How Data Thinking workshops help promote Data Literacy at Enterprises
Understanding the Data Literacy problem

Data Literacy is not a luxury anymore; it is a necessity for organizations to overcome today’s analytics challenges. Now that data analytics tools are getting better and better, we need to look to whether individuals and organizations are ready to get the most out of data to achieve better outcomes.

Developing data skills and competencies for individuals is imperative to overcome the challenge, but it is not enough to make your organization Data Fluent. Removing silos between people, data, and ideas; clear communication; leadership support; and fostering curiosity and iterative failure, are the main components of a data literate organization.

To move your organization towards Enterprise Data Literacy, you need to promote more practical, creative, and collaborative uses of data.

The Data Thinking Workshop is an excellent way for cross-functional teams to start understanding the data ecosystem at your organization and co-create data-driven and user-centric solutions.

This case study will cover a real-world experience using the Data Thinking workshop developed by dlighted - a creative data agency based in Berlin, Germany, in collaboration with members of Axis Academy and Axis Visual Analytics.

Data thinking for Data Literacy

Data Thinking is a beginner-friendly method for employees to start working with data and think about a somewhat intangible issue in a practical way.

It provides a set of creative strategies that can enable teams to:
- Develop feasible and innovative data use cases
- Explore hidden data potentials
- Improve the data understanding of employees with lower levels of Data Literacy
- Understand basic data concepts and AI technologies

In the next section, we describe our data thinking journey in solving a real-life inspired data thinking challenge.
The Challenge: Data-driven solutions for the ‘Quantified Self’

‘Quantified self,’ or lifelogging, is a movement built around collecting personal data to be able to understand various factors affecting your life. For example, people use fitness trackers to measure physical activity, or personal diaries to note the things they do on a particular day.

We explored this topic from both a user-centered perspective as well as a data perspective to identify the varying types of data metrics that could be captured (biological, environmental, social, financial, etc.) and the different use cases they could drive.

The Workshop Journey

Through a series of guided activities we tackled the following questions:

1. What are the goals of a typical ‘Quantified Self’ advocate?
2. What data can be feasibly captured to support their goals?
3. How might we add value to the life of a ‘Quantified Self’ advocate?
Workshop Outcomes

An intentionally structured approach helped create shared understanding around not only the needs of the user but also the data ecosystem. The workshop process paved the way for ideating solutions and producing a prototype of how the solution would be realized.

An empathy map that explores the goals and needs of our fictional persona Sal

A data map that identifies and categorizes data relevant to the use-case being explored

By using human-centered research techniques, creative brainstorming, and rapid prototyping, Data Thinking workshops help achieve the following outcomes:

**Empathy Mapping**
- Ask Questions/Define
- Communicate

**Data Mapping**
- Find
- Get

**Data Innovation Board**
- Find
- Get
- Communicate
- Assess and Interpret

**AI Game**
- Analyze
- Ethics and Security
- Assess and Interpret

**Prototyping**
- Visualize
- Communicate

#### Build Data Competencies
The workshop provides a safe environment to play and tinker with data and helps enhance data competencies using a series of different activities. This helps increase employee engagement and promote talent retention.

#### Data thinking mindset
By developing a data thinking mindset, employees become comfortable with the complexity around data and build a common language to co-create data solutions.

Data Thinking processes mapped to Data Literacy Competencies
From Concept to Prototype
Apart from the educational value of the workshop skills learned in this workshop can be immediately applied by cross-functional teams to build data-driven products and services that add business value.

By building prototypes and other artifacts employees can showcase how the organization can develop data-driven use cases that have a direct business impact and build leadership support for data initiatives.

“A data-driven solution designed for quantified-self advocate, Sal

Data Thinking is human-centered, experiential, and collaborative. It creates a safe space to be creative and produce interesting ideas. What’s more is that it helps promote Data literacy and is also pretty fun!

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