

# # C 615257 : MAJOR CONSTRUCTION MANAGEMENT

KEY WORD: CONSTRUCTION / DATA / EQUIPMENT / MANAGEMENT

PRATHOM SIRIWONGWANNGARM : A STUDY OF DATA COLLECTION FOR EQUIPMENT MANAGEMENT IN CONSTRUCTION. THESIS ADVISOR : ASST. PROF. PING KUNAWATSATTI, Ph.D. 148 pp. ISBN 974-635-922-3

The objective of this research is to study the data collection method of construction equipment regarding the accurate operating hours and equipment costs in order to present an effective data collection model for the management of the equipment in construction works. The research has collected data about the equipment , maintenance and repair , documents used in making requisition and delivery of materials and fuel , documents that show working time of equipment and documents for construction equipment used specifically in highway construction , bridge construction and expressway flyover projects.

According to the research , all of the project managers have a consensus that any data concerning the use of construction equipment should be collected and kept for further development of an effective equipment management system. However, most construction projects are still lacking the systematic data collecting process. Therefore, they are not able to make good use of the data they have for decision making purposes to manage the construction equipment.

The research also found that among data collecting methods used in most construction projects, the individual report of equipment model is the most appropriated. The result of the study leads to the suggestion that construction managers should collect equipment data starting from indicating the code numbers of equipment, construction site, and materials used. However, the coding system should be in the same format in every construction site. Next step, they should design a standard requisition form for any construction material. Such form should indicate the amount and the price each time any material is taken from the supply room. The pricing data would be useful for further accounting purpose. Moreover, the data concerning operation hours and equipment capacity should be kept at all time in order to determine the productivity and cost as well as maintenance plans. All data are to be processed and analyzed by the Storage Department which would also be responsible for reporting the information to the management which should include the actual cost of equipment and maintenance and repair cost, summary about operating cost and the amount of operating hours, and the investing capital on equipment for each job.

ภาควิชา.....วิศวกรรมโยธา

สาขาวิชา.....บริหารงานก่อสร้าง

ปีการศึกษา.....2539

ลายมือชื่อนิสิต.....

ลายมือชื่ออาจารย์ที่ปรึกษา.....

ลายมือชื่ออาจารย์ที่ปรึกษาร่วม.....