

Harnessing Digital Finance for Sustainable Development

By Simon Zadek and Fiona Bayat-Renoux

The digitalisation of finance will transform the global financial system and its interface with the real economy. There is both opportunity and need to harness this disruptive dynamic in financing the 2030 Agenda and meeting the Paris agreement commitments on climate.

Digital finance includes big data, artificial intelligence, mobile platforms, blockchain, the Internet of things (IoT) and virtual or crypto currencies and it will impact not just how we deliver finance and financial services, but the core transition pathways that must take us towards sustainable development. At the same time, technology advancements have not benefitted all equally, and the unintended consequences must be understood and managed to mitigate any negative environmental and development impacts.

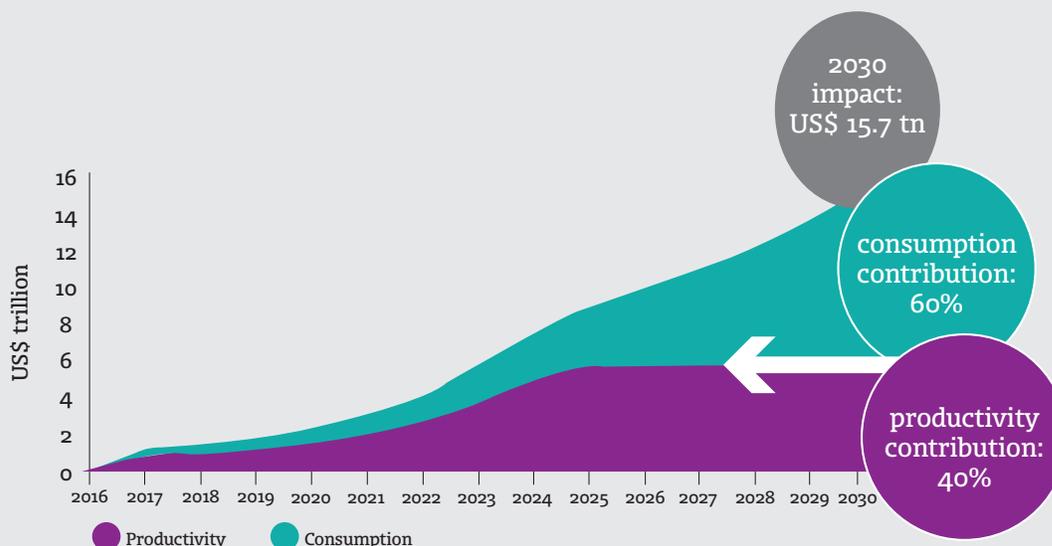
At its core, digital finance increases efficiency and accuracy, makes more data available more quickly at lower costs, and promotes greater inclusion and innovation. The digitalisation and automation of back-end processes

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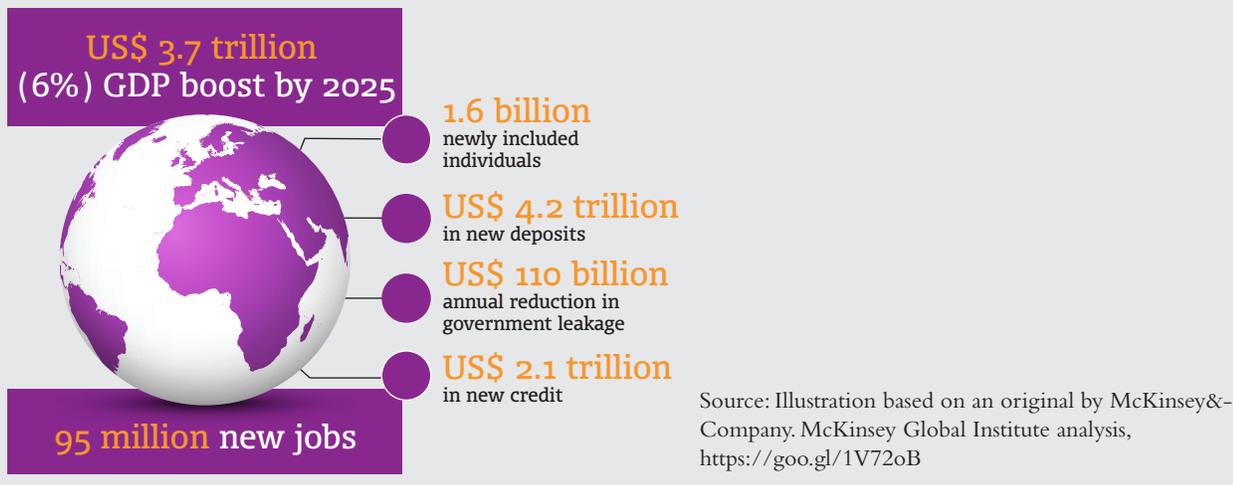
offer large scale reductions in costs and improved accuracy of back-end tasks. Similarly, the power of digital finance to make more data available more cheaply, more quickly and more accurately, reduces search costs for information related to sustainability impacts and financial risks, improves tracking of sustainable investments, and facilitates regulatory compliance. This helps overcome

Figure 1: Global Gross Domestic Product (GDP) uplift due to artificial intelligence



Source: PwC's Global Artificial Intelligence Study 2017

Figure 2: Digital finance in the developing world could have a great impact



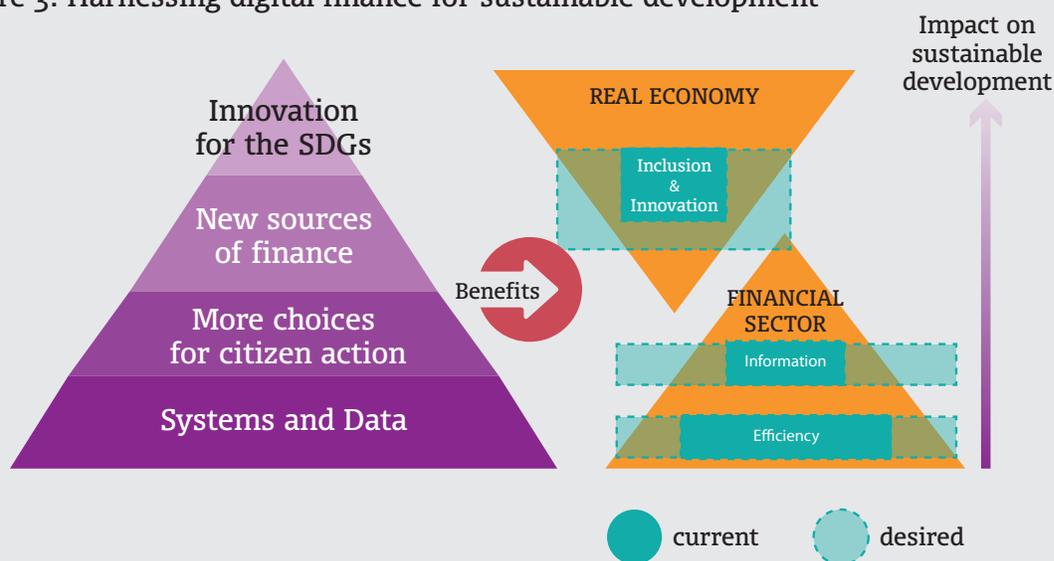
key barriers to mobilising and deploying sustainable finance in capital, private equity and venture capital markets.

Whilst the financial system has been at the forefront of adopting new technologies, its application of digital finance to sustainable finance has, to date, been limited, excepting in the more mature area of financial inclusion. There is a need to accelerate the broader deployment of digital finance for sustainable development, through market innovation and international cooperation.

The UN is increasingly active at the nexus between sustainable development and digital finance. UN Development Programme is advancing a Task Force on Digital Finance and the Sustainable Development Goals (SDGs)

on behalf of the Secretary-General. UN Environment, in partnership with Ant Financial Services, has created a public-private partnership, the Sustainable Digital Finance Alliance, which is working with the G20 under the Argentine Presidency on policy options for advancing digital approaches to financing the 2030 Agenda. A number of agencies are also operationalising digital finance in their work, including the UN Capital Development Fund (UNCDF) and UN Women. For example, UNCDF uses mobile payment platforms to progress financial inclusion by linking informal savings to formal institutions, and leveraging pay-as-you go models to enable a broad range of SDG linked basic services. UN Women is exploring blockchain-based solutions for women in humanitarian contexts to build an economic identity, and transfer digital assets.

Figure 3: Harnessing digital finance for sustainable development



Source: Illustration based on an original by the Sustainable Digital Finance Alliance (forthcoming, 2018). Digital applications for sustainable finance. An input paper for the G20 Sustainable Finance Study Group.