

Abstract

<https://www.youtube.com/watch?v=PkmON6i2d4M>

Successful Software Delivery with Estimation as a profession

Christine discusses the principles of successful software delivery. This includes accurate planning and estimation, managing and monitoring scope and progress, use of the correct resource's ad methodology, being AGILE and Innovative.

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Place: Virtual/Australia

Time: 19th of March 2021

Host Organization: ISBSG

Successful Software Delivery with Estimation as a profession





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Specialist on Process improvement and Execution of Complex and Critical Software Delivery.

25+ years of experience in the software industry.

Worked on Critical contracts and projects for both government and private sector. Independent Consultant and Advisor since 2017.

M.Sc. in Mathematics and Computer Science
Certified - PMP, CSM, SA; LSS BB, CFPS Fellow

President of IFPUG 2019-2021
CFPS Fellow since September 15th, 2020

Software projects is critical to the business
...but only 35% is considered successful

Over the past decade
at least 19% failed

Removing the ability to fail a software project would
bring a ROI of at least 1% of the revenue...

46% of all Software project is challenged

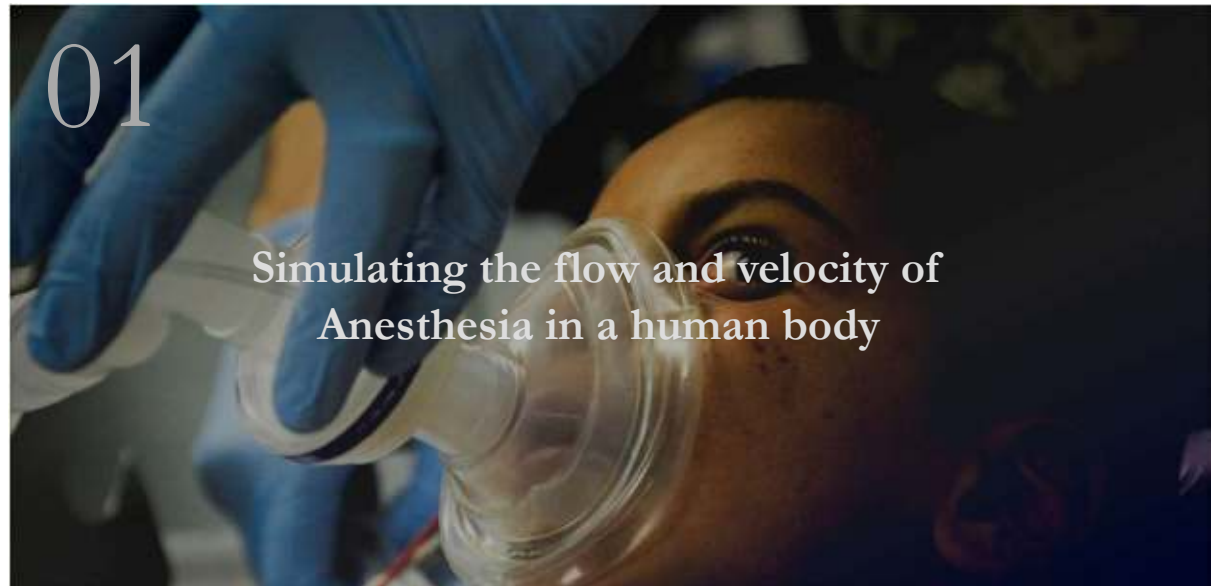
The background of the slide is a photograph of rolling hills or mountains, partially obscured by a thick layer of fog or mist. The image has a teal or cyan color overlay, giving it a serene but slightly somber appearance.

Not meeting budget, time or delivering
the value expected to the business

Successful projects requires the use of a
combination of Art and Science

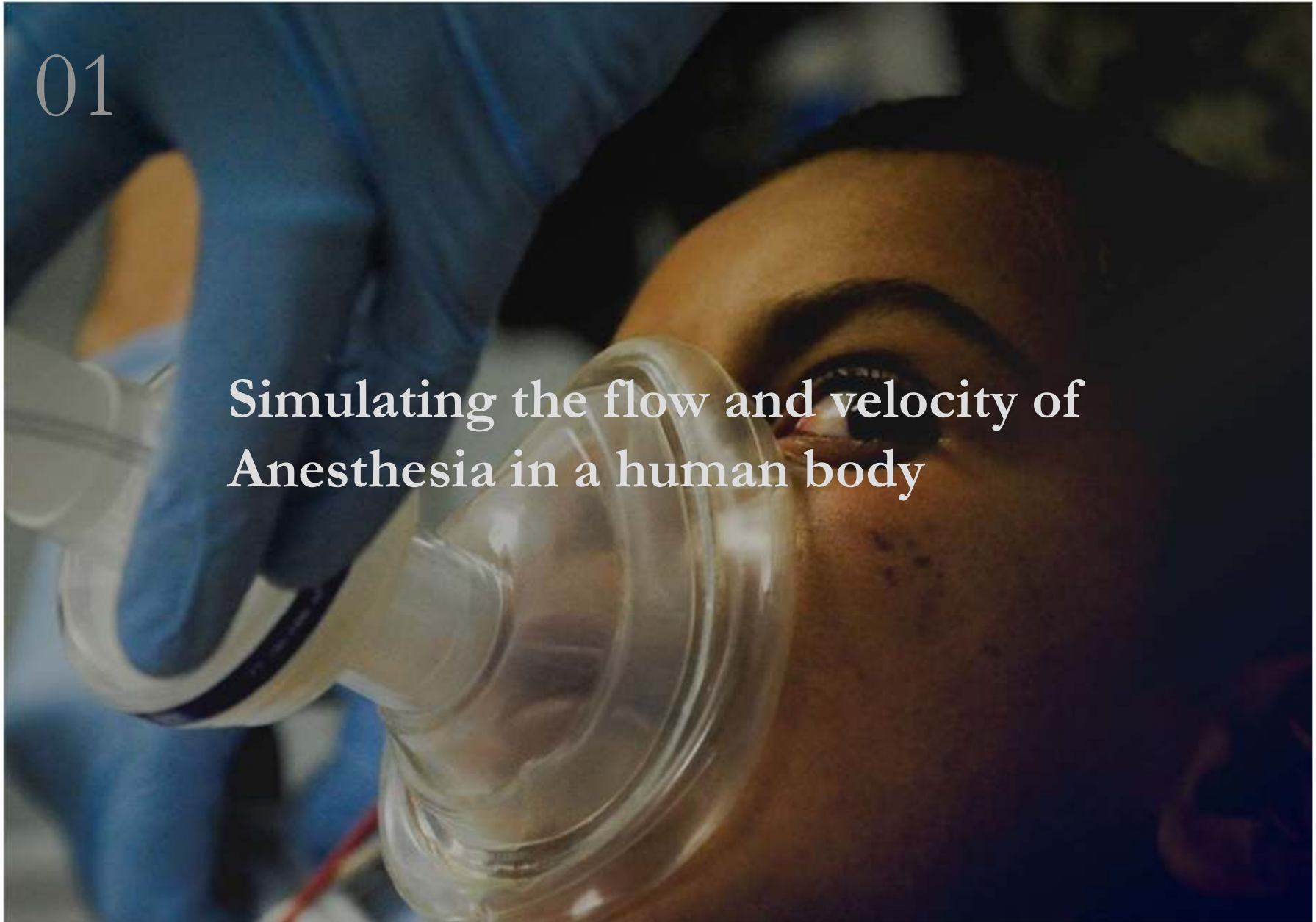
Looking at other industries from a software Project perspective

In retrospective



01

Simulating the flow and velocity of Anesthesia in a human body



02

Cost estimation and planning
of a cement fabric with all its complexities
- and similarities

03

Moving a lighthouse
70 meters



Looking at other
industries from a
software Project
perspective

In retrospective



Why are these cases relevant?





Why do IT projects fail?

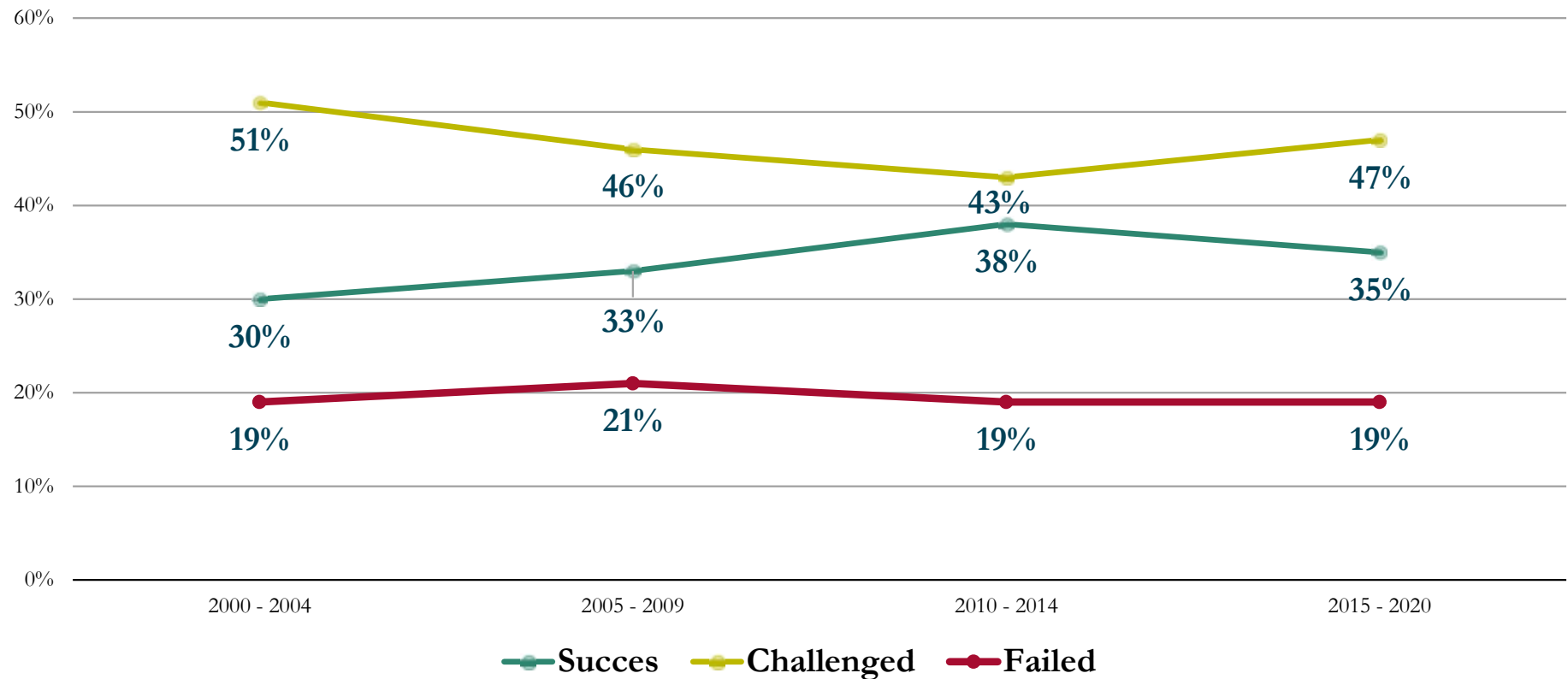
What could support the success
of software projects?

The single most important task of a project:
setting realistic expectations.

Unrealistic expectations based on
inaccurate estimates are the single largest
cause of software failure.

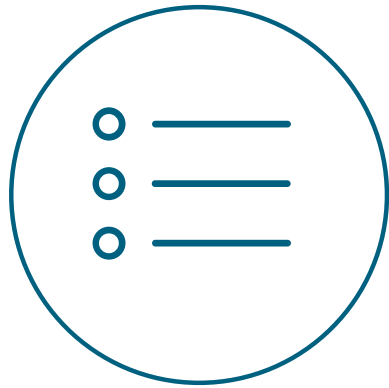
Source: Futrell, Shafer and Shafer “Quality Software Project Management”, 2002

The improvement of successful projects is missing



What are *realistic* estimates?

Scope as the Influencing Factor



Scope

...they fail to deliver within the combined objectives and requirements needed to complete a project

Time as the Influencing Factor



Time



Scope

...they fail to deliver
within the planned
time and schedule

Budget as the Influencing Factor



Budget



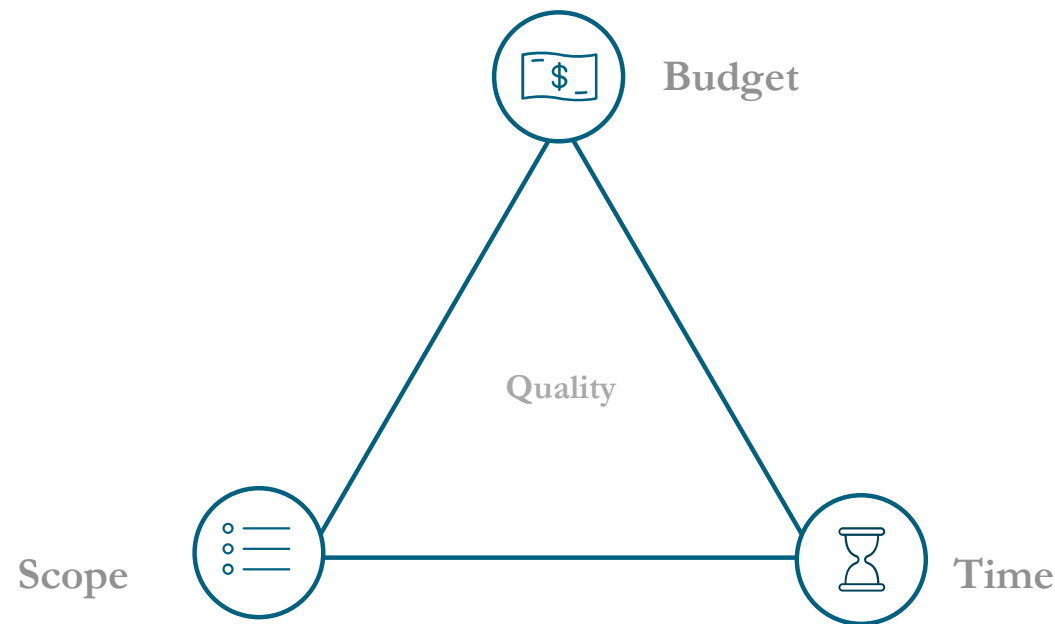
Time



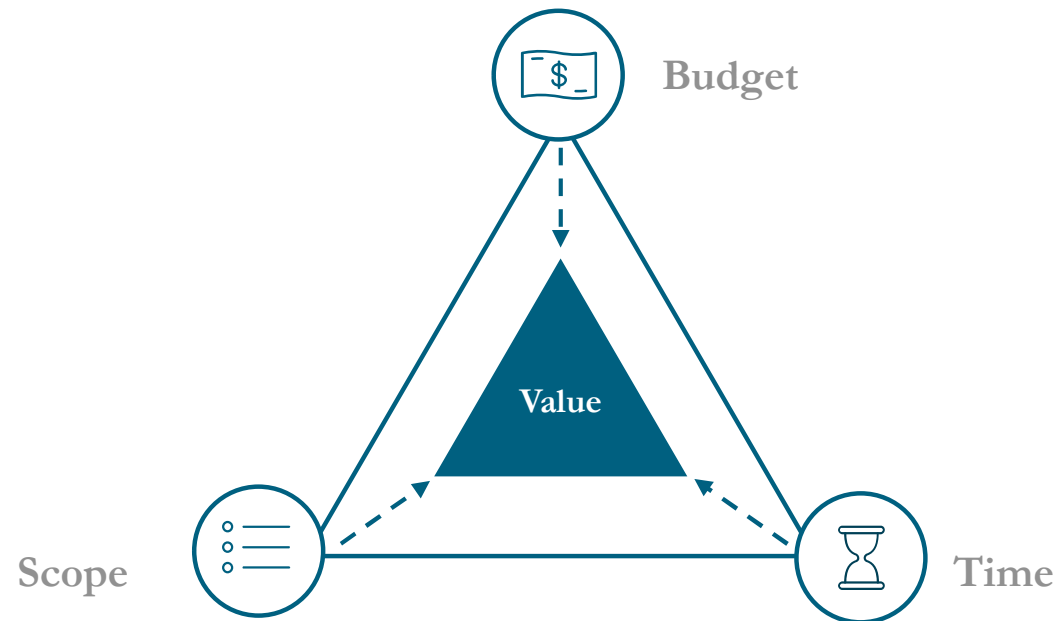
Scope

...and they fail to deliver within the estimated budget

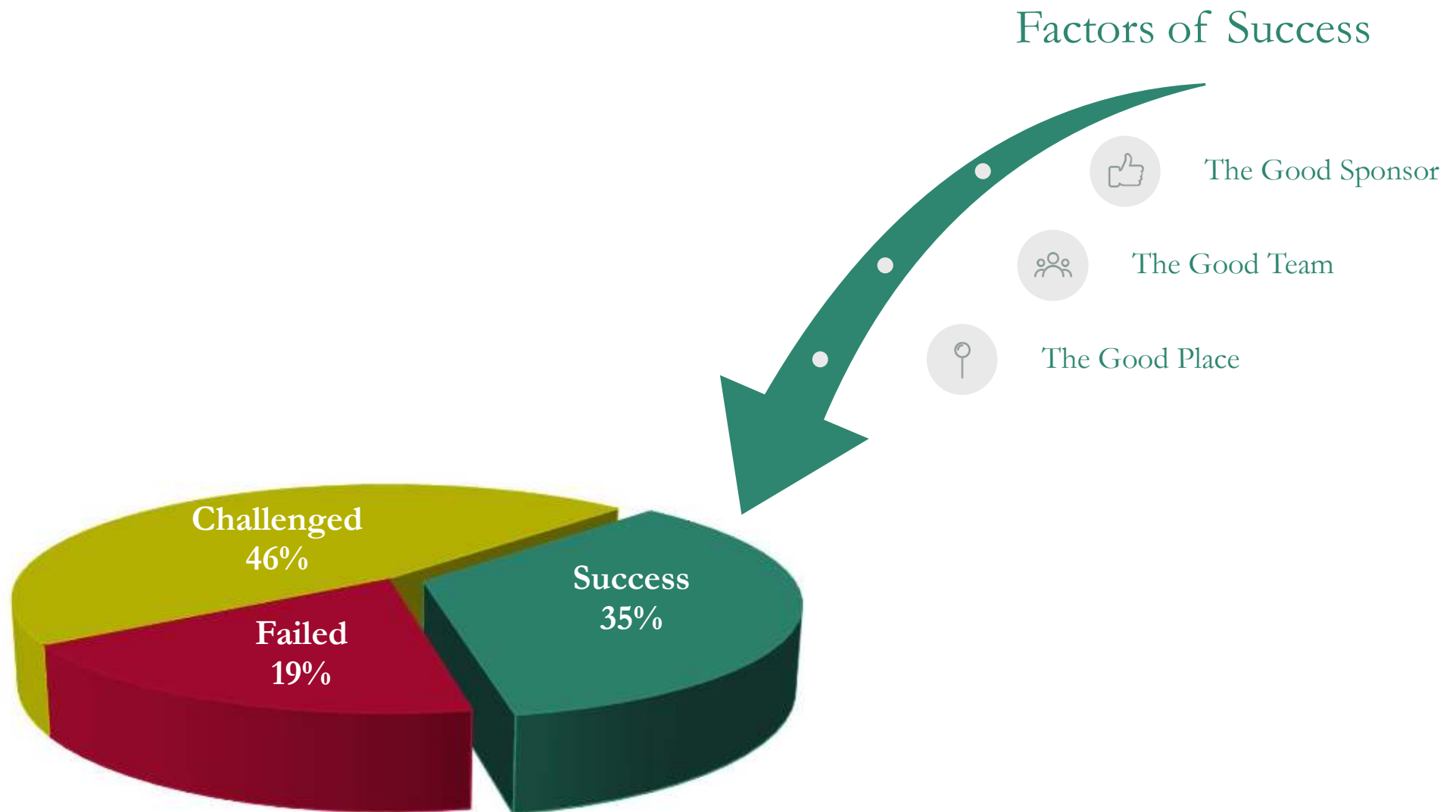
Which all together diminishes the expected value and quality of a project



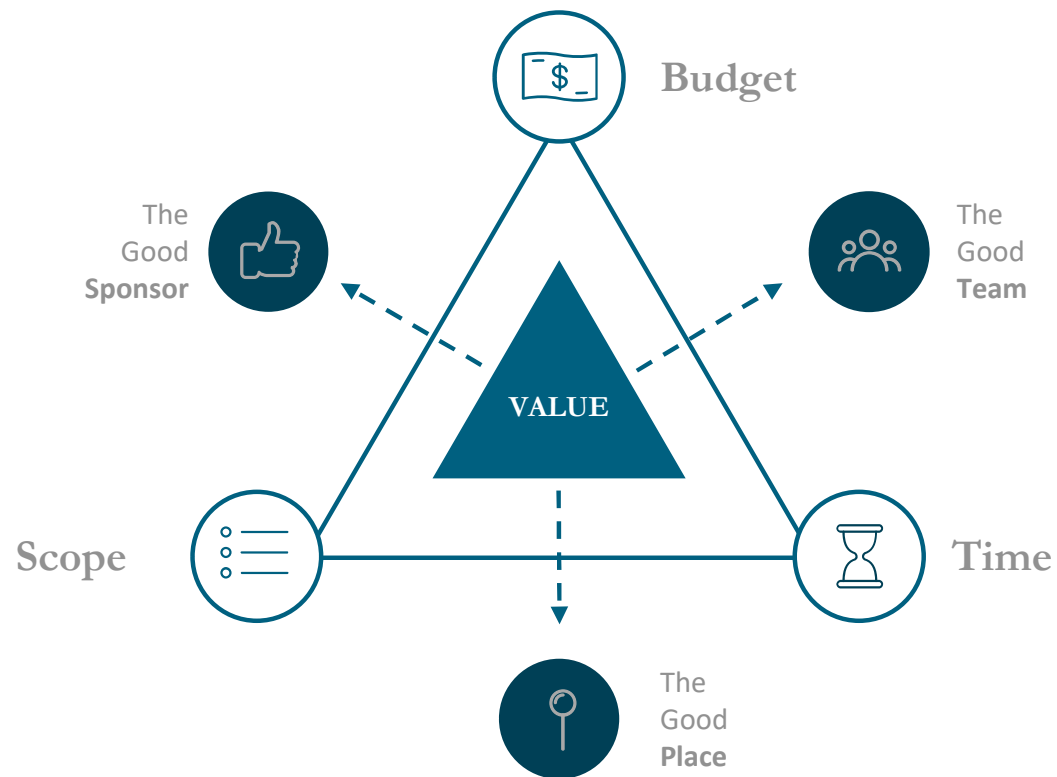
Which all together diminishes the expected value and quality of a project



What makes the 35% of all IT projects turns out as a success?



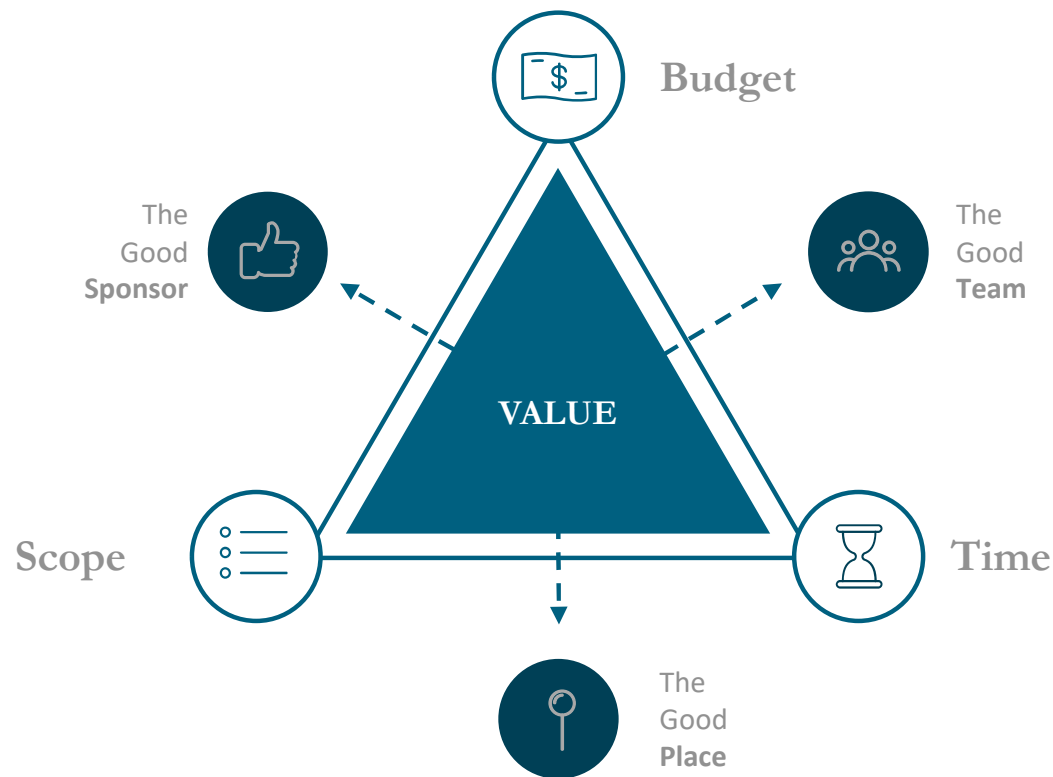
The improvement needs to focus on the factors of success and reason for failure



The background of the slide is a photograph of a sky filled with soft, white, and grey clouds against a pale blue background. The clouds are wispy and spread across the entire frame.

How to unlock more value through estimation?

Having the good sponsor, the good team, and the good place can *unlock* more value of an IT project



The background of the slide is a photograph of tall, thin grass or reeds against a soft, hazy sky. The image has a blueish-purple tint, giving it a serene and natural feel.

One method is
Function Point Analysis

Function Point Analysis (FPA)



Function Point Analysis (FPA) is a method for Measuring and/or Estimating the functionality of a software project



International Function Point Users Group



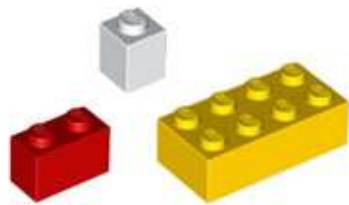
What does it take to build a LEGO construction?



Simple construction

Complex construction

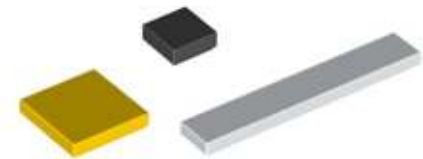
...it certainly depends on the requirements



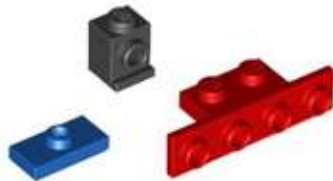
Bricks



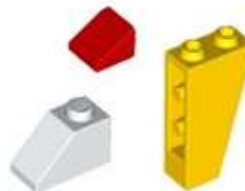
Plates



Tiles



SNOT

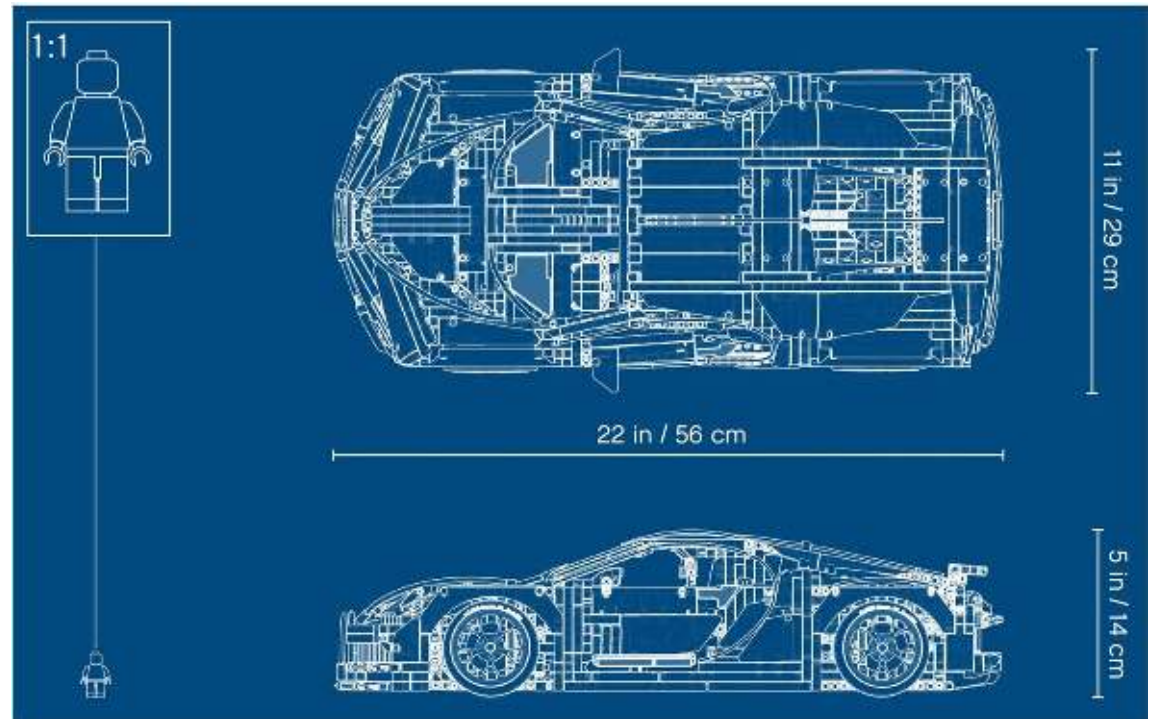


Slope



Technic

How accurate you know the requirements



...and the expertise at hand



← Low expertise High expertise →

The Technology & Methodology you use



Function Point Analysis used as a relevant methodology?



International Function Point Users Group



Governments' Usage

- Request for Proposal Evaluation
- Competitive pricing Evaluation
- Monitoring and Control of deliverables
- Quality Assurance Measurement
- Scenario Evaluation

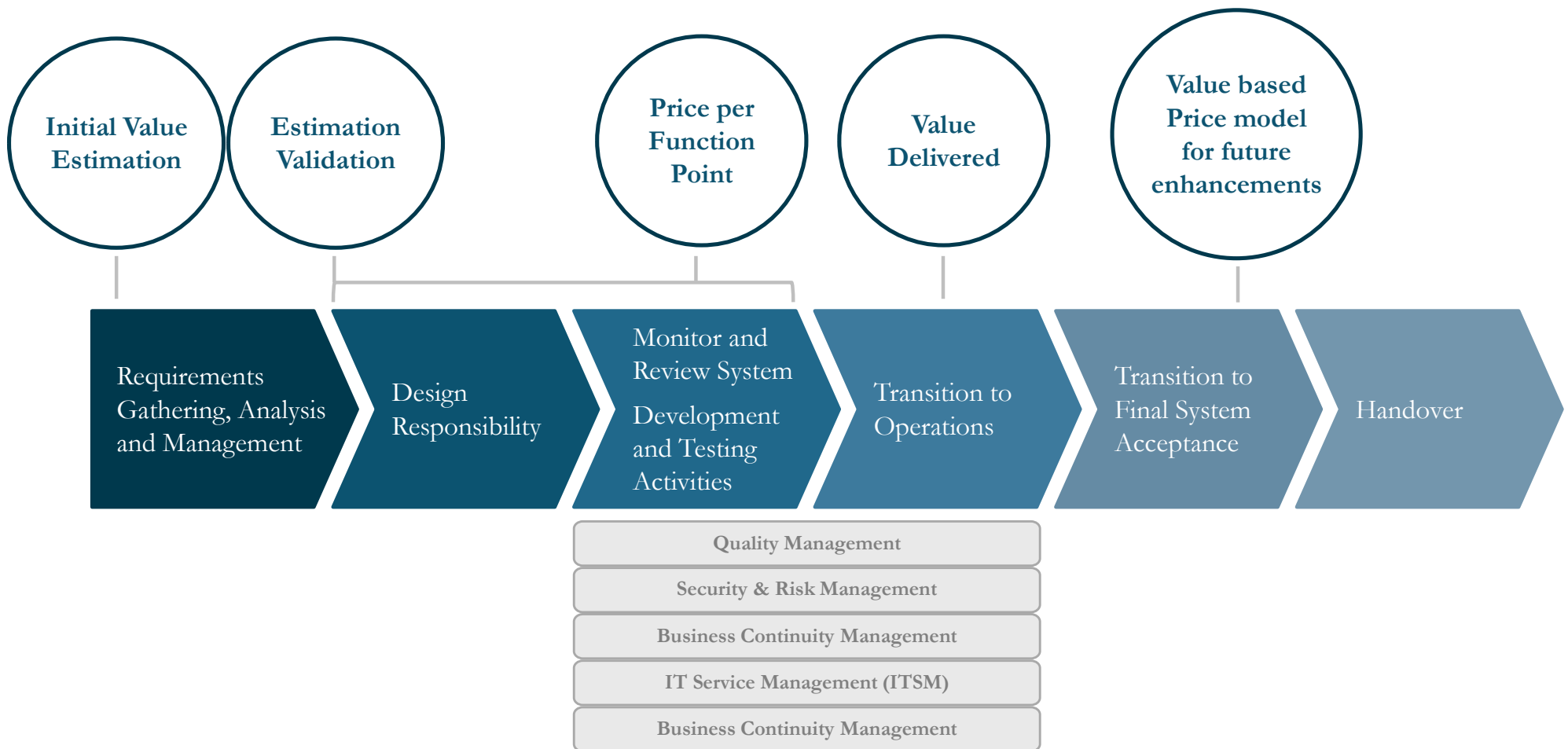


EU uses FPA

- Competitive Price evaluation
- Price per FP
- Monitoring and Control of Scope
- Scenario analysis



Realistic Schedule and Competitive Pricing

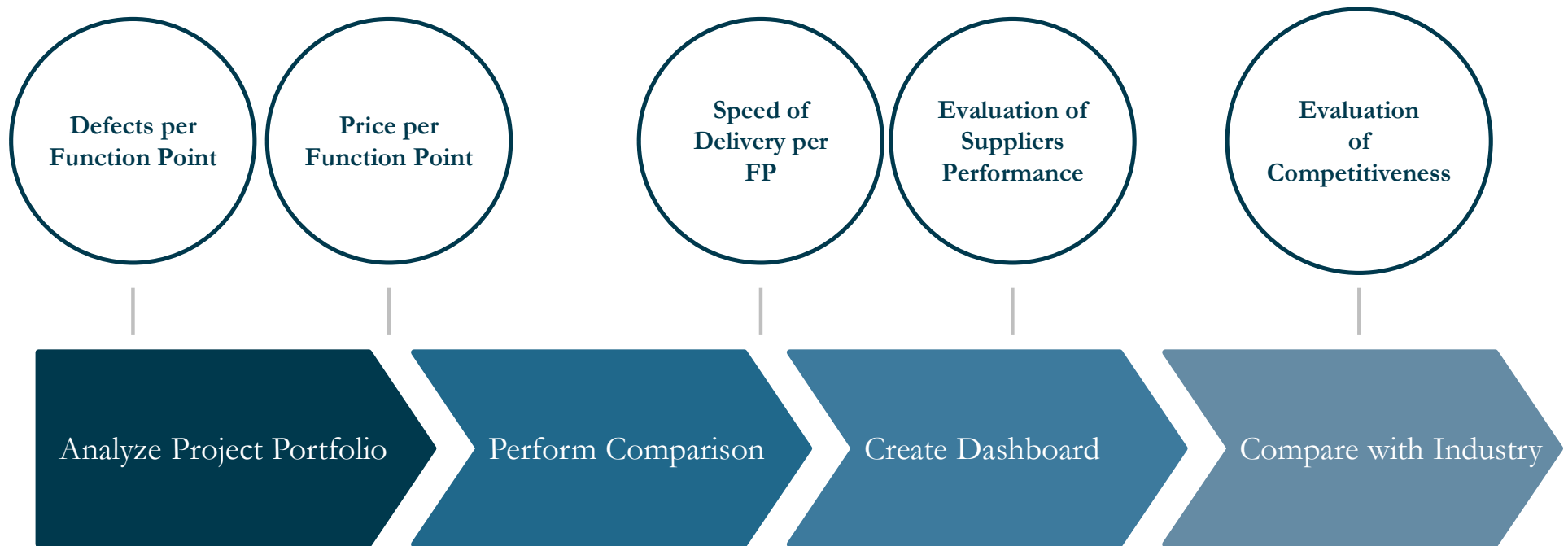


Private Sector Comparison

- Estimation comparison on RFP
- Monitoring and measuring of software
- Supplier Evaluation
- Price negotiation

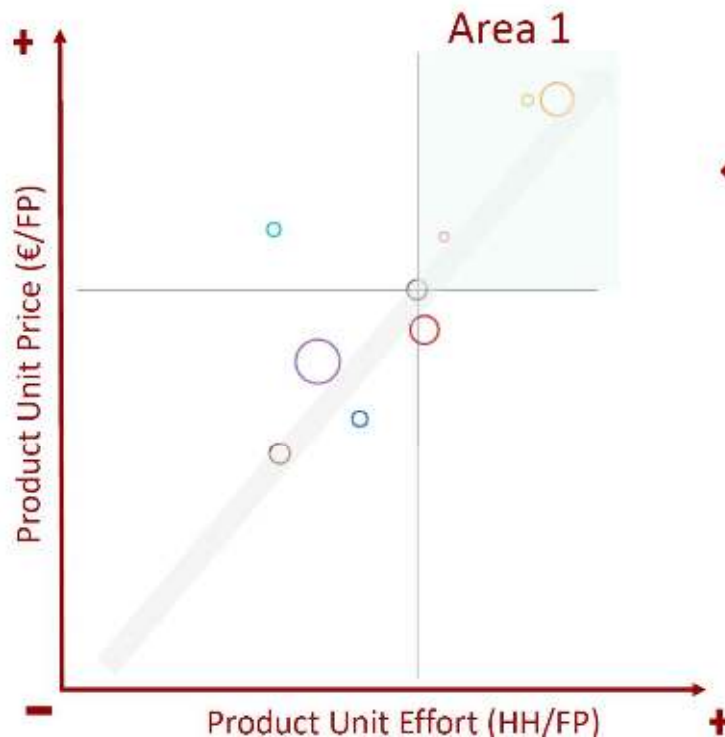


How the private sector companies perform FPA



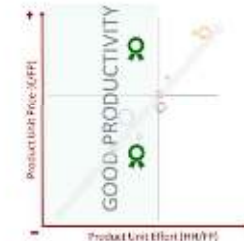
Evaluating suppliers through FPA

You can analyze if your rates are (or aren't) well balanced with the effort required by the vendors.



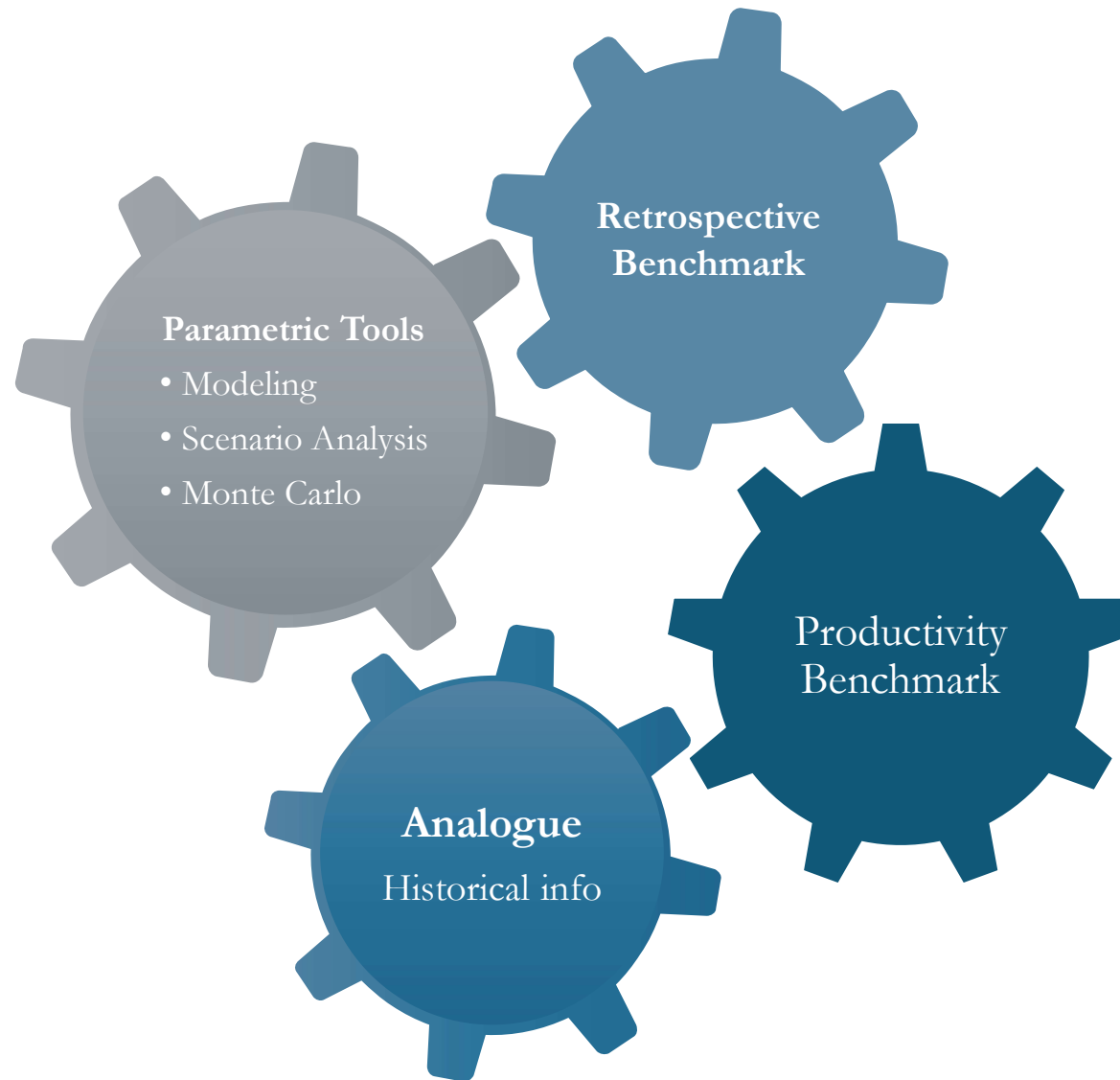
Vendors who require more effort and price per FP.

They should improve their productivity.



Example – a reduction of 32% of Yearly IT Budget

Usage of FPA for Project Budget



Parametric Estimation Tool

NATO Case

With its initial proposal the vendor requested a project budget of **€7.2Million**. Using the risk-based estimates generated from SEER, NATO were able to negotiate a project cost **€4.1Million**, a saving of 43%. Instead, the usual 5%-10% expected through traditional negotiations.

Data-driven estimation is seen as a fundamental part to the success of project delivery within NATO.



Value & Velocity measures



Other Benefits of FPA

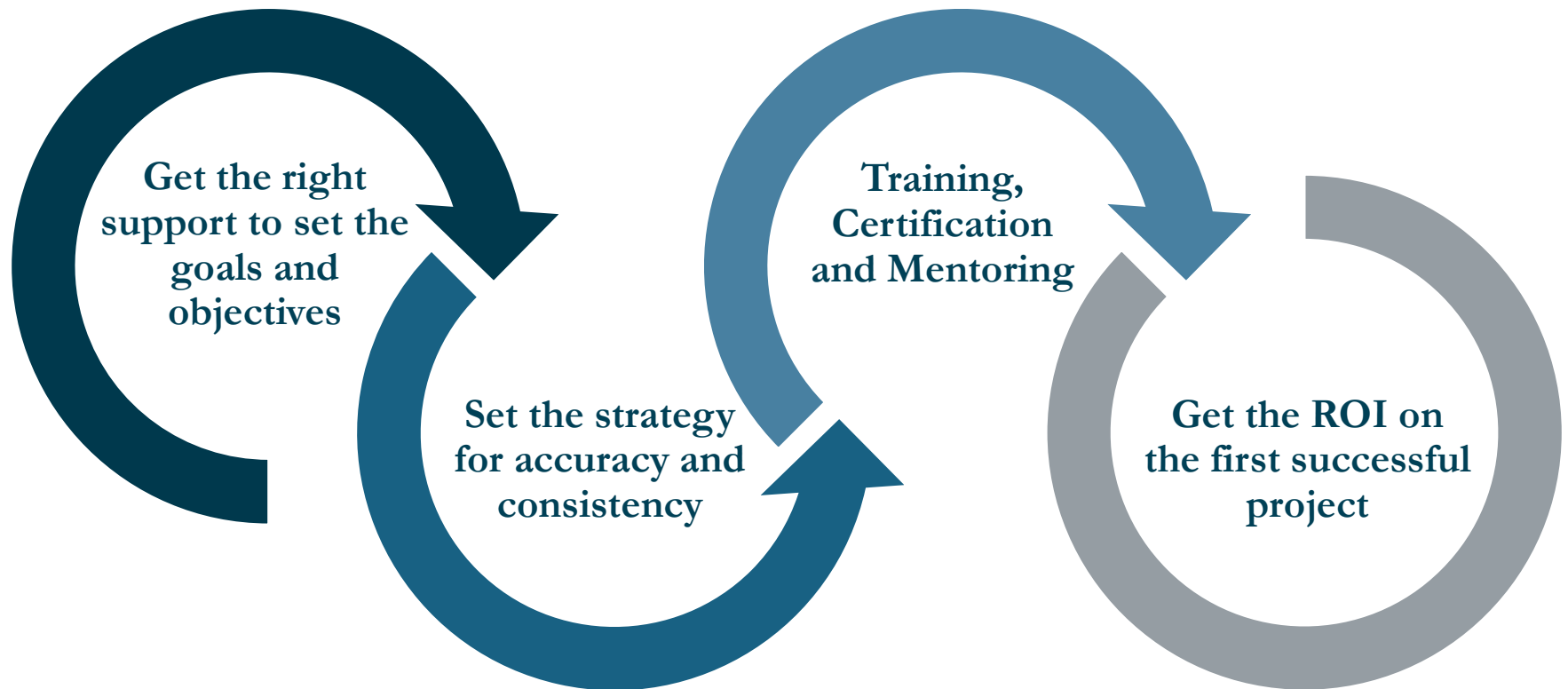


A Certified FP Specialist is an expert in bridging the communication between Sponsor, User, Technical and Planning needs

- A process more than a single number
- Strengths in its definition and usage
- The best scope management and control methodology in the world
- The high-level perspective of landscape and business coverage
- The Requirement traceability and control from a user's perspective
- The visibility that is required from Business Process to Software testing
- The quantitative measure between Purchaser and Delivery organization
- Strength is in the consistency
- Early, detailed and controlled – can evolve and change
- The visibility from Business Process to Software delivery acceptance

The Process for scope illumination, control and measurement

How to start using Function Point Analysis in your organization?



Ensure Scope Control

Estimation as a profession

Solving the tree foil knot

Use the Right Tools, Method and Processes

Recommendations for achieving successful IT Projects

PROFESSIONALISM

Scope Management, Estimation & forecast professionally

SIZE AND PRIORITIES

Size and priorities the project requirement and value

CONTROL

Control your project and process – quantify and validate

Remember

**Successful IT Budgets
is a combination of
Science and Art**

I believe that by using Function Point Analysis we can improve the success rate of software projects

**Add a Estimation
and Scope specialist
aka a Certified FP
Specialist (CFPS) to
your team**

- *Thank you!*
- *If any questions, feel free to ask in the comment section*



QUESTIONS?

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Successful Software Delivery as a profession

Even today we have half of our IT projects challenged and every fifth of them never deliver the value expected. This trend has not changed even without attempts of improving using rigorous process focus as well as agile trends.

I am on a mission to try to change this and would like to share with you what I believe is required in order to ensure Successful Software Delivery:

- Plan and Estimate software delivery projects as a prof
- Manage and monitor your scope and progress
- Ensure you use the right method at the right time
- Ensure you have the right resources at the right time
- Be Agile and Innovative, and use the right process at the right time

This presentation will take you on the journey to what it takes to accomplish the above

Event: ISBSG

Place: Virtual Webinar

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