

# Blockchain

## What is it?

The blockchain is a technology with similarities to a database: it allows to store and access data on a computer support. Unlike a database, the data stored on a blockchain is unalterable: it can not be deleted or modified. Another difference: the blockchain is not controlled by a particular actor: everyone has a copy. This ensures transparency and inalterability, and eliminates the need for a trusted third party.

## Influencers to follow

Nadia Filali, Sajida Zouarhi, Luca Comparini, Xavier Lavayssiere, @leshackeuses

## What business impact?

- Disintermediation. A blockchain guarantees the inalterability of registered transactions. For this reason, it can replace trusted third parties responsible for the notarization of acts: notaries, certification offices, chartered organizations, public regulators and official agencies. The guarantee provided by these organizations would now be provided by a blockchain.
- Re-intermediation. New players invent several blockchain variants ("distributed ledgers"), implement and manage them, and create related services (certification, audit, marketplaces, etc.)

## Companies to guide you

StratumnHQ, TheLedger.be, ChainAccelerator

## 3 use cases

**Quantmetry** uses the blockchain to ensure the transfer of assets (here, datasets) between stakeholders, without the need for trusted third parties.

**bitcoin** - This currency uses the blockchain to determine how new currency units are created, and to manage financial transactions. Bitcoin was created as the first use case of the blockchain in 2009.

**BCDiploma**: start-up developing a solution for the certification and authentication of diploma, across schools.

## Traps to avoid

Always ask yourself these questions before embarking on a blockchain project:

- Does the project involve the need to do without a trusted third party?
- Would a "classic" database suffice?

## Biz models

# Platforms

## What is it?

A platform is a half-organization, half-market structure that coordinates and stimulates transactions between producers and consumers of goods and services. The platform is set up by one or more organizations that take advantage of the value created.

**Platforms look like organizations** in that they are most often companies or public bodies that create them. But unlike organizations, resources, activities and value are developed by producers and consumers situated outside the organization.

**Platforms look like markets** to the extent that value is created by independent agents who carry out "atomic" transactions (trade, services or sales on a piecework basis). But unlike markets, these transactions are organized and strictly controlled by an organization - which in a way plays the role of a "private market place".

## "Dataification", key factor of success for platforms

The key factor of success for a platform is not the market fit between an in-house product and external buyers, but its ability to:

- **orchestrate a useful, fluid and efficient coordination** between many and varied third parties. This requires intensive data collection on the platform's players and their behavior (see **big data** and **IoT** memo cards), automation and scalability of information exchanges (see **web APIs** and **cloud** memo cards), excellence of the interfacing devices and channels (see memo cards on **web APIs** and **data visualization**), and fine management / governance of the rights and duties associated with the data (see **GDPR** and **blockchain** memocards).
- **put learning mechanisms in place** that increase the value that platform users gain over time. This is made possible by data analysis (see memo cards on **IA**, **machine learning**, **graph mining**, **text mining**).

## To go further

Andrew McAfee and Erik Brynjolfsson, *Machine, platform, crowd*, W. W. Norton, 2017.  
David S. Evans and Richard Schmalensee, *Matchmakers*, Harvard Business Review Press, 2016.

## To guide your company

Platform Design Toolkit:  
<https://platformdesigntoolkit.com/>

## Organizations that developed platforms

**Dawex** is developing a market platform for data, connecting data sellers and data buyers. The added value that Dawex brings to the players is the total control of the transaction, on a sensitive asset.

« Distribution » platforms: **Spotify, Netflix, Amazon, booking.com, Uber Eats**... coordinate suppliers with customers, drawing their competitive advantage from flawless logistics, interfaces, and data-driven processes

« Matching » platforms: **Facebook, Airbnb, Uber, Blablacar, LeBonCoin**... provide a data-driven digital infrastructure enabling users to buy, exchange or communicate.