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| BUAN6320 |
| **HW 1 Data Modeling and Normalization** |
| Monday4PM\_Group4 |

**Question 1: Data requirements of TTi: What are the critical data requirements based on your understanding of TTI business scenario described above.**

TTi is planning to expand their business into retail and hence, to meet their data and information needs we need to design a database. Below is a brief business scenario provided by TTi:

* TTi’s retails shop is going to sell desktops, monitors, laptops, mobiles, tablets and its parts.
* TTi is planning to provide various maintenance & buyback plan to its customers.
* As marketing strategy, TTi plan to sell these equipment’s in five different packages.
* For small and medium business, TTi is planning to lease the packages for a period of 3 years.
* TTi plans to meet their supply by entering contact with manufactures from China and Taiwan.
* The parts will be stored and assembled at the warehouse before delivering them to the retail stores.
* TTi has hired multiple employees who are responsible for sale and also have increased the repair workforce to handle the expansion.

Based on the above scenarios we believe these are the required entities:

1. Suppliers: To keep track of which part has been procured from which manufacturer
2. Parts: To know the type, quantity and location of the parts in the warehouse.
3. Equipment: To know which Store each equipment is headed to.
4. Packages: How the equipment are bundled and to differentiate the same packages.
5. Stores: To keep track of which Store is handling which customer and which packages they sell.
6. Customers: To have a record of what each customer buys and to keep their details.
7. Employees: To maintain records of the staff & sales people who work for TTi.
8. Plans: To know which plan a customer has chosen and its details.

**Question 2-4: Key Entities and their relationships; A conceptual data model in MySQL; Key Assumptions made while preparing the data model.**

