**TE Datasets Extract to Wharton**

Data points:

Part Master

Customer Master

TE Sales to Direct Customers (Direct)

Distributor sales of TE parts to Distributor End Customers (POS)

Contract Manufacturer Allocations to OEM Customers (CMA)

Distributor Inventory

Period:

Fiscal Year 2015 thru Q3 of 2019 (June 2019)

Key Column Definitions:

**te\_corporate\_part\_number –** TE’s part number

**customer\_id –** Anonymized Customer ID

**worldwide\_account\_number –** higher grouping of customers

**fiscal\_year\_historical** – TE Fiscal Year

**fiscal\_quarter\_historical** – TE Fiscal Quarter

**fiscal\_month\_historical** - TE Fiscal month

**fiscal\_month\_begin\_date\_converted\_historical –** date that points to first calendar day of the month for the fiscal month

**fiscal\_month\_week\_count –** number of weeks in a fiscal month

1. ***Part Master*** –parts that have been sold or have distributor inventories for the past 5 years.
   1. **te\_corporate\_part\_number** is the unique key and should be used to join to transactional data sets.
   2. All the columns with the word **“label”** are concatenation of code and description. Codes are enclosed in parentheses.
   3. In TE’s product structure, the hierarchy is as follows (from top to bottom):
      * product\_structure\_label\_level\_1
      * product\_structure\_label\_level\_2
      * product\_structure\_label\_level\_3
      * product\_structure\_label\_level\_4
      * product\_structure\_label\_level\_5
      * product\_line\_label
      * product\_code\_label
      * part number
   4. File Layout:

|  |  |  |
| --- | --- | --- |
| name | data type | comment |
| te\_corporate\_part\_number | string |  |
| part\_description | string |  |
| part\_material\_type\_name | string |  |
| part\_engineering\_status\_name | string |  |
| part\_discontinuance\_status\_name | string |  |
| part\_sales\_status\_name | string |  |
| part\_record\_original\_date | string | format: YYYY-MM-DD |
| part\_marketing\_brand\_name | string |  |
| part\_promote\_indicator | string |  |
| part\_base\_cpr\_unit\_of\_measure\_label | string |  |
| product\_classification\_name | string |  |
| product\_naics\_name | string |  |
| product\_structure\_label\_level\_1 | string |  |
| product\_structure\_label\_level\_2 | string |  |
| product\_structure\_label\_level\_3 | string |  |
| product\_structure\_label\_level\_4 | string |  |
| product\_structure\_label\_level\_5 | string |  |
| product\_family\_label\_level\_1 | string |  |
| product\_family\_label\_level\_2 | string |  |
| product\_family\_label\_level\_3 | string |  |
| product\_line\_label | string |  |
| product\_code\_label | string |  |
| product\_owning\_segment\_name | string |  |
| product\_owning\_business\_unit\_group\_name | string |  |
| product\_owning\_business\_unit\_name | string |  |
| product\_owning\_profit\_center\_group\_name | string |  |
| product\_owning\_profit\_center\_name | string |  |

1. ***Customer Master*** – end customers, contract manufacturer allocation (subcontractor)

customers and distributor customers that have sales (either direct or indirect) for the past 5 years.

* 1. **customer\_id** is the unique key and should be used to join to transactional data sets.
  2. **customer\_distributor\_indicator** can be used to identify if a customer is a Distributor. A value of “Yes” means it is a distributor, a value of “No” means it is not.
  3. **customer\_subcontractor\_indicator** can be used to identify if a customer is a subcontractor. A value of “Yes” means it is a sucontractor, a value of “No” means it is not.
  4. **tier2\_distribution\_classification\_name** – distributor classification based on the customer they are serving.
  5. All the columns with the word “**label**” are concatenation of code and description. Codes are enclosed in parentheses.
  6. The **worldwide\_account\_number** is the higher grouping of all sold to customers for a company.
  7. Customers have their own hierarchy by industry, which is as follows (from top to bottom).
     + customer\_industry\_business\_code\_label\_level\_1
     + customer\_industry\_business\_code\_label\_level\_2
     + customer\_industry\_business\_code\_label\_level\_3
     + customer\_industry\_label\_level\_1
     + customer\_industry\_label\_level\_2
     + customer\_industry\_label\_level\_3
     + customer\_industry\_label\_level\_4
  8. **customer\_type\_description** - is added in the extract to better understand the whether a customer is set-up in the TE customer master which comprises these values:
     1. **Listed account** – These accounts where TE have already defined and maintained in the customer master. There are both direct and indirect sales for these accounts.
     2. **Non-Listed account** – These are rather very small accounts that TE does not establish an account number, so there really is NO assigned TE customer ID. In this extract, we “fabricated” a customer id based on some submitted fields to make them unique. Then we took the submitted location (country and postal code) if provided. Only indirect POS sales have non-listed accounts.
     3. **Small customer aggregation** – These are accounts that are used as a one-time only for a direct sale. There is a generic customer id set-up, sometimes per business unit, in the TE customer master.
  9. File Layout:

|  |  |  |
| --- | --- | --- |
| name | data type | comment |
| customer\_id | string |  |
| customer\_region | string |  |
| customer\_country\_code | string |  |
| customer\_country\_name | string |  |
| customer\_postal\_code | string |  |
| customer\_worldwide\_account\_number | string |  |
| customer\_distributor\_indicator | string |  |
| customer\_type\_description | string |  |
| customer\_industry\_business\_code\_label\_level\_1 | string |  |
| customer\_industry\_business\_code\_label\_level\_2 | string |  |
| customer\_industry\_business\_code\_label\_level\_3 | string |  |
| customer\_industry\_label\_level\_1 | string |  |
| customer\_industry\_label\_level\_2 | string |  |
| customer\_industry\_label\_level\_3 | string |  |
| customer\_industry\_label\_level\_4 | string |  |
| customer\_subcontractor\_indicator | string |  |
| tier2\_distributor\_classification\_name | string |  |

1. ***TE Direct Sales to Customers (Direct)*** – TE Sales to direct customers for the past 5 years.
2. Aggregated at Fiscal Month, Customer and Part level.
3. A value of ‘Yes’ in the column **pricing\_agreement\_indicator** denotes that the sales transaction was made using a pricing agreement.
4. Negative sales amount and 0 quantity are credits (from *ship and debit* situations).
5. Negative sales amount and negative quantity are returns.
6. There are some transactions that have 0 part numbers (0-0000000-0). They are considered as part numbers where the part setup process was never completed (prototypes, etc.).
7. File Layout:

|  |  |  |
| --- | --- | --- |
| name | data type | comment |
| customer\_id | string |  |
| te\_corporate\_part\_number | string |  |
| fiscal\_year\_historical | smallint |  |
| fiscal\_quarter\_historical | tinyint |  |
| fiscal\_month\_historical | tinyint |  |
| fiscal\_month\_end\_date\_historical | string | format: YYYY-MM-DD |
| fiscal\_month\_begin\_date\_converted\_historical | string | format: YYYY-MM-DD |
| fiscal\_month\_week\_count | bigint |  |
| pricing\_agreement\_indicator | string | Yes or No |
| sales\_quantity | decimal(18,3) |  |
| sales\_amount | decimal(18,2) | in US$ |

1. ***Distributor (POS) Sales*** – Distributor sales of TE parts to distributor end customers for the past 5 years.
2. Aggregated at Fiscal Month, Customer and Part level.
3. A value of ‘Yes’ in the column **special\_price\_request\_indicator** denotes that the distributor submitted a special price request on behalf of the end customer.
4. Negative sales amount and negative quantity are returns from the end customer to the distributor.
5. There are some transactions that have 0 part numbers (0-0000000-0). They are likely data quality issues.
6. File Layout:

|  |  |  |
| --- | --- | --- |
| name | data type | comment |
| distributor\_customer\_id | string |  |
| end\_customer\_id | string |  |
| te\_corporate\_part\_number | string |  |
| fiscal\_year\_historical | smallint |  |
| fiscal\_quarter\_historical | tinyint |  |
| fiscal\_month\_historical | tinyint |  |
| fiscal\_month\_end\_date\_historical | string | format: YYYY-MM-DD |
| fiscal\_month\_begin\_date\_converted\_historical | string | format: YYYY-MM-DD |
| fiscal\_month\_week\_count | tinyint |  |
| special\_price\_request\_indicator | string | Yes or No |
| sales\_quantity | decimal(18,3) |  |
| sales\_amount | decimal(18,5) | in US$ |

1. ***Contract Manufacturer Allocations to OEM Customers (CMA)*** - TE makes an educated guess on direct sales to contract manufacturers as to the end customer for whom the manufacturing is being done. Data is for the past 5 years.
2. Aggregated at Fiscal Month, Customer and Part level.
3. A value of ‘Yes’ int the column **pricing\_agreement\_indicator** denotes that the reseller customer on the transaction purchased the part using a pricing agreement.
4. Negative sales amount and / or negative quantity, which does exist in small numbers, will need some investigation. They could be adjustments to prior period allocations.
5. File Layout:

|  |  |  |
| --- | --- | --- |
| name | data type | comment |
| cma\_customer\_id | string |  |
| end\_customer\_id | string |  |
| te\_corporate\_part\_number | string |  |
| fiscal\_year\_historical | smallint |  |
| fiscal\_quarter\_historical | tinyint |  |
| fiscal\_month\_historical | tinyint |  |
| fiscal\_month\_end\_date\_historical | string | format: YYYY-MM-DD |
| fiscal\_month\_begin\_date\_converted\_historical | string | format: YYYY-MM-DD |
| fiscal\_month\_week\_count | bigint |  |
| pricing\_agreement\_indicator | string | Yes or No |
| sales\_quantity | decimal(18,3) |  |
| sales\_amount | decimal(18,5) | in US$ |

1. ***Distributor Inventory*** – TE Distributor Inventory for the past 5 years.
   1. Data is a point in time snapshot at Fiscal Month, Distributor World Wide Account Number and Part level.
   2. ***The file contains header record, please exclude it when processing the data.***
   3. File Layout:

|  |  |  |
| --- | --- | --- |
| name | type | comment |
| disty\_ww\_acct | string | distributor worldwide\_account\_number |
| region\_name | string |  |
| tyco\_electronics\_corp\_part\_nbr | string | te\_corporate\_part\_number |
| tyco\_year\_id | smallint | fiscal\_year\_historical |
| tyco\_month\_of\_year\_id | tinyint | fiscal\_month\_historical |
| fisdate | tinyint | fiscal\_month\_begin\_date\_converted\_historical |
| inventory\_qty | decimal(18,5) |  |
| invy\_at\_avg\_sell\_price | decimal(18,5) | in US$ |