Group Assignment

For OMGT 701-103

Dinia Gepte (300818574)
Dinesh Bajaj (300824598)
Josue Reta (300821572)
Pamela Cambuy (300820758)

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Professor Jim Nestor

INTRODUCTION

A company needs to replace its two old machines with two new ones. This paper aims to determine a project plan on how the company might execute this process then give a graphic representation using a Gantt chart and a Program Evaluation and Review Technique (PERT) chart.

This report assumes the following:

- The 2 old machines are identical
- The 2 new machines are identical
- The company only has enough money to pay for 1 new machine
- The cost of 1 new machine is equivalent to 2 old machines
- At least 1 machine should be working at all times for continuous output

For convenience, we assign a name to each machine as follows:

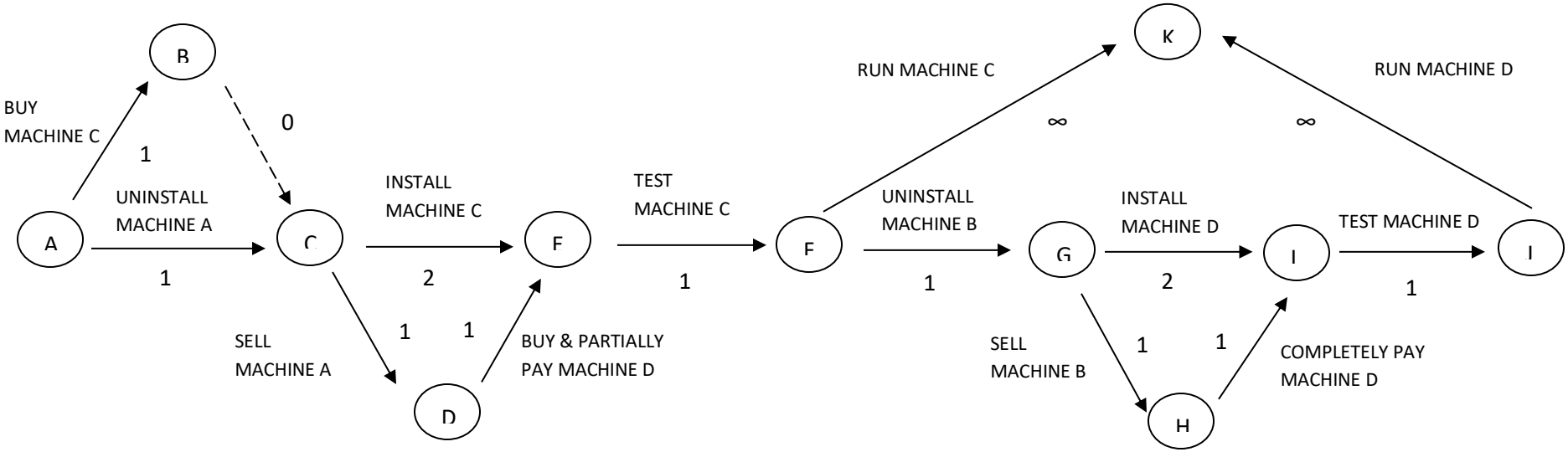
- Machine A – first old machine
- Machine B – second old machine
- Machine C – first new machine
- Machine D – second new machine

BODY

I. GANTT DIAGRAM

ACTIVITY	PLAN	PERIOD IN WEEKS								
		1	2	3	4	5	6	7	8	9
Activity 01	BUY MACHINE C									
Activity 02	UNINSTALL MACHINE A									
Activity 03	SELL MACHINE A									
Activity 04	INSTALL MACHINE C									
Activity 05	BUY & PARTIALLY PAY MACHINE D									
Activity 06	TEST MACHINE C									
Activity 07	UNINSTALL MACHINE B									
Activity 08	RUN MACHINE C									
Activity 09	SELL MACHINE B									
Activity 10	INSTALL MACHINE D									
Activity 11	COMPLETELY PAY MACHINE D									
Activity 12	TEST MACHINE D									
Activity 13	RUN MACHINE D									

II. PROJECT EVALUATION REVIEW TECHNIQUE (PERT) DIAGRAM



CONCLUSION

We see from the GANTT diagram that the whole process will be completed by the end of the eighth week. Furthermore, we try to eliminate time by doing multiple tasks at once. In this plan, we buy the new machines while we do some other work in the factory like uninstalling old machines or testing new ones. Since the company can only pay for one new machine, we use the money we get from selling the old machines to buy a second new machine. Finally, we run the machines after testing them. This part of the process is denoted by an infinite symbol (∞) in the PERT diagram because it represents a task that will continue on past the project.