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Incorporating AI into statistical standards: Enhancing GSBPM with (generative) AI

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Abstract

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In the evolving landscape of statistical production, AI stands out as a key force for change. Integrating AI with GSBPM can significantly enhance statistical production. This abstract proposes a kind of ongoing standardization and working model that utilizes generative AI across various stages of GSBPM, from data collection to dissemination.

AI is capable of automating complex data processing tasks and acts as a versatile support system in different production phases, speeding up and partly automating the GSBPM process. However, the adoption of generative AI also brings challenges, especially in terms of maintaining transparency and adhering to ethical standards. It is essential to develop standards that ensure all AI systems are efficient, fair and interpretable, promoting responsible AI. The working model that is suggested in this abstract also emphasizes the importance of ethical standards and transparency.

Additionally, it is important to harmonize AI applications with existing statistical standards and practices. Open dialogue among statisticians, data scientists, machine learning engineers and ethical experts enables the development of best practices. These practices leverage the possibilities of AI while protecting against its risks.

In this proposal will be presented how AI can be utilized in various sub-processes of GSBPM and how principles of responsible AI can be applied to each implementation. It will also go through the different stages of GSBPM and how AI is integrated into these various stages. AI is not only modifying statistical production systems but is also likely to reform the processes themselves and even the standards of statistical production, such as the generic statistical business process model (GSBPM).

In summary, the strategic integration of AI and especially generative AI into the GSBPM framework promises to renew statistical production, making it more efficient and responsive. However, this integration must occur carefully, committed to ethical practices and transparency, so that AI can support statistical integrity and not compromise it.