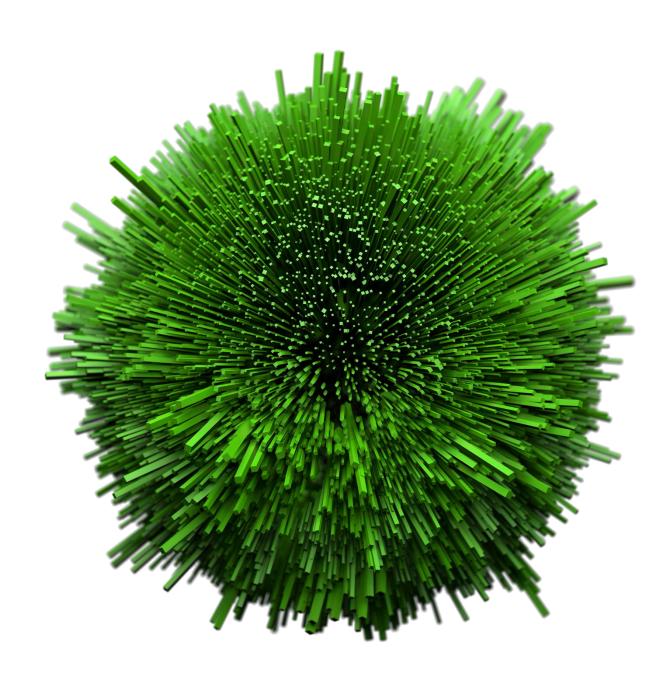
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Breaking Blockchain open

Central and Eastern European perspective

Deloitte's 2018 global Blockchain survey Central and Eastern European snapshot

About the survey

This summary presents the insights collected in a non-representative inquiry in Central and Eastern European countries, aiming to add a CEE perspective to Deloitte's global survey, Breaking Blockchain Open.

The survey was conducted online between 12 Oct and 9 Nov 2018, covering 10 countries in Central and Eastern Europe: *Lithuania, Poland, Czech Republic, Slovakia, Hungary, Slovenia*,

Lithuania, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Serbia, Romania and Bulgaria participated in the sounding.

The respondents covered six industries, with the majority of the survey participants representing companies from the Financial Services (34%), the Energy and Resources (25%) and Consumer Products and Manufacturing (23%) industries¹.

The respondents came mostly from C-level leaders and managers, who act as decision makers *in Finance (38%), IT (24%), Strategy (11%) or Innovation (10%) field.*



Figure 1: Distribution of respondents among the covered countries

Blockchain awareness in the CEE region

Considering the level of understanding Blockchain, the *CEE region has mostly slight, general knowledge of the technology*. The average preparedness of the respondents' companies is rather poor, only 42% of the survey participants believe that their executive team has strong understanding of Blockchain. Still, according to the participants, the key business decisions about the Blockchain technology are made by the business leaders in their company, only 23% of the represented companies prefer to have these decisions delivered by IT and only 32% of the respondents admitted that the R&D and Innovation division leads the Blockchain investments.

From an industry point of view, the *Financial Services and Technology/Media/Telecommunication sector is the most confident about their own knowledge of the technology*, which is in line with the global view, just like the *low comprehension of the Public Sector*. Based on the responses, good understanding of the topic among the executives lags behind the global results.

Compared to the global results, the whole region is less confident in their knowledge of Blockchain.

More than the half of the respondents believe that the whole Blockchain story is overhyped, but 45% of them also believe that this technology will disrupt their industry, and their company will lose competitive advantage if they do not adopt Blockchain.

¹ Perceived distruption of Blockchain technology – by industry: Energy&Resources: 75%; Tech-Media-Telco: 50%; FS: 42%

- Tech&TelCo
- FS
- Energy
- Cons/Manuf.
- Public

Mostly the Public Sector and Manufacturing and Consumers are confident about Blockchain's threat for their business but almost half of the respondents from the FS sector share the same opinion.

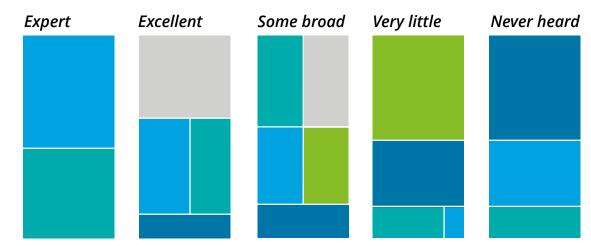
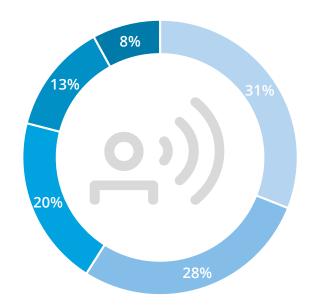


Figure 2: Level of understanding on Blockchain technology by industry

Beliefs vs. actions

In the Central and Eastern European Region, only 8% of the respondents believe that Blockchain will not be relevant for their companies, but almost 30% of them are unsure of the question. As Figure 3 shows, almost two thirds of the survey participants agree on the statement that Blockchain will be relevant for them, but only one third say that the adoption of the new technology is important or game changer for their company and they handle it with priority. From an industry point of view most of the identified industries say that Blockchain is relevant but not a strategic issue for them, except for the Technology / Media / Telecommunication sector, which believes that the technology is important to accelerate their business.

76% of the respondents share the idea that Blockchain will reach the mainstream adoption, but only 27% of them are planning to replace part or all of their existing system with innovations based on the new technology.

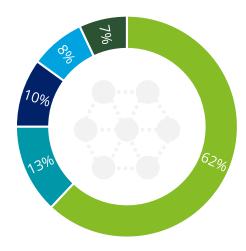


- It will not be relevant
- Not sure
- It will be critical in our top 5 strategic priorities
- It will be important, but not in the top 5 strategic priorities
- It will be relevant, but not a strategic priority

According to the survey participants, new business models and new revenue sources are the most important advantages of the new technology, but the greater security and lower risk are also great advantages according to the covered sample. Only 4% of the respondents say that Blockchain cannot bring any new advantage compared to the existing technologies. Almost 60% of the respondents believe that Blockchain based solutions are safer than the traditional ones.

Regarding the external influencers, most of the respondents (41%) say that there is no external factor in their decision about Blockchain adoption. The other part of the survey participants named customers (28%), partners (27%), suppliers (21%) and market analysts (13%) as external opinion leaders who influence their decisions regarding Blockchain technology.

Almost two thirds of the respondents are unsure now about their attitude on cooperation with competitors in a consortium with a role of Blockchain based service development. 13 % of them already participate in a formal group, which works on Blockchain based solutions.



- Unsure
- Currently participate in one
- Planning to go it alone
- Likely to join me
- Considering forming our own

Figure 4: Organizations' position on participating in a Blockchain consortium with competitors

Investment willingness

Most of the CEE respondents have not yet started to invest into Blockchain technology, only one quarter of the respondents claimed to have made investments so far. Three quarters of these investments were less than EUR 200 K, but there were respondents with more than EUR 2 million investments done in the field. These investments have been manifested mostly in the FS and Technology/Media/Telecommunication sectors, but there were some expenses also in the Consumer Products & Manufacturing and Energy & Resources sectors.

The existing use cases are mostly related to digital recording and payment solutions, but there are prototypes under construction for digital identity and also for supply chain traceability. Only 10% of the existing use cases aim at digital currency. There is a logical distribution of the use cases in line with the main profile of the sectors: supply chain solutions are mostly popular in the Consumer products & Manufacturing sector.

Private Blockchain solutions have the highest popularity in every covered sector, but the FS and Technology/Media/Telecommunication sectors are open to the public solutions, too.

These investments are realized mostly in consultant fees or HR investments into Blockchain skills. Some companies are developing front- and back-end solutions based on the Blockchain technology. They mostly use consultants with Blockchain experience and also invest into internal resources, or they are planning to do so. There are some companies who have ongoing existing system replacement projects, also supported by external experts.

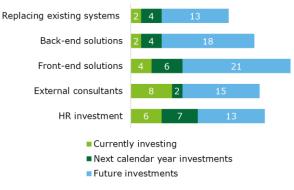


Figure 5: Investments planned in Blochchain technology

Considering the planned investments for the next calendar year, the trends are similar to the past years.

Half of the respondents are not planning to invest into the technology in the next calendar year, and almost 20% of the rest are unsure about their attitude on the short-term investments. Almost 30% of the respondents stated to invest at least EUR 100 K into the technology in 2019, and there are some big players who consider allocating between EUR 200 K and 2 million to these types of innovations. According to the responses, some participant have already started to invest into the technology and this process goes on, so most of the highest investments in the next calendar year are continued, as part of a longer process. However, there will be new players in the region who are planning to start exploring the technology, but with baby steps, less than EUR 100K amount of funds.



Planned investments in the next calendar year (EUR)

Figure 6: Investment attitudes by sector



Technology/Media/Telecommunication and Energy & Resources sectors will have the highest demand on the workforce with Blockchain expertise and these sectors have the biggest appetite to invest into any type of Blockchain based solutions. Public sector respondents are those who would like to invest only into external experts, and the respondents coming from this sector are not planning to invest in changing the existing systems.

The survey also investigated the *potential barriers of Blockchain adoption*. The results show that the strongest restraining force is the lack of business priority; *the topic is not recognized as a high priority issue in the business.* (See Figure 3) *The lack of in-house capacity and regulatory issues also block the future steps,* and only 1% of the respondents believe that there is no barrier to invest into the technology.

Comparing the respondents' attitude to their direct competitors in Blockchain readiness, almost quarter of them consider themselves one of the leaders (22%), and another 23% say that they are fast followers. Players of the FS and Technology/Media/Telecommunication sectors are the most confident, more than 40% of the respondents coming from these areas believe that they are in a good position in the Blockchain adoption competition. Unfortunately, most of the total respondents (38%) cannot judge their market position.

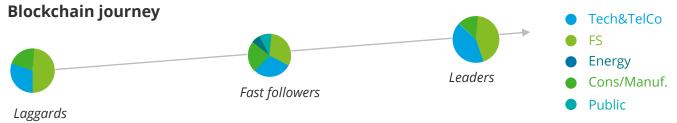


Figure 7: Industries' position in the journey to the Blockchain adoption

Financial Services perspective

The Financial Services sector was one of the first industries to explore blockchain and is recognized globally as an industry with high potential to be truly impacted by blockchain technology. Also in our survey, one-third (33 percent) of respondents identified themselves as working in financial services.

Although the respondents from the sector claim that they only have some broad understanding of the topic, they have a strong belief in Blockchain as a future mainstream technology. After the recovery from the financial crisis, banks need to face the challenge of innovation, fast shifting customer needs and the threats and opportunities presented by Fintechs. In line with these new trends Blochckain is becoming a hot topic, but the industry mostly believes it overhyped, and the majority of the respondents believe that the technology will not distrupt their market. One third of the participants coming from FS are unsure about their attitude to Blockchain, and another one third believe the new technology will be relevant for the industry but it is not among the strategic priorities. Quarter of them keep it in the loop with high priority during their strategic planning processes. Generally, the respondents ranked themselves as laggards compared to their competitors, but one guarter of them have already taken part in a consortium with other players to investigate the potential use cases of Blockchain. They prefer private blockchain models, and they believe mostly in Ethereum.

The most important advantages of the new technology for the FS sector are new business models and potential revenue sources, but the respondents also expect a more secured working area and greater speed of transactions. Quarter of the respondents are planning to bring Blockchain to production in the future. The same share of the participants have already invested into the technology, but only 10% is planning to do so in the next calendar year as well. These investments will mostly aim to strengthen HR capability, but the respondents are planning to invest into front and back end solutions in the further future. Considering the barriers in front of the investments, the most popular answers were the lack of regulations and the lack of business priority.

Historically, use cases for blockchain technology in financial services include trade finance, customer onboarding, regulatory reporting, and cross-border payments. Moving forward, revenue-generation use cases for crypto-trading services, loyalty programs, securities-lending services, and others have started to come into focus. In Central and Eastern Europe some use cases are under formation in the sector; based on the responses these mostly aim payment and digital identification.

Globally it is clear that the financial services industry is at the tipping point of critical change, and those who understand both the opportunities and challenges will emerge as winners.

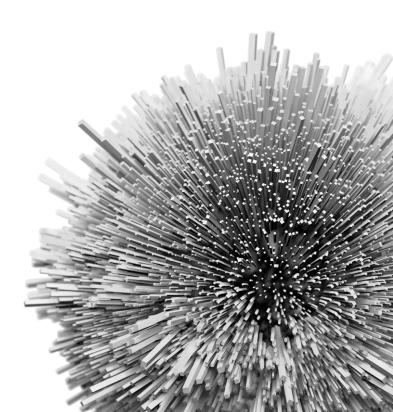
Summary

As the results of the CEE Blockchain survey show, the corporate sector is not yet sure about its position on the Blockchain. The respondents have mostly general background knowledge of the technology and the average preparedness of the executives is professedly weak. The Energy & Resources and Technology / Media / Telecommunication sector is the most confident about their own readiness regarding the knowledge, which is in line with the global view, just like the low preparedness of the Public Sector.

The sectorial expectations are in line with the global trends, but there are just rare investments in progress, yet. Almost half of the participants also believe that this technology will disrupt their industry, and Blockchain will have an effect on the competitive advantage of their company if they fail to adopt it. Three quarters of the respondents share the idea that Blockchain will reach the mainstream adoption, but just almost 30% of them are planning to use it as a base of their further system improvement. New business models and new revenue sources are believed to be the most important advantages of the new technology, but the greater security and lower risk are also great advantages according to the covered sample.

The next steps in the get to know process are likely to be investing into internal capacity and external support, and in total, the investment amounts are likely to grow. *Most of the CEE respondents have not yet started to invest into Blockchain technology*, only one quarter of the respondents claimed to have made investments so far, the existing investments have been manifested mostly in the FS and Technology / Media / Telecommunication sectors. The existing use cases are mostly related to digital recording and payment solutions, but there are prototypes under construction for digital identity and also for supply chain traceability.

Around half of the respondents admitted that they would not invest into the new technology during the next calendar year, and around 20% of the participants are unsure about their future attitude to the topic. Almost 30% of the respondents stated to start or follow the invest process with at least EUR **100** K in 2019, and there are some big players who consider allocating between EUR 200 K and 2 million to these types of innovations. *There will be new players* in the region who start exploring the technology with baby steps, with less than EUR 100K amount of funds. These investments would mostly be in the HR field, but there is a growing number of front and back-end solution changes and system replacements. The results show that the **strongest restraining force** is the lack of business priority; the topic is not recognized as a high priority issue in the business. The lack of in-house capacity and regulatory issues also block the future steps, and only 1% of the respondents believe that there is no barrier to invest into the technology.



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