Project Plan

May 16, 2010

Project name	Material handling
Client/Sponsor	StoraEnso plant in Hylte

0.1 Executive summary

Firstly, evaluate the data coming from the company production database, and reach the consensus how to deal with the invalid data. Develop one graphic user interface, using which users could easily understand the situation of the mill from different perspective.

0.2 Background, objective and goal

Background

Large quantities of paper are produced and shipped every day at a paper mill. Several trucks are involved to handle all these materials.
The situation is explained subsequently:

1. Paper reels are produced and come out on a conveyor belt.
2. From conveyor belt they are transported to intermediate storage or to immediate shipping.
3. From intermediate storage they are later transported to shipping (container, train, lorry).

Objective

To develop a simulation environment to test techniques that can be used optimize the material handling.

Goal

To convey intuitive information from the database, in order to do the further optimization.

Limitation

Possible optimization approach will not be proposed or simulated

0.3 Requirement specification

Requirement form

Product requirement • The situation expressed in the form of database is presented in the form that is easily understandable for human.
Project requirement • The simulation environment must be a copy of the StoraEnso plant in Hylte. • The simulation environment must have the function to extracting data from the StoraEnso production system database. • The simulation environment must have the ability to present the user with the total distance based on each truck and all trucks. • The simulation environment must have the information concerning the usage of all cells. • The simulation environment should have the ability to illustrate the production flow at the StoraEnso plant. • The function of extracting data from StoraEnso production system database could be a software.
Prerequisites • The information about StoraEnso production system database, such as how the data is gathered, and the platform this database is using. • Periodic reference must be provided during the execution of this project.

0.4 Milestones, activities and schedule

0.4.1 Milestone plan

- Construct the distance matrix from the plant map given that all trucks are moving between 2 cells directly.
- Obtain the valid data from the raw data.
- Get the statistical information of usage of cells.
- Construct the map of the mill.
- Get the statistical information of trucks.

- Associate all information obtained before with the map.

0.4.2 Activity list

1	Evaluate the data in the database, and determine how to deal with invalid data	Project sponsor and engineers from Hylte	May 17th 10:00 AM	May 17th 12:00 PM
2	Obtain valid data after pre-processing the raw data from database	Project members	May 18th	May 31th
3	Gather the information from the parsed data and extract the statistic information about usage of cell	Project members	June 1th	June 7th
4	Construct the map of the mill	Project members	May 17th	June 18th
5	Illustrate the production flow in the simulation environment	Project members	June 19th	June 29th
6	Construct the distance matrix	Project members	May 17th	May 31th

0.4.3 Gantt chart

Please see the open office file.