

EU AI Act

Risk-Based Approach (RBA) to AI Systems

Guidance for the Professional Services Sector

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Note: This sectoral guidance is incomplete on its own. It must be read in conjunction with the main guidance set out in the document titled, "Risk-Based Approach (RBA) to AI Systems".

Overview of the Sector

Professional services includes a range of knowledge-intensive activities, providing specialised support to businesses, government and other organisations:

- legal activities
- accounting, bookkeeping, audit and tax consultancy
- activities of head offices, management consultancy and corporate communications
- architecture, engineering and related technical consultancy
- scientific research and development, technical testing and analysis
- advertising and market research
- other professional, scientific and technical activities, including:
- specialised design and photographic activities
- translation and interpretation services
- environmental consulting and quantity surveying

In this guidance, professional services does not cover businesses services, which are dealt with separately in future guidance.

This sectoral guidance refers primarily to business undertaken within the European Union ("EU"). Firms operating in markets outside the EU will need to take account of local market practice, while at the same time ensuring that equivalent risk management and record-keeping measures to those set out in the EU artificial intelligence ("AI") are applied by their branches and subsidiary undertakings operating in these markets.

What are the Main Risks of Harm in Professional Services?

Bias and Discrimination:

Al systems used in legal activities, accounting, and management consultancy may perpetuate biases present in historical data, leading to discriminatory outcomes. This poses a risk of violating individuals' rights, especially in areas like hiring, where biased decision-making can impact employment opportunities.

Safety Concerns:

In professional services such as healthcare consulting or technical testing, AI errors could result in incorrect medical diagnoses or flawed technical analyses, posing direct risks to human health and safety. Autonomous systems in management consultancy may also malfunction, affecting decision-making processes.

Lack of Transparency:

The use of AI in activities like corporate communications or environmental consulting may lack transparency in decision-making processes. This opacity can hinder accountability and make it challenging to understand or challenge decisions, potentially undermining trust in these professional services.



Privacy Violations:

Al systems employed in legal and accounting activities often process sensitive personal data. There's a risk of privacy violations, including invasive surveillance or unauthorized use of personal information, potentially compromising fundamental rights in the areas of legal representation and financial privacy.

Job Displacement and Economic Inequality:

Automation and AI-driven technologies in professional services like accounting or management consultancy may lead to job displacement, contributing to economic inequalities. This could impact employment stability, especially for roles that involve routine tasks susceptible to automation.

Environmental Impact:

The energy-intensive nature of training and running large AI models used in scientific research or environmental consulting may contribute to increased carbon footprints. This environmental impact can be a concern, aligning with the growing need for sustainability in professional services.

Security Threats:

In activities such as corporate communications or legal services, AI systems may be susceptible to exploitation by malicious actors. Threats include cyberattacks or disinformation campaigns that could compromise the confidentiality and integrity of sensitive information, potentially impacting legal cases or corporate strategies.

Unintended Consequences:

Al systems in technical consultancy and scientific research may encounter unintended consequences due to unforeseen interactions or adaptations to changing environments. These unintended outcomes could compromise the safety and reliability of professional services.

Ethical Concerns:

Ethical considerations in the use of AI, such as in legal or environmental consulting, may challenge fundamental rights. For instance, AI deployed in legal activities must adhere to ethical standards to ensure fair and just outcomes in legal processes.

Dependency and Accountability:

Excessive reliance on AI systems in activities like management consultancy may lead to a loss of human control. Without proper accountability measures, this could undermine democratic governance and the rule of law, especially in decision-making processes that impact organizations and societies.

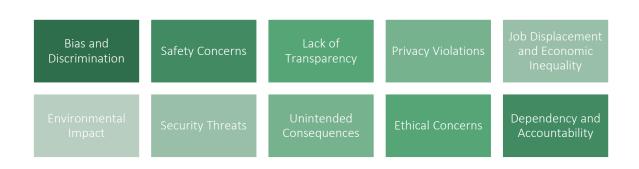


Figure 1: Main Risks of Harm in Professional Services



How Can Professional Services Firms Perform AI System Due Diligence?

Legal Activities:

- Scenario: A law firm is implementing AI systems for legal research and document analysis.
- **Description**: The firm needs to assess the risk of biased legal outcomes and violations of fundamental rights due to potential biases in the AI model.
- **Guidance**: Conduct a thorough risk assessment to identify potential biases in legal AI systems. Allocate supervisory resources to ensure ongoing monitoring for biased outcomes and regularly review the risk assessment.

Accounting, Bookkeeping, Audit, and Tax Consultancy:

- Scenario: An accounting firm deploys AI for automated financial analysis and auditing.
- **Description**: The risk of errors in financial reporting and potential safety concerns related to inaccurate financial information.
- **Guidance**: Implement a comprehensive risk assessment, focusing on the accuracy and reliability of AI-generated financial reports. Allocate supervisory resources to conduct periodic audits of AI-generated financial data.

Management Consultancy and Corporate Communications:

- Scenario: A management consultancy firm uses AI for strategic decision-making and corporate communications.
- **Description**: Risks include lack of transparency in decision-making processes and potential violations of privacy rights.
- **Guidance**: Prioritize transparency in AI decision-making. Allocate supervisory resources to ensure that AI systems adhere to privacy regulations and regularly review the risk assessment for any updates.

Architecture, Engineering, and Technical Consultancy:

- Scenario: An engineering firm incorporates AI for design optimization and technical consultancy.
- **Description**: Risks involve safety concerns due to errors in AI-driven design recommendations and potential environmental impacts.
- **Guidance**: Conduct a risk assessment focusing on the safety implications of AI-generated design recommendations and the environmental impact of AI systems. Allocate supervisory resources to monitor and mitigate these risks.

Scientific Research and Development, Technical Testing, and Analysis:

- Scenario: A scientific research firm uses AI for data analysis and experimentation.
- **Description**: Risks include unintended consequences in research outcomes and potential biases in data analysis.
- **Guidance**: Conduct a thorough risk assessment, emphasizing the potential unintended consequences of Al-driven research outcomes. Allocate supervisory resources to monitor research processes and address biases.



Advertising and Market Research:

- Scenario: An advertising agency employs AI for targeted advertising and market research.
- **Description**: Risks involve privacy violations through data processing and potential biases in targeted advertising.
- **Guidance**: Conduct a risk assessment focusing on privacy concerns and biased advertising outcomes. Allocate supervisory resources to ensure compliance with privacy regulations and regularly review risk assessments.

Other Professional, Scientific, and Technical Activities:

- Scenario: A firm offers specialized design and photographic activities using Al.
- **Description**: Risks may include biases in design recommendations and privacy concerns related to image processing.
- **Guidance**: Perform a comprehensive risk assessment, with a focus on design biases and privacy implications in AI-driven design and photographic activities. Allocate supervisory resources to monitor and mitigate these risks.

Translation and Interpretation Services:

- Scenario: A language services firm uses AI for translation and interpretation services.
- **Description**: Risks include potential biases in language processing and the need to safeguard individuals' fundamental rights in sensitive communications.
- **Guidance**: Conduct a risk assessment, emphasizing potential biases in language translation. Allocate supervisory resources to monitor language services for adherence to fundamental rights and regularly review risk assessments.

Environmental Consulting and Quantity Surveying:

- Scenario: An environmental consulting firm employs AI for data analysis in environmental assessments.
- **Description**: Risks may involve inaccuracies in AI-driven environmental impact assessments and potential safety concerns.
- **Guidance**: Conduct a risk assessment focusing on the accuracy of environmental impact assessments. Allocate supervisory resources to monitor AI-driven assessments for safety concerns and regularly review risk assessments.





How Can Professional Services Firms Undertake Cross-Disciplinary Al Risk Assessment and Consultation Activities?

Interdisciplinary Collaboration:

Encourage collaboration among professional services firms, bringing together diverse expertise from legal, accounting, management consultancy, engineering, scientific research, and other domains. This interdisciplinary approach ensures a comprehensive understanding of potential risks in AI systems.

Regulatory Familiarity:

Ensure that professional services firms are well-versed in the regulatory landscape outlined by the EU AI Act, even when assessing AI systems outside their primary field. This familiarity helps in aligning risk assessments with legal requirements.

Holistic Risk Assessment:

Advocate for a holistic risk assessment approach that considers a broad spectrum of potential harms, including health and safety risks, fundamental rights violations, biases, and unintended consequences. This comprehensive evaluation aligns with the multifaceted nature of AI risks under the EU AI Act.

AI Expertise Inclusion:

Include technical expertise related to AI systems within the collaborative effort. This ensures that the risk assessment accounts for the intricacies of AI technologies, even when professional services firms are not specialized in AI.

Client Education and Communication:

Educate clients on the importance of risk assessments under the EU AI Act, emphasizing the collaborative nature of the assessment process. Maintain open communication channels to foster a shared understanding of AI-related risks and mitigation strategies.

Tailored Risk Indicators:

Develop a set of risk indicators that can be adapted to various professional service domains. These indicators should encompass both domain-specific risks and general AI-related risks outlined in the EU AI Act.

Ethical Considerations:

Incorporate ethical considerations into the risk assessment process. Evaluate the ethical implications of AI systems on individuals and society, ensuring alignment with the ethical principles emphasized by the EU AI Act.

Continuous Learning and Adaptation:

Foster a culture of continuous learning and adaptation within professional services firms. The field of AI is dynamic, and staying abreast of technological advancements ensures that risk assessments remain relevant and effective.

Documentation Standards:

Establish documentation standards for risk assessments that meet the requirements of the EU AI Act. Clear and thorough documentation is essential for accountability, transparency, and compliance.



Legal Compliance Assurance:

Ensure that risk assessments explicitly address legal compliance aspects, even when professional services firms are not primarily engaged in legal activities. This includes adherence to data protection laws, anti-discrimination regulations, and other legal requirements.

Data Privacy Focus:

Place a particular emphasis on data privacy considerations during risk assessments. Evaluate how AI systems handle personal data, ensuring compliance with data protection regulations as per the EU AI Act.

Ongoing Monitoring and Review:

Establish mechanisms for ongoing monitoring and review of AI systems, adapting risk assessments based on evolving circumstances. This proactive approach aligns with the iterative nature of risk-based AI governance under the EU AI Act.

Client Empowerment:

Empower clients to actively participate in the risk assessment process. Encourage them to provide insights into their specific domain challenges and collaborate on developing effective risk mitigation strategies.

Cross-Sector Knowledge Exchange:

Facilitate knowledge exchange forums among professional services firms operating in different sectors. This cross-sector collaboration enhances collective learning and the development of best practices for AI risk assessments.

Transparent Consultation Process:

Maintain transparency in the consultation process when advising clients on AI risk findings. Clearly communicate the identified risks, potential consequences, and recommended mitigation measures.

Capacity Building:

Invest in capacity building initiatives to enhance technical expertise related to AI within professional services firms. This ensures that the group is well-equipped to address the technical nuances of AI systems.

Risk Communication Best Practices:

Develop and adhere to best practices for communicating risks to clients, emphasizing clarity, transparency, and the collaborative nature of the risk assessment process.

Periodic Training Programs:

Implement periodic training programs for professionals involved in AI risk assessments. These programs should cover updates in AI technologies, regulatory changes, and evolving best practices.

Feedback Mechanisms:

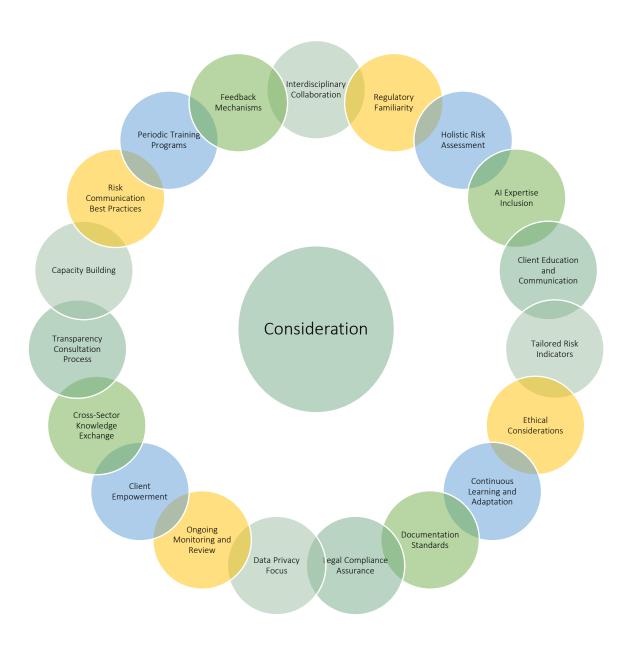
Guidance: Establish feedback mechanisms with clients to gather insights on the effectiveness of risk mitigation strategies post-implementation. This iterative feedback loop contributes to continuous improvement.



Adherence to Ethical AI Principles:

Emphasize adherence to ethical AI principles, including fairness, accountability, transparency, and human-centric design. Integrating these principles into risk assessments aligns with the EU AI Act's ethical considerations.

Figure 2: Key Considerations for Cross-Disciplinary AI Risk Assessment and Consultation





What is a Key Consideration for Professional Services Firms?

Interdisciplinary Collaboration

In implementing a risk-based approach to AI systems under the EU AI Act, a fundamental and comprehensive key consideration for the entire professional services sector is the promotion and integration of interdisciplinary collaboration. This entails fostering cooperation and knowledge exchange across diverse professional domains, including legal, accounting, engineering, scientific research, and other relevant disciplines within the sector.

Relevance:

Interdisciplinary collaboration is crucial due to the multifaceted nature of AI-related risks, which often transcend traditional professional boundaries. By pooling expertise from various sectors, professional services firms can achieve a more holistic understanding of potential harms to individuals' health and safety, as well as fundamental rights. This collaborative approach helps in identifying a broader spectrum of risks, including biases, ethical concerns, and unintended consequences that may arise from AI system deployment.

Implementation:

- Knowledge Exchange Platforms: Establish platforms and forums for regular knowledge exchange sessions where professionals from different domains share insights, experiences, and best practices related to AI risk assessments.
- **Cross-Functional Teams**: Form cross-functional teams comprising experts from legal, accounting, engineering, and other relevant fields when conducting AI risk assessments. This ensures a well-rounded evaluation of potential risks.
- **Training Programs**: Implement training programs that expose professionals to the foundational concepts and challenges of AI technologies, fostering a basic understanding even for those outside the AI-specialized fields.
- Shared Resources: Create shared repositories of resources, guidelines, and case studies that can be accessed by professionals across different domains. This facilitates a common understanding of AI-related risks and mitigation strategies.
- **Collaborative Risk Identification**: Develop a collaborative framework for identifying and assessing risks where professionals from different disciplines contribute their domain-specific insights to create a comprehensive risk profile.

Benefits:

- **Comprehensive Risk Assessment**: Interdisciplinary collaboration ensures that risk assessments consider a wide range of potential harms, reducing the likelihood of overlooking critical aspects related to health and safety, fundamental rights, and ethical considerations.
- Informed Decision-Making: Professionals benefit from a more informed decision-making process by drawing on the collective knowledge of diverse experts. This enables a more accurate evaluation of the AI system's risk level and informs resource allocation decisions.
- Enhanced Mitigation Strategies: The collaborative approach allows for the development of mitigation strategies that are not only legally and technically sound but also consider ethical implications, contributing to a more robust and comprehensive risk management framework.
- Adaptability to Evolving Risks: With ongoing collaboration, the professional services sector can stay adaptable to emerging risks. The iterative nature of interdisciplinary collaboration aligns well with the continuous monitoring and review required by the EU AI Act.