

MachineGenie

Objective

Collate data and report on field machine performance and production

Background

Client is an earthmoving contractor who wants an easier way to keep track of machine hours, maintenance and production.

Currently data is collected is disparate in-house developed Excel spreadsheets in different admin locations. There is no provision for data analysis or easy historical reporting

The system will need to replicate the cell calculations and functions present in the current Excel documents. (Attached)

Suggested Technology

- Web based DB (.Net)
- Option of Windows Desktop App for entering data
- Mobile app not required

Required Features

- Users able to generate reports using any combination of available data and across nominated time frames
- Field supervisor only has access to his data while Admin has access to all data
- Web based admin management
- Reports available in tabular and graph format where applicable (eg productivity comparison reports)
- Reports able to printed/saved as PDF
- Reports able to be exported as CSV
- Data entry screen must be clear and easy to use
- Must be scalable

Optional Features

- Admin can create custom reports and save them
- Admin can schedule any report to be generated and sent on a schedule

Attachments

1. Template – Revised.xlsx

This is the SS that the site supervisor uses to enter production and usage data about each of the machines, their hours and production. Data entry starts on “Production Template” tab and flows through the other tabs. Machines are listed down the left hand side. Missing from this is a field for “Operator Name” (Driver) This will need to go in the DB and on the data entry form.

Every 12 hours shift one of these documents is completed and submitted to admin

You will need to explore the cell formulas and experiment with test data to see how the SS works

- EX = Excavator
- Truck
- LDR = Loader
- 4475#1 etc I believe are also trucks

2. Plant Hire Template.xlsx

This is the SS that Admin use to work out hire rates for the equipment. This section should be accessible to Admin only. This SS is much simpler. Once again, explore the cell formulas to see how this works. I basically just needs to calculate hours for machines and labour and total these.