



POLITECNICO
MILANO 1863

Project Plan Document

Version: 1.0

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1.Introduction

1.1 Revision History

1.2 Purpose and Scope

1.3 Definitions and Abbreviations

Abbreviations

- ILF: Internal Logical Files
- EIF: External Interface Files
- EI: External Inputs
- EO: External Outputs
- EQ: External Inquiries
- DET: DataElement Types
- FTR: File Types Referenced
- RET: Record Element Types
- UFP: The Unadjusted Function Point

1.4 Reference Documents

2.Project size, cost and effort estimation

2.1 Size estimation: Function Points

Complexity matrix for function points

Internal Logical Files (ILF), External Interface Files (EIF), External Inputs (EI), External Outputs (EO) and External Inquiries (EQ). Each functional component is classified as a certain complexity based on its associated file numbers such as Data Element Types (DET), File Types Referenced (FTR) and Record Element Types (RET). The complexity matrix for the five components is shown in Table 1. Table 2 illustrates how each function component is then assigned a weight according to its complexity. The Unadjusted Function Point (UFP) is calculated with Equation 1, where W_{ij} are the complexity weights and Z_{ij} are the counts for each function component.

ILF/EIF	Data Elements Type		
Record Element Types	1-19	20-50	51+
1	Low	Low	Avg
2-5	Low	Avg	High
6+	Avg	High	High

Table 1: Internal Logical Files (ILF) and External Interface Files (EIF)

EI	Data Elements Type		
Record Element Types	1-4	5-15	16+
0-1	Low	Low	Avg
2	Low	Avg	High
3+	Avg	High	High

Table 2: External Inputs (EI)

EO/EQ	Data Elements Type		
File Type Referenced	1-5	6-19	20+
0-1	Low	Low	Avg
2-3	Low	Avg	High
4+	Avg	High	High

Table 3: External Outputs (EO) and External Inquiries (EQ)

Component	Weight		
	<i>Low</i>	<i>Average</i>	<i>High</i>
External Inputs	3	4	6
External Outputs	4	5	7
External Inquiries	3	4	6
Internal Logical Files	7	10	15
External Interface Files	5	7	10

Table 4: Complexity Weight Assignment

ILF: Internal Logical Files

EIF: External Interface Files

EI: External Inputs

EO: External Outputs

EQ: External Inquiries

2.2 Cost and effort estimation: COCOMO II

3.Schedule

4.Resource allocation

5.Risk management

6.Effort spent