Data Collection and Analysis Paper - Requirements

Prepare a 1,500-1,700 word paper describing your method of data collection, tools of analysis and conclusions. Start by restating your selected business process and problem statement identified on your problem definition worksheet.

Include either a **data measurement plan or a **data stratification tree**. Include charts and graphs - but not as a separate file.**

Incorporate answers to the following questions within your paper:

- What types of information did you measure (eg. cost, cycle time, WIP, changeover time, yield, machine utilization, scrap, rework, inventory)?
- Have clear operational definitions been established for your inputs and outputs?
- What kind of data did you collect (continuous or discrete data)?
- What is your baseline measurement?
- Did you collect your own data or did you use existing data?
- How much data did you collect and why? What is your ideal sample size using the sample size formula? What is the risk given the chosen sample size?
- How was your data collected? Describe the methods you used to collect it.
- Where could you have measurement error? How much measurement error do you have? What could you do to minimize your measurement error?
- What is the SQL for your old and new process?
- What 4 -5 **different** tools and techniques did you use to analyze your data and why?
- What is the data telling you? What did you discover?
- What solutions did you propose and/or implement? Did you successfully improve your process? What did you learn about your process?

Depending on your problem-type incorporate the following if appropriate:

- What is your measure of central tendency (measure of location)? Calculate it.
- What is your data's measure of dispersion? Calculate it.
- Is your process (old and new) in control?