

Meeting Minutes

Date: 30 August 2017

Attendees: Lam You Kang, Yong Li Ru Cheryl, Desmond Lin, Gao Shuang, and Prof Kam Tin Seong, Sponsor

Agenda

Further investigation of business processes and data issues

Notes

Data Modeling: ER Model, Conceptual Data Modelling □ Design document + Data understanding

Data Preparation: Data Profiling (understand the data itself: what is procurement type, etc.), Identify Data Quality Issues (things are called different things in different files.

Harmonization/Standardization □ Data Ready for Visualization

Data Visualization -> Tableau Reports

Build Predictive Model using R

Testing and Development

6 sprints:

Sprint 0: Baseline understanding. Relationship understanding, scoping, replaying what we understand

Sprint 1:

Group 2 presentation:

Phase 0: Visual presentation (ER Diagram, full metadata, visual representation of the supply chain + linkages between different parties in the supply chain)

Phase 1: Data Cleaning, Data Exploration

Phase 0 + Phase 1 (Sprints 0 to 4): 10 weeks

Phase 2 (Sprints 5 and 6): Deployment, execution

Apply data discovery methods to cost factors: What they will do for data exploration.

Suggestion from JNJ: Consolidate the data together, confirm with JNJ if the collated spreadsheet looks right or contains collation. They want a detailed breakdown of the steps needed in the process of data cleaning. (They want concrete steps: Identify anomalies/outliers, confirmation on the facts of the data, etc.)

They want to see that we can connect the different files together.

They really want to see a visualization of the supply chain earlier on.

Questions about data from groups

1) Quantity seen inside BOM is not actual production levels. It is a per/n units kind of composition information. Rationale is to have meaningful costs number.

- 2) Prof: We need transaction data instead of just static data, in order to investigate variation and consistency of costs and also to see if there are concerning outliers in each time span
- a. They are able to give us invoice records to understand if there is variation between expected and actual costs of a finished good.
 - b. Sourcing costs will not be in scope currently.
 - c. BOM prices are negotiated on a yearly basis
 - d. Transaction data will be between seller and buyer, pertaining to finished good.
 - e. Raw materials start with number "5...". BOM price is buying price.

3) Not all condition types may be present in our data. ZZIC is standard cost from manufacturing plant. (inter-company price)

- a. IR: Maintained at buying plant (DC), helps them know where they should be buying it from.

4) The breakdown costs in BOM are in local currency. The total cost is the sum of following columns (O + P + Q + R + U + X + AA + AB + AC)

Manufacturers do not buy from other manufacturers.

At the DCs, they do not have BOM information. The only way they know the cost of a finished good is through the PIR.

Mfg file is static, info record file is also static. Invoice (billing) that determines price from plants to DC will be dynamic. PB00: direct buying cost (direct buy from vendor).

Z--- transactions buy from manufacturer.

Scope will be changed to baby oil + adult wash (lotion, powder, etc, about 100 SKUs)
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PIR only contains material numbers for FINISHED GOODS.

Currently asking why 1 material number (19601576) has 2 BOL and 2 costs in the PH BOM. □ unresolved

The same material in different countries may have same OR different materials.

Other things to consider