功能點計算表

專案代號: PJ200700029 **專案規模:** 中 **估算階段:** PEP

原始功能點估算:(交易功能+資料功能)

功能型態	數量	權重植	小計 (FFP)
EI外部輸入	28	4	112
EO外部輸出	1	5	5
EQ外部查詢	24	4	96
ILF內部邏輯檔案	13	10	130
EIF外部介面檔案	0	7	0
		原始功能點	**343FPS**

功能調整

調整項目	調整因子	調整功能點	
原始估算調整	1.4	480.2	(依專案類型調整)
14項調整因子	1	480.2	
		調整後功能點	**480.2FPS**

工作量估算及加權

開發類

產能類型	每天產出功能點	每月工作天	每月生產力	開發類預計工作量(人月)
自製	0.9	22	19.8	24.25

非開發類

專案工作項目	工時代碼	百分比	額外工作量	備註	中型	大型
專案管理、專案規劃、專案會議以	PM	20%	4.85		13%	8%
文件審查,非開發類文件審查	DR	10%	2.43		5%	5%
非開發類文件製作	DM	5%	1.21	百分比建議以專案類型調整,可以依專案調整	3%	3%
使用者驗收測試	UA	10%	2.43		10%	8%
教育訓練,同仁間因專案之技術交	KM+UT	10%	2.43		5%	2%
配合組織稽核所需相關作業(如因稽核單所引發之工作不在此項目)	AU	1%	0.24		2%	1%
非開發類小計		56%	13.58		38%	27%
			整體專案所需工作量	37.83 人月	6659 人時	
		風險計量	15%	43.51 人月	7658 人時	

專案時程限制	6.0月

階段預估工時及開發成本

平均成本(月)	專案階段	階段分類	填入工作量百分比	人月總數	預計工時
200,000	專案規劃	PM	0%	0.00	0
180,000	系統分析	SA	20%	7.57	1,332
180,000	系統設計	SD	20%	7.57	1,332
140,000	程式開發	AP	30%	11.35	1,998
140,000	系統測試	TEST	25%	9.46	1,665
100,000	技術移轉/其他	OTHERS	5%	1.89	333
	小計	小計	100%	37.83	6658.77
			開發成本	**5,826,427**	
		風險計量	15%	6,700,391	

專案階段	階段分類	預計工作量百分比	預計投入人數	人月總數	預計工時
系統分析	SA	20%		7.57	1,332
系統設計	SD	20%		7.57	1,332
程式開發	AP	30%		11.35	1,998
系統測試	TEST	25%		9.46	1,665
技術移轉	OTHERS	5%		1.89	333

整體工作量100%

交易功能類別 (Transactional Function Types)

編號	功能說明	功能型態	註解與假設說明

資料功能類別 (Data Function Types)

編號	功能描述	功能型態	註解與假設

14項特徵表

一般系統特徵(GSC)	影響值 (DI)	說明	
資料通訊	0		
分散式處理	0	Data communications	How many communication facilities are there to aid in the transfer or exchange of information with the application or system?
效能	5	Distributed data processing	How are distributed data and processing functions handled?
硬體需求	4	Performance	Did the user require response time or throughput?
交易頻率	3	Heavily used configuration	How heavily used is the current hardware platform where the application will be executed?
線上資料輸入	5	Transaction rate	How frequently are transactions executed daily, weekly, monthly, etc.?
人機介面的親和性	5	On-Line data entry	What percentage of the information is entered On-Line?
線上更新	5	End-user efficiency	Was the application designed for end-user efficiency?
複雜處理	4	On-Line update	How many ILF's are updated by On-Line transaction?
重複使用性	0	Complex processing	Does the application have extensive logical or mathematical processing?
易於安裝	0	Reusability	Was the application developed to meet one or many user's needs?
易於操作(自動化程度,BackUP,Batch作業…)	4	Installation ease	How difficult is conversion and installation?
多地域性	0	Operational ease	How effective and/or automated are start-up, back up, and recovery procedures?
容易變更	0	Multiple sites	Was the application specifically designed, developed, and supported to be installed at multiple sites for multiple organizations?
Total DI	35	Facilitate change	Was the application specifically designed, developed, and supported to facilitate change?
調整因子值(VAF)：	**1**	(0.65 + 0.01 * TDI)	

Summary of Processing Logic Used by EIs, Eos, and EQs

Form of Processing Logic:	Transactional Functional Type:		
	EI	EO	EQ
1. Validations are performed	c	c	c
2. Mathematical formula and calculations are performed	c	m*	n
3. Equivalent values are converted	c	c	c
4. Data is filtered and selected by using specified criteria to compare multiple sets of data	c	c	c
5. Conditions are analyzed to determine which are applicable	c	c	c
6. At least one ILF is updated	m*	m*	n
7. At least one ILF or EIF is referenced	c	c	m
8. Data or control information is retrieved	c	c	m
9. Derived data is created	c	m*	n
10. Behavior of system is altered	m*	m*	n
11. Prepare and present information outside the boundary	c	m	m
12. Capability to accept data or control information that enters the application boundary	m	c	c
13. Resorting or rearranging a set of data	c	c	c

m	it is mandatory that the function type perform the form of processing logic
m*	it is mandatory that the function type perform at least one of these forms of processing logic
c	the function type can perform the form of processing logic, but it is not mandatory
n	function type cannot perform the form of processing logic

程式自行算出(鎖定)

需填入資料