September 2018

SAP's Guiding Principles for Artificial Intelligence

SAP AI Ethics Steering Committee







Transparency Quality and and integrity safety standa

5. 6. Data protection safety standards and privacy

7. Societal challenges

SAP's guiding principles for artificial intelligence

- 1. We are driven by our values.
- 2. We design for people.
- 3. We enable business beyond bias.
- 4. We strive for transparency and integrity in all that we do.
- 5. We uphold quality and safety standards.
- 6. We place data protection and privacy at our core.
- 7. We engage with the wider societal challenges of artificial intelligence.



1. Driven by our values 2.
Design
for people

Business beyond bias

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Introduction

Recognizing the significant impact of artificial intelligence (AI) on people, our customers, and society, SAP designed these guiding principles to steer the development and deployment of our AI software to help the world run better and improve people's lives.

For us, these guidelines are a commitment to move beyond what is legally required and to begin a deep and continuous engagement with the wider ethical and socioeconomic challenges of AI.

We look forward to expanding our conversations with customers, partners, employees, legislative bodies, and civil society and to making our guiding principles an evolving reflection of these discussions and the ever-changing technological landscape.



Driven by our values

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Quality and safety standards Data protection and privacy

Societal challenges

AI Ethics Steering Committee and AI Ethics Advisory Panel

AI Ethics Steering Committee

Guides internal efforts to implement and enforce AI Ethics operations and policies. Will consist of SAP Executives from all board areas with supervision of topics that are relevant to guiding and implementing AI Ethics.



Holds quarterly meetings and ad hoc consultation on gray-area use cases

Provides overview of activities

Holds quarterly meetings

Provides advice and helps build expertise

AI Ethics Advisory Panel

Advises on the development and operationalization of the guiding principles

Will consist of:

- Academics
- · Policy experts
- Industry experts

Provides guidance



Coordinates with business units to develop draft materials

SAP Employees and Experts



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1. We are driven by our values.

We recognize that, as with any technology, there is scope for AI to be used in ways that are not aligned with these guiding principles and the operational guidelines we are developing.

In developing AI software, we will remain true to our human rights commitment statement, the UN guiding principles on business and human rights, laws, and widely accepted international norms.

Wherever necessary, our AI Ethics Steering Committee will serve to advise our teams on how specific use cases are affected by these guiding principles.

Where there is a conflict with our principles, we will endeavor to prevent the inappropriate use of our technology.



3. 4. Transparency beyond bias and integrity

Quality and safety standards

d Data protec and ards and privacy

6. 7. Societal and privacy challenges

2. We design for people.

We strive to create AI software systems that are inclusive and that seek to empower and augment the talents of our diverse usership. By providing human-centered user experiences through augmented and intuitive technologies, we leverage AI to support people in maximizing their potential.

To achieve this, we design our systems closely with users in a collaborative, multidisciplinary, and demographically diverse environment.

4. Transparency and integrity

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3. We enable business beyond bias.

Bias can negatively impact AI software and, in turn, individuals and our customers. This is particularly the case when there is a risk of causing discrimination or of unjustly impacting underrepresented groups. We, therefore, require our technical teams to gain a deep understanding of the business problems they are trying to solve and the data quality this demands. We seek to increase the diversity and interdisciplinarity of our teams, and we are investigating new technical methods for mitigating biases. We are also deeply committed to supporting our customers in building even more diverse businesses by leveraging AI to build products that help move business beyond bias.



4. Transparency and integrity

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4. We strive for transparency and integrity in all that we do.

Our systems are held to specific standards in accordance with their level of technical ability and intended usage. Their input, capabilities, intended purpose, and limitations will be communicated clearly to our customers, and we provide means for oversight and control by customers and users. They are, and will always remain, in control of the deployment of our products. We actively support industry collaboration and will conduct research to further system transparency.

We operate with integrity through our <u>code of business</u> <u>conduct</u>, our internal AI Ethics Steering Committee, and our external AI Ethics Advisory Panel.



4. Transparency and integrity

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5. We uphold quality and safety standards.

As with any of our products, our AI software is subject to our **quality assurance process**, which we continuously adapt when necessary. Our AI software undergoes thorough testing under real-world scenarios to firmly validate they are fit for purpose and that the product specifications are met.

We work closely with our customers and users to uphold and further improve our systems' quality, safety, reliability, and security.



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6. We place data protection and privacy at our core.

Data protection and privacy are a corporate requirement and at the core of every product and service. We communicate clearly how, why, where, and when customer and anonymized user data is used in our AI software.

This commitment to data protection and privacy is reflected in our commitment to all applicable regulatory requirements as well as through the research we conduct in partnership with leading academic institutions to develop the next generation of privacy-enhancing methodologies and technologies.



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7. We engage with the wider societal challenges of artificial intelligence.

While we have control, to a large extent, over the preceding areas, there are numerous emerging challenges that require a much broader discourse across industries, disciplines, borders, and cultural, philosophical, and religious traditions. These include, but are not limited to, questions concerning:

 Economic impact, such as how industry and society can collaborate to prepare students and workers for an AI economy and how society may need to adapt means of economic redistribution, social safety, and economic development

- Social impact, such as the value and meaning of work for people and the potential role of Al software as social companions and caretakers
- Normative questions around how Al should confront ethical dilemmas and what applications of Al, specifically with regard to security and safety, should be considered permissible

We look forward to making SAP one of many active voices in these debates by engaging with our AI Ethics Advisory Panel and a wide range of partnerships and initiatives.

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