# ARTIFICIAL INTELLIGENCE: TRUST IS GOOD, CONTROL IS BETTER

> ℹ️ **Virtual assistant Alexa operates smart home devices and suggests which books we should read. Netflix recommends series to watch. Duplex, Google's automated booking service, makes phone calls for users and sounds deceptively real. Algorithms track internet browsing and real world behaviour, using the information to identify people's interests and habits. But how this artificial intelligence (AI) works is usually opaque.**
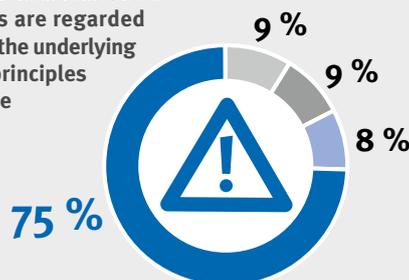
AI and algorithmic decision-making (ADM) processes enable technological systems to collect, analyse and use data. They are increasingly being used to control processes and make decisions about consumers. These decisions are often made within a 'black box'. Rules governing the use of algorithms and AI are therefore needed.

❗ To end this, the German government set up its Data Ethics Commission[1], in which the Federation of German Consumer Organisations (Verbraucherzentrale Bundesverband – vzbv) is involved. The European Commission has appointed a High-Level Expert Group[2] to develop ethical standards for AI. In this group, consumers' interests are represented by the European Consumer Organisation (BEUC). Both consumer associations call for transparency and comprehensibility of ADMs and for the facilitation of external auditing.
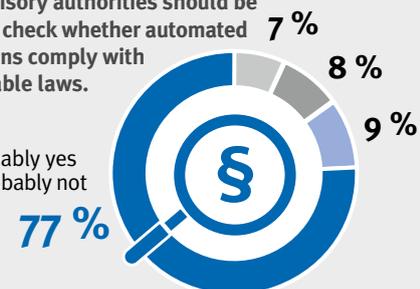
## BLACK BOX ALGORITHMS: ENABLING EXTERNAL AUDITING



**Automated decisions about consumers are regarded as a risk if the underlying data and principles applied are unclear.**

9 %
9 %
8 %
75 %

**Supervisory authorities should be able to check whether automated decisions comply with applicable laws.**

7 %
8 %
9 %
77 %

- 🟦 yes, absolutely/probably yes
- 🟦 no, definitely not/probably not
- ⬛ don't know
- ⬜ undecided

Source: Representative online survey conducted by Civey on behalf of vzbv, December 2017.

Percentage totals may add up to more than 100 percent due to rounding.

## ⋯ VZBV'S POSITION

👍 **Introduce information rights, mandatory information provision and disclosure:** Consumers have the right to know whether an algorithm is making important decisions about them or whether it plays a central role in preparing these decisions. Companies using ADM processes to prepare or make relevant decisions about consumers should be obliged to explain their decision-making logic and be clear with consumers about what data they are using. Rules for mandatory information provision should be introduced to indicate whether we are interacting with a person or a machine.

👍 **Enable inspection and audits by experts:** Lawmakers should adopt rules for an effective auditing system that is able to check relevant ADM processes. This would ensure that anti-discrimination laws and rules on unfair commercial practices and data protection are upheld and correctly applied. This would also reveal which — potentially unintended — consequences the processes have for consumers' everyday lives.

👍 **Implement rules and standards:** Rules and standards for the technical design of ADM processes and AI are needed to ensure that legal requirements are met from the outset. Standards for transparency and accountability must be established to enable independent auditing by external parties. This would ensure that legal and ethical requirements are adhered to right from the start of the design process and that ADMs can be accessed for auditing purposes.

**verbraucherzentrale**
*Bundesverband*

# FACTS AND FIGURES

ⓘ Virtual assistants, like the ones found on smartphones, are finding their way into our living rooms: 13 percent of the German population aged 18 or above use a smart speaker with a voice-based virtual assistant. That is equivalent to 8.7 million people.[3]

ⓘ Automated job applicant selection is on the rise.[4] Out of the 1,000 largest German companies,

6 percent use digital selection systems in the recruitment process and another 13 percent plan to do so in future.[5]

ⓘ Consumers feel insecure about the growing use of AI and ADM processes: Only 18 percent see more opportunities than risks when decisions are made on the basis of algorithms.[6]

## ⋯⋰ DOES TECHNOLOGY ALWAYS MAKE LIFE EASIER?



Lisa, a journalist, has had a housemate for some time now: A voice-based virtual assistant has moved in with her and takes care of a lot of things. It recommends what Lisa should buy, reminds her of appointments, helps her researching the web and turns the music up or down without her having to get up from her desk. The assistant improves constantly, as it analyses data about her personal preferences and behaviour and increasingly gets to know her better.

### A 'smart' decision is not always the right one

Lisa wants to use a fitness tracker to optimise her exercise programme and asks her virtual assistant for recommendations. The highly recommended devices are red or pink, and

they are all in the upper price range. "The assistant knows that I am a woman and seems to think that I earn well," she says, astonished. She wonders whether this is really the best choice, but goes with the recommendation anyway, because the assistant is now familiar with her preferences and she is pressed for time and about to leave. The assistant later tells her that she can send data from the tracker to her health insurance company, which offers a tariff that would lower her insurance premium if she continued to do sport regularly.

Three years later, Lisa regrets that she naively trusted the virtual assistant: After a bicycle accident, she can no longer exercise regularly and her insurance premium has risen significantly. Moreover, she has applied for several jobs, only to be rejected by a smart robo-recruiter following an initial video chat. She wonders whether the AI drew the wrong conclusions about her based on an analysis of her facial expressions, gestures and choice of words. In previous interviews, her personality had always shone through. On the whole, she still appreciates the convenience of her smart housemate, but she no longer leaves all decisions to the artificial intelligence.

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1 Website of the Data Ethics Commission: https://www.bmi.bund.de/DE/themen/it-und-digitalpolitik/datenethikkommission/datenethikkommission-node.html.
2 Website of the European Commission's High-Level Expert Group on Artificial Intelligence (AI-HLEG): https://ec.europa.eu/digital-single-market/en/high-level-expert-group-artificial-intelligence.

3 https://www.bitkom.org/Presse/Presseinformation/Home-Smart-Home-Jeder-Vierte-ist-auf-dem-Weg-zum-intelligenten-Zuhause.html.
4 https://www.economist.com/special-report/2018/03/31/managing-human-resources-is-about-to-become-easier.
5 Weitzel et al. (2018): Digitalisierung der Personalgewinnung - Themenspecial 2018 [digitisation of recruitment – 2018 spotlight theme], page 4, https://media.newjobs.com/id/hiring/419/page/Recruiting_Trends_2018/Monster_Recruiting_Trends_2018_Digitalisierung_der_Personalgewinnung.pdf.
6 Sarah Fischer and Thomas Petersen (2018): Deutschland noch nicht in der algorithmischen Welt angekommen [Germany has not yet arrived in the world of algorithms], survey conducted on behalf of the Bertelsmann Foundation, May 2018, page 17, https://algorithmenethik.de/2018/05/23/deutschland-noch-nicht-in-der-algorithmischen-welt-angekommen.

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