

## Utilising the Blockchain in today's OTC energy trading

### Gain increased process automation, regulatory transparency, reduced risk and cost savings

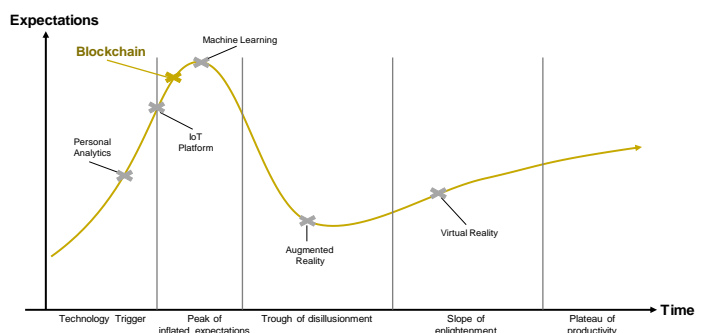
The end-to-end deal lifecycle in energy trading includes a number of intermediaries. Centrally-cleared exchanges strictly require that trades are backed by cash collateral. In contrast, over-the-counter (OTC) contracts allow the counterparties to use alternative collateral structures such as asset liens, credit lines, or no collateral below mutually agreed thresholds. This flexibility is becoming increasingly crucial as it frees up scarce capital. However, OTC brokers acting as intermediaries form a significant part of transaction cost. In an OTC energy trading market with dropping prices and transaction volumes, this is more and more turning into a painful burden for the involved market players.

Applying the Blockchain technology as a first step towards peer-to-peer transactions can be a tangible and realistic solution. It can lead to manifold benefits – for instance, a decrease in transaction cost paired with an increase of automation and data quality as a major opportunity for operations and IT. The OTC settlements process represents a promising starting point. It is well understood and standardised. At the same time, it does not yet follow a fully digitalised and automated approach.

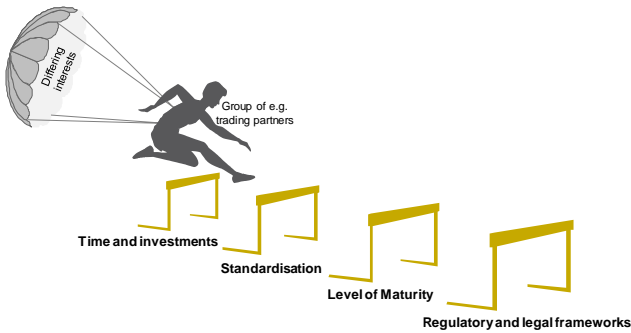
### Energy trading will need to make an informed choice when and how to embark on the Blockchain trend

A set of key questions can guide your choice regarding adaptation of the Blockchain technology for your business:

- Is the Blockchain of relevance for our OTC trading business?
- When and how should we get involved?
- Are our processes and IT systems ready for the Blockchain?
- What are the current and future critical factors for success?



A reference to Gartner's 2016 hype cycle for emerging technologies is very insightful to answer the above questions. Currently, the Blockchain is close to reaching the peak of inflated expectations – commonly referred to as a hype (see figure above). A trough of disillusionment is expected to follow as soon as the technology and its complexities are widely understood. After a slope of enlightenment, the plateau of productivity will be reached, especially for transactions between two to many parties. The technology will have matured sufficiently as for to promote itself in widely accepted evolutionary steps – for instance, by processing subparts such as settlements of the trade lifecycle.



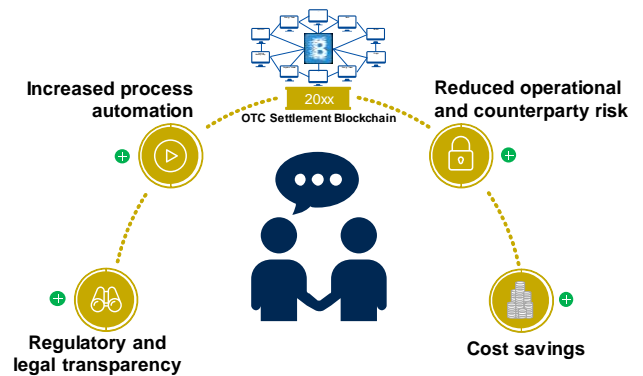
Blockchain as a new paradigm will have a substantial impact on the OTC energy trading business. The full Blockchain technology potential goes beyond the “Distributed Ledger Technology” (DLT) also known as the cryptocurrency bitcoin, which was originally meant to create a decentralized trust network for monetary transactions.

However, later approaches follow upcoming decentralisation trends. Blockchain now also represents a type of business process improvement software. Corresponding platforms for executing decentralised applications via Smart Contracts allow for almost

limitless use cases. Due to this multitude of possibilities, it is essential to decide on when to get involved and how much to invest. Considering the nature of trading, this comprises counterparties with differing interests to be aligned - at least in terms of commonly agreed standards (e.g. by ISDA or EFET).

Alongside strong collaboration and standards, existing and new IT infrastructure will be critical to succeed. Therefore, it is obligatory to analyse and understand, where specific functionality should sit in the future (e.g. databases, interfaces). As this also applies to different Blockchain approaches (e.g. Ethereum, Bitcoin), the latest level of technological maturity needs to be monitored and understood.

Additionally, government regulation – usually driven by centralised interests such as taxes – could have a detrimental impact on promising new value propositions. However, the overall objectives should be the driver for action in any circumstances. Benefits can include increased process automation, regulatory transparency, reduced risk and cost savings - just to name a few.



## The Advisory House supports you in seizing your market opportunities within the Blockchain Paradigm

The Advisory House is a focussed management consultancy to Europe’s energy and energy technology industry, employing over 50 consultants and operating out of four locations in Germany, Switzerland, Austria and the UK. We have repeatedly been awarded “Hidden Champion” of the consulting market in the category “energy industry” since 2012.



The Blockchain is a new underlying technology that allows for significant benefits. It has the potential to solve long lasting problems in an efficient and more well-designed way. It not only enables tamper proof transaction storage, aggregation and netting - sufficient to replace the ancient systems and processes currently used - but can also help to overcome today’s challenges in energy trading. The main challenges such as multi-stakeholder alignment and standardisation for settlements will be addressed in a working group, we are currently establishing.

**Please get in touch with us**, if you are interested to be involved in driving this topic across the industry. Let’s solve this issue together with what’s available and proven to work!

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