

# AI-powered Coding

## for Qualitative Market Research

April 2023 | Factsheet

At the latest since the rapid rise of ChatGPT, it is clear how quickly new solutions based on language models are now gaining in importance and performance. New AI-driven tools for processing and analysing text and conversations are being released on a daily basis.

Adequately applied, AI can significantly improve and simplify the way we work, research and interact. Thanks to huge technological advances in recent years, the algorithms can now be widely harnessed to optimise qualitative research processes.

Many leading market research institutes and companies are already using AI extensively in their daily work. Industry leaders including Kantar, Ipsos and GIM are now applying or even offering speech recognition and text analysis tools that collect, transcribe and code data. Why? The answer is simple: Large volumes of data can be processed faster and also more securely, and analysts can in turn shift their focus toward evaluation and interpretation.

trusted by partners and customers including



KANTAR



## Natural Language Processing (NLP)

NLP methods for speech recognition and conversation analysis all have their clear strengths and weaknesses, but when are used in a targeted, controlled and smartly combined manner, they can provide great added value to any kind of data-driven enterprise or project.

The fastest growing area at present is **automatic speech recognition (ASR)**, which basically converts verbalised words into text. These systems work very precisely and are thus ideal for tasks such as speaker recognition and transcription. However, when it comes to recognising multiple speakers in noisy environments and with strong accents and dialects, most systems still have great difficulties. This is why Tucan.ai has specialised in the automatic recognition of unclear and idiomatic speech.

Equally fundamental are AI models for so-called **natural language understanding (NLU)**, the second core strength of Tucan.ai. This method goes very far beyond transcribing words, as it attempts to correctly anticipate the meanings conveyed behind them. NLU is therefore well suited for coding, sentiment analysis and intention detection.

In addition, there are also AI systems that allow programs to have informative conversations with humans. So-called **virtual assistants** automatically collect data, generate (or reproduce) speech, and provided personalised responses. However, they usually still struggle to properly classify subtle forms of speech such as sarcasm.



## Automatic Coding

Qualitative research is supposed to lead us to a better understanding of social phenomena and this requires a meticulous annotation of data. This process, called coding, is extremely repetitive and time-consuming, especially when working with larger datasets. The mix of AI-based approaches needed to successfully automate this coding, in turn, requires a high level of technical expertise and needs to be continuously maintained and updated.

In the course of our projects with customers in the market research industry, it became clear that coding interviews and focus groups is a highly costly component in their daily work. Tucan.ai takes care of transcribing, summarising and coding relevant content for them. Thanks to the assistance of a smart AI the required manual effort is reduced to a minimum, without undermining the analysis and interpretation sovereignty of humans.

If we would be accompanying you one 'typical' day this week, what would we experience?

### Erkannte Stellen

**A** "I get up in the morning, brush my teeth and go to work. It is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum."

**A** "The answer continues here. It is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum."

**C** "I don't really know. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum."

Do you have a motto in life for yourself?

How would you describe your health overall?

*Tucan.ai recognises and organises the answers related to the content of the questions asked.*

# Coding with Tucan.ai

## 1. Individualisation

Analysts can create additional guidelines for studies and feed them into Tucan.ai. This way, the automatic coding can be easily adapted to special requirements.

## 2. Upload

All audios or videos are automatically assigned to the corresponding groups in a Tucan.ai account and listed in their own folders by study. This makes it faster and easier to find all relevant files for a single study.

## 3. Provision

The various answers to the individual questions are automatically provided by the AI in separate views and assigned to participants. The documented statements can be supplemented and corrected manually in a text editor (with audio track).

## 4. Extraction

After any post-processing and supplementation of the answers, they are immediately available for export. In the course of bulk uploads, own information - such as annotations - can be fed into the system in addition to the content extracted by the AI.

## 5. Archiving

Tucan.ai takes over all work steps up to archiving with a smart folder structure and AI search function (apart from the final evaluation of study-relevant content).

## Questions about Tucan.ai?



Please get in touch with Carlo Glaefeke, our Head of Key Accounts. He would be happy to answer all your questions in detail in a short online call.



Book **MEETING** with Carlo.