Analytical CDS Views - Table

```
1  @EndUserText.label : 'Product sales table'
2  @AbapCatalog.enhancement.category : #NOT_EXTENSIBLE
3  @AbapCatalog.tableCategory : #TRANSPARENT
4  @AbapCatalog.deliveryClass : #A
5  @AbapCatalog.dataMaintenance : #RESTRICTED
6  define table zproduct_sales {
7
8    key client           : abap.clnt not null;
9    key sales_id          : sysuuid_x16 not null;
10   category_id          : abap.char(5);
11   category_name        : abap.char(30);
12   @Semantics.amount.currencyCode : 'zproduct_sales.currency_code'
13   total_sales_amount : abap.curr(15,2);
14   currency_code        : abap.cuky;
15
16 }
```

Sample Data

CLIENT	SALES_ID	CATEGORY_ID	CATEGORY_NAME	TOTAL_SALES_AMOUNT	CURRENCY_CODE
100	EA9B930AA96C1FD08FF3BCB0CF819D58	CAT02	Books	1072.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF81BD58	CAT03	Clothing	1947.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF81DD58	CAT04	Groceries	2573.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF81FD58	CAT05	Sports	4614.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF821D58	CAT01	Electronics	2634.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF823D58	CAT02	Books	3443.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF825D58	CAT03	Clothing	3747.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF827D58	CAT04	Groceries	3725.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF829D58	CAT05	Sports	1545.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF82BD58	CAT01	Electronics	1003.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF82DD58	CAT02	Books	4702.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF82FD58	CAT03	Clothing	3371.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF831D58	CAT04	Groceries	4011.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF833D58	CAT05	Sports	2998.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF835D58	CAT01	Electronics	4314.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF837D58	CAT02	Books	3560.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF839D58	CAT03	Clothing	3113.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF83BD58	CAT04	Groceries	4261.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF83DD58	CAT05	Sports	3937.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF83FD58	CAT01	Electronics	2938.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF841D58	CAT02	Books	1262.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF843D58	CAT03	Clothing	3270.00	USD
100	EA9B930AA96C1FD08FF3BCB0CF845D58	CAT04	Groceries	3287.00	USD

Data Preview — find pattern — 100 rows retrieved - 30 ms — SQL Console — Number of Entries
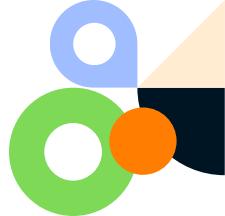
Cube view

```
 1  @AbapCatalog.sqlViewName: 'ZV_PROD_SALECUBE'
 2  @AccessControl.authorizationCheck: #NOT_REQUIRED
 3  @EndUserText.label: 'Product sales cube'
 4  @Analytics.dataCategory: #CUBE
 5  define view ZI_PRODUCT_SALES_CUBE
 6    as select from zproduct_sales
 7  {
 8    key category_id,
 9    key category_name,
10        @DefaultAggregation: #SUM
11        @Semantics.amount.currencyCode: 'currency_code'
12        total_sales_amount,
13        currency_code
14  }
15
```

Consumption view

```abap
1  @AbapCatalog.sqlViewName: 'ZV_PROD_SALECON'
2  @EndUserText.label: 'Product Sales Pie Chart'
3  @AccessControl.authorizationCheck: #NOT_REQUIRED
4  @Analytics.query: true
5  @UI.headerInfo: {
6    typeName: 'Product Sales',
7    typeNamePlural: 'Product Sales Entries',
8    title: { value: 'category_name' }
9  }
10 @UI.presentationVariant: [
11   {
12     sortOrder: [ { by: 'total_sales_amount', direction: #DESC } ],
13     visualizations: [ { type: #AS_CHART, qualifier: 'SalesPie' } ]
14   }
15 ]
16 @UI.chart: [
17   {
18     qualifier: 'SalesPie',
19     chartType: #PIE,
20     dimensions: [ 'category_name' ],
21     measures: [ 'total_sales_amount' ]
22   }
23 ]
24 define view ZI_PRODUCT_SALES_CONSUMPTION
25   as select from ZI_PRODUCT_SALES_CUBE
26 {
27   key category_id,
28   key category_name,
29   @DefaultAggregation: #SUM
30   @Semantics.amount.currencyCode: 'currency_code'
31   total_sales_amount,
32   currency_code
33 }
34
```

Pie Chart

Details ⊕ ⊖ ⤢

17.06%

23.92%

18.2%

20.91%

19.91%
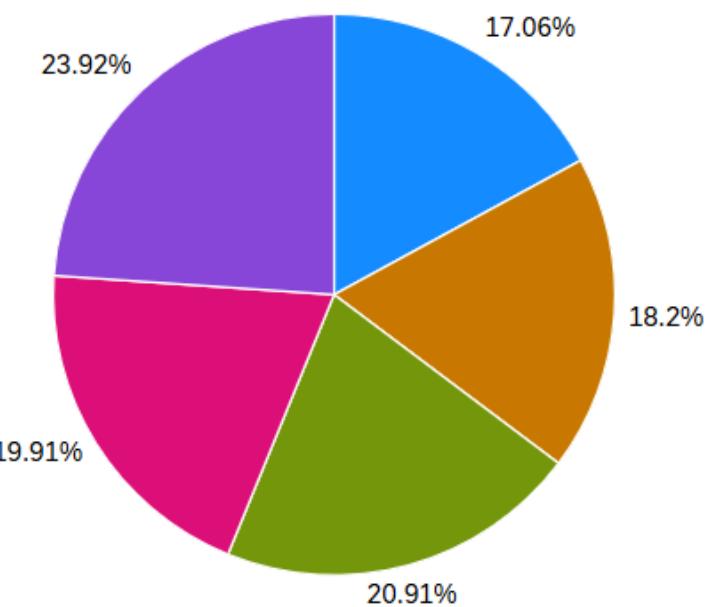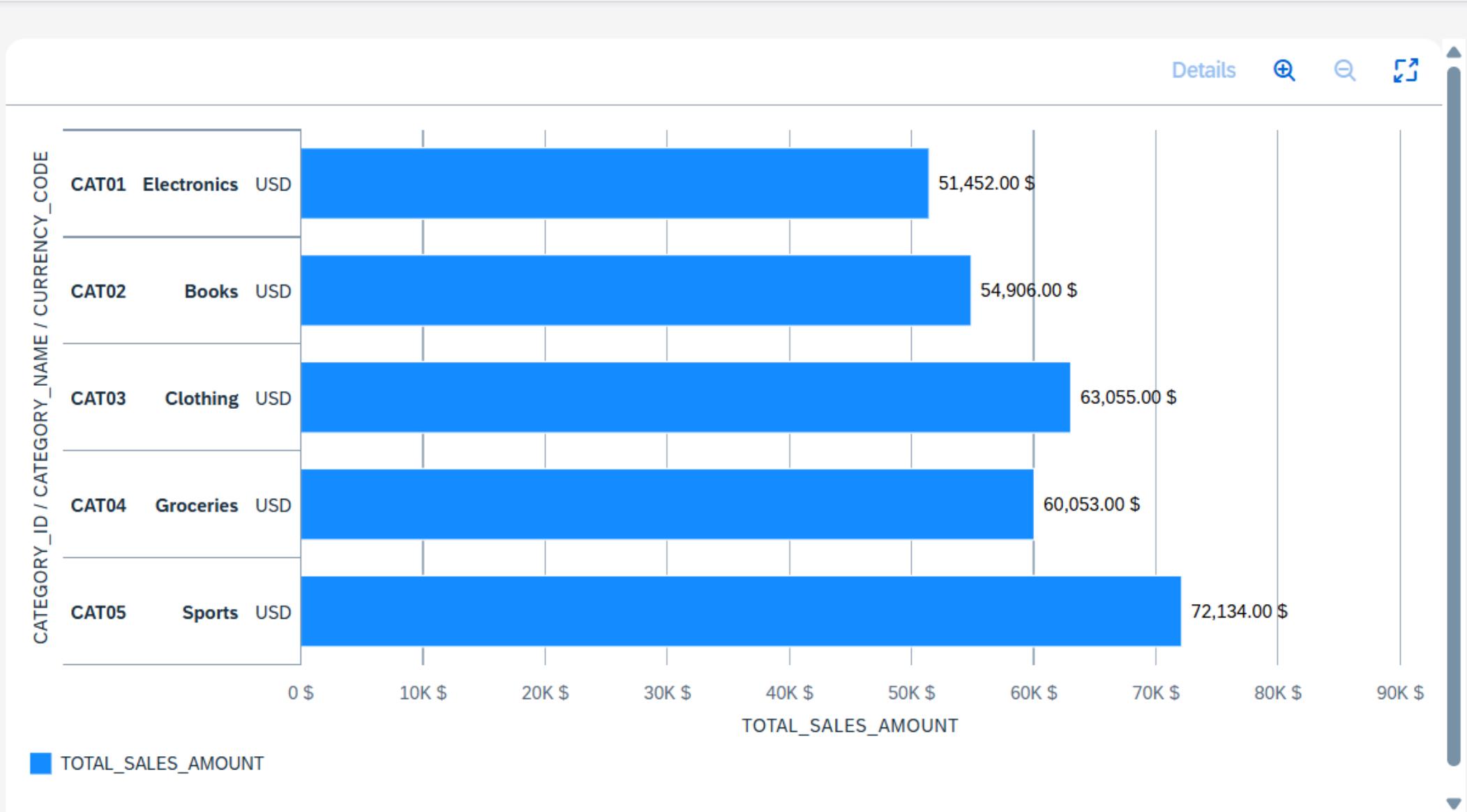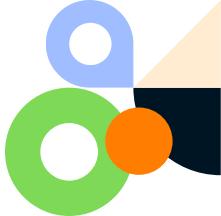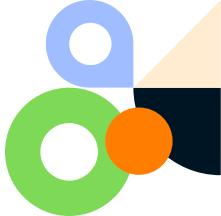
■ CAT01 / Electronics / USD   ■ CAT02 / Books / USD   ■ CAT03 / Clothing / USD   ■ CAT04 / Groceries / USD   ■ CAT05 / Sports / USD
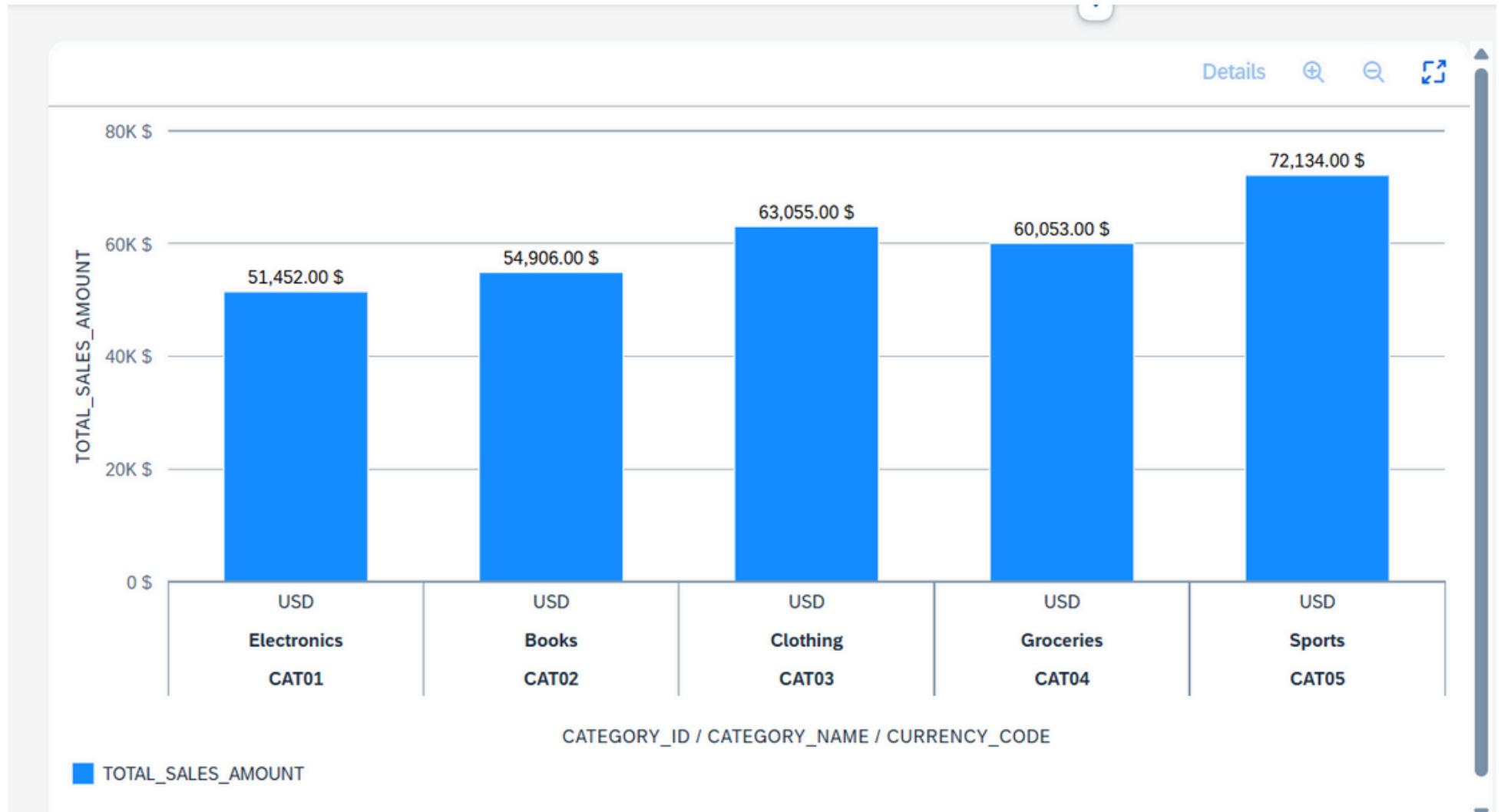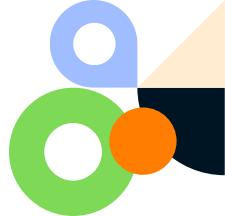
Bar Chart
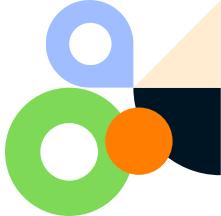
Line Chart

Column Chart

Charts in Analytical CDS view

Chart Type:

⊞ Waterfall Chart	⌄

- ⊟ Bar Chart
- ⬛ Column Chart
- ⬚ Line Chart
- ◖ Pie Chart
- ◉ Donut Chart
- ⊞ Heat Map
- ⊟ Stacked Bar Chart
- ⬛ Stacked Column Chart
- ⊟ 100% Stacked Bar Chart
- ⬛ 100% Stacked Column Chart
- ⊞ **Waterfall Chart**
- ⊟ Horizontal Waterfall Chart