

WORKSHOP IN A WALLET DATA EDITION

PROJECT TEAM

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FOREWORD

This report aims to explain the developed games of ***Workshop in a Wallet***, describe how to play them individually and in a group, as well as elaborate on the problems that the workshop tackles.

Workshop in a Wallet is a workshop for collaboration that consists of 12 metaphor cards and four games. The workshop's goal is to tune participants into discussions and reflections around their understanding of data.

The workshop was developed as a part of the IDBM Industry Project course in 2021. The multi-disciplinary group of designers, business and science students has been working on finding the correct methods of explaining data as a resource in today's world.

The workshop is intended to be used and applied by anyone. It can be adapted to the needs of various kinds of groups - however, the best results can be achieved with a group of 2 to 4 people. The workshop can be used as part of any group activities or collaborative settings in a work or educational context.

This guide contains an explanation of the most profound metaphors that our team found for describing data and encapsulates the idea of the one main game in depth. In addition, it includes descriptions of three other games in the concept that remain on a more conceptual level. We conclude that these three games require further testing and designing to function optimally. Still, the main idea behind the game as well as further development steps will be listed for all games.

BACKGROUND

For a long time, economists have made a distinction between rival and non-rival goods. Rival goods lose value when consumed, while non-rival goods may be used repeatedly without losing value. However, lately, schools of thought have emerged that have argued that digital goods, information, and data are **anti-rival** in nature. They are gaining value upon use; instead of it decreasing.

Therefore, the economics around such goods should be drastically different in order to account for this characteristic. For example, for digital goods, social efficiency cannot be reached within current economic systems. Also, creating the open market valuation would require more regulations and technological constructions to be successful.

PROBLEM

Such a structural and institutional disparity is a root cause of the market failures in the digital goods and data markets. As a result, we are faced with social media monopolies, poorly working or nonexistent markets for industrial data, and many existing data markets reducing to effectively near-zero prices.

These major concepts around data are crucial to understanding the modern world. Data is deeply incorporated into our work and everyday life. Societies, governments, corporations and people are hugely dependent on data and the decisions that are made with data.

However, understanding data is not something that people learn in school during basic education or sometimes even at universities. We end up having professionals, executives and decisions who do not fully comprehend the nature of such an invaluable resource that they are operating closely with. Our aim is to change this and allow for easier, more approachable discussions around topics related to data and the data economy.

CLIENT

This workshop was developed as part of studies in the International Design Business Management (IDBM) Master's program in Aalto University for our client; Accounting Technologies for Anti-Rival Coordination and Allocation (ATARCA).

Specifically, our client is Aalto University from the ATARCA consortium. Aalto University works as the academic and research partner in the EU funded ATARCA project. Aalto's representative and our contact person for the project is Dr. Ville Eloranta.

In addition to Aalto University, ATARCA consists of three other partners.

"Aalto as a leading university, Streamr as an experienced early stage commercialiser of token technology, Novact with experience in innovative social experiments, and Demos as an experienced research impact partner, constitute a minimally sufficient consortium: science, technology, experiments, and dissemination, the latter including policy recommendations. Qbit is the company behind the current technologies for Real Economy Currency (REC) and aims to develop it further. The consortium has a good balance of academic, SME and NGO partners" (ATARCA, 2021).

WORKSHOP

Workshop in a Wallet is a pocket-sized tool that will make you think about data in a way that you have never done before.

The compact size of the workshop allows for the rethinking of data in small, easily digestible pieces - and it can be done independently or in small groups.

The workshop is based on 12 metaphor cards, each having a detailed explanation of the metaphor on the card. In addition to the cards, in the first version of the workshop there is a game to use alongside the metaphor cards. The game includes 20 sentence cards to play the game with.

OUR AIM

The workshop is designed to make people rethink data as a resource. Many of us understand data to some extent. We understand that data is collected and stored, that there are databases with rows and columns.

However, it is not common to possess a comprehensive understanding of data and its unique qualities as a resource.

The workshop aims to make more people understand data

as a resource. A resource that is as valuable as soil, which is only capable of creating value when it is processed and nurtured. A resource that is as endless as sunlight. A resource that should be available to all people equally and generate value for everyone.

The workshop aims to achieve an understanding that data is a new type of a valuable resource of our economy and a crucial part of business and innovation.

WHO IS IT FOR?

We hope this report will be useful to anyone who wants to try the Workshop in a Wallet with their colleagues, friends, family, students or classmates.

Understanding the importance of data and discovering the key qualities of it is more important now than ever before. Thanks for being curious about it!

ABOUT THE WORKSHOP

WHAT THE WORKSHOP CONSISTS OF

**MEET WORKSHOP IN A WALLET -
A POCKET-SIZED TOOL THAT
WILL MAKE YOU THINK ABOUT
DATA IN A WAY THAT YOU HAVE
NEVER DONE BEFORE.**

METAPHOR CARDS

The workshop is based on 12 metaphor cards, each providing a detailed explanation of the metaphor on the card.

Q&A CARDS

In the first version of the workshop there is one game to use alongside the metaphor cards. The game includes 20 Q&A cards with sentences that provoke thinking.

If you decide to order the physical version of the workshop, it will look something like this.



FULL WORKSHOP

During the project, ideas for 3 more games were developed and they will be described later in the report. Each idea can be developed further and played as a game using different metaphors. Games are not explicitly connected and can be used independently from each other.

In the full version of the workshop, there will be four games altogether that formulate a full workshop.

The physical version of the full workshop, will include a wallet, the cards and a notebook.

WHY METAPHORS?

Plain language is often not enough to describe complex concepts. That's when the metaphors come into play.

A metaphor, by definition, is a word or a phrase used to describe something else in a way that differs from its conventional use in order to show that the two things possess similar qualities (Oxford Advanced Learner's Dictionary, 2021).

To enable better understanding of data through different lenses, describing abstract concepts, making analogies between two topics, bringing attention to the similarities and differences are the reasons why metaphors were used in our workshop.

WORKSHOP INSTRUCTIONS

While the workshop is designed to provoke new thoughts on how data is traditionally perceived, it also aims to provide easier access to the data economy on a conceptual level. We have found that researching and navigating concepts of the data economy of today can be difficult and time-consuming, as information is scattered and fragmented across a variety of different forms of media. Traditional views on how data should be utilized, shared and compensated for continue to prevail.

WORKSHOP PREPARATION

Workshop in a Wallet is designed for senior executives who already possess an established knowledge on data and the data economy on a broader level.

Still, the workshop is developed to be accessible for all - even with no prior knowledge.

New ideas and insights on how to utilize or perceive data can be extracted from partaking in the workshop. However, in order to get the most out of the workshop, having a basic understanding on what data is and how it is used by businesses and people around the world goes a long way.

And even if these topics sound tricky to you, there's no need to panic. For a simple pre-exercise, it's enough to write down or visualize with pen and paper what you already know about data. Just writing data-related words that you are somewhat with goes a long way!

As for practical preparations, all that is needed to participate in the workshop is to have the workshop materials provided by us. You can either use the physical deck of cards or alternatively in a digital format according to your preference.

ALLOCATE THE RIGHT TIME, PEOPLE AND PLACE

Workshop in a Wallet is unique in the sense that instead of being a 3-hour-long workshop that requires a designated facilitator, we have opted to develop our concept in a way that allows for utmost flexibility and modularity.

There is no need to allocate several hours for conducting the workshop or any of its games, as the games can be played individually or combined with each other as desired. Our main game (see chapter 2 for further details) is designed in a way that it can be used as a standalone game or simply as a warm-up exercise to spark creative thinking and alternative perspectives on data in e.g. a workshop or a classroom setting. Other games follow suit and aim for easy

access, with no preparations required beforehand apart from gathering the workshop materials provided by us.

The games are designed to function without a facilitator and they can even be played individually. The group size of the games is flexible, however we do recommend splitting larger groups into groups of four (4) people each for an optimal setting. Still, we won't mind if you feel like going bigger or smaller - your choice!

Finally, the workshop can be taken in both digital and physical format. The cards used in the workshop can be downloaded in PDF format and printed out or used in a fully digital setting using e.g. Miro.

LEARN THE METAPHORS

To make the unique qualities of data and key concepts of the data economy easier to grasp, our team has conducted extensive research by analyzing research papers, articles and interviewing data economy professionals. Through this research, we were able to narrow down to 12 metaphors that we find the most useful in

describing data economy related concepts in an easily digestible manner.

We have gathered the 12 metaphors below - and the following pages show all of the metaphor cards that are utilized in this workshop.

DATA AS...

information
water
oil
capital
lifeblood
soil

labor
sunlight
currency
art
equity
infrastructure

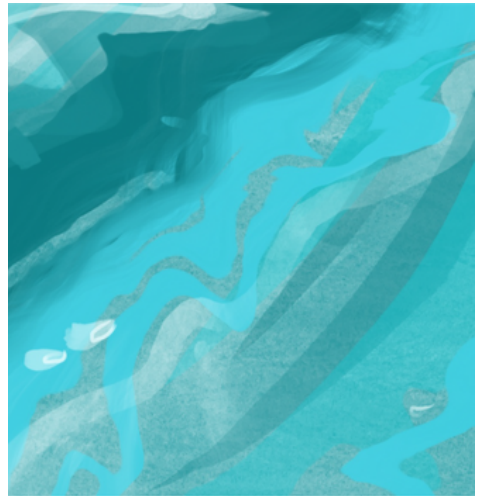


DATA AS INFORMATION

It is often said that data in itself holds no value - what does is the information derived from it.

Early humans are claimed to have survived and evolved primarily through sharing information and knowledge. Still, when it comes to data, many are hesitant to share it with others.

If we shared data just like information and knowledge, could our society become faster to evolve? What are all the wicked problems that we could already solve with the data that we possess?



DATA AS WATER

There is one thing that living creatures cannot survive without - water. Everyone has access to water - however, it's not always clean, its sources might not be reliable and in many countries, it's used as a means to rule over people.

Water is vital for all lifeforms to survive and grow. In a similar way, for the sustenance and growth of businesses, data is absolutely critical and has no alternative.



DATA AS OIL

The concept behind "data as oil" is that just like oil, raw data is not inherently valuable - rather the value is created when it's gathered completely and accurately, connected to other relevant data, and done so in a timely manner.

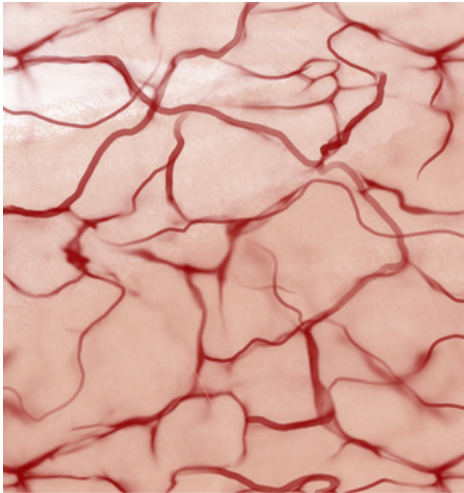
However, the reality about oil is that its supply, as well as its use cases, are finite. The reality with data is the opposite: as long as there are humans around, we will always create more data.



DATA AS CAPITAL

Businesses have relied on human, financial and intellectual capital to grow and compete over the last few centuries. Now there is a new form of capital - data, which is essential for businesses today to survive and thrive in the digital age.

The collection and circulation of data is a vital element for an increasing number of sectors of contemporary capitalism.



DATA AS LIFELOOD

Data flows through organizations or other systems like blood in the circulatory system - and each day, each hour, there is a myriad of touchpoints to that "static" data. To the modern economy, data is the crucial fluid that carries nutrients (information) to those functions that consume it.

Understanding how the body works will help us better understand the vital part data is playing in all the related systems.



DATA AS SOIL

To harness value out of soil, one has to take constant care of it. It's not simply a raw material to harvest - the history of humankind has survived by cultivating crops on nutrient-rich soil. While soil has little value on its own, it can bring enormous value when something is grown from it.

In the same vein, data brings little value when it's just ones and zeros lying around - it's what flourishes from it that can bring prosperity. Get your hands dirty!



DATA AS LABOR

Are we as individuals able to sufficiently harvest the fruits of our labor when it comes to data?

Data as labor is all about fair compensation. Each of us supply data to companies in one way or another, yet it's not necessarily something that we are proud of or are properly rewarded for. Were all data suppliers incentivized, they could provide high-quality data for the digital world around us to prosper.

What if the people supplying the data were to form a union?



DATA AS SUNLIGHT

"It is like sunshine — we keep using it, and it keeps regenerating." - Ruth Porat, CFO of Google

Every second we are generating vast amounts of data - and most of it is wasted. The value that can be derived from this data depends on how well we are able to capture it, the point of capture, and how quickly we can process it to fulfill our needs - just like sunlight.

It is a resource that won't deplete - but without harnessing its power, we're missing out.



DATA AS CURRENCY

What if internet users could use their own data as payment?

In traditional currency transactions, people exchange cash for goods and services of equal value. But when data is being exchanged, the transaction benefits one side over the other, at least today. Generators of data get practically nothing. Their data is captured and used to sell them more things in a targeted manner.



DATA AS ART

"The real value of art is not always revealed by the price set upon it." - Jeffrey Loria, art dealer

It has taken a great amount of creativity to build as many concepts and technological breakthroughs using data as building blocks. Furthermore, both art and data are often perceived as very abstract concepts - something that divides opinions and is difficult to completely understand.

Who determines the value of art? Does anybody have the power to say what is good art and what isn't?



DATA AS EQUITY

With the growth of data and AI, we expect decisions made by machines to be inherently equal.

However, data is handled by people who have their own subjective experiences and potential biases. Various forms of interpretation biases can alter our understanding of data, leading us to selectively value or dismiss certain outcomes over others.

We should, by all means, avoid these biases and ensure that data can provide equity for each individual.



DATA AS INFRASTRUCTURE

To see data as infrastructure holds an inherent value of neutrality. It's accessible for all regardless of age, gender or class and crucial for one's everyday life. People need to power their homes, commute to work and buy groceries. Without infrastructure, even the most basic of everyday tasks become difficult.

Still, a well-functioning infrastructure takes plenty of resources and enormous efforts to build. Who should bear the responsibility and who should take the cost? Have we built a neutral infrastructure around data?

GAME 1: QUESTIONS & ARGUMENTS

Data is the new _____
of the digital economy.

The main game of the workshop is called Q&A – Questions and Arguments. The goal of this game is to better understand the unique qualities of data by reflecting upon the materials and concepts described in the metaphor cards and making their common characteristics with data explicit.

The game includes:

- 12 metaphor cards
- 20 Q&A cards

The players utilize the 12 metaphor cards in this game to view data as something entirely different. The players need to think about data as something else, and play the game by replacing the word data with other words.

The 20 Q&A cards have both questions and statements related to data, and the players need to fill in the blanks with their metaphor card of choice. It's up to the player to decide their desired approach - sometimes the combination can fit surprisingly well, sometimes it can be for the sake of provoking thoughts and sparking interesting discussions around what could be.

How to play the game?

The game is optimally played by a group of 2-4 players - however, the group size is flexible and can be adjusted according to the needs of the participants.

First, the deck with the 20 Q&A cards is put on the table with the sentence side down, after which the 12 metaphor cards are divided equally between the players. One player lifts one Q&A card from the deck and puts it on the table for everyone to see.

Now, the task is for everyone to look at their metaphor cards and choose which card do they think would suit best in the Q&A cards' question or statement. Even if the player feels that none of their metaphor cards match the question or statement in the Q&A card, we encourage players to go for strange and thought-provoking combinations. These can spark surprisingly insightful conversations among the players and can offer new perspectives for seeing data.

After choosing a metaphor card, players are to explain their choice to the other players, with the goal being that there is discussion on the thoughts and ideas that emerged. The game goes on until all of the deck of Q&A cards are depleted. The duration of the game is between 20 and 40 minutes depending on the involvement and enthusiasm of the participants.

The 12 metaphor cards

In the metaphor cards the word data is juxtaposed with another word that the player will use to fill in the blanks of the Q&A cards.

The idea behind having metaphors in the cards is to get players to think more about their experiences with data and how data manifests itself.

This is done by replacing the word data with another word or concept that is more familiar to the players. This, in turn, makes players think more closely about data in their everyday life.

The 20 Q&A cards

The 20 questions and statements challenge the players to think about data as something entirely different. In this way the players are guided to think about their thoughts around data, and to share their knowledge and thoughts with each other.

Peer learning is key in this game, as it opens up new perspectives around data for the players. Suggestion to the players is to use constructive feedback and emphasize the development of critical thinking.

Additionally we made a facilitator's matrix that shows the answers to the 20 questions and statements. However, the final combination of cards depends on the player's choice.

See all 20 Q&A cards in the next few pages!

Circulating _____
creates wellbeing.

Can this be applied to data?

Which one is more valuable,
_____ or data?

Why?

Data is the new _____
of the digital economy.

Which one would you use
as the main resource for
starting a company,
_____ or data?

What if we ran out of _____?
Is that possible with data?

Data is like _____ — we
keep using it, and it keeps
regenerating.

There is enough _____ in the
world for everybody to enjoy.

What if we stopped
sharing _____?

What if we stopped
sharing data?

How might a fair system on
sharing _____ look like?

What about data?

_____ should be
accessible to everyone.

People shouldn't have to
worry about the
exploitation of
_____.

_____ should be considered
as a source of equity,
as should data.

What if _____ was governed
by a monopoly or an oligopoly?

What if data was governed
this way?

How might _____ contribute
towards common good?

What about data?

There is no extra cost in
producing an additional unit of
_____.

What is the biggest change
you would like to see
in the politics around
_____?

Apply your answer to data.

Owning _____ is useless
unless you use it.

Same goes with data.

_____ can be used
simultaneously by
multiple people.

Same goes with data.

_____ gains value
when it is used.

Same goes with data.

Where does the value of
_____ come from?

What about data?

RECOMMENDATIONS FOR FURTHER DEVELOPMENT

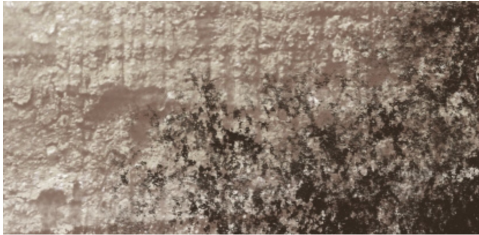
During the development of the concept Workshop in a Wallet, several games were designed and tested.

We introduce three complimentary games to be explored and developed further as part of the full workshop.

Overall, the full workshop needs development in three levels: 1) finalizing the three games 2) designing how the games work together and support each other and 3) creating a facilitator's guide or instructions for self-facilitation. All three require testing and iterating, preferably based on real life settings.

Our estimate for allocating time and money for the development is 3-5 months workload for a (service) designer with real-life situations such as other workshops or lectures where testing can be implemented in.

GAME 2: EARTHING DATA



Place the word **DATA** in the blanks and read the chapter.
Does it make sense? Why or why not?

_____ provides ecosystem services *critical* for life.

_____ acts as a filter and a growing medium. _____ provides habitat for billions of organisms, contributing to biodiversity. _____ supplies most of the treatments used to fight diseases.

Humans use _____ as a foundation for our cities and towns.

Healthy _____ is crucial for human life and wellbeing, and yet _____ across the globe are being threatened and damaged by human activities.

Earthing data is a game that makes you consider data similar to natural resources; *soil, water and oil*. These are all limited resources, and crucial for our living environment. The game works as a tool for reflecting intangible data to a tangible natural element.

Purpose

The purpose is to consider data through the lens of essential raw materials in our world. How should we nourish them? The comparison allows us to think for example if access to data should be seen as a human right. Or reflect how much cultivation data needs to turn into an asset?

How the game is played

The game links the appropriate metaphor card with a chapter of text that describes the essential qualities of the raw material. However, it leaves the raw material word itself blank, to be replaced instead with the word data. After reading, the participant is asked to reflect upon the similarities and dissimilarities with data and the metaphor.

Motivations

The game is inspired from learning materials for new languages. When learning a new language, words are given context in the form of example sentences, and short stories. The context helps in giving meaning to new words. The idea with placing the word data into new context, is to create new meanings and new associations and break old ones. During our research, we interviewed teaching professionals from both elementary school and university, and found out that giving context is key.

Next steps

The game was tested as an individual task with the opportunity for reflections on the similarities and differences afterwards by sharing thoughts with us. To develop this game further, the following steps are required: 1) define and develop the flow of the game; how is the correct metaphor card paired with the appropriate chapter?, 2) what comes after; how are the similarities/differences reflected upon? 3) test and validate in a group setting.

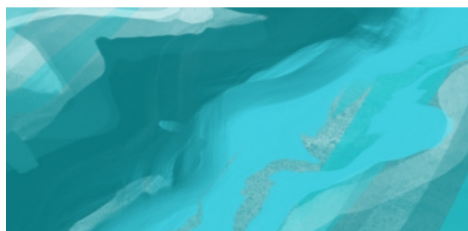


Place the word **DATA** in the blanks and read the chapter.
Does it make sense? Why or why not?

Whether you like it or not, _____ is still the most important commodity in the world. Everyday we use hundreds of things that are made from _____.

_____ is also important for the number of jobs they provide. Tens of thousands of people work in the _____ industry. Each week Britain produces about two million tonnes of _____. This is worth about £37 million pounds a day to the people of Britain.

In fact, our world would almost grind to a halt without _____. Factories would stop running. So would cars. Airplanes would be grounded. Tractors on the farm would sputter to a standstill and rust.



Place the word **DATA** in the blanks and read the chapter.
Does it make sense? Why or why not?

Safe and readily available _____ is important for public health, whether it is used for drinking, domestic use, food production or recreational purposes.

Improved _____ supply and sanitation, and better management of _____ resources, can boost countries' economic growth and can contribute greatly to poverty reduction.

In 2010, the UN General Assembly explicitly recognized the human right to _____. Everyone has the right to sufficient, continuous, safe, acceptable, physically accessible, and affordable _____ for personal and domestic use.

Data is a unique resource.

However, it can be described to have some similarities with natural resources such as water, oil or soil.

Write your own reflections on the similarities and differences you thought of after reading the text.

Did something stand out as preposterous?

GAME 3: BUSINESS SHARING NETWORK 180°

Business sharing network 180° is a complete turnaround game for how assets are seen in a company setting. It reinforces you to co-operate and share your company data within a small circle of 3-4 members.

Purpose

This game treats data as possession; something that could be utilized more with little effort, and more trust. The linked metaphors are: *currency, information and infrastructure.*

Data is a perfect resource to base cooperation around new innovation, but trust needs to be generated first. This game gives a tasting of what might be born from sharing data within a small network.

How the game is played

The game starts with formulating a group of 3-4 members who establish a community for sharing data. The mission of the network is to “Stop sitting on top of data and make it circulate”.

Each member first individually fills in their own company (or imaginary company) information; name, field of expertise and type of data that the company possesses.

BECOME A DATA BILLIONAIRE!

Create a network of 3-4 members, companies and/or organizations, to share you data.

Stop sitting on top of data. Make it circulate.



BECOME A SUPER GENIOUS WITH DATA!

Create a network of 3-4 members, companies and/or organizations, to share you data.

Stop sitting on top of data. Make it circulate.



BECOME A SULTAN OF DATA INFRASTRUCTURE!

Create a network of 3-4 members, companies and/or organizations, to share you data.

Stop sitting on top of data. Make it circulate.





OUR DATA COMMUNITY / MEMBERSHIP CARD

Fill in your company name, area of expertise and at least one type of data that your company possesses, have access to or can collect.

Company name

Business area / area of expertise


Type of data your company possesses, has access to or can collect.

The discussion of sharing and creating new value from data (monetary, societal, effectiveness) within the community can be directed 1) in a structured way by using the **ecosystem motivation matrix** (Cicero, 2017) OR 2) in a more unstructured way by giving the task to **ideate new services** from the shared data pool by, depending on the participants and aim of the workshop.

Afterwards, the teams come together and share some of their ideas and findings from their data sharing community.

Data is worthless unless you use it. Also sometimes the value of data can be unknown beforehand.

1. Place the name of each member of your data sharing community to both left AND top columns (=grey).
2. Think of the data you identified in your community membership cards.
3. Mark what data you have to share between the members and what new value (services, products, revenue) can come out of it in the columns.

gives to 	NGO	individuals	regional officials	
NGO		visualizations of information	complementary data	
individuals	observations, information			
regional officials	complementary data	recommendations		

Motivations

Our main target group included professionals that work in data related business fields. Thus, a game that makes data trading concrete to their daily work life, but in a new way, can have an impact on participants' thinking, and eventually action. The commonly used motivation matrix, or other innovation methods, provide a familiar ground to discuss data.

Next steps

The game puts the participants hands-on with sharing data and spotlights the immediate effects of sharing. The flow of the game is quite easy to grasp and it works. However, to develop this game further, redesigning the use of metaphors in this game is required; how might the metaphors be utilized in the game? Could the metaphors help bypass the fear or sharing real life company data?

GAME 4: DATA LITERACY



Data literacy game is based on creating new vocabulary for data. The game approaches the unique qualities of data by pointing out the infinite qualities of sharing it with others.

Purpose

New understanding sometimes requires new words altogether. As the data economy does not respond to the rules and restrictions of business as usual, it could benefit from a new vocabulary. This game allows anyone to try to come up with better or different explanations around data.

How the game is played

The first phase of the game inspires participants to think of data as inexhaustible, something that doesn't wear out or lose its value at any point from usage, just like sunlight, art or information.

Then participants are asked to think whether data is, in fact, like this and how they would describe data in three words. They write the words down and combine them into one new word. A word that doesn't need to make sense at first. The final task is to take some minutes to think how they would explain this new word and its meaning to others. They write the explanation down as well. After the individual work participants come together and share their words and explanations.

Motivations

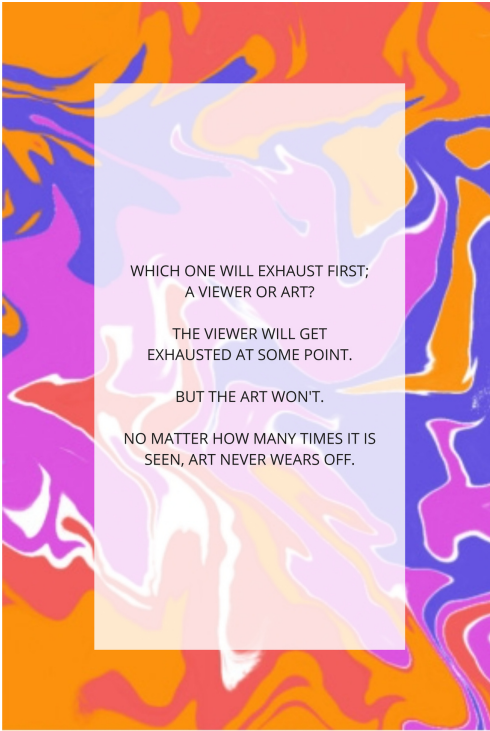
From the beginning of this project, it became clear that behind the difficulty to understand the concepts of the data economy, was the fact that the terminology today, is insufficient to describe them. From our interview with Sitra's expert Jyrki Suokas, we found out that at Sitra they come up with their own combinations of words, when there is a need for it (Suokas, 2021).

This inspired us to come up with a simple game of formulating new words by merging two or three of them together. Once the new word is created, the best way to learn it is to explain it to others. Hopefully, this also liberates participants from the restrictions of the imperfect vocabulary of today.

Next steps

The data literacy game is the most open-ended game of the workshop. The explanations that are created in this game might be valuable to collect somewhere and be shared to actually develop the new vocabulary. To develop this game further, the following steps are required:

- 1) define and develop the flow of the game; how do the appropriate metaphor cards (sunlight, art, information) lead to the task?
- 2) what comes after; how might we collect and share the new words and explanations?
- 3) test and validate in a group setting

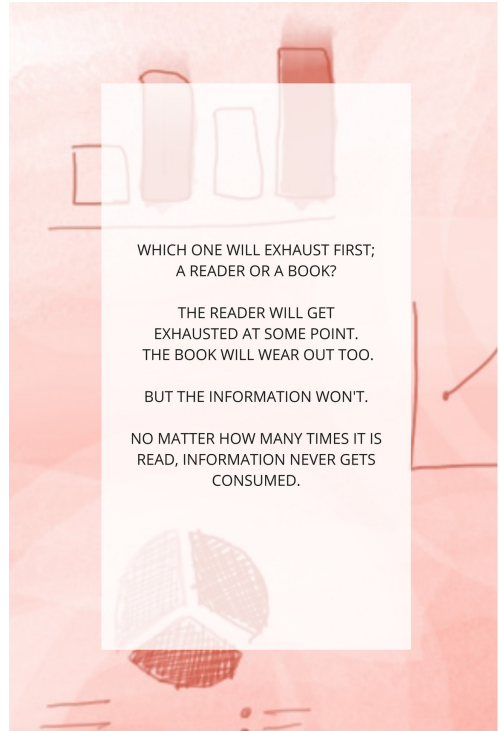


WHICH ONE WILL EXHAUST FIRST;
A VIEWER OR ART?

THE VIEWER WILL GET
EXHAUSTED AT SOME POINT.

BUT THE ART WON'T.

NO MATTER HOW MANY TIMES IT IS
SEEN, ART NEVER WEARS OFF.

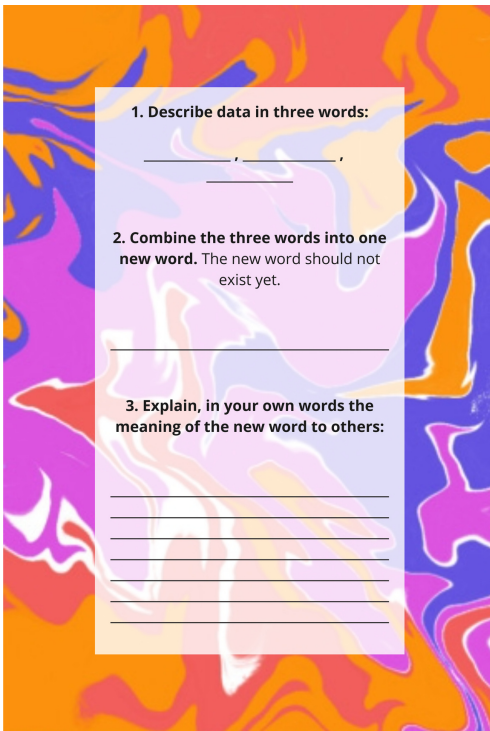


WHICH ONE WILL EXHAUST FIRST;
A READER OR A BOOK?

THE READER WILL GET
EXHAUSTED AT SOME POINT.
THE BOOK WILL WEAR OUT TOO.

BUT THE INFORMATION WON'T.

NO MATTER HOW MANY TIMES IT IS
READ, INFORMATION NEVER GETS
CONSUMED.



1. Describe data in three words:

_____ , _____ , _____

2. Combine the three words into one new word. The new word should not exist yet.

3. Explain, in your own words the meaning of the new word to others:



1. Describe data in three words:

_____ , _____ , _____

2. Combine the three words into one new word. The new word should not exist yet.

3. Explain, in your own words the meaning of the new word to others:

CONCLUSION

While the IDBM Industry Project course has come to a finish, we don't believe this to be the end of the workshop. Our vision for the workshop is that it will be improved and iterated upon - and to allow for this, we have licensed it under the Creative Commons license (CC BY-SA). This is also aligned with one of the requirements communicated in the beginning of the project by our client, that the end deliverable should be freely distributable and shareable to anyone, which this license allows for.

We have also taken future iterations into consideration during the development of our workshop - new sentences and cards can easily be developed and utilized for the main game and we hope that individuals who use this workshop do so to get the most out of it.

Specifically, the CC BY-SA license used "lets others remix, adapt and build upon your work even for commercial purposes, as long as they credit you and license their new creations under the identical terms" (Creative Commons, 2021).

Our belief is that just like data, sharing and distributing our workshop to anyone brings more value than building barriers around it - therefore we encourage individuals to share and use the workshop as well as iterate and create adaptations of the workshop, and bring those available to the world.



REFERENCES

ATARCA. 2021. *Who we are*.

Retrieved on 15th June 2021 from <https://atarca.eu/partners/>.

Creative Commons. 2021. *About The Licenses*.

Retrieved on 6th June 2021 from
<https://creativecommons.org/licenses/>.

Cicero, S. 2017. *Ecosystem's Motivation Matrix, Platform Design Toolkit 2.0*.

Retrieved on 10th June 2021 from
<https://stories.platformdesigntoolkit.com/evolving-user-research-into-the-age-of-platforms-ecosystems-9ca549f81d76>.

Oxford Advanced Learner's Dictionary. 2021. *Metaphor*.

Retrieved on 15th June 2021 from
<https://www.oxfordlearnersdictionaries.com/definition/english/metaphor>.

Suokas, J. 2021. *Interview*.

