FINAL YEAR PROJECT DIPLOMA IN MECH. (MANUF) ENG. SCHOOL. OF ENGINEERING I.T.M. SHAH ALAM

SIMULATION OF PRODUCTION CAPACITY USING BASIC LANGUAGE

BY:

PAIZUL AZLAN ABDULLAH OCTOBER 1991 A report submitted to the School of Engineering, Mara Institute of Technology in partial fulfillment of the requirement for the Diploma: in Mechanical (Manufacturing) Engineering.

Signed :

(Faizul Azlan Abdullah)

(Student)

Approved :

(Abdul Rahman Omar)

(Project Advisor)

Date : ...!/!/////

Shah Alan, Selangor. Date : !?...!?

Sunhaji Kiyai Abas

Course Tutor of Diploma in Mech (Manufacturing) Eng.

School of Engneering,

I. T. H.

Shah Alam, Selangor.

PREFACE

This project of production volume was originated by Encik Abdul Rahman Omar in his project *The Management Game* and presented in 1983. However in this report only part of the initial report taken to be improved, that is the production capacity section.

In the previous management game, the production only takes into account the existing workers without acknowledge certain aspects about workers behavior in the organization. As understood, workers behavior is the most important aspect in a production organization. This has been rectified and modified to ensure that it is introduced into the game.

However this program is made independently from the main program in the previous project. Certain modifications have to be made to this program in order to suit the program into the main program. It is to be noted that only *the production capacity with certain variables* are taken into consideration. Other variables such as financial requirement are assumed enough to make the production run smoothly and is not considered in the program.

i

. The variables are as the same as the previous report, which are workers (unskilled, semi-skilled and skilled), raw material, and machine available. Addition have been made in the workers variables such as incentive wages, effect of too many unskilled workers employed etc. It is program in such a way that the decision about these factors will effect the production volume.

CONTENTS Preface Acknowledgement Nomenclature CHAPTER PAGE ONE Introduction 1 Summary of the initial report on the section T₩O 2 of production capacity. THREE New parameters added to the designed program. 5 Variables used in the program. 7 FOUR • The designed program. FIVE 11 SIX Manual and form. 35 SEVEN Comments and conclusion. 44

•