



#DSM

Digital Single Market

HOW CAN EUROPE BENEFIT FROM BLOCKCHAIN TECHNOLOGIES?

WHAT IS BLOCKCHAIN?



#EUBlockchain

Blockchain is the best known **distributed ledger technology**. A ledger is a database which keeps a final and definitive record of transactions. Records, once stored, cannot be tampered without leaving behind a clear track. Blockchain enables a ledger to be held in a network across a series of nodes, which avoids one centralised location and the need for intermediaries' services. This is particularly helpful for providing **trust, traceability** and **security** in systems that exchange data or assets. There is a lot of potential for blockchain to be used in many different areas such as financial services, supply chains or healthcare.

Until today, the venture capital industry has invested around **€1.2 billion** in more than 1,100 startups; 300 of them are European.

Initial Coin Offerings (ICOs) which represent new ways for financing blockchain ventures are booming (moving **from €250 million in 2016** to around **€3 billion in 2017**).

10% of global GDP could be stored, via digital assets, through blockchain technology in less than 10 years.*

POTENTIAL SECTORS (BEYOND VIRTUAL CURRENCIES)



By **governments** for citizens' ID management, taxation reporting, development aid management, eVoting and regulatory compliance (RegTech).



By **insurances** for automatic execution of contracts.



In **finance** for money transfer, peer-to-peer lending and transfer of securities.

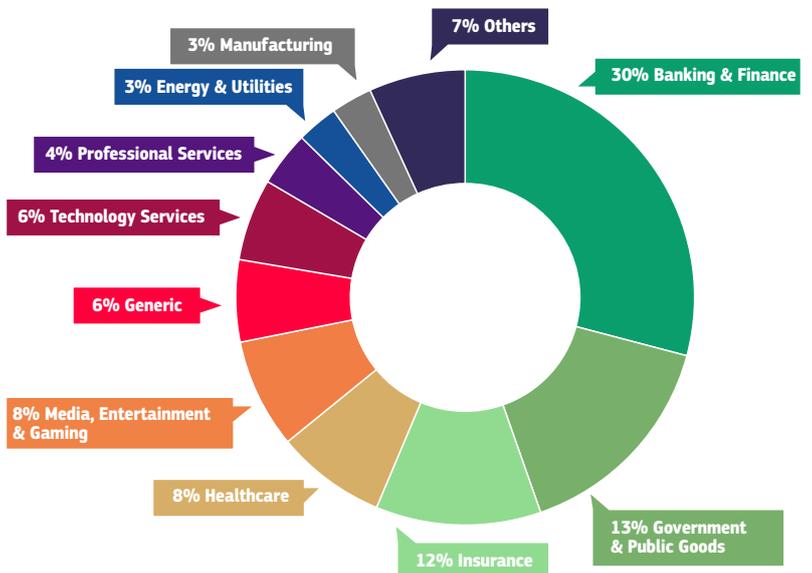


For **media and intellectual property** to directly distribute music, videos and other content.



In healthcare to track transactions on patient's health records and identification of access.

Sectors currently using blockchain



*World Economic Forum Survey: www3.weforum.org/docs/WEF_GAC15_Technological_Tipping_Points_report_2015.pdf

Source: www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/global-blockchain/#.Wms8ZrPtypo

Blockchain is a disruptive technology opening new avenues, Europe should help to



Support the European industry, seizing the economic opportunity introduced by this innovation in sectors such as supply chain, energy, mobility, ...



Improve business processes in governments, companies and organisations.



Enable **new distributed business models** based on direct peer-to-peer transactions without the need for central platforms.

WHAT IS THE EUROPEAN UNION DOING FOR BLOCKCHAIN?



Financing Horizon 2020 Research & Innovation projects.
So far **€83 million** have been allocated by the EU in blockchain related projects, and potentially up to **€340 million** could be committed **from 2018 to 2020**.



Actively **participating in international standardisation** like in:
- ISO Technical Committee 307 on blockchain and Distributed Ledger Technologies,
- ITU-T Focus Group on DLT Distributed Ledger Technologies.

Testing blockchain solutions (through proof of concept) and **piloting projects in support to EU policies** in areas like regulatory compliance, tax and customs, energy, identity management,...

IN 2018, THE EUROPEAN COMMISSION WILL:

Work on **Governance and Interoperability** Framework of the blockchain technologies.



Launch the **EU Blockchain Observatory and Forum** to:
- map relevant blockchain initiatives,
- share experiences and pool expertise on blockchain and its related challenges
- and organise debates at the EU level.

Broaden EU financing of pilot projects in other areas of public interest like eGovernment, eHealth, or transport.

Assess the need for an EU blockchain infrastructure and its **benefits**.

Engage with Member States and consolidate initiatives at EU level.