Blockchain in Europe
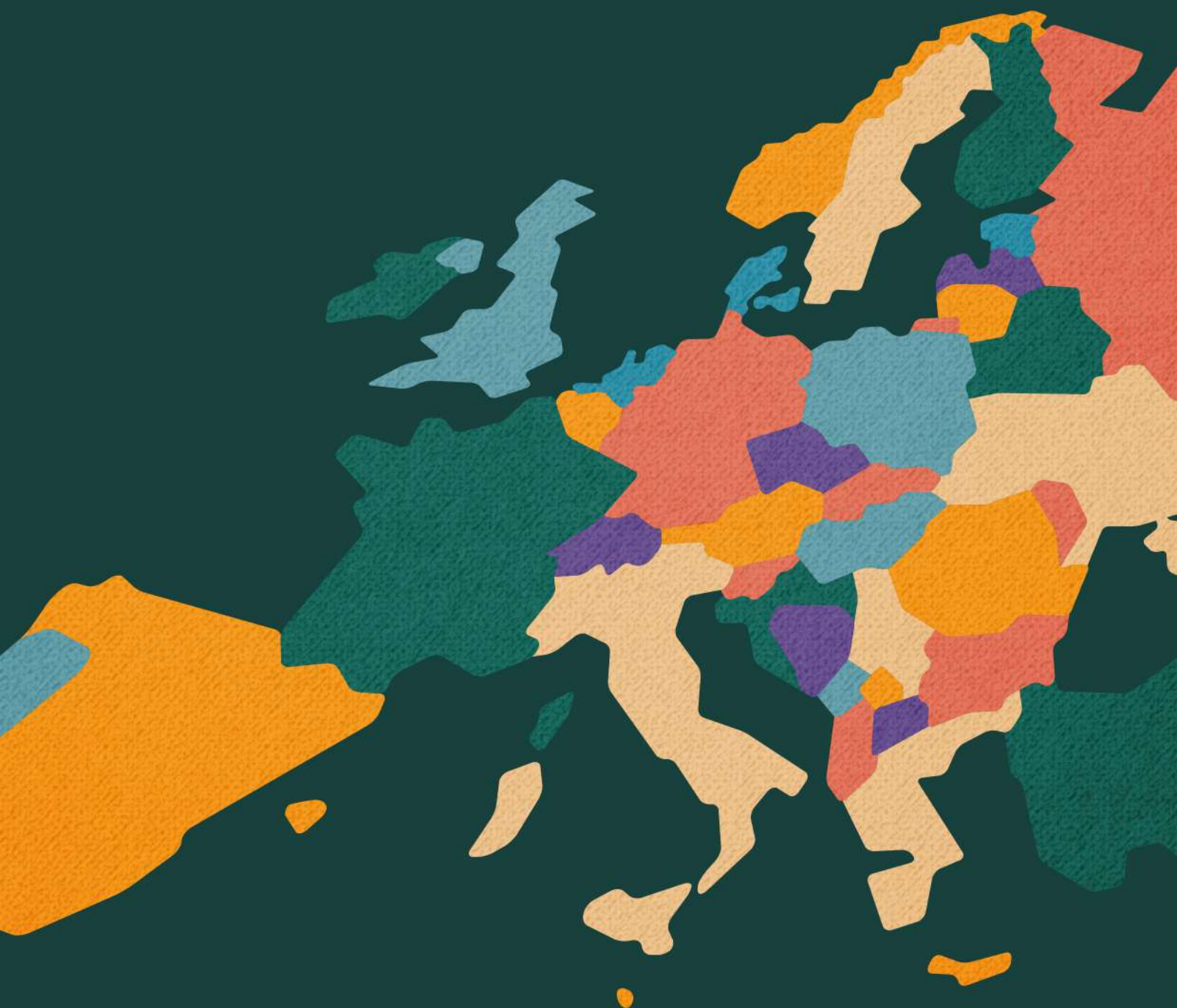# 2020 Review

dGen

BEYOND

Blockchain in Europe 2020 Review

Foreword

Being mostly based in Berlin, we feel fully emerged in the European blockchain ecosystem. Our office in Kreuzberg is a stone's throw away from Full Node, the offices of Parity, and the location of Ethereum's first developer conference. But it's also right next to the last remnants of the Berlin Wall, a monument symbolising society's power to demand freedom, self-sovereignty, and the overthrow of an oppressive system. My commute over the former state border serves as a daily reminder of what we should not take for granted.

It's interesting to analyse the culture that drives much of contemporary blockchain development, as it appears very endemic to Europe. Whether we look at The Enlightenment, the fall of the Berlin Wall, or our more recent history of fading borders for increased cross-country collaboration: it feels blockchain has a welcome home in the European discourse.

But to proclaim any singular location to blockchain is to misunderstand what it stands for. With origin stories, collaborators, and legal entities spread over different locations, it's almost impossible to pin blockchain startups to one geographical ecosystem. More than any other subsector of 'Tech', these really are virtual, decentralised organisations.

This is also what made the task of creating the ultimate European Blockchain Review such a daunting task. We recognise, and want to remind our readers, that most of the organisations mentioned in this report are likely located and active in multiple locations, with both employees and collaborators spread all over the world. Rather than starting with the organisations, we tried to assess what the different European ecosystems look like as a whole. We reached out to more than 60 experts and reviewed some 1200 organisations in over 20 countries. Although we tried to maintain an equal and diverse set of opinions and include all organisations in each ecosystem, I don't think we achieved perfection yet.

We're incredibly proud of our team and would like to extend our gratitude to everyone who took the time to contribute to this report. Europe is in a great position to grow its global position in this space and extend its culture of collaboration in tech, as we have in politics.

Nick Dijkstra & Jake Stott

Founding Board, dGen

Nick Dijkstra
dGen

Jake Stott
dGen

Executive Summary

Blockchain technology burst on to the scene in an explosive way. And in the last few years, crypto currency prices and hopes and dreams for the future have begun to level out to manageable levels. This is not to say that the blockchain hype is over, but just that it's no longer the end-all, be-all. Simply a useful tool in updating and improving the systems that touch, and in some cases, drive our daily lives. Some might proclaim 'it's about the technology again'.

Europe, and more specifically the European Union (EU), have exhibited an investment in exploring where adoption will take the continent. This is clear in the numerous partnerships and organisations to foster broader blockchain adoption and collaboration. But, the push for more collective blockchain adoption efforts are not restricted to the government. In many ways, interest in blockchain has been a grassroots movement, and continues to be greatly driven forward by those on the ground who are fostering these communities. Of this, María Paula Fernández, Founder and Director Department of Decentralization / ETHBerlin and *Head of Communications, Golem Factory GmbH, says:*

'I'm really excited to stop talking about countries or startups and start talking more about communities and collectives'.

This is the great strength that Europe can bring to the scene, as a united collective of individual countries and ecosystems. So while Europe's blockchain ecosystem may not be as big as the US or Asia's, it comes with the potential to collaborate due to greater sharing between countries. And, as each country has unique strengths and cooperation continues to grow, it is a strong environment that promises to push forward even more innovation. Therefore, we've taken a review of Europe's different blockchain ecosystems, to the end of growing a stronger and more united front.

Our review collected a database of players in the various European, including startups, NGOs, spaces, events, and more. We also reached out to local experts, to get a broad range of views for how the space looks. Based on all of this information, we rated each country.

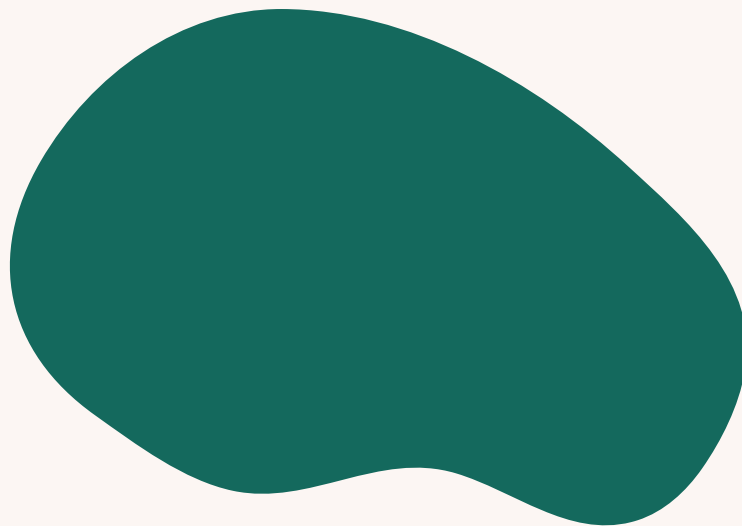The top players we identified are:

- Germany
- Switzerland
- France
- The United Kingdom
- Malta
- The Netherlands

However, many other countries also have much to offer, and present various interesting prospects.

Based on the expert input and our own findings, each country was given a multifaceted score. For instance, Germany has an extremely strong ecosystem, with a lot of very strong startups and communities. However, other countries far outstrip the difficult German tax system, such as Malta, which jumped on the bandwagon early on, and continues to have a close relationship with players in the blockchain space in creating future legislation.

Moving forward, we're hoping for all of Europe to continue to take advantage of these differences. Ideally, the great organisations throughout Europe will be able to share ideas and source work from each other. And, in turn, in the coming years, all of Europe needs to adopt clear, but not restricting legislation, so that sharing across borders becomes more accessible, even outside of the EU.

Under these circumstances, Europe can expand its reputation in blockchain beyond Crypto Valley. This is already happening as the EU and various European governments implement blockchain in their governmental systems. But, while many European governments have expressed interest and started initiatives, it is often still the startups and organisations who drive the most exciting innovations. Jamie Burke, Outlier Ventures CEO predicts that '2020 will see Europe begin to steal a march on the US as The West's hub for blockchain projects'. So while blockchain might not be the cure-all some touted it to be, we're going to keep observing the possibilities that blockchain and other emerging tech present and watch the players in the field, because they will ultimately drive innovation in Europe.

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Methodology

Tackling a pan-European overview of blockchain is a daunting task. To this end, we chose to focus only on countries that are entirely contained on the European continent, excluding transcontinental countries, like Russia and Turkey. We aimed to be as complete as possible, and strove to include as much information on the current ecosystems, regulations, and leaders in the industry as possible. That being said, information on blockchain innovation is still largely distributed, hard to gain a full picture of, and very dynamic.

To gather this information, we collected a database of companies, funds, events, spaces, non-profits, and other organisations operating in the European blockchain ecosystem. We then looked at these, along with regulations, to determine how friendly countries are to blockchain innovations, and how active the ecosystem is. Based on this information, we selected several influential figures for each country to reach out for insights. Looking forward, we have tried to provide some useful predictions for how blockchain ecosystems might change or be influenced in 2020.

Taken all together, we used this information to provide a grade for each country, giving more information on the countries we found to be leaders in blockchain innovation. This is intended to be a broad overview, and unfortunately cannot be guaranteed to be entirely complete; its main purpose is to inspire a sense of growth and progress. The country overviews are not exhaustive and do not include all organisations in the respective ecosystem. On some occasions transnational or decentralised organisations have been added to where we think they fit best. That being said, we feel that the information we have collected is a good place to start, and a good reference for those looking to gain further insight into the state of blockchain in Europe in 2020.

If we missed something or made a mistake, feel free to reach out to us at HQ@dGen.org.

Europe in Review

Ecosystem

'In the future, all public services will use blockchain technology. Blockchain is a great opportunity for Europe and Member States to rethink their information systems, to promote user trust and the protection of personal data, to help create new business opportunities and to establish new areas of leadership, benefiting citizens, public services and companies. The Partnership launched [enables] Member States to work together with the European Commission to turn the enormous potential of blockchain technology into better services for citizens'.[56]

Mariya Gabriel, Commissioner for Digital Economy and Society

Europe is emerging as a strong blockchain ecosystem on the global playing field. Between 2017 and 2019, London had the second largest amount of blockchain funding globally,[18] pointing to the importance of the European blockchain sector. But, much of what makes Europe unique is the intersharing that occurs between the individual blockchain ecosystems of each country. Simon Schwerin, Co-Founder of Scalewonder and Investor Relations Manager at KILT Protocol, says that:

'Collaboration, clarity and focus are key for EU players to succeed [in] giving the EU a unique position. We should start seeing our efforts more as EU wide or global efforts, which is very hard due to local "bubble" bias'.

While each country has its own defining characteristics, the goal of collaboration that Schwerin defines at an EU and broader European or global level, are already being addressed by organizations, task forces, and committees to encourage cooperation and sharing. These efforts make European blockchain unique, and give it an edge over other markets - one that we hope to continue to see in the 2020's.

Crypto Currencies and Finance (STO)

2019 has been a roller coaster year for regulations, between fundraising and widespread discussion of Central Bank Digital Currency (CBDC). With reports that claim that 70% of central government banks are exploring CBDCs, it still remains unclear as to whether or not this is a viable option. The European Central Bank's (ECB) most recent report on anonymity in digital currencies highlights many of the issues with adopting digital currencies. Central banks have many concerns over digital currencies, and to issue them directly would require a lot of work to bring together current laws and expectations for transparency with the anonymity that many cryptocurrencies, and cash, offer. For instance, the proposed method would require the ECB to issue anonymity vouchers, which essentially recentralise the procedure, calling into question whether this is an improvement on current systems at all. Though banks approach CBDCs with both trepidation and interest, it seems there are some issues to be hammered out in 2020 and beyond.

Additionally, Security Token Offerings (STOs), while an exciting potential for startups and FinTech, has proved to be a hurdle for regulators. After Initial Coin Offerings (ICOs) did not live up to the 2017 hype, or perhaps outmatched the reality, blockchain technologies experienced a great setback, both in public opinion and in practice, as the safety of the space became uncertain for investors. STOs have provided a means for a second chance of sorts, as they are designed with existing regulations in mind, and therefore, provide investors much greater security. However, many countries are still wary, and have failed to fully incorporate either STOs or ICOs into law. Presently, 'Europe [has] perhaps the most permissive regulatory environment for tokens as a form of crowdfunding globally', according to Outlier Ventures CEO Jamie Burke, and while this allows for innovation, in 2020, securities regulations need to be hammered out and incorporated for STOs to ever reach their potential.

Politics and Regulations

Regulation is one of the most pressing issues for the European Union (EU) and Europe at large. Facebook's announcement of Libra has been a disconcerting 'wakeup' call to many European lawmakers,[13] though Switzerland has decided not to block its registration.[14] The EU fears that this stablecoin will usurp the Euro,[15] but is uncertain about releasing their own Central Bank Digital Currency (CBDC). Research and exploration into a European CBDC is ongoing.

The decentralised and anonymous or pseudonymous nature of blockchain makes it particularly hard to regulate.[16] The EU has updated Anti-Money Laundering legislation in its 5th iteration (AMLD5), which was fully instated on January 10 2020,[12] to specifically mention blockchain. This is a major concern for many operating in the crypto space, as this directly places some serious restrictions on cryptocurrencies. Other regulations have merely been applied to cryptocurrencies, but there is still some uncertainty in this, leading most countries to apply regulation of tokens on a case-by-case basis.[6] In 2020, crypto traders are preparing for heavier regulations and greater involvement from regulatory bodies. According to Mel Gelderman, CEO of UK-based Monolith, the industry would benefit from more collaboration with the authorities:

'In the UK, the Financial Conduct Authority (FCA) has been proactive in learning how to make AMLD5 work for existing startups. They have deployed 400 people to work on blockchain companies. Regulation is helpful, but the question remains what this means for new startups without the means to hire lawyers and people working on compliance'.

Smart contracts also present several issues, as they are not yet recognized under stringent enough guidelines to act as signatures.[16] Therefore, in order to foster blockchain growth and innovation, while still protecting customers, many European lawmakers see the solution to be clear, but not confining regulations.[17] As Zeeshan Feroz, the Coinbase's UK chief executive, told Sifted:

'Europe has the potential to emerge as a global leader in blockchain technology...This is in part down to an openness towards innovative technologies, coupled with regulatory developments'.[11]

Incentives

News

GERMANY

Germany

By far the most startups, but little enterprise involvement and an unfriendly fiscal situation leave room for improvement

Regulation 6.5
Adoption 6
Startups 9.5
Funding 6
Fiscal Inc. 4.5

65
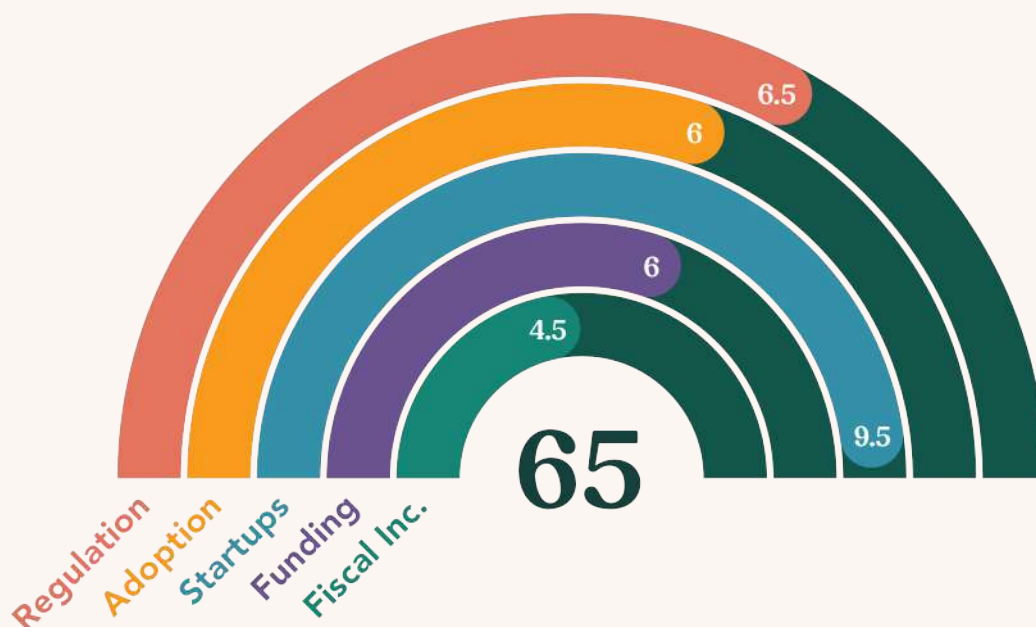
Description of Ecosystem

Often whispered to be the unofficial birthplace of Ethereum, and with a history of counter culture and desire for self-governance, Germany is an attractive hub for blockchain startups. With the second highest amount of blockchain startups in the European Union (EU) at 8%,[53] the majority of Germany's blockchain community and companies are located in Berlin.[50] While Germany's government caught the attention of many with the release of a blockchain strategy that outlines plans for innovation, adoption, and legislation, the ecosystem is still largely driven by organisations from the ground up.[3] This ground up approach is fueled by a steady influx of talent into Berlin, and has led to several large players in blockchain registering in Berlin.[51] However, while Berlin is still attracting talent, it may have reached the tipping point, with some startups looking into drawing on wider, global teams to find talent that they cannot easily source in the country. Like most blockchain ecosystems, crypto and finance dominate Berlin startups.[51]

Local Community Experts

Lasse Clausen
1kx

María Paula Fernández
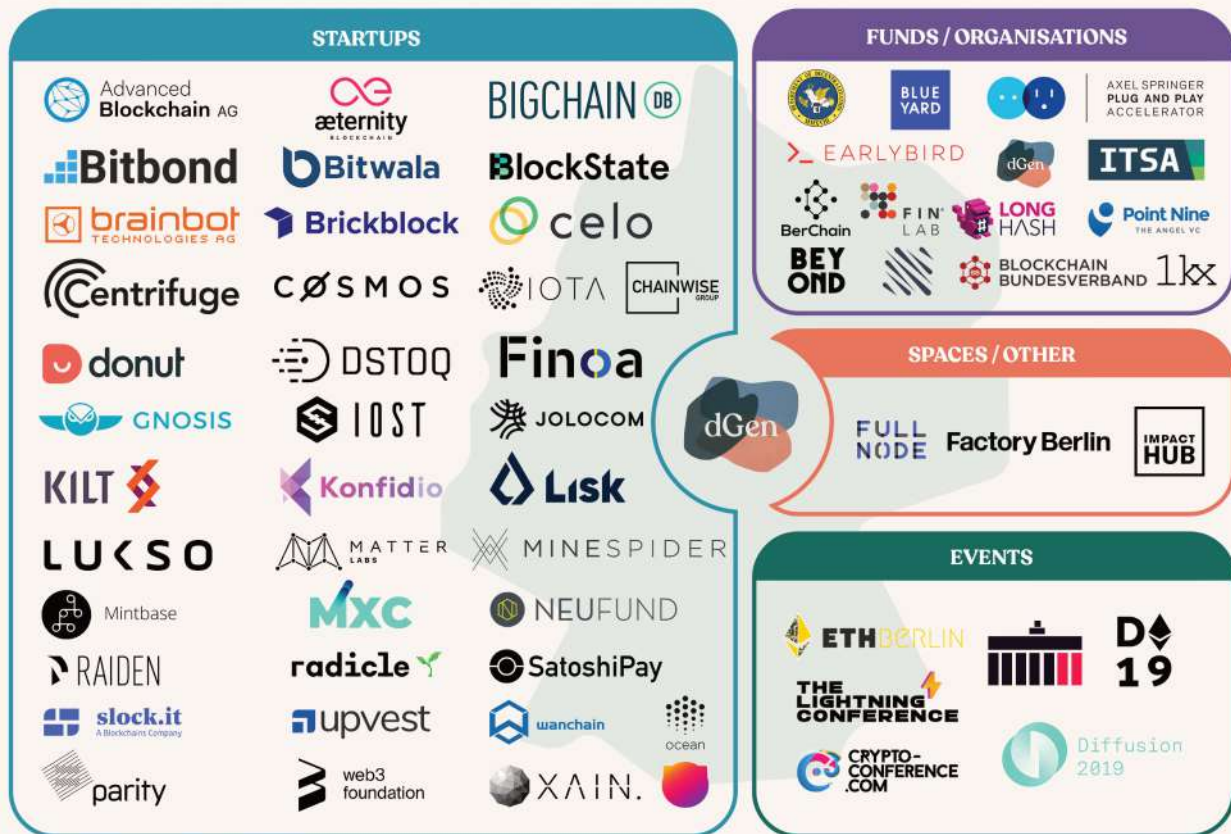ETHBerlin, Golem

Silvan Jongerius
BerChain

Simon Schwerin
Scalewonder

> '[L]et's try to break the mold of talking about startups, and understand that in this industry, community reigns supreme, and Berlin has one of the strongest and brightest decentralized industry communities of them all!'
>
> **Maria Paula Fernández**
> Founder and Director Department of Decentralization / ETHBerlin (decentralala.com) and Head of Communications, Golem Factory GmbH.

Germany's main players

European Blockchain Review 2020   dGen.org

Maria Paula Fernández, Founder and Director Department of Decentralization / ETHBerlin and Head of Communications, Golem Factory GmbH, told us:

'Of course it goes without saying that the ecosystem is healthy and growing – however, my personal opinion is that after the 2017 ICO craze, where everyone in Berlin was into blockchain, the ecosystem needs to go back to basics. We need to read up on the decentralised web and alternative systems, and why we do this at all'.

Regulation in Germany

Germany does not currently have specific legislation regarding cryptocurrencies and blockchain beyond EU regulations.[6] Existing regulations that has been applied to tokenized securities are:

- German securities Trading Act
- European Markets in Financial Instruments Regulation
- European Market Abuse Regulation.[6]

However, Germany's financial regulator, BaFin, released a statement in 2017 declaring that they must review each token offering on a case by case basis.[3] *'For example, BaFin requires [a] crypto custody license, which can be hard to acquire for early stage startups'*, Simon Schwerin of KILT Protocol says, going on to stress that while *'regulators [are starting] to provide clarity'*, it does *'not mean it is cheap or easy to comply'*. And Silvan Jongerius, President and Founder of BerChain, backs up this claim, saying that: *'even though blockchain seems to be top of mind in some respects,'* that *'[o]ver-implementation of AMLD5 [Anti-Money Laundering Directive 5] in Germany is not helpful, and inflexibility of legal structure is tricky, too'*.

While there is clearly already some regulation, the government released a Federal Blockchain Strategy in September 2019,[2] which promises to draft legislation specifically on publicly offered crypto-tokens as well as updating Anti-Money Laundering regulating this year.[1][4] This strategy alludes to coming regulations, however, Germany already passed legislation which allow banks to hold cryptocurrencies, effective as of 1 January, 2020.[54] There is some trepidation over the security of this, but many see it as increasing access to cryptocurrencies and placing them under the scrutiny of institutions already accustomed to regulating finances.[54] All in all, Germany appears to have a vested interest in providing regulatory frameworks which foster the blockchain and cryptocurrency ecosystems. Schwerin sums it up as: 'Regulators have an open ear and they are trying! Many blockchain companies are also starting to work together with regulators to help innovate regulation itself, which is an exciting step for a country as large and traditional as Germany'.

Blockchain Developments

Germany: New Proposed Law Would Legalize Banks Holding Bitcoin, 29.11.2019

Germany Passes National Policy to Explore Blockchain but Limit Stablecoins, 18.09.2019

SWITZERLAND
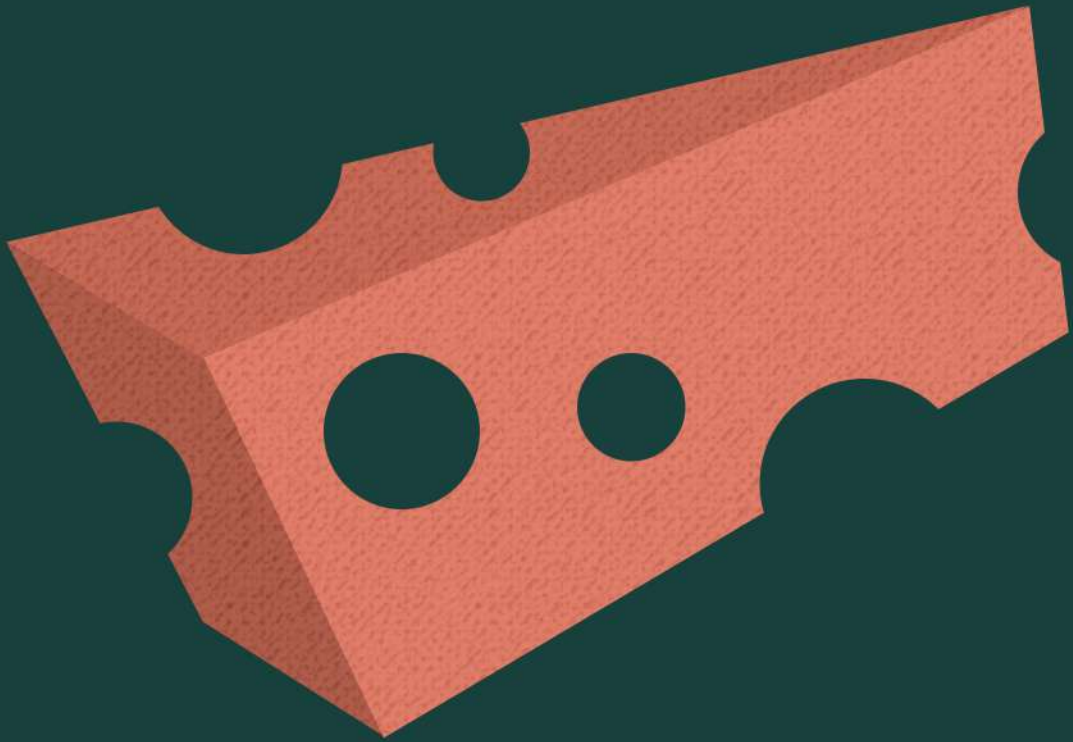
Switzerland

A world leader for capital and regulation, attracting businesses and foundations, but a smaller local community

Regulation 9
Adoption 7.5
Startups 8.5
Funding 7
Fiscal Inc. 10

84
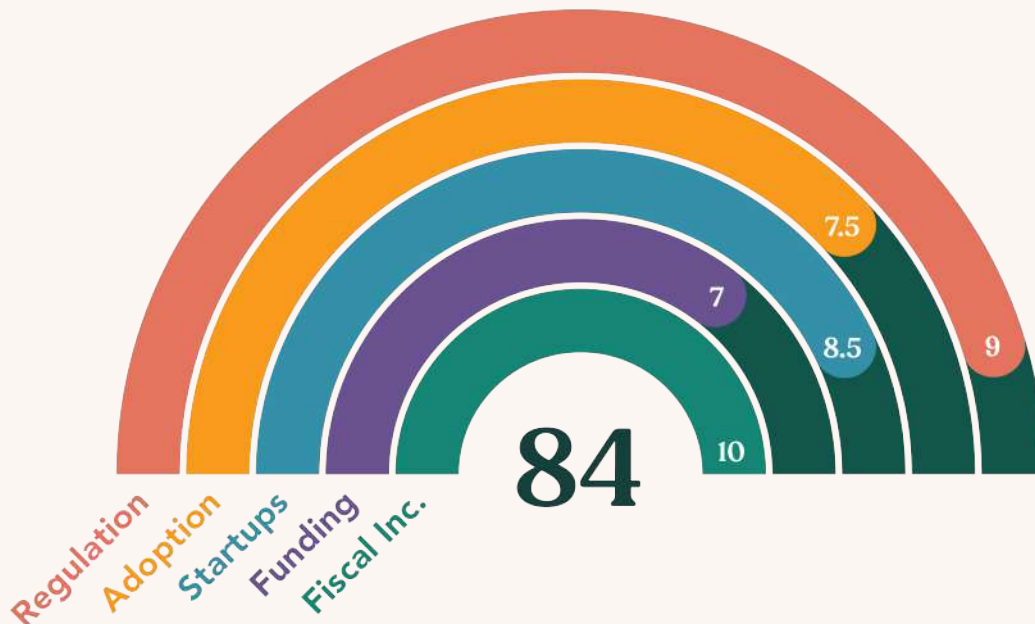
Description of Ecosystem

Zug, or Crypto Valley, is seen as the European, if not global, blockchain epicenter. Initially known as a tax haven,[28] the broad adoption of blockchain by the city has brought widespread recognition of the city both in and outside the blockchain community. According to Emi Lorincz, Chair Western Chapter - CVA, there are *'still many projects[...] considering setting up shop in Switzerland and the ecosystem is certainly healthy'*. While the country is *'seeing less projects'*, Lorincz continues to say that the projects currently setting up are *'higher in quality, have more solid business models, competitive teams, and determined product market fit'*.

Local Community Experts

Emi Lorincz
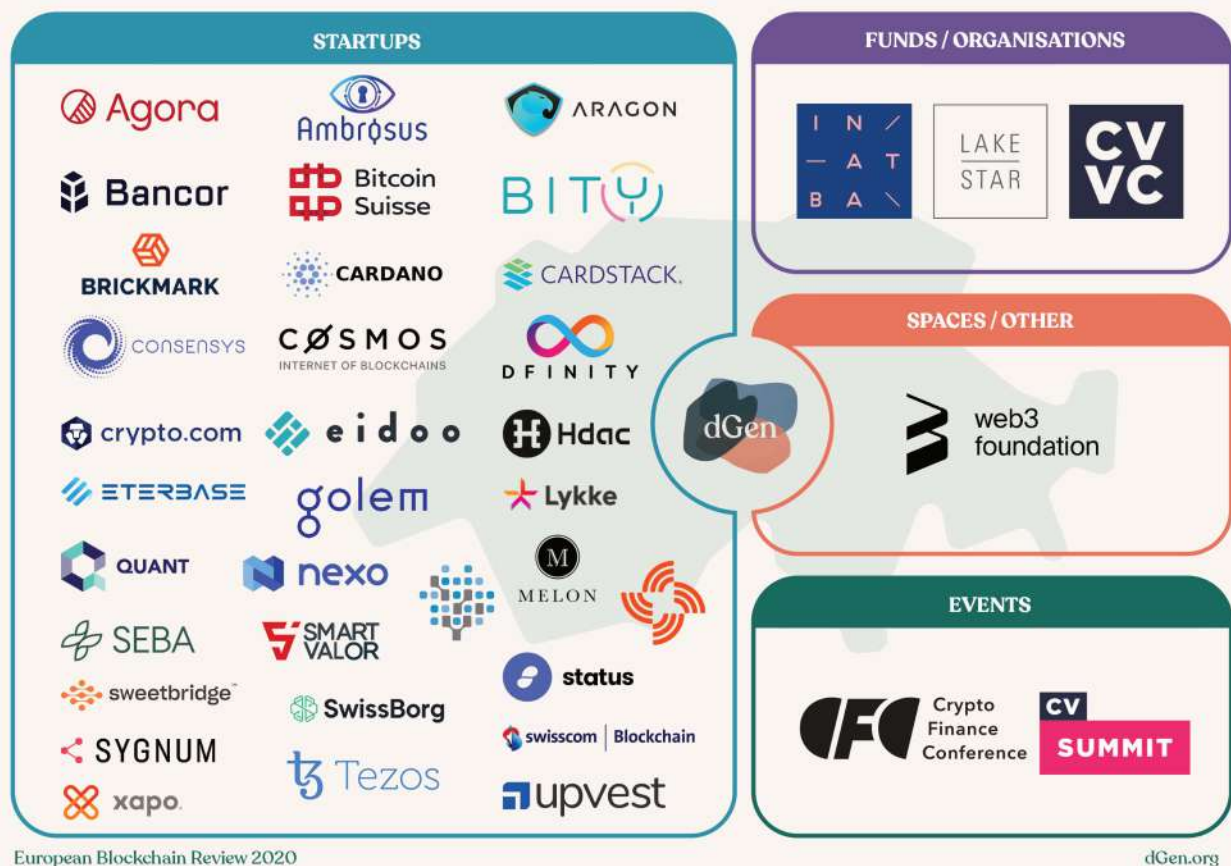Bancor, Crypto Valley Association

Stephan Rind
Brickmark

Tom Lyons
Consensys Switzerland

Switzerland's main players

European Blockchain Review 2020   dGen.org

Continued growth for Swiss blockchain ecosystems is also driven by Zug, which in addition to housing many startups, also has the Crypto Valley Association (CVA), which broadly drives forward adoption. The CVA has plans to partner with Zurich to expand blockchain to the capital city.[29] Zurich Tourism and the CVA have even gone so far as to sign a *'Memorandum of Understanding that a synergy between the two entities will enable the creation of a larger and broader Swiss blockchain ecosystem'*, according to the CVA.[29] CVA's Executive Director, Alexander Schell, says, *'We're trying to establish an ecosystem of law firms, banks, startups and other players who might be interested in this space'*.[28] Switzerland, which has already named itself as a major player in blockchain, appears to be set on keeping that title well into the 2020's.

Due to its favorable legislation and positioning as a strong financial power, Switzerland is also an interesting base for digital currencies. Most recently, Facebook has moved to register its cryptocurrency, Libra, in Switzerland.[30] Tom Lyons, Executive Director of Consensys Switzerland, says the landscape of blockchain *'is also changing, becoming more DeFi and enterprise focused'*, something that can clearly be seen in Switzerland's already finance heavy space.

Regulation in Switzerland

There are no laws specific to cryptocurrency,[6] though there are provisions in anti-money laundering ordinance and a DLT-Draft Law,[5] which finished public consultation in June 2019, but has not yet been adopted by the Swiss Parliament. Switzerland classifies digital tokens as either:

- Payment
- Asset
- Utility.[6]

Based on these classifications, they can then be regulated under existing financial law. Each token is therefore regulated on a case-by-case basis after categorization by FINMA,[5] the Swiss Financial Market Supervisory Authority. The DLT-Draft Law would introduce a new licensing category for DLT-Trading Venues, which would be authorized to provide services in trading, clearing, settlement, and custody of DLT-Securities for regulated and unregulated financial market participants.[5] There has been a great deal of collaboration between legislators and players in the blockchain space, and as Stephan Rind, Founder and CEO of Brickmark, says: *'the upcoming DLT legislation[...] should pass parliament in fall 2020 will also create an even more favourable legal environment, especially for asset backed and security tokens'*.

Blockchain Developments

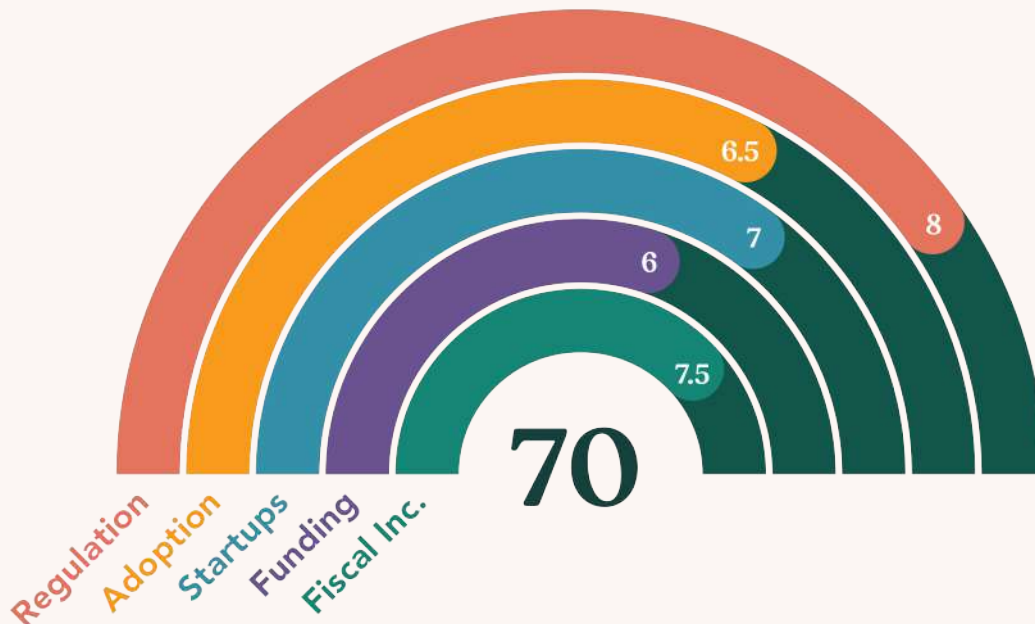Swiss Government Moves to Remove Legal Barriers for Blockchain Development, 27.11.2019

Swiss Regulator FINMA Won't Impede Libra's Development, 01.10.2019

FRANCE
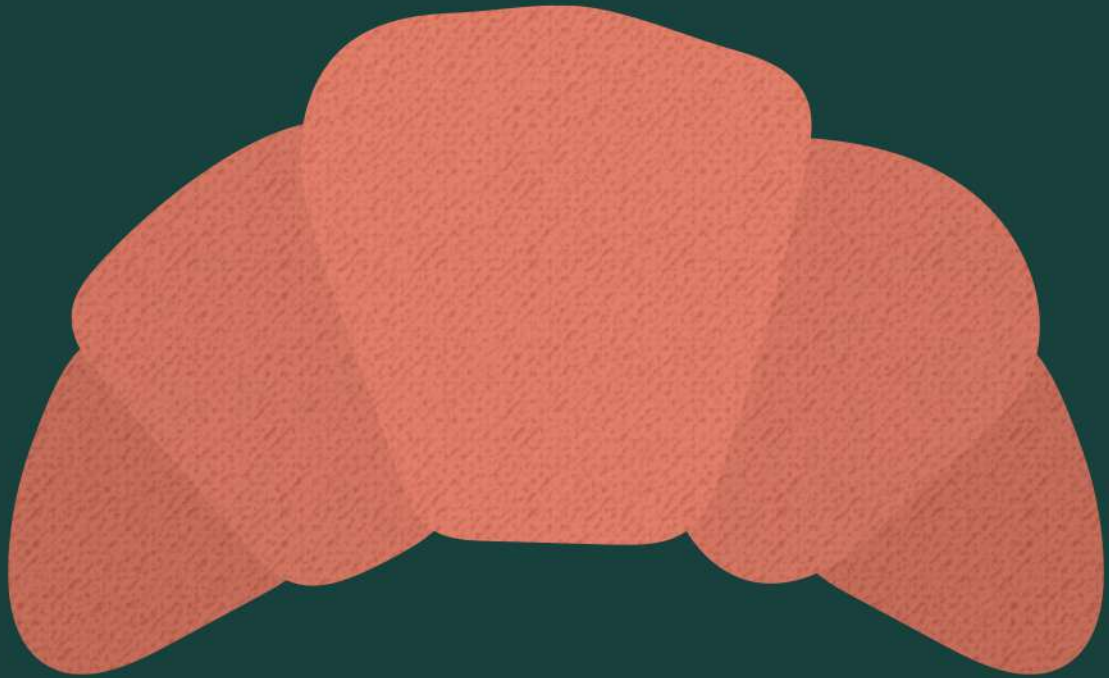
France

Clear regulations and a healthy startup scene, but like other countries in need of better funding

Regulation · Adoption · Startups · Funding · Fiscal Inc.

6.5 · 7 · 8 · 6 · 7.5

70

Description of Ecosystem

Corporate adoption of blockchain in France is relatively high.[31] With the passage of the PACTE Act, blockchain has become even more friendly, as the oversight creates greater security in a market that has attracted some bad actors.[31] Simon Polrot, President of ADAN, points to how *'[n]ew projects are announced each month and big companies are leaning into the space'*. This is representative of the strong grassroots blockchain network in France that has helped to shore up and drive forward corporate adoption. *'Since 2017, [France has] seen an influx of serious actors enter the ecosystem'*, according to Sebastien Couture, host of Epicenter podcast. And, while the country's generally encouraging view towards startups has aided in fostering a strong ecosystem,[32] the introduction of the PACTE Act is seen to be the next step in setting France up to a leader in blockchain by providing clear guidelines for businesses and protecting investors. Polrot continues that *'France is one of the most friendly [countries] for digital assets-related activities, with great know-how and motivation'*.

Local Community Experts
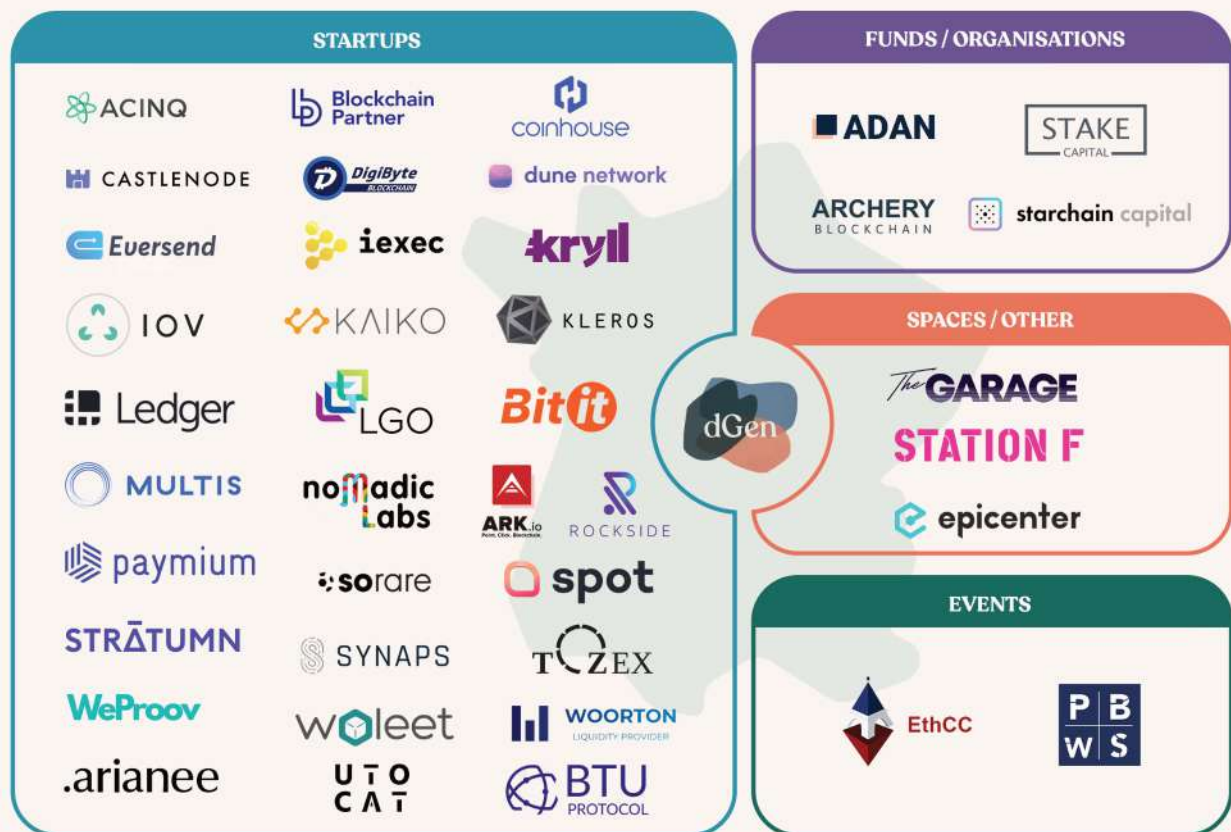
Sebastien Couture
Epicenter

Simon Polrot
ADAN

France's main players

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Regulation in France

France adopted the PACTE Act in 2019,[8] after an in depth study of Initial Coin Offerings (ICOs) under the Universal Node to ICOs Research & Network (UNICORN) programme.[9] The PACTE Act gives France's Financial Market Authority (AMF) greater oversight over digital tokens, though it is far from heavy handed, and has several provisions that make France particularly friendly to ICO and Security Token Offerings (STOs). For instance, STOs under €8 million are exempt from the Prospectus Directive.[6] Sebastien Couture, Epicenter podcast host, says this law, 'clarified many of the areas where there were previously uncertainties', making France a particularly friendly 'jurisdiction for ICOs/STOs'. Additionally, although under the PACTE Act ICOs can receive licenses from the AMF, these are optional, and enable them to solicit to the general public.[8] All ICO organisations must however register with the AMF.[8]

Blockchain Developments

France Says It Will Block Facebook Libra in Europe, 12.09.2019

France's Financial Watchdog Proposes 'Voluntary' Regulatory Framework for Crypto Firms, 17.07.2019

UNITED KINGDOM

United Kingdom

A stronghold for DeFi, with access to talent and funding, but a need for entreprise adoption and inclusive regulation

Regulation · Adoption · Startups · Funding · Fiscal Inc.

64

3 · 7 · 7 · 8 · 7
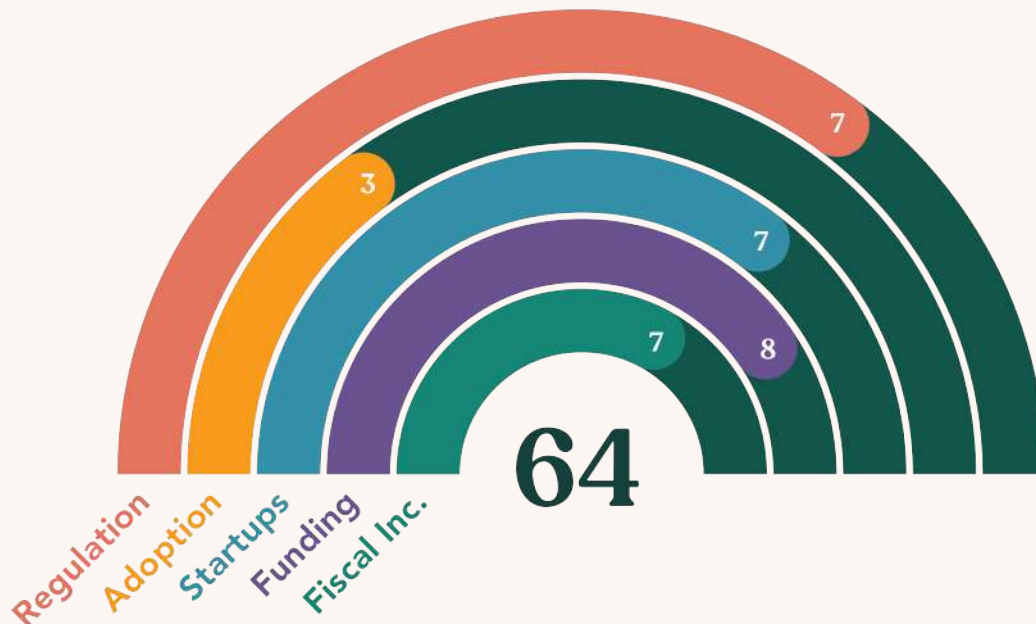
Description of the Ecosystem

The UK housed 48% of European Union (EU) blockchain startups in 2018,[53] and London had the world's second largest amount of early stage funding for blockchain companies,[11] securing its place as one of the most prominent blockchain ecosystems. As an existing global financial power, it is prime for a similar adoption of cryptocurrencies as Switzerland is currently experiencing.[49] The blockchain scene in London is already dominated by the financial sector, but due to university courses and other thriving markets, has broader reach.[52] Monolith's Mel Gelderman points out that London's position as a global leader in FinTech helped attract attention towards blockchain and the subsequent decentralised finance (DeFi) space. *'Good universities and an interest in finance means that there is plenty of talent and funding to go around, even though startups aren't as prevalent as in places like Berlin'*. He also points out that there is an active Ethereum community which resulted in sprouting DeFi projects in the city.

Local Community Experts
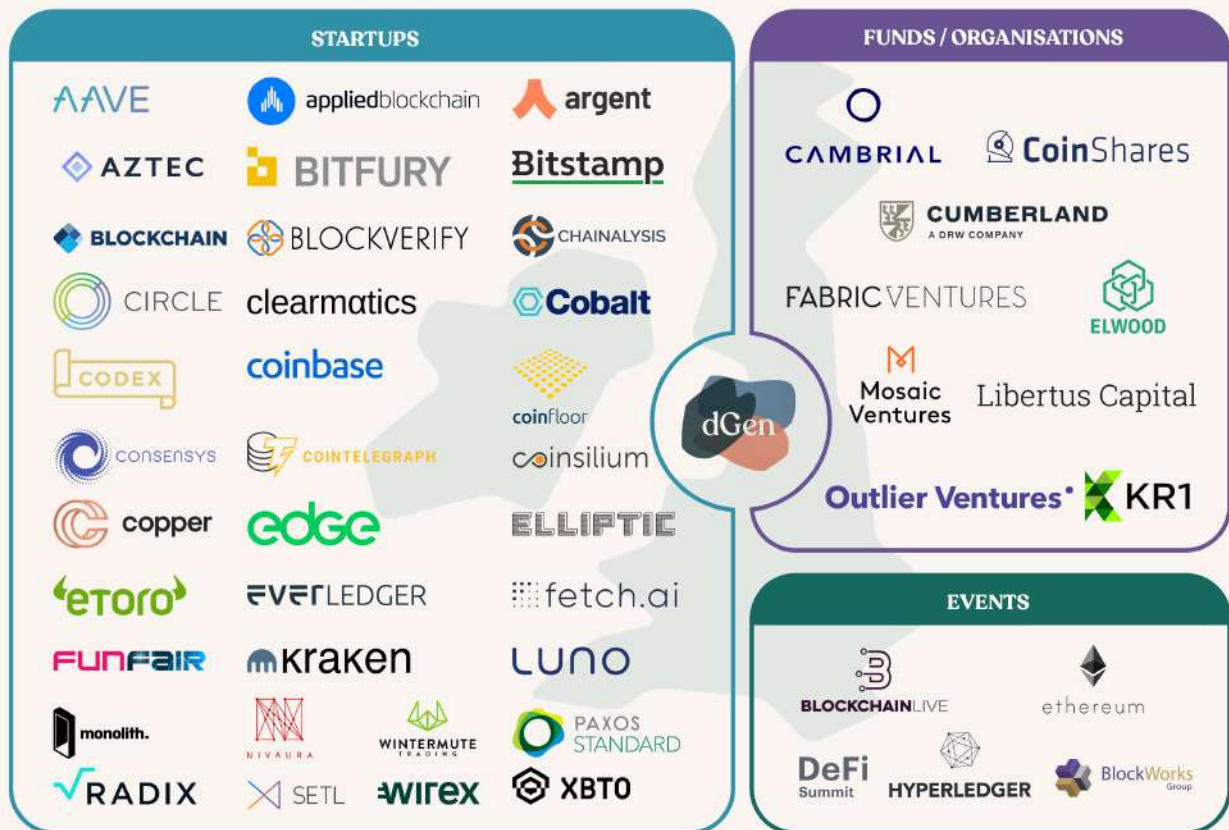
Mel Gelderman
Monolith

Piers Ridyard
Radix

Jamie Burke
Outlier Ventures

UK's main players

European Blockchain Review 2020   dGen.org

However, following the vote for Brexit and tough regulation implementation, many blockchain startups have closed or moved their registrations. As Piers Ridyard, CEO of Radix DLT, says, the ecosystem *'feels a little like it is holding its breath'*, and has been *'in suspended animation'* as the exact impacts of Brexit remain unclear. While still a global financial power, the political turmoil has been hard on the ecosystem. *'London continues to be part of [this] narrative, [as] it was previously the second most popular city globally for early-stage blockchain financing'*, according to Outlier Ventures CEO, Jamie Burke. So while Brexit anticipation has been hard on this scene, it still remains to be seen where post-Brexit 2020 will take this financial power.

Regulation in the UK

The UK does not have any legislation specific to blockchain, and regulation generally falls under the laws of the EU for regulation.[6] This has obvious implications for the recent exit of the UK from the EU. Presently, in order to apply existing laws to digital tokens, they are categorized as:

• Securities

• Exchange

• Utility.[6]

The Bank of England has reportedly called for more regulation of cryptocurrency. The Bank of England Act 1998 places responsibility to protect the stability of the UK's financial system, and they have considered the risk of cryptocurrencies, but believe the size of the crypto market is not yet large enough to merit a risk.[7]

With the implementation of the Anti-Money Laundering Directive 5 (AMDL5) in 2020, the Financial Conduct Authority (FCA) is expected to have a much greater role in regulation, as they have been named as the proper regulatory officials. But, Piers Ridyard, Radix DLT CEO, says they are *'doing great things'*, and has high hopes for the future of regulations, a much needed reinvigoration to the scene. Mel Gelderman agrees, and mentioned that the FCA has been *'proactive in learning what this means for blockchain companies'*. He thinks that operating will be easier under a license, but also acknowledges that it will be harder for small startups without the means to hire lawyers and compliance officers.

Blockchain Developments
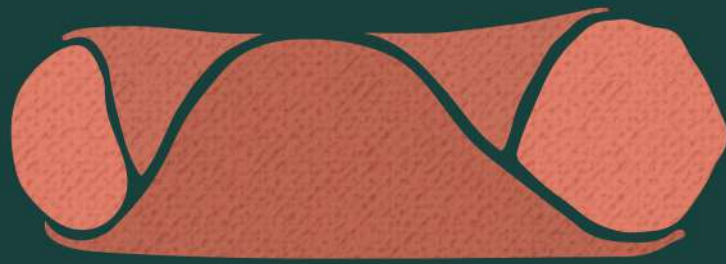
UK Law Panel Defines Crypto Assets as Property, 18.11.2019

Bank of England Sets Out Rules for Libra Launch in the UK, 09.10.2019

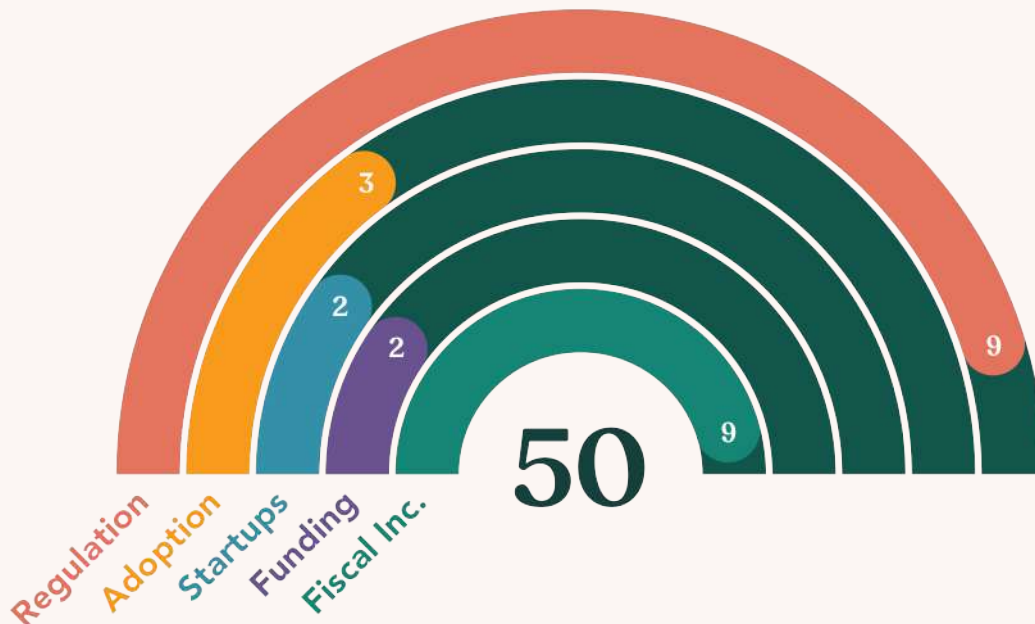London-Based Hedge Fund Raises $50M for New Crypto Investment Fund, 09.09.2019

UK Finance Watchdog Issues Guidance on Regulation for Bitcoin and Crypto Assets, 31.07.2019

MALTA

Malta

Pioneer in regulations and crypto currency tax, but very little startup presence

Regulation — 3
Adoption — 2
Startups — 2
Funding — 9
Fiscal Inc. — 9

50

Description of Ecosystem

Also known as Blockchain Island, Malta has pushed to be a major player in blockchain, both for companies and innovation. Malta's blockchain frameworks, which although not legally binding, came on to the scene very early on, giving companies some level of guidance and certainty, while still allowing the government to remain malleable in regulation.[33] With relatively low taxes and EU Membership,[33] Malta is situated as a very favourable place to register a company, and when factored in with the semi-lenient framework, has placed itself as a top country for registering blockchain startups. However, Alex Dreyfus, CEO of Socios.com and Chiliz, says that *'[w]hile Malta is a strong EU country with a proper regulatory framework for companies [in blockchain], it may be too small to build a proper ecosystem'*.
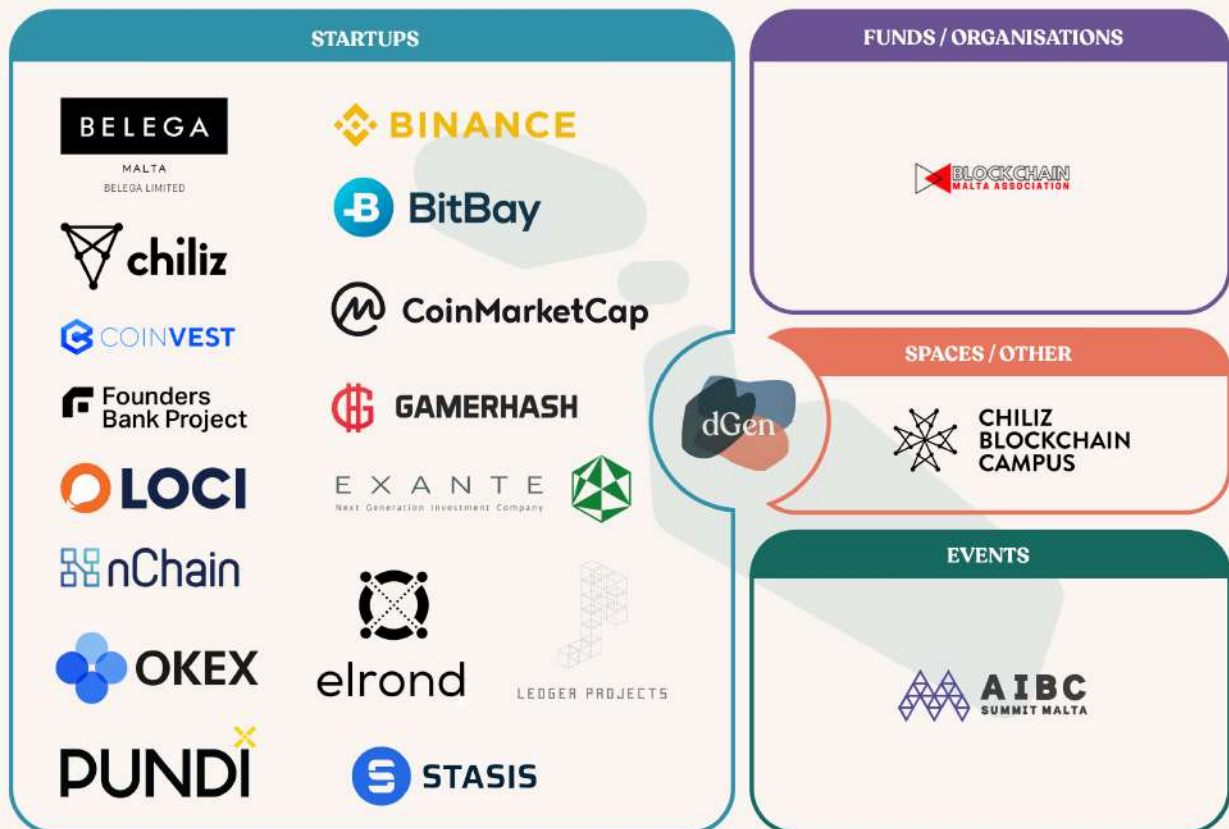
Local Community Expert

Alex Dreyfus
chiliZ, Socios.com

Malta's main players

This is in line with predictions that as the UK leaves the EU, companies could choose to move their registration to Malta, though the majority of employees may remain based in other countries.[34] However, due to the recent resignation of the former Prime Minister Joseph Muscat, who had a very favourable view of blockchain, the future of blockchain in Malta faces some uncertainty. This may impact whether UK companies choose to move their registration to

Malta. The lack of physical presence of organisations and people, resulting in an absence of talent and events, seem to make Malta mostly a virtual safe haven, rather than a healthy ecosystem.

Regulation in Malta

Malta has some of the clearest blockchain regulations in Europe, and the government, in line with their extremely pro-blockchain stance, has three bills on blockchain and cryptocurrency currently up for consideration.[7] These bills have been drafted with the goal of making regulation clear to increase trust and transparency and ultimately foster further blockchain and cryptocurrency use.[7] The three bills are:

- The Malta Digital Innovation Authority Bill (MDIA Bill), which would establish the Malta Digital Innovation Authority (MDIA)
- The TAS Bill, which would establish a registration system for DLT services providers in tandem with the MDIA
- The Virtual Currency Bill, which would establish a framework for ICOs and regulations for services relating to cryptocurrencies (i.e. brokers, wallet provides, and virtual currency exchanges.[7]

Presently, Malta's cryptocurrencies and blockchain services are regulated under EU law,[6][7] but these proposed bills would provide comprehensive legislation. However, Alex Dreyfus, CEO of Chiliz, the largest crypto company in Malta, says Malta's *'[r]egulations are by far the most advanced in the market in Europe BUT are also not friendly. That's the price to pay when you [want to] be regulated'*. In light of Malta's pro-blockchain Prime Minister, Joseph Muscat's, removal from office, legislation is uncertain.[10]

Developments in Blockchain

'Blockchain Island' Malta's Prime Minister Joseph Muscat to Step Down, 30.11.2019

Malta May Soon Have a Crypto Friendly Bank Thanks to Polychain and Binance, 02.10.2019

THE NETHERLANDS
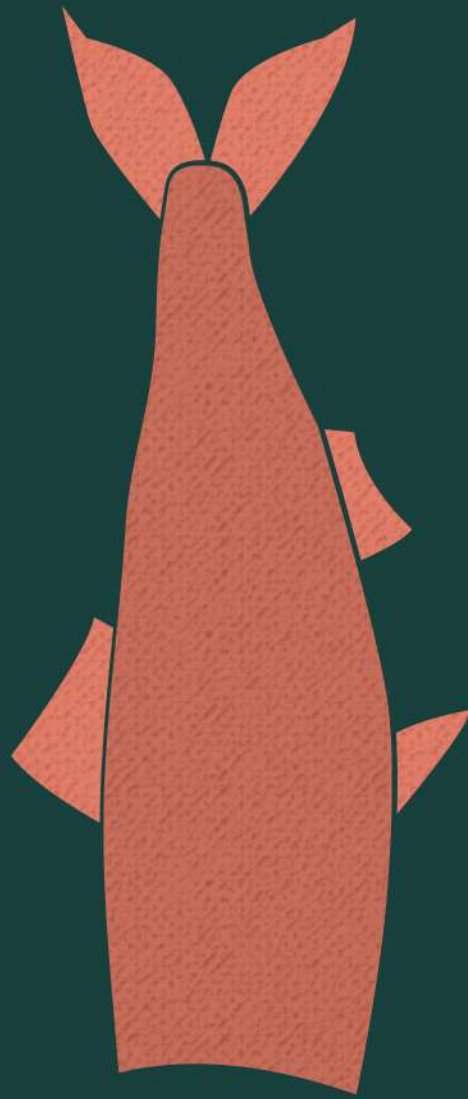
The Netherlands

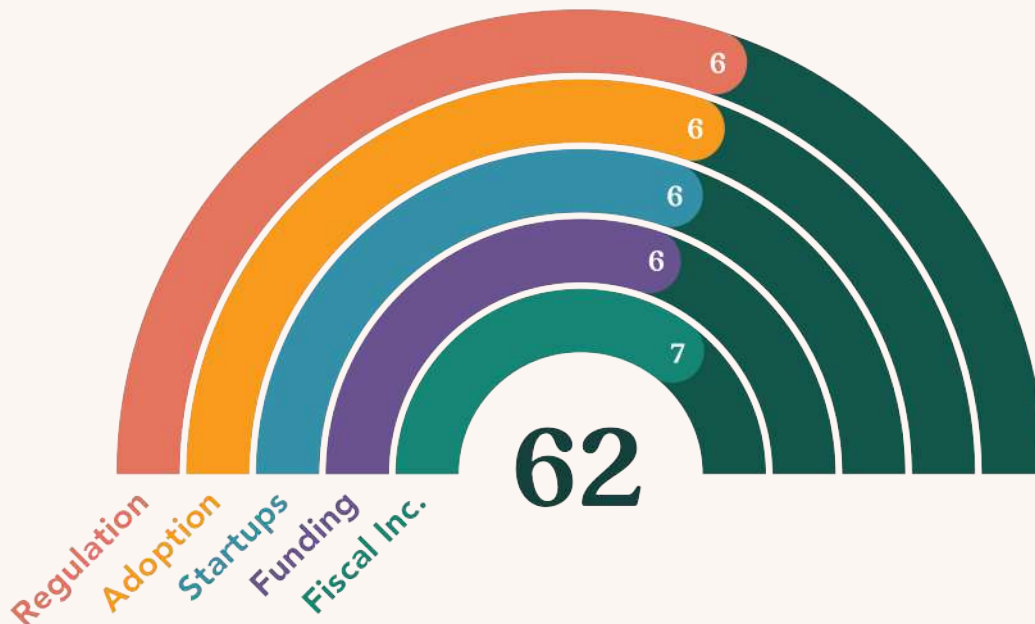## Some interesting initiatives, a decent fiscal situation for traders, but in need of better regulations to nurture startups

Regulation: 6
Adoption: 6
Startups: 6
Funding: 6
Fiscal Inc.: 7

62

Description of Ecosystem

The Netherlands' blockchain ecosystem is somewhat unique in that there is broad interest from the residents, potentially due to an initiative by the Dutch Blockchain Coalition to provide free blockchain courses.[55] While the government is struggling to keep up with regulation and has deep concerns about predatory behaviour in the space,[7] it has also backed innovation, supported pilot projects, and formed influential partnerships.[35] Sebastiaan van der Lans, founder of WordProof.io, lists *'Blockchain Netherlands Foundation, Dutch Blockchain Coalition, great ambassadors like Olivier Rikken and Marloes Pomp, [and the] Lisk Center Utrecht'*, as some of the initiatives driving growth in the ecosystem. However, Bart Mol, Satoshi Radio's Host, says that *'the ecosystem is healthy, [but] not necessarily growing at the moment'*. This is not entirely a bad thing though, as he continues that a *'lot of startups are focusing on tech or applying blockchain tech. Not [...] ico's [Initial Coin Offerings]'*, revealing a focus on bringing projects to fruition, rather than the beginning of a host of new projects.

Local Community Experts

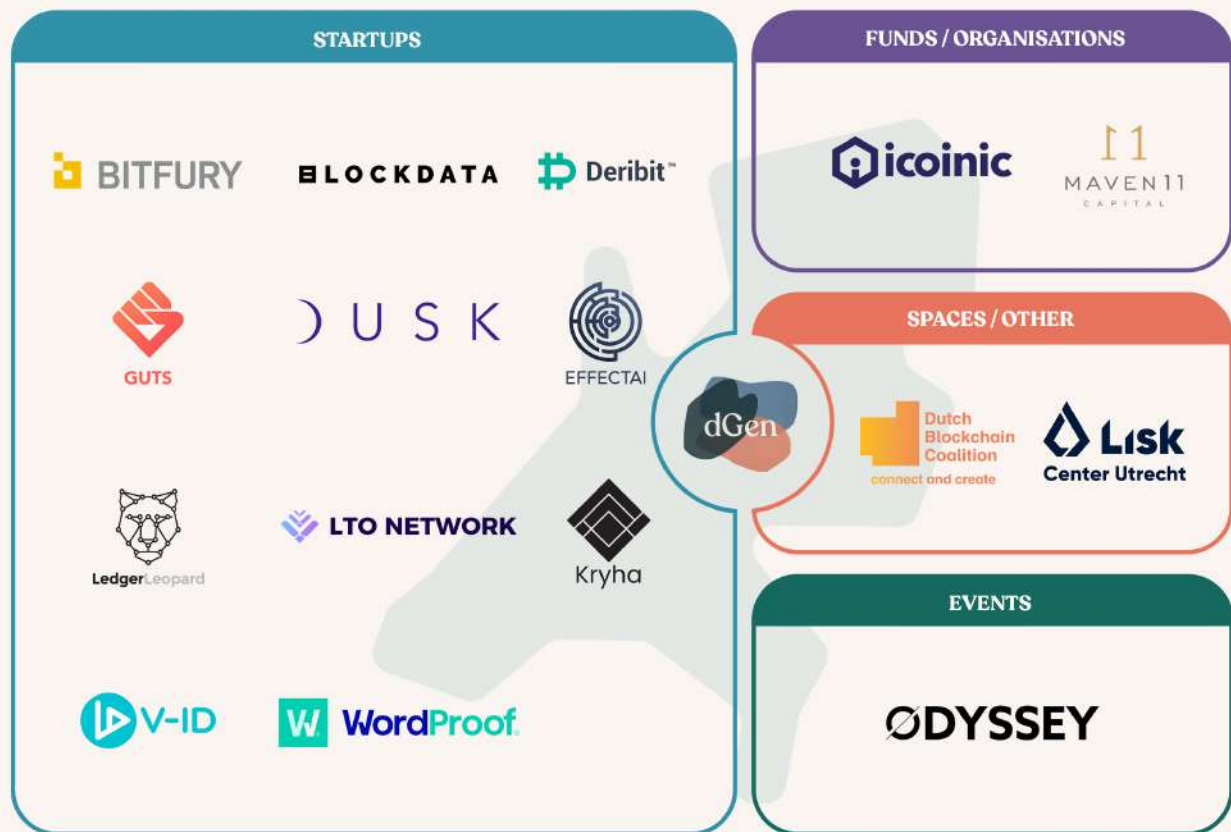
Bart Mol
Satoshi Radio

Sebastiaan van der Lans
WordProof.io

Madelon Vos
CryptoCast

The Netherlands' main players

European Blockchain Review 2020   dGen.org

Madelon Vos, Youtuber and co-host of the weekly CryptoCast radio show, agrees with that, adding that *'where companies felt they needed to do something with blockchain, we now see a retreat to the technology with interesting initiatives like GUTS'*.

She does stress that there is still widespread skepticism about application of the technology. She mentioned that *'though airplanes were a big invention, revolutionising travel, they can only be used to transport people from A to B. Planes won't serve another purpose, and there are other ways to get to B'*, illustrating that though many hopes are pinned on blockchain, it similarly has limitations.

Despite government concerns, cryptocurrencies are increasingly popular with Dutch citizens, with one report returning that in the five months between October 2017 and February 2018, there was a 430% increase in the number of Dutch people who had invested in cryptocurrencies,[35] showing a very strong interest from the residents.

Regulation in The Netherlands

The Netherlands does not currently have any individual legislation regulating cryptocurrencies,[6] but several statements from officials indicate the perceived importance of such legislation. The Central Bank of the Netherlands (DNB) is studying opportunities in blockchain and virtual currencies, but has expressed concerns.[7] Nonetheless, they have been testing the DNBCoin, the DNB's digital currency.[7]

The Dutch Authority for the Financial Markets (AFM) came out with a formal statement on the risks of ICOs, advising consumers to avoid investing in them due to fraud and manipulation risks.[7] However, the *'STO [Security Token Offering] market is relatively open - not as much restrictive legislation as elsewhere in Europe'*, according to Madelon Vos, co-host of CryptoCast. The AFM rather assesses tokens on a case-by-case basis to determine if they are subject to AFM authorization.[7] According to Bart Mol of Satoshi Radio, the *'Dutch regulator is implementing a stricter version of AMLD 5 [the Anti-Money Laundering Directive 5] European legislation'*. However, when working in blockchain tech outside of finance and cryptocurrencies, the regulations are significantly lighter. *'Most blockchain companies don't really know where they stand'* according to Vos, *'[i]t's been relatively hard, for example, to open and retain a bank account when you're a blockchain startup'*.

Blockchain Developments

[Netherlands May Block Foreign Crypto Firms Under Anti-Money Laundering Laws](#), 10.09.2019

[Dutch Financial Authorities Plan Licensing Scheme for Crypto Exchanges,](#) 22.01.2019

BEST OF THE REST
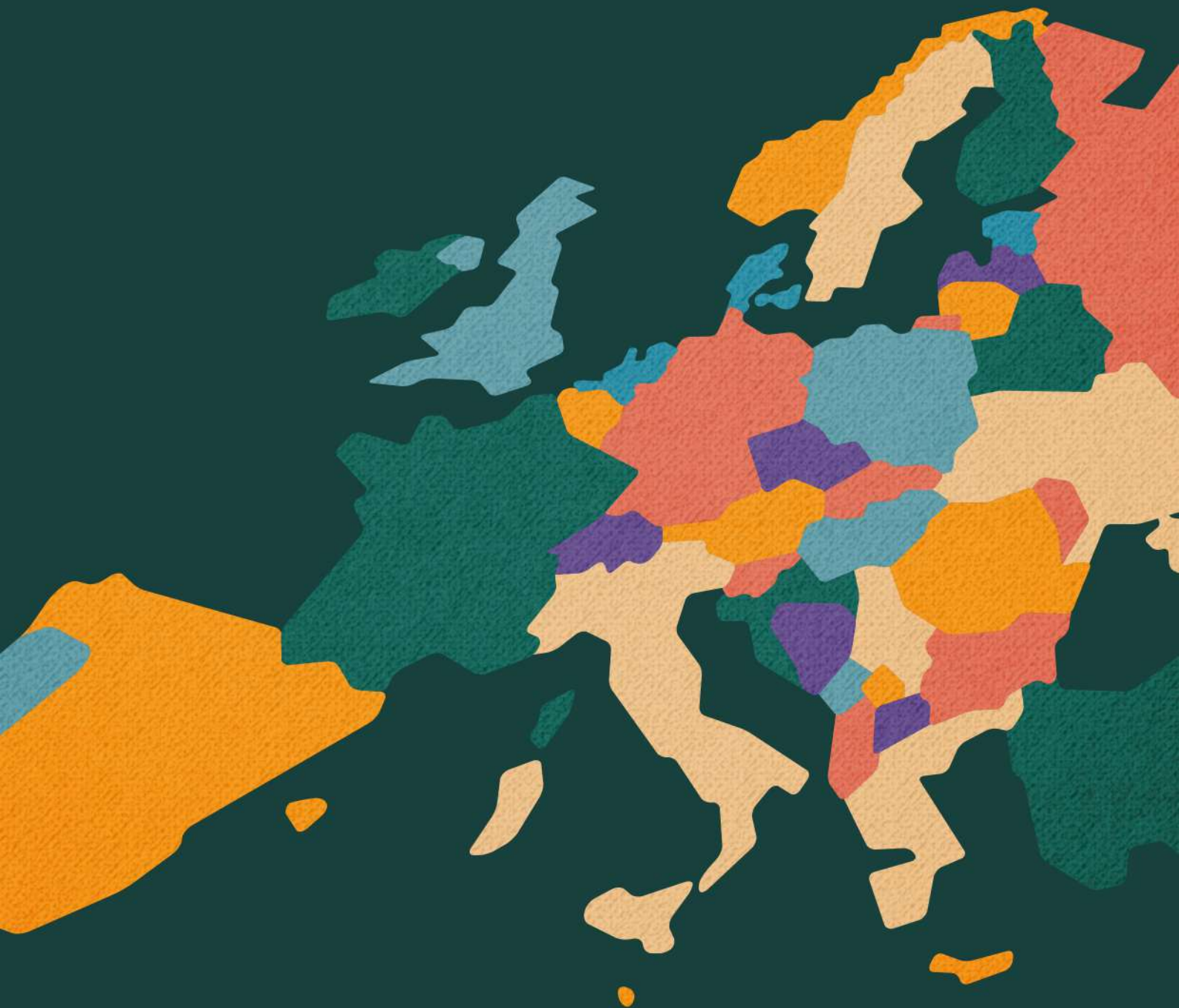
Other Ecosystems

Belarus

Belarus' President, Alexander Lukashenko, used the 2017 Bitcoin boom to draft a law that would help Belarus shift its economy to a more tech heavy presence.[38] To do so, in December 2017, President Lukashenko signed the Decree on the Development of the Digital Economy, giving foreign tech companies unlimited access to Belarus' tax-free climate.[38] [39] This decree also gave Initial Coin Offerings (ICOs) legal status if they are residents of the High Technology Park (HTP),[39] which acts as both the regulatory body and tech hub,[40] facilitating further business growth.[38]

The prompt action in creating regulation have lead some, such as Stanislav Basko of the Blockchain Technology Association Belarus, to feel that Belarus' blockchain regulations are *'one of the best in [...]Europe'*. However, laxer regulations than other countries also allowed for some issues with the registration of shady companies, but this is offset by a majority of well intentioned companies.[38] And, Basko goes on to say, the Blockchain Technology Association is *'working constantly with our government to improve [these regulations]'*, as can be seen by the additional blockchain regulations which went into effect in 2018 with more stringent controls for Anti-Money Laundering (AML), as well as other controls.[40] This regulation has been lauded as a leader, as it is specific to blockchain technologies, but still leaves room for innovation and growth.[40]

Denmark

Denmark has a few strong blockchain university programmes and some startup presence. This has been somewhat restricted by the lack of up-to-date regulation, making it difficult for startups to comply, though.[43] By far the biggest player is MakerDAO, a decentralised lending platform, but other players like Concordium emerge.

Pan-European Community Experts

Beniamin Mincu
Elrond

Stanislav Basko
Blockchain Technology
Association Belarus

Estonia

Estonia is well known for its eGovernment initiative. Estonia's government currently has 99% of government services online,[19] with a strong reliance on blockchain or blockchain-like services to increase security.[20] These registrars increase efficiency, at the rate of 844 years of working time saved, according to government.[19] Overall, the government has a strong pro-blockchain presence, and has shown a great interest in fostering blockchain initiatives on a government and private level.[21] Although, like much of the rest of the European Union (EU), Estonia also does not have specific blockchain or cryptocurrency regulation, leaving some grey areas and doubt, the government is generally perceived of as open and approachable by blockchain companies.[21] According to one report by doingcrypto.org:

'During the first six months of 2018, some EUR 245.6 million was invested in Estonian startups, which is only EUR 26.5 million less than the entire amount of investments for the year 2017'.[21]

Clearly, Estonia is positioned to be a strong presence in blockchain and the future of blockchain developments.

Gibraltar

Gibraltar has the Distributed Ledger Technology (DLT) Framework, which went into effect in January 2018.[22] This Framework was established to foster DLT adoption, and outlines the rules and expectations for DLT providers to protect users,[23] including establishing a Money Laundering Reporting Officer (MLRO), in order to more fully adhere to the Anti-Money Laundering Directive 5 (AMLD5).[23] The Framework, which acts as guiding principles rather than direct legislation, allows Gibraltar to sidestep the 'sandbox', or safe space for development that many governments prefer, and rather, have flexible and developing frameworks so that business can begin to fully develop.[23] Gibraltar also has low tax rates, placing it among the top countries for emerging blockchain startups to register in.[23]

Lichtenstein

On 3 October 2019, Liechtenstein's Parliament unanimously adopted a Blockchain Act that seeks to increase investor protection and decrease money laundering, as well as increase regulatory clarity.[24] This law is unique in that it covers not only cryptocurrencies, but all associated token generation events (TGEs) as well,[25] making it the first country to comprehensively regulate the token economy.[24] The new law went into effect 1 January 2020, and is expected to foster even more blockchain growth, although, Liechtenstein's already favorable approach has attracted several blockchain companies.[24] Of the new legislation, Mauro Casellini, Liechtenstein's Bitcoin Suisse CEO, says:

'The positive decision without dissent from the Liechtenstein government shows the importance of the "Blockchain Act". The TVTG not only creates legal certainty for all market participants, but also heralds a new era, the token economy. With its pioneering role, Liechtenstein proves once again that it is the ideal location for FinTech and Blockchain companies and thus for us too, in the heart of Europe'.[24]

Lithuania

Lithuania's blockchain ecosystem is largely grassroots,[26] but the government has been fast in catching up to create a friendly environment. They have a 'sandbox' for companies to test their products in a safe space,[26] and were one of the first countries to provide Security Token Offering (STO) guidelines in 2019.[27] These guidelines first arose in response to high Initial Coin Offering (ICO) raising in the country, but were adjusted to apply to STOs in 2018.[27] In general, the regulatory agent, the Bank of Lithuania, is very friendly and works with blockchain companies,[26][27] making Lithuania a very favorable environment for blockchain. The government's involvement and commitment to fostering growth is expected to continue to attract blockchain companies.

Portugal

There is a lot of stir, both from organizations on the ground and the government, about blockchain technologies. But, even with that said, Portugal does not currently have any blockchain specific regulations.[44] It also does not tax crypto holdings, making it a favourable country to enter the crypto space from. The Comissão do Mercado de Valores Mobiliários (CMVM) regulates Initial Coin Offerings (ICOs) on a case by case basis, but has been criticized for a lack of clarity.[44] Even with these issues, the government is actively exploring blockchain technology, as can be seen by the issuance of GOVTECH, the voting token, in 2018.[44]

Romania

Romania has seen substantial growth in its tech scene in the last few years.[37] In June 2019, it became the first country in South-Eastern Europe to host a blockchain summit.[36] The interest at the ground level and lower salaries, mean that many are looking at Romania for continued growth and expansion.[37] As Beniamin Mincu, CEO of Elrond, says:

'There are very few blockchain startups in Romania for now, but there are a lot of brilliant and resourceful people here. So I expect a significant wave of startups coming out of Romania in the next one or two years'.

In 2018, Romania's National Bank also published a statement discouraging local credit institutions from participating in cryptocurrency exchanges due to potential risks.[7] This led to several closures of cryptocurrency exchanges.[7] However, Romania's student communities and AI companies continue to thrive, retaining expectations for continued growth in the blockchain sector.

Spain

Spain has taken a conservative stance on cryptocurrencies and tokens, which reflects the strong consumer and investor rights stance post financial crisis.[46] There are no specific blockchain regulations currently, and in 2018, the Bank of Spain and the Spanish Stock Market Regulator (CNMV) released a joint communique about the perils of investing in cryptocurrencies, especially for small and medium investors.[46] Despite government reservations, blockchain for increased transparency is highly exciting, especially in the agriculture industry.[45][47] Northern Spain has been leading blockchain innovation and adoption in the country, partially due to Catalonia, a region in northwestern Spain pushing for independence. Catalonia has a very forward thinking blockchain policy, which the Catalonia Department of Digital Policies published in June 2019. This policy outlines plans for growth and ecosystem development.[45][48]

Ukraine

A joint statement by Financial Regulators on the Status of Cryptocurrencies in Ukraine reinforced that they did not fall under the purview of any existing law.[41] However, Ukraine plans to remedy that, with several bills drafted to cover cryptocurrencies. Beyond simply implementing regulation, there is an attempt to create the 'Crypto Valley' of Eastern Europe here.[42] Several organizations exist to support blockchain communities and foster law making, including Blockchain4Ukraine, the Ukrainian Blockchain Association, and a Bitcoin Embassy.[41][42] With the help of these organizations, the grassroots blockchain companies are hopeful about the imminent passage of legislation and continued growth under this legislation.[42] In 2018 and 2019, the Ukraine blockchain ecosystem moved beyond the hype, and began to come into fruition, with focus moving beyond the earning potential of cryptocurrencies.[41]
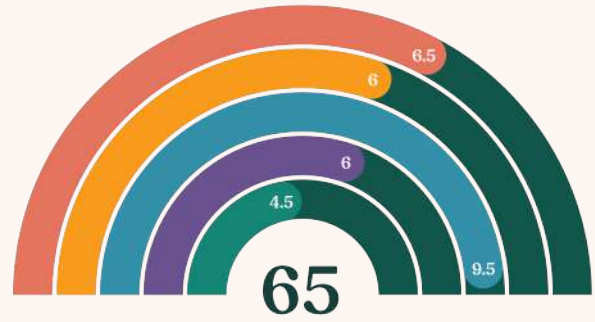
Sergy Vasilchuk, Attic Lab CEO, says:

'Now is the moment when hype around Bitcoin for $20k has already passed, and blockchain companies appear like mushrooms after the rain and I want to say that is good! We are all on the threshold of a new technology that is developing smoothly. The bear market has hardened all of us, and it showed who is in the industry for more than just quick money, which means the hardest part begins -- bringing this whole blockchain machine to a bright future'.[43]

Countries Overview

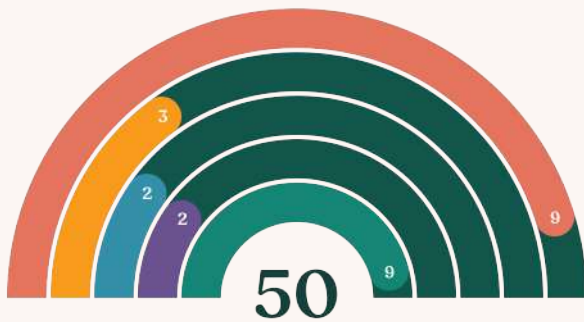## France
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Germany
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Malta
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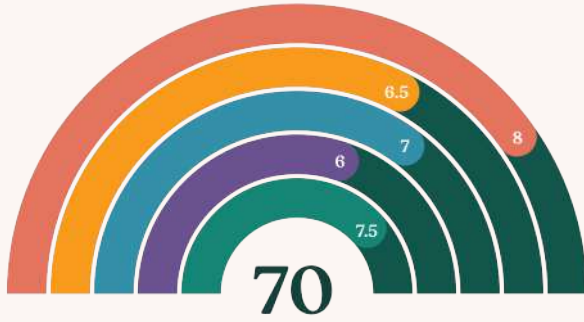
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Switzerland
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United Kingdom
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64

Conclusion and Looking Ahead

2019, as with many of the early years of emerging technologies, was a year of defining and understanding the role and positioning of regulators. Many countries passed, or laid the groundwork to pass, regulations on cryptocurrencies and other applications of blockchain. And this, as has been said by many in the industry, makes blockchain a much more approachable industry, giving companies clear definitions for how they should proceed and providing protections for investors. While some of these regulations, such as the Euro zone Anti-Money Laundering Directive 5 (AMDL5), went into effect on 1 January, 2020, others are expected to be passed in 2020. While the AMLD5 has led to some anxiety in crypto exchanges operating in Europe, many companies have already prepared for the increased regulations. The overall sentiment seems to be acceptance, as startups realise that compliance will ultimately make doing business easier. Whether this becomes a hurdle too high for early stage companies to pass remains to be seen.

Several countries in Europe have played off their existing strengths in finance to grow in blockchain spaces, such as Switzerland and the UK, while others, such as Malta, Lichtenstein, and Gibraltar, have taken advantage of their smaller size to act in much faster and more malleable manners to list themselves as leaders in this emerging technology. Last year saw some blockchain skepticism and many cryptocurrencies falling into perhaps more realistic valuations; looking forward, 2020 seems to be the year in which broader adoption and expansion under realistic views can take place. While broader European homogeneity has already begun, unity can help the European ecosystem fully realise its potential, and grow into a strong, thriving network of ecosystems.

Looking Forward

2020 doesn't just kick off the next year, though, it also kicks off the next decade. The 2020's are a decade for opportunity in blockchain, one when it can be fully integrated into the public sector, and finally be leveraged to provide widespread services. A few areas we're looking for are:

- Borderless transactions

- Decentralised finance (DeFi)

- Machine to machine (M2M) services

- Data protection.

The lack of flying cars and jet packs, despite a host of past predictions for 2020, is a bit disappointing. But, all the same, the possibilities that blockchain presents are still extremely exciting, and it's difficult not to spiral down that path. Part of this is just how close so many of these possibilities already seem. For instance, from the perspective of a partly decentralised team here at dGen, it's easy to picture the utility of borderless, digital currency payments. If we continue that line of thought, new governance models and decentralised autonomous organisations (DAOs) have clear advantages, and are already being applied by startups today. The same goes for the many new models proposed in the DeFi space: the trustless and virtual state of assets combined with smart contracts offers a plethora of possibilities.

Borderless Transactions

With greater interest in digital currencies, both from central banks and private entities like Libra, the technology is slated to reach a much broader public and might slowly see some

adoption. While governments are wary and taking time to ease into these new developments, startups and private companies continue to push forward innovation. Governments are faced with the difficult task of keeping up, and perhaps more importantly, finding the balance between security and innovation. The space has seen some proactive approaches from regulators, we advise lawmakers to continue down this path and include small, non-established organisations to prevent survivorship bias.

DeFi

Digital currencies present advantages over fiat money - instant borderless payments, a reduced reliance on banks and intermediaries, and other DeFi applications - will be too much of a draw to counterbalance fears about what introducing this technology would do. Blockchain exists, now it's just a matter of getting the policy in a place where implementation won't hinder innovation while protecting individuals and our economy. With its contemporary ideas, the DeFi space is set to disrupt traditional finance and asset management. This year, we expect traditional institutions to pick sides in this transition by getting involved, or attempting to stall innovation.

M2M Transaction

M2M transactions are a bit more difficult, but present a seemingly boundless wealth of opportunities. At present, the smart devices/Internet of Things (IoT) revolution has not yet lived up to its promise, partly due to sky high expectations, and partly due to the lack of protocols. Enabling devices to automate processes by interacting with other machines opens a wide range of opportunities. This is a space that blockchain is said to offer potential solutions.

These possibilities don't just end at grocery-buying fridges, as the rise of smart cities and M2M automation could, for example, enable cleaner energy sources. Imagine self-driving cars becoming truly autonomous as they broker their own energy procurement from local suppliers (people with solar panels, perhaps) and schedule maintenance at a repair shop. They can pay for those services with digital currencies earned from picking up drivers, while negotiating the best deals using decentralised exchanges. Based on its realtime performance, a pension fund in Australia can automatically decide to buy a share in the car through security tokens. This is a much more involved shift in technological advances, but also has the potential to more deeply change people's lives.

M2M protocols require more technical work than your average stablecoin, but it faces a similar issue of needing to be accepted into legal codes as well. Smart contracts have to be recognised in law as well, for trust to extend to our physical world. Either way, 2020 is the decade where our lives could be streamlined through M2M interactions that facilitate daily tasks, from hailing a ride to improving the efficiency of data and asset transactions.

Data Protection

With the promise of more digitalisation of services and assets, now is the time for data ownership to be restored to individuals. The privacy vs. services debate needs to finally see some resolution. The generation growing up steeped in this debate will find it nearly inconceivable that we willingly traded our data for services as freely as we have. Especially in Europe, where privacy is a central concern, the ability to maintain data ownership will come as second nature to the decentralised generation.

The EU and Europe have advertised themselves as champions of cross-border sharing, environmental protection, and personal data protection. These innovations, then, only make

sense in ensuring that Europe maintains its dominance in these areas. In the next few years, Europe has the opportunity to consolidate its position as privacy advocate, between the corporate, permissive USA and state surveillance in China.

As with GDPR, data protection initiatives benefit from a centralised initiative. Though privacy and self governance are highly endemic in blockchain ecosystems, this cannot be guaranteed for all players, especially as the space grows. A closer collaboration on this matter between the EU and blockchain ecosystems can provide strong guidelines and set a baseline for the future.

About dGen

After Gen X, characterised by big societal shifts, Gen Y, better known as millennials, and the digital native Gen Z, the *decentralised generation* will grow up in a future shaped by different dynamics and technological developments. AI, blockchain technology, and IoT will individually bring disruption to many industries, but it's at the crossroads where we expect our whole socio-economic fabric to change.

dGen is a not-for-profit think tank based in Berlin, Germany. We focus on how blockchain technology can contribute to a decentralized future in Europe and what this might mean for people, society, private entities, and the public sector over the coming decades.

Emerging technology focused on decentralising society will shape the next part of the twenty-first century; The dGen will grow up with opportunities for borders to fade and traditional networks to dissipate. Meanwhile, most blockchain developments are still in the early stages; focusing on building solid products and exploring regulatory requirements to create a fertile yet safe environment for companies and investors. The industry is focused on solving the big topics right now, while we encounter a lot of great ideas in the blockchain community about adoption. It's time for those ideas to find a purpose and for the real decision-makers in the world to learn what decentralisation will mean for them.

We're working with a team of researchers exploring how decentralisation will shape our future. Our insight reports focus on specific topics and industries to drive ideas for adoption in Europe. If you're researching how decentralisation is shaping our future, and would like to get involved, please get in touch at dgen.org

dGen is part of Beyond, a venture studio exploring a new world. For more information, go to beyond.ventures.

Interested in Partnering on Our Next Report?

We're looking for partners operating in blockchain ecosystems, corporates, universities, the public sector, and other stakeholders to engage in conversations about how blockchain and emerging tech is shaping the decentralised generation.

We're open for any collaboration on this topic and the broader study of decentralisation in Europe.

You can reach us at partners@dgen.org for more information.

Research Agenda

'Made in Italy' - Safeguarding Artisans From Counterfeiting	Scheduled Q1 2020
Considerations for the Digital Euro	Scheduled Q1 2020
Developments in DeFi	Scheduled Q1 2020

Contributors

Nick Dijkstra

One of the founders of dGen and with a rich background in tech, Nick knows how to build organisations from scratch and can transform ideas to great tech products. As a former Product Manager at LiveIntent and Director of Customer Success at Avari he shipped software to a user base over 15% of the US population and has organised 200+ events in Berlin. As the COO at hype partners he is currently helping top-tier blockchain firms strategise their market approach. Nick is one of the founding partners of Beyond, a venture studio exploring a new world.

Jake Stott

Before founding dGen, Jake was originally a partner at Signal Ventures, investing in blockchain tech. In late 2017 he founded hype partners to help build and nurture ecosystems for blockchain projects and has worked with many top 100 projects. With these combined experiences he is able to distinguish legitimacy, necessity, and nonsense in this space. Jake is one of the founding partners of Beyond, a venture studio exploring a new world.

Maggie Clarendon

Maggie is a writer, researcher, and editor. Trained in literature, critical theory, and gender studies, they are now exploring the ways that technology is changing the landscape of human interaction.

Francisco Rodríguez Berenguer

Francisco has a degree in Business and Law, and is currently working for dGen to communicate its vision for blockchain adoption to an audience of thought leaders in tech companies, corporates, and the public sector as a researcher and marketer.

Blockchain in Europe 2020 Review

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References

1. https://www.bmwi.de/Redaktion/EN/Publikationen/Digitale-Welt/blockchain-strategy.html

2. https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Financial_markets/Articles/2019-09-18-Blockchain.html.

3. https://www.ampliv.io/all-about-sto-regulations-in-germany/.

4. https://www.bundesfinanzministerium.de/Content/EN/Downloads/2019-04-17-statement-fintech-council.pdf?__blob=publicationFile&v=3

5. https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/switzerland

6. https://www.bitcoinmarketjournal.com/sto-regulations-by-country/

7. https://www.loc.gov/law/help/cryptocurrency/world-survey.php#europe

8. https://news.bitcoin.com/france-cryptocurrency-regulation/

9. https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/france

10. https://beincrypto.com/blockchain-island-maltas-prime-minister-joseph-muscat-to-step-down/

11. https://sifted.eu/articles/european-blockchain-overview/

12. https://paytechlaw.com/en/aml5-update/

13. https://www.coindesk.com/libra-crypto-is-undoubtedly-a-wakeup-call-for-central-banks-says-ecb-exec

14. https://www.coindesk.com/swiss-regulator-finma-wont-impede-libras-development

15. https://www.fin24.com/Companies/ICT/facebooks-libra-currency-could-threaten-the-euro-official-20190903

16. https://www.eublockchainforum.eu/sites/default/files/reports/report_legal_v1.0.pdf?width=1024&height=800&iframe=true

17. https://www.eublockchainforum.eu/sites/default/files/reports/20180727_report_innovation_in_europe_light.pdf

18. https://www.blockchain-council.org/blockchain/top-10-countries-leading-blockchain-technology-in-the-world/

19. https://e-estonia.com

20. https://hackernoon.com/e-estonia-is-not-on-blockchain-22iy2gx6

21. https://doingcrypto.org/estonia

22. https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/gibraltar

23. http://www.gfsc.gi/dlt

24. https://cointelegraph.com/news/liechtensteins-parliament-unanimously-approves-new-blockchain-act

25. https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/liechtenstein#

26. https://bcgateway.eu/lithuanias-blockchain-ecosystem-in-10-minutes/

27. https://paymentexpert.com/2019/10/22/bank-of-lithuania-issues-first

28. https://www.coindesk.com/switzerlands-crypto-valley-is-bringing-blockchain-to-zurich

29. https://cryptovalley.swiss/cva-and-zurich-tourism-establish-official-partnership/

30. https://www.thelocal.ch/20191015/facebook-cryptocurrency-libra-launches-in-geneva

31. https://www.forbes.com/sites/darrynpollock/2019/04/15/is-france-the-sleeping-giant-of-european-blockchain-and-cryptocurrency/

32. https://www.nasdaq.com/articles/vive-la-blockchain%3A-why-the-french-government-is-embracing-blockchain-and-implementing

33. https://iconfinancemalta.blob.core.windows.net/libx-128-public/Tags/General/Malta%20Destination%20Blockchain%20Island.pdf

34. https://www.mca.org.mt/articles/global-report-recognises-malta-leading-ecosystem-fintech-blockchain-and-gaming

35. https://www.forbes.com/sites/yoavvilner/2018/10/13/how-the-netherlands-is-blazing-a-trail-through-the-blockchain-scene/

36. https://www.blockpass.org/events/romania-blockchain-summit/

37. https://thinkgrowth.org/romania-could-be-the-next-berlin-by-2020-24cdc032b936

38. https://www.newsbtc.com/2019/03/20/how-belarus-focused-on-bitcoin-and-crypto-to-grow-its-tech-industry/

39. https://www.nomoretax.eu/belarus-zero-tax-for-blockchain-companies/

40. https://openledger.info/insights/belarus-passes-new-blockchain-and-

41. https://www.slideshare.net/Blockchainukraine/overview-of-the-blockchain-industry-in-ukraine-145456836

42. https://news.bitcoin.com/ukraine-in-a-rush-to-legalize-cryptocurrencies-under-zelensky/

43. https://medium.com/blockchain-association-of-ukraine/overview-of-the-blockchain-industry-of-ukraine-8210690f1556

44. https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/portugal

45. https://cointelegraph.com/news/spain-remains-a-primary-example-of-blockchain-optimism-on-all-levels

46. https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/spain

47. https://www.export.gov/article?id=Spain-Blockchain-Technology-Overview

48. http://politiquesdigitals.gencat.cat/web/.content/Telecomunicacions/Blockchain/destacats-informes-descarregues/Estrategia-Blockchain-a-Catalunya-VF_1_EN.pdf

49. http://analytics.dkv.global/data/pdf/Blockchain-in-UK-Executive-Summary.pdf

50. https://blockstate.com/german-blockchain-index-en/

51. https://fintechnews.ch/fintechgermany/blockchain-germany-ecosystem-study-rapidly-growing-blockchain-startup-scene/24285/

52. https://assets.ctfassets.net/nubxhjiwc091/3Ybaz35Dc4y8WW2CgG68we/da538354ff055227daa8db2552ad4de4/Blockchain_in_Action_report.pdf

53. https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/blockchain-now-and-tomorrow

54. https://www.coindesk.com/german-banks-allowed-to-sell-and-custody-crypto-assets-from-2020-report

55. https://dutchblockchaincoalition.org/en/news/free-national-blockchain-course-for-everyone

56. https://ec.europa.eu/digital-single-market/en/news/european-countries-join-blockchain-partnership

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