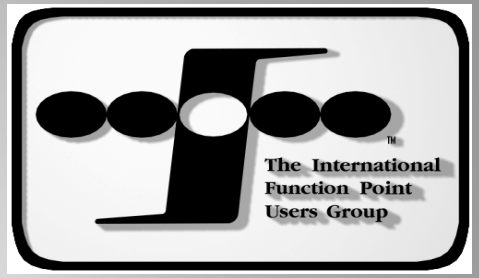


Create Cost Savings Using Size Measure

Christine Green

IT CONFIDENCE CONFERENCE
2017

A bit about me & IFPUG

Owner of IP$_{by}$Green – a Danish consultancy company
Improving Process, Performance and Productivity of Software Services

Director of Certification and next Vice-President of the International Function Points Users Group (IFPUG)

Honorary Treasure of the International Software Benchmarking Standards Group (ISBSG) and IFPUG Director of ISBSG

See more at www.ipbygreen.com

IFPUG is a non-profit, member governed organization that endorses two types of standard methodology for software sizing as well as utilization of methods using IFPUG Sizing Standards

Why even go down this road?

Clients (the users of software) and Providers (the suppliers of software services) are both focussed on cutting cost and increasing revenue.

Cost of IT Service is high on the list of areas for optimization

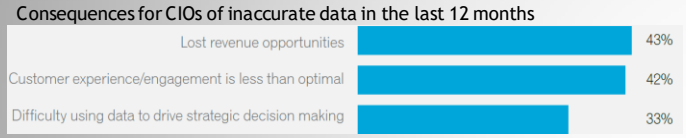
IT budget either flat or increasing

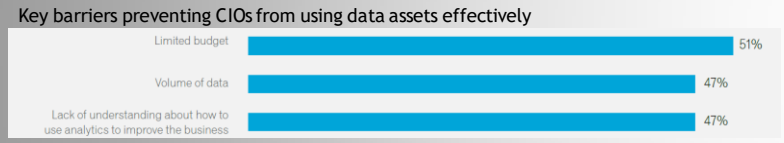
Application portfolio and scope of services increasing

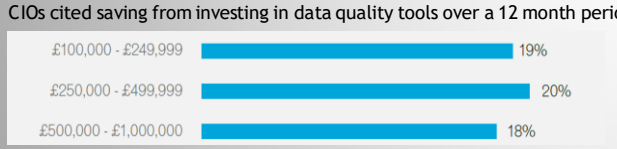
Tech Pro Research (TPR) on IT Budgets in 2016 concludes that 43% will increase their budget on improving efficiency and business processes.

The Perfect Match

CIO Perspective







Source: Experian Data Quality, Dawn of the CDO Research, 2014

Measurement Perspective

Just having good, reliable and accurate data will provide cost savings

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Software Size Measure – the most important normaliser

Let's face it – in order to get software measurement practices to work for everybody there need to be this normalisation factor that can be used to quantify the scope of the work.

Software size measure is this normalising factor.

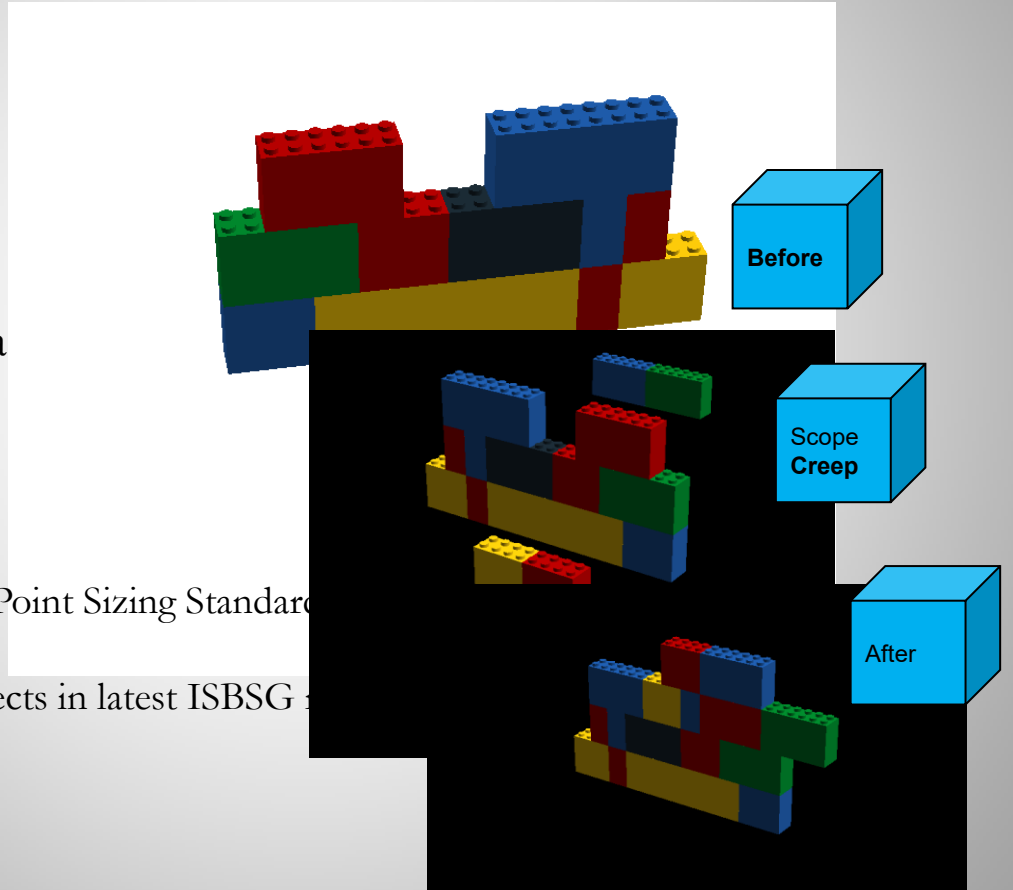
It enables comparison without consideration to areas such as technology, clients, provider, team, methods, process, quality etc.

Using software size measures such as Function Point Analysis will provide a common ground for not only establishing an agreement of what needs to be delivered as part of a software project, but also a measure that can be used for quantifying the productivity, performance and quality of the delivered product.

From Scope Black box to Quantitative measure

Quantitative Scope

- Scope to # of
- Transactional breakdown
- Data breakdown
- Scope size – before, creep, a



IFPUG Function Point Sizing Standar

# of IFPUG projects in latest ISBSG

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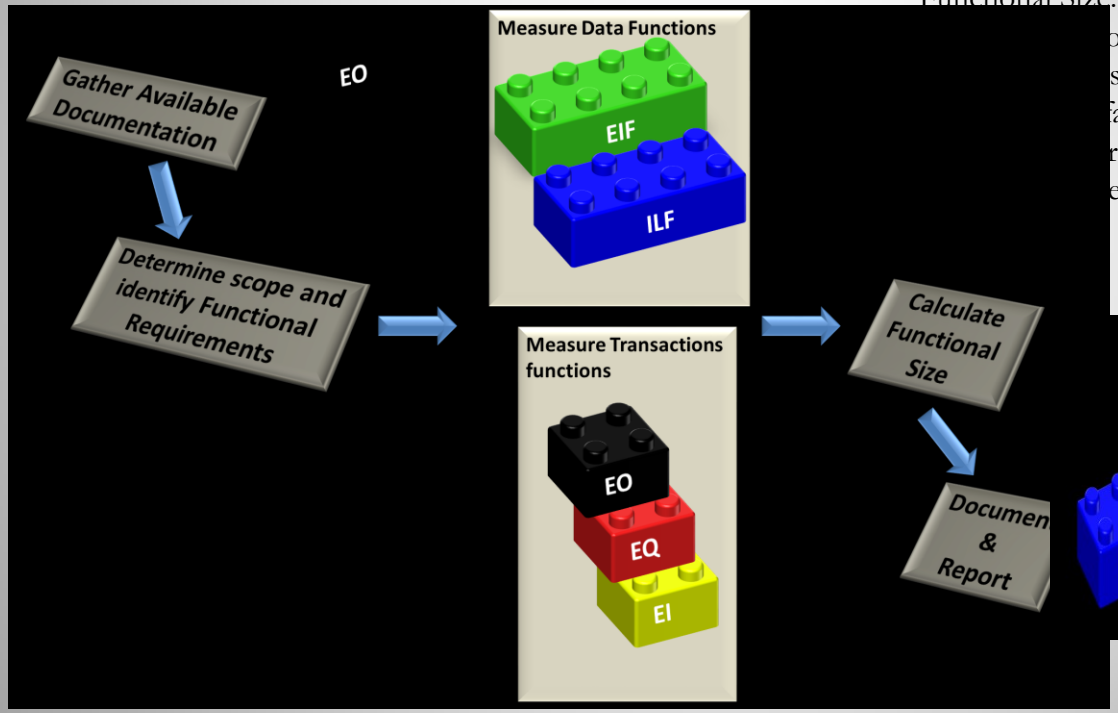
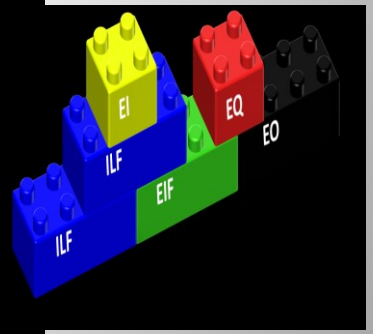
IFPUG Function Point Analysis (FPA) - The Scope Process

Functional Size:
- ” Size
- s and # Lego Studs
- aces (EIF)
- rts (EO, EQ)
- e





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IFPUG SNAP – Software Non-functional Assessment Process

1. Determine Assessment Purpose, Scope and Boundary
2. Associate Non-Functional Requirements to Categories and Sub-Categories
3. Identify the SCUs
4. Determine the complexity of the SCU
5. Calculate the SNAP Point of the SCU
6. Calculate the non-functional size

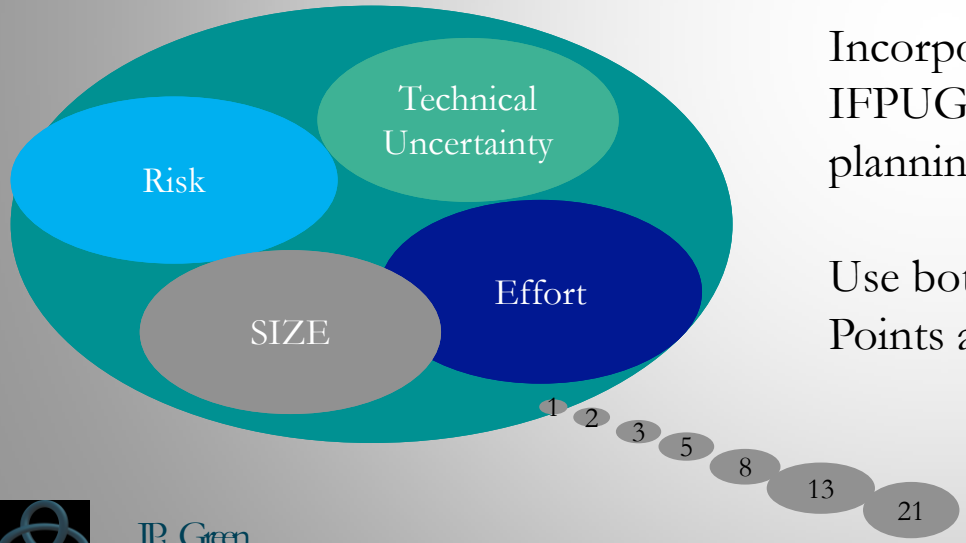
SCU: SNAP Counting Unit

Non-Functional Size Measure SNAP Point

Data Operations	Interface Design	Technical Environment	Architecture
• 1.1 Data Entry Validation • 1.2 Logical and Mathematical Operations • 1.3 Data Formatting • 1.4 Internal Data Movements • 1.5 Delivering Added Value to Users by Data Configuration	• 2.1 User Interfaces • 2.2 Help Methods • 2.3 Multiple Input Methods • 2.4 Multiple Output Methods	• 3.1 Multiple Platforms • 3.2 Database Technology • 3.3 Batch Processes	• 4.1 Component based software • • 4.2 Multiple Input / Output Interfaces

Agile

- How big is the backlog right now?
- How is the backlog evolving over time?
- How is the backlog progressing in the delivery of the required deliverables?
- How much of the backlog has been delivered



Incorporate industry standard size measure such as IFPUG FP and SP into Story Point definition for planning purpose

Use both Story points, Function Points and SNAP Points as a delivery and progress size

Word of advice regarding Software Size Measure

When do we NOT need to do the deep dive?

- If the risk associated with inaccuracy of other measures is higher
- If some of the other measures is not 100% accurate
- If you are looking at what needs a further deep dive
- If you are okay with making validatable and verifiable assumptions

Scope Analysis & Management

Software Size measure is an excellent tool for:

- Identification, validation, verification and documentation of scope.
- Visibility in prioritization against business process
- Analysing Software requirements both functional and non-functional
- Increased quality of scope documentation
- Breakdown of scope to comparable processes (main business process),
- Ensuring ~~e~~ consistency in documentation,
- Agreement on scope between stakeholders (Client, provider, user, developer) etc.
- Establishing an agreement of what needs to be delivered
- Quantifying productivity, performance and quality of the delivered product.

Prioritization against strategic and practical

Change Management - Traditional

Collect Requirements

Define Scope

FPA during life cycle.

Detail level at 3 points – otherwise high level assessment

Verify Scope – Size it

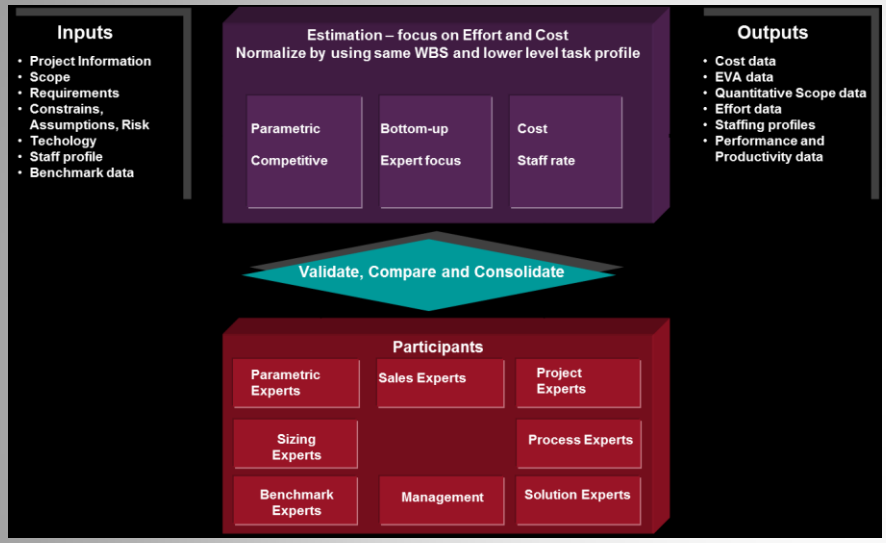
Control Scope – Analyze Size

Agile Backlog and Industry Size

- Size the backlog
- Use Size to prioritize
- Distinct between tactical and practical
- Use Size to bundle and group

Start measuring to improve, optimize and lower the cost

Estimation and Cost Models



Cost savings by just implementing parametric estimation

"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."

Futrell, Shafer and Shafer, "Quality Software Project Management"

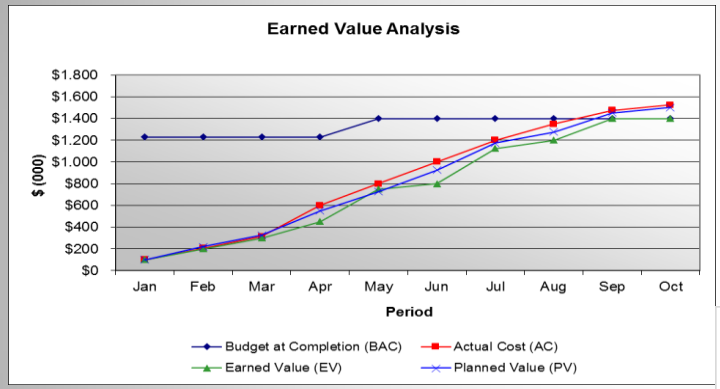
Estimating tools and cost savings
Use it right

- Competitive cost versus estimated cost
- Competitive price versus quote price
- Resource planning and optimized use of resources
- Optimize productivity Project with scenarios
- Maintenance cost versus modernization
- Buy or build
- Yearly scope planning
- Prioritization – project as a backlog
- ROI for improvement initiative
- Reduces cost of estimates
- Early strategic decision
- Not loosing $ on the wrong things

"I see SEER giving me the intelligence to spend IT dollars as strategically as possible, and that's a competitive advantage for TASC.

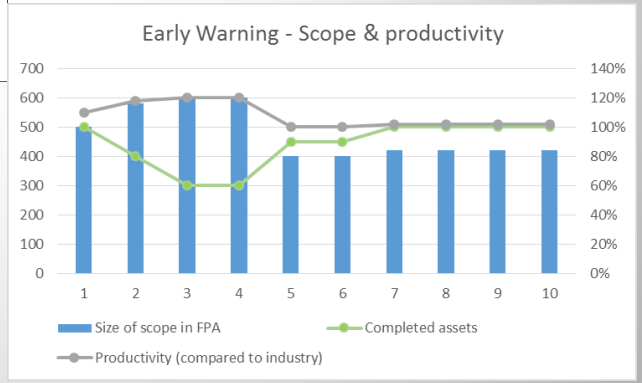
Galorath client Karl Richards, CIO of TASC

Realistic expectations
- Accurate Estimates – Informed Tracking



Good project
Meeting cost
(almost)

Bad project
Optimistic from
day one
Never delivered
the Anticipated
scope



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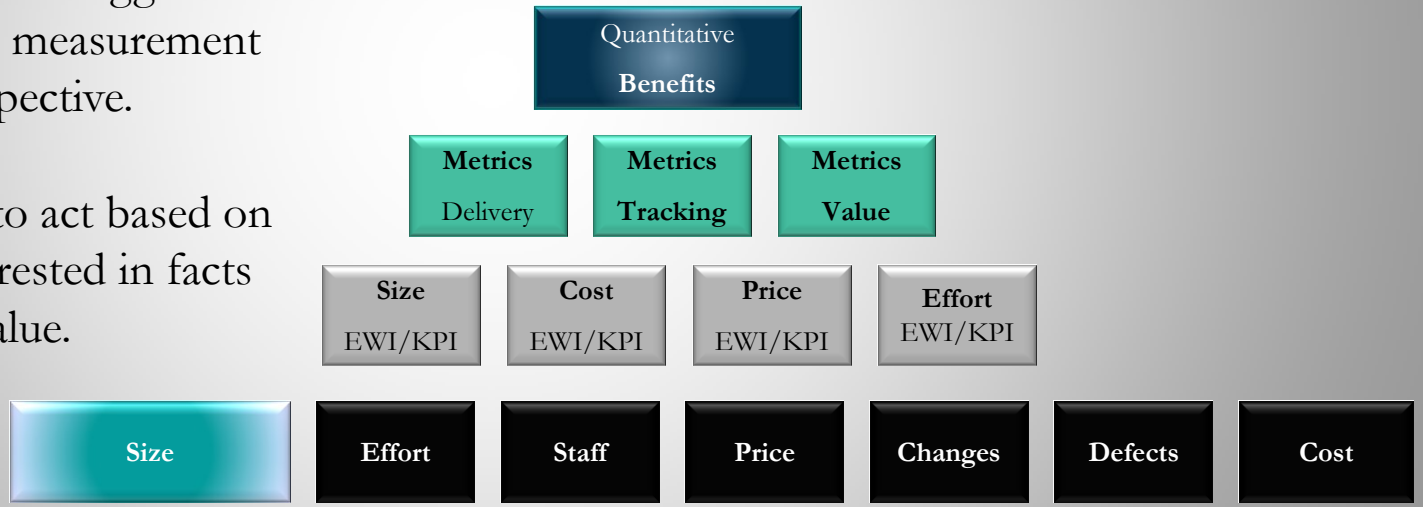
Early Warning Indicators/Key Process Indicators

Management is looking at the overall economic from a budget, scope, quality and performance perspective.

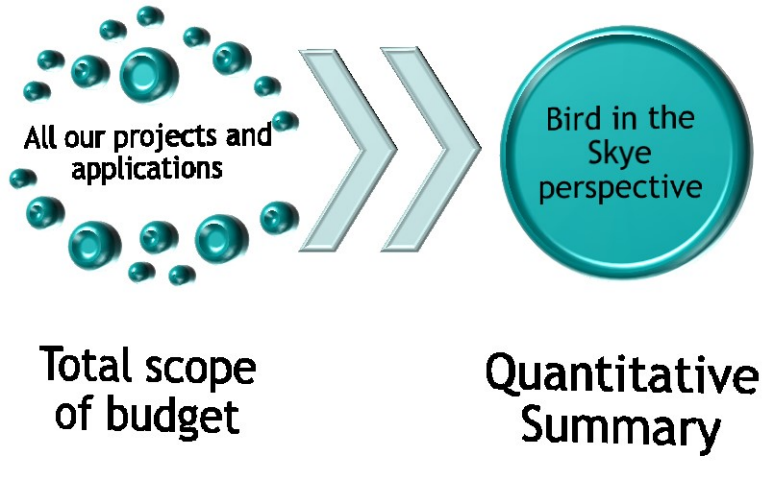
They are interested in the bigger picture and would like measurement from a top down perspective.

They need the ability to act based on facts and they are interested in facts that has a monetary value.



The software Measurement Practice

A Company might have hundreds of applications and projects, multiple of suppliers that they deal with. An Executive management perspective is therefor on the overall picture and usually on the value measured in monetary units.



Management is looking at the overall economic from a budget, scope, quality and performance perspective. They are interested in the bigger picture and would like measurement from a top down perspective. They need the ability to act based on facts and they are interested in facts that has a monetary value

Benchmarking

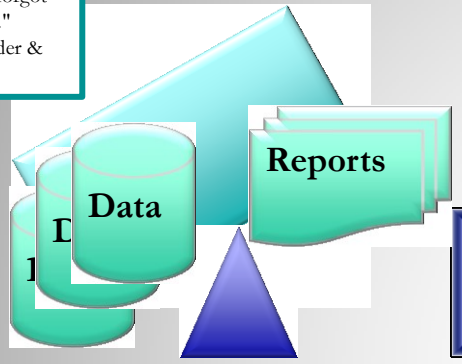
Benchmarking is the tool that can help both Clients and Providers to achieve not only a cutting of cost, but also an increase of quality, productivity and performance of the IT software

- Vodafone Spain has introduced a rating card based on Function Point and cost model. By monitoring very closely the cost models productivity they have made a saving of 10MUSD over the last year, by forcing their suppliers to lower the price (estimate) to be competitive.
- MapFre has created a scorecard on their 8 Suppliers where they measure them on Performance such as productivity, Quality (defects) etc… Their focus is to then down select the two suppliers lowest on the list.

Presentations from IFPUG ISMA9 2014 in Madrid

"IT is probably the last discipline that's running on spreadsheets: CIOs put in business systems for every other function, but forgot to put it in for themselves."
— Sunny Gupta, co-founder & CEO of Apptio

The Balance (Score Card) perspective



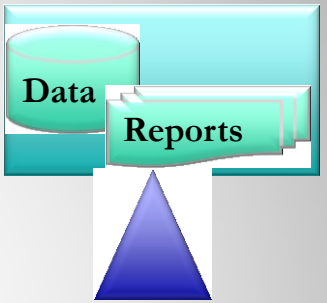
- A lot of reports
- Lots of data
- A lot of KPI's
- A lot of information
- A lot of data'

Use FPA to size the Current Mode of Operation (CMO)

Ton's of data & Reports…	Never used or looked at…
Tells only half of the truth..	Status without a reason …

Goal:

Decision, Informing, used & facts



- The right reports
- The right data
- The right KPI's
- The right information
- The right data

Calculate savings, improvements, benefits

Based on FPA, Percentage etc.

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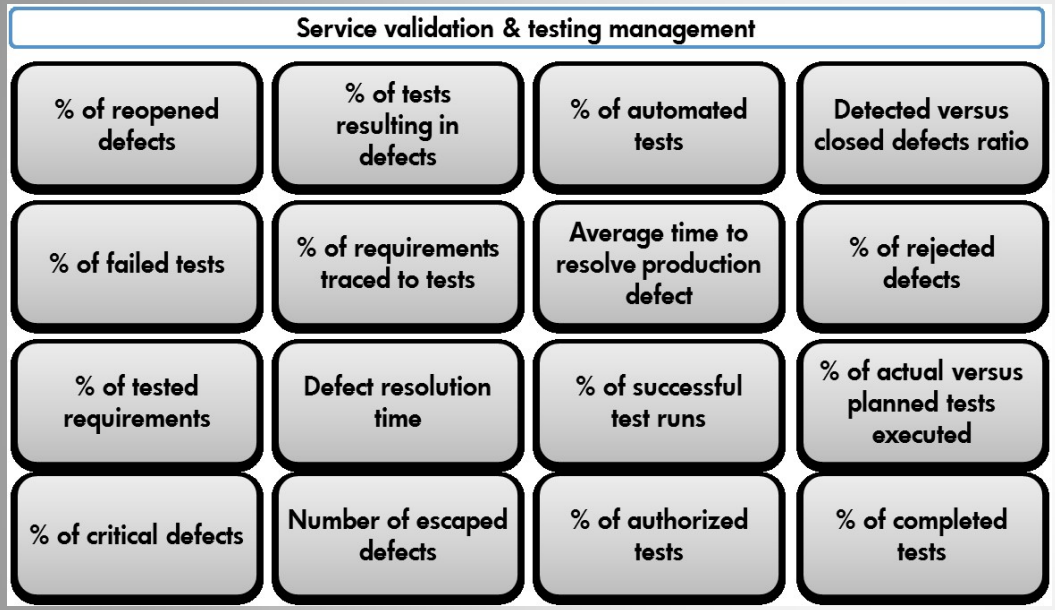
Defect SLA - ITIL



Normalize it with Sizing standards FP & SP

QUESTIONS?

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