

Data for Development

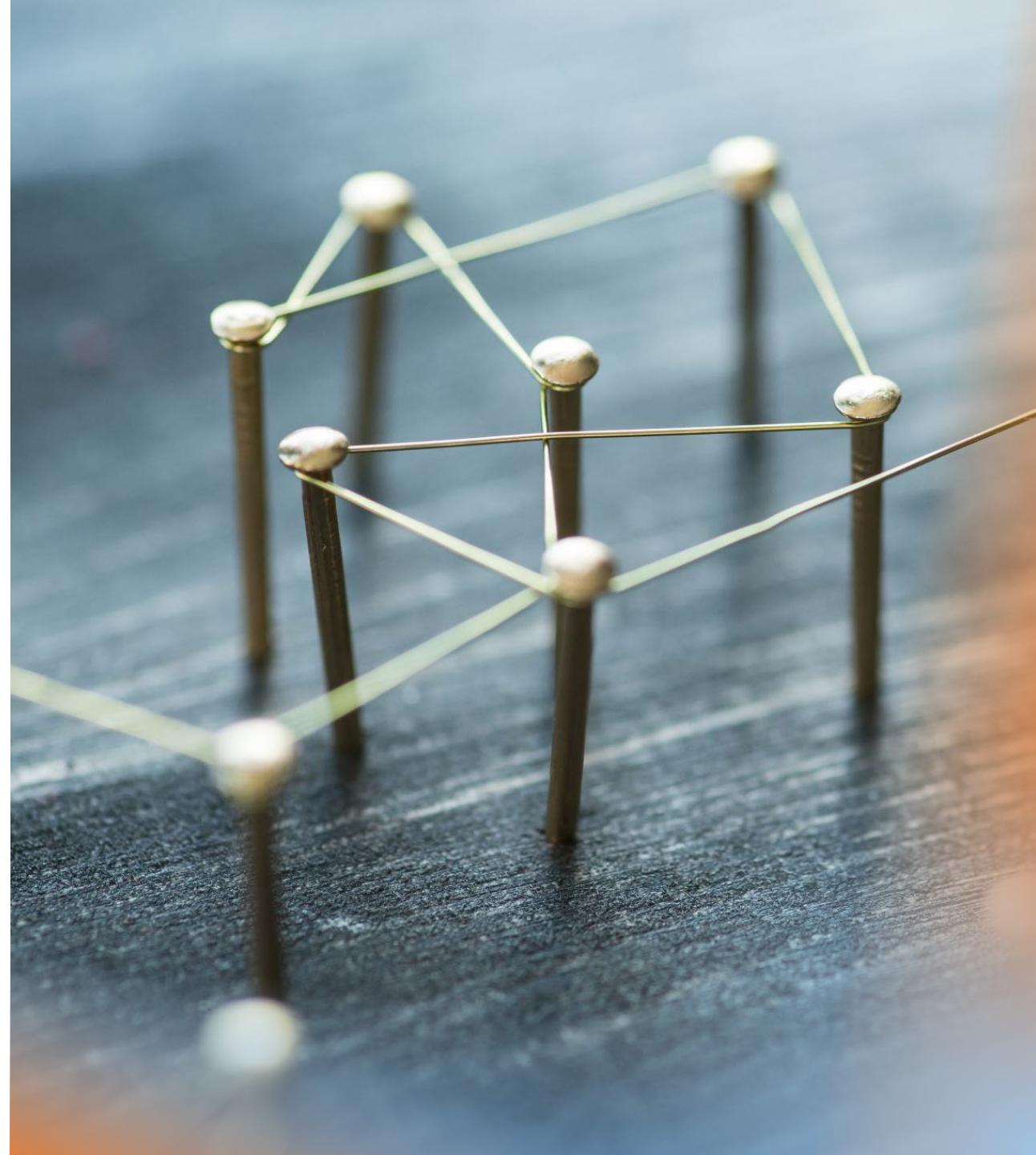
Introduction of the Issues paper by
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The structure of the issues paper Data for Development

- Promises of data for development
- Challenges of data for development
- Data governance
- Fostering capacities to benefit from data and address associated challenges



Guiding themes of the paper

- Data are **NOT a mirror to reality** but an outcome of broader social, technological, and economic contexts.
- Data are only **partially objective**.
- **Dual role of data:** data have the potential to address significant global challenges, while also resulting in the emergence of new ones.



Promises of data for development



Data as an economic input

- Breakthrough innovation
- Transition to sustainable manufacturing
- Sustainable energy production and management

Data-informed decision-making

- Actions against climate change
- Agricultural systems and nutrition
- Urban planning and development
- Disaster management
- Healthcare and health research

Digital platforms as breakthrough innovations

- **The most successful companies** today by market capitalization are owners of platform-based business models.
- Digital platforms **can address major challenges** in sustainable development.
- They enable breakthrough innovations through **large-scale collaboration**
- **Platforms' strength** lies in leveraging diverse knowledge, skills, and resources.



Example of promises: Climate change and SDGs



Data can help us **understand, monitor, and predict** key factors like climate patterns and emissions, making its effective use crucial in combating climate change.



Data-centered approaches support both **nature-based climate mitigation** methods and innovative technological **solutions for greenhouse gas removal**.



Data supports a **systems approach**, illuminating the intricate dynamics among various SDGs.

Challenges of data for development

Data prerequisites

- Data quality, portability and interoperability
- Data infrastructure
- Complementary skills and capabilities
- Data security
- Organizational acceptance
- Legal frameworks

Systemic challenges

- Data divides
- Market competition
- Data ethics and violations of human rights
- Disinformation and misinformation
- Power imbalances
- Sustainability

Example of challenges: Data security



- Governments must **enhance capabilities** to counter and manage cyber attacks.
- **Cyber attacks on power grids** can cause widespread, life-threatening blackouts.
- **Communication network disruptions** can isolate communities and hinder emergency responses.
- **Compromised transportation systems** may lead to delays and accidents.
- **Breaches of financial data** can result in fraud and financial theft.



Example of challenges: Data security

Companies often underinvest in cybersecurity, as the economic fallout from data breaches and cyber attacks usually impacts clients, not themselves.



Government interventions, through incentives and regulations, are needed to address firms' underinvestment in cybersecurity.



Example of challenges. Adverse effects on sustainability

Rebound effects

Large-scale energy and resource consumption

Mismanagement of electronic waste

Data governance

- A need for holistic data governance frameworks
- The fragmented global data landscape poses a risk of missing out on the benefits offered by digital technologies
- Limited influence of developing countries on global data governance standards .





Conclusions

- Harmonization of global data governance frameworks
- A comprehensive data strategy involving all government sectors, from health to agriculture, is required, moving away from assigning data governance to just one ministry or department.
- Strengthen regulatory policies to promote digital innovative businesses through public-private partnerships (PPPs)
- Allocate resources and funding for research in emerging data technologies



Thank you!

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