**PROBLEM STATEMENT**

Quantitative Study - Example #1
A steel tubes manufacturing company producing 5000 Steel tubes per day. As standard practice, they are drawing the tubes from big outside diameter to small diameter for increase tube length. The company using big outside diameter tubes as raw materials to get 19.05 diameter tubes with require length of tubes. Normally, to get 5000 Steel tubes as production from multiple big outside diameter tubes.

**Case Brief:**
- Production: 5000 Steel Tubes
- Final Product: 19.05 Outside Diameter tubes
- Raw materials: With Multiple sizes with big Outside diameters from 19.05 OD. (Such as 25.40 OD, 24.30, 22.10, 20.50 etc.)

**Ideal**
- At end of the day, all the multiple sizes tubes (Raw Materials) quantity's records should be match with final product.
- Variation up to +/- 0.5% in quantity, and up to 1.5% wastage should include.
- Each Input Raw material's individual records should be maintained.

**Reality**
The raw material register not match with production register. The Management can't segregate which raw materials having a variations and wastage.

**Consequences**
The Quantity records describing variation is about 1.80% (45 tubes) and wastage is about 2.30% (38 Tubes) of raw materials. Monthly: Variation in quantity is 45x30 = 1350 Tubes, and wastage =1740 tubes.

**Problem statement**
The company don't have a sufficient system to identify, measure and quantify the inputs for the production. Even Does not have any method to analyze the information to rectify actual variations & wastage.

**Proposal**
The administration team & production team working to evaluate potential solutions for establishing sufficient IT system such as ERP.