CONTINENTAL Guidelines For The
Ethical Usage Of Artificial Intelligence

As of FEBRUARY 2020

1. Preamble

These guidelines are intended to establish high-level principles to which Continental aspires as we explore and deploy artificial intelligence ("AI") to support our business. We aspire to use AI responsibly to benefit our employees, partners, suppliers, customers and society in general. Continental recognizes that legal and cultural requirements vary in a global market, and the view on the usage of AI may vary from culture to culture. However, we have created these guidelines because we aspire to promote the beneficial use of AI that aligns with our worldwide ethical principles embodied in our Code of Conduct and our data protection requirements set forth in our Binding Corporate Rule.

These guidelines provide recommendations and a framework for all employees, managers, executives, and members of the Executive Board who have access to or are involved in the development of our AI (herein referred to as "we", "our", "ourselves", "you", "your", "yourself" or "us", as appropriate). These guidelines also outline the recommendations that any third parties with whom we collaborate in delivering AI-based products and services, such as our partners or suppliers, should observe when using and developing our AI.

We acknowledge that AI and its technology is a dynamic area and these guidelines may need to be amended from time to time to reflect technological progress and ethical norms. We recognize society's emerging AI guidelines including the European Commission's High-Level Expert Group on "Ethics Guidelines for Trustworthy AI". We also recognize that many industry groups are grappling with AI ethics, including "Ethically Aligned Design" by the Institute of Electrical and Electronics Engineers ("IEEE"). As we gain more experience with the use of AI, the non-binding aspects of these guidelines may form a basis for a binding ethical policy on the use of AI, to the extent our other policies do not already cover such usage.

These guidelines can and should form the basis of our training about the ethical usage of AI at Continental.

2. Scope of AI Usage

AI is generally the use of technology to carry out intelligent behavior based on input into a computer system. AI is sometimes developed by training the AI to act in certain ways based on data, and AI often involves data processing, and automatic or semi-automatic decisioning.

AI may be used by Continental internally in our own business (e.g., to automate or assist with tasks ranging from manufacturing, to design, to human resources assistance), as well as externally as part of our products or services.

AI can range from physical robots, including human-like robots, industrial robots and autonomous vehicles, to more digital AI, such as chatbots, image recognition and analytic tools. Especially because certain AI may operate automatically or semi-automatically, AI could cause physical or reputational harms or infringe on a person's rights. Given the potential impact of the utilization of AI and potential misuse of AI, we should develop and use AI in a human-centered manner, and in a responsible, secure, accountable, transparent, fair and ethical manner.

3. Responsibility and Accountability

AI and it's usage should be accountable and controlled. All leaders who are responsible for developing or adopting AI at Continental ("AI Owners") should understand these guidelines and be responsible for the training of their staff on these guidelines.

In general, AI Owners should:

› Be vigilant in inquiring where the data are acquired from and what are the terms of use that apply and their implications, if any third-party data are used for AI training.

› Ensure the use of the AI is aligned with these ethical guidelines.

› Require our vendors to apply these guidelines before acquiring and deploying AI solutions and services.

› Ensure there is human accountability for the training, development and use of the AI.

› Ensure there are controls in place for people to change the AI's behavior to prevent or reduce harms, particularly where human empathy and judgement may be needed.

› Ensure the AI is subject to monitoring and periodic reviews.

› Have a general understanding of how the AI makes its decisions. When an AI's decision cannot be (easily) understood or explained, we should also use heightened care in the use of the AI.

› Consider how AI actions are recorded and kept in accordance with Continental's record retention policy.

4. Usage of AI that Complies with Laws, Regulations, and Continental Corporate Rules, Standards and Instructions

To comply with the laws and regulations applicable in the countries in which we operate, we must understand how the usage of AI may be regulated. As with any technology, there may be variety of legal concerns (in the area of data protection, data security, intellectual property, safety, employment, product liability and more), and you should review the relevant Continental policies related to those areas to ensure the use of the AI complies with those Continental policies, including the Continental Code of Conduct and the Binding Corporate Rule. If you have questions about the legal compliance of the usage of the AI, you should contact the Continental Law Department Global Expert Team: Digitalization.

5. AI in the Workplace and Fair Working Conditions

Our usage of AI should promote fair working conditions, free from any form of discrimination. While we might use AI in the workplace, it should be fair. AI in the workplace could include automated or semi-automated employment decisions, such as hiring or promotion. Before we use AI in the workplace, AI Owners should:

› Ensure the usage of AI in the workplace is consistent with our human relations policies.

› Ensure the usage of the AI is transparent, which may require ensuring that employees have notice that the AI is being used were appropriate.

› Respect employee's privacy and confidence as required by law.

› Ensure AI actions are free from bias (as discussed below).

6. Health, Safety, Environment and Product Integrity

Usage of AI should promote health, safety, and environmental protection. AI Owners should:

› Ensure that the AI has safeguards against any uncontrolled behavior (especially for fully or semi-automated physical robots) that may cause harm.

› Ensure the AI meets legal safety requirements.

› Provide the necessary instructions, warnings and safety equipment for our products that may use AI.

The product integrity of our AI should be ensured by design. AI Owners should:

› Develop and apply strong safety and secure practices to avoid unintended results that create risks of harm.

› Ensure the AI is well designed, developed, and tested with appropriate training data.

› Understand the scope of AI use including the business case and geography under which the AI is intended to be used.

› Evaluate the potential harms that could occur from the use of the AI and processes to mitigate such harms.

› Test AI technologies in constrained environments and monitor their operation after deployment.

› Involve relevant stakeholders in the development and testing of the AI.

7. Diversity, Non-Discrimination and Fairness in the Use of AI

The development, deployment and use of AI systems must be fair to avoid the potential for unfair bias or discrimination. Thus, we should:

› Be aware of the potential for AI to unintentionally promote unfair bias, disparate impacts, or discrimination due to improper programming or training.

› Be vigilant of the use of data which may introduce unfair bias, including limited or skewed data sets.
  • For example, when using an AI tool to filter potential candidates for interviews for employment, ask the AI vendors providing the AI whether the tool is trained with data that may cause discrimination based on gender, age, race, skin color, social or ethnic origin, nationality, sexual orientation, ability, religious or political beliefs, or any other characteristics protected by applicable law.

› Identify potential harms to certain segments of the populations and implement controls to mitigate the risk of harm.

8. Data Protection and Cybersecurity in the Usage of AI

Data is an integral part of any AI system, and Continental is committed to respecting individual persons' rights to privacy and protection of personal data.

› We strive to ensure AI that involves personal data developed and used by us will be compliant with data protection laws, including where applicable, the General Data Protection Regulation (GDPR) and any other applicable data protection legislation in force at the time.
  • For example, under the GDPR, data subjects shall have the right not to be subject to a decision based solely on auto-mated processing, including profiling, which produces legal effects concerning him or her (Article 22(1) of the GDPR).

› We will employ security practices including encryption and access control methodologies to prevent users' data from unauthorized theft, misuse or destruction.

› Our usage of AI should be transparent, including striving to explain to users, where appropriate, why an AI made its decisions. Transparency shall also mean disclosing to users that they are interacting with an AI.

9. Confidential Information, Intellectual Property and Our AI

We should protect the confidential business information and trade secrets ("Confidential Information") and intellectual property embodied in our AI and processed by our AI, as these are vital to the interests and success of Continental. The Confidential Information and intellectual property include trade secret, copyright, database, patents, software, algorithms, data (e.g., used to train and test the AI), enhancements to the AI algorithm and the outputs of the AI. We should:

› Ensure Confidential Information and intellectual property embodied in our AI are held in strict confidence.

› Ensure that the Confidential Information that may be processed by AI, including any outputs, are protected appropriately.

› Respect the Confidential Information embodied in clients and/or suppliers' AI and only use them in accordance with applicable laws and/or contractual obligations.

10. Contact Information Regarding AI Usage at Continental

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