

HIGHER TECHNICAL INSTITUTE

COMPUTER STUDIES COURSE

DIPLOMA PROJECT

BUSINESS FIXED ASSETS
COMPUTER CONTROL SYSTEMS

CS/066

Design by
ANTIGONI PITZIOLI

JUNE 1991

BUSINESS FIXED ASSETS COMPUTER
CONTROL SYSTEM

Project Report Submitted by :

ANTIGONI PITZIOLI

In part satisfaction of the award
of Diploma in Computer Studies
of the
Higher Technical Institute, Cyprus.

Project Number : CS/066

PROJECT SUPERVISOR : Mrs Pagona Katsouri,
Lecturer in the Computer
Studies Course, HTI
BSC in Computer Science
and Mathematics.

EXTERNAL SUPERVISOR : Mr John Myrianthousis,
BSC in Civil Engineering
MBA with specialization in
Finance and Computer
Technology.

May 1991.

BUSINESS FIXED ASSETS COMPUTER CONTROL SYSTEMS

SUMMARY

The project deals with the development of an Information System and specifically with the Development Of the BUSINESS FIXED ASSETS CONTROL SYSTEM.

In order to provide the reader with the necessary understanding regarding the technique used in analyzing and developing an Informational System, a brief description of this process is given at an initial stage.

An extensive description of each of the major steps that comprise this process is given in separate chapters and is documented through the use of different forms, data flow diagrams and narratives.

The objectives of the project are :

1. Fully Control the possession, movement and evaluation of the assets of an enterprise.
2. Provide an On-Line facility for the personnel of the enterprise to calculate yearly or individual asset depreciation based on different methods.
3. To provide budgeting of assets to the user.
4. Provide all necessary reports on Screen or Printer according to user request.
5. Provide Communication with Accounting Department.
6. Provide a variety of Enquiries.

BUSINESS FIXED ASSETS COMPUTER CONTROL SYSTEMS

TABLE OF CONTENTS

	PAGE
1. <u>OVERVIEW</u>	
THE PROCESS OF SYSTEMS ANALYSIS	2
1.1. PROCESS DESCRIPTION	2
1.2. SYSTEMS DEVELOPMENT LIFE CYCLE	2
2. <u>PHASE 1</u>	
INITIAL INVESTIGATION PHASE	6
2.1. INTRODUCTION	6
2.2. ACTIVITY 1	
INITIAL INVESTIGATION	7
2.2.1. INTRODUCTION	7
2.2.2. INVESTIGATION FOR THE BUSINESS ASSETS COMPUTER CONTROL SYSTEMS	7
2.2.2.1. INTRODUCTION	7
2.2.2.2. DESCRIPTION OF EXISTING SYSTEM	8
2.2.2.3. DISADVANTAGES OF EXISTING SYSTEM	14
2.2.2.4. SOLUTIONS	16
2.2.2.5. CONCLUSION	16
2.3. ACTIVITY 2	
FEASIBILITY STUDY	18
2.3.1. FEASIBILITY FOR THE BUSINESS ASSETS SYSTEM ...	19
2.3.1.1. INTRODUCTION	19
2.3.1.2. EXISTING SYSTEM BRIEF DESCRIPTION ...	19
2.3.1.3. TECHNICAL FEASIBILITY	20
2.3.1.4. HUMAN FACTOR FEASIBILITY	21
2.3.1.5. SCHEDULE FEASIBILITY	22

2.3.1.6. OPERATIONAL FEASIBILITY	22
2.3.1.7. FINANCIAL FEASIBILITY	24
2.3.1.8. BENEFITS OF THE NEW SYSTEM	28
2.3.1.9. COST OF THE NEW SYSTEM	29
2.3.1.10. CONCLUSION	30

3. PHASE 2

ANALYSIS AND GENERAL DESIGN PHASE	32
3.1. DESCRIPTION OF THE PHASE	32
3.2. ACTIVITY 3	
EXISTING SYSTEM REVIEW	34
3.2.1. ACTIVITY DESCRIPTION	34
3.2.2. REVIEW OF THE EXISTING BUSINESS ASSETS SYSTEM. 34	
3.2.2.1. PROCEDURES WITHIN THE ORGANIZATION ..	34
3.2.2.2. DATA FILES	35
3.2.2.3. CURRENT SYSTEM INPUTS	36
3.2.2.4. CURRENT SYSTEM OUTPUTS	36
3.3. ACTIVITY 4	
NEW SYSTEM REQUIREMENTS	37
3.3.1. ACTIVITY DESCRIPTION	37
3.3.2. USER SPECIFICATION DOCUMENT	37
3.3.2.1. OVERVIEW NARRATIVE	37
3.3.2.2. SYSTEM FUNCTION (BLACK BOX)	38
3.3.2.3. PROCESSING	40
3.3.2.4. OUTPUTS FOR THE USERS	54
3.3.2.5. INPUTS TO THE SYSTEM	54
3.3.2.6. USER INTERFACES WITH THE SYSTEM	54
3.3.2.7. CONCLUSION	54

3.4	ACTIVITY 5	
	NEW SYSTEM DESIGN	55
3.4.1.	NEW SYSTEM DESIGN SPECIFICATION DOCUMENT	55
3.4.1.1.	PROCESSING	56
3.4.1.2.	INPUTS TO THE SYSTEM	56
3.4.1.3.	OUTPUTS TO THE USERS	56
3.4.1.4.	DATA FILES	56
3.4.1.5.	HARDWARE REQUIREMENTS	68
3.5	ACTIVITY 6	
	IMPLEMENTATION AND INSTALLATION PLANNING	73
3.5.1.	ACTIVITY DESCRIPTION	73
3.5.2.	PRELIMINARY DESIGN AND IMPLEMENTATION PLANNING	73
3.5.3.	PRELIMINARY SYSTEM TEST PLAN	75
3.5.4.	USER TRAINING OUTLINE	75
3.5.5.	PRELIMINARY INSTALLATION PLAN	76
4.	<u>PHASE 3</u>	
	DETAIL DESIGN AND IMPLEMENTATION PHASE	78
4.1.	PHASE DESCRIPTION	78
4.2.	ACTIVITY 7	
	TECHNICAL DESIGN	79
4.2.1.	DETAIL DESIGN SPECIFICATION DOCUMENT	79
4.2.1.1.	HUMAN MACHINE INTERFACE DESIGN	79
4.2.1.2.	FILE DESIGN	80
4.2.1.3.	APPLICATION S/W DESIGN	80
4.3.	ACTIVITY 8	
	TEST SPECIFICATION AND PLANNING	81
4.4.	ACTIVITY 9	
	PROGRAMMING AND TESTING	81

4.5. ACTIVITY 10

USER TRAINING 82

4.6. ACTIVITY 11

SYSTEM TEST 82

DOCUMENT APPENDIX

APPENDIX 1

DATA DICTIONARY