Dalberg Data Insights

"FROM BIG DATA TO SHARED DATA"

By Frederic Pivetta, CEO Dalberg Data Insights

Data and technology are at the core of many economic development strategies of the 21st century. Digitization and advanced technical approaches using artificial intelligence (AI) and Big Data have generated expectations and promises beyond anything we could have dreamed of 40 years ago. It is now important to reflect on the progress made and what needs to be done moving forward. What is our shared understanding when it comes to investing in data and AI? How can we ensure our approach is inclusive and sustainable?

Building on systemic learnings

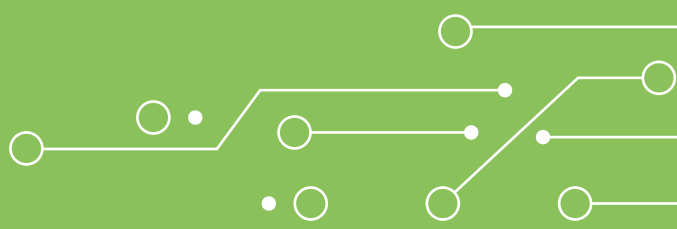
Over the last decade, there has been considerate attention and investment on the application of data to achieve development outcomes. Based on this experience, there are some important systemic learnings:

- *Impact is sometimes incremental and can barely be measured* – Digital impact is neither direct nor in step change but rather very indirect and incremental. Each step builds gradually on each other to generate digital transformation. This makes measurement more challenging.
- *Capacity building is not a silver bullet* – We need to unpack the cognitive path of the end-users of the data. In complex environments, it becomes important to create intuitive technical interfaces offering more ready-to-digest insights rather than mobilizing a large group of on-call data analysts.
- *Cutting-edge innovation is not always key* – Big Data and AI-based models and tools have been piloted over the last few years. Hence, it becomes increasingly important to move to the next phase and imbed the most advanced approaches into operational processes.
- *Social impact-driven products and services should find the right balance between not being economically sustainable vs. supporting a business case for the private sector* – For instance, telecom operators offering agri-related insights to farmers can both increase crop yields and create commercial stickiness that prevent farmers from moving away from their current telecom operators.

Integrating the learnings to build the next level of impact: Creating data ecosystems

One way to generate technical innovation and improve quality of life for citizens has often been to build more advanced infrastructure on top of existing infrastructure, while building new goods and services that leverage these new and more advanced infrastructures. More broadly, the historical path and evolution of a country makes us think that economic growth, longer lives, and the very idea of progress are rooted into creating assets. These assets are important as they are meant to last and be leveraged to bring progress at scale. The very idea of infrastructure is at the core of sustainable economic progress and technical innovation. We now are at a stage of digital maturity where we can start building data assets and infrastructure on top of existing data environments and digital assets. This has already been done in the past, for example around the FinTech industry directly resulting from the Payment Services Directive (PSD2) regulation. Such regulation aimed at creating an entire data ecosystem for FinTech in Europe by requiring banks and financial institutions to open their data backend to foster the emergence of new services and business models.

However, with data comes 'the trust question' combined with questions around reputation and liabilities of data holders. These questions can be addressed by creating stable institutions, forward looking regulation and inclusive communities. This translates into a strong governance and market place where different sides can meet. Such vision has been promoted by the European Union over the last decade when it comes to digital and market for data, namely from the General Data Protection Regulation (GDPR) to the Data Governance Act.

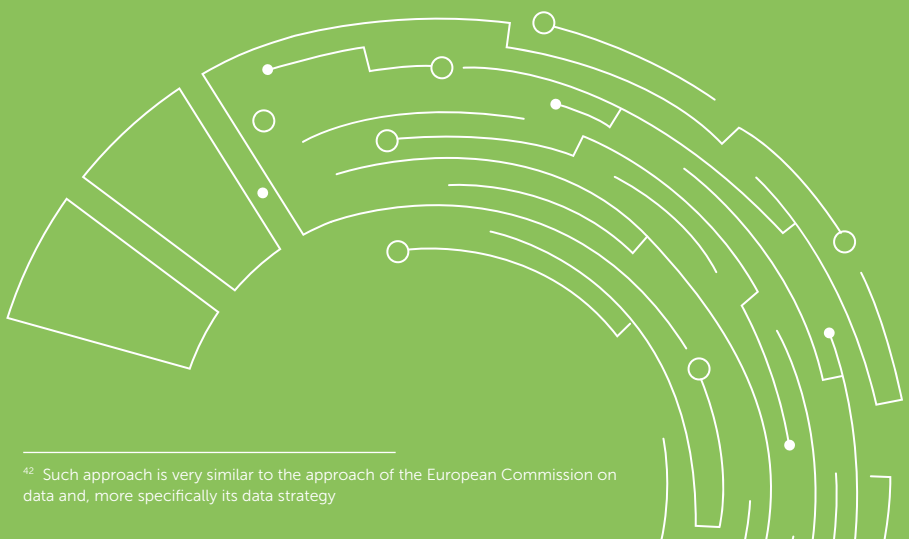


Integrating the creation of additional layers of infrastructure and services and the building of governance and community lead to a more holistic approach that we define as 'creating data ecosystems'. Such ecosystems can be classified in three pillars: (i) being smart on technical tools and assets; (ii) creating the supportive governance; and (iii) ensuring that there is a strong and vivid community of users and data holders.[42]

Some critical ingredients

To build a data ecosystem means to be visionary in terms of funding but still intentional about specific strategic investments, such as:

- *Pick relevant topics or questions and develop relevant data governance models*, as different topics might require different types of governance, for example personal health data (to support mental health questions) vs. satellite images (to support agriculture questions).
- *Invest in creating reliable and standard data sources*. Leveraging non-standard data sources can be insightful but long-term sustainability requires generating more standard data (e.g. administrative data).
- *Create data hubs/spaces* for each relevant topic, with, for example actual data, data access points, etc.
- *Create a community* of organizations and stakeholders for a given data space/topic to ensure mobilizing the relevant organizations with the right set of incentives.
- Move from monitoring and evaluation analytics to **predictive analytics**.



[42] Such approach is very similar to the approach of the European Commission on data and, more specifically its data strategy