Annex

Data Revolution: Proposed UN System Initiatives

Initiative 1:

UN System Data Innovation Lab

Description:

1. Within the UN system there are few compelling operational examples of applications that leverage analysis of emerging data sources (mobile call records, social media, financial transactions, sensor data, etc.) with measurable impact in sustainable development programmes and humanitarian action.

2. A UN system-wide joint Data Innovation Lab would address this gap and provide the system with the capability to investigate, design, develop, prototype and test applications of emerging digital data sources in support of global efforts to achieve the data revolution for sustainable development. By bringing together private sector partners, academic centres of excellence, and leading experts in data privacy, the Lab would gain access to new types of data, data mining and visualization technologies and novel analytical methodologies, providing the UN with hands-on experience collaborating within “safe spaces” for rapid innovation, and would contribute to the development and adoption of more agile, effective and efficient ways of working.

3. A data innovation lab, therefore, would address many existing constraints, including:

   - **Internal Capacity.** Although the data revolution is already transforming private sector and civil society in profound ways, there remains limited institutional knowledge and technical capacity within the UN system for accessing the myriad sources of real-time digital data available today, analyzing them to gain new insights, and harnessing them to improve decision-making in the fast-changing, 21st-century landscape.

   - **Partnership Mechanism.** Although a growing number of private sector and academic organizations are willing to contribute relevant data, technology tools and analytical expertise to support the work of the UN system, the system lacks adequate means to support data innovation on an inter-agency basis, limiting the opportunity to leverage partnerships jointly.

   - **Space for Innovation.** There is need for “safe spaces” for experimenting with new approaches, exploring the capabilities of new technologies, and applying methods from the emerging field of data science to development and humanitarian challenges. Short-term risk aversion reinforces a culture of “business as usual” rather than promoting new ways of working through risk-taking.
• **Dedicated Resources.** To date, UN funds, programmes and agencies have limited access to designated financial channels for innovation. The current financial regulations and practices may hinder financing for the initiative, piloting and scaling-up of innovative approaches.

4. Using a build-to-learn, “fail fast or scale fast” approach, the Data Innovation Lab would identify high-potential opportunities to leverage new data sources safely and responsibly to address priority sustainable development challenges, employ user-centred design and rapid prototyping to develop new analytical approaches and tools, pilot innovations in the field, and share findings, technology, and lessons learned. The Data Innovation Lab will provide a flexible and efficient platform for jointly delivering proven, ready-to-scale tools and approaches while simultaneously strengthening internal capacity for data innovation across the UN system.

5. It is proposed that a coordination mechanism be established bringing together a network of associated data labs from across the system and leveraging external academic and private sector partners and networks, including the “Global Working Group on Big Data for Official Statistics”. Largely based on the experience of the UN Global Pulse, the UN System Data Innovation Lab will coordinate innovation projects implemented directly within the UN system and provide technical guidance to external partners for exploration, research and feasibility testing of new approaches.

6. It is recommended that the UN System Data Innovation Lab work under inter-agency guidance and be coordinated at country level through the Resident Coordinator Offices. While a core group of agencies will lead the work, all relevant UN agencies will be invited to designate focal points to collaborate with the UN System Data Innovation Lab on indicators that fall within their respective mandates.

7. Some of the benefits of the UN System Data Innovation Lab include:

   • UN system entities gain experience working with new sources of data, new tools, new analytical approaches, lab-based approaches to data innovation, and data access partnerships with private sector.

   • Private sector partners recognize opportunity to play a significant role in advancing the work of the United Nations through both corporate “data philanthropy” and development of new tools for data-driven decision-making.

   • Funding organizations are persuaded to invest in both discovery and scale-up of proven approaches.

**Expected Outputs of the UN System Data Innovation Lab:**

8. Global frameworks and harmonized methodologies for harnessing emerging data sources for new insights, real-time monitoring, and predictive analysis.

9. Dashboards and applications for data analysis and visualization that collect continuous feedback from target populations to allow agile and adaptive approaches to programme implementation, and new tools for anticipating, detecting and managing emerging risks.
10. Case studies drawing on pilot-based evaluation that capture lessons learned, illustrate best practices, and make a compelling business case for investment by providing evidence of implementation feasibility.

**Activities of the Data Innovation Lab:**

11. Identify priority areas for data innovation through consultation with UN system partners.

12. Develop public-private partnerships for access to relevant data, technology and expertise.

13. Conceptualize, design, implement and evaluate joint data innovation projects with UN system partners.

14. Undertake knowledge management and capacity building activities, including the sharing of findings, methods, tools, and lessons learned through case studies, toolkits and manuals.

**Timeframe for Implementation:**

15. It is essential that the UN System Data Innovation Lab be able to deliver quick wins soon after it begins operating. By implementing the UN System Data Innovation Lab as a joint innovation effort supported by a core group of UN agencies, planning can begin by mid-2015 and innovation activities may commence by October 2015. Proposed milestones would include:

   a) Designation of an inter-agency guidance mechanism

   b) Development of a workplan and “Standard Operating Procedures” outlining terms of engagement with participating UN agencies and external partners

   c) Resourcing of staff secondment to serve in the UN System Data Innovation Lab

   d) Designation of a UN System Data Innovation Lab focal point from each participating UN agency

   e) Convening of a consultative meeting with Innovation Lab coordinators, knowledge management focal points from across the UN system, and external partners, such as the Sustainable Development Solutions Network

   f) Providing regular updates to the CEB.

16. The UN System Data Innovation Lab will build on, among others, the experience of UN system organizations and Global Pulse.