

I PRO 303

Information Design for Plant Management to Predict Equipment Failure

Objective:

The main goal of I PRO 303 was to conduct a day-in-life study of two key players involved with planned and unplanned maintenance in a coal power plant and how their decision making about maintenance affect other aspects of the plant.

Basic Organization and Tasks:

I PRO 303 had a very dynamic team structure due to limited amount of members. It was not uncommon for members to participate in more than one sub-team throughout the semester. During the first part of the semester the group was divided into the following sub-teams: Contacts, Questionnaire and Deliverables. Once the questions were prepared, the members of the questionnaire group joined the other two sub-groups while everyone participated in the interviews. An analysis group was created towards the end of the semester.

Accomplishments:

The members in I PRO 303 were able to gain a better understanding of the day-to-day activities of an Engineering Specialist and a Shift Supervisor of various power plants. Team members were also able to study the decision making process concerning maintenance and the factors that contribute to it.

Critical Barriers and Obstacles:

Major obstacles that team members faced were developing appropriate questionnaire, contacting willing participants for interviews, and difficulties due to conflicting schedules for the interviews. Another major obstacle was to quantify the data acquired from interviews.

Conclusion:

I PRO 303 made significant progress continuing the work of the previous semester. The team members have taken the project to the next step where a new team of students are able to eventually design a new, user friendly interface of Smart Signal's software.

Next step:

The project can be taken further by questioning the key players in maintenance decisions about their preference in methods of receiving alerts about equipment failure. Then a new software interface can be designed accordingly.

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