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Meinungsmonitor
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ChatGPT

Factsheet No. 10 – December 2023

People's awareness and acceptance of ChatGPT in Germany

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The launch of ChatGPT in November 2022 caused quite a stir: after just a few weeks, it was known to around 30% of the German population, and more than a tenth were actively using ChatGPT. These figures come from a study by Opinion Monitor Artificial Intelligence [MeMo:KI], which surveyed the German population in January 2023 on their knowledge, use and evaluation of the AI language model. Comparative data from March 2023 shows that the mainly positive response to ChatGPT continued more than three months after its launch.
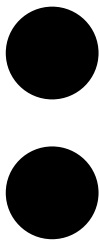
Background

ChatGPT, which is short for "Generative Pre-trained Transformer" (OpenAI, 2022), is an AI chatbot developed by the US company OpenAI that was first made available to the public in November 2022 and has since been used widely. What is striking is the (worldwide) rapid spread of ChatGPT in a very short time, for example in comparison to other popular applications such as the social networks Instagram or TikTok (Hu, 2023). The bot offers people the chance to interact within a chat window; it is able to answer questions on a variety of topics in natural language, to simulate conversations, and to perform numerous tasks in the field of text processing and text comprehension. ChatGPT is also already being used in the commercial sector, for example in customer service, which enables human-like communication without actual humans (OpenAI, 2022).

Large Language Models (LLMs) such as ChatGPT are based on mathematical concepts from probability theory (Bender et al., 2021; Carlini et al., 2021). The basic idea is that these models recognize patterns and structures in large amounts of text data in order then to react to user input on the basis of this lear-

ned knowledge. This means that, in response to the input to provide a meaningful and contextualized continuation of a text, the bot predicts individual words, whole sentences and paragraphs (Shanahan, 2023). To this end, applications such as the ChatGPT language model are trained using a large amount of text from various types of data sources, e.g. publicly available information on the Internet, in order to generate extensive knowledge on various topics (Mitchell & Krakauer, 2023; OpenAI, 2023).

High level of awareness in a short space of time

In January 2023, the Opinion Monitor Artificial Intelligence [MeMo:KI] surveyed the German population on their awareness, use and evaluation of the AI language model. The results of the study show that ChatGPT was already known to a quarter of respondents just a few weeks after its launch, and was already being used by over a tenth at that time. Of the 1,028 respondents, a total of 11% stated that they used ChatGPT regularly or had at least tried it once.
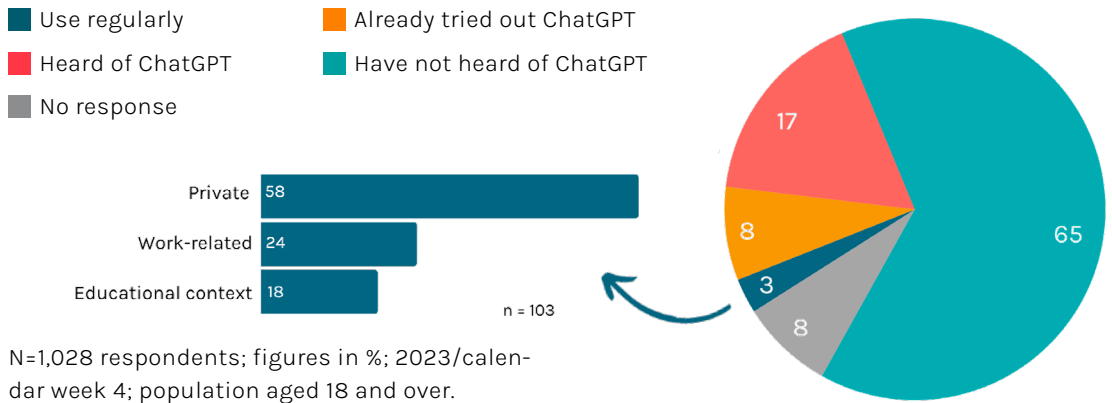
Figure 1: Awareness and context of use of ChatGPT in January 2023 (in %).

N=1,028 respondents; figures in %; 2023/calendar week 4; population aged 18 and over.

A look at the area of application shows that the focus was on the private use of this AI-based language model. More than half of the respondents stated that they used ChatGPT in their personal leisure time, while a quarter had already used the chatbot in the work context. Educational contexts such as school, training or university were only mentioned as an area of application by around 11% of respondents. A different picture emerged with regard to the context of use of regular users, with almost a third of these using ChatGPT primarily in the field of education (see Fig. 1).

Most are impressed by ChatGPT

The launch of ChatGPT triggered a positive attitude among many people, and the beginning of 2023 saw a somewhat favorable mood emerge: more than half of those surveyed stated that they were impressed by the technology and felt that it could be very useful in many areas. On the other hand, though, almost 50% had concerns about the potential impact on

the labor market and about the potential for machines to displace human labor. This uncertainty is also reflected in the fact that almost the same number of respondents expressed fears regarding their own privacy and data protection.

Users are more positive than non-users

Besides the respective context of use, we can also observe differences between users and non-users in terms of how they evaluate ChatGPT. For example, the group of users clearly saw more potential in the bot, and rebutted the idea that it carried possible risks far more than the respondents who were (still) unfamiliar with the program.

How has the trend developed over time?

The Opinion Monitor surveyed the German population on their awareness, use and evaluation of ChatGPT once again in March 2023, the

Figure 2: Evaluation of ChatGPT. Non-users vs. users in January 2023 (in %).
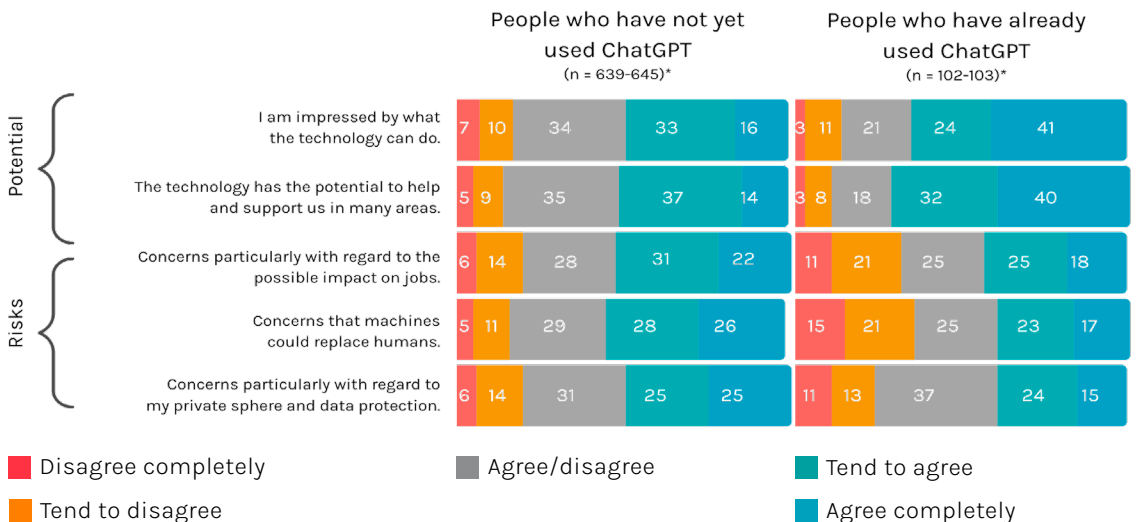
n=639-645 respondents; n=102-103 respondents; figures in %; 2023/calendar week 4; population aged 18 and over. | *These people were shown a self-description of ChatGPT and informed that the text had been created by ChatGPT. The evaluation questions then followed.
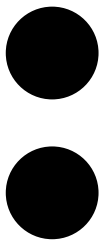
idea being to track people's awareness and attitudes toward the application over a period of time and to provide an overview of emerging trends.

An expected but central aspect of the comparative study is a growing awareness of the technology. While around 28% of those surveyed were aware of ChatGPT in January, around 46% said that they had heard of ChatGPT or had already used it in March.

In terms of use, there is a tendency for the AI application to be used more for private purposes and less in work or educational contexts. While just over half of those surveyed in January said that they used ChatGPT for private purposes, that figure increased to over 75% in March – an increase of 19%. The work and educational contexts each fell to 11% (see Fig. 3).

Continuation of approval for ChatGPT

The somewhat positive attitude toward ChatGPT remained among those surveyed more than four months after the official launch, with this period seeing the level of agreement remaining more or less constant (at approx. 55%) with regard to being impressed by the technology and seeing its potential to provide help and support. When asked about their concerns regarding the use of AI, the German population show the biggest change in attitude when it comes to private information: while around 48% stated in January that they had concerns about their privacy and data protection, this figure was 52% of all respondents in the March survey. In contrast, the first three months of the year saw the concern that AI could replace human labor fall by a full 6%.

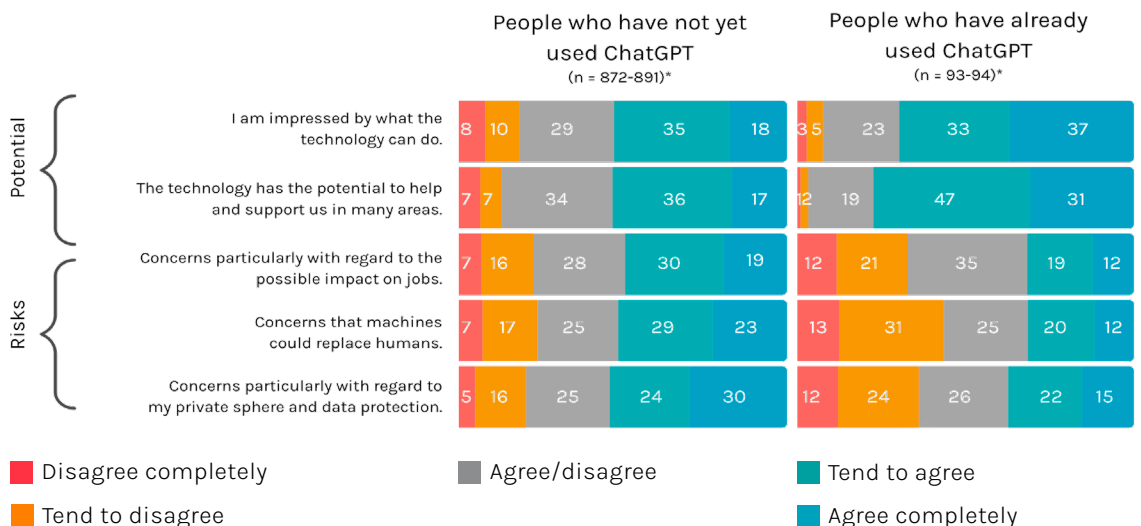**Figure 3: Awareness and context of use of ChatGPT in March 2023 (in %).**

- Use regularly
- Already tried out ChatGPT
- Heard of ChatGPT
- Have not heard of ChatGPT
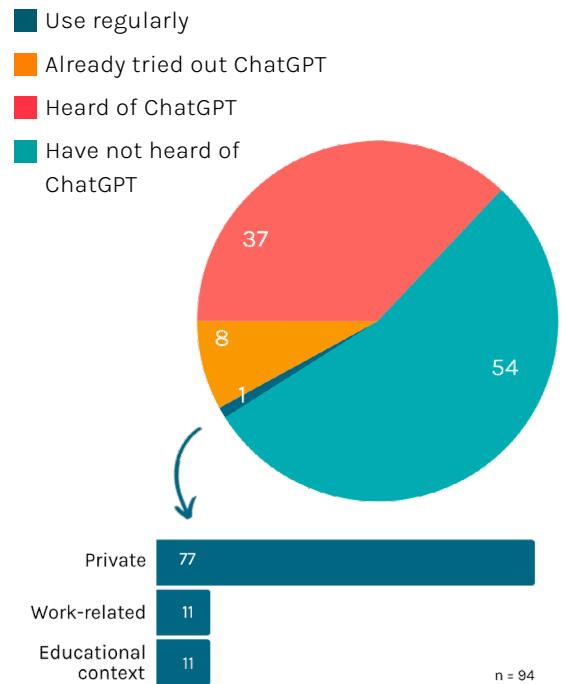
N=1,025 respondents; figures in %; 2023/calendar week 12; population aged 18 and over.

Differences between users and non-users still discernible

It is also important to look separately over a period of time at those people who have not yet had any experience with ChatGPT. It is particularly striking that the slight increase in concerns about privacy and data protection can only be seen among respondents who had not yet used ChatGPT. In contrast, ChatGPT users are more optimistic in all respects ab-

Figure 4: Evaluation of ChatGPT. Non-users vs. users in March 2023 (in %).

	People who have not yet used ChatGPT (n = 872-891)*	People who have already used ChatGPT (n = 93-94)*
Potential — I am impressed by what the technology can do.	8 / 10 / 29 / 35 / 18	3 / 5 / 23 / 33 / 37
The technology has the potential to help and support us in many areas.	7 / 7 / 34 / 36 / 17	1 / 2 / 19 / 47 / 31
Risks — Concerns particularly with regard to the possible impact on jobs.	7 / 16 / 28 / 30 / 19	12 / 21 / 35 / 19 / 12
Concerns that machines could replace humans.	7 / 17 / 25 / 29 / 23	13 / 31 / 25 / 20 / 12
Concerns particularly with regard to my private sphere and data protection.	5 / 16 / 25 / 24 / 30	12 / 24 / 26 / 22 / 15

- Disagree completely
- Tend to disagree
- Agree/disagree
- Tend to agree
- Agree completely

n=872-891 respondents; n=93-94 respondents; figures in %; 2023/calendar week 12; population aged 18 and over. | *These people were shown a self-description of ChatGPT, and informed that ChatGPT had created the text. The evaluation questions then followed.

out the risks of the new technology: in March, around 8% fewer users expressed concerns that machines could replace humans. Significant is the marked decline in their concerns about the potential impact on jobs, this rate falling from around 43% of those surveyed in January to just 32% in March (see Fig. 4).

Summary

What is remarkable is the rapid spread of ChatGPT within just a few weeks compared to other applications. The results of the study in January 2023 show that, just a few weeks after its launch, around 30% of the German population had heard of the bot, with more than a tenth already actively using it. As comparative data from MeMo:KI from March 2023 show, the overwhelmingly positive response to ChatGPT remained more than three months after its launch. It is clear that enthusiasm is growing, especially among users, and that people recognize the technology's potential when it comes to helping and supporting them; it is also clear that the initial concerns about possible negative effects are notably diminishing over time.

Suggested citation

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