



BUILDING UP OF FMS SIMULATION MODEL FOR FURNITURE INDUSTRY

**NORAZILA BINTI TAHIR
(2000205486)**

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**Faculty of Mechanical Engineering
Universiti Teknologi MARA (UiTM)**

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ABSTRACT

Modern manufacturing systems are complex and difficult to implement and consequently costly, where one of the most important issues facing industry today is the effective use of the new flexible manufacturing systems (FMS) in the modern machining factory. The recent growth in the development of such systems, where machines are adjusted automatically by computer to produce different parts, reduction of the batch size and great demand in quality has been created for more efficiency in the manufacturing.

Flexibility manufacturing system has become a key consideration in the design of manufacturing system across a broad range of applications, an increasingly large number of factories in the New World market conditions today. That characterized by an increase in the innovation product variety, reduction of batch size and great demand in quality. This can make a forced revision in the relations between the company's functions. To follow these development tendencies, manufacturing companies have experienced an increasing degree of sophistication, especially by incorporating computational technology to the production systems. One of the most important results of this process is the Flexible Manufacturing System (FMS). This system, especially by the increasing flexibility, brings together a high degree of adaptability to the manufacturing function.

In the keys to establish the new product designs and manufacturing processes will be the ability to model and simulate the production methods by using the advanced computer hardware and software. The use of the computerized process modeling and simulation will eliminate much of the prototyping and reduce product development times and costs in the production.

TABLE OF CONTENTS

CONTENTS		PAGE
	PAGE TITLE	i
	ACKNOLEEGEMENT	ii
	ABSTRACT	iii
	TABLE OF CONTENTS	iv
	LIST OF TABLES	viii
	LISTS OF FIGURES	ix
CHAPTER 1	INTRODUCTION	
	1.0 Introduction	1
	1.1 Background of Study	2
	1.2 Objective	2
	1.3 Scope of Study	2
CHAPTER 2	LITERATURE REVIEW	
	2.0 Introduction	3

2.1	Definition of simulation	4
2.2	The application of simulation	4
2.3	The using of simulation	5
2.4	When the simulation to be used	6
2.5	The advantages and the advantages of Simulation	6

CHAPTER 3 FLEXIBLE MANUFACTURING SYSTEM

3.0	Flexible manufacturing system	7
3.1	The application of FMS simulation	8
3.2	The advantages of simulation in the	9

CHAPTER 4 CASE STUDY ON TAWEI (M) SDN. BHD.

4.0	Introduction	11
4.1	Tawei Sdn. Bhd. production	12
4.2	Production chair	12
4.2.1	Back leg	14
4.2.2	Front leg	14
4.2.3	Side rail	14
4.2.4	The assembly of chair	14

CHAPTER 5 METHODOLOGY

5.0	Introduction	16
5.1	Arena	17
5.2	Quest	18
5.2.1	The application of QUEST	19
5.2.2	The advantages of QUEST	20
5.2.3	QUEST parameter	20