




EA as the **#ENABLER** for Cost Transparency at innogy

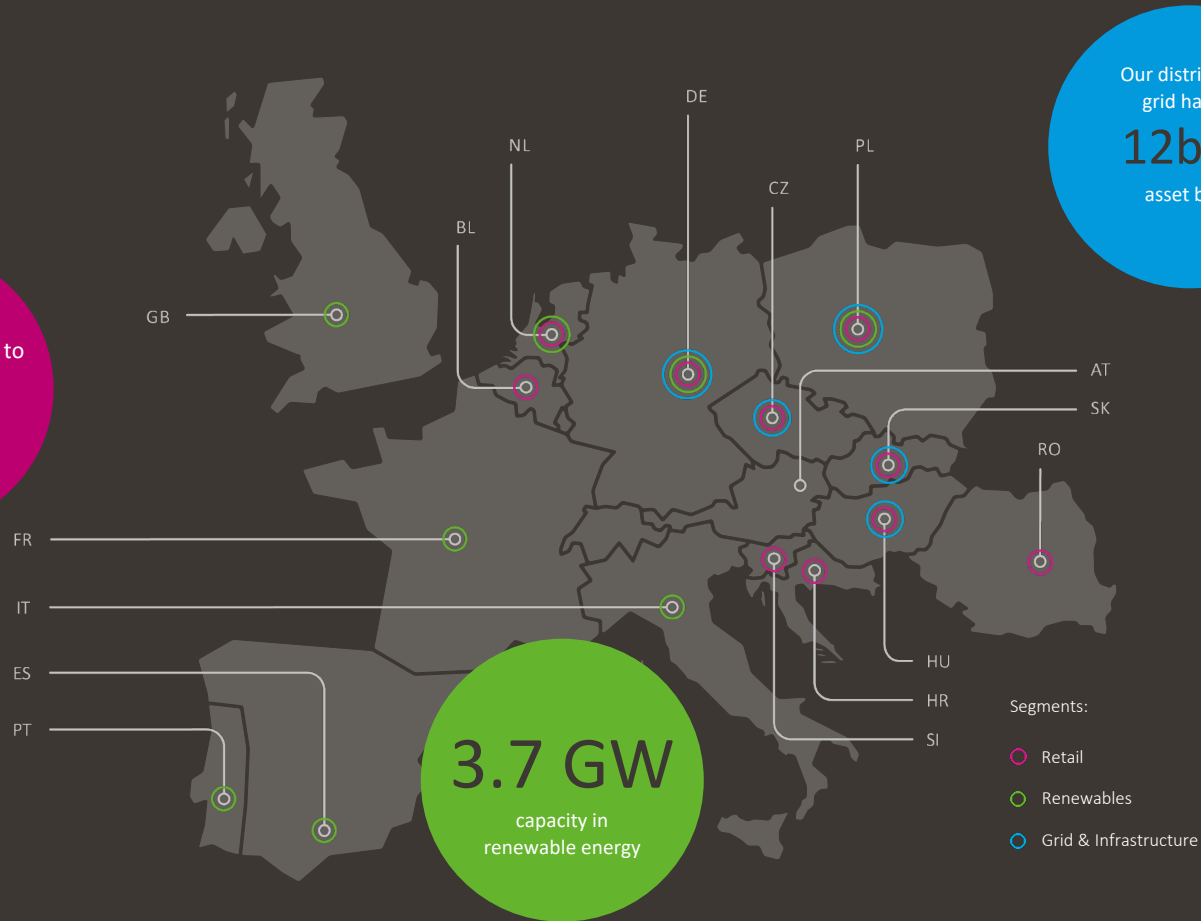
innogy SE · Christian Schürmann · 26th November 2019

- 
- A high-angle, aerial photograph of a winding asphalt road on a steep, grassy mountain slope. The road curves sharply through the landscape, with stone retaining walls on some sections. The sun is low in the sky, creating a warm, golden glow and long shadows. The terrain is rugged and covered in green vegetation.
- 1 Introduction
 - 2 The Transparency@IT initiative
 - 3 Enterprise Architecture and IT cost transparency
 - 4 From theory to practice
 - 5 Lessons learned / Q&A

1. Introduction

innogy today

We offer
Energy+ and
Commodity Services to
21 million
customers



1. Introduction

innogy tomorrow

EXPLORE
TOMORROW

innogy as part of the **new E.ON** ...

... with **~53m customers**
for Energy+ and Commodity Services



... and a **~34bn€** grid asset base



combined of E.ON and innogy reported in 2018

e.on



Renewables as part of RWE
with an **installed capacity of**
~9.5 GW

RWE



The Transparency@IT initiative

#PIONIERGEIST

2. The Transparency@IT initiative

THE ZOMBISERVER

Nobody knows...

... who is responsible for it

... who pays for it

... for wich application it is running

... what will happen if you shut it down

... who will provide security updates



Three major goals



A cross-departmental team of experts was formed to review the existing data models and tools to design and implement an integrated solution



information security

Give insight of the critical IT at innogy and help to strengthen them



operational efficiency

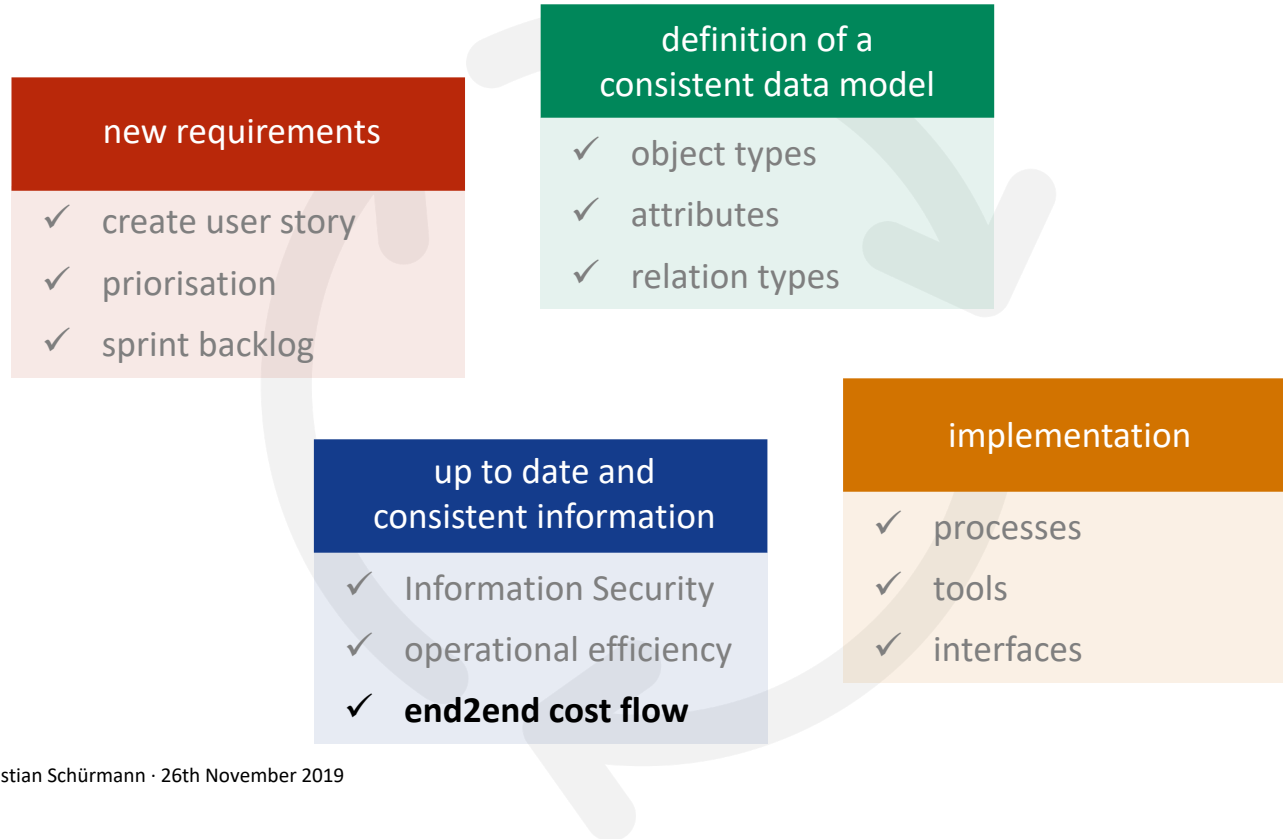
Support the reduction of incidents with a well documented and transparent IT Landscape



end2end cost flow

Enable IT and Business for „insight hunting“ to deliver the IT Services cost efficient

Steps of enablement



Development Principles



Focus on shared items
(object types & attributes)



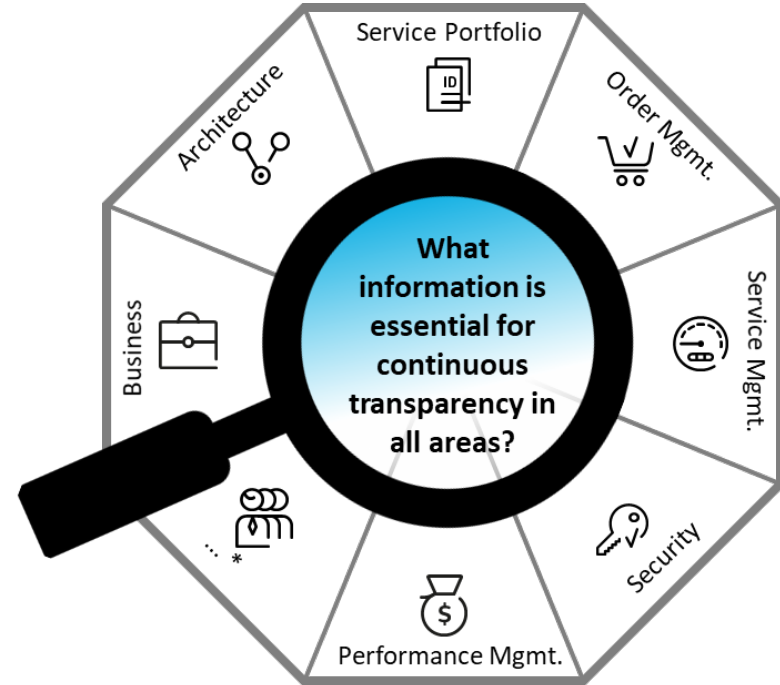
Consider Master Data Management
(leading systems, accountabilities)



Existing data models have to be used
as a **baseline**



Tools already in use (or planned) **are not questioned**



Tools in use or planned

The innogy tool landscape consists of "state of the art" IT management tools and tools developed in-house.



Enterprise Architecture



Service Catalog



Service- & Order Management



License Management



Performance Management



Order Management

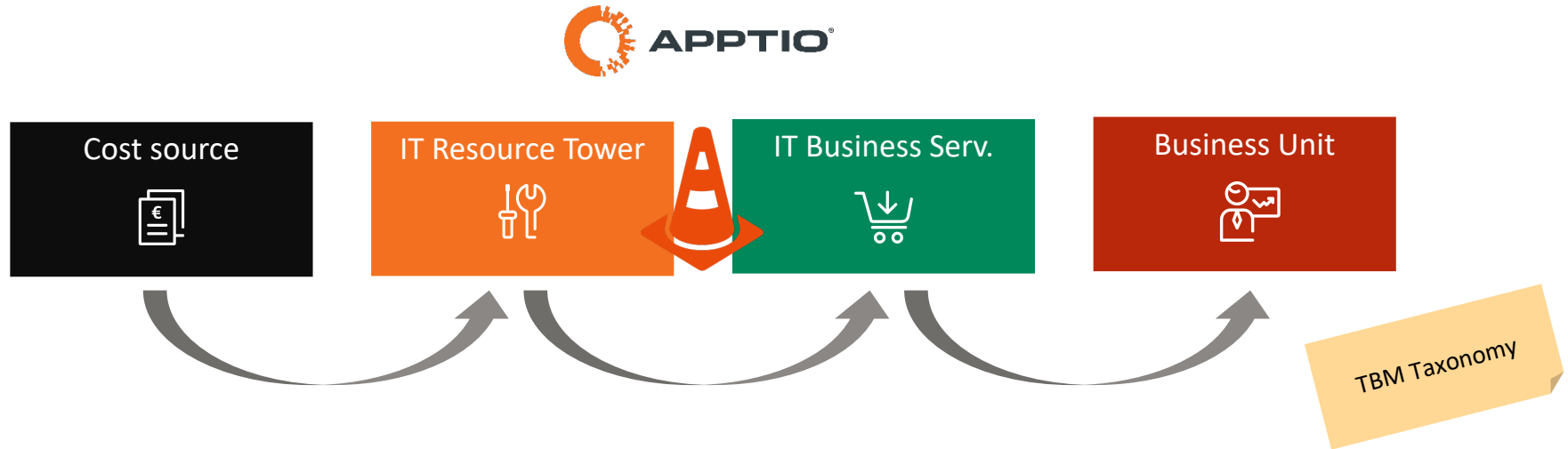
A photograph of two men in an office setting. One man, with a beard and wearing a light blue shirt, is pointing at a computer monitor. The other man, wearing a blue patterned jacket over a grey t-shirt, is leaning over his shoulder, looking at the screen. The background shows office shelves and a desk lamp.

Enterprise Architecture and IT cost transparency

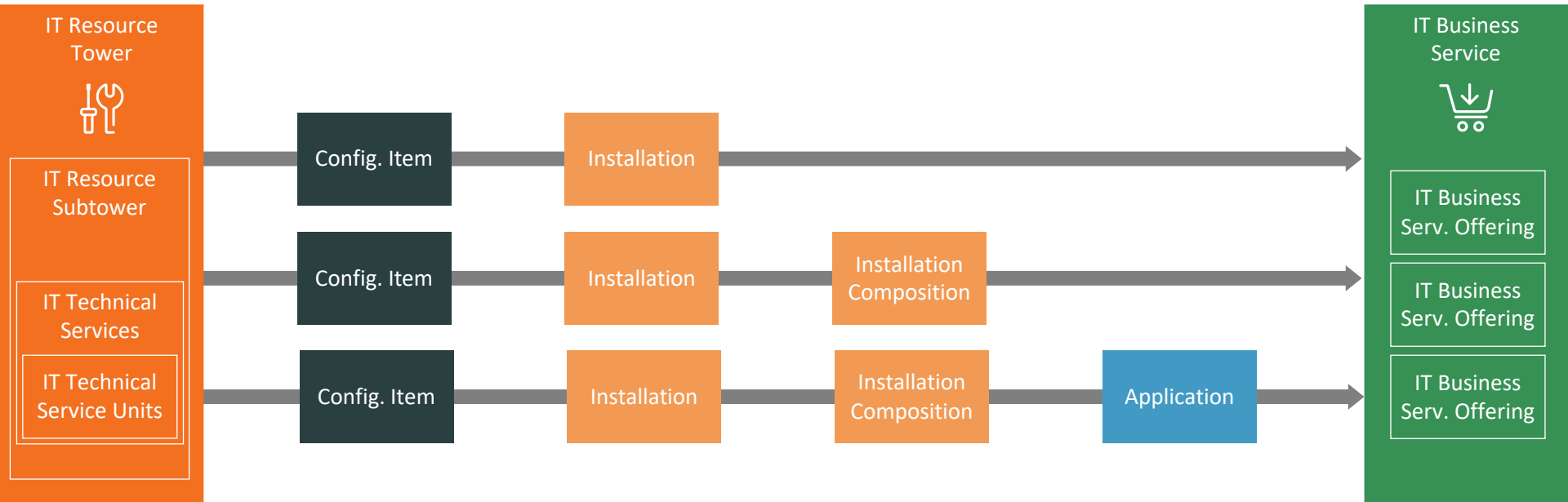
#ENABLING

The Information Backbone in a nutshell!

- The **Information Backbone for cost transparency** is defined by a 4-layer taxonomy representing the IT value chain and different layer of responsibilities.

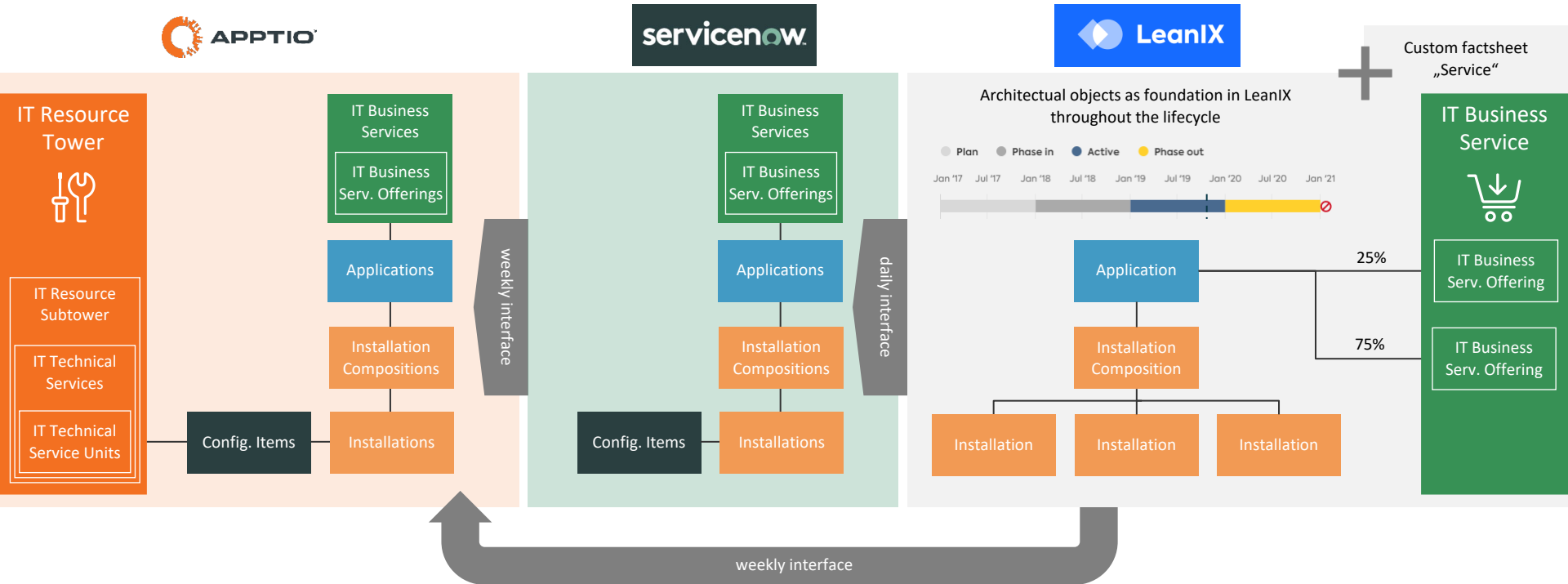


The Information Backbone: Datamodel



3. Enterprise Architecture and IT cost transparency

The Information Backbone: Tools



LeanIX Custom Factsheet „Service“

1 Any Installation Composition ✓ 3%	
Fact Sheet	Subscriptions (0) Comments (0) Documents (0) Metrics Surveys (0) Last Update (less than a minute ago)
Services (3) (Optional)	Which Services are provided by this IT Component?
<div><div>S Business Application Service / Business Service Offering 1</div><div>QAS: approved Segment: Corporate SrvObjType: IT Business Service Offering SrvType: BAS</div><div>Contribution: 20</div></div>	
<div><div>S Business Application Service / Business Service Offering 2</div><div>QAS: approved Segment: Corporate SrvObjType: IT Business Service Offering SrvType: BAS</div><div>Contribution: 30</div></div>	
<div><div>S Business Application Service / Business Service Offering 3</div><div>QAS: approved Segment: Corporate SrvObjType: IT Business Service Offering SrvType: BAS</div><div>Contribution: 50</div></div>	
Services Contribution	100

Service ✖

Search for Fact Sheet

Active from

Active until

yyyy-mm-dd

yyyy-mm-dd

Description

Contribution

Contribution of this Application to the Service in values between 0 and 100.

Delete entry

Cancel

Save & New

Save & Next

Save



From theory to practice

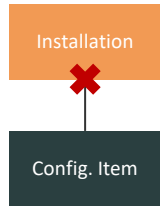
#IMPLEMENTATION

Inventory phase: Fallout Report

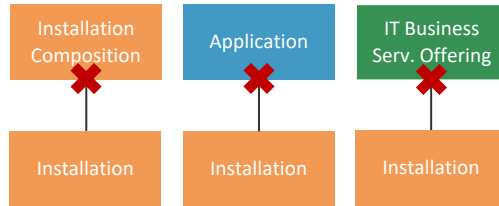


A **Fallout Report** was created in Apptio to find out how many objects did not have the necessary mapping.

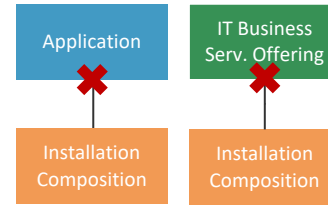
The objects with the **highest costs** were **processed first**.



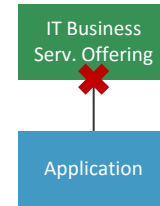
How many **Configuration items** are not linked to an:
- **Installation**



Which **Installations** is not link to an:
- **Installation Composition** or
- **Application** or
- **IT Business Service Offering**



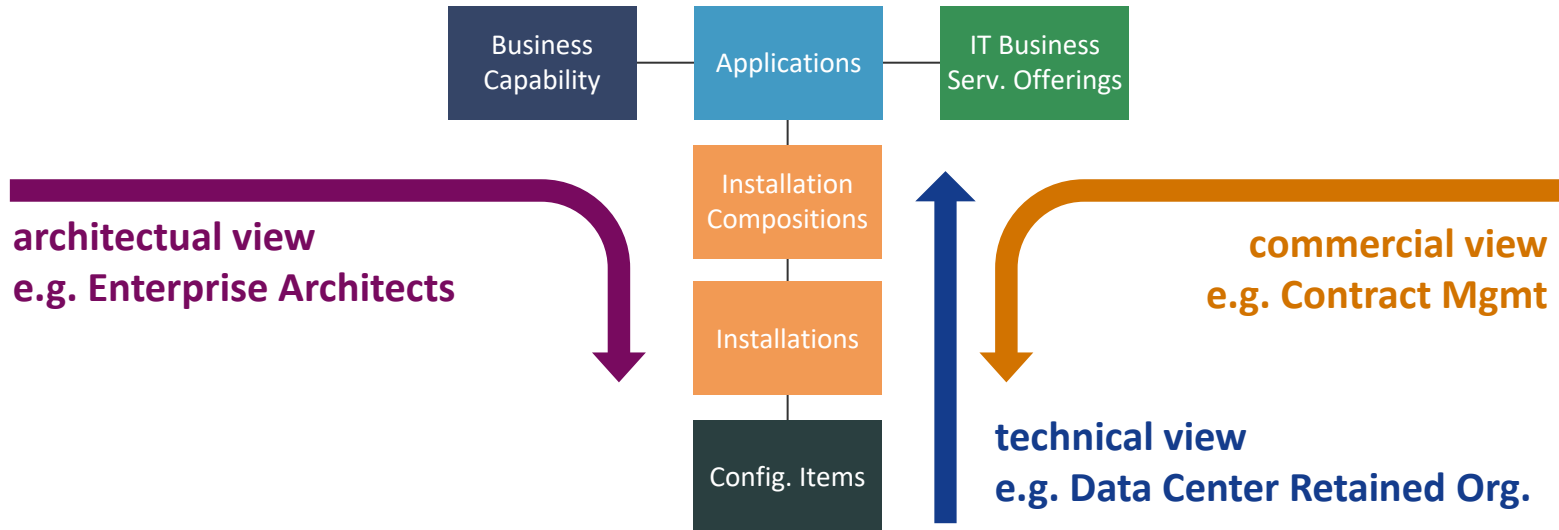
Which **Installation Composition** is not link to an:
- **Application** or
- **IT Business Service Offering**



Which **Application** is not link to an:
- **IT Business Service Offering**

Rollout Plan Transparency@IT

The inventory was a common task of different roles in the IT



Rollout Plan Transparency@IT

The Rollout started in three waves

1. Initial data inventory at Central IT and Corporate
2. Initial data inventory at Business Segments
3. Continuous data maintenance by standard processes

1. Central IT & Corporate

2. Business Segments

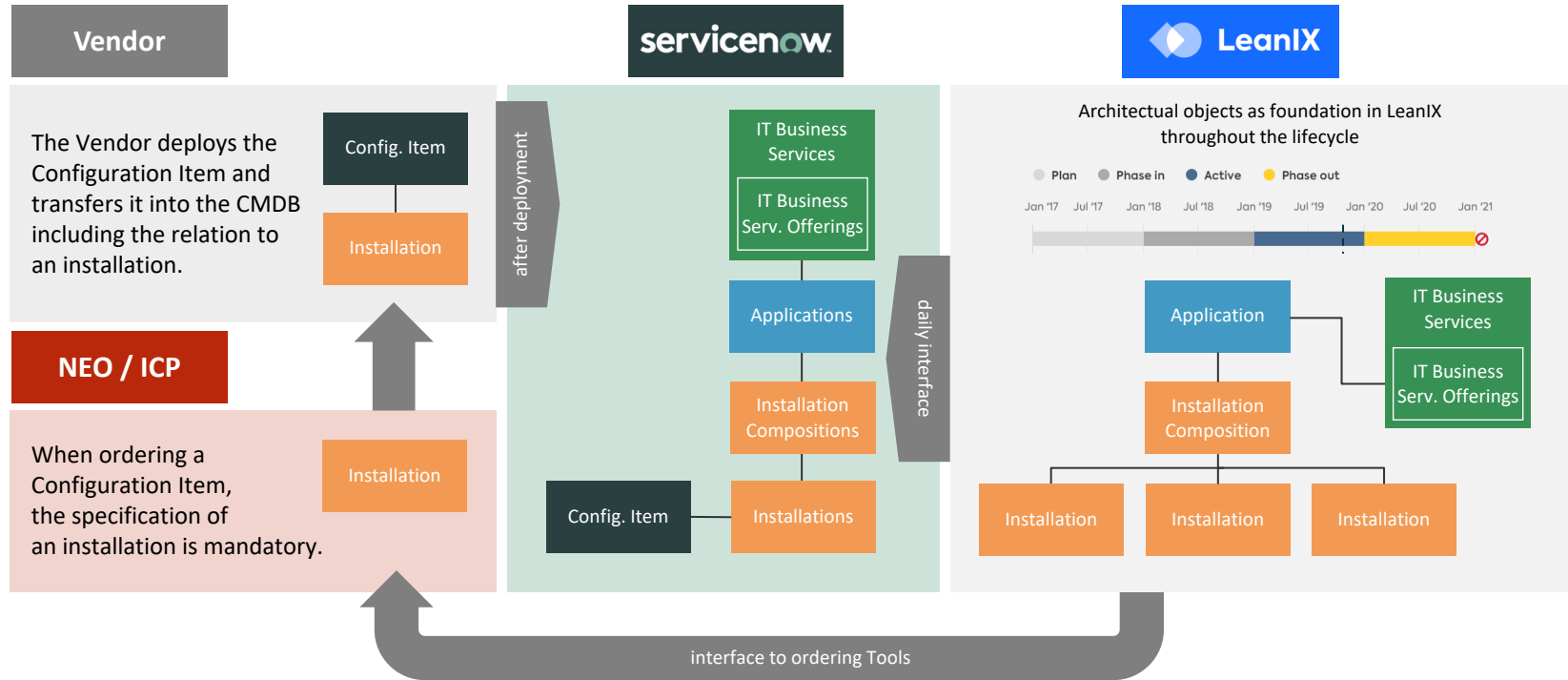
3.

From initial data acquisition...

...to continuous maintained data

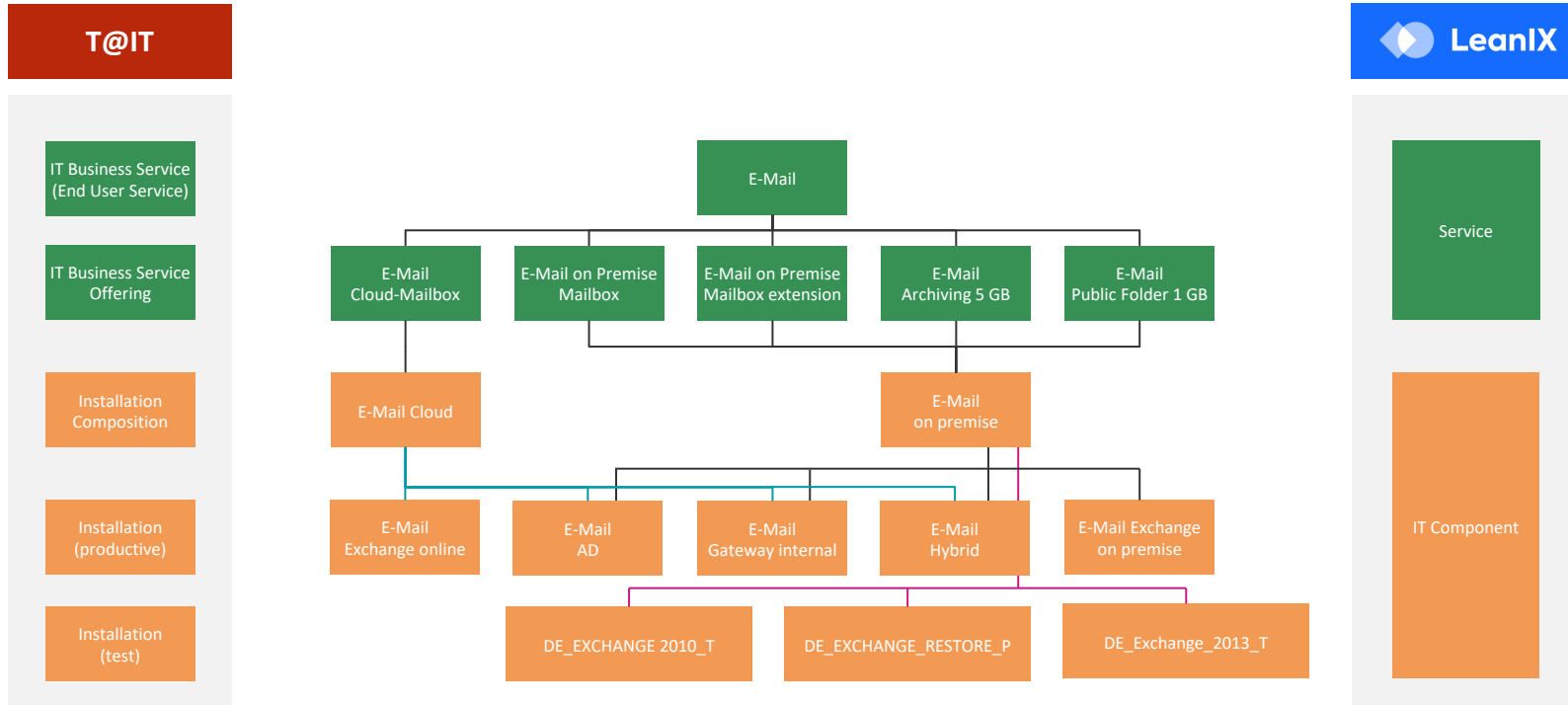
4. From theory to practice

Up2date information: Ordering / automation



4. From theory to practice

Architecture mapping example: E-Mail



4. From theory to practice

Architecture mapping example: SAP Application



Other use cases (beside cost transparency) are also shown e.g. lifecycle management / technology risk management



4 - IT Business Services

IT Business Services

IT Business Services Details

Architecture Details

Service Type: Business Application Service

Service Name:

Service Owner:

Service Offering

No Filter Applied ▾

Cost

34,05T €

Budget: 46,76T €

Cost YTD

294,84T €

Budget YTD: 374,06T €

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Service
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Service Offering Cost

Service Offering ID	Service Offering	Unit of Measure	Cost ▾	Budget	YTD Cost	YTD Budget
IBU000317		per service, per month	4.071 €	4.988 €	33.691 €	39.906 €
IBU000321		per service, per month	3.981 €	4.743 €	32.637 €	37.946 €
IBU000314		per service, per month	2.789 €	3.505 €	23.222 €	28.042 €
IBU000320		per service, per month	2.556 €	3.179 €	21.153 €	25.431 €
IBU000323		per service, per month	2.556 €	3.179 €	21.153 €	25.431 €
Total			34.046 €	46.756 €	294.841 €	374.058 €

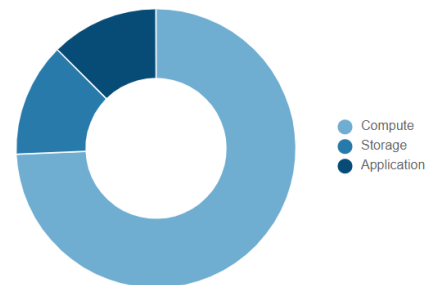
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Service Offering Unit Rates

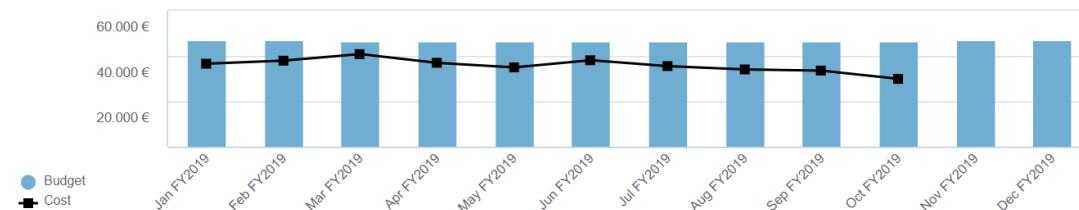
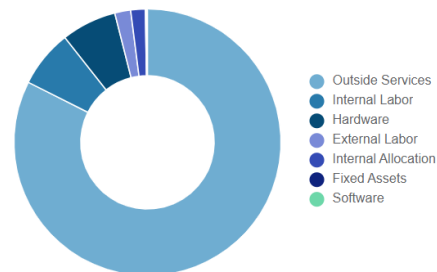
Service Offering ID	Service Offering	Unit of Measure	Planned Billable Units ▾	Billable Units	Planned Unit Rate	Actual Unit Rate
IBU000916			0,00	,00		0,00 €
IBU000896			0,00	,00		0,00 €
IBU000327		per service, per month	0,00	,00		0,00 €
IBU000326		per service, per month	0,00	,00		0,00 €
IBU000325		per service, per month	0,00	,00		0,00 €
Total			0,00	,00		0,00 €

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Resource Tower Composition FY Budget



Cost Pool Composition FY Budget





4 - IT Business Services

IT Business Services

IT Business Services Details

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Service Owner:

Service Offering

No Filter Applied

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Service Overview Cost Structure Resource Structure App Support & Ops Architecture Software BU Consumption

Business Service Resource Structure

IT Resource Tower	IT Resource Sub Tower	IT Technical Service Unit Name	Unit of Measure	Cost	Budget	Cost YTD	Budget YTD
Application							
Application	Database		per Instance, per month	5 €	5 €	38 €	40 €
Application	Database		per Instance, per month	58 €	121 €	478 €	969 €
Application	Database		per Instance, per month	1 €	1 €	7 €	7 €
Application	Middleware		per Instance, per month	92 €	102 €	759 €	815 €
Application	App Support & Ops		per SID, per month	220 €	303 €	1.816 €	2.426 €
Application	App Support & Ops		per SID, per month	1.396 €	2.052 €	11.877 €	16.419 €
Application	App Support & Ops		per document, per month	1.302 €	2.616 €	18.210 €	20.926 €
Application	App Support & Ops		per document, per month	8 €	22 €	201 €	174 €
Application	App Support & Ops		per Job run, per month	520 €	546 €	3.177 €	4.366 €
Application	App Support & Ops		per Job change, per month	0 €	22 €	16 €	174 €
Application	Database		not defined yet	0 €	42 €	0 €	333 €
Application Subtotal				3.602 €	5.831 €	36.578 €	46.650 €

Compute

Compute	Server (Windows/Linux)		per OS Instance, per month	7 €	8 €	60 €	64 €
Compute	Server (Windows/Linux)		per OS Instance, per month	825 €	775 €	6.805 €	6.197 €
Compute	Server (Windows/Linux)		per OS Instance, per month	674 €	297 €	5.499 €	2.375 €
Compute	Server (Windows/Linux)		per OS Instance, per month	1.445 €	2.078 €	12.448 €	16.627 €
Compute	Server (Unix)		per OS Instance, per month	6 €	7 €	53 €	56 €

Resource Tower

☒ IT Resource Sub Tower☐ IT Technical Service☒ IT Technical Service Unit Name☐ IT Technical Service Unit ID☒ Unit of Measure

IT Resource Tower

No Filter Applied

IT Resource Sub Tower

No Filter Applied

Metrics

☒ Cost YTD☒ Budget YTD☐ Budget FY☐ Actual Volume☐ Budget Volume

Total

34.046 €

46.756 €

294.841 €

374.058 €



4 - IT Business Services

IT Business Services

IT Business Services Details

Architecture Details

Service Type: Business Application Service

Service Name:

Service Owner:

Service Offering

No Filter Applied ▾

Cost

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Budget: 46,76T €

Cost YTD

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Application Type	App / Comp ID ▲	Application Name	Cost	Budget	Cost YTD	Budget YTD
Application	APP000044		902 €	1.062 €	7.363 €	8.499 €
Application	APP000246		189 €	5.338 €	15.055 €	42.709 €
Application	APP002209		902 €	1.062 €	7.363 €	8.499 €
Application	APP005142		379 €	421 €	3.106 €	3.366 €
Application	APP005456		1.804 €	2.125 €	14.727 €	16.997 €
Application	APP006540		497 €	0 €	3.710 €	0 €
Application	APP006722		669 €	736 €	5.295 €	5.888 €
Application	APP006746		669 €	736 €	5.295 €	5.888 €
Application	APP006753		669 €	736 €	5.295 €	5.888 €
Application	APP006759		669 €	736 €	5.295 €	5.888 €
Installation Composition	ICO000018		0 €	0 €	1 €	0 €
Installation Composition	ICO000019		756 €	828 €	6.189 €	6.628 €
Installation Composition	ICO000047		1.408 €	1.219 €	9.991 €	9.749 €
Installation Composition	ICO000049		24.534 €	31.757 €	206.156 €	254.061 €

Resource Tower

- ☐ IT Resource Tower
- ☐ IT Resource Sub Tower
- ☐ IT Technical Service
- ☐ IT Technical Service Unit Name

IT Resource Tower

No Filter Applied ▾

IT Resource Sub Tower

No Filter Applied ▾

Metrics

☒ Cost YTD☒ Budget YTD☐ Budget FY

Total

34.046 €

46.756 €

294.841 €

374.058 €

4 - IT Business Services

IT Business Services

IT Business Services Details

Architecture Details

Application & Composition Architecture

Data Freshness - Reference Date

LeanIX
08.11.2019

CMDB
04.11.2019

Business Service
No Filter Applied

Application
No Filter Applied

Installation
No Filter Applied

Service Module
No Filter Applied

Business Service Offering
No Filter Applied

Composition
No Filter Applied

Component Key
No Filter Applied

Service Module Unit
No Filter Applied

Applications Installation Compositions Installations Service Modules DC Services

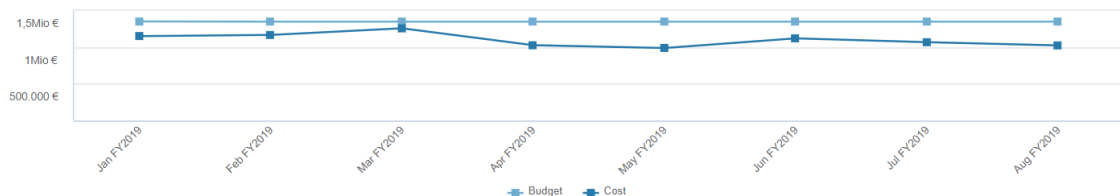
Applications Cost

Application ID	Application Name	Cost	Budget	YTD Cost	YTD Budget	FY Budget
APP000155		112.456 €	121.860 €	920.974 €	974.911 €	1.462.349 €
APP006687		64.717 €	71.712 €	508.354 €	573.717 €	860.581 €
APP004714		33.285 €	50.693 €	319.568 €	405.568 €	608.340 €
APP006568		30.706 €	32.122 €	243.307 €	256.986 €	385.481 €
APP006598		29.252 €	26.244 €	213.539 €	209.912 €	314.846 €
APP006573		22.753 €	23.042 €	191.902 €	184.339 €	276.505 €
APP000053		1.445 €	23.006 €	70.135 €	184.053 €	276.081 €
APP005149		22.689 €	22.831 €	173.943 €	182.651 €	273.978 €
APP005295		16.373 €	20.929 €	134.883 €	167.435 €	251.149 €
APP005654		19.200 €	20.704 €	156.235 €	165.636 €	248.451 €
APP004919		19.080 €	19.832 €	145.346 €	158.660 €	238.013 €
APP000659		17.839 €	19.606 €	143.545 €	156.886 €	235.311 €
APP005457		17.839 €	19.606 €	143.545 €	156.886 €	235.311 €
APP000066		18.164 €	18.986 €	143.320 €	151.898 €	227.843 €
APP006641		1.385 €	18.411 €	49.660 €	147.293 €	220.939 €
APP006653		1.385 €	18.411 €	49.660 €	147.293 €	220.939 €
APP005462		15.319 €	18.018 €	123.292 €	144.150 €	216.230 €
APP005238		3.113 €	16.878 €	50.784 €	135.026 €	202.538 €
APP005591		3.113 €	16.878 €	50.784 €	135.026 €	202.538 €
APP006281		3.113 €	16.878 €	50.784 €	135.026 €	202.538 €

Total


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Monthly Trend



Lessons learned

- ✓ Good **backlog management** is important
- ✓ Team should be **cross-functional** (avoid the "ivory tower")
- ✓ Resources should also be available for the initiative (**commitment!**)
- ✓ Employees should **identify** with their role in the team
- ✓ **Line tasks** may **not** become part of the initiative
- ✓ A **common data model and terminology** are extremely important
- ✓ Delicious **Snacks** & good **Coffee** are mandatory



Würden wir alles wie immer
machen, würden wir
wieimmergy heißen.

#PIONIERGEIST