

Project Development

PHASE SPRINT-1

Team ID	PNT2022TMID22771
Project Name	Project – Retail Store Stock Inventory Analytics

SPRINT-1:

Data Collection

Data Preparation

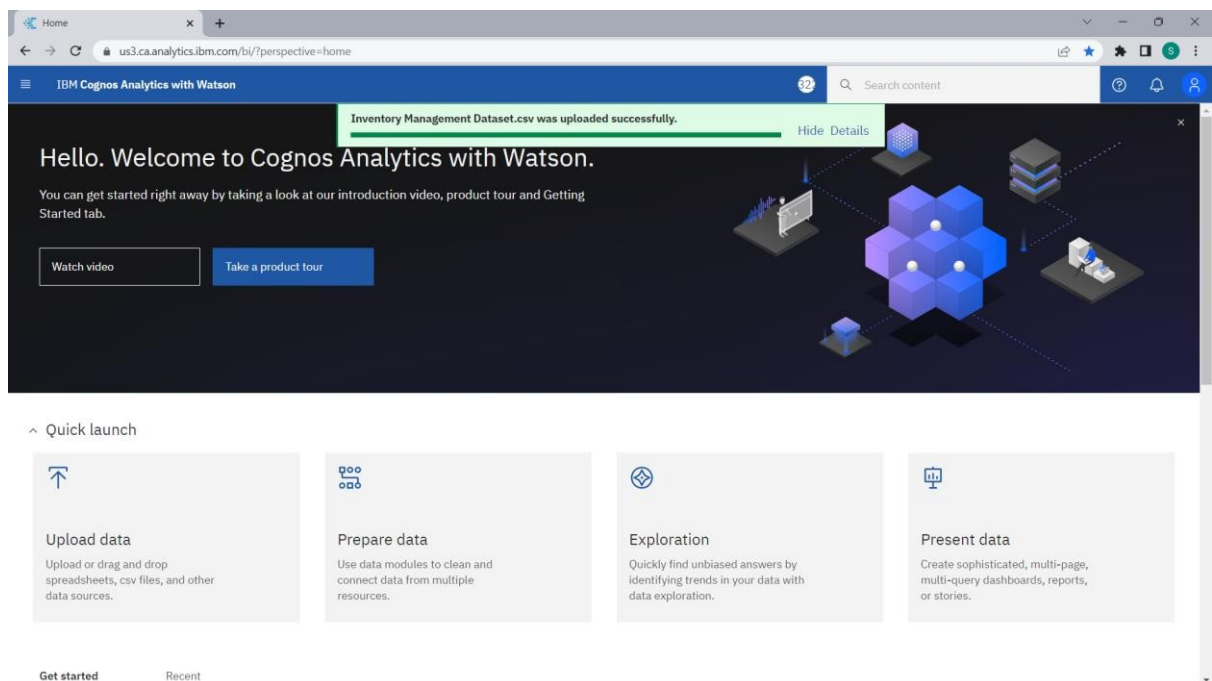
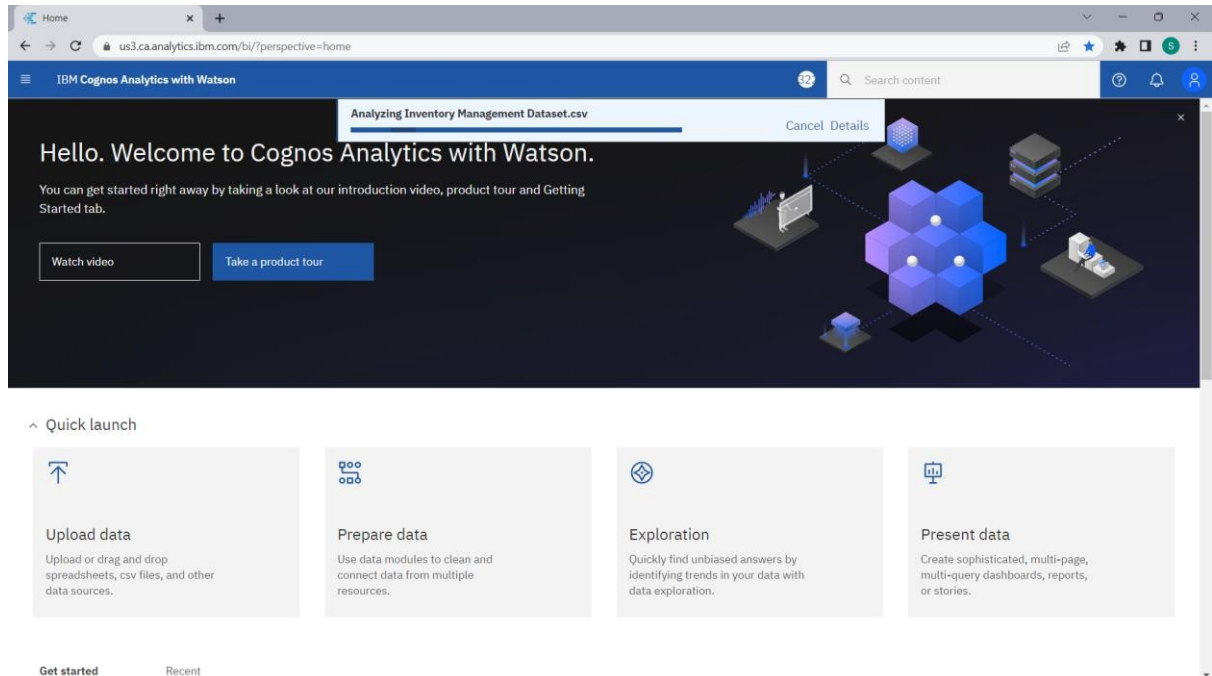
DATA COLLECTION:

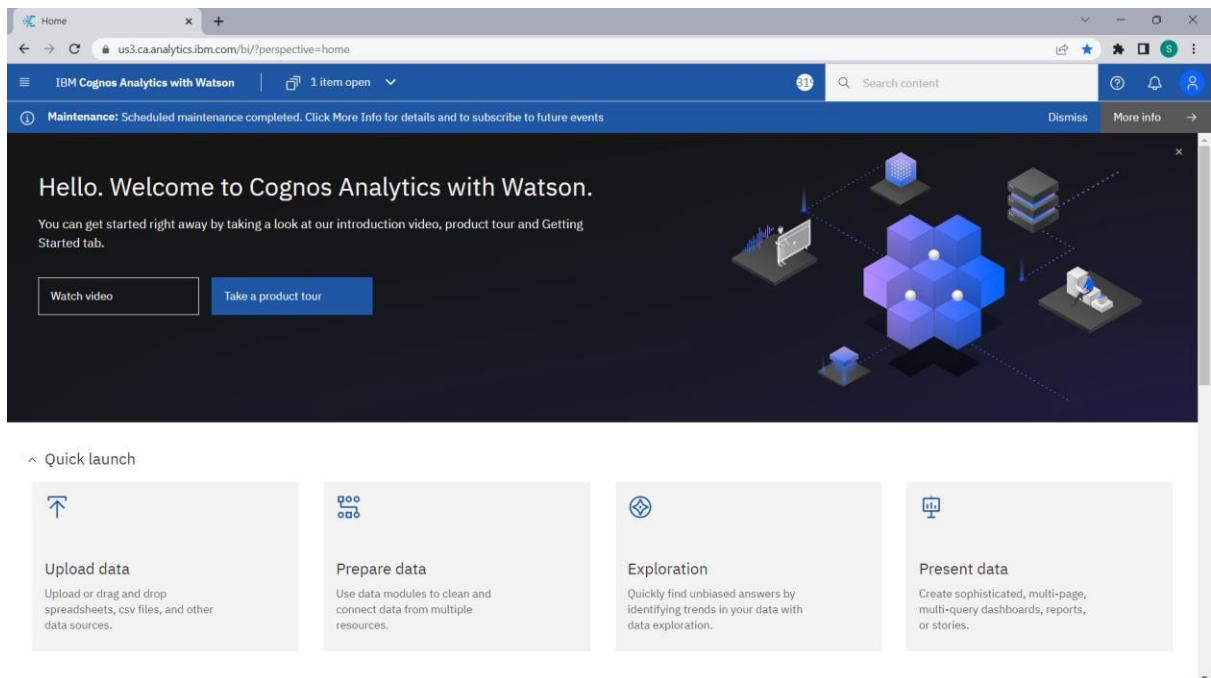
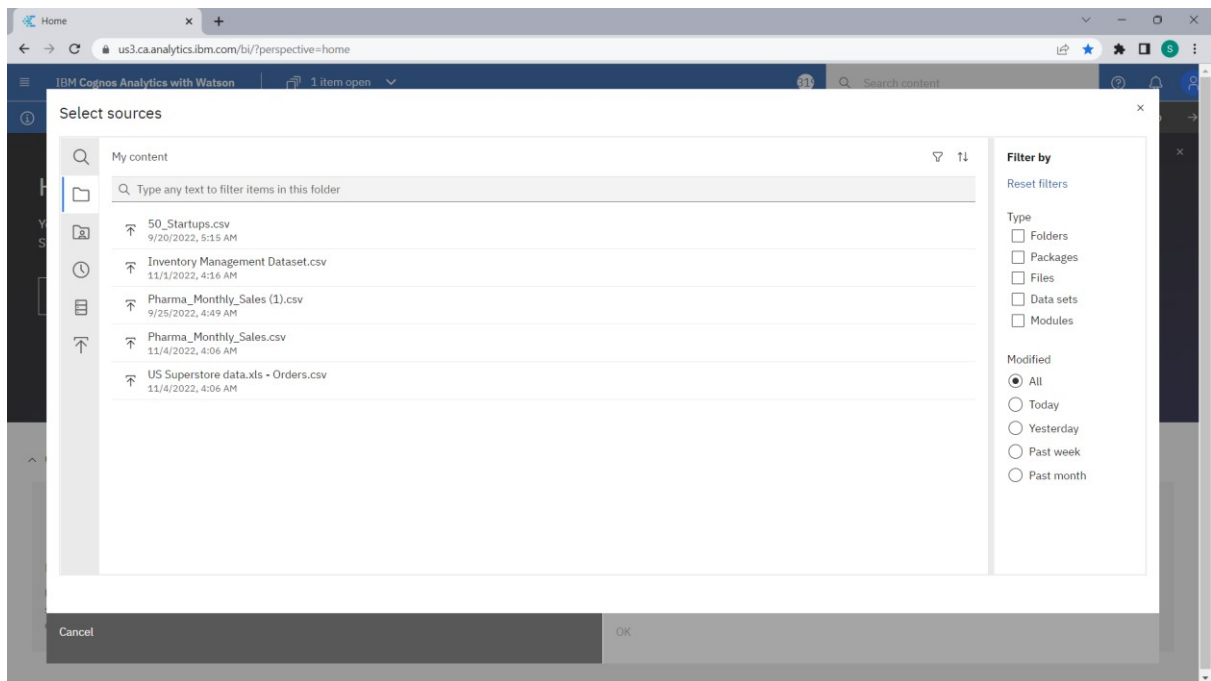
1. Download the dataset

[illegible]

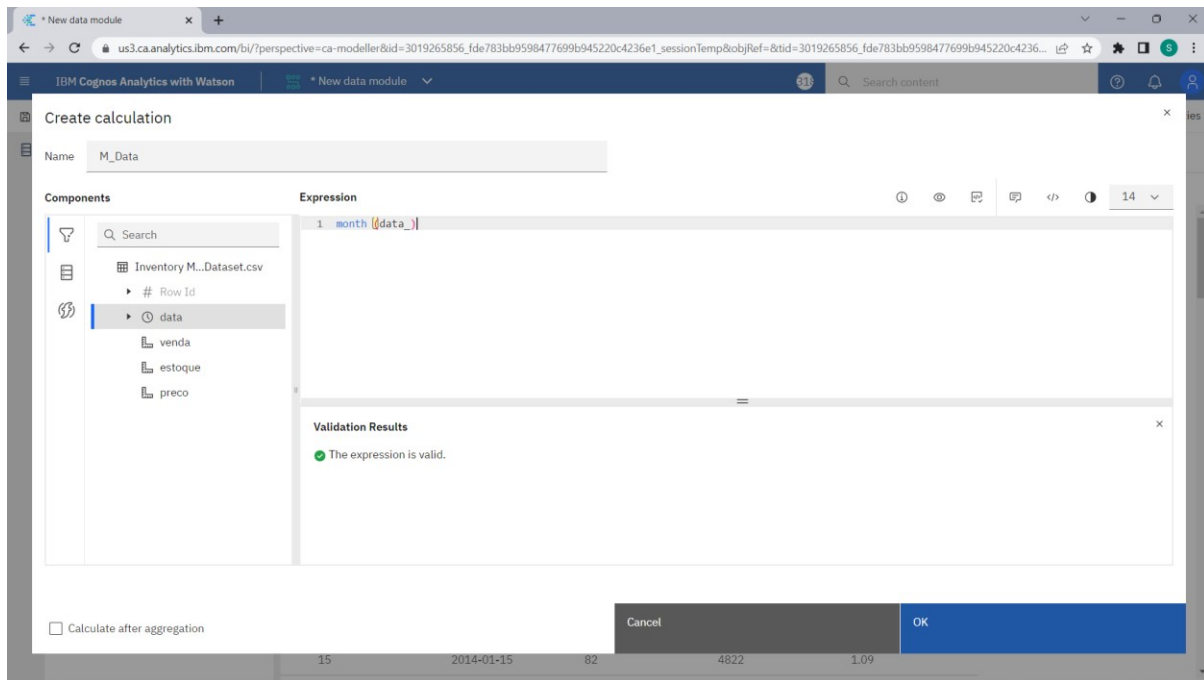
2. Loading the dataset

Tool Used – IBM Cognos Analytics





Month Data:



The screenshot shows the 'Data module' view in IBM Cognos Analytics. The 'Data module' pane on the left shows a tree structure with 'New data module' expanded, showing fields like 'Navigation paths', 'Inventory M...ataset.csv', and 'M_Data'. The main area displays a table with the following data:

M_Data	Row Id	Year	Sales	Stock	Price
1	1	2014-01-01	0	4972	1.29
1	2	2014-01-02	70	4902	1.29
1	3	2014-01-03	59	4843	1.29
1	4	2014-01-04	93	4750	1.29
1	5	2014-01-05	96	4654	1.29
1	6	2014-01-06	145	4509	1.29
1	7	2014-01-07	179	4329	1.29
1	8	2014-01-08	321	4104	1.29
1	9	2014-01-09	125	4459	1.09
1	10	2014-01-10	88	5043	1.09
1	11	2014-01-11	188	5239	1.09
1	12	2014-01-12	121	5118	1.09
1	13	2014-01-13	134	4984	1.09
1	14	2014-01-14	80	4904	1.09
1	15	2014-01-15	82	4822	1.09

Revenue Data:

Create calculation

Name: Revenue

Expression: `venda*preco`

Components:

- Inventory M...Dataset.csv
 - # M_Data
 - # Row Id
 - Year
 - Sales
 - Stock
 - Price

Validation Results: The expression is valid.

☐ Calculate after aggregation

Cancel OK

Data module

Grid Relationships Custom tables

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	2014-01-01	0	4972	1.29
90.3	1	2	2014-01-02	70	4902	1.29
76.11	1	3	2014-01-03	59	4843	1.29
119.97	1	4	2014-01-04	93	4750	1.29
123.84	1	5	2014-01-05	96	4654	1.29
187.05	1	6	2014-01-06	145	4509	1.29
230.91	1	7	2014-01-07	179	4329	1.29
414.09000000000003	1	8	2014-01-08	321	4104	1.29
136.25	1	9	2014-01-09	125	4459	1.09
95.92	1	10	2014-01-10	88	5043	1.09
204.92000000000002	1	11	2014-01-11	188	5239	1.09
131.89000000000001	1	12	2014-01-12	121	5118	1.09
146.06	1	13	2014-01-13	134	4984	1.09
87.2	1	14	2014-01-14	80	4904	1.09
89.38000000000001	1	15	2014-01-15	82	4822	1.09

Year Data:

The screenshot shows the IBM Cognos Analytics interface. The left sidebar displays a tree view of the data model, with 'Year' selected under the 'Inventory M...ataset.csv' dataset. The main area shows a table with columns: Revenue, M_Data, Row Id, Year, Sales, Stock, and Price. The table contains 15 rows of data, with the 'Year' column showing dates from 2014-01-01 to 2014-01-15.

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	2014-01-01	0	4972	1.29
90.3	1	2	2014-01-02	70	4902	1.29
76.11	1	3	2014-01-03	59	4843	1.29
119.97	1	4	2014-01-04	93	4750	1.29
123.84	1	5	2014-01-05	96	4654	1.29
187.05	1	6	2014-01-06	145	4509	1.29
230.91	1	7	2014-01-07	179	4329	1.29
414.09000000000003	1	8	2014-01-08	321	4104	1.29
136.25	1	9	2014-01-09	125	4459	1.09
95.92	1	10	2014-01-10	88	5043	1.09
204.92000000000002	1	11	2014-01-11	188	5239	1.09
131.89000000000001	1	12	2014-01-12	121	5118	1.09
146.06	1	13	2014-01-13	134	4984	1.09
87.2	1	14	2014-01-14	80	4904	1.09
89.38000000000001	1	15	2014-01-15	82	4822	1.09

Sales Data:

The screenshot shows the IBM Cognos Analytics interface. The left sidebar displays a tree view of the data model, with 'Sales' selected under the 'Inventory M...ataset.csv' dataset. The main area shows a table with columns: Revenue, M_Data, Row Id, Year, Sales, Stock, and Price. The table contains 15 rows of data, with the 'Sales' column showing values from 0 to 82.

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	2014-01-01	0	4972	1.29
90.3	1	2	2014-01-02	70	4902	1.29
76.11	1	3	2014-01-03	59	4843	1.29
119.97	1	4	2014-01-04	93	4750	1.29
123.84	1	5	2014-01-05	96	4654	1.29
187.05	1	6	2014-01-06	145	4509	1.29
230.91	1	7	2014-01-07	179	4329	1.29
414.09000000000003	1	8	2014-01-08	321	4104	1.29
136.25	1	9	2014-01-09	125	4459	1.09
95.92	1	10	2014-01-10	88	5043	1.09
204.92000000000002	1	11	2014-01-11	188	5239	1.09
131.89000000000001	1	12	2014-01-12	121	5118	1.09
146.06	1	13	2014-01-13	134	4984	1.09
87.2	1	14	2014-01-14	80	4904	1.09
89.38000000000001	1	15	2014-01-15	82	4822	1.09

Stock Data:

The screenshot shows the IBM Cognos Analytics interface with a table titled 'Stock Data'. The table has 8 columns: Revenue, M_Data, Row Id, Year, Sales, Stock, and Price. The data represents daily stock prices from January 1, 2014, to January 15, 2014. The 'Stock' column values range from 4822 to 4972, and the 'Price' column values range from 1.09 to 1.29.

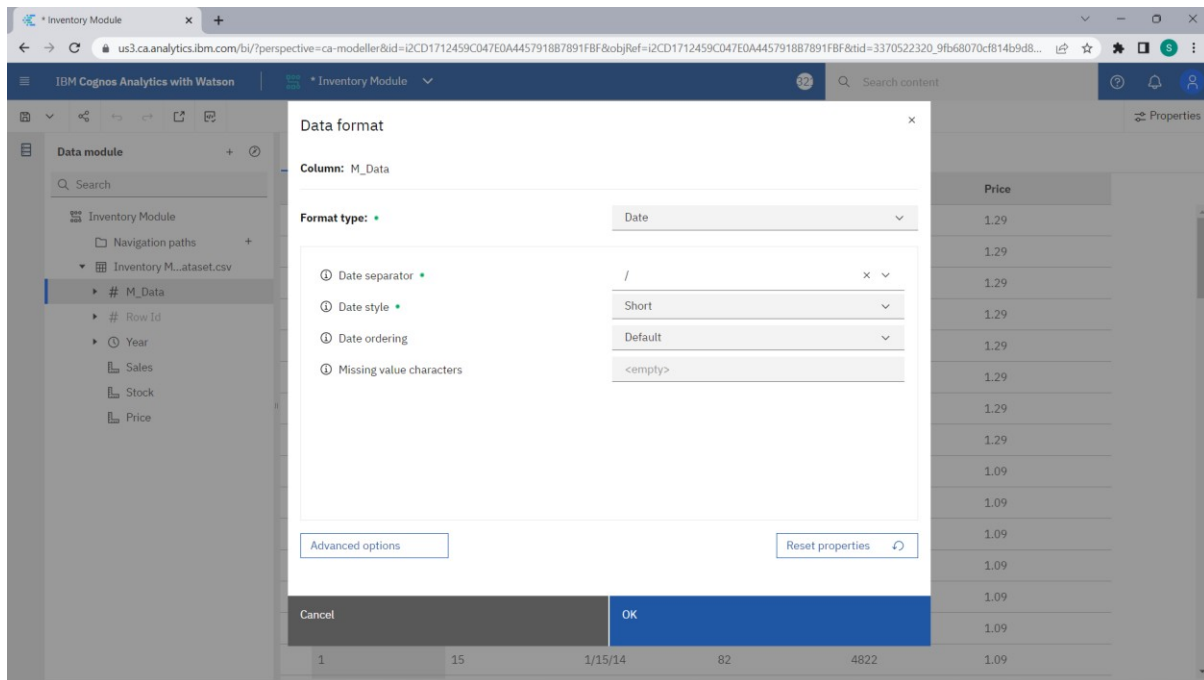
Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	2014-01-01	0	4972	1.29
90.3	1	2	2014-01-02	70	4902	1.29
76.11	1	3	2014-01-03	59	4843	1.29
119.97	1	4	2014-01-04	93	4750	1.29
123.84	1	5	2014-01-05	96	4654	1.29
187.05	1	6	2014-01-06	145	4509	1.29
230.91	1	7	2014-01-07	179	4329	1.29
414.09000000000003	1	8	2014-01-08	321	4104	1.29
136.25	1	9	2014-01-09	125	4459	1.09
95.92	1	10	2014-01-10	88	5043	1.09
204.92000000000002	1	11	2014-01-11	188	5239	1.09
131.89000000000001	1	12	2014-01-12	121	5118	1.09
146.06	1	13	2014-01-13	134	4984	1.09
87.2	1	14	2014-01-14	80	4904	1.09
89.38000000000001	1	15	2014-01-15	82	4822	1.09

Price Data:

The screenshot shows the IBM Cognos Analytics interface with a table titled 'Price Data'. The table has 7 columns: M_Data, Row Id, Year, Sales, Stock, and Price. The data represents daily stock prices from January 1, 2014, to January 15, 2014. The 'Stock' column values range from 4822 to 4972, and the 'Price' column values range from 1.09 to 1.29.

M_Data	Row Id	Year	Sales	Stock	Price
1	1	2014-01-01	0	4972	1.29
1	2	2014-01-02	70	4902	1.29
1	3	2014-01-03	59	4843	1.29
1	4	2014-01-04	93	4750	1.29
1	5	2014-01-05	96	4654	1.29
1	6	2014-01-06	145	4509	1.29
1	7	2014-01-07	179	4329	1.29
0000000003	1	2014-01-08	321	4104	1.29
1	9	2014-01-09	125	4459	1.09
1	10	2014-01-10	88	5043	1.09
0000000002	1	2014-01-11	188	5239	1.09
0000000001	1	2014-01-12	121	5118	1.09
1	13	2014-01-13	134	4984	1.09
1	14	2014-01-14	80	4904	1.09
0000000001	1	2014-01-15	82	4822	1.09

Month Format Data:



The screenshot shows the IBM Cognos Analytics interface with the 'Grid' view of the data. The table has the following columns: M_Data, Row Id, Year, Sales, Stock, and Price. The data is as follows:

M_Data	Row Id	Year	Sales	Stock	Price
1	1	1/1/14	0	4972	1
1	2	1/2/14	70	4902	1
1	3	1/3/14	59	4843	1
1	4	1/4/14	93	4750	1
1	5	1/5/14	96	4654	1
1	6	1/6/14	145	4509	1
1	7	1/7/14	179	4329	1
1	8	1/8/14	321	4104	1
1	9	1/9/14	125	4459	1
1	10	1/10/14	88	5043	1
1	11	1/11/14	188	5239	1
1	12	1/12/14	121	5118	1
1	13	1/13/14	134	4984	1
1	14	1/14/14	80	4904	1
1	15	1/15/14	82	4822	1

Revenue Format Data:

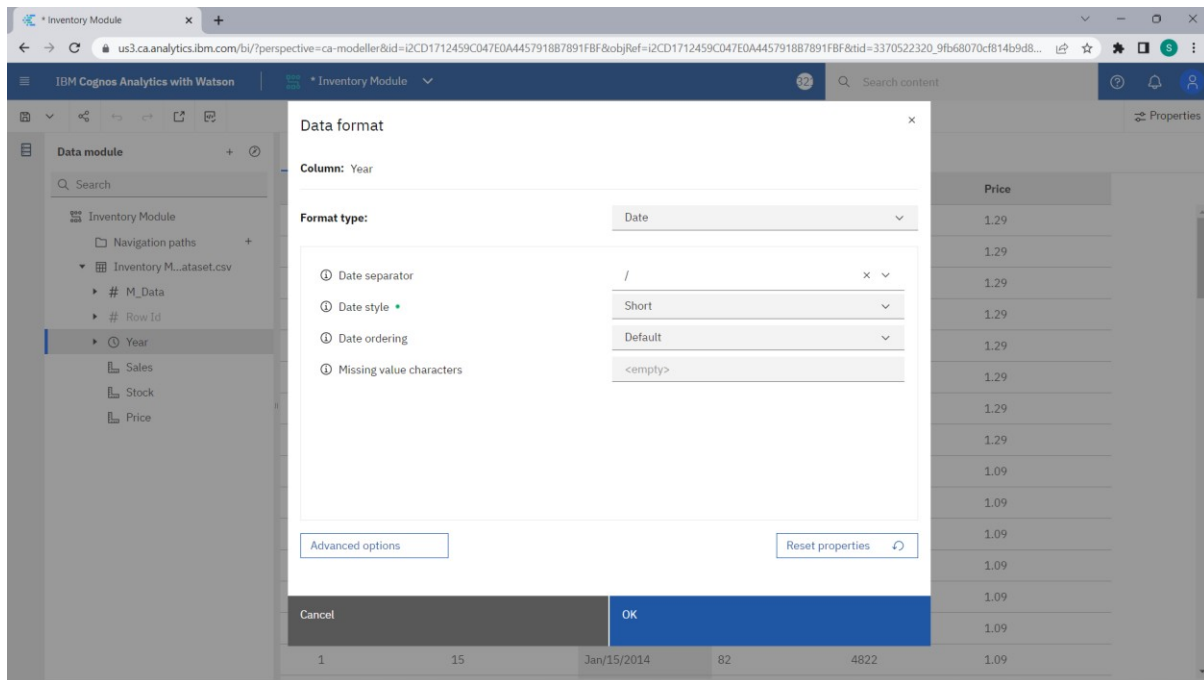
The screenshot shows the 'Data format' dialog box for the 'Revenue' column in IBM Cognos Analytics. The 'Format type' is set to 'Number'. The 'Number of decimal places' is 0. The 'Negative sign symbol' is 'Default'. The 'Use thousands separator' is set to 'No'. The 'Negative sign position' is 'Default'. The 'Missing value characters' are '<empty>'. The 'Advanced options' button is visible. The background shows a table with columns 'Stock' and 'Price'.

Stock	Price
4972	1.29
4902	1.29
4843	1.29
4750	1.29
4654	1.29
4509	1.29
4329	1.29
4104	1.29
4459	1.09
5043	1.09
5239	1.09
5118	1.09
4984	1.09
4904	1.09
4822	1.09

The screenshot shows the 'Inventory Module' in IBM Cognos Analytics. The table displays data for the 'Revenue' column, with columns 'Revenue', 'M_Data', 'Row Id', 'Year', 'Sales', 'Stock', and 'Price'.

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	1/1/14	0	4972	1
90	1	2	1/2/14	70	4902	1
76	1	3	1/3/14	59	4843	1
120	1	4	1/4/14	93	4750	1
124	1	5	1/5/14	96	4654	1
187	1	6	1/6/14	145	4509	1
231	1	7	1/7/14	179	4329	1
414	1	8	1/8/14	321	4104	1
136	1	9	1/9/14	125	4459	1
96	1	10	1/10/14	88	5043	1
205	1	11	1/11/14	188	5239	1
132	1	12	1/12/14	121	5118	1
146	1	13	1/13/14	134	4984	1
87	1	14	1/14/14	80	4904	1
89	1	15	1/15/14	82	4822	1

Year Format Data:



The screenshot shows the 'Grid' view of the data in IBM Cognos Analytics. The table has the following columns: Revenue, M_Data, Row Id, Year, Sales, Stock, and Price. The data is as follows:

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	1/1/14	0	4972	1
90	1	2	1/2/14	70	4902	1
76	1	3	1/3/14	59	4843	1
120	1	4	1/4/14	93	4750	1
124	1	5	1/5/14	96	4654	1
187	1	6	1/6/14	145	4509	1
231	1	7	1/7/14	179	4329	1
414	1	8	1/8/14	321	4104	1
136	1	9	1/9/14	125	4459	1
96	1	10	1/10/14	88	5043	1
205	1	11	1/11/14	188	5239	1
132	1	12	1/12/14	121	5118	1
146	1	13	1/13/14	134	4984	1
87	1	14	1/14/14	80	4904	1
89	1	15	1/15/14	82	4822	1

Sales Format Data:

Data format

Column: Sales

Format type: Number

Number of decimal places: 0

Negative sign symbol: Default

Use thousands separator: No

Negative sign position: Default

Missing value characters: <empty>

Advanced options

Reset properties

Cancel OK

Price
1.29
1.29
1.29
1.29
1.29
1.29
1.29
1.09
1.09
1.09
1.09
1.09
1.09
1.09
1.09
1.09
1.09

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	1/1/14	0	4972	1
90	1	2	1/2/14	70	4902	1
76	1	3	1/3/14	59	4843	1
120	1	4	1/4/14	93	4750	1
124	1	5	1/5/14	96	4654	1
187	1	6	1/6/14	145	4509	1
231	1	7	1/7/14	179	4329	1
414	1	8	1/8/14	321	4104	1
136	1	9	1/9/14	125	4459	1
96	1	10	1/10/14	88	5043	1
205	1	11	1/11/14	188	5239	1
132	1	12	1/12/14	121	5118	1
146	1	13	1/13/14	134	4984	1
87	1	14	1/14/14	80	4904	1
89	1	15	1/15/14	82	4822	1

Stock Format Data:

The screenshot shows the IBM Cognos Analytics interface with the 'Inventory Module' selected. A 'Data format' dialog box is open for the 'Stock' column. The dialog box has a 'Column: Stock' header and a 'Format type' dropdown set to 'Number'. Below this, there are several settings: 'Number of decimal places' (0), 'Negative sign symbol' (Default), 'Use thousands separator' (No), 'Negative sign position' (Default), and 'Missing value characters' (<empty>). At the bottom of the dialog are 'Advanced options', 'Reset properties', 'Cancel', and 'OK' buttons.

Column	Format type	Number of decimal places	Negative sign symbol	Use thousands separator	Negative sign position	Missing value characters
Stock	Number	0	Default	No	Default	<empty>

The screenshot shows the IBM Cognos Analytics interface with the 'Inventory Module' selected. The 'Data module' is set to 'Inventory M...ataset.csv'. The 'Grid' view is selected, showing a table with 7 columns: Revenue, M_Data, Row Id, Year, Sales, Stock, and Price. The table contains 15 rows of data.

Revenue	M_Data	Row Id	Year	Sales	Stock	Price
0	1	1	1/1/14	0	4972	1
90	1	2	1/2/14	70	4902	1
76	1	3	1/3/14	59	4843	1
120	1	4	1/4/14	93	4750	1
124	1	5	1/5/14	96	4654	1
187	1	6	1/6/14	145	4509	1
231	1	7	1/7/14	179	4329	1
414	1	8	1/8/14	321	4104	1
136	1	9	1/9/14	125	4459	1
96	1	10	1/10/14	88	5043	1
205	1	11	1/11/14	188	5239	1
132	1	12	1/12/14	121	5118	1
146	1	13	1/13/14	134	4984	1
87	1	14	1/14/14	80	4904	1
89	1	15	1/15/14	82	4822	1

Price Format Data:

The screenshot shows the 'Data format' dialog box in IBM Cognos Analytics. The 'Column' is 'Price'. The 'Format type' is 'Number'. The 'Number of decimal places' is set to 0. The 'Negative sign symbol' is 'Default'. The 'Use thousands separator' is 'No'. The 'Negative sign position' is 'Default'. The 'Missing value characters' are '<empty>'. The 'Advanced options' button is visible. The background shows a table with a 'Price' column containing values like 1.29, 1.09, and 4822.

Column: Price

Format type: Number

Number of decimal places: 0

Negative sign symbol: Default

Use thousands separator: No

Negative sign position: Default

Missing value characters: <empty>

Advanced options

Reset properties

Cancel OK

The screenshot shows the 'Grid' view of a table in IBM Cognos Analytics. The table has columns: M_Data, Row Id, Year, Sales, Stock, and Price. The data is as follows:

M_Data	Row Id	Year	Sales	Stock	Price
1	1	1/1/14	0	4972	1
1	2	1/2/14	70	4902	1
1	3	1/3/14	59	4843	1
1	4	1/4/14	93	4750	1
1	5	1/5/14	96	4654	1
1	6	1/6/14	145	4509	1
1	7	1/7/14	179	4329	1
1	8	1/8/14	321	4104	1
1	9	1/9/14	125	4459	1
1	10	1/10/14	88	5043	1
1	11	1/11/14	188	5239	1
1	12	1/12/14	121	5118	1
1	13	1/13/14	134	4984	1
1	14	1/14/14	80	4904	1
1	15	1/15/14	82	4822	1

Month Data Properties:

The screenshot shows the IBM Cognos Analytics interface with the 'Inventory Module' selected. The 'Data module' pane on the left shows the 'M_Data' measure selected. The main grid displays a table with columns: Revenue, M_Data, Row Id, Year, and Sales. The 'Properties' pane on the right shows the 'General' tab for the 'M_Data' measure.

Revenue	M_Data	Row Id	Year	Sales
0	1	1	1/1/14	0
90	1	2	1/2/14	70
76	1	3	1/3/14	59
120	1	4	1/4/14	93
124	1	5	1/5/14	96
187	1	6	1/6/14	145
231	1	7	1/7/14	179
414	1	8	1/8/14	321
136	1	9	1/9/14	125
96	1	10	1/10/14	88
205	1	11	1/11/14	188
132	1	12	1/12/14	121
146	1	13	1/13/14	134
87	1	14	1/14/14	80
89	1	15	1/15/14	82

Properties - General

- Label: M_Data
- Hide from users: ☐
- Expression: [View or edit](#)
- Usage: Attribute
- Aggregate: Count Distinct
- Data type: Integer
- Represents: Time
- Month:
- Description:
- Comments:

Revenue Data Properties:

The screenshot shows the IBM Cognos Analytics interface with the 'Inventory Module' selected. The 'Data module' pane on the left shows the 'Revenue' measure selected. The main grid displays a table with columns: Revenue, M_Data, Row Id, Year, and Sales. The 'Properties' pane on the right shows the 'General' tab for the 'Revenue' measure.

Revenue	M_Data	Row Id	Year	Sales
0	1	1	1/1/14	0
90	1	2	1/2/14	70
76	1	3	1/3/14	59
120	1	4	1/4/14	93
124	1	5	1/5/14	96
187	1	6	1/6/14	145
231	1	7	1/7/14	179
414	1	8	1/8/14	321
136	1	9	1/9/14	125
96	1	10	1/10/14	88
205	1	11	1/11/14	188
132	1	12	1/12/14	121
146	1	13	1/13/14	134
87	1	14	1/14/14	80
89	1	15	1/15/14	82

Properties - General

- Label: Revenue
- Hide from users: ☐
- Expression: [View or edit](#)
- Usage: Measure
- Calculate after aggregation: ☐
- Aggregate: Total
- Data type: Decimal
- Represents: Default
- Lookup reference: None
- Description:
- Comments:

Year Data Format:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists 'Inventory Module' with sub-items: 'Navigation paths', 'Inventory M...ataset.csv', 'Revenue', 'M_Data', '# Row Id', 'Year' (selected), 'Sales', 'Stock', and 'Price'. The main grid displays a table with columns: Revenue, M_Data, Row Id, Year, and Sales. The 'Year' column is highlighted. The 'Properties' pane on the right shows the 'General' tab for the 'Year' field, with fields like Label, Hide from users, Expression, Usage, Aggregate, Data type, Represents, Time, Year, Lookup reference, and Description.

Revenue	M_Data	Row Id	Year	Sales
0	1	1	1/1/14	0
90	1	2	1/2/14	70
76	1	3	1/3/14	59
120	1	4	1/4/14	93
124	1	5	1/5/14	96
187	1	6	1/6/14	145
231	1	7	1/7/14	179
414	1	8	1/8/14	321
136	1	9	1/9/14	125
96	1	10	1/10/14	88
205	1	11	1/11/14	188
132	1	12	1/12/14	121
146	1	13	1/13/14	134
87	1	14	1/14/14	80
89	1	15	1/15/14	82

Sales Data Format:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists 'Inventory Module' with sub-items: 'Navigation paths', 'Inventory M...ataset.csv', 'Revenue', 'M_Data', '# Row Id', 'Year', 'Sales' (selected), 'Stock', and 'Price'. The main grid displays a table with columns: Year, Sales, Stock, and Price. The 'Sales' column is highlighted. The 'Properties' pane on the right shows the 'General' tab for the 'Sales' field, with fields like Label, Hide from users, Expression, Usage, Aggregate, Data type, Represents, Default, Lookup reference, and Description.

Year	Sales	Stock	Price
1/1/14	0	4972	1
1/2/14	70	4902	1
1/3/14	59	4843	1
1/4/14	93	4750	1
1/5/14	96	4654	1
1/6/14	145	4509	1
1/7/14	179	4329	1
1/8/14	321	4104	1
1/9/14	125	4459	1
1/10/14	88	5043	1
1/11/14	188	5239	1
1/12/14	121	5118	1
1/13/14	134	4984	1
1/14/14	80	4904	1
1/15/14	82	4822	1

Stock Data Properties:

The screenshot displays the IBM Cognos Analytics interface for the 'Inventory Module'. The 'Data module' pane on the left shows a tree view with 'Inventory M...ataset.csv' expanded, and 'Stock' selected. The main grid shows a table with columns: Year, Sales, Stock, and Price. The 'Properties' pane on the right shows the 'General' tab for the 'Stock' measure.

Year	Sales	Stock	Price
1/1/14	0	4972	1
1/2/14	70	4902	1
1/3/14	59	4843	1
1/4/14	93	4750	1
1/5/14	96	4654	1
1/6/14	145	4509	1
1/7/14	179	4329	1
1/8/14	321	4104	1
1/9/14	125	4459	1
1/10/14	88	5043	1
1/11/14	188	5239	1
1/12/14	121	5118	1
1/13/14	134	4984	1
1/14/14	80	4904	1
1/15/14	82	4822	1

Properties - General

- Label: Stock
- Hide from users: ☐
- Expression: [View or edit >](#)
- Usage: Measure
- Aggregate: Total
- Data type: Integer
- Represents:
Default:
Lookup reference: None
- Description:
Comments:

Price Data Properties:

The screenshot displays the IBM Cognos Analytics interface for the 'Inventory Module'. The 'Data module' pane on the left shows a tree view with 'Inventory M...ataset.csv' expanded, and 'Price' selected. The main grid shows a table with columns: Year, Sales, Stock, and Price. The 'Properties' pane on the right shows the 'General' tab for the 'Price' measure.

Year	Sales	Stock	Price
1/1/14	0	4972	1
1/2/14	70	4902	1
1/3/14	59	4843	1
1/4/14	93	4750	1
1/5/14	96	4654	1
1/6/14	145	4509	1
1/7/14	179	4329	1
1/8/14	321	4104	1
1/9/14	125	4459	1
1/10/14	88	5043	1
1/11/14	188	5239	1
1/12/14	121	5118	1
1/13/14	134	4984	1
1/14/14	80	4904	1
1/15/14	82	4822	1

Properties - General

- Label: Price
- Hide from users: ☐
- Expression: [View or edit >](#)
- Usage: Measure
- Aggregate: Total
- Data type: Decimal
- Represents:
Default:
Lookup reference: None
- Description:
Comments: