



EVALS DGs Insight #19: Quick tips to assess the risks of AI applications in monitoring and evaluation*

PURPOSE:

Artificial Intelligence (AI) may be defined as intelligence - perceiving, synthesizing, and processing information - demonstrated by machines, as opposed to human intelligence. AI adapts to meet users' needs by analyzing usage patterns across diverse data sources or general guidelines within a vast information landscape. It undertakes tasks requiring human intelligence, including visual perception, speech recognition, and language translation.

It is essential to note that AI is not a new phenomenon, having been utilized by organizations for over 30 years. Recently, however, there has been a surge of interest from multilateral organizations, governments, security and law enforcement agencies, academia, and the private sector in integrating AI into operations, including into the evaluation discipline. Despite the operational benefits, AI applications pose risks. The **purpose of this EVALSDGs Insight** is to outline quick tips for assessing the risks of AI applications in monitoring and evaluation (M&E) that can be useful for M&E of the SDGs implementation.

THE ISSUE:

Within the framework of the United Nations 2030 Agenda and the pursuit of the Sustainable Development Goals (SDGs), AI has leveraged big data and datasets to inform decision-making through trend and pattern analysis. For instance, AI has supported crisis identification and disaster preparedness (SDGs 11 and 13) and revolutionized diagnostics and treatment in the health sector (SDG 3). In agriculture (SDG 2) and education (SDG 4), AI has been instrumental in real-time monitoring and reporting. Nonetheless, the utilization of AI in M&E poses several risks, including:

- **Bias and Fairness:** AI can inherit biases from the data they are trained on, leading to unfair outcomes, especially in evaluations related to social issues or human behavior.

- **Data Misinterpretation:** AI may misinterpret data or produce misleading results if the input data is flawed, or the algorithm is not properly designed.
- **Privacy Concerns:** AI may process sensitive personal data, raising concerns about privacy violations and unauthorized access.
- **Security Vulnerabilities:** AI could be vulnerable to hacking, leading to data breaches or manipulation of evaluation results.
- **Ethical Dilemmas:** AI may raise ethical dilemmas, such as the use of surveillance technologies or the potential for discrimination in decision-making processes.
- **Reliability and Robustness:** AI may lack reliability or robustness, leading to errors or failures in evaluations.
- **Overreliance on Technology:** Overreliance on AI could lead to a diminished role for human judgment and oversight, potentially undermining the quality and credibility of evaluations.

Addressing these risks requires careful consideration of ethical, technical, and regulatory factors, as well as ongoing M&E of AI systems' performance and impact.

Examples of AI applications: Pertinent to the M&E field (of the SDGs implementation):

- **Web search** engines like Google Search.
- **Generative or creative tools** such as ChatGPT, ClaudeAI, Bard, or AILYZE.
- **Remote sensing** and unmanned aerial vehicles.
- **Big data analytics** for trend and correlation analysis in SDGs.
- **Blockchain technology** for transaction tracking and enhanced resource allocation accountability.
- **Computer vision**, including aerial photo analysis.
- **Natural language processing (NLP)** for textual data analysis.
- **Machine learning** for large dataset analysis of SDG indicators.

Targeted towards organizations/experts involved in development and security:

- **Data management capabilities** for processing and categorizing information and monitoring dataset access.
- **Predictive analytics** to analyze emergencies and threats, aiding in risk management and the development of early warning systems.
- **Risk mitigation** through AI algorithms identifying behavior patterns related to past incidents.
- **Fraud detection** using machine learning models focused on text mining, social media analysis, and database searches to reduce fraud threats and streamline financial processes.

QUICK TIPS TO ASSESS THE RISKS OF AI APPLICATIONS IN EVALUATION:

1. FRAMEWORK ANALYSIS

- 1.1 Review existing legal frameworks and regulations related to AI in your country. AI projects should comply with relevant laws, regulations, and ethical guidelines
- 1.2 Identify regulatory and reputational risks for your organization
- 1.3 Conduct a risk assessment based on current frameworks, trends, values, future goals, and objectives
- 1.4 Use it to determine what data you need to collect and how you want to analyze them and process information
- 1.5 Involve diverse stakeholders in the risk assessment process: AI developers, domain experts, policymakers, and end users

What are the frameworks, rules, regulations, values, and future goals and objectives of your organization?

2. DATA COLLECTION

- 2.1 Choose the datasets which are suitable for AI model processing and which ones to discard
- 2.2 Plan where you can find reliable and quality data
- 2.3 Check the data quality, integrity, and readiness. Choosing the right datasets influences the quality of results
- 2.4 Ethical considerations: address issues related to AI fairness, transparency, accountability, and responsibility
- 2.5 Consistently evaluate privacy and security to avoid data breaches or invasions of privacy

*Are these the right datasets for a potential AI application?
What are the ethical considerations?*

3. MODEL DEVELOPMENT

- 3.1 Consider whether the AI tools you are planning to utilize can concretely help monitor and evaluate the implementation of the SDGs
- 3.2 Review any regulatory limits on how AI can be used for certain processes
- 3.3 Assess how AI will help your organization advance the M&E of the SDGs implementation
- 3.4 Promote awareness about AI risks within the broader community discussions about the development and deployment of AI systems. Transparency in AI decision-making can build trust and mitigate risks
- 3.5 Consider costs and benefits for your organization, and the sustainability of the utilization of AI to conduct evaluations

Is this AI application suitable for your evaluation?

4. MONITORING AND EVALUATION

- 4.1 The implementation and use of AI must be constantly monitored, evaluated, and adjusted. It is critical to consider the changing needs of the organization, the possible drawbacks that this technology may present, and the global landscape
- 4.2 Evaluate the potential impact and likelihood of occurrence. Some risks may have low probability, but severe societal impact (intended or unintended / positive or negative)
- 4.3 Use evaluation findings and recommendations to prepare a catalogue of lessons learned and good practices on AI applications

Is the AI application effective, efficient, impactful, and coherent with the values, goals, and objectives of your organization?

KEY TAKEAWAYS:

AI IMPACT

AI enhances evaluations by analyzing data and informing decisions across various sectors.

RISKS

AI in M&E poses risks such as biases, privacy concerns, security vulnerabilities, and others.

MITIGATION

To address risks, implement ethical protocols, monitor AI performance, and maintain human oversight in M&E.

Did you know?

EVALSDBGs is a global network formed to add value and learning to SDGs, made up of people with a shared interest in evaluation and sustainable development. EVALSDBGs Guidance Group (GG) is an EVALSDBGs sub-group focusing on strengthening capacity development for evaluation and the SDGs. The EVALSDBGs 'Insights' are short, light and easy to digest notes presenting ideas and new information, and stimulate thinking to strengthen evaluation capacity.

*This note is based on the reference blog: [Using Artificial Intelligence in Risk Management](#), RiskOptics, 2021. Cover picture retrieved from: <https://www.needpix.com/photo/1287856/artificial-intelligence-technology-futuristic-science-intelligence-business-free-pictures-free-photos-free-images>

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