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

- Part Master parts that have been sold or have distributor inventories for the past 5 years.
 - a. **te_corporate_part_number** is the unique key and should be used to join to transactional data sets.
 - b. All the columns with the word "label" are concatenation of code and description. Codes are enclosed in parentheses.
 - c. 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
 - d. 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	

- 2. **Customer Master** end customers, contract manufacturer allocation (subcontractor) customers and distributor customers that have sales (either direct or indirect) for the past 5 years.
 - a. **customer_id** is the unique key and should be used to join to transactional data sets.
 - b. **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.
 - c. **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.

- d. **tier2_distribution_classification_name** distributor classification based on the customer they are serving.
- e. All the columns with the word "label" are concatenation of code and description. Codes are enclosed in parentheses.
- f. The **worldwide_account_number** is the higher grouping of all sold to customers for a company.
- g. 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
- h. **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:
 - 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.
 - ii. 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.
 - iii. **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.

i. File Layout:

name	data type	comment
customer_id	string	
customer_region	string	
customer_country_code	string	
customer_country_name string		
customer_postal_code strin		
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	

- 3. **TE Direct Sales to Customers (Direct)** TE Sales to direct customers for the past 5 years.
 - a. Aggregated at Fiscal Month, Customer and Part level.
 - b. A value of 'Yes' in the column **pricing_agreement_indicator** denotes that the sales transaction was made using a pricing agreement.
 - c. Negative sales amount and 0 quantity are credits (from *ship and debit* situations).
 - d. Negative sales amount and negative quantity are returns.
 - e. 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.).
 - f. 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\$

- 4. **Distributor (POS) Sales** Distributor sales of TE parts to distributor end customers for the past 5 years.
 - a. Aggregated at Fiscal Month, Customer and Part level.
 - b. 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.
 - c. Negative sales amount and negative quantity are returns from the end customer to the distributor.

- d. There are some transactions that have 0 part numbers (0-0000000-0). They are likely data quality issues.
- e. 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\$

5. **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.

- a. Aggregated at Fiscal Month, Customer and Part level.
- b. 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.
- c. 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.
- d. File Layout:

4 = 24/44.		
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\$
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- 6. **Distributor Inventory** TE Distributor Inventory for the past 5 years.
 - a. Data is a point in time snapshot at Fiscal Month, Distributor World Wide Account Number and Part level.
 - b. The file contains header record, please exclude it when processing the data.
 - **c.** 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\$