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	Governance and Change	
	Management: Enabling	
	Statistical Systems	· · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·	Dubai, Jan 2025	
DATA NETWORK		

Yves Jaques, Chief Frontier Data Technology Unit

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Data science holds the potential to revolutionize the way we produce and use statistics, but its success depends on two critical enablers: effective governance and thoughtful change management.



Data Governance

There may be more standards and guidelines governing Data and AI than actual implementation of AI-enabled solutions...

11. **AI Utilization Guidelines**: Released by Japan's Ministry of Internal Affairs and Communications, these guidelines encourage the development and use of AI with considerations for ethical principles.

12. **G20 AI Principles**: Adopted by the G20 nations, these principles promote a human-centered approach to AI and align closely with the OECD's recommendations.

13. **Hiroshima Al Process Framework**: Established by the G7 in 2023, this framework aims to guide the responsible development and use of Al technologies.

14. **Framework Convention on Artificial Intelligence**: Signed by the US, EU, UK, and others in 2024, this legally binding treaty ensures AI aligns with human rights, democracy, and the rule of law.

15. **Australian Voluntary AI Ethics Principles**: Introduced by the Australian government, these principles provide a framework for the ethical development and use of AI in Australia.

Data Governance: an enabler, not a blocker

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Governance can provide the foundation that allows users to access and analyze data without fear or uncertainty!



Enabling governance can address all of these common issues.

Privacy enhancing technologies are key

A core **technology** that enables us to work on **data** using **AI** responsibly, and there are many approaches:



Allows NSOs to analyze sensitive data without compromising privacy.

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Al is an opportunity, not just a risk

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The risks of AI (bias, opacity, misuse) can be mitigated, the benefits are many



Process Automation

Automating routine workflows for efficiency.



GenAl / Large Language Models

Summarizing, localizing, and customizing outputs for diverse stakeholders



Retrieval-Augmented Generation

Enhancing discovery and access to relevant data.

But how to enable all this new stuff?

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We need principles, strategies, and operating models for change.

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Data Mesh

Socio-technological principles for data + technology change management.





Open Science Community

A strategy for culture change based on transparency, collaboration, shared knowledge





Increase openness, integrity, and reproducibility. Behavior change to get researchers to show their work and to share

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Operating models

There's no one-size-fits-all model for data science teams.





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Frontier Data Network A UNICEF Data & Analytics Community since 2021



Frontier Data Connect (global) Builds partnerships and community across public / private / research sector.

Frontier Data Nodes (regional) Build regional collaboration, pairing local solutions with local talent.

Workforce challenges to change

- Fear of job loss due to automation.
- Skills gaps in advanced analytics.
- Resistance to adopting new processes.

But challenges are also opportunities

It's not a bug, it's a feature!



- Mainstream constant mentorship, knowing that turnover is high
- Make change collaborative by engaging staff in shaping the future of their work.
- Build trust through clear communication.
- Reach out to academia for partnership.
- Build a community of youthful data scientists (e.g., youth mappers), it's a powerful resource mobilizer



Key Takeaways

- **Governance** can be an **enabling catalyst** for data science adoption, and not necessarily a control mechanism that shuts down innovation.
- Privacy-enhancing technologies and delivering quick value with lightweight AI implementations are key value areas to support change.
- Change management principles like Data Mesh, community strategies like open science, and careful though to appropriate operating models can facilitate institutional transformation.
- Workforce challenges are an inherent feature of the data+technology space, in the public and private sector, and should be though of as a feature of the system that has to be designed for.

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Bringing data science into national statistical systems is not just about technology - it's about creating the **frameworks**, partnerships, and mindsets needed to drive sustainable change. Together, let's turn these challenges into opportunities.



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