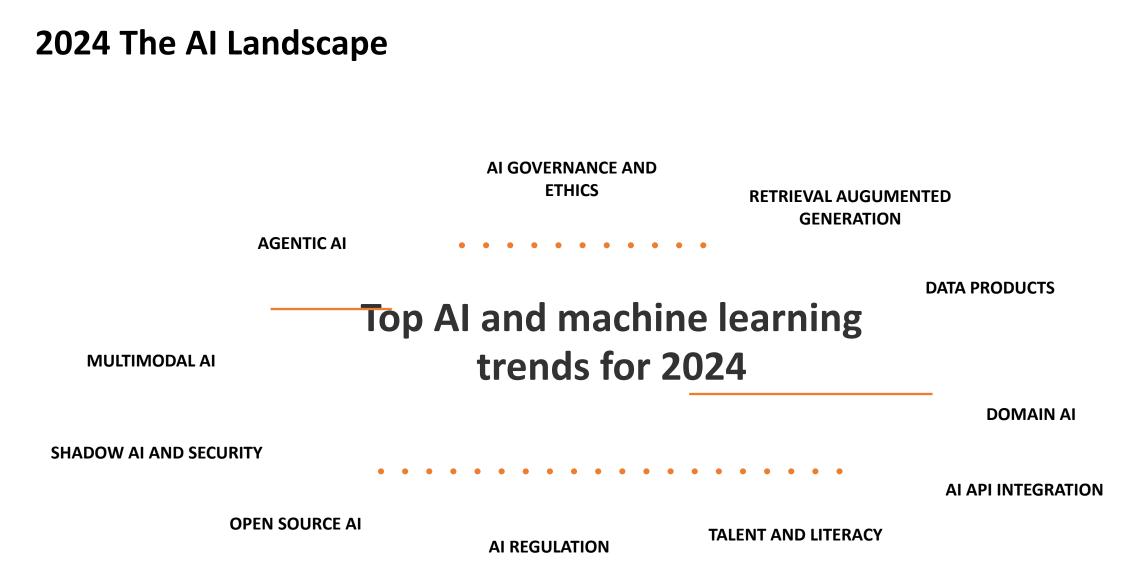
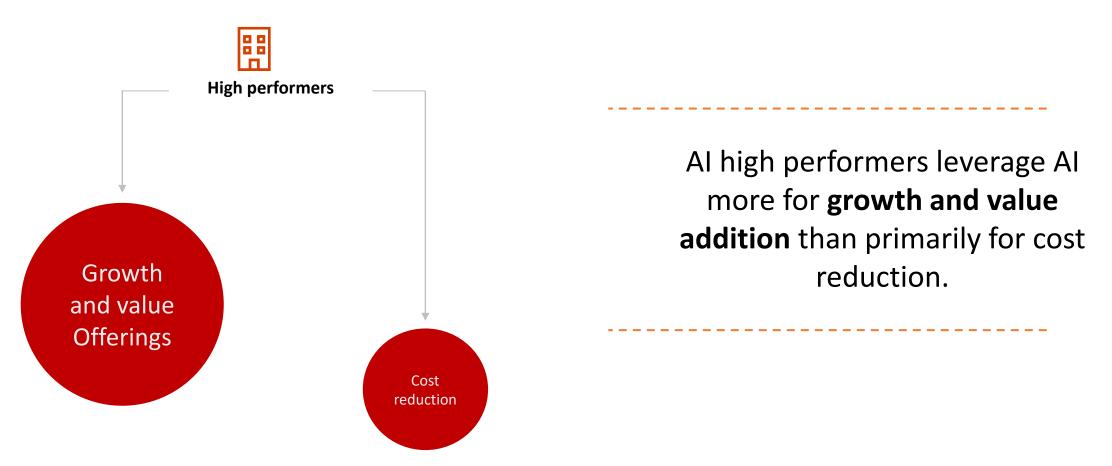
Presentation:

Trailblazing the AI Epoch: Evolving Chief Data Officers through Innovative Models, Dynamic Governance, Ethical Frontiers, and Automation Prowess EVOLUTION



AI Adoption

... there's a significant difference in the primary objectives between AI high performers and all other organizations

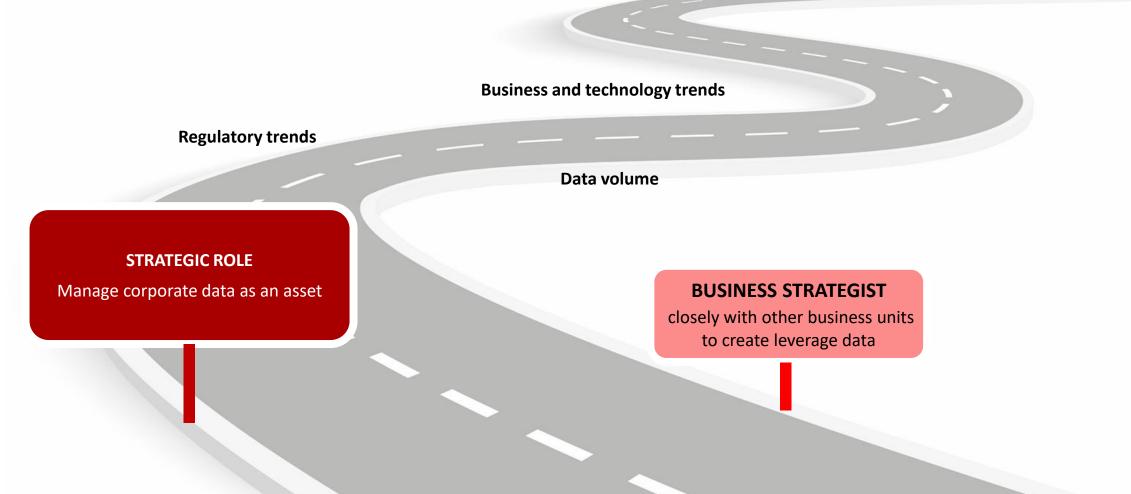


Evolution of the Chief Data Officer (CDO)

Integrating the CDO role with business, technology, risk, and corporate functions is imperative.

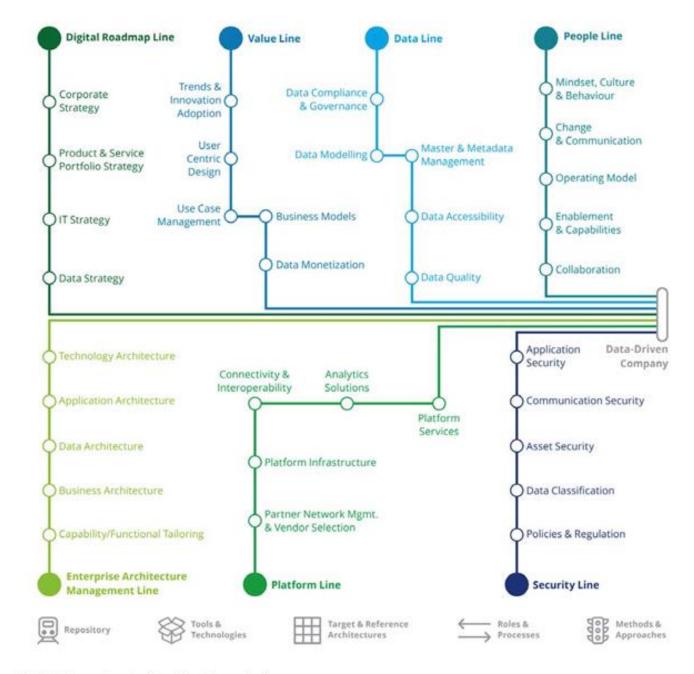
DATA MANAGEMENT

data availability, quality, and regulatory compliance



EVOLUTION

Evolution of the Chief Data Officer (CDO)



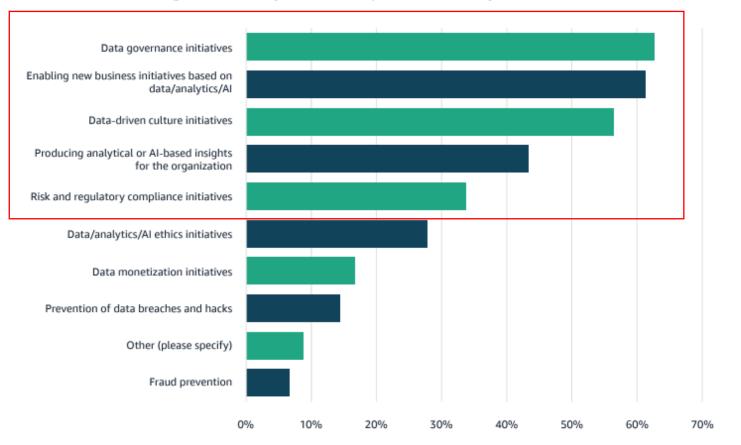
CDO's Priorities in shaping organizational strategy and digital transformation

Risk, Governance and Oversight	AI Literacy	Technology Acquisition
Talent	Strategic Planning Inclusion	Culture and Change Management
Security	Privacy by Design and Consent	Data monetization
Resource allocation	Hybrid cloud	Automation

Reality....

Chart 8

To which of the following activities have you devoted 20 percent or more of your attention?



The CDO's job is getting complex

CDO Roles in an Organization

Analyzing the proactive vs. reactive approaches of CDOs in AI innovation.



CAN

- Canadian Directive on Automated Decision-Making, in force since 2020
- Regulatory Proposal: Canada's Artificial Intelligence and Data Act, pending since 2022

USA

Blueprint for an Al Bill of Rights, in effect since 2022.

Different regulation on State Level, e.g.

- Illinois' Artificial Intelligence Video Interview Act, in force since 2020
- New York City's Law Regulating the Use of Automated Employment Decision Tools, enters into force 2023.

LATAM

- Brazil: Regulatory Proposal: Legal Framework for Artificial Intelligence (Lei 21/20), pending since 2021.
- Mexico: Mexican National Al Agenda, in effect since 2018.

EMEA

EU General Data Protection Regulation (GDPR), in force since 2018

 EU Regulatory Proposal Artificial Intelligence Act pending proposal since 2021

APAC

- Singapore: National Al Strategy, in effect since 2019
- Australia: Artificial Intelligence (AI) Action Plan, in effect since 2021

Reflecting on the hurdles and potentials CDOs face in the AI era.

The primary responsibility for data is still divided.

Business leaders don't trust the data to augment their decision-making creating new data silos

Data silos lead to confusion and integration challenges.

Innovation without trust due to creating short-term wins at the expense of developing a strategic roadmap



TR's Data and AI Ethics Principles

1. Thomson Reuter's use of data and AI is informed by our <u>Trust Principles</u>.

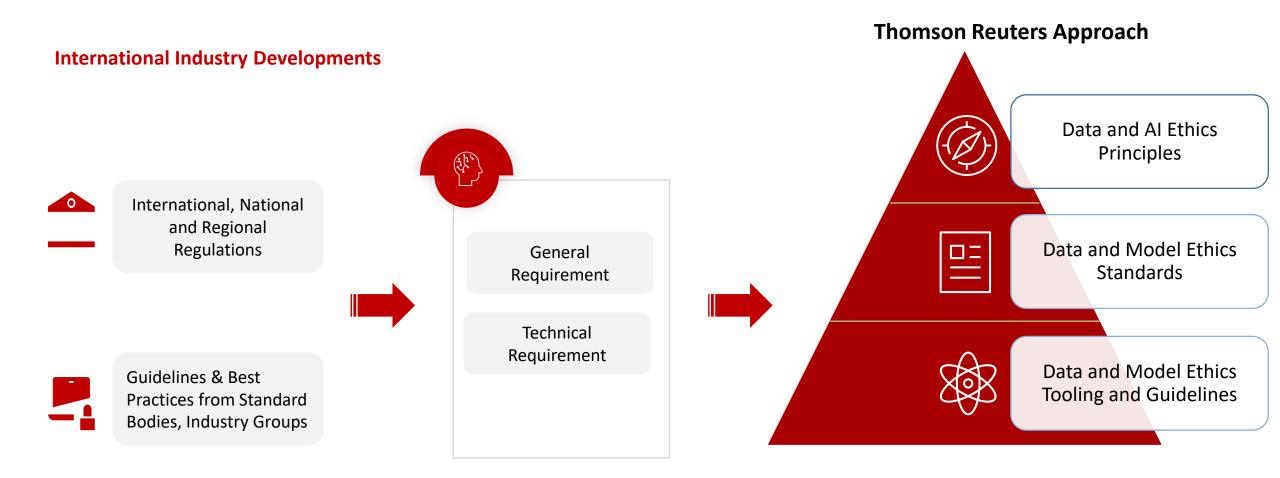
2. Thomson Reuters will strive to partner with individuals and organizations who share similar ethical approaches to our own regarding the use of data, content, and AI. 3. Thomson Reuters will prioritize security and privacy in our use of data and throughout the design, development and deployment of our data and Al products and services.

4. Thomson Reuters will strive to maintain meaningful human involvement, and design, develop and deploy AI products and services and use data in a manner that treats people fairly

5. Thomson Reuters aims to use data and to design, develop and deploy AI products and services that are reliable, consistent and empower socially responsible decisions.

6. Thomson Reuters will implement and maintain appropriate accountability measures for our use of data and our AI products and services. 7. Thomson Reuters will implement practices intended to make the use of data and AI in our products and services understandable. 8. Thomson Reuters will use employee data to ensure a safe and inclusive work environment and to ensure employee compliance with regulations and company policies.

From principles to operationalization



Stemming from our Data and **Al Ethics** principles, and to achieve wholesome governance on our data and model assets we embed:

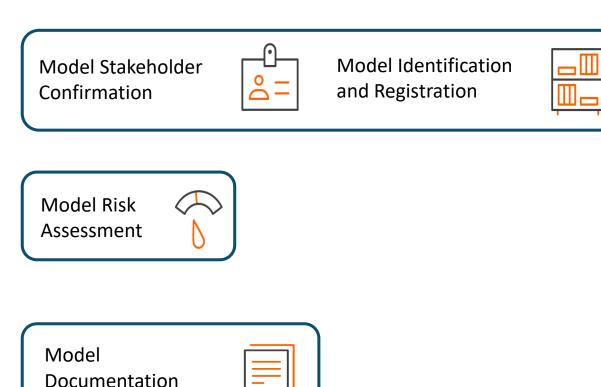
OPERATIONALIZING DATA AND GOVERNANCE

- Internal Policies, Standards, Procedures and Guidelines
- Impact Assessments
- Model Monitoring (in lifecycle and post-deployment)
- Risk identification and mitigation structures
- Risk reporting
- Data and Model Issue Management and Remediation
- Training and Upskilling
- Feedback collection
- Enterprise compliance monitoring and audits
- Data and Model Stewardship Network events

How do we "manage risks"?



How do we know which Models exist across Thomson Reuters, how they are used, and who develops/consumes them?





How do we assess the impact of Model failure on our finances, customers, ...?



How do we capture the knowledge on the business purpose, design, development, and deployment of the Model?





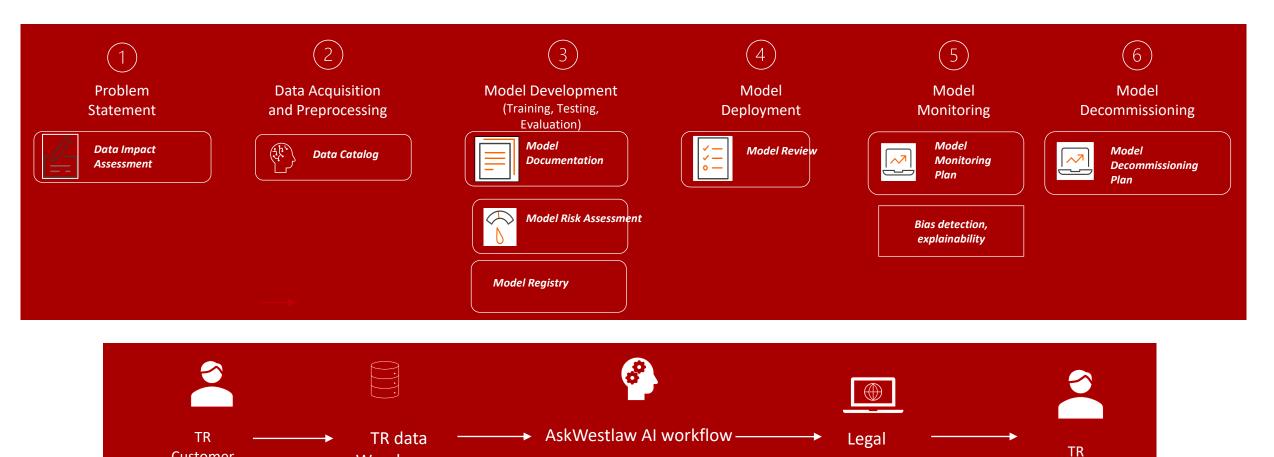
How do we ensure the Model's performance does not degrade over time?

Model Monitoring Plan

AskWestlaw Example

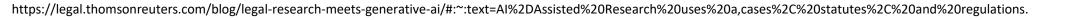
Customer

Goal: Al-assisted research uses a large language model (LLM) that analyzes trusted content on Westlaw to generate answers. The content analyzed includes cases, statutes, and regulations.



responses

Customer



Warehouse

Automating Governance/Ethics throughout the Data and Al Lifecycles

Automation use cases to enable AI Governance

Risk management app that pre-populates data across various model systems to identify model materiality, health and risk

These risks range from privacy, legal, ethics, data and model governance and compliance within policies

Automated ethics-harm assessment, and harm mitigation plans in place where applicable

Real-time monitoring and escalation of non-remediated data and model issues to the appropriate council Real-time Dashboards for Executive Sponsors that track visibility on their compliance journey for all data and model assets

Automate Control's dictionary- creation and publishing of glossary, standards/controls using LLM

Automated Access controls - Data Subject Access Request (DSAR), classification and ownership within systems Automated tracking and tagging of custom tags in model documentation and data elements such as CDE across systems

AI/ML techniques to profile new source data/metadata

Auto-assigning of training based on users roles and user engagement tracking to improve the course

The AI acquisition framework

Assess and benchmark solutions to ensure your organization's AI investment is responsible, ethical and aligned to larger business goals.

ETHICS AND SUSTAINABILITY

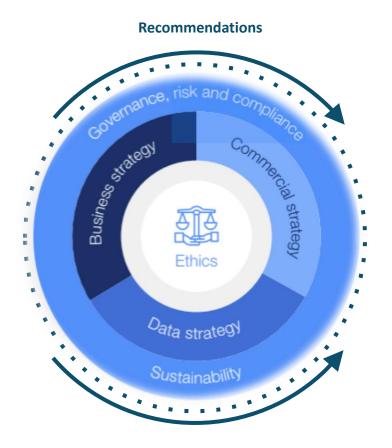
Al solution creates a net positive impact from an ethical and sustainability perspective.

GOVERNANCE AND RISK

integrate risk management plans with the AI solution and improve business resilience and risk

LEGAL

Keep up-to-date on legal and policy developments related to AI regulation.



BUSINES STRATEGY

Evaluate ways AI can create a competitive advantage through enhanced business decision-making,

COMMERCIAL STRATEGY

Al solutions align with the broader commercial strategy?

DATA STRATEGY

Evaluate the effectiveness of the AI solution in supporting enterprise objectives.

AI Governance Tiers – Recommendation

three tiers of complementary, company-wide governance structures in place to put the AI Principles into practice



The winning formula — a framework to address data challenges

TRUST: DEFENCE

Surprisingly, the exponential rise in data has not correlated to increased data usage. Data distrust is a value inhibitor and a significant barrier to adoption and usability. For CDOs to drive data trust, they need data to be well ingrained in the business and establish the right level of effective governance.

DEMOCRATIZE

Inspiring the organization to embrace data and building a data-driven culture are key success indicators for CDOs. To accomplish this, CDOs need to be change agents and great people leaders. Bridging the gap between people and technology is crucial for data democratization across the organization. This involves investing in self-service, low-code/no-code tools and data literacy programs that enable non-technical business users to access and use data effectively. Being a data visionary requires a collaborative mindset that cultivates a culture of creativity and continuous improvement.

(TRUST + MONETIZE) INNOVATE × DEMOCRATIZE

MONETIZE: OFFENCE

By the end of 2022, 35% of large organizations will either be sellers or buyers of data via formal online data marketplaces.² CDOs need to be business driven, networking focused and entrepreneurial to help drive offensive data strategies in their organizations. By harnessing both the internal and external demand for data through a "data economy," CDOs can enhance their organizations' business practices with added revenue.

INNOVATE

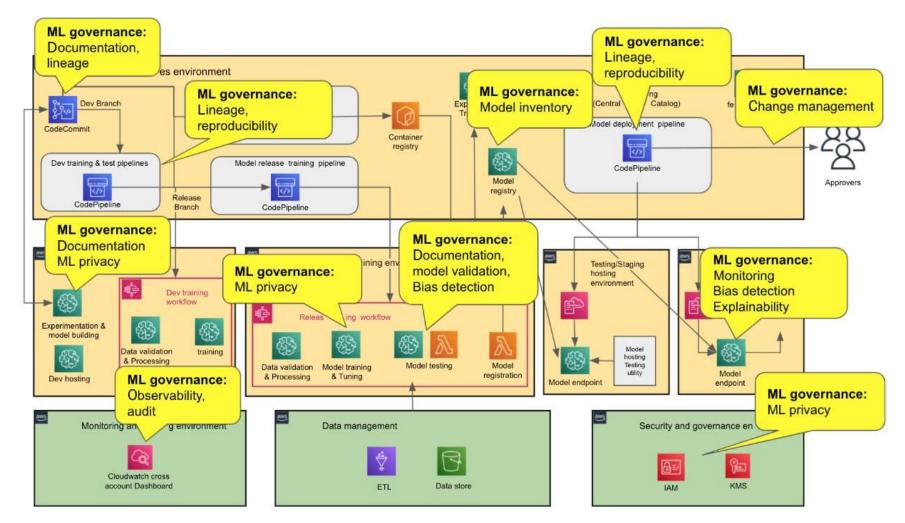
Innovation – introducing new ideas or methods – is a critical element of the winning formula, enabling CDOs to accelerate the adoption of data culture. The challenge for CDOs is to innovate responsibly by striking a balance between risk-taking and disciplined data management.

Source: https://www.ey.com/en_ca/big-data-analytics/the-winning-formula-for-cdo-success

APPENDIX

BUILD A GOVERNED AI PLATFORM

First, these technology systems must be designed and built to meet internal and external policies and guidelines.



The following diagram shows the various ML governance touchpoints in an enterprise ML platform:

Reference

- <u>https://www.vktr.com/ai-disruption/why-cios-and-cdos-need-to-work-together-on-generative-ai/</u>
- <u>https://www.ey.com/en_ca/big-data-analytics/the-winning-formula-for-cdo-success</u>
- Reference: Initiative for applied artificial intelligence Applying AI: Building the organization for scaling AI
- AWS, CHIEF DATA OFFICER (CDO) AGENDA 2023 Prioritizing business value creation Thomas H. Davenport In partnership with MIT CDOIQ