

TECH 646 Analysis of Research in Industry & Technology
Assignment 4
Research Proposal – Initial Investigation

Assigned date: Friday, September 14, 2018

Due date: Thursday, **Sept. 20, 2018, before 5 PM**

Hand-in requirement:

- A MS Word file: containing Part A and Part B.

PART 1: Initial Meeting Minute (needed by Monday, Sept. 17)

The research project on “Improving the Accuracy and Quality of Metal Bar Straightening Process,” is considered.

A face-to-face meeting and discussion on the machine process, problems, and expected solution was taking place. After the meeting, the meeting minutes should be documented and circulated for approval. The student team should prepare a minute that documenting the details of on problem/issues, current operating environment and metal bar treatment and making process, desired improvements, research questions, and initial considerations on alternative solutions.

- Philip can prepare the first draft of the minutes
- Ryan proof read and add info as needed

PART II: Team Research Project – Initial Investigation (due Friday, Sept. 21)

The project proposal should include the following sections (see pp. 114-118, Exhibit 5-10) and incorporate some findings from class discussion (Sept. 13):

- Project Title
- Problem Statement
- Introduction
- Research Objectives
- Important Benefits

The following sections are To Be Developed (TBD) in the following two weeks:

- Research Design
- Data Analysis
- Results: Deliverables
- Budget
- References (sufficient references must be included)

Note:

- Proper drawings, diagrams should be added (use Microsoft Visio)
- A Gantt Chart for the proposal should be also considered