



zühlke
empowering ideas

The logo consists of a solid purple square containing the text 'zühlke' in a white, lowercase, sans-serif font. Below it, the tagline 'empowering ideas' is written in a smaller, white, lowercase, sans-serif font. The logo is centered on a white background. Two large, dashed circles are visible: a light blue one on the left and a light grey one on the right, both partially cut off by the edges of the frame.

State of Enterprise Machine Learning

2023 Survey

Swiss Data Science Conference 23.06.2023

AI is Hot Again



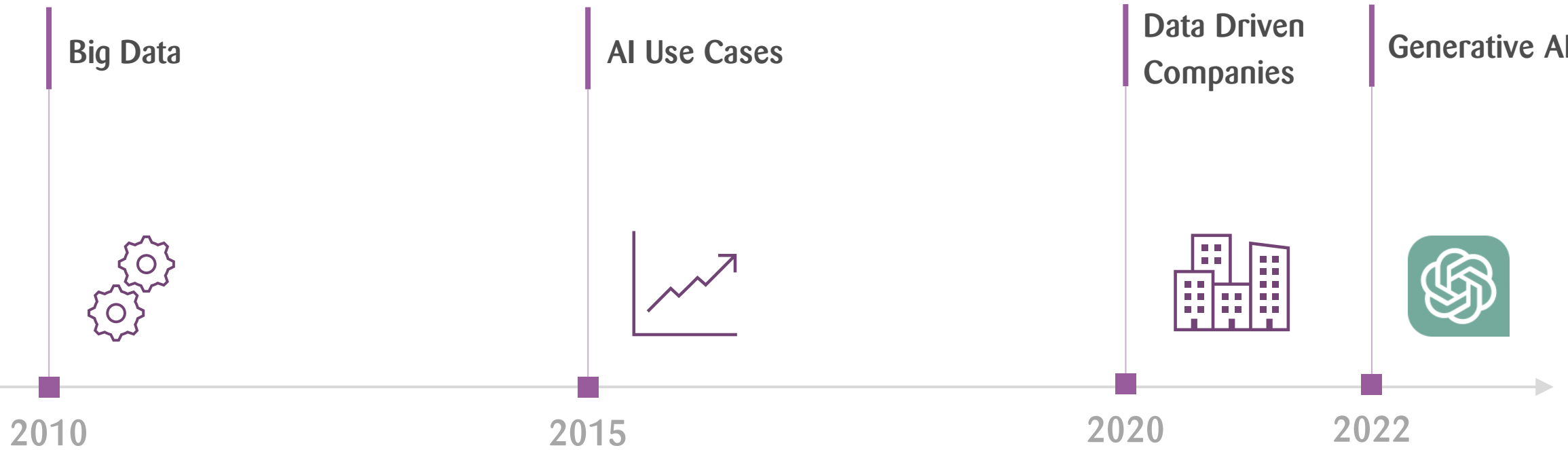
The New York Times

We Need to Talk About How Good A.I. Is Getting

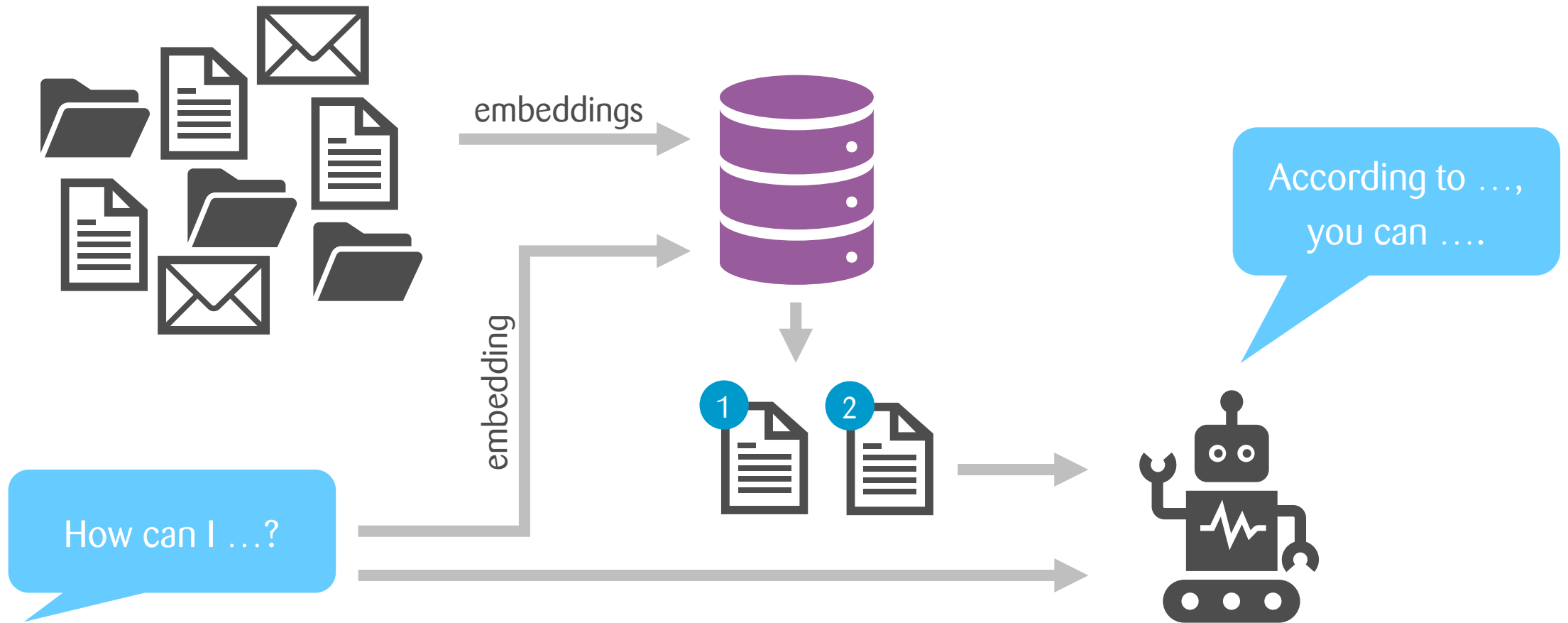
We're in a golden age of progress in artificial intelligence. It's time to start taking its potential and risks seriously.



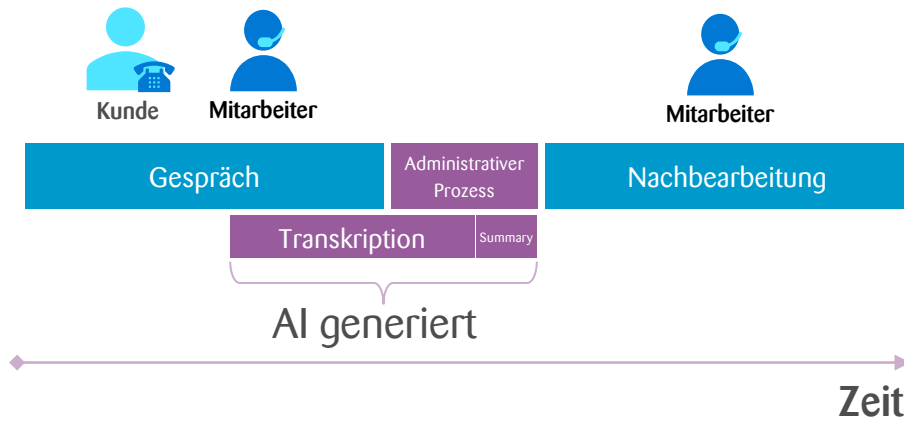
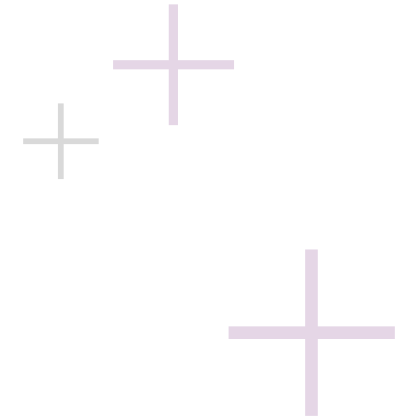
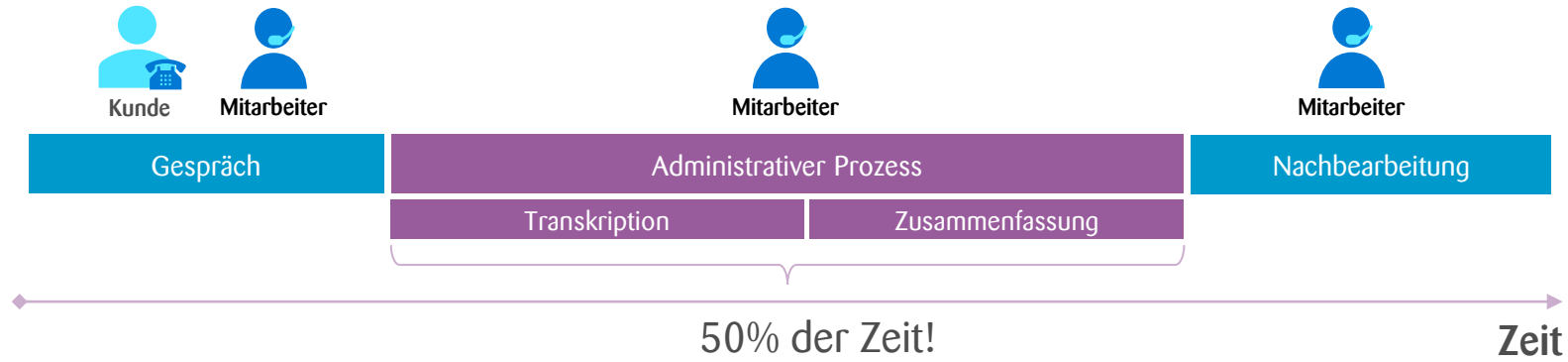
The Current Thing: Generative AI



Ask your Documents



Speech to Summary




Help Your Customers

Help Your Customers


User

 Hi, how can I help you?


Hi, I have a new address 

 Great! Please provide your new street, house number, zip code, and city.

Sure, I live in Samplestreet 10 in Birr now 

 Thank you for providing your new address. Please let us know your new zip code as well.

Ah sorry, it's 1234 

 I have updated your postal address to Samplestreet 10, 1234 Birr. If you need any more assistance, feel free to ask.

Your Message


System

Address
Street: Samplestreet
Number: 10
Zip: 1234
City: Birr

E-Mail
-

Billing Type
-

Questions
Question: -
Answer: -

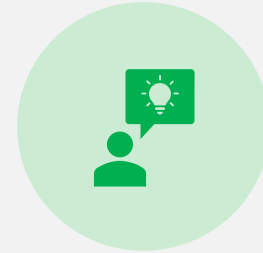
Model
GPT 4 

Proof-of-Concepts Get Stuck

Inactive Data Innovation Pipeline



30% lack of business vision, or too much focus on technology.



17% lack of a proper, company wide data and AI strategy.

Proof-of-Concepts Get Stuck



35% of respondent companies indicated that their AI initiatives faced problems associated with bringing PoCs to production.

No Business Adoption



28% of participants stress a lack of integration into tools and processes.

Aiming to Become a Data-Driven Company

13
Trillion \$

AI's contribution
to the global economy
in the next decade*



85% of interviewed
decision-makers
rate the potential of
data & AI projects as high

Why?

10% of interviewed
decision-makers
consider their own
companies to be
data-driven

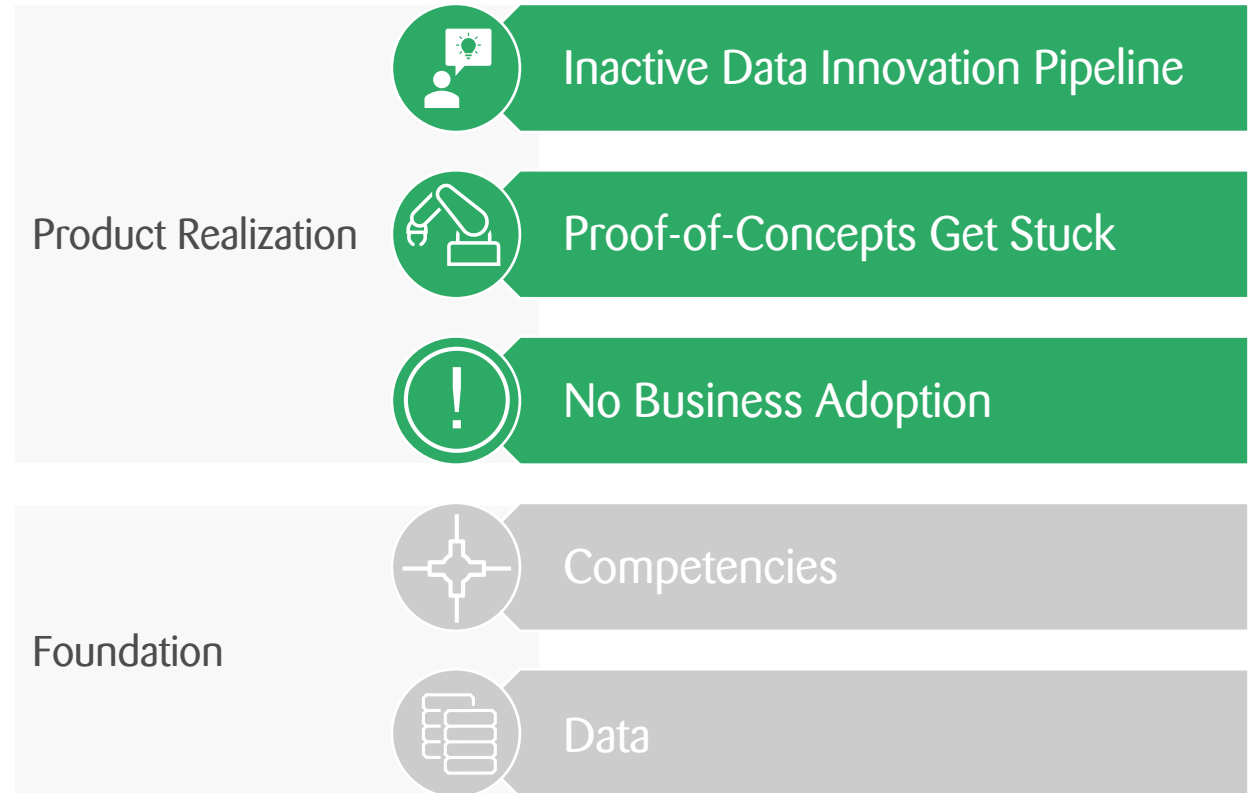
Source: <https://hbr.org/2019/07/building-the-ai-powered-organization>

© Zühlke 2023 State of Enterprise Machine Learning
Krummenacher, Gabriel

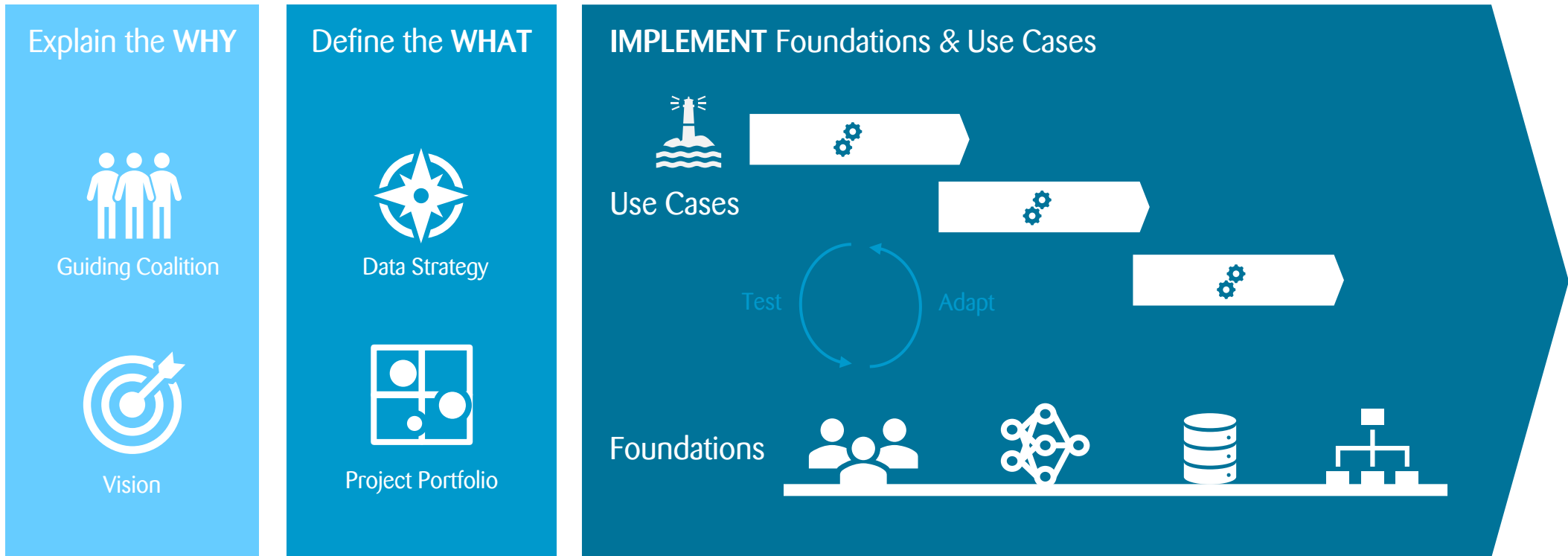
Source: Study by Zühlke on Data-Driven Companies, March 2021

23-06-2023

Common Impediments in Becoming Data-Driven



Becoming a Data-driven Company



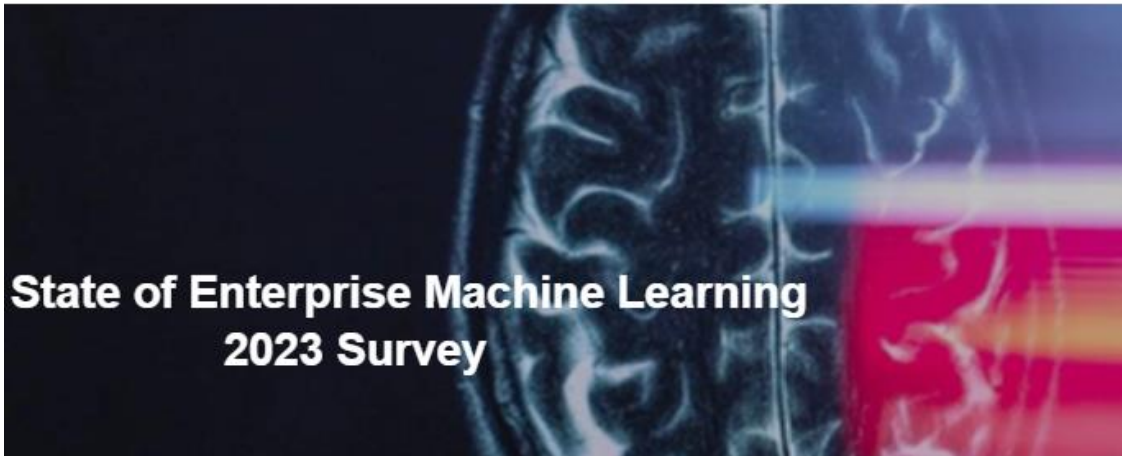
State of Enterprise Machine Learning – 2023 Survey



Machine learning adoption and usage

Applications with impact

Ex: Lower cost, increase customer satisfaction or generate additional revenue.



Confidentiality and data protection



Confidentiality



Ethical Approval



Data Collection



Personal Data

Focus on Impact

2.1 How impactful are ML applications in different parts of your organization?

Impactful ML applications could be those that:

- significantly lower costs
- are crucial for customer satisfaction
- generate large amounts of revenue
- enable new products and services

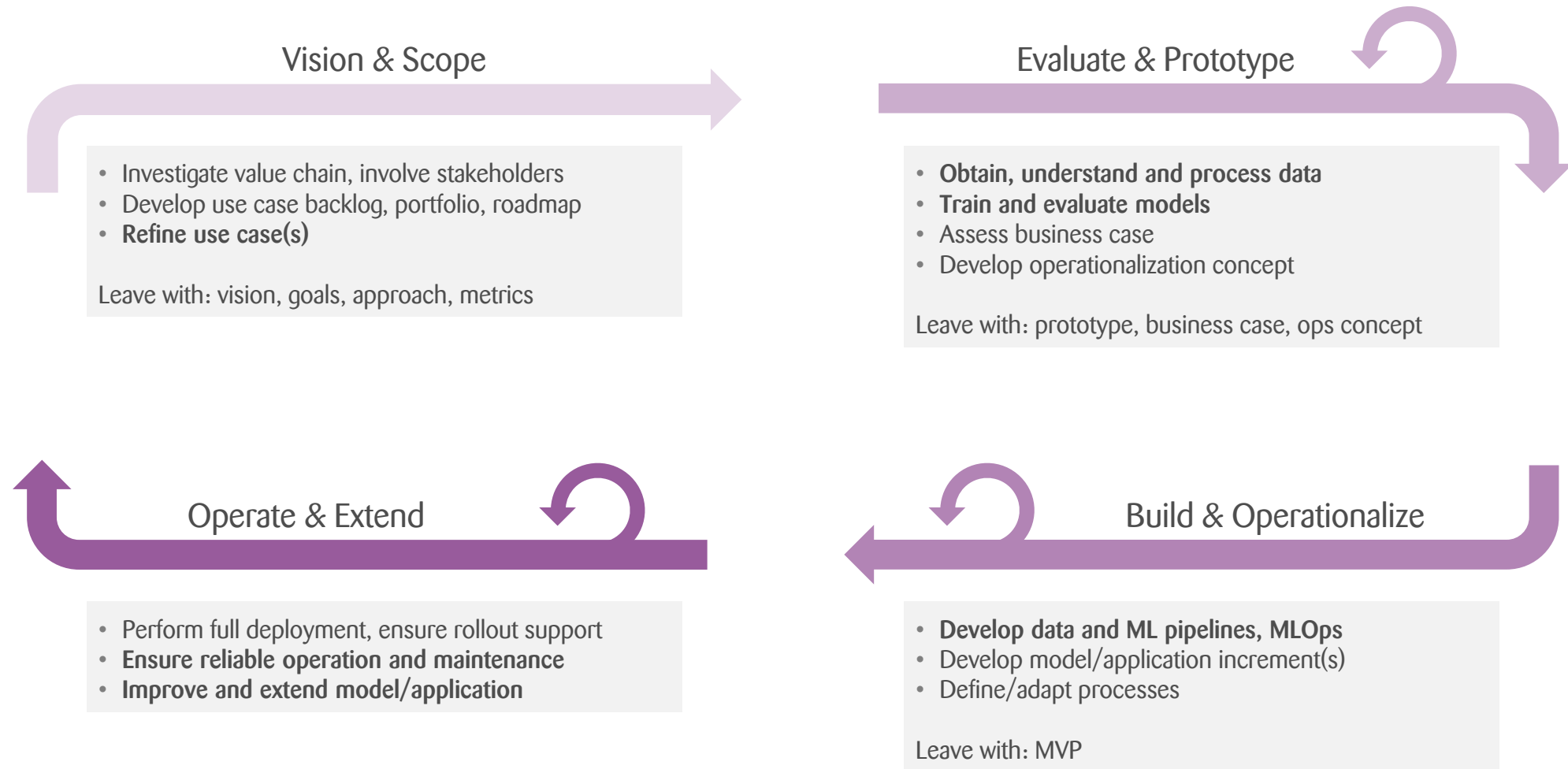
3.6 Please specify which KPI(s) is (are) used to measure the outcome of the ML application

Note: Please only mention the KPI(s) that are directly linked to the most important business objectives.

3.5 How critical is the ML application to the continuity of the business?

- Very critical
- Critical
- Sometimes critical
- Not critical at all
- Not applicable

Zühlke's AI Process



The Most Impactful Application



Survey Overview

State of Enterprise Machine Learning: 2023 Survey

Please note that this survey consists of six main parts:

1. Definition of ML
- 2. The Organizational Adoption of Machine Learning Applications**
- 3. Organizational Context and Business Impact of the Most Impactful ML Application**
- 4. Data Platform for Data Storage and Processing**
- 5. ML Model Development and Acquisition**
- 6. Model Deployment, Inference Platform, and Prediction Usage**
- 7. Assessing the Ethical Implications of ML Applications in Organizations**
8. Final Question

The Most Impactful Application

6.5 How are the predictions used?

Note: If the predictions are used in multiple ways, please select the three most important ways.

They trigger an automatic action (fully automatic, autonomous)

Are shown to a person who then performs an action based on the prediction

Is used as supplementary information in a process

Is used as a recommendation

Other (please specify)

Ethical Implications

7. Assessing the Ethical Implications of ML Applications in Organizations

In this section, we will explore various aspects of ethical considerations for ML applications, including the harm associated with data labeling, unintended consequences, and strategies to mitigate adverse effects. We will also address instances where ML applications were not implemented due to ethical concerns and the observed adverse effects resulting from ML applications in organizations.

7.1 Does your organization have an ethical framework in place to assess the implications of ML applications?

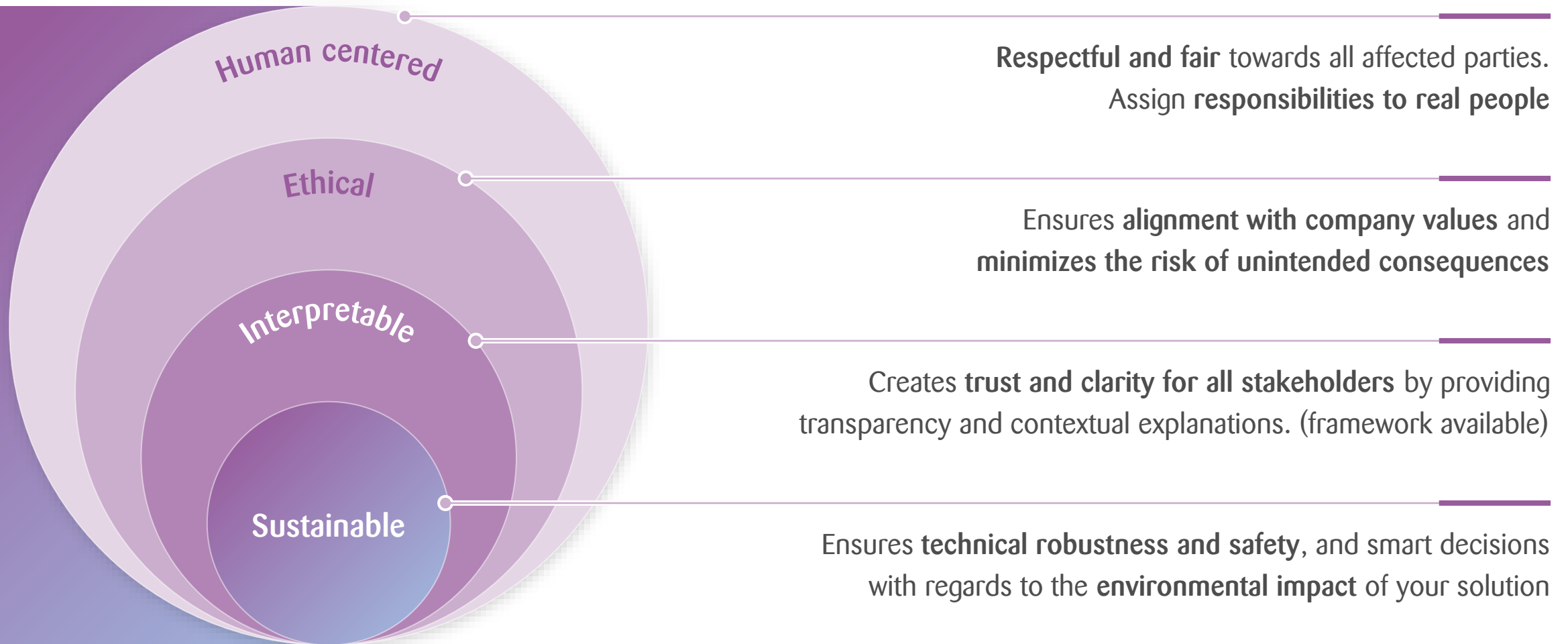
Yes

No

Not Sure

Core components of Responsible AI

Our framework is based on a long experience of developing AI under medical regulations & Data Governance



Academia & Industry Collaboration

ETH zürich

Chair of Technology and
Innovation Management



AI & Data Practice



Prof. Stefano Brusoni



Sebastian Niederberger
Daniel Schoess



Dr. Philipp Morf



Dr. Gabriel Kruppenacher

Be part of it!

Join the Survey!



<https://www.zuehlke.com/en/machine-learning>

Your participation in this survey will greatly contribute to the development of machine learning strategies and solutions for companies.

- First to receive the survey's findings.
- Benchmark your company against competition.
- Valuable insights into what machine learning use cases are successfully used to generate value.
- Personal presentation of the results
- Win a 1-day Ideation Workshop for Machine Learning applications worth 10'000 CHF.

Win a 1-day Ideation Workshop for Machine Learning applications worth 10`000 CHF.



With our proven methodology to discover Machine Learning (ML) use cases we will:

- Create an understanding of how machine learning applications have a business impact
- Ideate ML solutions for your most pressing problems
- Estimate technical feasibility of your most promising use cases
- Prioritize the solutions to create an initial portfolio of use cases

The workshop will be held by well-rehearsed Zühlke team consisting of a Data Scientist and an AI & Data Consultant and will take place at our premises in Schlieren.



ETH zürich



23-06-2023

We are hiring!

- Data Scientists at all levels
- Data Science Intern

Come talk to us at our booth!



Join the Survey!
<https://www.zuehlke.com/en/machine-learning>



Dr. Gabriel Kruppenacher
Head of Data Science

@ Gabriel.Kruppenacher@zuehlke.com
in <https://www.deeplearning.ch>



Join Zühlke!
datascientist@zuehlke.com