



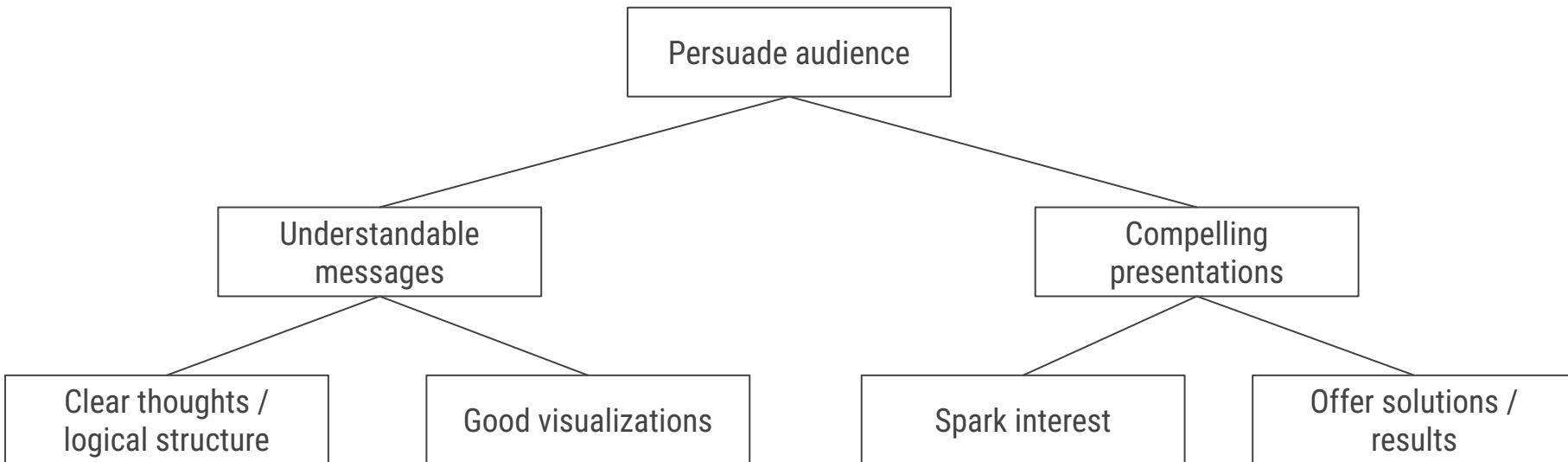
LOGICAL STRUCTURING WITH THE **THE PYRAMID PRINCIPLE**



HOCHSCHULE OSNABRÜCK
UNIVERSITY OF APPLIED SCIENCES

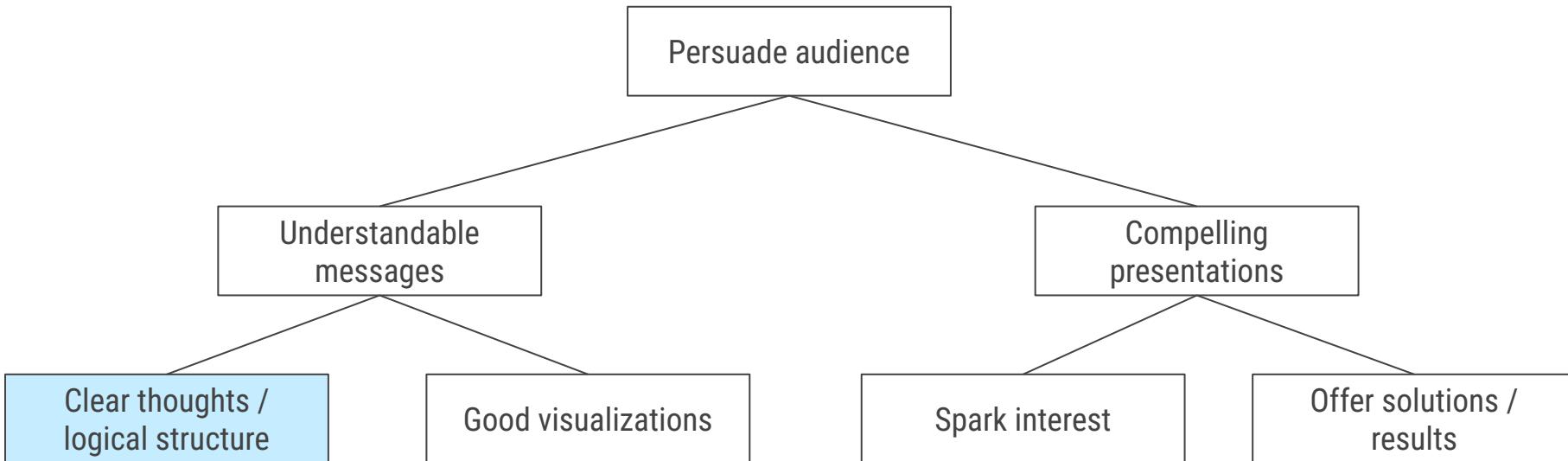
MOTIVATION

To persuade our audience, we need to create **understandable messages** and wrap them in a **compelling presentation**.



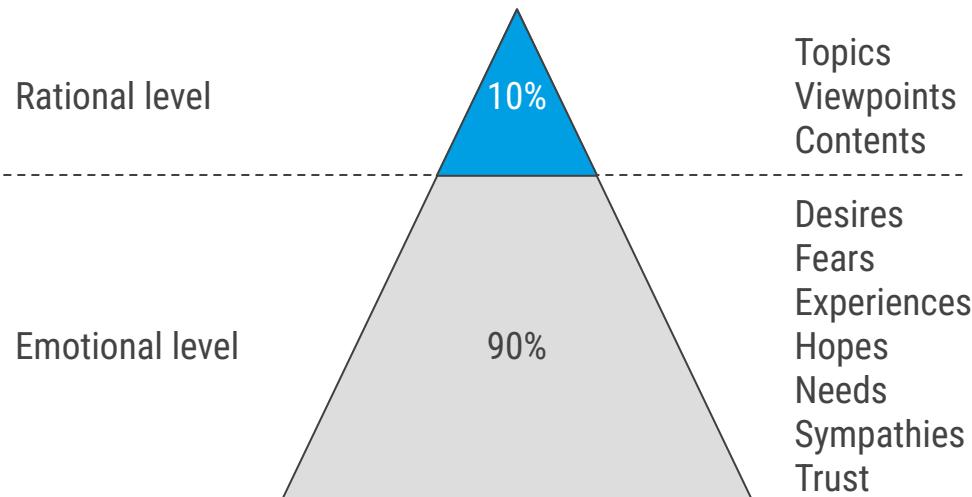
MOTIVATION

To persuade our audience, we need to create **understandable messages** and wrap them in a **compelling presentation**.



MOTIVATION

Problem: Only about 10% of messages are absorbed by humans on a **rational level**. We receive 90% on an emotional level.





EXAMPLE: E-MAIL

Dear Shirley,

Remember last Saturday afternoon when I was playing in the park with my boyfriend and you came over, and he told me that when my back was turned, you kissed him?

And also, on Sunday when you came to my house and my Mom made you a tuna fish salad for lunch and you said: "Yech! That's the worst salad I ever ate!"?

And yesterday, when my cat brushed against your leg, you kicked her and threatened to sic your dog "Monster" on her?

Well, for all of these reasons, I hate you, and I no longer want to be your friend.
Lucy



Dear Shirley,

I HATE you. Here are my reasons:

1. You stole my boyfriend.
2. You insulted my mother.
3. You scared my cat.

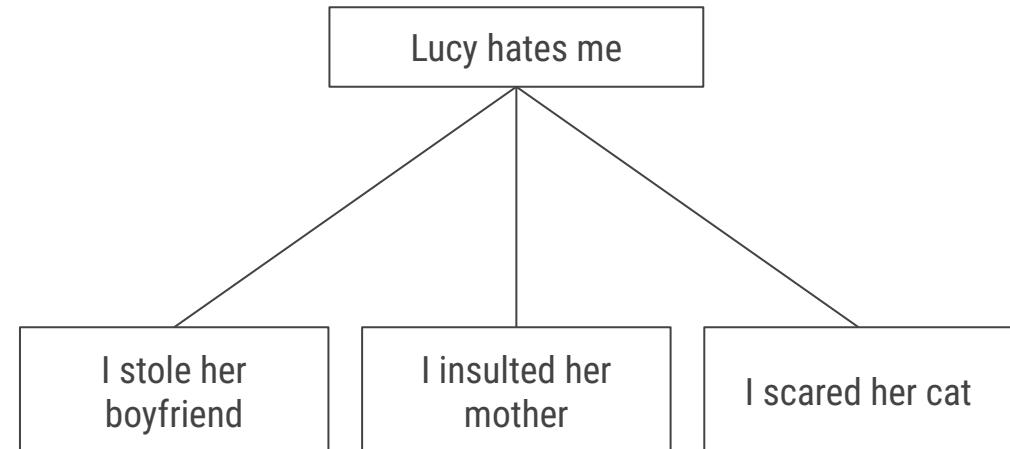
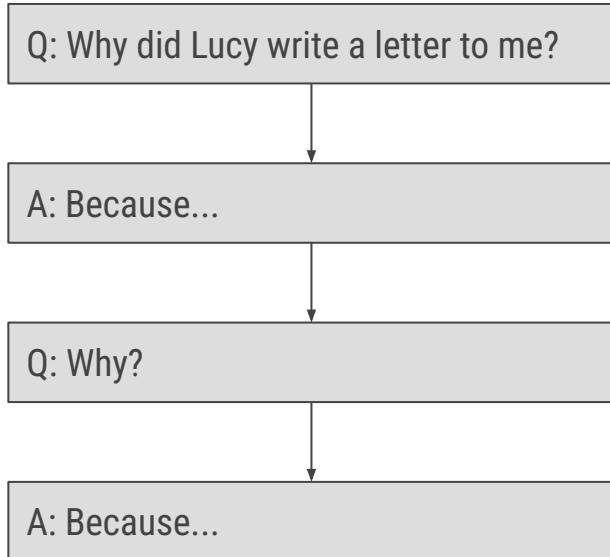
Lucy

Key message

Arguments supporting the key message

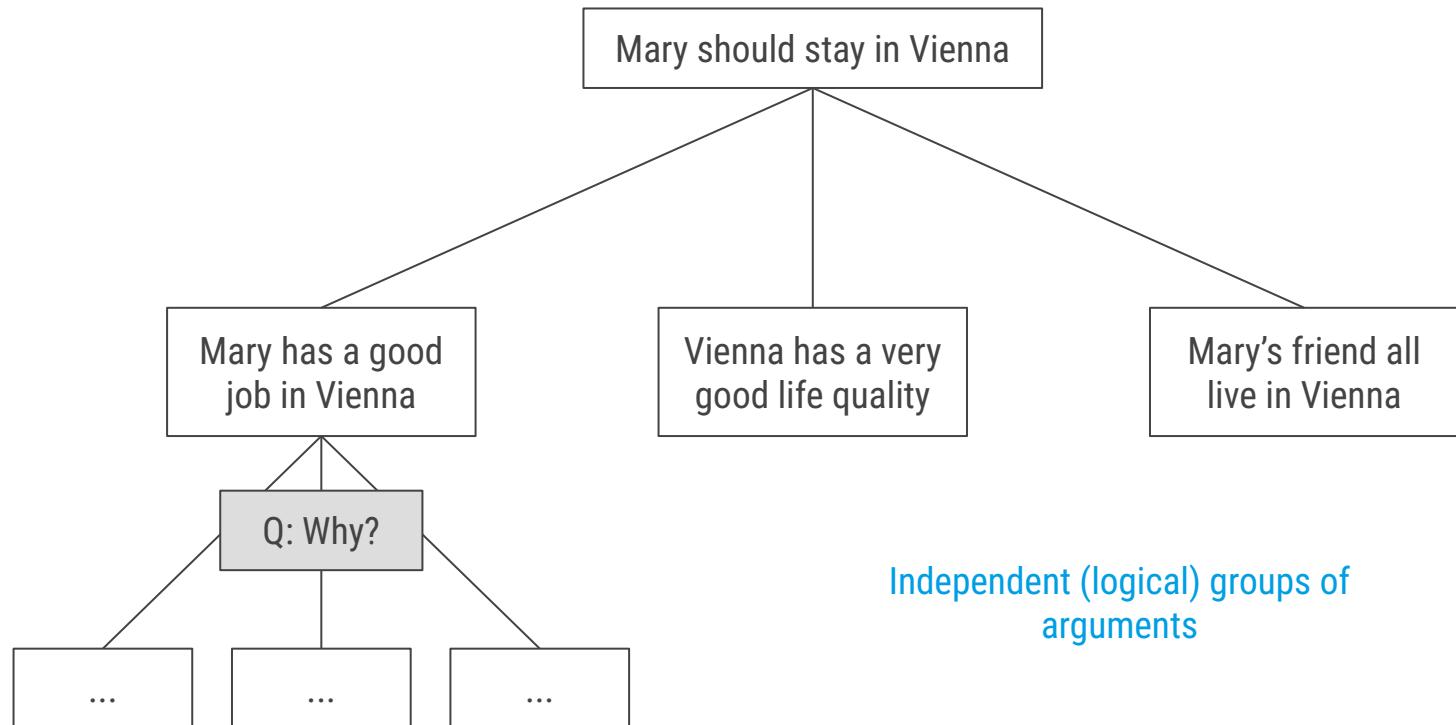


EXAMPLE: E-MAIL



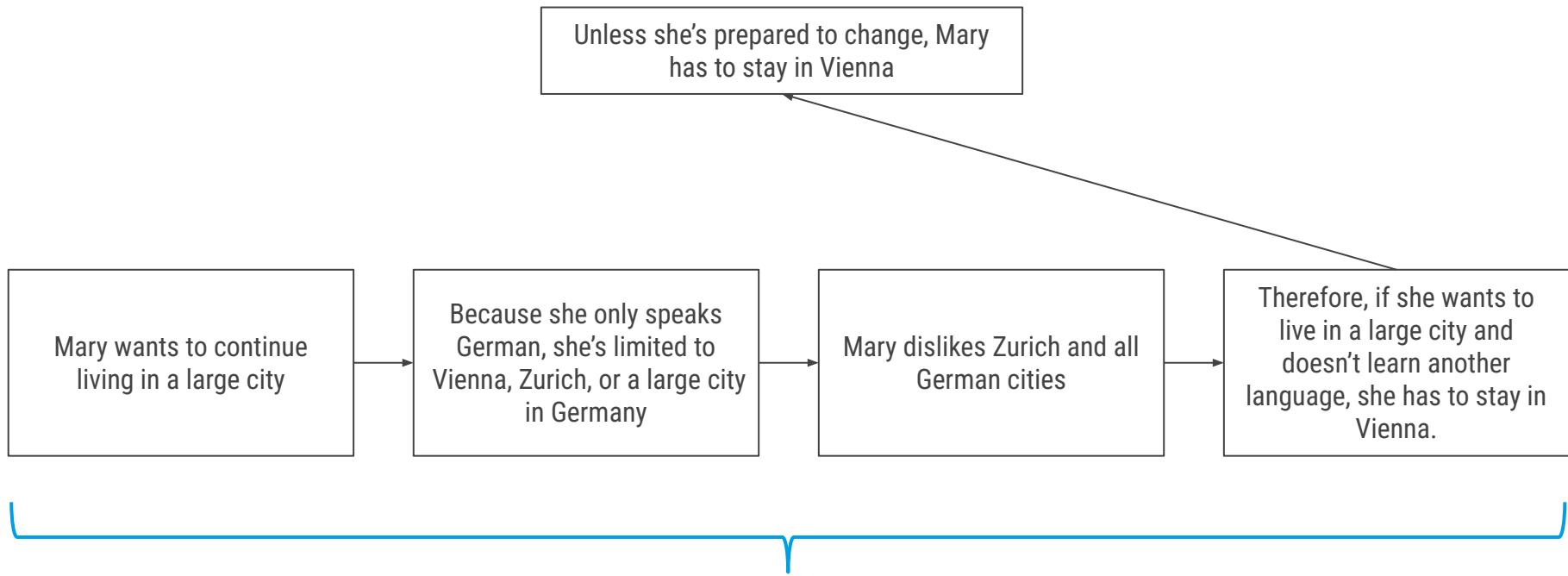


INDUCTIVE VS. DEDUCTIVE LOGIC





INDUCTIVE VS. DEDUCTIVE LOGIC



Logical chain of reasoning



P

V

EXAMPLE 2: E-MAIL

Hello boss,

Hans Meister called to say that he won't be able to make the 9 a.m. meeting.

Uwe Hoffmann says that later would be fine for him, or tomorrow. But not before 10:30 a.m.

And I heard from Fred Meier's assistant that he won't be back from Frankfurt until late tomorrow evening.

The meeting room is booked all day tomorrow, but it's free on Thursday.

So Thursday at 11 a.m. would work.



Hello Boss,

Is it possible to move today's meeting from 9 a.m. to Thursday at 11 a.m.?

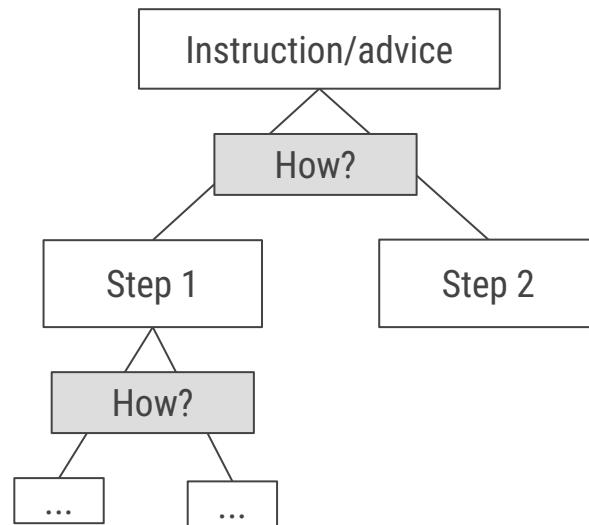
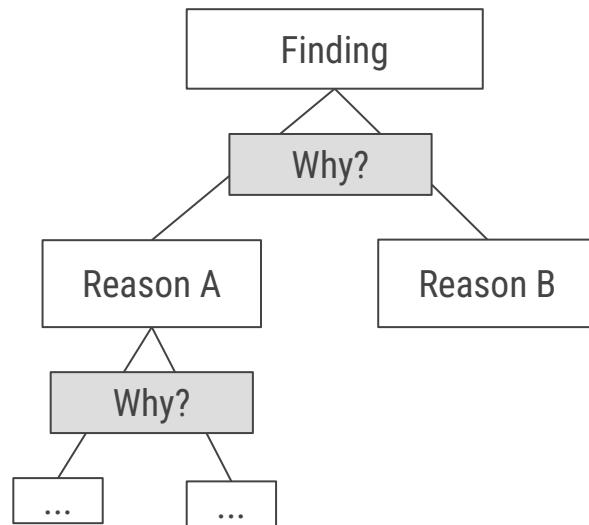
That would suit Hans Meister and Uwe Hoffmann better. Fred Meier would also be able to attend then.

The meeting room is also available on Thursday at 11 a.m.



FINDINGS VS. INSTRUCTIONS

WHY OR HOW?





RULES FOR THE PYRAMID

MECE

MECE = Mutually Exclusive, Collectively Exhaustive

Each thought/idea/point can be assigned to only one group (mutually exclusive).

All relevant thoughts/ideas/points are assigned to a group (completely collected).

Violation of the MECE rule is the most common cause of confusion.



RULES FOR THE PYRAMID

THE MAGIC NUMBER 7

Maximum of **3–7** statements per level

Ideally 3 and a maximum of 4 on the first level

A maximum of 7 points on the levels below

More points mean greater complexity = less comprehensible



P

V

BUILDING THE PYRAMID

BOTTOM-UP

Collect work results

1. Collect your individual results and formulate a key statement for each result in 2-3 sentences
2. Write the key statements on cards (or digital equivalents)

Build groups

3. Identify logically related groups and assign each work result to a group
4. Find a key message for each group based on the associated points
5. Depending on the number of groups, iteratively form further groups at the next level, etc.
6. Pay attention to the MECE rule and the maximum number of groups (3-7)

Formulate key message

7. Summarize your pyramid into a key message.

What are hot topics around organic food?

Collect work results and summarize them in key statements

EXAMPLE: INDUCTIVE / BOTTOM-UP

Das Hashtag #sustainability (und verwandte) liegt auf Platz 1 in der Häufigkeit der Verwendung.

Die Analyse der geposteten Bilder zeigt, dass überdurchschnittlich häufig Gemüse und Früchte zu sehen sind.

Die induktive Themenanalyse hat das Thema CO2 Footprint als wichtigstes Thema identifiziert.

Die Analyse der Emoticons hat ergeben, dass Posts über negative Beispiele für exzessive Plastikverpackungen besonders mit Wut begegnet wurde.

Die Analyse der Emoticons hat ergeben, dass über das Thema vegane Ernährung besonders häufig positiv gesprochen wird.

Die Netzwerkanalyse der Hashtags hat gezeigt, dass die Themen #organic und #globalwarming nahe beieinander liegen.

Eine Analyse der geposteten URLs hat ergeben, dass eine Studie zum Thema Klimawandel besonder häufig zitiert wird.

Die Sentimentanalyse brachte zum Vorschein, dass Tweets mit dem Thema "Vegetarische Ernährung" überdurchschnittlich positiv waren.

Die Verben "improve" und "change" kamen im bei positiven Tweets zum Thema Nachhaltigkeit am häufigsten vor.

Das Hashtag #healthy liegt auf Platz 2 in der Häufigkeit der Verwendung.

Die induktive Themenanalyse hat das Thema Gesundheit als 2. wichtigstes Thema identifiziert.

Die induktive Themenanalyse hat das Thema Nachhaltigkeit als 3. wichtigstes Thema identifiziert.

EXAMPLE: INDUCTIVE / BOTTOM-UP

What are hot topics around organic food?

Build groups

Das Hashtag #sustainability (und verwandte) liegt auf Platz 1 in der Häufigkeit der Verwendung.

Die Analyse der geposteten Bilder zeigt, dass überdurchschnittlich häufig Gemüse und Früchte zu sehen sind.

Die induktive Themenanalyse hat das Thema CO2 Footprint als wichtigstes Thema identifiziert.

Die Analyse der Emoticons hat ergeben, dass Posts über negative Beispiele für exzessive Plastikverpackungen besonders mit Wut begegnet wurde.

Die Analyse der Emoticons hat ergeben, dass über das Thema vegane Ernährung besonders häufig positiv gesprochen wird.

Die Netzwerkanalyse der Hashtags hat gezeigt, dass die Themen #organic und #globalwarming nahe beieinander liegen.

Eine Analyse der geposteten URLs hat ergeben, dass eine Studie zum Thema Klimawandel besonder häufig zitiert wird.

Die Sentimentanalyse brachte zum Vorschein, dass Tweets mit dem Thema "Vegetarische Ernährung" überdurchschnittlich positiv waren.

Die Verben "improve" und "change" kamen im bei positiven Tweets zum Thema Nachhaltigkeit am häufigsten vor.

Das Hashtag #healthy liegt auf Platz 2 in der Häufigkeit der Verwendung.

Die induktive Themenanalyse hat das Thema Gesundheit als 2. wichtigstes Thema identifiziert.

Die induktive Themenanalyse hat das Thema Nachhaltigkeit als 3. wichtigstes Thema identifiziert.

EXAMPLE: INDUCTIVE / BOTTOM-UP

Die Nutzer interessiert die Verbesserung der Nachhaltigkeit und Vermeidung von Plastikmüll spielt dabei für sie eine wichtige Rolle.

Das Thema gesunde Ernährung spielt eine wichtige Rolle und die Nutzer legen dabei einen Fokus auf eine pflanzliche Ernährung.

Der Klimawandel wird oft im Zusammenhang mit ökologischen Lebensmitteln diskutiert.

Das Hashtag #sustainability (und verwandte) liegt auf Platz 1 in der Häufigkeit der

Die Verben "improve" und "change" kamen im bei positiven Tweets zum Thema

N Die Analyse der Emoticons hat ergeben, dass Posts über negative Beispiele für exzessive Pla

Die induktive Themenanalyse hat das Thema Nachhaltigkeit als 3. wichtigstes Thema identifiziert.

Die Analyse der geposteten Bilder zeigt, dass

Die Analyse der Emoticons hat ergeben, dass über das Thema

Die Sentimentanalyse brachte heraus zum Vorschein, dass Tweets mit

E Die induktive Themenanalyse hat das Thema Gesundheit als

Das Hashtag #healthy liegt auf Platz 2 in der Häufigkeit der Verwendung.

Die induktive Themenanalyse hat das Thema CO2 Footprint als wichtigstes Thema identifiziert

Eine Analyse der geposteten URLs hat ergeben, dass eine Studie zum Thema Klimawandel besonder häufig zitiert wird

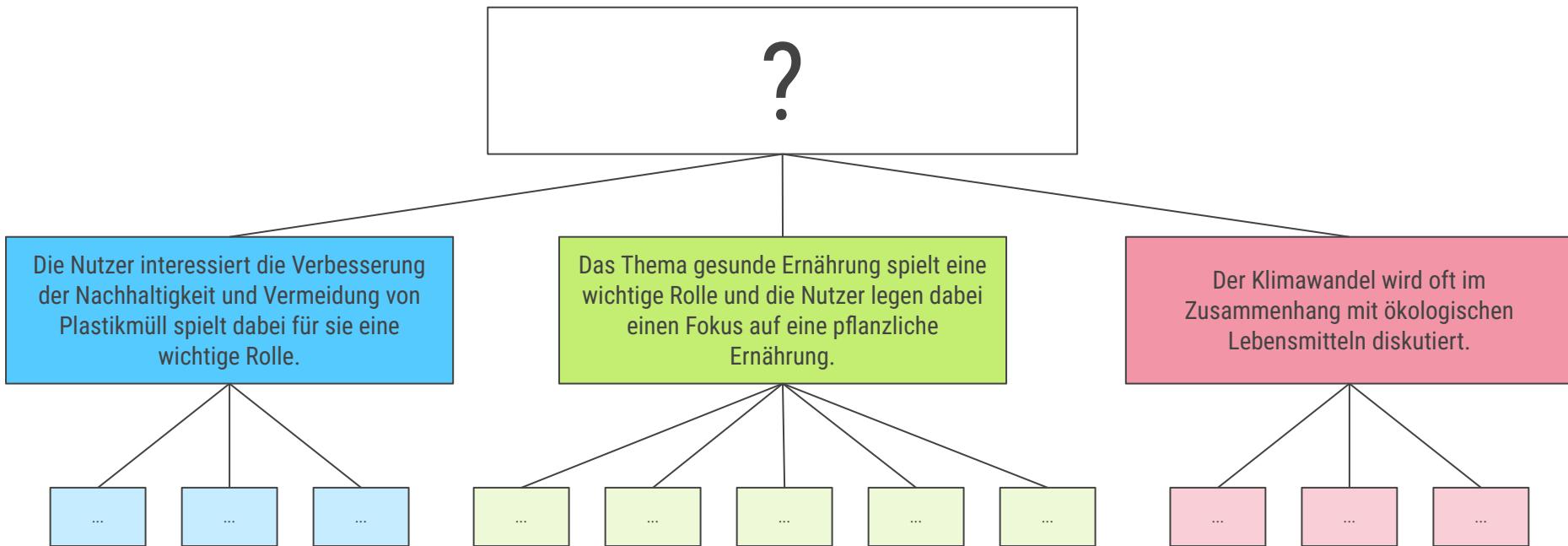
Die Netzwerkanalyse der Hashtags hat gezeigt, dass die Themen #organic und #globalwarming nahe beieinander liegen.



EXAMPLE: INDUCTIVE / BOTTOM-UP

What are hot topics around organic food?

Summarize the pyramid into a key message

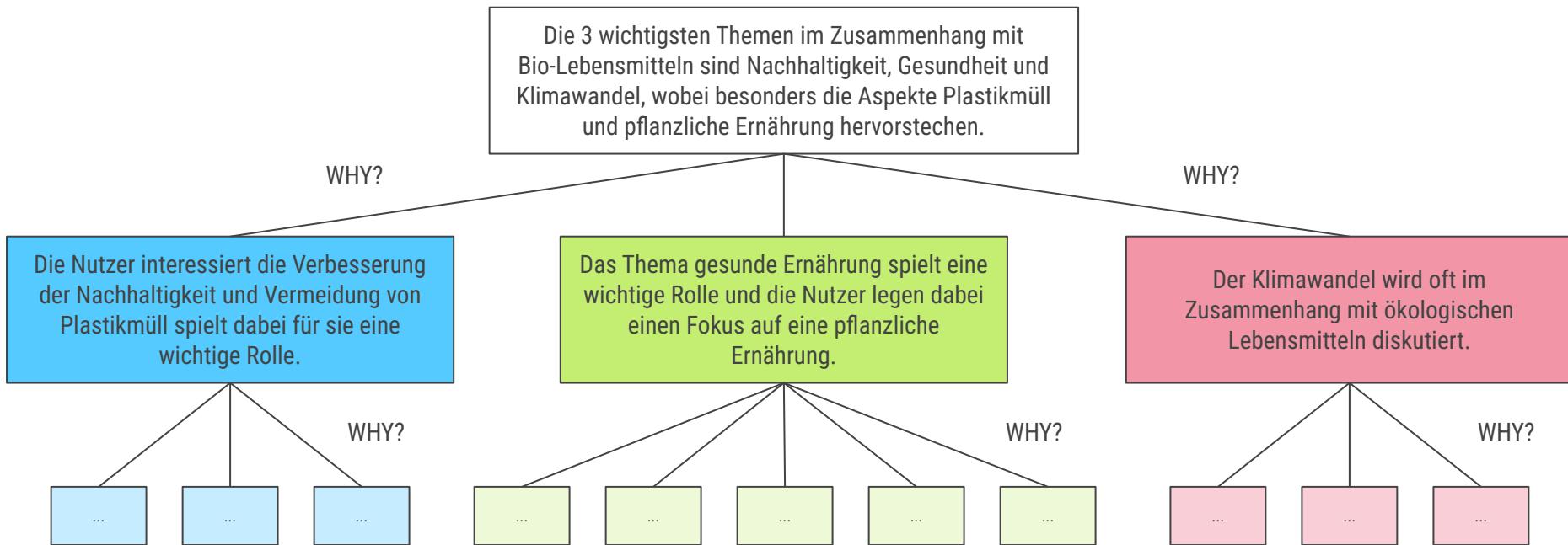




What are hot topics around organic food?

Summarize the pyramid into a key message

EXAMPLE: INDUCTIVE / BOTTOM-UP





INTRODUCTION: S-P-Q-A

We are delighted to have this opportunity to present to you today. We are fascinated by your business and believe that you have a highly experienced team. We have brought along a few ideas today on how we can support you and look forward to discussing them with you.



INTRODUCTION: S-P-Q-A

We are delighted to have this opportunity to present to you today. We are fascinated by your business and believe that you have a highly experienced team. We have brought along a few ideas today on how we can support you and look forward to discussing them with you.





P



INTRODUCTION: S-P-Q-A

We are delighted to have this opportunity to present to you today. We are fascinated by your business and believe that you have a highly experienced team. We have brought along a few ideas today on how we can support you and look forward to discussing them with you.



You want to launch a new organic food for dogs and cats. To be successful in the market, you need to know how to best address your target group, especially since this is a specialized product. We know that consumers are best addressed through topics that concern them personally.

These topics are difficult to identify using traditional market research methods. We therefore conducted a comprehensive analysis of selected users on Twitter to find out which topics are being discussed there.

Our analyses have shown that the three most important topics in connection with organic food are sustainability, health, and climate change, with plastic waste and plant-based nutrition being particularly prominent.



Situation (S)

INTRODUCTION: S-P-Q-A

We are delighted to have this opportunity to present to you today. We are fascinated by your business and believe that you have a highly experienced team. We have brought along a few ideas today on how we can support you and look forward to discussing them with you.



You want to launch a new organic food for dogs and cats. To be successful in the market, you need to know how to best address your target group, especially since this is a specialized product. We know that consumers are best addressed through topics that concern them personally.

These topics are difficult to identify using traditional market research methods. We therefore conducted a comprehensive analysis of selected users on Twitter to find out which topics are being discussed there.

Our analyses have shown that the three most important topics in connection with organic food are sustainability, health, and climate change, with plastic waste and plant-based nutrition being particularly prominent.



INTRODUCTION: S-P-Q-A

We are delighted to have this opportunity to present to you today. We are fascinated by your business and believe that you have a highly experienced team. We have brought along a few ideas today on how we can support you and look forward to discussing them with you.

Problem (P)



Situation (S)

You want to launch a new organic food for dogs and cats. To be successful in the market, you need to know how to best address your target group, especially since this is a specialized product. We know that consumers are best addressed through topics that concern them personally.

These topics are difficult to identify using traditional market research methods. We therefore conducted a comprehensive analysis of selected users on Twitter to find out which topics are being discussed there.

Our analyses have shown that the three most important topics in connection with organic food are sustainability, health, and climate change, with plastic waste and plant-based nutrition being particularly prominent.



INTRODUCTION: S-P-Q-A

We are delighted to have this opportunity to present to you today. We are fascinated by your business and believe that you have a highly experienced team. We have brought along a few ideas today on how we can support you and look forward to discussing them with you.

Answer (A)

Problem (P)

Situation (S)

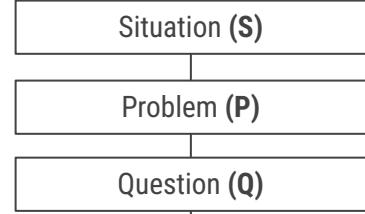
You want to launch a new organic food for dogs and cats. To be successful in the market, you need to know how to best address your target group, especially since this is a specialized product. We know that consumers are best addressed through topics that concern them personally.

These topics are difficult to identify using traditional market research methods. We therefore conducted a comprehensive analysis of selected users on Twitter to find out which topics are being discussed there.

Our analyses have shown that the three most important topics in connection with organic food are sustainability, health, and climate change, with plastic waste and plant-based nutrition being particularly prominent.



THE PRESENTATION



Die 3 wichtigsten Themen im Zusammenhang mit Bio-Lebensmitteln sind Nachhaltigkeit, Gesundheit und Klimawandel, wobei besonders die Aspekte Plastikmüll und pflanzliche Ernährung hervorstechen. (A)

WHY?

Die Nutzer interessiert die Verbesserung der Nachhaltigkeit und Vermeidung von Plastikmüll spielt dabei für sie eine wichtige Rolle.

WHY?

Das Thema gesunde Ernährung spielt eine wichtige Rolle und die Nutzer legen dabei einen Fokus auf eine pflanzliche Ernährung.

WHY?

...
...
...

WHY?

...
...
...
...

WHY?

Der Klimawandel wird oft im Zusammenhang mit ökologischen Lebensmitteln diskutiert.

...
...
...

VISUALIZATIONS

WHY THEY WORK

READING RECOMMENDATION



P

V

VISUALIZATIONS WHY THEY WORK

“**Data visualization** appeals to the dorsal stream in our occipital lobe [...] The dorsal stream is one of the **fastest thinking parts of the brain** [...] One picture, shown for fractions of a second, is enough to trigger a lot of reaction in the brain [...]”

Text, audio and video require a lot deeper, and slower engagement, to potentially tell the same message”

Source: [URL](#)



VISUALIZATIONS

READING RECOMMENDATION

Fundamentals of Data Visualization - Chapter 5

<https://serialmentor.com/dataviz/directory-of-visualizations.html>

Data Visualisations: Contributions to Evidence-based decision making

<https://social.shorthand.com/SciDevNet/3geA2Kw4B5c/data-visualisation-contributions-to-evidence-based-decision-making>

39 Studies about Human Perception in 30 Minutes

<https://medium.com/@kennelliott/39-studies-about-human-perception-in-30-minutes-4728f9e31a73>