



Technical Report

ISO/IEC TR 21221

Information technology — Artificial intelligence — Beneficial AI systems

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Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 42, *Artificial intelligence*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

Introduction

At present government, commercial and not-for-profit organizations are increasing their investment and adoption of artificial intelligence (AI) technology in systems and applications for business processes, products and services. As with other innovations, the adoption of AI comes with risks potentially resulting in negative impacts. In some cases, the legal requirements governing the use of the technology have already been imposed to mitigate these risks. To prevent unjustified negative societal attitude towards the AI, there is a need to clearly articulate the benefits of AI for all the stakeholders, comparing the benefits with relevant costs and risks. This can foster transparency and trustworthiness of AI, ensuring better governance, trust, understanding and appreciation of the value of the AI technology.

This document describes a conceptual framework for the articulation of benefits of AI as one of the non-functional characteristics of AI systems. This framework incorporates the make, use and impact perspectives of the stakeholders. It can help to initiate meaningful discussion among the stakeholders and to formulate appropriate business models and value propositions along the AI value chain.

This document also shows how the United Nations Sustainable Goals (UN SDGs) can be incorporated into the benefit components of AI system value ([Annex D](#)). Examples are provided to show how an AI system with the proper benefit components in its value proposition can potentially contribute to and help accelerate the UN SDGs and lend support to the ISO's London Declaration^[1].

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