Data Literacy

Navigating Your Way to
Data-Driven Success!

sqlbits 2025

Data Literacy

- Is it data?
- Is it knowledge?
- Is it technology?
- Is it functional?

What do you think?

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Placeholder

What do you think is Data Literacy

Reitse Eskens

Axians

sqlreitse.com

Microsoft® Most Valuable Professional

Valerie Junk

PorcuBI

www.porcu.bi

Microsoft® Most Valuable Professional

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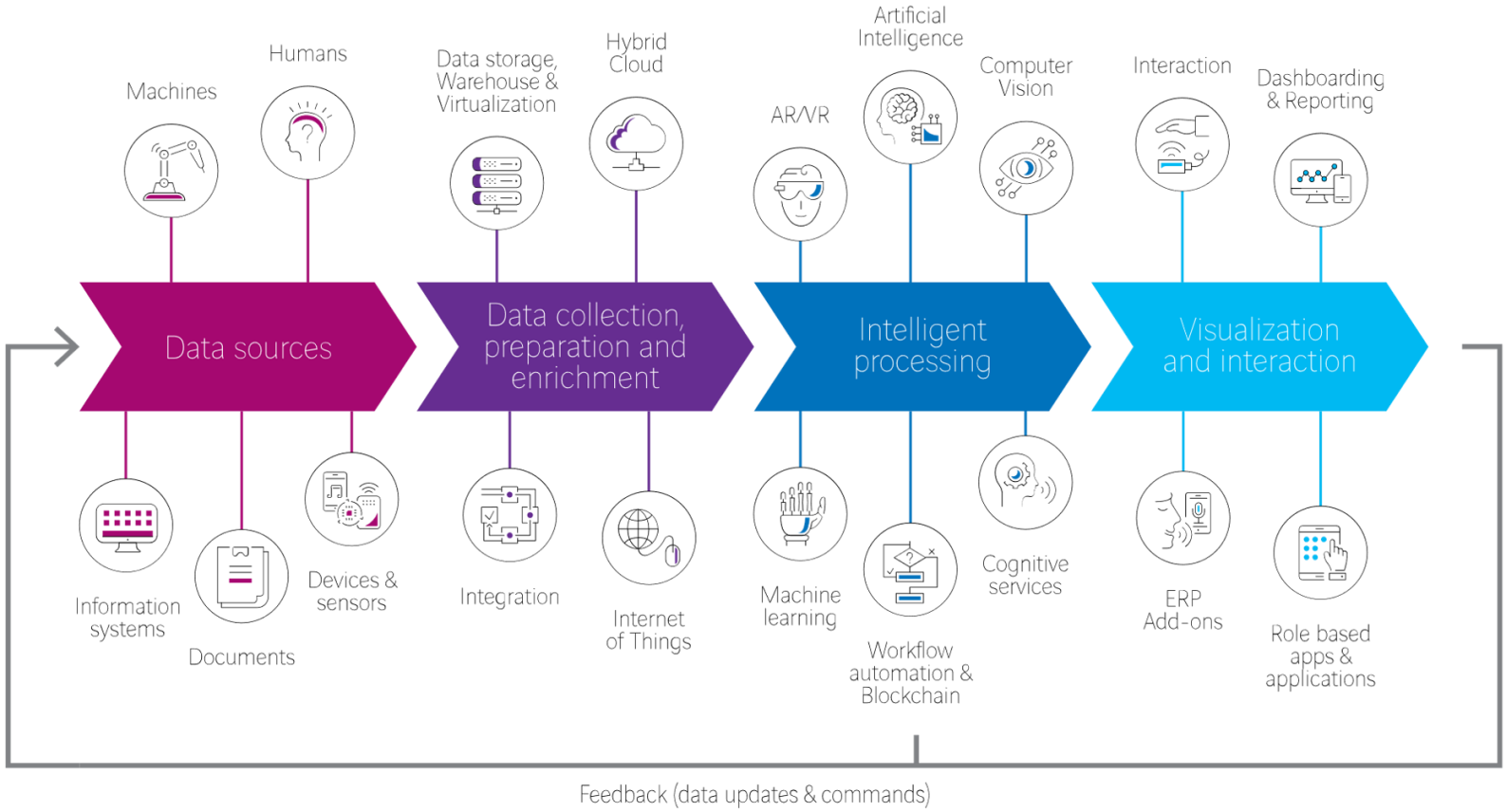
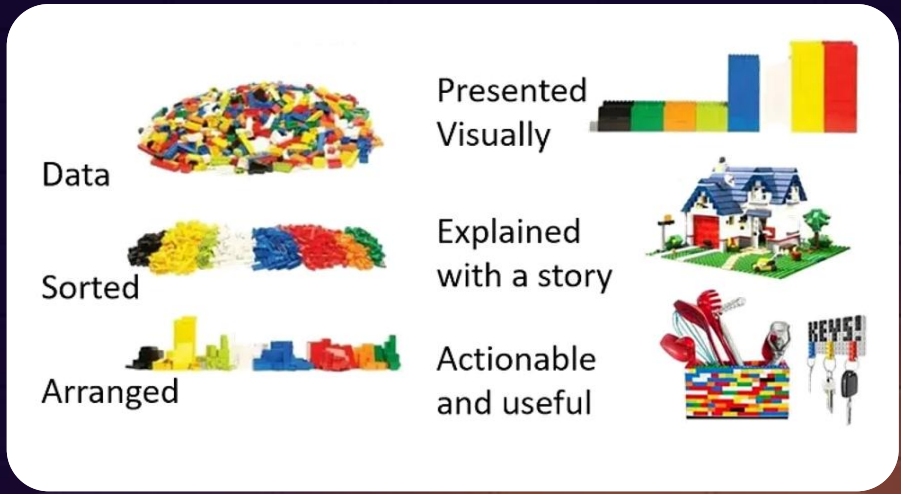
Aspects of Data



Where to start?

- Are you using data to tell a story?
- Are you telling a story using data?



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What is your starting point?

Let’s break it down!

- The definition.
- Why is it important?
- No one size fits all.
- The framework.
- Dream big, start small!

The definition

- Gartner:
- “…the ability to read, write, and communicate data in context, including an understanding of data sources and constructs, analytical methods and techniques applied, and the ability to describe the use case, application, and resulting value.”

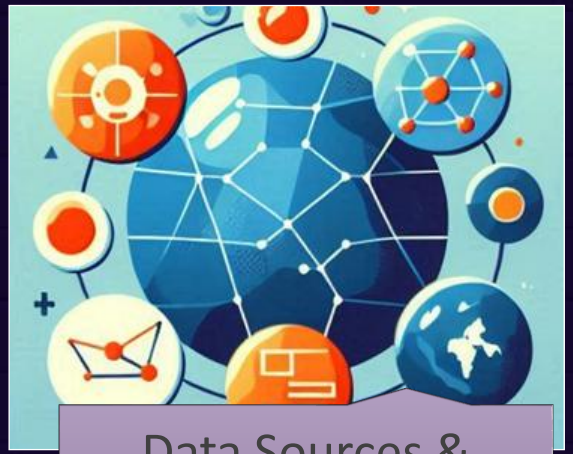
The ability to **read**, **write,** and **communicate** data in context

Read

Write

Communicate

..including understanding of **data sources** and **constructs**, analytical **methods** and **techniques** applied …



Data Sources & Constructs

Methods & Techniques

..and the ability to **describe the use case**, **application**, and resulting **value**.

Use Case

Application

Added value

Importance of Data Literacy

- Companies realize they can achieve more with data
- More advanced tools
- Increase in “modern” workforce (less gut feeling)

But

- Data initiatives lead to less real change
- Risk of ‘anarchie’
- Employees lack the enthusiasm to change the way of working

How can we make this work?

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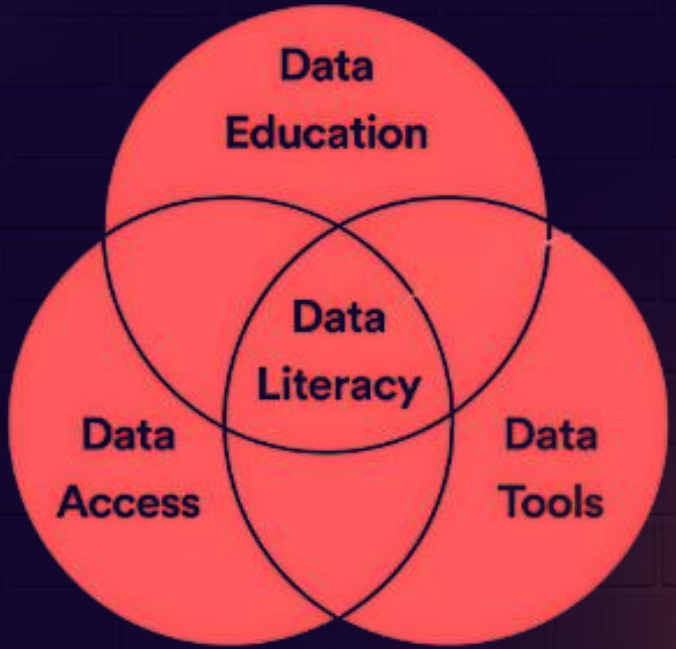
Placeholder

How do you make Data Literacy work?

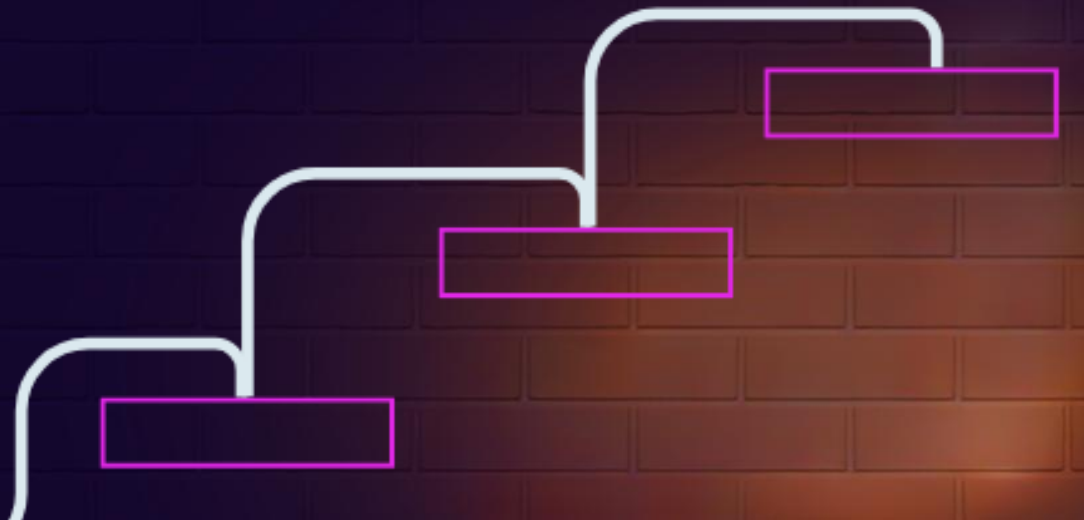
An Example: Airbnb



Customization is Key

- Content needs to be specific and customized to your work.
- Use your data, tools, and use/cases.
- What you learn is what you need! Real problems and real questions.
- Measure success

Skilling – 3 Levels



Level 1 - Consuming Data

- Consuming data.
- Working with data is not a daily task.
- Manager thinks data is important but does not take actions (currently) based on data.

Level 1 - Consuming Data

- Put the data goggles on!
- How to interpret visuals and use a dashboard?
- How can I tell a story/convince using this data?
- How does this data add value?
- Ethics and privacy.

Level

- Put th
- How
- How
- How
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Level 2 – Using Data

- Working with data.
- Employees who want to create their own dashboards.
- Combining and analyzing data.

Level 2 – Using Data

- Training in specific tools
- Combining data sources
- Dashboard Design Basics
- SQL
- Performance
- Basic Statistics
- Looking critically at data

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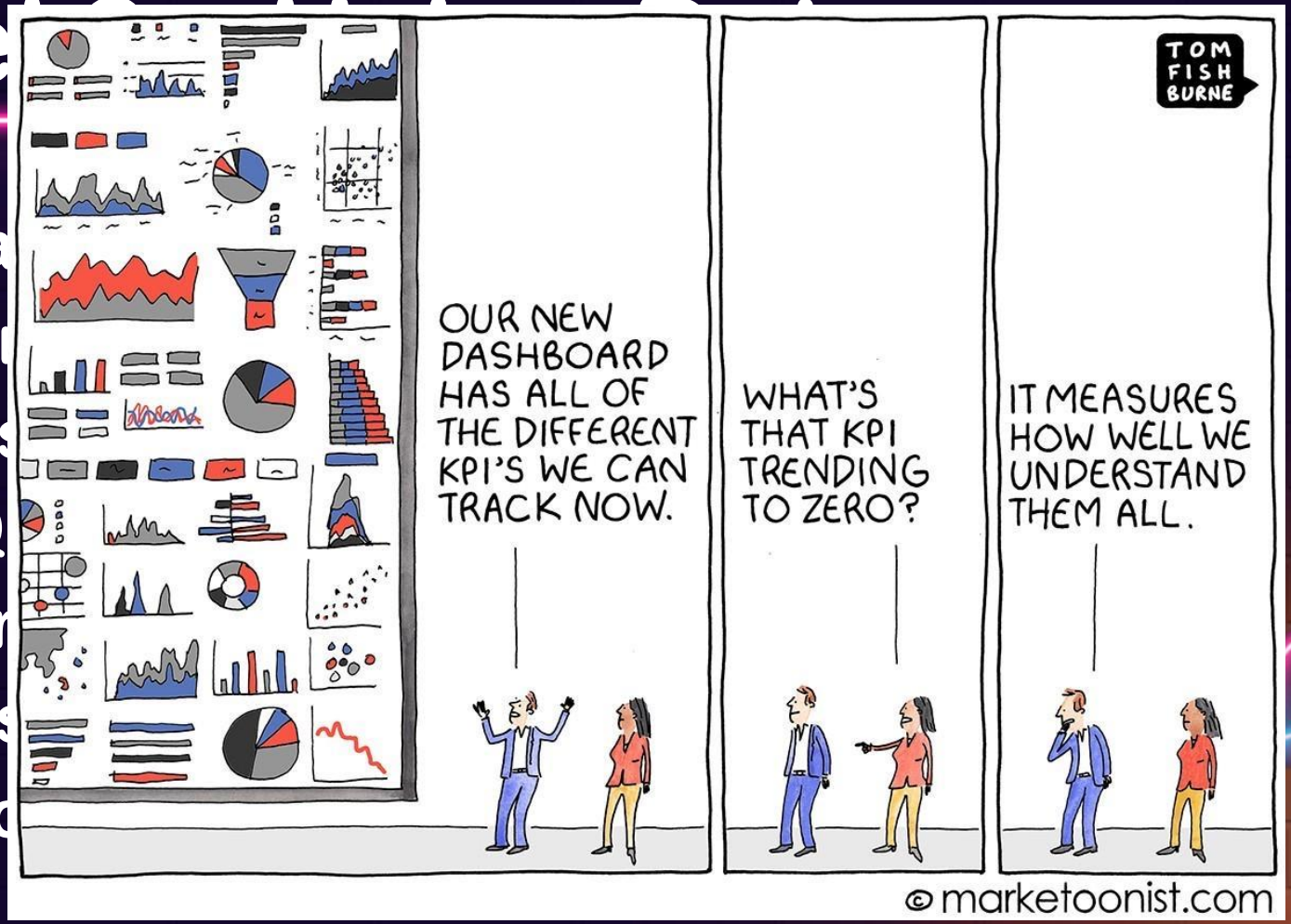
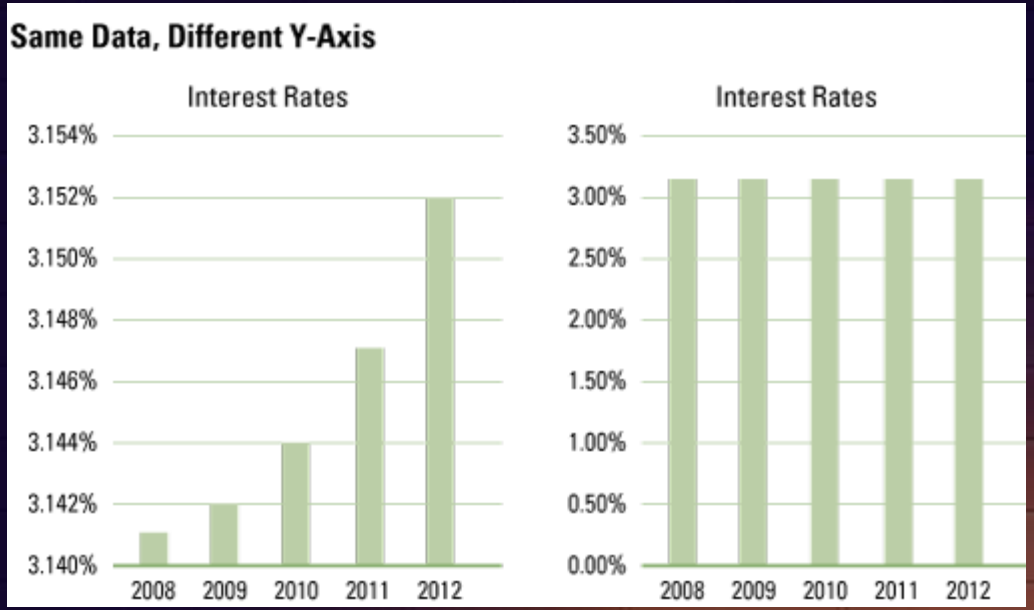


Data - Presentation



Level 3 – Data Scientist

- Employees who want to start making their own predictions based on data.
- Understand the availability and possibility of different available techniques.

Level 3 – Data Scientist

- Which technique is best to use for which problem?
- Implementation of data science models
- Machine learning
- R, Python, Alteryx
- Time series analysis and prediction
- Advanced statistics

Knowledge & Skills

- Functional (what data do I have)
- Technical (how do I get it out)
- Presentation (how do I tell the story)
- Synergy!

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Where is your company?

Starting point

Architecture Design Session

- Define what end users wants and needs.
- Define the data sources, current data platform(s) and pain points.
- Define knowledge level inside the organisation.

All good and well, but

- … If my employees want everything with data, it increases the pressure on the BI department. They are overwhelmed as it is right now!
- … can my data platform handle all the extra users?

The magical 2nd step

Think big – start small

- With 1 department, for instance HR
- With 1 domain where the data is verified, for instance, salaries
- With 1 layer, for instance, management
- With 1 skill, for instance, story telling
- With 1 level, for instance, data scientists

Key takeaway

Working data-driven:

- Data Literacy = part of the data strategy!
- Change needs time!
- Training is a must and not a “nice to have”.
- Responsibility is key.
- Track progress, celebrate successes, and show interest.

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What is your biggest takeaway?

Reitse Eskens

reitse.eskens@axians.com

Valerie Junk

valerie@porcubi.nl