



Kingdom of the Netherlands

# **Blockchain in Switzerland**

*Opportunities for future cooperation between Switzerland and the Netherlands*

## Colophon

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## Summary

- Switzerland has a transparent legal system, economic stability, an innovative focus, a good education system, risk capital, tax incentives and a very well functioning digital infrastructure and advanced data security.
- Switzerland ranked number 1<sup>st</sup> in the Global Innovation Index for eight years in a row now. The Netherlands ranked 2<sup>nd</sup> in 2018. Switzerland ranked 1<sup>st</sup> in being the most crypto-friendly country in Europe in 2018, the Netherlands ranked 8<sup>th</sup>.
- Switzerland is an attractive country for blockchain because of:
  - A high blockchain knowledge level
  - The position of blockchain is at the start of the implementation phase
  - Zug (Crypto Valley) is home to many international blockchain projects from all over the world
  - Guidelines for ICOs
  - Possibilities for start-ups to experiment with few money in the so-called **"Sandbox"**
  - The cantons offer excellent services to their citizens and the business area
- Blockchain in Switzerland will have the most impact in the near future on the sectors:
  - Financial services
  - Insurance
  - Logistics
  - Healthcare
- Strong sectors in the Netherlands that can be influenced directly by blockchain technology are:
  - Financial services
  - Logistics
  - Energy
  - Healthcare
- Blockchain related activity at the Swiss government: the Swiss Financial Market Supervisory Authority (FINMA) guidelines for Initial Coin Offerings (ICOs) result in more certainty for ICOs: ICO organisers could make a requirement at FINMA to see if their ICO is subject to existing financial market regulation. FINMA decides enquiries for ICOs on a case-by-case basis with FINMA approval. Although no obligation to make an enquiry at FINMA, it makes a company more trustworthy and therefore more attractive to investors. **In the Netherlands, such guidelines don't exist yet.**
- **"Blockchain Labs"** at the ETZ Zurich (CH) and TU Delft (NL) are frontrunners in the investigation of blockchain technology.

- The most attractive regions for blockchain related activities in Switzerland are:
  - Zug
  - Zurich
  - Geneva
- For relatively similar countries like Switzerland and the Netherlands it is interesting to cooperate in the international competition towards blockchain technology.
- The most interesting sectors for cooperation between Switzerland and the Netherlands are:
  - Financial services
  - Healthcare
  - Logistics
- The Netherlands is a frontrunner in the investigation of blockchain in the logistics sector. Notable logistic projects in the Port of Rotterdam are going on. In Switzerland there are not much blockchain related activities in this sector yet. Dutch blockchain logistic solutions can be very interesting for the Swiss logistics sector, because of the expected growth in the transport of goods.
- Many interesting blockchain events for 2018 and 2019 are planned in Switzerland and the Netherlands. The next event where a Dutch delegation comes to Zurich, Switzerland is October 1-2 2018 at the "FinTech+ 2018 Exhibit".

# Introduction

Cooperation is the key to success.

Blockchain technology is likely to disrupt many industries in the next five to ten years. It is a relative new phenomenon, evolved out of new technological developments. Blockchain makes things transparent, democratic, decentralized, efficient and secure (Future Thinkers, 2017). Keeping track of data and doing transactions using blockchain technology takes place without a third party with central registration. Blockchain technology realizes digital trust. It has the opportunity to transform existing markets and possibly create new ones. This new technology with so many possibilities offers new opportunities for the Netherlands.

Already now, there exists strong international competition when it comes to blockchain technology. Countries leading the current blockchain innovation movement come from different parts of the world. Non-European examples are Singapore, Dubai, the United States, China and Japan. For countries with a relatively small home market it is important to collaborate in order to compete.

In the Netherlands, more and more businesses, knowledge institutions and the government are starting to investigate in what blockchain technology can offer. In the market and at government level, there is a need for acceleration of the development of blockchain applications, necessary to be able to implement blockchain applications faster.

A study of [Blockshow](#) (2018) revealed that Switzerland and the Netherlands are two of the most blockchain friendly countries in Europe. The report concentrated on the European countries that impose friendly regulations on cryptocurrencies and blockchain related projects. The Netherlands ranked eighth of 48 countries and Switzerland ranked first. This means that both countries are very attractive for blockchain start-ups. Besides, Switzerland (1<sup>st</sup>) and the Netherlands (2<sup>nd</sup>) are the most innovative countries of the world according to the Global Innovation Index 2018. International collaboration possibilities are therefore very **interesting**. **"It's in the collaboration that we (Switzerland and the Netherlands) can find the power to grow big companies which have a global importance."** Said Constantijn van Oranje-Nassau, special envoy of StartupDelta, about blockchain technology (Moneycab, 2018).

Switzerland offers very favourable locations for blockchain companies and has a very blockchain-friendly environment with a lot of knowledge. The way Switzerland is open for experimenting with blockchain, for example in Zug, **"Crypto Valley"**, and the way Switzerland is regulating ICOs are a worldwide example. This makes it worth looking into the possibilities of the Swiss blockchain market.

This report is based on both literature study and interviews with people in the blockchain field. It provides more knowledge about Swiss-Dutch blockchain cooperation possibilities and Dutch blockchain opportunities on the Swiss market. It also offers general information about blockchain activities in the Netherlands and Switzerland. The first two chapters of this report are a summary of the current most interesting blockchain activities in the Netherlands and Switzerland. From both countries the sectors with the most potential concerning blockchain will be described. Followed by a description of blockchain activities on business level, governmental level and at knowledge institutions. Chapter three explains Dutch blockchain opportunities in Switzerland. Chapter four explains the Swiss business culture.

This report is meant to encourage and support blockchain cooperation between Switzerland and the Netherlands between businesses, the government and knowledge institutions. The overview given in this report is meant to generate an idea of the development in both countries and where we can learn from and/or cooperate with each other.

# Chapter 1. Blockchain in the Netherlands

Blockchain offers new opportunities for the Dutch market. The Netherlands is creating an environment where Blockchain companies can develop easily thanks to different factors (PWC, 2016):

- The economy in the Netherlands is doing well (Rijksoverheid, 2018).
- The Netherlands has an international focus. The country is traditionally internationally orientated and its economy consist for a huge part of international trade (Centraal Bureau voor de Statistiek, 2018).
- The Netherlands has a drive for innovation. The Netherlands ranked second in the world in being innovative in 2018 (Dutta et al., 2018). Drive for innovation is necessary when it comes down to the investigation of new technologies.
- The Netherlands has a good digital infrastructure. According to the European Commission, Denmark, Sweden, Finland and the Netherlands have the most advanced digital economies in the European Union (European Commission, 2018a). The Netherlands ranked 9<sup>th</sup> in the 2018 [IMD World Digital Competitiveness Ranking](#). This report investigated to what extend countries adopt and explore digital technologies in the government and business area. A good digital infrastructure is essential for businesses that want to compete in the digital society (PWC, 2016).

Due to the above mentioned the Netherlands has, compared to other countries, a well-functioning blockchain ecosystem with collaboration between public and private parties (Dutch Blockchain Coalition, 2017b). At the current moment, there are many initiatives in the business community, the government- and at knowledge institutions (Dutch Blockchain Coalition, 2017a). Many diverse partnerships and field labs with a focus on Blockchain are active. Some initiatives are already in the prototype phase and will be operational within a few years (Dutch Blockchain Coalition, 2017a).

Dutch parties are active in searching interesting international partners. There exist international cooperation projects between the Netherlands and Canada, United States, Belgium, Malta, Dubai, Singapore, India and Scandinavian countries (Dutch Blockchain Coalition, n.d.) and the Netherlands is looking for more interesting international partners. In Germany, especially in Berlin a lot is happening in the blockchain technology. Dutch parties are therefore active in searching for German cooperation possibilities: [Blockchaingers](#) (NL) cooperates for example with [BigChainDB](#) (DE).

Sectors where the Netherlands distinguishes itself worldwide, so-called **“top sectors”**, the role of the Dutch government and a list of Dutch Blockchain companies will be named in this chapter.



## **1.1 Potential sectors**

The Netherlands is traditionally strong in financial services, logistics, energy and healthcare. These are sectors that can be directly influenced by the outcomes of blockchain (Dutch Blockchain Coalition, 2017b).

At the moment, researchers from for example knowledge institute TNO and Technical University Delft, actively examine ideas on how to implement Blockchain applications in diverse sectors. The financial sector is a front runner when it comes to the implementation of blockchain in the Netherlands.

### 1.1.1 Financial services

The Netherlands has an open economy and is therefore interested in the development of new technologies that accelerate monetary flows. New technologies and innovation have always played a very important role in the Netherlands. The role of ICT in financial services keeps increasing, because of the huge digitalisation of this sector. Blockchain is a technology that can be used for new ICT services.

Amsterdam is a front running city for FinTech. The city brings together a constantly growing technology sector, start-up possibilities and a substantial financial sector which makes it the perfect combination for FinTech (IAmsterdam, n.d.). Amsterdam ranked 5<sup>th</sup> in the IFZ Global FinTech Rankings 2018 (Ankenbrand, Bieri and Dietrich, 2018), which means that it's the 5<sup>th</sup> strongest city in having potential in FinTech, entrepreneurship and innovation across the globe. Over 350 companies in the Dutch capital are working actively on FinTech (IAmsterdam, n.d.). Four reasons why Amsterdam is an attractive environment for FinTech companies are (IAmsterdam, n.d.):

- A strong entrepreneurial environment
- Excellent digital infrastructure
- Reliable and cooperative regulators (AFM and DNB)
- Access to highly skilled talent

Banks in the Netherlands are investigating what blockchain technology can mean for them. ABN-AMRO, Rabobank and ING are all participating in the [Dutch Blockchain Coalition \(DBC\)](#). The DBC is a public/private organization with the aim to promote the rollout of blockchain technology in Dutch key sectors on large scale.

Click [here](#) for more information about how FinTech is shaping financial services in the Netherlands.

Holland FinTech, an organization that helps Dutch start-ups in the FinTech sector, developed a Dutch FinTech Infographic which shows which organizations use FinTech in the financial sector. The



## FINANCIAL SECTOR THE NETHERLANDS

In 2016, **232.000** people are employed in the financial sector. There are **25.000** freelancers.

The amount of jobs in the traditional financial sector (banks) is reducing. This has to do with the current possibility of financial services over the internet. The amount of freelancers however, is increasing.

In the regions Amsterdam and Utrecht are the most financial service activities.

Source: [UWV \(2017\)](#).

most recent version of this infographic shows that 475 companies are currently active in the Dutch FinTech market. The number of FinTech related companies keeps increasing. This is essential to the Netherlands' competitive position (Holland FinTech, 2017).

*Figure 1. Organizations that work with FinTech in the Netherlands. Source: [Holland FinTech](http://HollandFinTech.com)*



### 1.1.2 Logistics

One of the top sectors in the Netherlands is logistics. The favorable location of the Netherlands, in combination with a well educated labor force, a good infrastructure and much experience in complex logistic processes, makes the Netherlands a gateway to Europe. The import and export of goods over Dutch international sea- and airports is huge (Centraal Bureau voor de Statistiek, 2018).

There is much potential for blockchain in logistics. This is of special interest for instance to the Port of Rotterdam. Blockchain in the logistics sector can be used to improve efficiency and reduce costs.

- Project “TKI Dinalog **Blockchain Consortium**” is one of the major projects of blockchain in logistics in the Netherlands. In this project 16 partners, i.a. [TU Delft](#), knowledge institute TNO and the Port of Rotterdam work together to set up blockchain use cases for logistic purposes, for example the possibilities blockchain can offer for container transport (TNO, 2017). Project Manager Professor Johan Pouwelse at TU Delft said that the project is not about discussing potential, but that they are actually going to put words into action (Siebrand, 2017).
- [Blocklab](#) is another major project in both the energy and logistics sector. Founded by the Port of Rotterdam and the municipality of Rotterdam. Blocklab is setting up use cases for the ways in which blockchain can change logistics.

Because of the Dutch reputation of having a strong logistics sector, Dutch blockchain initiatives have many international opportunities as well. Right now, ideas from the TKI Dinalog project are **communicated to the European Union’s [Digital Transport and Logistics Forum](#)** to show Europe and the world what happens in the Netherlands with blockchain in the logistics sector (TNO, 2017).

### 1.1.3 Energy



## ENERGY SECTOR THE NETHERLANDS

The employment in the energy sector keeps increasing. In 2016 there are **52.000** employees in the sustainable energy sector (Centraal Bureau voor de Statistiek, 2016).

The Netherlands has a lot of experience in energy efficiency (Holland Trade and Invest, n.d.a).

The Netherlands is doing well in the areas of renewable energy and energy efficiency and the country has a leading position in wind energy at sea, biomass processing and greenhouse farming (Holland Trade and Invest, n.d.a).

The production of renewable electricity out of wind, biomass, hydro and solar power rises. In 2016, almost 13% of the total use of electricity in the Netherlands was sustainable generated energy (Centraal Bureau voor de Statistiek, 2017).



The Netherlands wants to have a sustainable, reliable and affordable energy system by 2050. The energy sector could therefore use blockchain technology. "A future sustainable energy market will depend on decentralized exchange (Blocklab, 2017)".

- In the report "[A Comprehensive Guide for Companies involved in Blockchain and Energy \(2018\)](#)" becomes clear that the Netherlands leads the world market in terms of numbers of companies using Blockchain in the energy sector. They are followed by Germany and the USA (Solarplaza, 2017).
- Major project "[Blocklab](#)", grounded by the Port of Rotterdam and the municipality of Rotterdam, investigates how Blockchain can help with a Dutch transfer to a sustainable energy system (Soeteman, 2018). The best innovation projects that Blocklab investigated, are rewarded with financial support.

## HEALTHCARE SECTOR THE NETHERLANDS

The Netherlands contains **318** hospitals (Zorgkaart Nederland, 2018). There are **8 UMC's (University Medical Centres)**. These hospitals are connected to universities for healthcare on the highest possible level.

The Dutch healthcare system is the best healthcare system of Europe, according to [the Euro Health Consumer Index](#) (Health Consumer Powerhouse, 2017).



The Netherlands is very interested in eHealth solutions like telemedicine, online therapy and prevention (Holland Trade and Invest, n.d.b). Therefore blockchain is an interesting tool. Blockchain in the healthcare sector can be used to improve exchange of information in four ways (Felix, Nap, Nuijten & Piller, 2018):

- **Nonrepudiation:** due to the decentralized database-structure, data can't be undesirable adjusted.
- **Patients get the control:** Patients get the control over their own data. They decide who gets access to their data in a secure environment.
- **The same source of information:** there is one shared truth for all parties involved.
- **Administrative optimization:** by dealing with realtime processes.

The application [Mijn Zorg Log](#) is a perfect example of how government, companies and knowledge institutions collaborate and share knowledge successfully. In this application National Health Care Institute Nederland, law firm Pels Rijcken, Health Care Institute Idius Felix and technological brand Ledger Leopard work together in the first working blockchain application in healthcare in the Netherlands.

National Health Care Institute Nederland is using "Mijn Zorg Log" for a practical trial around blockchain in maternity care in collaboration with health insurance company VGZ for a transparent and efficient process for the registration of maternity care-hours (Felix et al., 2018). [Report](#) in Dutch.

## 1.2 Government

The government has an important role when it comes to investigating and implementing blockchain technology: there is a need for regulation for cryptocurrencies. Besides, blockchain can improve governmental processes. Taskforces are active to investigate the possibilities of blockchain for the government. The most important blockchain activities of the government are explained in this paragraph.

### 1.2.1 Regulation of cryptocurrencies

The Netherlands pleads for a European approach of regulation of cryptocurrencies, since cryptocurrencies are a border crossing phenomena. The Ministry of Finance wants to take the lead to create rules for cryptocurrencies with other EU states to proceed against improper use. These regulations shouldn't counteract the power of the new technology. The Ministry of Finance

also investigates the possibilities for rules with regard to Initial Public Offering (IPO) of cryptocurrencies. Until now, these currencies are being left out of normal rules for IPOs (ANP, 2018).

### *1.2.2 Government projects*

#### Blockchain pilots

Blockchain pilots is an organization that accelerates the development of blockchain in the public domain. To investigate how blockchain can be used by the government, around 40 pilot projects are set up for both the ministries and for local authorities under the umbrella of blockchain pilots.

Blockchain pilots contains pilot projects for i.a.:

- The Ministry of Interior Affairs
- The Ministry of Justice
- The Ministry of Foreign Affairs
- The Ministry of Health, Welfare and Sport
- The Chamber of Commerce

#### *Digital Identity*

Applications of blockchain technology need a trustworthy identity and authentication. Therefore it is necessary to work on blockchain solutions for the identification of people (Dutch Blockchain Coalition, 2017a). Nowadays, people have many different online identities. For example: there is a different online identity for every social media network. With the help of blockchain, it will become possible to put all these digital identities into one digital identity. At the moment, **intermediaries are always necessary to determine someone's identity**. Blockchain can make these intermediaries like banks and notaries superfluous. Blockchain **realizes a trustworthy determination of someone's identity**.

The Netherlands is investigating the options for international standardization of digital identities and blockchain (Dutch Blockchain Coalition, 2017a). Research and experiments with digital identity for blockchain is ongoing. **The "Rijksdienst voor Identiteitsgegevens"** (the national service for identity data) has been investigating the possibilities (Rijksdienst voor Identiteitsgegevens, 2017). The goal of this Ministry is to get the highest possible quality of identity data. One practical example is the local authority in Utrecht that works on a new digital identity in collaboration with the central government (Schram, 2018).

#### European participation

The Dutch government also joins the so-called 'blockchain partnership' of 23 European countries. **The goal is "to exchange experience and expertise in the technical and regulatory fields and prepare for the launch of EU-wide blockchain applications across the Digital Single Market for the benefit of the public and private sectors (European Commission, 2018b)".** Countries from the EU and the EEA are allowed to join this blockchain partnership. Switzerland is not a member of the EU nor of EEA so is at this moment not able to join.



### 1.3 Knowledge institutions

Almost every Dutch university is discovering the possibilities of blockchain technology. One outstanding example is the TU Delft.

- TU Delft has its own Blockchain Lab, [Delft Blockchain Lab \(DBL\)](#). It is an “initiative for research, education, and training in blockchain technology and trust in the internet (TU Delft, n.d.a)”. “The mission of DBL is to strengthen the scientific basis of blockchain technology, to provide education and training in blockchain technology, and to reach out to societal and industrial partners and other stakeholders in order to support the use of blockchain technology (TU Delft, n.d.a).”
- TU Delft offers a certificate in blockchain technology: MSc Education: Blockchain Technology Certificate. To qualify, students must successfully complete [three advanced computer science master courses](#) (TU Delft, n.d.b).
- TU Delft teaches a course on blockchain technology and related subjects to PhD students in the Research School: Advanced School for Computing and Imaging (TU Delft, n.d.b).

Knowledge institute [TNO](#) invests in blockchain technology (TNO, n.d.):

- TNO develops knowledge and shares results as support for parties that develop blockchain applications.
- TNO collaborates with other research bodies and the business community on the acceleration of implementation of blockchain technology, which i.a. led to the Dutch Blockchain Coalition.
- TNO leads experiments in blockchain field labs.
- The [TNO Blockchain Laboratory](#) coordinates and integrates the blockchain expertise and knowledge and is a contact point for their customers and collaborators.
- TNO [projects](#) and [researchers](#).

### 1.4 Dutch blockchain initiatives

There are many blockchain initiatives in the Netherlands. The most important ones are explained in this paragraph.

#### [Dutch Blockchain Coalition \(DBC\)](#)

M: [info@dutchdigitaldelta.nl](mailto:info@dutchdigitaldelta.nl)

T: +31 704 190 309

The DBC is a public/private organization with the aim to promote the rollout of blockchain technology in the Dutch top sectors on a large scale, developed by the business community, the government and knowledge institutions. DBC is an initiative from [Dutch Digital Delta](#). The National Blockchain Coalition wants to create conditions for reliable and socially accepted blockchain applications (Dutch Blockchain Coalition, 2017a). In total, the Dutch Blockchain Coalition contains around 60 parties.



### [DutchChain](#)

M: [info@dutchchain.com](mailto:info@dutchchain.com)

T: +31 502 112 515

DutchChain is an organization wanting to improve society through blockchain **based solutions**: “We design and build blockchain based software solutions, kickstart the ecosystem with the largest blockchain hackathon in Europe, and **share our knowledge through our magazine and the conferences we organize.**” DutchChain organized the **innovation program “Blockchaingers”** and the **“Dutch Blockchain Hackathon”**:

### [Blockchaingers](#)

**Blockchaingers** is an innovation program. “We are an ecosystem of launching customers, investors, governments, corporates, startups, scale-ups, NGOs, universities and regulators. The Blockchaingers is an open platform. We welcome **the big and the small, the public and the private, the people and the machines.**”

### [Dutch Blockchain Hackathon](#)

The Netherlands shows as front runner in the international community with its **blockchain ecosystem: “Dutch Blockchain Hackathon”** where **experts from the business community, the government and blockchain technology** come together. The Dutch Blockchain Hackathon was an event that took place in April 2018 in Groningen. Over 600 participants from 20 countries gathered. This gathering of different parties is unique in the world.

The goal of this event was to work on blockchain prototypes in seven different sectors and find out if these prototypes work as solutions for worldwide challenges. During this hackathon, different teams were offered support from experts in blockchain from for example Bitcoin, Ethereum and BigchainDB (Emerge, 2018).

### [Holland FinTech](#)

M: [info@hollandfintech.com](mailto:info@hollandfintech.com)

T: +31 208 946 408

The Dutch organization **“Holland FinTech”** helps start-ups to **“be part of the future of financial services”** and has **64 international partners**. This helps global companies to get in touch with FinTech organizations.

Holland FinTech organizes FinTech trade missions for companies to other countries, there are two Holland FinTech trade missions to Switzerland in 2018:

- [March 22-23 2018, Zurich & Zug](#): Participants found opportunity to see what their company is doing right and what is missing. It was an excellent networking opportunity and an opportunity to present themselves at important players at the Swiss financial industry.

- [October 1-2 2018, Zurich](#): The delegation will attend the event “[FinTech+](#)” where FinTech leaders from all over the world gather.

### [Blocklab](#)

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See paragraph 1.1.2 and 1.1.3

### [Blockchain pilots](#)

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See paragraph 1.1.2

## **Chapter 2. Blockchain in Switzerland**

Switzerland has good conditions to be a key player in the global Blockchain industry:

- Just like the Netherlands, Switzerland has a sophisticated network infrastructure with high speed (Bachmann, Lyons and Seffinga, 2017). Switzerland ranked 5<sup>th</sup> in the 2018 IMD World Digital Competitiveness Ranking.
- Data security and protection is very advanced.
- The knowledge level on blockchain technology is high.
- Switzerland for many years now ranked as the most innovative country in the world (Dutta et al., 2018). This leads to an obliging attitude towards blockchain technology.

- Switzerland is a decentralized country. Lots of things are arranged on cantonal level instead of national level. The decentralized bottom-up political culture matches perfectly with the decentralized, bottom-up crypto technologies of the future (Crypto Valley Association, n.d.).

Potential sectors in Switzerland, the role of the Swiss government, the Swiss Blockchain Ecosystem and Swiss Blockchain initiatives will be named in this chapter.

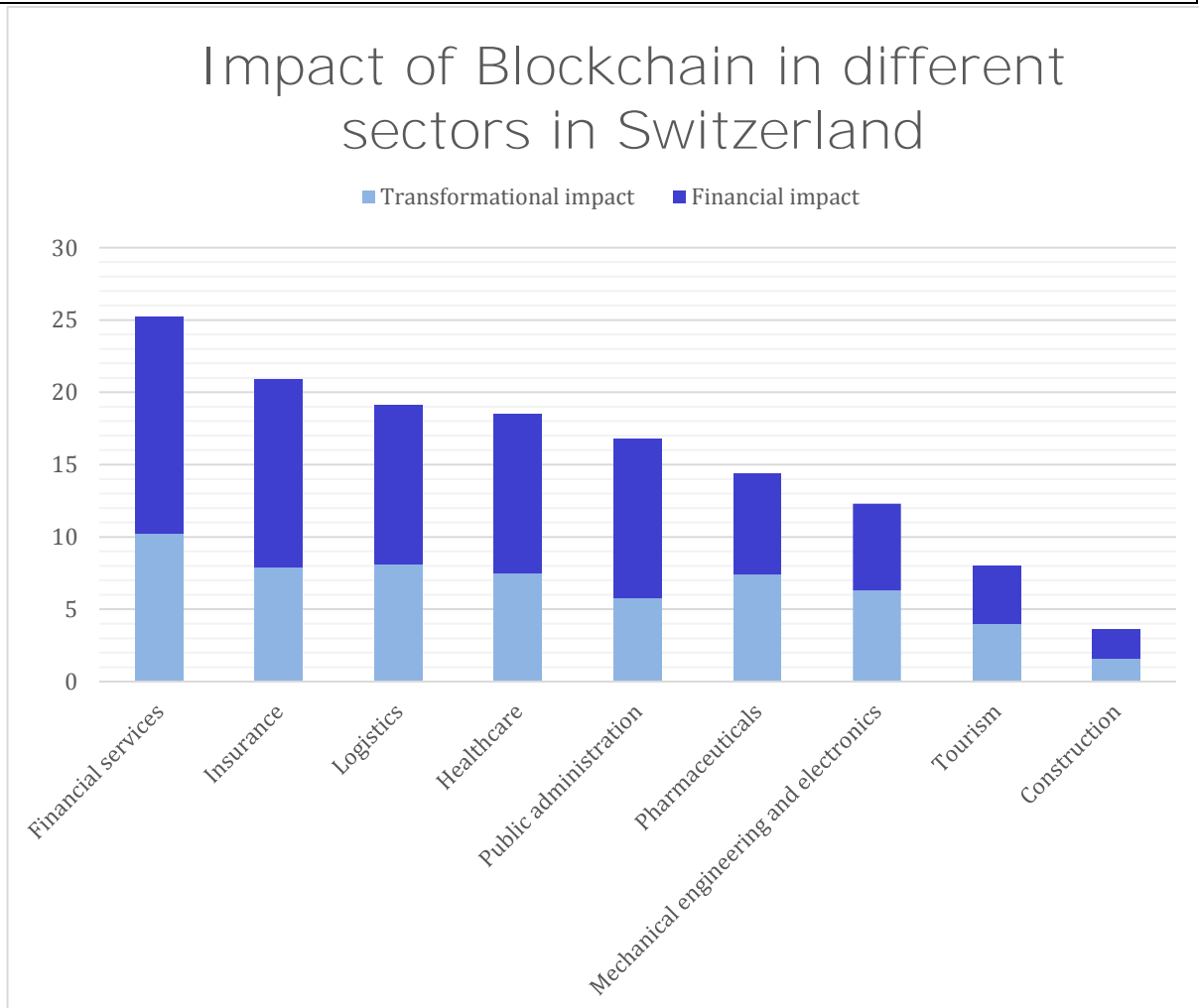
## **2.1 Potential sectors**

The possibilities of blockchain are almost limitless. It is not certain yet how blockchain is going to develop, but it is advisable to investigate in what sectors blockchain will have the most impact in the near future. Deloitte Switzerland analyzed the short term blockchain-possibilities for the Swiss market. The analysis matrix that Deloitte Switzerland developed, measures the impact of blockchain in different sectors in Switzerland. Four sectors seem to have a pioneer role: financial services, logistics, insurance and healthcare. This means that blockchain technology most likely will transform these sectors.

From all sectors in Switzerland, both the transformational impact (scores: 0 – 12) and the financial impact (scores: 0 – 18) are shown in figure 2. Transformational impact is the expected amount of change blockchain could bring in the sector. The financial impact is the expected saving in costs and

generated new incomes blockchain can bring in that sector (Bachmann et al., 2017).

**Figure 2. Transformational impact (scores: 0-12) and financial impact (scores: 0-18) of Blockchain in the different sectors in Switzerland. Source: [Deloitte](#) (Bachmann et al., 2017).**



### 2.1.1 Financial services

The financial sector is an enormous important sector in Switzerland. Switzerland has a very good reputation. Zurich is also known as 'the financial centre of the world'.

Switzerland is a leading FinTech hub. The most interesting cities for FinTech in Switzerland are Zurich, Geneva and Zug.

- FinTech companies are growing and maturing (Ankenbrand, 2018). For a factsheet of Swiss companies working on FinTech, go to chapter 7 in [this study](#).
- Zurich ranked second and Geneva third at the [IFZ Global FinTech Rankings 2018](#). This means that these two Swiss cities are being seen as the second and third strongest in the world in having potential in FinTech.
- **Zug, better known as "Crypto Valley"**, is a city in Switzerland with a very friendly FinTech climate. In this city it is possible to pay with cryptocurrencies like bitcoin. A lot of important FinTech companies and developers are established in Zug.
- Banks in Switzerland are participating in blockchain technology. Falcon and Swissquote offer bitcoin investments to clients (Allen, 2017). Banks in Switzerland are cooperating with FinTech companies instead of competing with them. Just like banks in Liechtenstein, some regional banks and online banks like Swissquote are offering ICOs to companies decided on a case-by-case basis.
- The Swiss FinTech sector has been growing in the past two years. This becomes clear in figure 3. In 2015 there were 162 FinTech companies, in 2016 190 and in 2017 220 (Ankenbrand et al ., 2018). Figure 3 shows in which FinTech product areas (Analytics, Banking Infrastructure, Distributed Ledger Technology, Deposit & Lending, Investment Management and Payment) most of the Swiss FinTech companies are active.



## THE SWISS FINANCIAL SECTOR

The Swiss financial sector contains some **270** banks (Switzerland global enterprise, 2016).

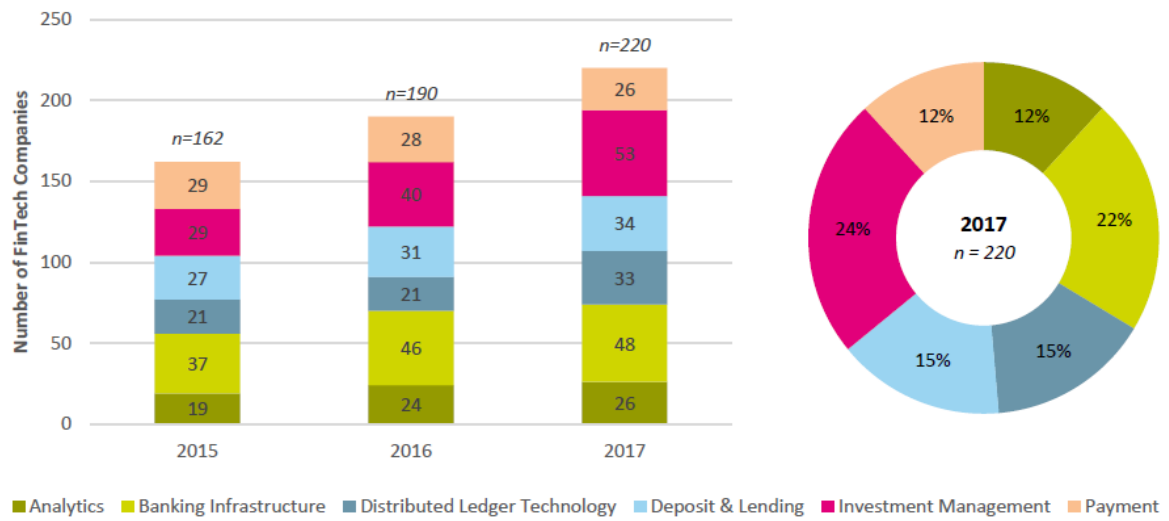
Most financial institutions have its location in Zurich, Geneva, Basel and Lugano. Besides the two globally known banks **UBS and Credit Suisse**, the country contains a lot of regional and specialized institutions (Switzerland Global Enterprise, 2016).

Around **212.000** people in Switzerland have a job in the financial sector, this is about 5.5% of the entire working population in Switzerland (Switzerland global enterprise, 2016).

The financial sector also contains a lot of international companies: around **85** foreign banks are established in Switzerland.

**51%** of the securities managed in Switzerland come from foreign clients (Switzerland global enterprise, 2016).

Figure 3. Number of FinTech companies in Switzerland 2015-2016-2017  
Source: [IFZ FinTech Study 2018](#) (Ankerbrand et al., 2018)



### 2.1.2 Insurance

The success of the insurance sector in Switzerland is related to “a high per capita income, a strong need for security, a solidly structured old-age pension system, an open and internationally networked insurance centre, a credible regulatory environment and international know-how in the reinsurance business (Switzerland Global Enterprise, 2018)”.

The insurance market is based on trust management. Blockchain offers a new way of trust due to its decentralised characteristics. Blockchain can be used to verify many types of data in insurance contracts. With blockchain technology, insurers can input all data in the blockchain network. There is not one party who has all control over the funds (Future thinkers, 2017).

- Reinsurance companies Swiss RE and Zurich Insurance are doing a pilot experiment under the blockchain initiative “**B3i**”: The **B**lockchain **I**nsurance **I**ndustry **I**nitiative. In this pilot experiment Swiss RE and Zurich Insurance are working together with several international insurance companies. Inter alia Dutch insurance companies Aegon and Achmea. Together they investigate in which way Blockchain can contribute to safer transactions and a faster exchange of information.
- In March 2018, the **Blockchain Initiative “B3i”** announced the formation of a blockchain start-up in Zurich: “**B3i Service AG**” (Allianz, 2018). B3i Services AG is meant to commercialize blockchain solutions for re/insurance (Allianz, 2018).



## THE SWISS INSURANCE SECTOR

The insurance industry plays an important role in the overall economic growth of Switzerland.

According to the Swiss Insurance Association, the insurance sector is one of the most productive industries in Switzerland in general (Schweizerischer Versicherungsverband, 2017).

The sector contains:

Some **200** insurance companies  
**53.000** people employed  
(Switzerland Global Enterprise, 2016)

### 2.1.3 Logistics

Logistics is a key sector in Switzerland because it is a transit country due to its geographical location.

For the coming few years, a strong growth in the volume of transported goods is expected. Therefore optimisation of logistic processes between and within companies are essential (GS1 Switzerland, 2018). A possible way for sustainable optimisation, could be implementing blockchain technology into the sector.

Blockchain technology has a positive outcome for supply chain management: it can reduce time delays and lead to less costs. Blockchain technology can make it possible to verify authenticity or fair trade status of products (Future Thinkers, 2017).

- Impact Hub Zurich organized a network event in September 2017 about the possibilities of blockchain in the supply chain in Switzerland.
- A big logistic company in Switzerland, DHL, works on prototypes for implementing Blockchain in their system (Online PC, 2018). This is connected with the healthcare sector. Together with technology advisor "Accenture" they investigate how blockchain could help preventing mistakes in delivering medicines to patients.
- Swiss company [Smart Containers Group](#) "develops, builds and rents out airfreight containers for medicine & food transports. They combine cutting-edge technology and IoT sensors in a logistics ecosystem on blockchain". Key clients are Roche, Takeda, Novartis, Kedrion, Grifols and Alagan.



## THE SWISS LOGISTICS SECTOR

There are **181.350** employees in the logistics sector (Hofmann, Mathauer and Stölzle, 2018).

The value of the whole logistics market in Switzerland is around **CHF 39 billion**. This is more than six percent of the Gross Domestic Product (GDP). (GS1 Switzerland, 2018).



#### 2.1.4 Healthcare

The Swiss healthcare system is the second best healthcare system of Europe, according to [the Euro Health Consumer Index](#) (Health Consumer Powerhouse, 2017). For three reasons (Switzerland Global Enterprise, 2016):

- Highly trained medical professionals.
- Internationally famous hospitals.
- Top medical institutions.

Innovation is key to keep guaranteeing this status. A possible way to innovate is using blockchain technology.

- Healthcare company Novartis recognized the added value of so-called smart contracts. A smart contract is a blockchain application. Smart contracts are agreements between two parties that are registered on the blockchain (Bachmann et al., 2017).
- Organization [Swiss Digital Health](#) is a digital healthcare platform. Its aim is to connect the digital health community to improve the global healthcare system. Swiss Digital Health cooperates with companies that are working with blockchain technology in the healthcare sector, like for example the Swiss company [Digipharma](#), a blockchain platform for fair pricing in healthcare.
- Expert Karafiloski (2017), who is project manager at the Swiss software company Netcetera, spoke on the Deephealth Conference in October in Zurich in 2017. She expects that Blockchain will change the healthcare system completely.
- ['Blockchain for Healthcare'](#) in Zurich is active in this topic and organises meetups.



### THE SWISS HEALTHCARE SECTOR

The Swiss healthcare sector has a very good reputation worldwide.

The country contains **108 hospitals** and **181 specialized clinics** in 2014 (Switzerland global enterprise, 2016).

## 2.2 Government

Just like the Dutch government, the Swiss government is aware of the need for technology friendly regulation.

### 2.2.1 ICO and the Financial Market - Technology friendly regulation

The Swiss Financial Market Supervisory Authority is actively supporting the emerging FinTech sector since late 2016 and has become more active in the area of blockchain driven business models and ICOs since 2017. As the number of ICO projects in Switzerland increased significantly over the last months, and also the number of enquiries about the applicability of the regulation, FINMA gave an update in February 2018 on its ICO policy [Guidelines](#).

Furthermore, FINMA launched a FinTech Desk ([fintech@finma.ch](mailto:fintech@finma.ch)) for questions in the areas of FinTech and cryptocurrencies, where ICO organisers could make a requirement to see if their ICO is subject to existing financial market regulation. The assessment by FINMA is **exclusively** based on the perspective of existing financial market regulation. The ICO itself is responsible for compliance with the obligations under civil and tax law.

Swiss financial regulation is principle-based rather than rule based and technology neutral, providing an innovation-friendly eco-system for FinTech. There is no need for constant changes to the legal framework.

Since there is no ICO specific regulation yet, each case is decided on its individual merits but FINMA did set the minimum information they require from the ICO. The ICO organizer has to hand in general information, but also details of the design and issuance of the tokens and potential secondary trading.

FINMA introduced a definition of tokens to facilitate this process and to guide interested parties. FINMA categorises tokens in three main categories, based on their economic functionality, hybrid forms are possible:

- Payment tokens, used as payment for acquiring goods
- Utility tokens, used for access to applications or services
- Asset tokens, represent assets

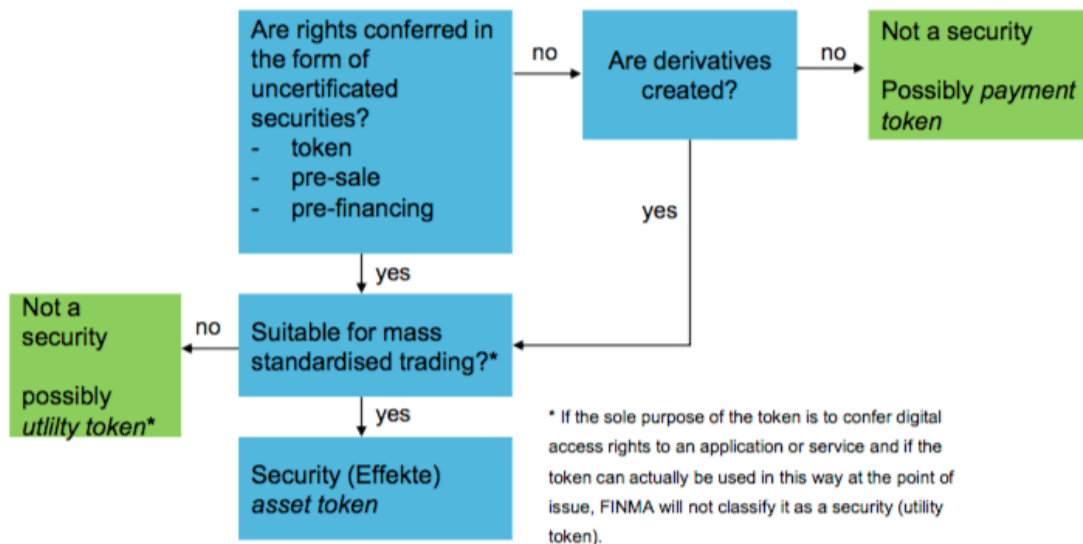
Figure 4 shows the regulatory framework of tokens under securities law.

Figure 4: Tokens under securities law – overview Source: [FINMA](https://finma.ch)

Supervisory and regulatory framework



## Tokens under securities law - overview



### Compliance with anti-money laundering regulation

Switzerland is extremely sensitive to anti-money laundering rules. This has become even more urgent since the international pressure on the Swiss financial sector. Switzerland has strict regulation in place to prevent money laundering and terrorist financing. The Swiss government wants to prevent that cyber currencies would be used for illicit activities, especially given that Switzerland dominates the market for the cross-border management of private wealth, therefore Swiss ICOs are obliged to follow strict anti-money laundering procedures.

- By removing some uncertainty about its legal framework, Switzerland hopes to encourage ICOs
- FINMA made it transparent and clear for ICO market participants in Switzerland, how they will deal with their enquiries regarding the supervisory and regulatory framework
- Guidelines result in more certainty for ICOs which is valuable in the process of offering new tokens.
- Although no obligation to make an enquiry at FINMA, it makes a company more trustworthy and therefore more attractive to investors.
- ICO regulations are like Swiss financial regulation principle-based, rather than rule-based. FINMA considers all cases individually

- Zug (Cryptovalley) is a very popular city for ICOs. Established in Zug are for example Ethereum, Bancor and Tezos.

### *The situation in the Netherlands*

The guidelines and the categorization of tokens of FINMA are interesting for the Netherlands. The Dutch Authority for the Financial Markets (AFM) analyses these guidelines with much interest.

- In contrast to Switzerland: the Netherlands has no guidelines for ICOs and **hasn't categorized tokens yet.**
- The AFM warns for the risks of ICOs because of the unregulated environment and discourages investments in ICOs.
- On the other hand the AFM sees the importance of innovation in financial markets (AFM, n.d.).
- In exceptional situations an ICO can be covered by the Act on Financial Supervision (Wet op het financieel toezicht, Wft). The AFM assesses on a case-by-case base whether the Wft is applicable or not (AFM, n.d.).
- Companies which consider an ICO and want to publish it under financial supervision should contact the [InnovationHub](#) of AFM and De Nederlandse Bank (DNB) for questions.

### *Summarized:*

Both in Switzerland and the Netherlands exist no generalized policy for ICOs and enquiries are investigated case-by-case. Switzerland made up guidelines for ICOs and categorizes tokens into payment-, utility- and asset tokens. In the Netherlands **such guidelines don't exist yet, but some ICOs are covered by the Wft.** Both in Switzerland and the Netherlands, companies can turn to the Financial Market Supervisors (FINMA and AFM) for questions about ICOs under financial supervision.

### *Sandbox*

The Swiss Federal Council announced in 2016 plans to reduce barriers for market entry for FinTech companies. This led to the implementation of a so-called **"Sandbox"** in August 2017 (Ankenbrand, 2018).

- The Sandbox is an experimental space, a gap in the bank regulation. It enables investments in a company for which under usual regulations a bank license would be required.
- To the limit of CHF 1 million, public deposits are allowed to be accepted without a license, provided that they are not invested and do not bear interest (FINMA, 2017).
- The sandbox is optional to everyone. It is attractive to FinTech start-ups/companies. It offers start-ups/companies the option to experiment with few money. It offers the opportunity to test if their idea works.

### 2.2.2 Other Governmental projects

#### *Blockchain/ICO working group*

In January 2018 The State Secretariat for International Financial Matters (SIF) established a blockchain/ICO working group. The working group reviews the legal framework and identifies any need for action with the involvement of the Federal Office for Justice (FOJ), FINMA and in close consultation with the sector (Schweizerische Eidgenossenschaft, 2018).

#### *SBB*

Since 2016 it is possible to buy bitcoins at the pay-machines of the Schweizerische Bundesbahnen (SBB), the national railway company of Switzerland.

#### *Digital Identity*

**Zug, better known as “Crypto Valley” offers a blockchain-based digital identity** for the citizens of the city since November 2017. This made Zug the first city of the world in doing this. Zug also experimented with the first blockchain-based voting, so called **“e-voting” in Switzerland**. In a week-long experiment in June 2018, it was possible to vote with digital identities (Handelszeitung, 2018). Zug being a pioneer in blockchain technology is related to the open attitude of its mayor (Don, 2018). Switzerland in general is working on a national E-ID for all citizens as an online and offline identifier. This was announced by the Federal Department of Justice and Police (DFJP) in 2017 (Sperlich, 2017). Ultimately both the technical implementation and the publication of the E-ID of the government will be in the hands of private providers, so called Identity Service Providers, to offer a customer-friendly approach and needs flexibility for technical changes (Sperlich, 2017) The government want clear rules, that are approved by the state for an E-ID. By the summer of 2018, the DFJP has to frame a new bill for the Federal Council (Sperlich, 2017). For this reason, new developments can be expected in the near future.

## 2.3 Knowledge institutions

In Switzerland many knowledge institutions are doing something with blockchain technology. Progressive blockchain institutions are for example the ETH in Zurich (leading university in continental Europe) and the Lucerne school of Information Technology.

The ETH Zurich has its own ETH Blockchain Lab, just like the TU Delft. The blockchain lab of the ETH Zurich distinguishes itself from other institutional blockchain labs worldwide because of its focus on sustainability.

Activities of the ETH Blockchain Lab:

- [Future ICT 2.0](#): Blockchain for Smart Human Coordination. An international European project, locally funded. Countries that are funding are i.a. Switzerland, Italy and France. There is no connection with the

Netherlands. **One of the challenges within this project is called “[Finance 4.0](#)”:** blockchain used for more sustainability. Finance 4.0 is about building a platform on the blockchain that makes it possible to collect how people are contributing to the society. The project is meant to generate a more sustainable society.

- [BlockchainX](#): a platform where universities and companies from all over the world can join, share knowledge and work on use cases in blockchain technology. Interested institutions can go to [info@blockchainx.ch](mailto:info@blockchainx.ch)
- Blockchain and IoT School ([BIOTS](#)): a blockchain educational event for students from all over the world in Zurich. Coming up in 2019 again. Students from all over the world are welcome. **“During the cause of one week local students including selected international students are invited to participate, learning about new innovative technologies direct from the creators, engage in selected sustainable programs.”**

Activities at the Lucerne school of Information Technology:

- **Involved in “Horizon 2020”**, to ensure that the EU and Switzerland play a leading role in blockchain technology (Greater Zurich Area, 2018).
- There are plans at this university to offer blockchain courses at bachelor level; a platform for digital learning about blockchain from the summer of 2018 on.
- Organizing blockchain events: in march 2018 in cooperation with UK Science & Innovation Network to see what cooperation opportunities there are between the UK and Switzerland.

## 2.4 The Swiss blockchain Ecosystem

In Switzerland, many companies are starting to use the potential of blockchain (Schlup, 2018). **Organization** “BlockchainHub” has created an overview of the Swiss blockchain ecosystem. The map shows companies that work on Blockchain technology in Switzerland (Kahn and Kern, 2018). Every Swiss start-up who has a new blockchain related product can sign up for this overview and if relevant will be included in the overview. The Swiss Blockchain Ecosystem shows in figure 3 below:

*Figure 3. The Swiss Blockchain Ecosystem. Source: [BlockchainHub](#) (Kahn and Kern, 2018).*



## 2.5 Swiss blockchain initiatives

The most important blockchain initiatives in Switzerland are named in this paragraph.

### [Crypto Valley Association](#)

M: [Contact form](#)

“Crypto Valley is an ecosystem centered in and around the Swiss canton of Zug with active connections to international centers of Blockchain innovation in London, Singapore, Silicon Valley and New York. The Crypto Valley Association has been set up to foster the growth of this ecosystem. We drive innovation through collaboration and partnerships with entrepreneurs, startups, investors, corporates, educational institutions, service providers, and government bodies.”

[The creation](#) of Crypto Valley was inspired by the enormous advantages of global industry clusters – “a friendly regulatory environment, network effects,



**economies of scale, attracting the world's best talent, building deep pools of capital and a rich ecosystem of resources and know-how for start-up companies, nurturing an entrepreneurial culture, infectious energy, and strong trust relationships that make the impossible possible."**

On their website you can find the possibility to join their network. This makes it for example possible to join Blockchain events and conferences. The Crypto Valley Association can also bring a company in contact with investors who **understand Blockchain and can be interested in one's business idea. This is** meant for members of the association only. The Crypto Valley Association now counts over 220 corporate and individual members. Including leading companies like Ethereum, Shapeshit and Tezos.

Crypto Valley is welcoming foreign blockchain companies. In Zug they are alighted to welcome blockchain companies who can bring expertise and knowledge. Crypto Valley has shown to be able to attract blockchain companies.

### *Swiss BlockchainHubs*

A [BlockchainHub](#) is a corporation network of independent hubs that share the same vision and goals. They share resources, but stay independent (BlockchainHub, n.d.). It is a common office for specialized Blockchain startups. This common office makes it possible to share relevant information with each other and in this way develop faster as an independent. It is another example of the fundamental idea that collaboration leads to success. In Europe, Blockchainhubs exist in Berlin, Brussels, Oslo, Vienna, Graz and Sofia (BlockchainHub, n.d.). Zurich is setting up a BlockchainHub in 2018 as well and is therefore joining the network. This includes possible partnerships with universities in the future as well.

Geneva and Zug both have blockchain cooperation labs as well:

- **In Geneva startups launched a 'Blockchain Lab' in January 2018.** The goal of this Blockchain Lab is to provide education and infrastructure for corporations in blockchain.
- In Zug opened a Blockchain Hub **called "[Crypto Valley Labs](#)" in February 2018.** "Crypto Valley Labs" is a blockchain co-working space in Zug.

### *[Swiss Blockchain Association](#)*

M: [info@swissblockchainassociation.ch](mailto:info@swissblockchainassociation.ch)

"The Swiss Blockchain Association aims to further develop the Swiss ecosystem as a global hub for blockchain technologies and enable understanding of the implications of blockchain tech to the general public." The Swiss Blockchain Association is an association with members from different fields and **organizations all over Switzerland. "Our objective is to advance interests of the public and promote blockchain for economic development across Switzerland."** The Swiss Blockchain Association has four main goals:



1. "Educate the public and private on blockchain technologies and applications"
2. "Connect members and develop the communities and ecosystem"
3. "Advocate for solutions which address specific issues"
4. "Promote Switzerland as a global blockchain hub"

### [Blockchain Taskforce](#)

The Blockchain Taskforce is a private initiative with people from different fields (science, politic, industry). The taskforce writes recommendations for future regulations in the blockchain- and, more specific, ICOs area. The Blockchain Taskforce is an addition to the blockchain/ICO working group of the government.

The first [White Paper](#) of the Blockchain Task Force was released at 26. April 2018. It contains recommendations for the development of the Swiss blockchain industry. At the end of 2018, a paper with further recommendations will follow.

The Swiss Blockchain Task Force changes its name half 2018 to Swiss Blockchain Institute. Future activities will be financed with the use of an ICO.

### [Swiss Finance + Technology Association](#)

M: [info@swissfinte.ch](mailto:info@swissfinte.ch)

This organization is the center of the FinTech community in Switzerland.

"An independent membership-based organization which is leading in the development of financial technology (FinTech) innovation ecosystem in Switzerland. We are one of the driving forces in creating a world-class FinTech hub in Switzerland. As the largest Swiss FinTech association our mission is to create an ecosystem that enables Switzerland to leverage the potential it has to become a world-class FinTech Hub." **It is possible to join** the network which could lead to opportunities to develop your own business and access financing, engagement with partners and members-only market knowledge.

This organization organizes the [Fintech+ 2018 exhibit](#) where a delegation from Holland FinTech will attend as well.

### [Bitcoin Association Switzerland](#)

M: [Contact form](#)

"We form an active community of enthusiasts with regular events, try to resolve open legal questions, and educate the public by providing a contact point for media inquiries. If you want to help us in our efforts or start new initiatives to bring Bitcoin to Switzerland please get in touch with us."

### [Bitcoin Suisse AG](#)

M: [Contact form](#)

T: +41 415 441 251

**"Bitcoin Suisse is a pioneer and global market leader in crypto-financial services. Bitcoin Suisse provides its global institutional and private client base with the following services: Brokerage, ICO facilitation/advisory and other related offerings such as storage solutions".**

### *Blockchain Society*

M: [contact@blockchainsociety.ch](mailto:contact@blockchainsociety.ch)

**"Blockchain Society is a Swiss student network which aims to develop the blockchain ecosystem in the country. This initiative was born from the association of several groups of students fond of cryptocurrencies and blockchain technologies. It brings together curious students from all fields in Switzerland interested in sharing knowledge or views, building projects and participating in the evolution of the ecosystem."**

## Chapter 3. Dutch blockchain opportunities

### 3.1 Why is Switzerland interesting for foreign blockchain investors/companies?

Because of:

- The transparent legal system and the economic stability. The [World Competitiveness Rankings](#) (2018) shows that Switzerland ranks 5<sup>th</sup> of the world in being competitive (the Netherlands 4<sup>th</sup>).
- **Switzerland's drive for innovation.** According to the [Global Innovation Indexes](#), the country ranks first in the world in being innovative for the last eight years now. This innovative drive stimulates the development of new technologies like blockchain.
- Tax incentives. There is a strong culture of financial privacy. The different Swiss cantons offer tax incentives to establish companies/activities in Switzerland. These financial incentives are also beneficial for foreign companies which want to locate in Switzerland.
- The good education system. For example [ETH Zurich](#) is the best university in continental Europe.
- A flexible labour market.
- Good services. From the cantonal authorities in Switzerland, you can expect fast and good services with efficient communication. This has to do with the competition between the different cantons. Within the federal structure, cantons have a high level of independence.
- Short lines to regulations.
- The availability of (risk) capital in Switzerland. So-called [Business Angels](#), individual investors, are willingly to invest in projects where the outcome is unsure.
- State support, the Swiss state offers many tools to support companies (Switzerland Global Enterprise, 2016).

#### **Blockchain has a favourable position in Switzerland**

The Swiss Economics Minister said in the beginning of 2018: "It does not need to stay with Crypto Valley, it should become the crypto-nation." Reasons why Switzerland is in a favourable position:

- Switzerland rated number 1. of European countries in being crypto-friendly, according to a study of [Blockshow](#) (2018) (The Netherlands 8<sup>th</sup>). The study focuses on regulations on cryptocurrencies and blockchain related projects. It means that Switzerland is the most attractive country of Europe for blockchain startups.

- Switzerland has become the hub for cryptocurrency-related projects for entrepreneurs and investors from all over the world. Switzerland has showed to be open to experiment with blockchain technology. Zug is home to multiple projects and fund entities like Ethereum Foundation and Shapeshift.
- The current position of blockchain in Switzerland has moved out of the hype phase and finds itself at the start of the standardisation phase in the business innovation model (Bachmann et al., 2017). This means that blockchain is now starting to play an active role for the government, politicians, knowledge institutions, companies and start-ups: The whole country is starting to see the opportunities blockchain can offer. Examples are Crypto Valley and regulation of ICOs by FINMA.
- The Blockchain knowledge level in Switzerland, and especially in Crypto Valley, is high.
- The regulation of ICOs by FINMA (see paragraph 2.2.1) makes it possible to have a more trustworthy ICO. Which makes the company more attractive to investors.
- **The in 2017 implemented "Sandbox" (see paragraph 2.2.1) makes it possible for start-ups to experiment with few money on new technologies. It offers the opportunity to test if ones idea works.**

### **The Swiss blockchain scene is very internationally oriented**

The entrepreneurs in Crypto Valley are mostly foreigners. Crypto Valley is welcoming blockchain companies can bring expertise and knowledge and it has created an environment that makes companies from all over the world want to come to Zug.

Cooperation on an international level is necessary also for Switzerland because it makes it possible to compete with other parts of the world. The last two years several blockchain trade missions came to Switzerland.

## **3.2 Tips**

### **Interesting sectors for cooperation:**

- **Financial services:** Both Switzerland and the Netherlands have a strong reputation when it comes to financial services. Both countries are characterised by open economies and therefore have benefitted by the development of new technologies and want to improve the efficiency of money flows. FinTech trade missions from the Netherlands to Switzerland were organized in respectively 2017 and 2018 in Switzerland. These trade missions offered the possibility for Dutch companies to present themselves at important players of the Swiss financial industry. This is a promising start of much more collaboration between the countries within this area.

- **Healthcare:** Both Switzerland and the Netherlands have a very strong healthcare sector. Concerning the [Euro Health Consumer Index](#) of 2017, the Netherlands has the strongest and Switzerland the second strongest **healthcare system in Europe. Because of Switzerland's drive for innovation** and the importance of their healthcare sector, Dutch healthcare blockchain solutions could explore Switzerland.
- **Logistics:** Dutch logistics blockchain solutions have opportunities in Switzerland because the Netherlands has a very strong logistics sector as the entrance of Europe with the Port of Rotterdam and Schiphol airport. **Switzerland's logistics** sector is also strong with its central position in **Europe as 'transit country'.** **For the next few years, a strong growth of the** volume of goods transport in Switzerland is expected. Long-term optimisation of logistic processes will be essential for this success (GS1 Switzerland, 2018). This is very well possible with blockchain technology. The port of Rotterdam is already very active when it comes down to investigating the possibilities of blockchain, with the projects "[Blocklab](#)" and "TKI Dinalog **Blockchain Consortium**". The port of Switzerland does not have any activities concerning blockchain yet.

The need for sustainable optimisation in the Swiss logistics sector and the Dutch reputation of having a strong logistics sector plus the fact that they already actively investigate in blockchain in the logistics sector offers many opportunities for Dutch logistic solutions in Switzerland.

### **Suggestion for cooperation: blockchain for sustainability**

Being the two most innovative countries of the world, in both Switzerland and the Netherlands sustainability is a relevant topic. Blockchain can be used for sustainable projects. Therefore blockchain for sustainability can be an interesting field for cooperation.

- The blockchain lab at the ETH in Zurich distinguishes itself from institutional blockchain labs worldwide for their focus on sustainability.
- The Netherlands works on many projects among sustainability as well.
- The Dutch organization "Blocklab" recognizes opportunities for a sustainable energy market with help of blockchain technology: "a future sustainable energy market will depend on decentralized exchange"

## Chapter 4. Doing business in Switzerland

When doing business in Switzerland, it is important to keep in mind that there are some cultural differences between the Netherlands and Switzerland. In this chapter the Swiss business culture will be explained, key areas for doing Blockchain business will be named and the chapter finishes with a list of organizations to approach when doing businesses in Switzerland.

### 4.1 The Swiss business culture

Switzerland is a decentralized country and there can be cultural differences depending on the region.

#### *Languages*

In Switzerland there are three main languages: German (Swiss people prefer Swiss German, which is only a spoken language, but they also speak High German: 63%), French (23%), Italian (in Ticino) (8%). Even though most people speak English, it is advisable to bring or send documents in German/French as well.

#### *Business etiquette*

- The Swiss business area is formal
- It is advisable to invest in long-term relationships with Swiss companies
- **Don't come unprepared to an appointment**
- Swiss appreciate punctuality, it is better to be five minutes early than one minute late.
- Talking about private life in the business area is a no-go

### 4.2 Key areas for doing blockchain business

Zurich is the financial centre of Switzerland, followed up by Geneva and Basel. The most attractive areas to go to for blockchain related businesses are Zurich, Geneva and Zug. All three cities have so-called blockchain hubs where start-ups gather to share knowledge. Zug, Crypto Valley, is the most attractive area. According to the *Regierungsrat Zug*, one of their most important 'assets' is that they offer excellent services to their citizens and the business area. This is thanks to intercantonal competitiveness. There is a very approachable authority. Appointments are made very fast. There is few bureaucracy. According to diverse citizens from Zug, the authorities think along with their customers (citizens/business area) on a high level.

### 4.3 Relevant organizations to approach

#### [The Embassy of the Kingdom of the Netherlands in Bern](#)

M: [ben@minbuza.nl](mailto:ben@minbuza.nl)

T: +41 313 508 700

The Embassy of the Kingdom of the Netherlands can support companies by giving advice on how to proceed or get them in touch with their extended network in Switzerland. The Embassy can also offer help when companies want to export or extend their business abroad through the RVO project: Starters International Business (SIB) [Rijksdienst voor Ondernemend Nederland](#).

#### [Greater Zurich Area AG](#)

M: [info@greaterzuricharea.com](mailto:info@greaterzuricharea.com)

T: +41 442 545 959

"We assist international companies and entrepreneurs in developing their business activities in the Greater Zurich Area." Greater Zurich Area offers free services to establish a company in **Switzerland's economic centre**. The pro of this organization is their regional network. Greater Zurich Area wants to act as a mediator between international companies and entrepreneurs looking to settle in the area and local interests and requirements.

#### [Google Zurich](#)

T: +41 446 681 800

International start-ups who come to Switzerland, can ask for support at Google Zurich. Google Zurich can offer help in the form of sponsorships and Googlers (employees at Google). They can help start-ups to conceptualize ideas and use their knowledge.

#### [DBRT \(Dutch Business Round Table\)](#)

M: [Contact form](#)

The Dutch Business Round Table is the Dutch network platform in Switzerland and is meant for the Dutch business community in Switzerland. The DBRT is located in Basel, Geneva, Zurich and Central Switzerland. The DBRT has the possibility to introduce new Dutch companies to their network in Switzerland.

#### [Contact point for businesses in Zug \("Crypto Valley"\)](#)

Kontaktstelle Wirtschaft:

T: +41 41 728 55 04

M: [Contact form](#)

#### **Swiss Financial Market Supervisory Authority FINMA**

T: +41 31 327 91 00

FinTech Desk: [fintech@finma.ch](mailto:fintech@finma.ch)

## ...The Netherlands. Sustainable. Creative. Innovative.

### Appendices

#### Appendix A: Blockchain events in NL and CH 2018-2019

Date:	Location:	Event:
<b>September 19-20, 2018</b>	Zurich, Switzerland	<a href="#">World Blockchain Congress</a>
<b>September 20, 2018</b>	Amsterdam, the Netherlands	<a href="#">IMD Europe, Identity Management</a>
<b>September 29, 2018</b>	Amsterdam, the Netherlands	<a href="#">Blockchain Day Netherlands</a>
<b>October 1-2, 2018</b>	Zurich, Switzerland	<a href="#">FinTech+ 2018 Exhibit *</a>
<b>October 4, 2018</b>	The Hague, the Netherlands	<a href="#">Fintech Vortex</a>
<b>October 8-9, 2018</b>	Zurich, Switzerland	<a href="#">Crypto Summit 2018</a>
<b>October 9, 2018</b>	Geneva, Switzerland	<a href="#">Blockchain &amp; Bitcoin Conference Switzerland</a>
<b>October 12, 2018</b>	Zug, Switzerland	<a href="#">Block Hedge Business 5th Edition</a>
<b>October 15-16, 2018</b>	Amsterdam, the Netherlands	<a href="#">European Women Payments Network</a>
<b>October 24, 2018</b>	Geneva, Switzerland	<a href="#">Blockchains for sustainable development</a>
<b>October 29-31, 2018</b>	Amsterdam, the Netherlands	<a href="#">Consumer Identity World Tour 2018</a>
<b>November 14, 2018</b>	Zurich, Switzerland	<a href="#">Fintech Statups Pitch for Investors</a>
<b>November 22, 2018</b>	St. Gallen, Switzerland	<a href="#">Blockchain for Business</a>
<b>November 23-24, 2018</b>	Basel, Switzerland	<a href="#">Blockchain Leadership Summit</a>
<b>January 24-25, 2019</b>	Amsterdam, the Netherlands	<a href="#">Supply Chain Finance Summit</a>
<b>June 3-5, 2019</b>	Amsterdam, the Netherlands	<a href="#">Money 20/20</a>
<b>2019</b>	Zurich, Switzerland	<a href="#">BIOTS 2019</a> (to be announced)
<b>2019</b>	Zug, Switzerland	<a href="#">Crypto Valley Conference on blockchain technology</a>



(to be announced)

\* Holland FinTech organizes a [FinTech trade mission](#) to Zurich to this event. Seven of their members can join to explore the Swiss ecosystem. This event will be attended by delegations from many countries (e.g. Spain, Canada, Israel).

## Appendix B: A special thanks to:

Contact	Organization
Lacangelo Salvatore	Blockchain Taskforce
Marcus Dapp	ETH Zurich, Department of Computational Social Science
Stefan Klauser	ETH Zurich, Department of Computational Social Science
Björn-Gunnar Flückiger	The Swiss Financial Market Supervisory Authority (FINMA)
Matthias Obrecht	The Swiss Financial Market Supervisory Authority (FINMA)
Lars Kramer	Consulate General of the Kingdom of the Netherlands in Munich
Meret Smeitink	Embassy of the Kingdom of the Netherlands in Berlin
Jorn Mieras	Embassy of the Kingdom of the Netherlands in Washington, D.C.
Flurina Kuhn	British Embassy in Berne
Marloes Pomp	Blockchainpilots
Koen Hartog	Blockchainpilots
Aleid de Jong van Coevorden	Consulate General of the Kingdom of the Netherlands in Geneva
Roland Jansen	Consulate of the Kingdom of the Netherlands in Vaduz

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