



# **Data Warehouse Modernization: 10 day assessment**

# What is the Data Warehouse Modernization Assessment of element61 & Microsoft?

“It’s a short strategic assessment **aimed to further clarify & detail-out how your Data & AI workloads can be accelerated & improved.** Focused on your challenges & ambitions we will **deliver a tangible concrete roadmap document** incl. as-is SWOT & maturity assessment and recommendations on architecture, phasing & roles and responsibilities”



**Bart Van Der Vurst**

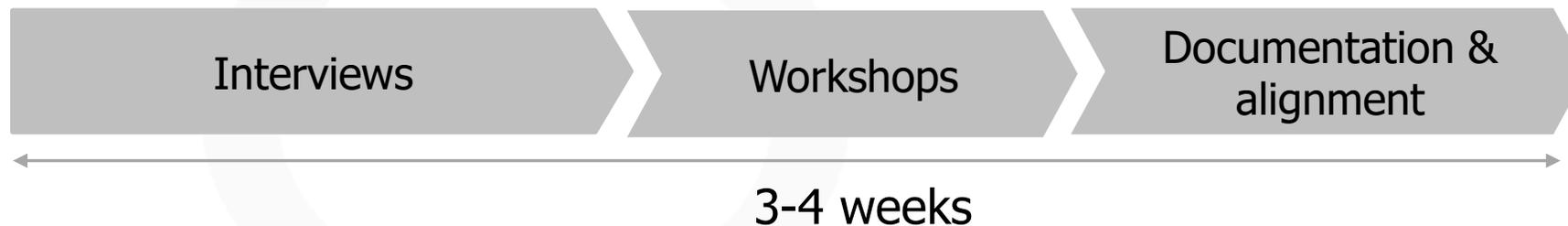
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# How does it practically happen the Assessment?

- The assessment is **run by a Director of element61** who - with **technical & business knowledge** - runs a set of **interviews & workshops** and documents observations, assessment results and recommendations
- It's typically ran in a **3-4 weeks run-through** period with
  - 2 days of 1-to-1 interviews
  - 3-4 workshops spread across 1,5 weeks
  - Iterative documentation of vision & roadmap



# What can you expect as deliverable?

- 🔗 an **as-is assessment on Data & Analytics maturity**  
incl. SWOT assessment & maturity benchmark
- 🔗 an **inventory of data opportunities** and improvement domains  
(incl. tools, technology, people & processes)
- 🔗 a **design of a future-proof architecture** to support these needs
  - keeping in mind budget, existing technology and application landscape and skills
  - evaluating different technologies (with their strengths and weaknesses)
- 🔗 a **detailed cost breakdown** of the target architecture on running costs (Opex) and implementation investments (Capex)
- 🔗 a perspective on the **required organization** to support these initiatives both from a people point of view as of a process point of view
- 🔗 a **prioritized implementation plan** on the migration towards this new modern data platform

# We have all material ready to support this assessment

## Analytics Maturity Model

As part of the assessment, we will score your organization on **Analytics maturity** across 5 dimensions ranging from governance to technology

The element61 Analytics Maturity model

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Governance and organization</b>	Done by dispersed individuals	BI is done in non-aligned projects; no best-practices in place	Project & process standardization in place	Business Analytics is managed by a competence center	BI&C and analytics is aligned with & driving strategy
<b>Technology &amp; systems</b>	No technology in place; typically Excel-driven	Diverse set of tools & architectures	Standard toolset & architecture	Enterprise-wide Analytics for BI & AI	Integrated data and AI platform
<b>Information</b>	Untrusted scattered information & very limited knowledge on source systems	Information model is known but BU/domain-specific	Enterprise-wide Information model across quality in place major sources	Governance for data	Fully trusted data environment
<b>Usage &amp; value of reporting</b>	Reporting is not in place; focus lies on 'preparation for'	Reporting focus is on Group level (e.g. finance, hr)	Reporting usage is omni-present but not enterprise-wide	Reporting is used enterprise ind. with vendors/customers	Reporting is beyond enterprise ind. with vendors/customers
<b>Usage &amp; value of AI</b>	AI not in place; no perspective on use-cases	Use-cases documented but no focus on delivery	Use of Data Science in Discovery & POCs	AI use-cases live in specific divisions (e.g. marketing)	Various AI use-cases live w. a centralized strategy and priorities

## Interview kit

For the interviews, we can share our **pre-read with concrete questions** to truly understand analytics in your organization

**Data Optimization Assessment at AG Insura**  
a pre-read for our upcoming interview

OPEN QUESTIONS / INTERVIEW GUIDELINE

Executive-wide reporting

Functional: what are your business objectives in regards of information and data?

What are the most important reports that you need to obtain to evaluate & monitor the performance of my department/business unit/division...?

What has been the biggest challenge in getting the most important reporting reports so far we can discuss the pros and cons in detail.

Do you currently have access to all of the needed information?

If not, all, which info is missing and why?

o Are there any right-hand data and why? (The information is lost?)

o Is the information of the right hand of quality?

o Do you have the right-hand data in the right format?

Is any reporting done manually before in your teams and why?

Do there are any other data sources available internally and what information can be found where?

Do I receive data/business reports or is it important to introduce new data sets, add-down, add the information? Do I need tables with detailed info or graphs that can be used for analysis and aggregated data?

Is all the information that is presented to me clear and consistently defined (e.g. if the term "open report" appears in several reports, do I need all of my colleagues have the same understanding/definition here)?

Is there a need for access to real-time data? Why would this (not) be relevant?

What are the most relevant data sources for you being either in ERP, in MES systems, CRM, cloud data lake, or other? How does data sources will be important in the next 3-5 years? (e.g. IoT, digital tools)

How do you ensure data quality in real-time?

Who is doing what with data in reporting?

Who is doing reporting and how are roles reporting and data governed across teams?

Do you for any of your colleagues have to do a lot of repetitive manual processing before having the information reported? What processes? How much time/cost does it take?

Does ICT do a lot of data pre-processing?

What are you looking for if you have a concrete use case about existing or new reports? Who supports you if you require a new management information report?

How much time does it take if you have a new requirement (e.g. a new report) before this is delivered to you?

How would you describe the support by / relationship with ICT department for management information?

How much training or using the existing BI technology have you received?

## Workshop material

We have **ready-to-present workshop material** on Modern Data Platform, Data Governance, Power BI governance, ML use-cases & much more

**ETL vs ELT**

ETL - Extract, Transform and Load

ELT - Extract, Load and Transform

After transform, structured more stable data

Better for compliance, sensitive data never gets loaded

Data moves from extract to staging area and from staging area to warehouse, data longer

Need to structure everything

Ingest anything and everything

Transform only what you need (but load everything)

AH less reliable

**Different tools for different self-service use-cases**

What are the different 'layers' of the Materialize data?

Data Scientist

Data Analyst?

Business Analyst?

Management?

What data would they want to see?

What would they want to visualize & how?

Are they technical or not?

**Self-service fails without governance**

Insufficient use, lack of trust...

- Lack of reporting data also - again...
- Overwhelming data
- Trust & time
- Lack of support
- Data quality issues, lack of data
- Lack of standards in look & feel, structure, naming...
- Reports covering periods over and over again
- Bad user adoption, no use

IT leads

- Over-reliance on vendors, "tell the author"
- Complexity, confusion, uncontrolled cost outlook
- Missing governance / toolset
- Complex support development
- Security breaches
- Legacy issues

# Example workshops ran as part of the Assessment (1/2)

## **Workshop 1 - Modern data platform architecture fit**

- In this workshop element61 will propose various modern data platform architectures & outline the components uses (incl. their pro & con's, alternatives and references). Objective of this workshop is to create understanding of the various modern data platform components, align on an architecture fit for you and draft priorities. We will clarify role of data lake, data catalog, parallelized computing, ETL vs. ELT and difference between Azure, clouds & on-premise

## **Workshop 2 - Getting started with ML: from use-case to maturity running platform**

- In this workshop we envision a workshop to discuss ML use-cases & clarify the link of Machine Learning within the modern data platform incl. the (best-practice) tech needed to run ML and the tools needed to run DevOps for ML incl. MLOps. Objective of this workshop is to identify first use-cases and define the actions needed to set up these first use-cases using all best-practices

## **Workshop 3 – Visualization tools: the right tool for the right purpose**

- It's important to set-up the right reporting tool for the right users: when to use Power BI vs. when to use other tools like process engineering visualization tools. In this workshop we together outline the user persona's in your organization for reporting & their needs towards self-service BI and analytics.

# Example workshops ran as part of the Assessment (2/2)

## **Workshop 4 – Platform and Data security (& GDPR) on Azure**

- In this workshop we want to discuss the options towards setting up Cloud & Data security on both platform and data level for BI, analytics and Machine Learning. Using privacy by design on both networking, data & access we can guarantee data & platform security. Objective of this workshop is to align on how to set-up security to be conform with your security requirements.

## **Workshop 5 – Data Governance**

- In this workshop we clarify on what is data governance incl. the link with meta-data management, data quality and master data management. We clarify the typical components of data governance and outline the typical roles & responsibilities of BI vs. IT vs. business teams and stakeholders. Objective is to outline the gaps in data governance you need to fill-in to achieve a solid modern data platform strategy.

## **Workshop 6 – Migration planning & volumes: building the roadmap**

- In this last workshop we want to discuss the migration planning and openly define a high-level planning using all building blocks from the previous workshops. Objective of this workshop is to define an aligned planning, set of priorities and roles & responsibilities.

Note: workshops are always tailored to your needs & context. Above workshop serve as inspiration of relevant workshops we have given to other customers

**Who is element61?**



# element61 is the most Senior Analytics team in Belgium

**839 years**

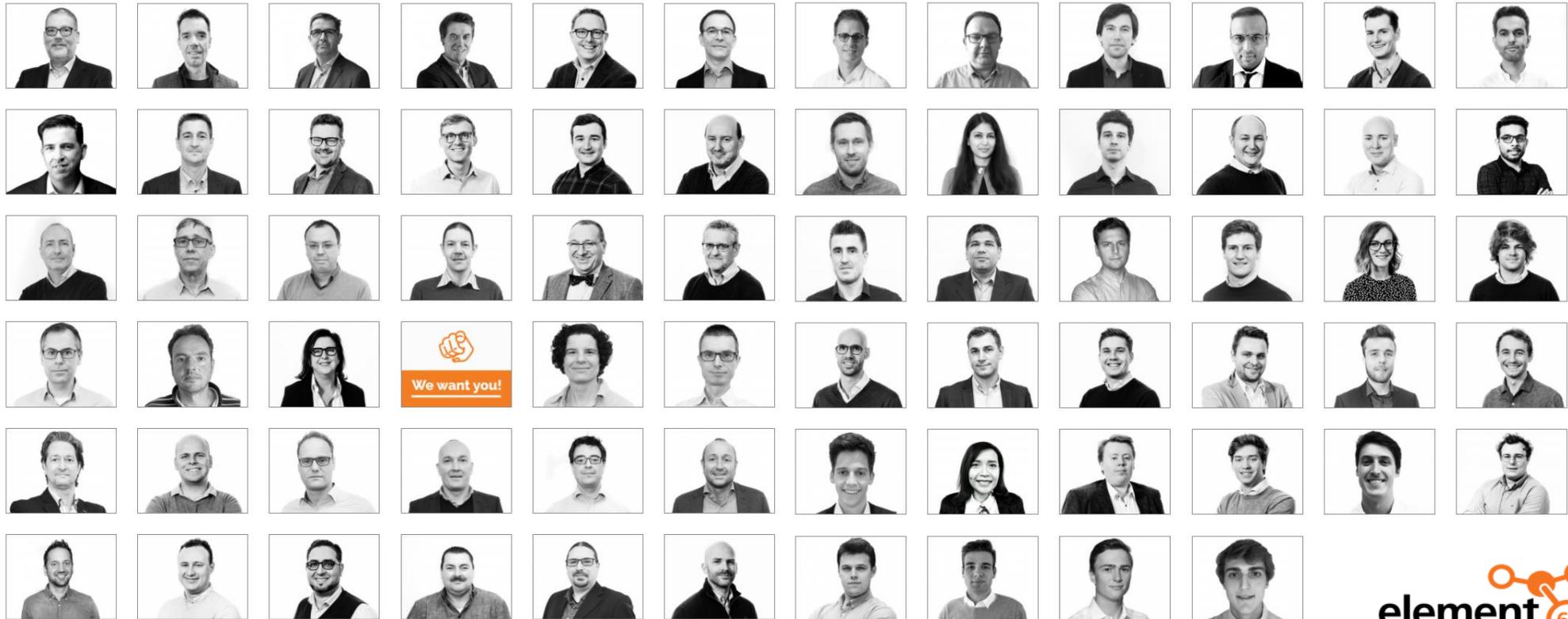
Total Business Analytics experience

**69 experts**

In Business Analytics

**12 years**

Average Business Analytics experience



# What element61 is about ...

## Data Science & Strategy

- 🔗 Data Lake
- 🔗 Modern Data Platform
- 🔗 Machine Learning
- 🔗 Big Data and IoT



## Performance Management

- 🔗 Consolidation
- 🔗 Financial Reporting
- 🔗 Planning, Budgeting & Forecasting
- 🔗 Disclosure Management

## Business Intelligence

- 🔗 Data Warehousing
- 🔗 Data Quality
- 🔗 Master Data Management
- 🔗 Data Integration

# We are a Microsoft Gold Partner

- ❦ element61 is “**Microsoft Gold Partner**” since many years
- ❦ Competence center of **30+ Microsoft Consultants on BI & AI**
- ❦ 200 years+ of combined Microsoft & Azure experience & expertise
- ❦ Solid expertise in new technology incl. Synapse, Databricks, DevOps, Infrastructure-as-code and Spark

Microsoft  
Partner



Gold Data Analytics  
Gold Data Platform  
Gold Cloud Platform

# Questions?



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