



Algorithmic Opportunities, Transparency and Accountability

S&D Roundtable on the Algorithmic Opportunities, Transparency and Accountability

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Algorithms transform industries

examples



Consumer

- Smart Assistants
- Chatbots
- Search
- Personalization
- Augmented Reality
- Robots



Health

- Enhanced Diagnostics
- Drug Discovery
- Patient Care
- Research
- Sensory Aids



Finance

- Algorithmic Trading
- Fraud Detection
- Research
- Personal Finance
- Risk Mitigation



Retail

- Support
- Experience
- Marketing
- Merchandising
- Loyalty
- Supply Chain
- Security



Government

- Defense
- Data Insights
- Safety & Security
- Resident Engagement
- Smarter Cities



Energy

- Oil & Gas Exploration
- Smart Grid
- Operational Improvement
- Conservation



Transportation

- Automated Cars
- Automated Trucking
- Aerospace
- Shipping
- Search & Rescue



Industrial

- Factory Automation
- Predictive Maintenance
- Precision Agriculture
- Field Automation



Other

- Advertising
- Education
- Gaming
- Professional & IT Services
- Telco/Media
- Sports

Accountable *Intelligence*

Algorithmic accountability principles:

- 1) Organization commitment to accountability and adoption of internal policies consistent with external criteria.
- 2) Mechanisms to put <privacy> relevant policies into effect, including tools, training and education.
- 3) Systems for internal ongoing oversight and assurance reviews and external verification.
- 4) Transparency and mechanisms for individual participation.
- 5) Means for remediation and external enforcement.

Adapted from **Information Accountability Foundation's** accountability framework for data privacy

Recommendations

Accountable *Intelligence*:

Governments, industry and academia should apply the *Information Accountability Foundation's* principles to algorithmic decision-making.

Organizations implementing high-stakes algorithmic decision-making solutions should be able to demonstrate to regulators that they have the right processes, policies and resources in place to meet those principles.

Transparent decisions:

Policy makers should determine which implementations require algorithm explainability to mitigate discrimination and harm to individuals.

