Consider the following company background:

Blockhead Martin has been developing contract software for many years. They have been using a waterfall model for development, with inspections after every development phase (design and code inspections) and several test phases (unit, system, and acceptance test phases). The design approach has been data flow diagrams and functional decomposition. They have been collecting data on resources expended (effort spent by phase and activity on a weekly basis), defects (fault data from inspections which include various error and fault classes, and failure data from testing and customer operation of the system, which include various failure classes), process conformance and domain understanding, and various product characteristics, such as size and complexity.

Blockhead Martin wishes to build a baselines for its effort distribution with its current data and use it to build a simple cost model. Write 2 GQM goals to specify how to perform this task for that company. Develop abstraction sheets for the goals and define the most effective models and metrics they can use for the tasks. Offer a plan for presenting the data to management. (8)

Blockhead Martin has decided to change its design process from functional decomposition to object oriented design to improve reuse with the hopes of lowering their overall cost. They will use it on a pilot project. Write a GQM goal and the major accompanying models to help them determine if the new method is cost effective. Use an abstraction sheet. The models should be realistic based upon the company’s history and maturity. Provide any accompanying models needed for support as well as the metrics. However, be sure there is data/information to support the models. Offer a plan for interpreting the data and presenting the results to management. (7)

Limit your answer to a maximum of three pages.