DATA STEWARDSHIP FOR A 21ST CENTURY DATA-DRIVEN WORLD:

ETHICAL BIG DATA ASSESSMENT,

HOLISTIC GOVERNANCE BEYOND BIG DATA AND ENFORCEMENT MODELS
WHO WE ARE

• The Information Accountability Foundation, “IAF”, is a 501(c)(3) charitable organisation with a research and education mission

• IAF looks 3 to 5 years out to chart balanced information policy governance

• MAYA – Most Advanced Yet Acceptable

• IAF takes a global view
TODAY’S PROGRAM

• Enforcing big data codes of conduct

• Introduction to Holistic Governance and Policy Project

• Intel cocktail reception
ENFORCING BIG DATA CODES OF CONDUCT
THE ISSUE

• Predicting future outcomes — no matter the endeavour — is compelling
  • Big data isolates correlations humans cannot see
  • This leads to predictions based on non-intuitive data relationships

• There is exponentially more data in an observational world to drive insights — most beyond the individual’s knowledge and control

• Most big data processing is beyond the individual’s top-of-mind knowledge

• Legal, fair and just requires an assessment process that goes beyond tradition PIAs

• The assessment objective is no longer focused only on compliance, but rather also an understanding the broad range of risks and whether risk mitigation is effective
THE DILEMMA EXISTS FOR ALL STAKEHOLDERS

• Individuals have interests that go well beyond compliance, including better health, education, opportunities and choices

• Companies can only do with data what is acceptable, and acceptable goes beyond compliant

• Enforcement agencies are tasked with protecting individuals while facilitating fair data-driven innovation
KEY GOVERNANCE CONCEPTS

• Data protection assures the full range of individual interests, not just a narrow definition of privacy

• Reticence risk is meaningful, real and creates harms

• A fair and just assessment is necessary – what is the cost of not processing

• This takes us beyond compliance to ethics
TWO BIG DATA PHASES

• Phase one is discovery
  • Knowledge creation
  • Limited or no individual impact if assessment isolates mitigation issues

• Phase two is application
  • Often personally impactful
  • Governable by traditional data protection mechanisms
A UNIFIED ETHICAL FRAME FOR BIG DATA

Big Data provides unprecedented opportunities to drive innovation in economies, healthcare, public safety, education, transportation and almost every human endeavour.

Big Data also creates risk to both individuals and society unless effective governance is in place.

Governance must be sensitive to the full range of interests. Ethics must form the basis of decisions balancing the incentives that come with free enterprise and the breadth of human interests.
IAF PROJECT STRUCTURE

Part A
- Description of the unified ethical framework
- Creates a basis for the assessment guidance

Part B
- Assessment guidance for implementing the code
- Illuminates the key issues that must be considered in making a judgment on whether a Big Data project is fair, responsible and ethical

Part C
- Mechanisms for enforceability
- Demonstrates compliance with code.

Part D
- Contextual assessment questionnaire
- Customised for organisations, industries and mediums.
VALUES FOR AN ETHICAL FRAME

Beneficial
- Sense of purpose
- Define the benefits
- Parties who gain benefit
- Risk-Benefit balance

Progressive
- Materially better
- Measures
- Support innovation
- Consider risks

Sustainable
- Legal basis/permissions
- Influence of model(s)
- Longevity of insights
- Ability to refine/correct

Respectful
- Data origination/restrictions
- Context/Purpose
- Interests of all parties
- Expectations/Rights

Fair
- Insights/Applications
- Inferences/Discrimination
- Labeling/Predestination
- Compatibility/Legal Basis
PART B – ASSESSMENT FRAMEWORK

• Full project description with clear intents
• Questions to identify issues related to processing and accountability
• Clear description of stakeholders
• A description of intended benefits and possible risks
• A final assessment of fairness based on facts
WHEN SHOULD ASSESSMENT TAKE PLACE

• Discovery
  • Project scoping
  • Discovery processing

• Application
  • Using insights to predict behaviour
  • Reviewing for effectiveness
THERE MUST BE A REGULATORY BACKSTOP

• Part C is Enforcement – our topic for today
  • Assessment process must link to a regulator’s legal mandate
    • Linkage is in many ways dependent on the type of regulator
    • Enforcement may be hard (fines) or soft (ability to shame)
  • Regulators need to have the power to influence the market
    • Guidance
    • Enforcement
  • What is the instrument for enforcement
ASSESSMENT TOOL AND GOVERNANCE – PART D

• Based on Part B framework

• Customised to an industry or company

• Sits within a broader corporate governance structure

• Is demonstrable to a regulator
EXTERNAL OVERSIGHT KEY QUESTIONS

1. What is being overseen?
2. Who will oversee it?
3. Under what authority?
4. For what purpose?
5. With what outcome?
WHAT WOULD ENCOMPASS A CODE

1. Internal policy that mandates assessments and their integration in internal governance.
2. Assessment tool that contains the elements of the assessment framework.
3. Decisions, mitigations and evidence used to make those decisions.
4. Internal oversight over the big data process.
5. Standing ready to demonstrate the process.
AGENCIES HAVE DIFFERENT POWERS

• Instruments for best practices
  • Industry good practices
  • Suggested industry best practices
  • Codes of practice
  • Codes of conduct

• Type of agency and law dictates direction
  • Enforce codes of conduct
  • Enforce underlying law
  • Ombudsman suggested best practices
OVERSIGHT CREATES RESOURCE QUESTIONS

• Who enforces?
  • Enforcement directly by an agency
  • Enforcement through an accountability agent with backstop authority

• When?
  • Ex-ante certification
  • Spot testing
  • Ex-post enforcement
MATERIAL QUESTIONS

• Compatible data or data in context
  • Definition for research
  • Knowledge creation versus legal effect

• Legal basis or equivalent
  • Legitimate interests in knowledge creation
  • Predictive sciences and profiling

• Independent capable accountability agent
  • Relationship with regulator
  • Economic model that works
PANEL DISCUSSION
HOLISTIC GOVERNANCE AND POLICY PROJECT
TODAY’S OBJECTIVES ARE THE SAME, BUT THE CHALLENGES ARE DIFFERENT

• Data protection and privacy law have always had the dual objectives of facilitating the free flow of information while protecting individuals’ interests.

• The law has been comprised of
  • Individual rights
  • Organisational obligations
  • Regulator oversight & enforcement

• The acceleration of data creation and the velocity of flows and uses require a fresh new ethical approach to best facilitate the dual objectives.

• The Holistic Governance Project
  • We are building the plane while we fly it.
  • Why an IoT scenario?
THE IMPACT OF INFORMATION
WHY SOMETHING NEW IS NEEDED

• We need to enable and encourage data uses and flows that recognise the full range of rights and interests for all stakeholders in complex data rich ecosystems.

• We need to assess and re-balance these rights and interests of individuals and organisations through stronger data stewardship in organisations and meaningful participation by individuals.

• We need to enable more meaningful data protection through better enforcement.
WHY IS TODAY MORE COMPLICATED?

Expanding Ecosystems of Participants
KEY QUESTIONS FOR AN HOLISTIC INFORMATION GOVERNANCE SYSTEM

1. What broader responsibilities are required for data stewards?

2. What level of participation is meaningful and practical for an individual to have?
   • How does the individual exercise his/her preferences?
   • When should individual participation occur?

3. What types of oversight are needed?
   • How would enforcement work?
OBJECTIVES OF A HOLISTIC INFORMATION GOVERNANCE SYSTEM

• **Re-Balance Responsibilities** – We must rebalance the responsibilities of individuals and users of information while improving overall data protection effectiveness.

• **Greater Transparency** – Users of information should provide accessible, transparent and legally binding notice covering all their policies and practices relating to information collection and use.

• **Meaningful Engagement** – Individuals should have meaningful, contextual and flexible engagement, where there is genuine choice that facilitates control over information about them.

• **Foundational Obligations** – Users of information are accountable for baseline obligations such as security, data retention, all legal requirements and contractual obligations (upstream and downstream).

• **Fair Assessment of Interests & Risks** – Users of information should determine (and be accountable for) understanding and mitigating risks to individuals and providing appropriate individual engagement.

• **Oversight and Enforcement** – Regulators should have better information to engage in enforcement activities.
THE PROPOSED MODEL

Components of an Holistic Information Governance System

• Transparency, engagement, accountability, oversight and enforcement.

Proposed Approach

• Address needs of all participants in the ecosystem.
• Re-balance responsibilities.
  - Propose new obligations and a new way to think about obligations for each participant.
  - Focus individual participation where it is meaningful and impactful, but eliminate it where it is not.
• Expand the effectiveness of risk assessments by considering all rights and interests.
  - Conduct Information Impact Assessments (IIA) in place of or in addition to PIAs
    • Big Data Analytics Assessment is an example of an IIA for Big Data applications.
• Make regulators more efficient and effective in handling complaints and their overall enforcement efforts through greater transparency about business practices.
FRAMEWORK FOR ETHICAL DATA GOVERNANCE
(A Data and Use Based Approach)
• Publish an overview paper on the proposed framework

• Integrate enforcement approach from Big Data Analytic work

• Engage small groups for interactive feedback
  • Test, explore, develop the framework with smart shirt scenario through a multi-stakeholder approach

• Further refine and test the framework applicability to other information intensive scenarios