



Kostenramen van complexe Software Intensieve Projecten (SIPs) met behulp van parametrische tools

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- Militair verdrag
- 30 lidstaten
- Consensus
- Artikel 4
- Artikel 5





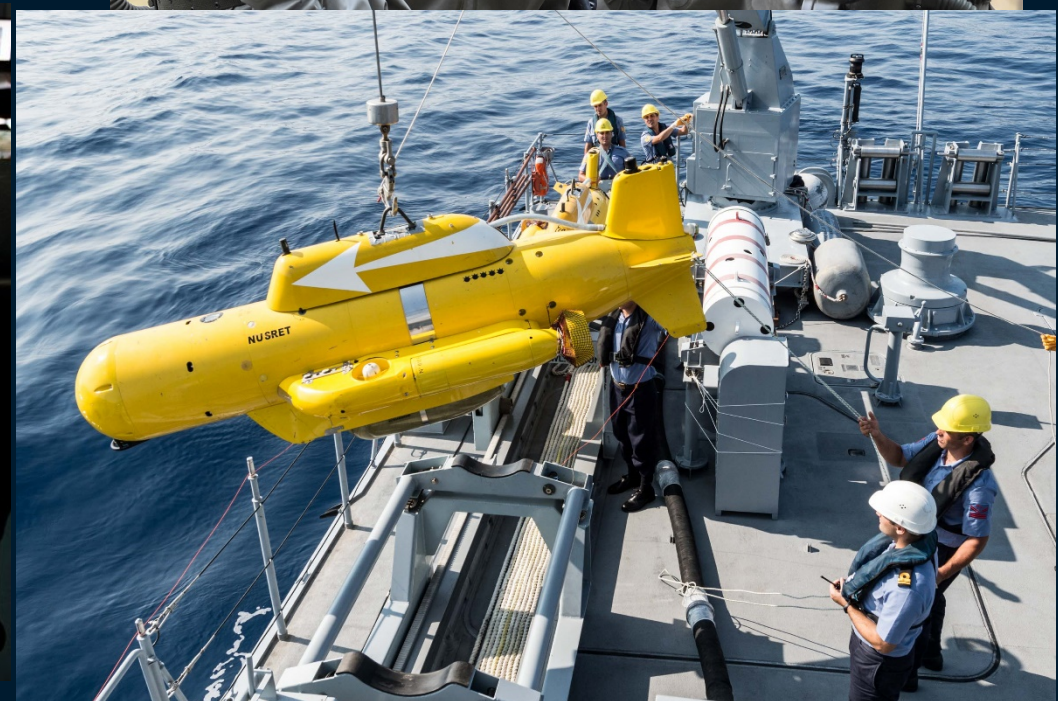
- We leiden de digitale inspanningen van de NAVO
- Cyber Defense
- BMD
- C4ISR

C4ISR

- Command
- Control
- Communications
- Computers
- Intelligence
- Surveillance
- Reconnaissance



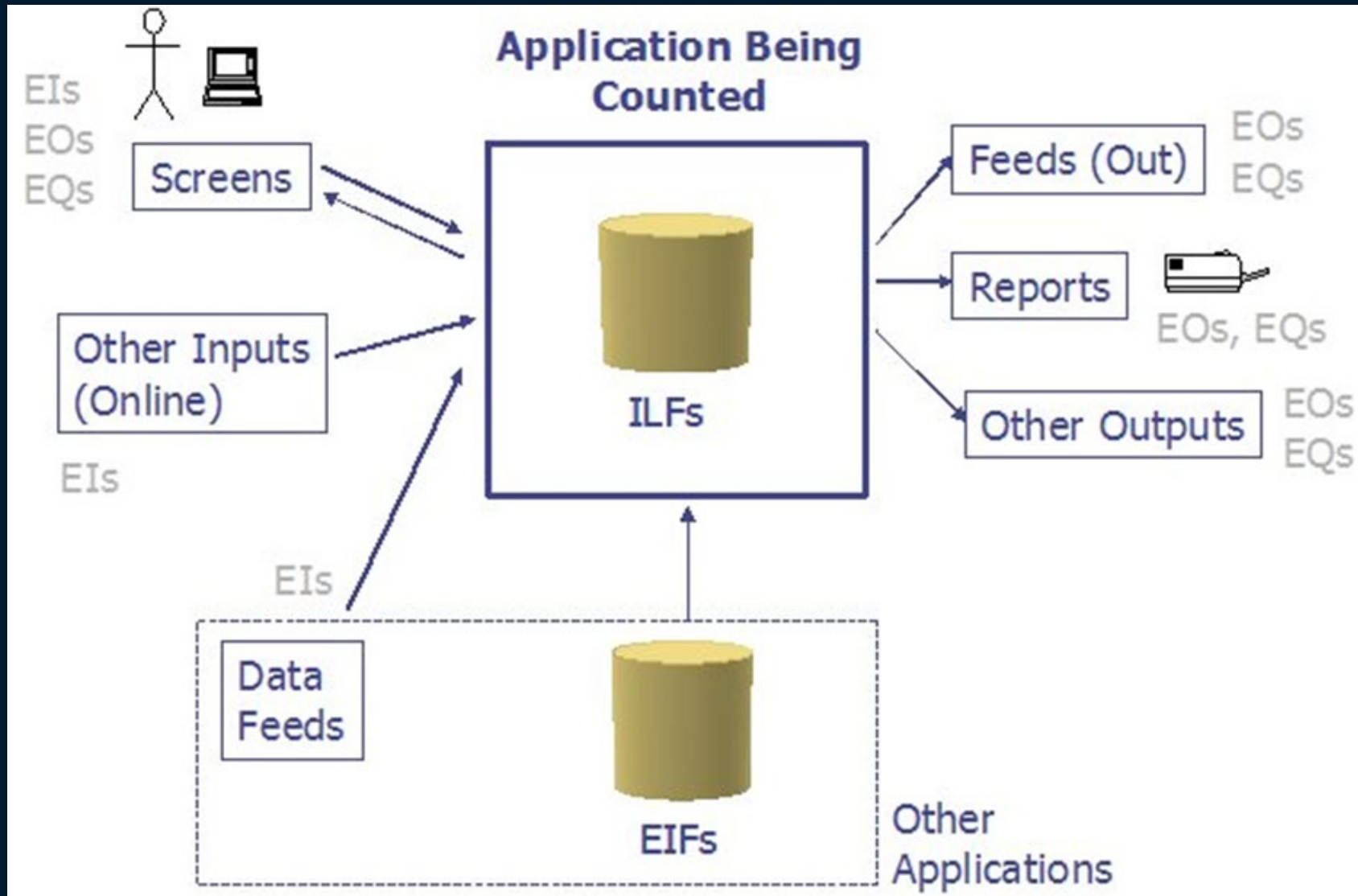
- AIRC2IS
- CBRN-FS
- NCOP
- ISMERLO



“Als radar operator wil ik de identiteit van een vliegtuig zien door op de radar track te klikken zodat ik verdere acties kan bepalen.”

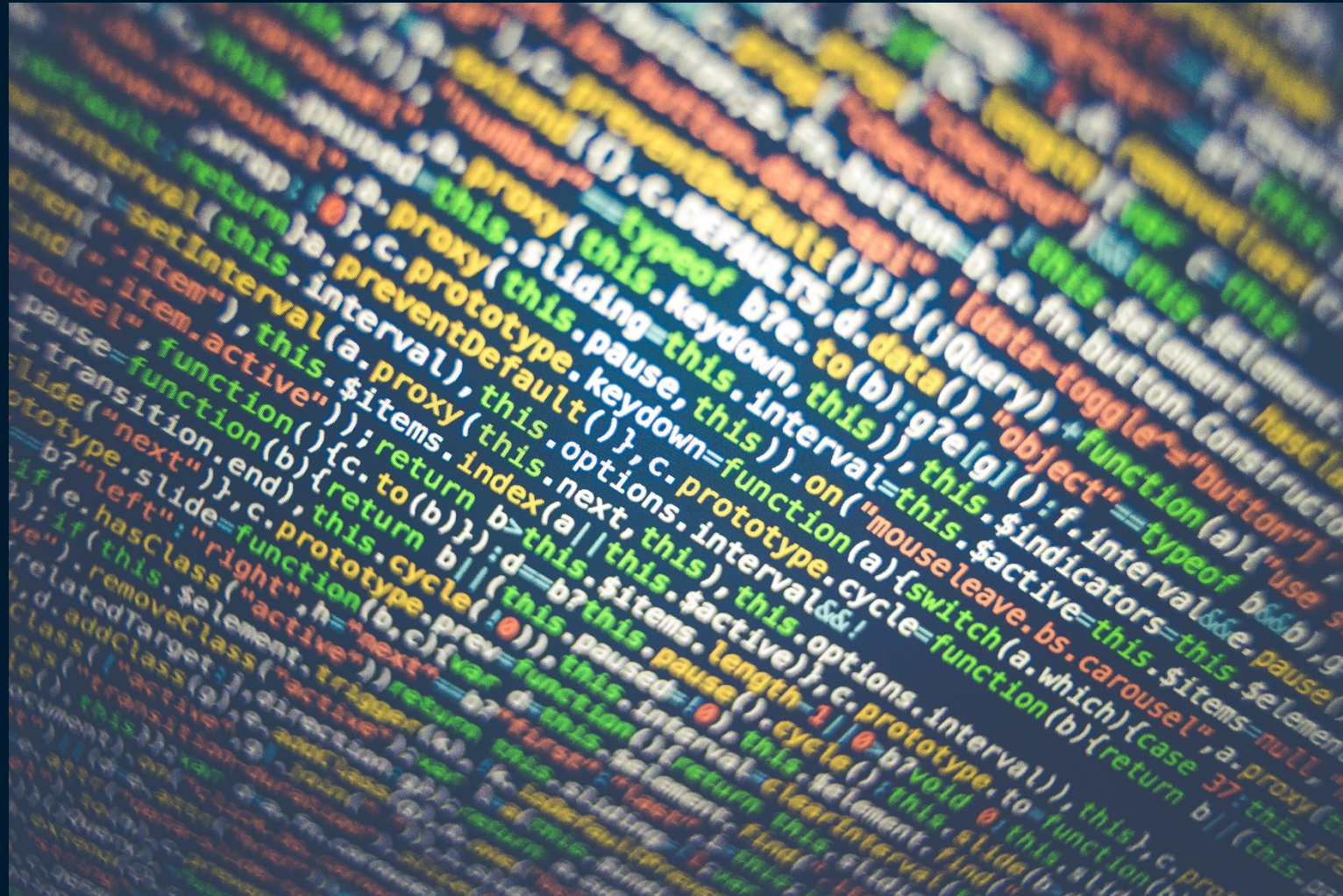
“Ik wil deze identiteit maximaal na één seconde na het klikken zien.”

Functiepuntenanalyse (FPA)



Off-the-shelf Parametric Tools

- 4cost
- Bach Consulting
- Galorath
- Price
- Quanter
- QSM
- SAP
- Tecolote



Parametrisch Modellieren - Knowledge Bases

Create/Modify WBS Element

[Guide me using Project Assistant](#)

SEER For Software

Create/Modify WBS
This dialog box lets you describe a new project or WBS element.

Guide me using Project Assistant
Use the SEER Project Assistant to create a new project or work element.

Description
Enter text to uniquely identify the item

Notes
Enter work element notes.

Analyst
The analyst who is estimating this project.

Volume Inputs
(Project only) Select one or more sizing metrics

FBS Method

Description: ASTERIS

Analyst: John Doe

Notes...

Activity Names: (SEER-SEM Standard)

Role (Labor Category) Names: (SEER-SEM Standard)

Knowledge Base Selections

[Platform](#): Web Based Development

[Application](#): Decision Support System

[Acquisition Method](#): !~General - new and pre-existing

[Development Method](#): Hybrid Agile (Water-Scrum-Fall)

[Development Standard](#): Commercial Low

[Class \(Custom\)](#): NATO_Class

Create and Insert Next Element

OK

Cancel

Parametrisch Modellieren - Plattform

Knowledge Base Selections

Platform	!No Knowledge
Application	!No Knowledge
Acquisition Method	Avionics
	Business and Non-Critical MTS
	Business Mission Critical
Development Method	Client
	Client-Server
	Cloud
	Embedded
Development Standard	ERP Development
	Financial Processing
Class (Custom)	Ground System Non Critical
	Ground-Based Mission Critical
	Industrial
	Mainframe
	Manned Space
	Missile and Unmanned Airborne
	Mobile Device
	Mobile Ground-Based
	SAP Development
	Server
	Shipboard
	Telecommunications
	Unmanned Space
	Web Based Development

Parametrisch Modellieren - Application

Knowledge Base Selections

Platform !No Knowledge

Application Decision Support System

Acquisition Method Decision Support System

Development Method Device Driver
Diagnostics
Document Management
Electronic Data Interchange
Embedded Electronics/Appliance
Expert System
Financial Transactions

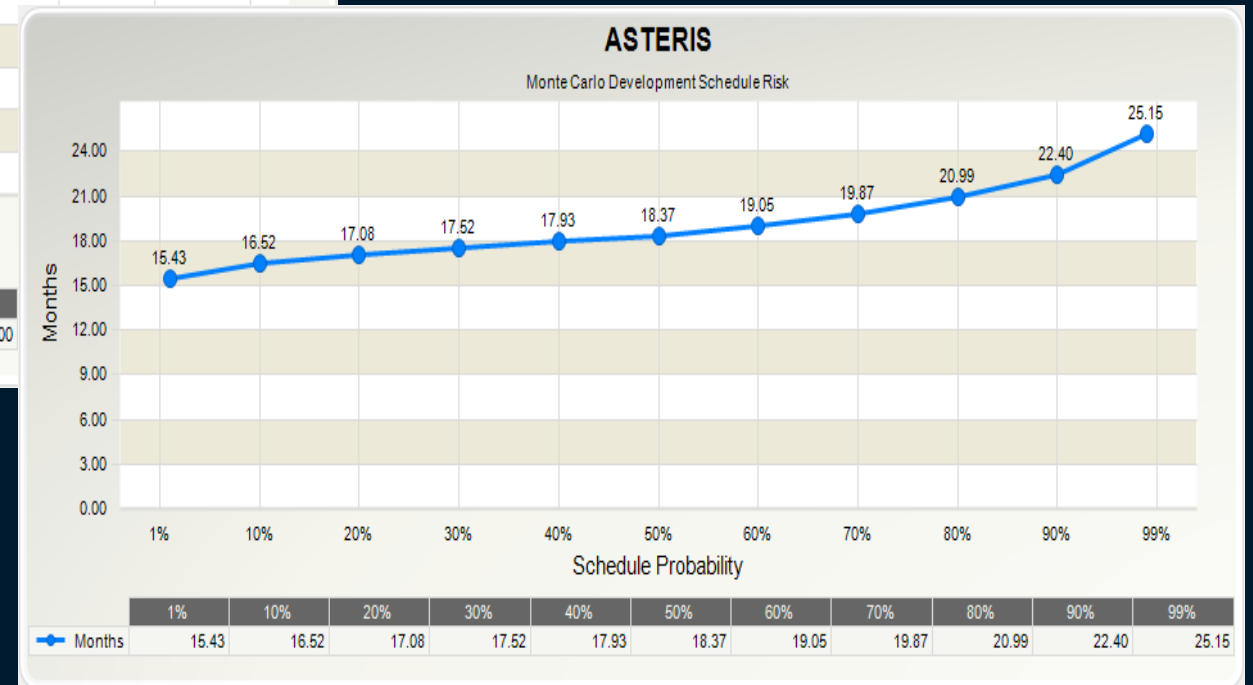
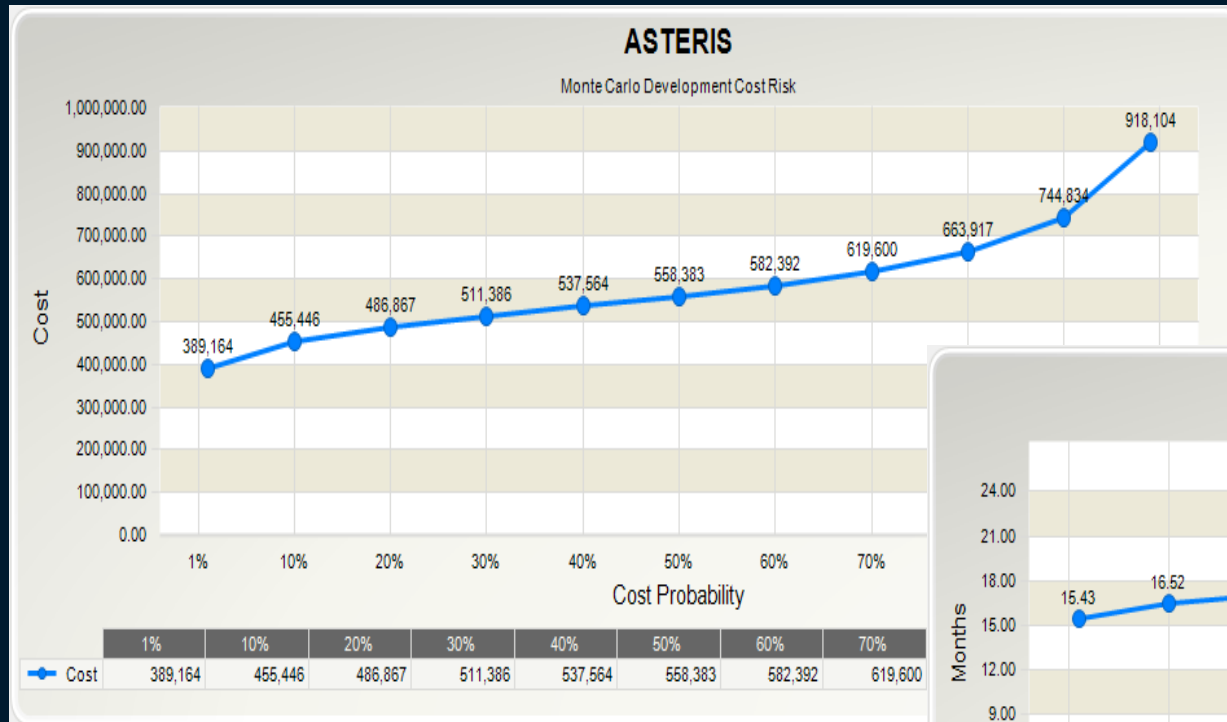
Development Standard Flight Systems
Graphics
Logistics
Mathematical & Complex Algorithm
Message Switching
MIS
Mission Planning & Analysis
Multimedia
Network Management
Office Automation
OS/Executive
Process Control
Radar
Report Generation
Robotics
Signal Processing
Simulation
Software Development Tools
System & Device Utilities
Testing Software
Training / CBT / CAI
Transaction Processing

Parametrisch Modellieren - Parameters

Inputs

Parameters	Function Based Sizing	Economic Factors	Maintenance	Labor Category Allocation	Schedule Dependencies	
PROGRAM: GEN 3 Public site				Least	Likely	Most
PERSONNEL CAPABILITIES & EXPERIENCE						
Analyst Capabilities	Low	Nom	Hi			
Analyst's Application Experience	Nom-	Nom	Nom+			
Programmer Capabilities	Low	Nom	Hi			
Programmer's Language Experience	Nom	Hi	VHi			
Development System Experience	Nom	Nom	Nom			
Target System Experience	Nom	Nom	Nom			
Practices & Methods Experience	Nom	Hi	VHi			
DEVELOPMENT SUPPORT ENVIRONMENT						
Development Practices Use	Nom+	Nom+	Hi			
Automated Tools Use	Nom+	Hi-	Hi			
Turnaround Time	VLo	Low-	Nom			
Response Time	Low-	Nom+	Hi			
Multiple Site Development	Nom	Nom	Nom			
Resource Dedication	Nom	Nom	Nom			
Resource and Support Location	Nom	Nom	Nom			
Development System Volatility	Nom	Nom	Hi			
Process Volatility	Low	Low+	Nom			
PRODUCT DEVELOPMENT REQUIREMENTS						
Requirements Volatility (Change)	Nom	Hi	Hi+			
Specification Level - Reliability	VLo	Low	Low+			

Monte Carlo Simulation – Cost & Schedule



Takeaways

- Kwaliteit van de requirements is uiterst belangrijk
- Praat met de Subject Matter Experts
- Software Intensive Projecten zijn keigaaf!

Dank voor uw aandacht!

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