

Quick Reference Guide

SLIM-Estimate Sizing Techniques

Technique Name	When to Use?	Data Required	Example	Special Considerations
Expected Total Size	Minimum data required for any SLIM estimate	Estimate of most likely total size, expressed in Function Units	Entered: 150 Use Cases; Calculated: 46500 IU (Implementation Units)	Single numeric value entered on the Solution Assumptions screen, else equals the Total Expected Size from Sizing Calculator
		Gearing Factor - single value	Entered: 310 IU/Use Case; Calculated = 1 IU/IU	QSM Default = 1
		Uncertainty - using % sliding scale	+/- 30 % = 32,085 to 60,915	
Sizing by History	Early Planning - Intuitive Guess	Estimate of most likely total size bin relative to all sizes for a given application type	Major Bins: Very Small, Small, Medium, Medium Large, Large, Very Large.	Primary Trend Group sets size range bins & associated uncertainties
			Medium - QSM Business Trend = 30,000 IU	QSM Default = SLOC; Gearing Factor = 1
		Uncertainty - using % sliding scale	Medium - QSM Business Trend = 12,300 IU to 47,700	Uncertainty taken from Primary Group Trend; +/- 3 STD (Standard Deviation)
Total System Mapping	Early Planning - Size estimates available	System Mapping Unit - either Basic Unit of Work or Function Unit	Use Cases	
		Most Likely Size - Expected No. of Components	125 Use Cases	
		Uncertainty for Size - using % sliding scale	+/- 20 % = 99 to 151	
		Mapping Factor = BUW/FU	500 to 1500 IU/Use Case - SLIM Suggested Range; Ex: 1100 IU/Use Case	Once the Mapping Unit is selected, SLIM provides a suggested Mapping Factor range. Usually large ranges, so best to determine from history. Total Expected Size calculated once entered.
		Uncertainty for Mapping Unit - using % sliding scale	+/- 16 % = 924 to 1276; Total Expected Size = 13750 IU, with range of 101750 IU to 173250 IU	Uncertainty ranges on both the size estimate and mapping factor are additive, so use carefully
Sizing by Decomposition	Detailed Planning - Requirements & Design data available	Component Name - represents Function Unit used to size all parts	Simple User Stories, Average User Stories, Complex User Stories	
		BUW/Component - Gearing Factor	370 IU/User Story - Simple; 610 IU/User Story - Average; 915 IU/User Story - Complex	Using multiple Gearing Factors allow different parts of the system to be mapped to one Function Unit
		Uncertainty for Size - using % sliding scale	+/- 30 % = 9995 to 18975	

Sizing by Module	Detailed Planning - Requirements & Design data available	Module Name	Drug Interaction Unit, Pricing, Adjudication, Shipping	
		Size in "IU" (FU)	104,000 IU, 96,000 IU, 110,000 IU, 50,000 IU	If the Function Unit is different than the Basic Unit of Work, all modules will use the same Gearing Factor
		Uncertainty for Size - using % sliding scale	+/- 25 % ; Total Expected Size = 360000 IU, with range of 266400 IU to 453600 IU	
Function Points	Detailed Planning - Requirements & Design data available	Project Type - Development or Enhancement	Development	IFPUG 4.0 Counting Rules apply
		Function Point Count Detail	ILF, ELF, EI, EO, EQ detail	See SLIM-Estimate User Manual for VAF recommendations
		"SLOC" per FP (BUW)	C++ Median - 53 SLOC/FP	Function Point Gearing Factors are almost always for BUW of SLOC; See QSM website Function Point Language Table
		Uncertainty for Size - using % sliding scale		See SLIM-Estimate User Manual for Uncertainty recommendations
Microsoft Excel	Detailed Planning - Requirements & Design data available	Excel Template file to be edited		Save As... to give the file a meaningful unique name and preserve the template
		Estimate Name, Method of Decomposition	Name: ERP Business Process Model; Business Process Sizing	Documentation to distinguish between multiple sizing techniques and/or estimates, all of which can be part of one project estimate
		Component Name	Reports Medium, Interfaces Low, Conversions Medium	Data tab
		Low, Most Likely, High Gearing Factor	300, 150, 600 (Most Likely)	Data tab - only Most Likely required
		Number of Components	(1,2,3); (10,17,25); (13,28,43)	Data tab - only Most Likely required
		Uncertainty		Captured by specifying 3-point estimates for Number of Components and/or GF
		Post Results	188480 ESLOC +/- 9749	Total Expected Size and Sigma from the Data tab must be copied to Main tab
		Save File & Import		Final steps required to import size estimate into SLIM

