sec.gov/CIK	2016-06-30	Total assets	Entity [Domain]	193468000000	USD	-6

Information Model Definition

An information model definition or information model structure defines the model of the information for the set of facts in the fact set.

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Results	Elements		
Label			Report Element Class	Period	Balance	Preferred L...	Name
▼ Statement [Table]			[Table]			Terse Label	us-gaap:StatementTable
▼ Legal Entity [Axis]			[Axis]			Terse Label	dei:LegalEntityAxis
Entity [Domain]			[Member]			Terse Label	dei:EntityDomain
▼ Statement [Line Items]			[LineItems]			Terse Label	us-gaap:StatementLineItems
▼ Assets			[Abstract]			Terse Label	us-gaap:AssetsAbstract
▼ Current assets:			[Abstract]			Terse Label	us-gaap:AssetsCurrentAbstract
Cash and cash equivalents			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:CashAndCashEquivalentsAtCarryingValue
Short-term investments (including securities loaned of \$3,694			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:AvailableForSaleSecuritiesCurrent
Total cash, cash equivalents, and short-term investments			[Concept] Monetary	As Of	Debit	Total Label	us-gaap:CashCashEquivalentsAndShortTermInvestments
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:AccountsReceivableNetCurrent
Inventories			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:InventoryNet
Other			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:OtherAssetsCurrent
Total current assets			[Concept] Monetary	As Of	Debit	Total Label	us-gaap:AssetsCurrent
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:PropertyPlantAndEquipmentNet
Equity and other investments			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:LongTermInvestments
Goodwill			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:Goodwill
Intangible assets, net			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:FiniteLivedIntangibleAssetsNet
Other long-term assets			[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:OtherAssetsNoncurrent
Total assets			[Concept] Monetary	As Of	Debit	Total Label	us-gaap:Assets

Rules

Rules describe the relations between the facts in the fact set.

In this case you see the roll up rules that describe the roll up relations for the facts in the assets roll up fact set.

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Results	Elements
Roll UPs					
Label	Report Element Class	Balance	Weight	Name	
▼ Statement [Table]	[Table]		0	us-gaap:StatementTable	
▼ Total assets	[Concept] Monetary	Debit	0	us-gaap:Assets	
▼ Total current assets	[Concept] Monetary	Debit	1.00	us-gaap:AssetsCurrent	
▼ Total cash, cash equivalents, and short-term investments	[Concept] Monetary	Debit	1.00	us-gaap:CashCashEquivalentsAndShortTermInvestments	
Cash and cash equivalents	[Concept] Monetary	Debit	1.00	us-gaap:CashAndCashEquivalentsAtCarryingValue	
Short-term investments (including securities loaned of \$3,694	[Concept] Monetary	Debit	1.00	us-gaap:AvailableForSaleSecuritiesCurrent	
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426	[Concept] Monetary	Debit	1.00	us-gaap:AccountsReceivableNetCurrent	
Inventories	[Concept] Monetary	Debit	1.00	us-gaap:InventoryNet	
Other	[Concept] Monetary	Debit	1.00	us-gaap:OtherAssetsCurrent	
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800	[Concept] Monetary	Debit	1.00	us-gaap:PropertyPlantAndEquipmentNet	
Equity and other investments	[Concept] Monetary	Debit	1.00	us-gaap:LongTermInvestments	
Goodwill	[Concept] Monetary	Debit	1.00	us-gaap:Goodwill	
Intangible assets, net	[Concept] Monetary	Debit	1.00	us-gaap:FiniteLivedIntangibleAssetsNet	
Other long-term assets	[Concept] Monetary	Debit	1.00	us-gaap:OtherAssetsNoncurrent	

Rules Validation Results

The business rules validation results show the facts in the fact set and verifies that the facts in the fact set are consistent with the rules that describe how the facts relate to one another, in this case mathematically.

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Results	Elements		
Roll UPs							
Label	Rendered Value	Op	Reported Value	Calculated Value	Balance	Result	Name
▼ Statement [Line Items]							us-gaap:StatementLineItems
▼ Assets							us-gaap:AssetsAbstract
▼ Current assets:							us-gaap:AssetsCurrentAbstract
Cash and cash equivalents	7,663,000,000	+	7,663,000,000		Debit		us-gaap:CashAndCashEquivalentsAtCarryingValue
Short-term investments (including securities loaned of	125,318,000,000	+	125,318,000,000		Debit		us-gaap:AvailableForSaleSecuritiesCurrent
Total cash, cash equivalents, and short-term investments	132,981,000,000	+	132,981,000,000	132,981,000,000	Debit	Verified	us-gaap:CashCashEquivalentsAndShortTermInv...
Accounts receivable, net of allowance for doubtful	19,792,000,000	+	19,792,000,000		Debit		us-gaap:AccountsReceivableNetCurrent
Inventories	2,181,000,000	+	2,181,000,000		Debit		us-gaap:InventoryNet
Other	4,897,000,000	+	4,897,000,000		Debit		us-gaap:OtherAssetsCurrent
Total current assets	159,851,000,000	+	159,851,000,000	159,851,000,000	Debit	Verified	us-gaap:AssetsCurrent
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800	23,734,000,000	+	23,734,000,000		Debit		us-gaap:PropertyPlantAndEquipmentNet
Equity and other investments	6,023,000,000	+	6,023,000,000		Debit		us-gaap:LongTermInvestments
Goodwill	35,122,000,000	+	35,122,000,000		Debit		us-gaap:Goodwill
Intangible assets, net	10,106,000,000	+	10,106,000,000		Debit		us-gaap:FiniteLivedIntangibleAssetsNet
Other long-term assets	6,250,000,000	+	6,250,000,000		Debit		us-gaap:OtherAssetsNoncurrent
Total assets	241,086,000,000		241,086,000,000	241,086,000,000	Debit	Verified	us-gaap:Assets

Report Elements

The report elements show the individual report elements that are used to create the information model structure of the fact set.

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Results	Elements
Filter Class					
Label	Report Element Class	Period	Balance	Name	
Statement [Table]	[Table]			us-gaap:StatementTable	
Legal Entity [Axis]	[Axis]			dei:LegalEntityAxis	
Entity [Domain]	[Member]			dei:EntityDomain	
Statement [Line Items]	[LineItems]			us-gaap:StatementLineItems	
Assets	[Abstract]			us-gaap:AssetsAbstract	
Current assets:	[Abstract]			us-gaap:AssetsCurrentAbstract	
Cash and cash equivalents	[Concept] Monetary	As Of	Debit	us-gaap:CashAndCashEquivalentsAtCarryingValue	
Short-term investments (including securities loaned of \$3,694 and \$204)	[Concept] Monetary	As Of	Debit	us-gaap:AvailableForSaleSecuritiesCurrent	
Total cash, cash equivalents, and short-term investments	[Concept] Monetary	As Of	Debit	us-gaap:CashCashEquivalentsAndShortTermInvestments	
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426	[Concept] Monetary	As Of	Debit	us-gaap:AccountsReceivableNetCurrent	
Inventories	[Concept] Monetary	As Of	Debit	us-gaap:InventoryNet	
Other	[Concept] Monetary	As Of	Debit	us-gaap:OtherAssetsCurrent	
Total current assets	[Concept] Monetary	As Of	Debit	us-gaap:AssetsCurrent	
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800	[Concept] Monetary	As Of	Debit	us-gaap:PropertyPlantAndEquipmentNet	
Equity and other investments	[Concept] Monetary	As Of	Debit	us-gaap:LongTermInvestments	
Goodwill	[Concept] Monetary	As Of	Debit	us-gaap:Goodwill	
Intangible assets, net	[Concept] Monetary	As Of	Debit	us-gaap:FiniteLivedIntangibleAssetsNet	
Other long-term assets	[Concept] Monetary	As Of	Debit	us-gaap:OtherAssetsNoncurrent	
Total assets	[Concept] Monetary	As Of	Debit	us-gaap:Assets	

Rendering

Using the facts in the fact set, the information model definition, and the rules of the mathematical information, software can auto-generate a human readable rendering.

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Res
Component: (Network and Table)				
Network	100040 - Statement - BALANCE SHEETS			
Table	Statement [Table]			
Reporting Entity [Axis]	0000789019 http://www.sec.gov/CIK			
Legal Entity [Axis]	Entity [Domain]			
Unit [Axis]	USD			
	Period [Axis] ▼			
Statement [Line Items]	2017-06-30	2016-06-30		
Assets				
Current assets:				
Cash and cash equivalents	7,663,000,000	6,510,000,000		
Short-term investments (including securities loaned of \$3,694 and \$204)	125,318,000,000	106,730,000,000		
Total cash, cash equivalents, and short-term investments	132,981,000,000	113,240,000,000		
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426	19,792,000,000	18,277,000,000		
Inventories	2,181,000,000	2,251,000,000		
Other	4,897,000,000	5,892,000,000		
Total current assets	159,851,000,000	139,660,000,000		
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800	23,734,000,000	18,356,000,000		
Equity and other investments	6,023,000,000	10,431,000,000		
Goodwill	35,122,000,000	17,872,000,000		
Intangible assets, net	10,106,000,000	3,733,000,000		
Other long-term assets	6,250,000,000	3,416,000,000		
Total assets	241,086,000,000	193,468,000,000		

Universally applicable rules

While a taxonomy describes report specific rules, there are other rules that are *universally applicable rules* that are common to each and every report and therefore every report must be consistent with:

- *Class-subclass relations*
- *Concept arrangement patterns*
- *Consistency cross checks*
- *Disclosure mechanics*

In 6,023 reports there are 754,430 fact sets:

- 407,392 fact sets (54%) are **text blocks** (Level 1 Notes, Level 2 Policies, Level 3 Disclosures)
 - 181,063 fact sets (24%) are **sets**
 - 120,708 fact sets (16%) are **roll ups**
 - 37,721 fact sets (5%) are **roll forwards**
 - 7,546 fact sets (1%) are **roll forward infos** or something else
-
- Total reports: 6,023
 - Total facts reported: 8,532,275
 - *Average facts per report: 1,416*
 - Total networks in all reports: 462,786
 - *Average networks per report: 77*
 - Total fact sets in all reports: 754,430
 - *Average fact sets per report: 125*
 - *Average fact sets per network: 1.6*
 - *Average facts per network: 18*
 - *Average facts per fact set: 11*

Class- subclass relations

Report elements from a base taxonomy such as the US GAAP XBRL Taxonomy must be used consistently with how the taxonomy expects the concepts to be used.

For example, a “Current Asset” related concept MUST NOT be used to represent a “Noncurrent Assets”. Must be clear what is a “Current assets” and what is a “Noncurrent asset” from taxonomy.

Rendering	Model Structure	Fact Table	Business Rules Structure	Business Rules Validation Results	Elements	
Label			Report Element Class	Period	Balance	Preferred L... Name
▼ Statement [Table]			[Table]			Terse Label us-gaap:StatementTable
▼ Legal Entity [Axis]			[Axis]			Terse Label dei:LegalEntityAxis
Entity [Domain]			[Member]			Terse Label dei:EntityDomain
▼ Statement [Line Items]			[LineItems]			Terse Label us-gaap:StatementLineItems
▼ Assets			[Abstract]			Terse Label us-gaap:AssetsAbstract
▼ Current assets:			[Abstract]			Terse Label us-gaap:AssetsCurrentAbstract
Cash and cash equivalents			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:CashAndCashEquivalentsAtCarryingValue
Short-term investments (including securities loaned of \$3,694			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:AvailableForSaleSecuritiesCurrent
Total cash, cash equivalents, and short-term investments			[Concept] Monetary	As Of	Debit	Total Label us-gaap:CashCashEquivalentsAndShortTermInvestments
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:AccountsReceivableNetCurrent
Inventories			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:InventoryNet
Other			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:OtherAssetsCurrent
Total current assets			[Concept] Monetary	As Of	Debit	Total Label us-gaap:AssetsCurrent
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:PropertyPlantAndEquipmentNet
Equity and other investments			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:LongTermInvestments
Goodwill			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:Goodwill
Intangible assets, net			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:FiniteLivedIntangibleAssetsNet
Other long-term assets			[Concept] Monetary	As Of	Debit	Terse Label us-gaap:OtherAssetsNoncurrent
Total assets			[Concept] Monetary	As Of	Debit	Total Label us-gaap:Assets

Concept arrangement patterns

Fact sets have patterns. Each fact set is either a:

- **Set** (i.e. no mathematical relations)
- **Roll Up**
- **Roll Forward**
- **Adjustment**
- **Variance**
- **Roll Forward Info**
- **Text Block**

These patterns are the same for all reports and are derived by empirical evidence provided by the reports themselves.

Inventory [Line Items]	Period [Axis]	
	2017-06-30	2016-06-30
Raw materials	797,000,000	612,000,000
Work in process	145,000,000	158,000,000
Finished goods	1,239,000,000	1,481,000,000
Total	2,181,000,000	2,251,000,000

Income Tax Contingency [Line Items]	Period [Axis]		
	2016-07-01 - 2017-06-30	2015-07-01 - 2016-06-30	2014-07-01 - 2015-06-30
Balance, beginning of year	10,164,000,000	9,599,000,000	8,714,000,000
Decreases related to settlements	(4,000,000)	(201,000,000)	(50,000,000)
Increases for tax positions related to the current year	1,277,000,000	1,086,000,000	1,091,000,000
Increases for tax positions related to prior years	397,000,000	115,000,000	94,000,000
Decreases for tax positions related to prior years	(49,000,000)	(317,000,000)	(144,000,000)
Decreases due to lapsed statutes of limitations	(48,000,000)	(118,000,000)	(106,000,000)
Balance, end of year	11,737,000,000	10,164,000,000	9,599,000,000

Reporting Entity [Axis]	SAMP http://www.SampleCompany.com		
Legal Entity [Axis]	Consolidated Entity [Member]		
Period [Axis]	2010-01-01/2010-12-31		
Variance Analysis [Line Items]	Reporting Scenario [Axis]		
Variance Analysis [Hierarchy]	Budgeted [Member]	Variance [Member]	Actual [Member]
Sales	5,000	1,000	6,000
Cost of Goods Sold	3,000	1,000	4,000
Contribution Margin	2,000	(1,000)	1,000
Distribution Costs	1,000	0	1,000

Reporting Entity [Axis]	000000001 http://www.sec.gov/CIK	
Legal Entity [Axis]	Consolidated Entity [Domain]	
Period [Axis]	2015-12-31	
Changes in Stockholders' Equity [Line Items]	Report Date [Axis]	Drop Column Fields Here Fact Value
Increase (Decrease) in Stockholders' Equity [Adjustment]		
Stockholders' equity, originally stated	Originally Stated Report Date [Member]	30,000,000
Correction of a prior period error	Restated Report Date [Domain]	12,000,000
Effect of mandatory change in accounting policy for adoption of FAS XXX	Restated Report Date [Domain]	(2,000,000)
Stockholders' equity, restated	Restated Report Date [Domain]	40,000,000

Statement [Line Items]	Period [Axis]		
	2016-07-01 - 2017-06-30	2017-07-31	2016-12-31
Document Type	IS-X		
Amendment Flag	None		
Document Period End Date	2017-06-30		
Document Fiscal Year Focus	2017		
Document Fiscal Period Focus	FY		
Trading Symbol	MSFT		
Entity Registration Name	MICROSOFT CORPORATION		
Entity Central Index Key	0000789019		
Current Fiscal Year End Date	-06-30		
Entity Well-Known Seasoned Issuer	Yes		
Entity Current Reporting Status	Yes		
Entity Voluntary Filers	No		
Entity Filer Category	Large Accelerated Filer		
Entity Common Stock, Par Value Per Share	0.00000425		
Entity Common Stock, Shares Outstanding	7,702,243,979		
Entity Public Float	466,500,000		
U.S. Employer Identification No.	01144442		

Statement [Line Items]	Period [Axis]	
	2016-07-01 - 2017-06-30	2017-06-30
Components of Inventories	The components of inventories were as follows:	
	(In millions)	
	2017	2016
Raw materials	\$ 797	\$ 612
Work in process	145	158
Finished goods	1,239	1,481
Total	\$ 2,181	\$ 2,251

<http://xbrlsite.azurewebsites.net/2017/IntelligentDigitalFinancialReporting/UnderstandingBlockSemantics.pdf>

Disclosure mechanics rules

Each fact set discloses specific information. Each fact set must conform to a set of **disclosure mechanics rules** that (a) describe the disclosure and (b) can be used to verify that the disclosure is consistent with the provided description (i.e. the rules).

Rules	Line of Reasoning
	This disclosure: disclosures:InventoryNetRollUp
	- MUST be represented by a network with the SEC Category: cm:DisclosureType
	- MUST be represented as a Level 4 Disclosure Detail with the concept arrangement pattern: cm:RollUp
	- cm:RollUp REQUIRES total: us-gaap:InventoryNet
	- Or by the allowed alternative concept: us-gaap:InventoryNetOfAllowancesCustomerAdvancesAndProgressBillings
	- Or by the allowed alternative concept: us-gaap:PublicUtilitiesInventory
	- Or by the allowed alternative concept: us-gaap:AirlineRelatedInventory
	- Or by the allowed alternative concept: us-gaap:RetailRelatedInventory
	- Or by the allowed alternative concept: us-gaap:EnergyRelatedInventory
	- Or by the allowed alternative concept: us-gaap:AgriculturalRelatedInventory
	- MUST be represented as using the Level 3 Disclosure Text Block : us-gaap:ScheduleOfInventoryCurrentTableTextBlock
	- Or by the allowed alternative concept: us-gaap:ScheduleOfUtilityInventoryTextBlock
	- Requires the policy to be reported using the Level 2 Policy Text Block : us-gaap:InventoryPolicyTextBlock
	- Or by the allowed alternative concept: us-gaap:InventoryMajorClassesPolicy
	- Or by the allowed alternative concept: us-gaap:InventorySuppliesPolicy
	- Or by the allowed alternative concept: us-gaap:InventoryWorkInProgressPolicy
	- Or by the allowed alternative concept: us-gaap:InventoryFinishedGoodsPolicy
	- Requires the note to be reported using the Level 1 Note Text Block : us-gaap:InventoryDisclosureTextBlock

Component: (Network and Table)	
Network	100140 - Disclosure - INVENTORIES
Table	Statement [Table]
Reporting Entity [Axis]	0000789019 http://www.sec.gov/CIK
Period [Axis]	2016-07-01/2017-06-30
Legal Entity [Axis]	Entity [Domain]
Unit [Axis]	
Statement [Line Items]	
INVENTORIES	
	NOTE 7 — INVENTORIES
	The components of inventories were as follows:
	(In millions)
	June 30, 2017 2016
	Raw materials \$ 797 \$ 612
	Work in process 145 158
	Finished goods 1,239 1,481
	Total \$ 2,181 \$ 2,251

Component: (Network and Table)	
Network	100370 - Disclosure - INVENTORIES (Tables)
Table	Statement [Table]
Reporting Entity [Axis]	0000789019 http://www.sec.gov/CIK
Unit [Axis]	
Period [Axis]	2016-07-01/2017-06-30
Legal Entity [Axis]	Entity [Domain]
Statement [Line Items]	
Components of Inventories	
	The components of inventories were as follows:
	(In millions)
	June 30, 2017 2016
	Raw materials \$ 797 \$ 612
	Work in process 145 158
	Finished goods 1,239 1,481
	Total \$ 2,181 \$ 2,251

Component: (Network and Table)	
Network	100710 - Disclosure - Components of Inventories (Detail)
Table	Inventory, Current [Table]
Reporting Entity [Axis]	0000789019 http://www.sec.gov/CIK
Legal Entity [Axis]	Entity [Domain]
Unit [Axis]	USD
Period [Axis]	
Inventory [Line Items]	
	2017-06-30 2016-06-30
Raw materials	797,000,000 612,000,000
Work in process	145,000,000 158,000,000
Finished goods	1,239,000,000 1,481,000,000
Total	2,181,000,000 2,251,000,000

Disclosure mechanics rule

The **disclosure mechanics rules** describes each disclosure.

Each fact set is a disclosure, each disclosure has disclosure mechanics rules that describe the disclosure.

Rules	Line of Reasoning
	This disclosure: disclosures:InventoryNetRollUp
	- MUST be represented by a network with the SEC Category: cm:DisclosureType
	- MUST be represented as a Level 4 Disclosure Detail with the concept arrangement pattern: cm:RollUp
	- cm:RollUp REQUIRES total: us-gaap:InventoryNet
	- Or by the allowed alternative concept: us-gaap:InventoryNetOfAllowancesCustomerAdvancesAndProgressBillings
	- Or by the allowed alternative concept: us-gaap:PublicUtilitiesInventory
	- Or by the allowed alternative concept: us-gaap:AirlineRelatedInventory
	- Or by the allowed alternative concept: us-gaap:RetailRelatedInventory
	- Or by the allowed alternative concept: us-gaap:EnergyRelatedInventory
	- Or by the allowed alternative concept: us-gaap:AgriculturalRelatedInventory
	- MUST be represented as using the Level 3 Disclosure Text Block : us-gaap:ScheduleOfInventoryCurrentTableTextBlock
	- Or by the allowed alternative concept: us-gaap:ScheduleOfUtilityInventoryTextBlock
	- Requires the policy to be reported using the Level 2 Policy Text Block : us-gaap:InventoryPolicyTextBlock
	- Or by the allowed alternative concept: us-gaap:InventoryMajorClassesPolicy
	- Or by the allowed alternative concept: us-gaap:InventorySuppliesPolicy
	- Or by the allowed alternative concept: us-gaap:InventoryWorkInProgressPolicy
	- Or by the allowed alternative concept: us-gaap:InventoryFinishedGoodsPolicy
	- Requires the note to be reported using the Level 1 Note Text Block : us-gaap:InventoryDisclosureTextBlock

Fundamental accounting concept relations continuity cross check rules

Make sure there are no inconsistencies or contradictions BETWEEN fact sets. (i.e. one fact set says one thing and another fact says something different)

There are 21 high-level accounting related consistency cross checks watching over Microsoft's primary financial statements.

Entity	Period	ID	Test	Result	Amount Of...	Evaluation
0000789019	2017-FY	FAC_CONSISTENCY_1	fac:Equity = (fac:EquityAttributableToParent + fac:EquityAttributableToNoncontrollingInterest)	True	0	fac:Equity[72,394,000,000] = (fac:EquityAttributableToParent[us-gaap:StockholdersEquity[72,394,000,000]] + fac:EquityAttributableToNoncontrollingInterest[0])
0000789019	2017-FY	FAC_CONSISTENCY_10	fac:NetCashFlowFromInvestingActivities = (fac:NetCashFlowFromInvestingActivitiesContinuing + fac:NetCashFlowFromInvestingActivitiesDiscontinued)	True	0	fac:NetCashFlowFromInvestingActivities[46,781,000,000] = (fac:NetCashFlowFromInvestingActivitiesContinuing[us-gaap:NetCashProvidedByUsedInInvestingActivitiesContinuingOperations[46,781,000,000]] + fac:NetCashFlowFromInvestingActivitiesDiscontinued[0])
0000789019	2017-FY	FAC_CONSISTENCY_11	fac:NetCashFlowFromFinancingActivities = (fac:NetCashFlowFromFinancingActivitiesContinuing + fac:NetCashFlowFromFinancingActivitiesDiscontinued)	True	0	fac:NetCashFlowFromFinancingActivities[8,408,000,000] = (fac:NetCashFlowFromFinancingActivitiesContinuing[us-gaap:NetCashProvidedByUsedInFinancingActivitiesContinuingOperations[8,408,000,000]] + fac:NetCashFlowFromFinancingActivitiesDiscontinued[0])
0000789019	2017-FY	FAC_CONSISTENCY_12	fac:GrossProfit = (fac:Revenues - fac:CostOfRevenue)	True	0	fac:GrossProfit[55,689,000,000] = (fac:Revenues[us-gaap:SalesRevenueNet[89,590,000,000]] - fac:CostOfRevenue[us-gaap:CostOfRevenue[34,261,000,000]])
0000789019	2017-FY	FAC_CONSISTENCY_13	fac:OperatingIncomeLoss = (fac:GrossProfit - fac:OperatingExpenses)	True	0	fac:OperatingIncomeLoss[us-gaap:OperatingIncomeLoss[22,326,000,000]] = (fac:GrossProfit[55,689,000,000] - fac:OperatingExpenses[33,363,000,000])
0000789019	2017-FY	FAC_CONSISTENCY_15	fac:IncomeLossFromContinuingOperationsBeforeTax = (fac:OperatingIncomeLoss + fac:NonoperatingIncomePlusInterestAndDebtExpensePlusIncomeFromEquityMethodInvestments)	True	0	fac:IncomeLossFromContinuingOperationsBeforeTax[us-gaap:IncomeLossFromContinuingOperationsBeforeIncomeTaxesMinorityInterestAndIncomeLossFromEquityMethodInvestments[23,149,000,000]] = (fac:OperatingIncomeLoss[us-gaap:OperatingIncomeLoss[22,326,000,000]] + fac:NonoperatingIncomePlusInterestAndDebtExpensePlusIncomeFromEquityMethodInvestments[823,000,000])
0000789019	2017-FY	FAC_CONSISTENCY_16	fac:IncomeLossFromContinuingOperationsAfterTax = (fac:IncomeLossFromContinuingOperationsBeforeTax - fac:IncomeTaxExpenseBenefit)	True	0	fac:IncomeLossFromContinuingOperationsAfterTax[21,204,000,000] = (fac:IncomeLossFromContinuingOperationsBeforeTax[us-gaap:IncomeLossFromContinuingOperationsBeforeIncomeTaxesMinorityInterestAndIncomeLossFromEquityMethodInvestments[23,149,000,000]] - fac:IncomeTaxExpenseBenefit[us-gaap:IncomeTaxExpenseBenefit[1,945,000,000]])
0000789019	2017-FY	FAC_CONSISTENCY_17	fac:NetIncomeLoss = (fac:NetIncomeLossAttributableToParent + fac:IncomeLossFromDiscontinuedOperationsNetOfTax + fac:ExtraordinaryItemsOfIncomeExpenseNetOfTax)	True	0	fac:NetIncomeLoss[21,204,000,000] = (fac:NetIncomeLossAttributableToParent[us-gaap:NetIncomeLoss[21,204,000,000]] + fac:IncomeLossFromDiscontinuedOperationsNetOfTax[0] + fac:ExtraordinaryItemsOfIncomeExpenseNetOfTax[0])
0000789019	2017-FY	FAC_CONSISTENCY_18	fac:NetIncomeLoss = (fac:NetIncomeLossAttributableToParent + fac:NetIncomeLossAttributableToNoncontrollingInterest)	True	0	fac:NetIncomeLoss[21,204,000,000] = (fac:NetIncomeLossAttributableToParent[us-gaap:NetIncomeLoss[21,204,000,000]] + fac:NetIncomeLossAttributableToNoncontrollingInterest[0])
0000789019	2017-FY	FAC_CONSISTENCY_19	fac:NetIncomeLossAvailableToCommonStockholdersBasic = (fac:NetIncomeLossAttributableToParent - fac:PreferredStockDividendsAndOtherAdjustments)	True	0	fac:NetIncomeLossAvailableToCommonStockholdersBasic[21,204,000,000] = (fac:NetIncomeLossAttributableToParent[us-gaap:NetIncomeLoss[21,204,000,000]] - fac:PreferredStockDividendsAndOtherAdjustments[0])
0000789019	2017-FY	FAC_CONSISTENCY_2	fac:Assets = fac:LiabilitiesAndEquity	True	0	fac:Assets[us-gaap:Assets[241,086,000,000]] = fac:LiabilitiesAndEquity[us-gaap:LiabilitiesAndStockholdersEquity[241,086,000,000]]
0000789019	2017-FY	FAC_CONSISTENCY_20	fac:ComprehensiveIncomeLoss = (fac:ComprehensiveIncomeLossAttributableToParent + fac:ComprehensiveIncomeLossAttributableToNoncontrollingInterest)	True	0	fac:ComprehensiveIncomeLoss[20,098,000,000] = (fac:ComprehensiveIncomeLossAttributableToParent[us-gaap:ComprehensiveIncomeLossAttributableToParent[20,098,000,000]] + fac:ComprehensiveIncomeLossAttributableToNoncontrollingInterest[0])
0000789019	2017-FY	FAC_CONSISTENCY_21	fac:ComprehensiveIncomeLoss = (fac:NetIncomeLoss + fac:OtherComprehensiveIncomeLoss)	True	0	fac:ComprehensiveIncomeLoss[20,098,000,000] = (fac:NetIncomeLoss[21,204,000,000] + fac:OtherComprehensiveIncomeLoss[(1,106,000,000)])
0000789019	2017-FY	FAC_CONSISTENCY_3	fac:Assets = (fac:CurrentAssets + fac:NoncurrentAssets)	True	0	fac:Assets[us-gaap:Assets[241,086,000,000]] = (fac:CurrentAssets[us-gaap:AssetsCurrent[159,851,000,000]] + fac:NoncurrentAssets[81,235,000,000])
0000789019	2017-FY	FAC_CONSISTENCY_4	fac:Liabilities = (fac:CurrentLiabilities + fac:NoncurrentLiabilities)	True	0	fac:Liabilities[us-gaap:Liabilities[168,692,000,000]] = (fac:CurrentLiabilities[us-gaap:LiabilitiesCurrent[64,527,000,000]] + fac:NoncurrentLiabilities[104,165,000,000])
0000789019	2017-FY	FAC_CONSISTENCY_5	fac:LiabilitiesAndEquity = (fac:Liabilities + fac:CommitmentsAndContingencies + fac:TemporaryEquity + fac:Equity)	True	0	fac:LiabilitiesAndEquity[us-gaap:LiabilitiesAndStockholdersEquity[241,086,000,000]] = (fac:Liabilities[us-gaap:Liabilities[168,692,000,000]] + fac:CommitmentsAndContingencies[us-gaap:CommitmentsAndContingencies[]] + fac:TemporaryEquity[0] + fac:Equity[72,394,000,000])
0000789019	2017-FY	FAC_CONSISTENCY_50	fac:NetCashFlow = (fac:NetCashFlowContinuing + fac:NetCashFlowDiscontinued + fac:ExchangeGainsLosses)	True	0	fac:NetCashFlow[us-gaap:CashAndCashEquivalentsPeriodIncreaseDecrease[1,153,000,000]] = (fac:NetCashFlowContinuing[1,134,000,000] + fac:NetCashFlowDiscontinued[0] + fac:ExchangeGainsLosses[us-gaap:EffectOfExchangeRateOnCashAndCashEquivalents[19,000,000]])
0000789019	2017-FY	FAC_CONSISTENCY_6	fac:NetCashFlow = (fac:NetCashFlowFromOperatingActivities + fac:NetCashFlowFromInvestingActivities + fac:NetCashFlowFromFinancingActivities + fac:ExchangeGainsLosses)	True	0	fac:NetCashFlow[us-gaap:CashAndCashEquivalentsPeriodIncreaseDecrease[1,153,000,000]] = (fac:NetCashFlowFromOperatingActivities[39,507,000,000] + fac:NetCashFlowFromInvestingActivities[(46,781,000,000)] + fac:NetCashFlowFromFinancingActivities[8,408,000,000] + fac:ExchangeGainsLosses[us-gaap:EffectOfExchangeRateOnCashAndCashEquivalents[19,000,000]])
0000789019	2017-FY	FAC_CONSISTENCY_7	fac:NetCashFlowContinuing = (fac:NetCashFlowFromOperatingActivitiesContinuing + fac:NetCashFlowFromInvestingActivitiesContinuing + fac:NetCashFlowFromFinancingActivitiesContinuing)	True	0	fac:NetCashFlowContinuing[1,134,000,000] = (fac:NetCashFlowFromOperatingActivitiesContinuing[us-gaap:NetCashProvidedByUsedInOperatingActivitiesContinuingOperations[39,507,000,000]] + fac:NetCashFlowFromInvestingActivitiesContinuing[us-gaap:NetCashProvidedByUsedInInvestingActivitiesContinuingOperations[(46,781,000,000)]] + fac:NetCashFlowFromFinancingActivitiesContinuing[us-gaap:NetCashProvidedByUsedInFinancingActivitiesContinuingOperations[8,408,000,000]])
0000789019	2017-FY	FAC_CONSISTENCY_8	fac:NetCashFlowDiscontinued = (fac:NetCashFlowFromOperatingActivitiesDiscontinued + fac:NetCashFlowFromInvestingActivitiesDiscontinued + fac:NetCashFlowFromFinancingActivitiesDiscontinued)	True	0	fac:NetCashFlowDiscontinued[0] = (fac:NetCashFlowFromOperatingActivitiesDiscontinued[0] + fac:NetCashFlowFromInvestingActivitiesDiscontinued[0] + fac:NetCashFlowFromFinancingActivitiesDiscontinued[0])
0000789019	2017-FY	FAC_CONSISTENCY_9	fac:NetCashFlowFromOperatingActivities = (fac:NetCashFlowFromOperatingActivitiesContinuing + fac:NetCashFlowFromOperatingActivitiesDiscontinued)	True	0	fac:NetCashFlowFromOperatingActivities[39,507,000,000] = (fac:NetCashFlowFromOperatingActivitiesContinuing[us-gaap:NetCashProvidedByUsedInOperatingActivitiesContinuingOperations[39,507,000,000]] + fac:NetCashFlowFromOperatingActivitiesDiscontinued[0])

Information Model Structure Relations Rules

If the relationships between the report element categories are consistent with the machine-readable description of the expected structure of the report; and if this is true for every fact set included in the report; then the structure of the model is consistent with what is expected.

Child	Parent						
	Network	Table	Axis	Member	LineItems	Abstract	Concept
Network	0	0	0	0	0	0	0
Table	0	0	0	0	0	128	0
Axis	0	229	0	0	0	0	0
Member	0	0	229	264	0	0	0
LineItems	0	128	0	0	0	0	0
Abstract	128	0	0	0	26	5	0
Concept	0	0	0	0	428	152	0

Label	Report Element Class	Period	Balance	Preferred L...	Name
Statement [Table]	[Table]			Terse Label	us-gaap:StatementTable
Legal Entity [Axis]	[Axis]			Terse Label	dei:LegalEntityAxis
Entity [Domain]	[Member]			Terse Label	dei:EntityDomain
Statement [Line Items]	[LineItems]			Terse Label	us-gaap:StatementLineItems
Assets	[Abstract]			Terse Label	us-gaap:AssetsAbstract
Current assets:	[Abstract]			Terse Label	us-gaap:AssetsCurrentAbstract
Cash and cash equivalents	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:CashAndCashEquivalentsAtCarryingValue
Short-term investments (including securities loaned of \$3,694	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:AvailableForSaleSecuritiesCurrent
Total cash, cash equivalents, and short-term investments	[Concept] Monetary	As Of	Debit	Total Label	us-gaap:CashCashEquivalentsAndShortTermInvestments
Accounts receivable, net of allowance for doubtful accounts of \$405 and \$426	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:AccountsReceivableNetCurrent
Inventories	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:InventoryNet
Other	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:OtherAssetsCurrent
Total current assets	[Concept] Monetary	As Of	Debit	Total Label	us-gaap:AssetsCurrent
Property and equipment, net of accumulated depreciation of \$24,179 and \$19,800	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:PropertyPlantAndEquipmentNet
Equity and other investments	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:LongTermInvestments
Goodwill	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:Goodwill
Intangible assets, net	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:FiniteLivedIntangibleAssetsNet
Other long-term assets	[Concept] Monetary	As Of	Debit	Terse Label	us-gaap:OtherAssetsNoncurrent
Total assets	[Concept] Monetary	As Of	Debit	Total Label	us-gaap:Assets

Period comparisons

If the representation of current period information is consistent with the representation in prior reports created by Microsoft; then the reports are consistent between reporting periods.

This is a clue that the report is created correctly.

Component: (Network and Table)					
Network	401 - Unknown - Income Statement, Multi Step, With Operating Income, Special 6				
Table	Income Statement, Single Step [Table]				
Reporting Entity [Axis]	0000789019 http://www.sec.gov/CIK				
	Period [Axis]				
	2016-07-01/2016-12-31	2016-07-01/2016-09-30	2015-07-01/2016-06-30	2015-07-01/2016-03-31	2015-07-01/2015-12-31
Income Statement [Line Items]					
Net Income (Loss) [Roll Up]					
Income (Loss) from Continuing Operations After Tax					
Income (Loss) from Continuing Operations Before Tax					
Operating Income (Loss) [Roll Up]					
Gross Profit [Roll Up]					
Revenues	44,543,000,000	20,453,000,000	85,320,000,000	64,706,000,000	44,175,000,000
Cost of Revenue	17,745,000,000	7,844,000,000	32,780,000,000	24,801,000,000	17,079,000,000
Gross Profit	26,798,000,000	12,609,000,000	52,540,000,000	39,905,000,000	27,096,000,000
Operating Expenses	15,396,000,000	7,384,000,000	32,358,000,000	22,803,000,000	15,277,000,000
Operating Income (Loss)	11,402,000,000	5,225,000,000	20,182,000,000	17,102,000,000	11,819,000,000
Nonoperating Income (Loss) Plus Interest and Debt Expense Plus Income (Loss) from Equity Method Investments	286,000,000	100,000,000	(431,000,000)	(698,000,000)	(451,000,000)
Income (Loss) from Continuing Operations Before Tax	11,688,000,000	5,325,000,000	19,751,000,000	16,404,000,000	11,368,000,000
Income Tax Expense (Benefit)	1,798,000,000	635,000,000	2,953,000,000	2,728,000,000	1,750,000,000
Income (Loss) from Continuing Operations After Tax	9,890,000,000	4,690,000,000	16,798,000,000	13,676,000,000	9,618,000,000
Income (Loss) from Discontinued Operations, Net of Tax	0	0	0	0	0
Extraordinary Items of Income (Expense), Net of Tax	0	0	0	0	0
Net Income (Loss)	9,890,000,000	4,690,000,000	16,798,000,000	13,676,000,000	9,618,000,000

Component: (Network and Table)					
Network	401 - Unknown - Cash Flow Statement				
Table	Cash Flow Statement [Table]				
Reporting Entity [Axis]	0000789019 http://www.sec.gov/CIK				
	Period [Axis]				
	2016-07-01/2016-12-31	2016-07-01/2016-09-30	2015-07-01/2016-06-30	2015-07-01/2016-03-31	2015-07-01/2015-12-31
Cash Flow Statement [Line Items]					
Net Cash Flow [Roll Up]					
Net Cash Flow from Operating Activities [Roll Up]					
Net Cash Flow from Operating Activities, Continuing	17,842,000,000	11,549,000,000	33,325,000,000	24,861,000,000	14,192,000,000
Net Cash Flow from Operating Activities, Discontinued	0	0	0	0	0
Net Cash Flow from Operating Activities	17,842,000,000	11,549,000,000	33,325,000,000	24,861,000,000	14,192,000,000
Net Cash Flow from Investing Activities [Roll Up]					
Net Cash Flow from Investing Activities, Continuing	(33,221,000,000)	(18,470,000,000)	(23,950,000,000)	(13,877,000,000)	(8,394,000,000)
Net Cash Flow from Investing Activities, Discontinued	0	0	0	0	0
Net Cash Flow from Investing Activities	(33,221,000,000)	(18,470,000,000)	(23,950,000,000)	(13,877,000,000)	(8,394,000,000)
Net Cash Flow from Financing Activities [Roll Up]					
Net Cash Flow from Financing Activities, Continuing	17,345,000,000	14,329,000,000	(8,393,000,000)	(9,364,000,000)	(4,146,000,000)
Net Cash Flow from Financing Activities, Discontinued	0	0	0	0	0
Net Cash Flow from Financing Activities	17,345,000,000	14,329,000,000	(8,393,000,000)	(9,364,000,000)	(4,146,000,000)
Exchange Gains (Losses)	(8,000,000)	10,000,000	(67,000,000)	(45,000,000)	(62,000,000)
Net Cash Flow	1,958,000,000	7,418,000,000	915,000,000	1,575,000,000	1,590,000,000

Peer comparison

If information is represented consistent with peers of Microsoft that use the same reporting style (and therefore have the same set of fundamental accounting concept relations); then the Microsoft report is consistent with other entities that use the same reporting style.

This is a clue that the report is created correctly.

Component: (Network and Table)					
Network	001 - Unknown: General Information				
Table	General Information [Table]				
Drop Filter Fields Here					
	Period [Axis]	Reporting Entity [Axis]			
	2016-07-31/2017-01-28	2016-09-25/2016-12-31	2016-07-01/2016-12-31	2016-04-01/2016-12-31	2015-11-28/2016-12-02
General Information [Line Items]	0000858877 http://www.sec.gov/CIK	0000320193 http://www.sec.gov/CIK	0000789019 http://www.sec.gov/CIK	0000880807 http://www.sec.gov/CIK	0000796343 http://www.sec.gov/CIK
General Information [Hierarchy]					
Entity Registrant Name	CISCO SYSTEMS, INC.	APPLE INC	MICROSOFT CORPORATION	AMERICAN SUPERCONDUCTING CORPORATION	ADOBE SYSTEMS INC
Entity Central Index Key	0000858877	0000320193	0000789019	0000880807	0000796343
Entity Filer Category	Large Accelerated Filer	Large Accelerated Filer	Large Accelerated Filer	Accelerated Filer	Large Accelerated Filer
Trading Symbol	CSCO	AAPL	MSFT	AMSC	0
Fiscal Year End	--07-29	--09-30	--06-30	--03-31	--12-02
Fiscal Year Focus	2017	2017	2017	2016	2016
Fiscal Period Focus	Q2	Q1	Q2	Q3	FY
Document Type	10-Q	10-Q	10-Q	10-Q	10-K
Balance Sheet Date	2017-01-28	2016-12-31	2016-12-31	2016-12-31	2016-12-02

Component: (Network and Table)					
Network	001 - Unknown: Balance Sheet, Classified				
Table	Balance Sheet, Classified [Table]				
Drop Filter Fields Here					
	Period [Axis]	Reporting Entity [Axis]			
	2017-01-28	2016-12-31	2016-12-31	2016-12-02	
Balance Sheet [Line Items]	0000858877 http://www.sec.gov/CIK	0000320193 http://www.sec.gov/CIK	0000789019 http://www.sec.gov/CIK	0000880807 http://www.sec.gov/CIK	0000796343 http://www.sec.gov/CIK
Assets [Roll Up]					
Current Assets	83,392,000,000	103,332,000,000	144,949,000,000	64,260,000	5,839,774,000
Noncurrent Assets	42,856,000,000	227,809,000,000	79,661,000,000	45,981,000	6,867,340,000
Assets	126,248,000,000	331,141,000,000	224,610,000,000	110,241,000	12,707,114,000
Liabilities and Equity [Roll Up]					
Liabilities [Roll Up]					
Current Liabilities	22,708,000,000	84,130,000,000	70,787,000,000	38,364,000	2,811,635,000
Noncurrent Liabilities	39,722,000,000	114,621,000,000	85,014,000,000	8,084,000	2,470,644,000
Liabilities	62,430,000,000	198,751,000,000	155,801,000,000	46,448,000	5,282,279,000
Commitments and Contingencies	xsl:nil	xsl:nil	xsl:nil	xsl:nil	xsl:nil
Temporary Equity	0	0	0	0	0
Equity [Roll Up]					
Equity Attributable to Parent	63,811,000,000	132,390,000,000	68,809,000,000	63,793,000	7,424,835,000
Equity Attributable to Noncontrolling Interest	7,000,000	0	0	0	0
Equity	63,818,000,000	132,390,000,000	68,809,000,000	63,793,000	7,424,835,000
Liabilities and Equity	126,248,000,000	331,141,000,000	224,610,000,000	110,241,000	12,707,114,000

All fact sets consistent with all rules

If there are rules for 100% of the 194 disclosures contained in 194 fact sets in the 2017 Microsoft 10-K; and if each of the represented disclosures are consistent with all of the articulated rules; then each fact set is CORRECT.

(If rules are missing, then you cannot be sure the fact set is correctly represented).

#	Pattern	Disclosure Found	Disclosure Consist.	Applicable	Representation Concept [TEXT BLOCK]	Representation Concept DETAIL
ck/Level4Detail	RollForward	True	CONSISTENT	True	Schedule Of Accumulated Other Comprehensive Income Loss Table [Text Block]	Stockholders Equity
	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Assets
	Component	True	CONSISTENT	True	-	-
	TextBlock	True	CONSISTENT	True	Basis Of Accounting Policy Policy [Text Block]	NOT-EXPECTED
	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Cash And Cash Equivalents Period Increase Decrease
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Deferred Tax Assets And Liabilities Table [Text Block]	Deferred Tax Assets Liabilities Net
	Hierarchy	True	CONSISTENT	True	NOT-EXPECTED	Document Fiscal Period Focus
	Hierarchy	True	CONSISTENT	True	NOT-EXPECTED	Entity Registrant Name
Level4Detail	Hierarchy	True	CONSISTENT	True	Schedule Of Finite Lived Intangible Assets Table [Text Block]	Finite Lived Intangible Asset Useful Life
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Finite Lived Intangible Assets Future Amortization Expense Table [Text Block]	Finite Lived Intangible Assets Net
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Finite Lived Intangible Assets Table [Text Block]	Finite Lived Intangible Assets Net
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Future Minimum Rental Payments For Operating Leases Table [Text Block]	Operating Leases Future Minimum Payments Due
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Future Minimum Lease Payments For Capital Leases Table [Text Block]	Capital Leases Future Minimum Payments Due
Level4Detail	RollForward	True	CONSISTENT	True	Schedule Of Goodwill [Text Block]	Goodwill
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Income Before Income Tax Domestic And Foreign Table [Text Block]	Income Loss From Continuing Operations Before Income Taxes Minority Interest And In...
	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Net Income Loss
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Components Of Income Tax Expense Benefit Table [Text Block]	Income Tax Expense Benefit
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Inventory Current Table [Text Block]	Inventory Net
	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Liabilities And Stockholders Equity
Level4Detail	Hierarchy	True	CONSISTENT	True	Schedule Of Entity Wide Disclosure On Geographic Areas Long Lived Assets In Ind...	Noncurrent Assets
Level4Detail	Hierarchy	True	CONSISTENT	True	Schedule Of Debt Instruments [Text Block]	Debt Instrument Face Amount
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Maturities Of Long Term Debt Table [Text Block]	Debt Instrument Face Amount
	TextBlock	False	CONSISTENT	True	NOT-FOUND	NOT-EXPECTED
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Other Nonoperating Income Expense Table [Text Block]	Nonoperating Income Expense
Level4Detail	Hierarchy	True	CONSISTENT	True	Property Plant And Equipment Policy [Text Block]	Property Plant And Equipment Useful Life
Level4Detail	RollUp	True	CONSISTENT	True	Property Plant And Equipment [Text Block]	Property Plant And Equipment Net
Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Effective Income Tax Rate Reconciliation Table [Text Block]	Effective Income Tax Rate Continuing Operations
Level4Detail	RollForward	True	CONSISTENT	True	Schedule Of Restructuring Reserve By Type Of Cost [Text Block]	Restructuring Reserve
Level4Detail	Hierarchy	True	CONSISTENT	True	Schedule Of Revenue From External Customers Attributed To Foreign Countries B...	Sales Revenue Net
	TextBlock	True	CONSISTENT	True	Revenue Recognition Policy [Text Block]	NOT-EXPECTED
Level4Detail	RollForward	True	CONSISTENT	True	Disclosure Of Share Based Compensation Arrangements By Share Based Payment...	Share Based Compensation Arrangement By Share Based Payment Award Equity Instru...
Level4Detail	RollForwardInfo	True	CONSISTENT	True	Disclosure Of Share Based Compensation Arrangements By Share Based Payment...	Share Based Compensation Arrangement By Share Based Payment Award Equity Instru...
	TextBlock	True	CONSISTENT	True	Significant Accounting Policies [Text Block]	NOT-EXPECTED
	RollForward	True	CONSISTENT	True	NOT-EXPECTED	Stockholders Equity
	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Comprehensive Income Net Of Tax
ck/Level4Detail	RollForward	True	CONSISTENT	True	Summary Of Income Tax Contingencies [Text Block]	Unrecognized Tax Benefits

No rules, cannot automate work

Since Microsoft has 194 fact sets, to be sure the report is correct, each of the 194 fact sets must be verified to be correct and the fact sets need to be checked for inconsistencies between fact sets.

But, since I am only checking 67 fact sets; that means 127 fact sets have to be checked manually.

Why? I have not yet created rules for the other 127 fact sets.

Primary Information									
#	Disclosure	Category	Level	Pattern	Disclosure Found	Disclosure Consistent	Applicable	Representation Concept [TEXT BLOCK]	Representation Concept DETAIL
4	Accumulated Other Comprehensive...	Disclosure	Level3TextBlock,Level4Detail	RollForward	True	CONSISTENT	True	Schedule Of Accumulated Other Comprehensive Income Loss Table [Text Block]	Stockholders Equity
7	Assets [Roll Up]	Statement	Level4Detail	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Assets
8	Balance Sheet	Statement	Level4Detail	Component	True	CONSISTENT	True	-	-
9	Basis of Reporting Note [Note Level]	Disclosure	Level1TextBlock	TextBlock	True	CONSISTENT	True	Basis Of Accounting Policy [Text Block]	NOT-EXPECTED
10	Cash Flow Statement [Roll Forward]	Statement	Level4Detail	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Cash And Cash Equivalents Period Increase Decrease
11	Deferred Tax Assets and Liabilities...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Deferred Tax Assets And Liabilities Table [Text Block]	Deferred Tax Assets Liabilities Net
19	Document Information [Hierarchy]	Document	Level4Detail	Hierarchy	True	CONSISTENT	True	NOT-EXPECTED	Document Fiscal Period Focus
20	Entity Information, by Legal Entity...	Document	Level4Detail	Hierarchy	True	CONSISTENT	True	NOT-EXPECTED	Entity Registrant Name
23	Finite-lived Intangible Assets, Esti...	Disclosure	Level3TextBlock,Level4Detail	Hierarchy	True	CONSISTENT	True	Schedule Of Finite Lived Intangible Assets Table [Text Block]	Finite Lived Intangible Asset Useful Life
25	Finite-lived Intangible Assets, Fut...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Finite Lived Intangible Assets Future Amortization Expense Table [Text Block]	Finite Lived Intangible Assets Net
26	Finite-lived Intangible Assets, Net...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Finite Lived Intangible Assets Table [Text Block]	Finite Lived Intangible Assets Net
28	Future Minimum Payments Due un...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Future Minimum Rental Payments For Operating Leases Table [Text Block]	Operating Leases Future Minimum Payments Due
30	Future Minimum Payments, Presen...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Future Minimum Lease Payments For Capital Leases Table [Text Block]	Capital Leases Future Minimum Payments Due
31	Goodwill [Roll Forward]	Disclosure	Level3TextBlock,Level4Detail	RollForward	True	CONSISTENT	True	Schedule Of Goodwill [Text Block]	Goodwill
33	Income before Income Tax, Dome...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Income Before Income Tax Domestic And Foreign Tax [Text Block]	Income Loss From Continuing Operations Before Income Taxes Minority Interest And In...
34	Income Statement, by Legal Entity...	Statement	Level4Detail	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Net Income Loss
35	Income Tax Expense (Benefit), Cu...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Components Of Income Tax Expense Benefit Table [Text Block]	Income Tax Expense Benefit
38	Inventory, Net (Current) [Roll Up]	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Inventory Current Table [Text Block]	Inventory Net
39	Liabilities and Equity [Roll Up]	Statement	Level4Detail	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Liabilities And Stockholders Equity
40	Long-Lived Assets in Individual For...	Disclosure	Level3TextBlock,Level4Detail	Hierarchy	True	CONSISTENT	True	Schedule Of Entity Wide Disclosure On Geographic Areas Long Lived Assets In Ind...	Noncurrent Assets
41	Long-term Debt Instruments, by I...	Disclosure	Level3TextBlock,Level4Detail	Hierarchy	True	CONSISTENT	True	Schedule Of Debt Instruments [Text Block]	Debt Instrument Face Amount
44	Long-term Debt Maturities [Roll Up]	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Maturities Of Long Term Debt Table [Text Block]	Debt Instrument Face Amount
45	Nature of Operations Note [Note L...	Disclosure	Level1TextBlock	TextBlock	False	CONSISTENT	True	NOT-FOUND	NOT-EXPECTED
48	Other Nonoperating Income (Exp...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Other Nonoperating Income Expense Table [Text Block]	Nonoperating Income Expense
50	Property, Plant and Equipment Us...	Disclosure	Level3TextBlock,Level4Detail	Hierarchy	True	CONSISTENT	True	Property Plant And Equipment Policy [Text Block]	Property Plant And Equipment Useful Life
51	Property, Plant and Equipment, N...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Property Plant And Equipment [Text Block]	Property Plant And Equipment Net
53	Reconciliation of Statutory to Effe...	Disclosure	Level3TextBlock,Level4Detail	RollUp	True	CONSISTENT	True	Schedule Of Effective Income Tax Rate Reconciliation Table [Text Block]	Effective Income Tax Rate Continuing Operations
57	Restructuring Reserve, by Type o...	Disclosure	Level3TextBlock,Level4Detail	RollForward	True	CONSISTENT	True	Schedule Of Restructuring Reserve By Type Of Cost [Text Block]	Restructuring Reserve
58	Revenue from External Customers...	Disclosure	Level3TextBlock,Level4Detail	Hierarchy	True	CONSISTENT	True	Schedule Of Revenue From External Customers Attributed To Foreign Countries B...	Sales Revenue Net
59	Revenue Recognition Policy [Policy...	Disclosure	Level2TextBlock	TextBlock	True	CONSISTENT	True	Revenue Recognition Policy [Text Block]	NOT-EXPECTED
60	Share-based Compensation Arran...	Disclosure	Level3TextBlock,Level4Detail	RollForward	True	CONSISTENT	True	Disclosure Of Share Based Compensation Arrangements By Share Based Payment...	Share Based Compensation Arrangement By Share Based Payment Award Equity Instru...
61	Share-based Compensation, Restr...	Disclosure	Level3TextBlock,Level4Detail	RollForwardInfo	True	CONSISTENT	True	Disclosure Of Share Based Compensation Arrangements By Share Based Payment...	Share Based Compensation Arrangement By Share Based Payment Award Equity Instru...
63	Significant Accounting Policies No...	Disclosure	Level1TextBlock	TextBlock	True	CONSISTENT	True	Significant Accounting Policies [Text Block]	NOT-EXPECTED
64	Statement of Changes in Equity [R...	Statement	Level4Detail	RollForward	True	CONSISTENT	True	NOT-EXPECTED	Stockholders Equity
65	Statement of Comprehensive Inco...	Statement	Level4Detail	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Comprehensive Income Net Of Tax
67	Unrecognized Tax Benefits, Exclud...	Disclosure	Level3TextBlock,Level4Detail	RollForward	True	CONSISTENT	True	Summary Of Income Tax Contingencies [Text Block]	Unrecognized Tax Benefits

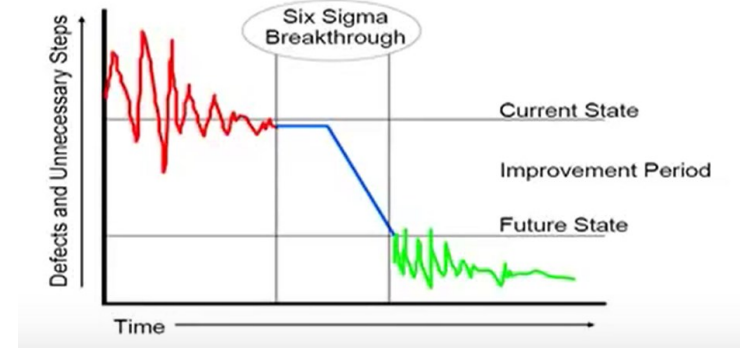
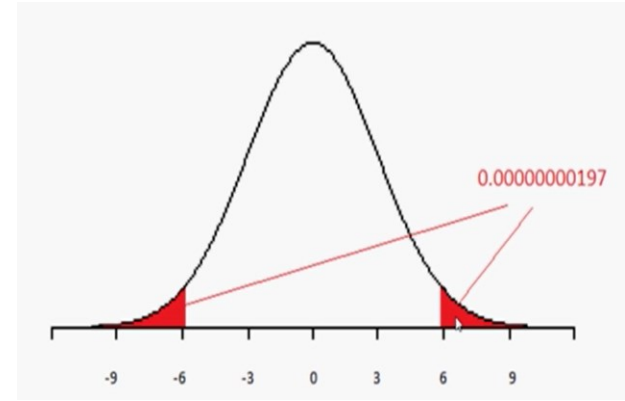
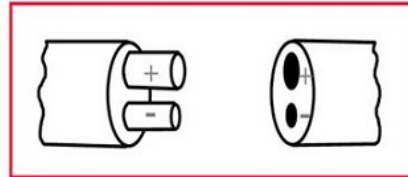
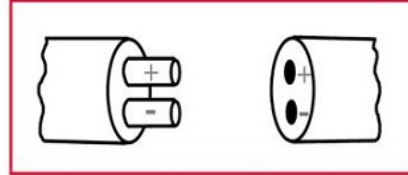
[Disclosure Consistent] = 'CONSISTENT'

Edit Filter

Lean Six Sigma

Lean Six Sigma is a discipline that combines the problem solving methodologies and quality enhancement techniques of **Six Sigma** with the process improvement tools and efficiency concepts of **Lean Manufacturing**.

Because an XBRL-based report is made up of many pieces, Lean Six Sigma **philosophies** and **techniques** can be used to measure and control report quality.



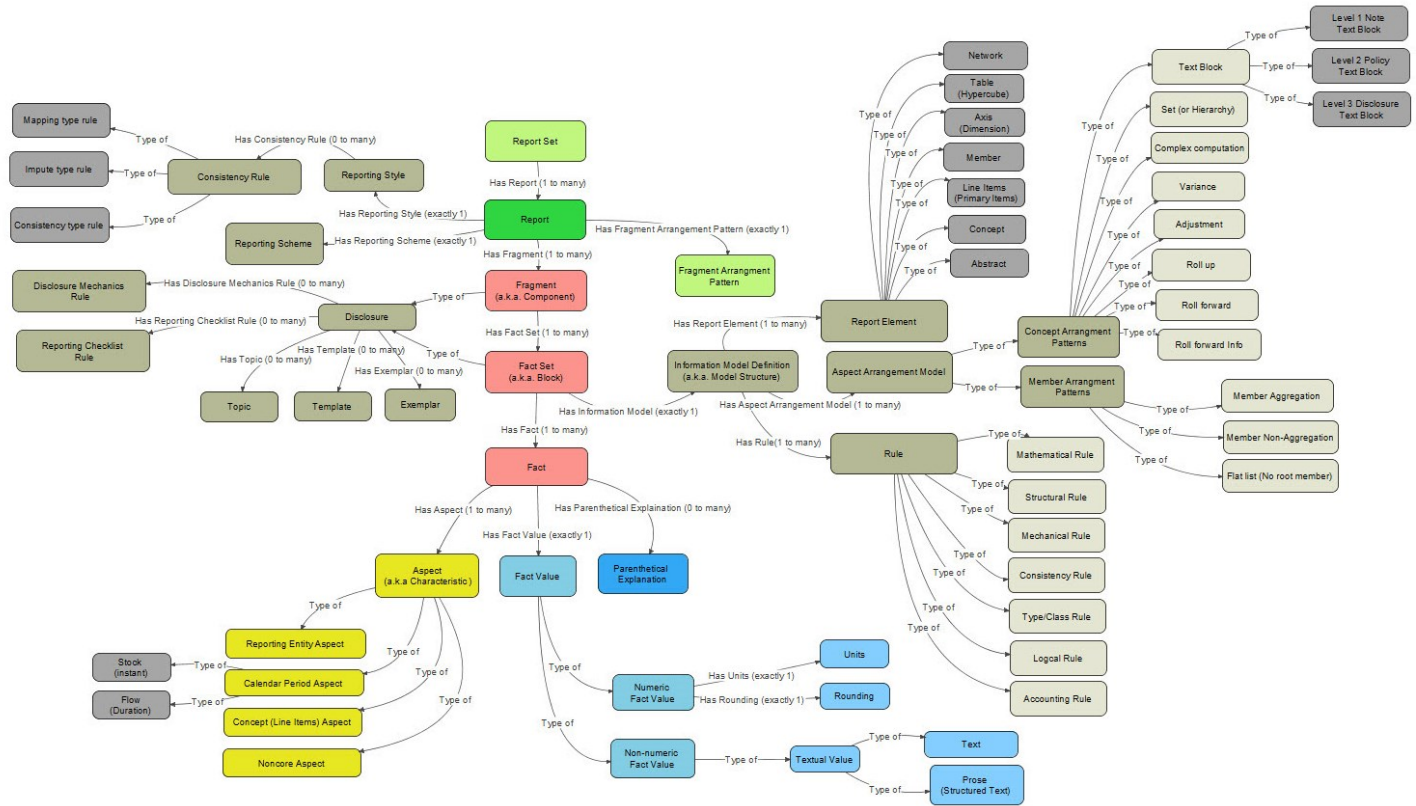
http://xbrlsite.azurewebsites.net/2017/IntelligentDigitalFinancialReporting/Part01_Chapter02.72_LeanSixSigma.pdf

Logical Model

All these pieces can be organized into one comprehensive logical model.

That logical model can be leveraged by software applications.

Because an XBRL-based report is made up of many pieces, Lean Six Sigma philosophies and techniques can be used to measure and control report quality.



<http://xbrlsite.azurewebsites.net/2019/Framework/FrameworkEntitiesSummary.html>

Agenda

The rules that make up the logical model **describe** the model to software. Software can **verify** an instance of the model against that description. To the extent that you have machine-readable rules, that verification process can be automated. You can also **explain** or spell out or tell a software application **knowledge** about the **state** of where you are in your **agenda** of **tasks** necessary to meet some **goal**.

The screenshot shows the XBRL software interface. The main window displays a financial statement table for 'Statement of Financial Position, Classified'. The table includes columns for '2020-12-31', '2019-12-31', and '2018-12-31'. The data is organized into sections: Assets (Current and Noncurrent), Liabilities and Net Assets/Equity (Current and Noncurrent). A yellow callout box labeled 'Agenda' points to a small 'Agenda' window in the top right corner of the application. The agenda window contains a search bar and a table with columns for 'Disclosure', 'Explanation', and 'Add'.

Statement of Financial Position, Classified [Line Items]	2020-12-31	2019-12-31	2018-12-31
Assets [Roll Up]			
Current Assets [Roll Up]			
Cash and Cash Equivalents	1,000	1,000	
Receivables, Net, Current	1,000	1,000	
Inventory	1,000	1,000	
Prepaid Expenses	500	500	
Investments, at Cost	500	500	
Other Current Assets	1,000	1,000	
Current Assets, Total	5,000	5,000	
Noncurrent Assets [Roll Up]			
Property, Plant, and Equipment, Net, Total	4,000	4,000	4,000
Investment in Affiliates	0	0	
Receivables, Net, Noncurrent	0	0	
Other Noncurrent Assets	3,000	1,000	
Noncurrent Assets, Total	7,000	5,000	
Assets, Total	12,000	10,000	
Liabilities and Net Assets/Equity [Roll Up]			
Liabilities [Roll Up]			
Current Liabilities [Roll Up]			
Payables from Exchange Transactions	3,000	3,000	
Long-Term Debt, Current	1,000	1,000	
Other Current Liabilities	1,000	1,000	
Current Liabilities, Total	5,000	5,000	
Noncurrent Liabilities [Roll Up]			
Long-Term Debt, Noncurrent	500	500	
Other Noncurrent Liabilities	500	500	
Noncurrent Liabilities, Total	1,000	1,000	

Tasks

Note that three fragments which contained fact sets were deleted from this report. The agenda has been automatically populated with the tasks of creating those three fact sets.

The **goal** is to complete all the **tasks** in the **agenda**.

Once all the tasks are complete and no rules are inconsistent with expectation, then the report is complete.

The screenshot displays a financial reporting application. The main window shows a 'Statement of Financial Position, Classified' for the period ending 2020-12-31. The table includes assets, liabilities, and net assets/equity. The agenda on the right lists tasks, with three items circled in red: 'Document Information', 'Entity Information', and 'Cash Flow Statement, Direct Method'. A yellow callout box points to these items with the text: 'Note that the three fragments of the report which were deleted were added to the Agenda.'

Statement of Financial Position, Classified (Line Items)	2020-12-31	2019-12-31	2018-12-31
Assets [Roll Up]			
Current Assets [Roll Up]			
Cash and Cash Equivalents	1,000 ¹	1,000	
Receivables, Net, Current	1,000 ¹	1,000	
Inventory	1,000	1,000	
Prepaid Expenses	500	500	
Investments, at Cost	500	500	
Other Current Assets	1,000	1,000	
Current Assets, Total	5,000	5,000	
Noncurrent Assets [Roll Up]			
Property, Plant, and Equipment, Net, Total	4,000	4,000	4,000
Investment in Affiliates	0	0	
Receivables, Net, Noncurrent	0	0	
Other Noncurrent Assets	3,000	1,000	
Noncurrent Assets, Total	7,000	5,000	
Assets, Total	12,000	10,000	
Liabilities and Net Assets/Equity [Roll Up]			
Liabilities [Roll Up]			
Current Liabilities [Roll Up]			
Payables from Exchange Transactions	3,000	3,000	
Long-Term Debt, Current	1,000	1,000	
Other Current Liabilities	1,000	1,000	
Current Liabilities, Total	5,000	5,000	
Noncurrent Liabilities [Roll Up]			
Long-Term Debt, Noncurrent	500	500	
Other Noncurrent Liabilities	500	500	
Noncurrent Liabilities, Total	1,000	1,000	