**✚ SWITZERLAND
GLOBAL
ENTERPRISE**

KEY FIGURES

842
blockchain-related
companies
in Crypto Valley

>4,400
employees

5
unicorns
(Ethereum, Dfinity, Polkadot,
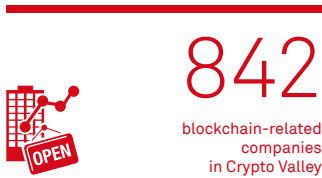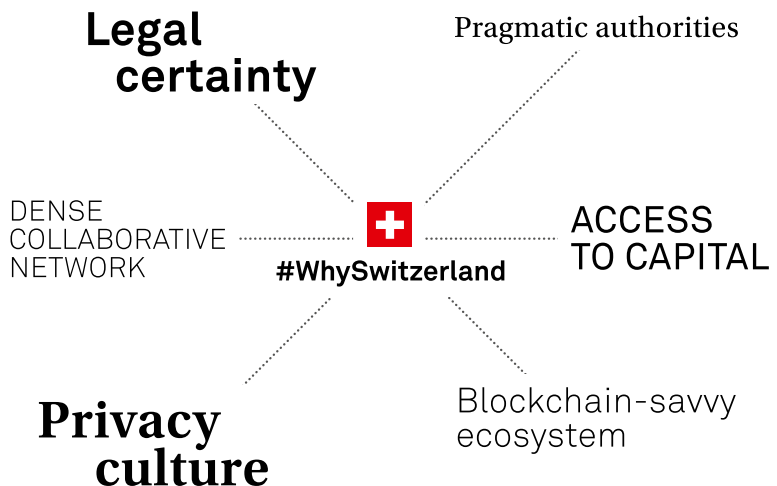Bitmain, Libra)

2
regulated crypto banks
(SEBA, Sygnum)

Source: CV VC Top 50 Report H2/2019

BLOCKCHAIN HUB SWITZERLAND

AT A GLANCE

Its rich heritage of financial security, strong privacy laws and a pragmatic regulatory approach have made Switzerland a vibrant hub for new business ideas in the field of distributed ledger technology (DLT) such as blockchain. The country both fosters innovation and offers a reliable regulatory framework. Initiated in the city of Zug, "Crypto Valley" has established a worldwide reputation as a catalyst for new blockchain business ventures, with early movers such as Ethereum and Bitcoin Suisse paving the way. Meanwhile, Crypto Valley has spread far beyond the borders of Zug, now comprising leading blockchain ecosystems, each with its original approach, in Zurich, Geneva, Neuchâtel, Ticino, Basel, Vaud, Lucerne, and Bern.

Switzerland's decentralized, bottom-up political culture is a natural fit for crypto technologies: In 2018, the Swiss Financial Market Supervisory Authority FINMA became the first regulator in the world to publish clear guidelines on ICOs and classifications for tokens. The Swiss authorities' pragmatic and business-friendly attitude makes Switzerland a natural choice for developing blockchain and distributed ledger technologies for new global applications in a tokenized economy.

**Legal
certainty**

Pragmatic authorities

DENSE
COLLABORATIVE
NETWORK

✚

#WhySwitzerland

**ACCESS
TO CAPITAL**

**Privacy
culture**

Blockchain-savvy
ecosystem

RESEARCH AND DEVELOPMENT (R+D)

Switzerland is renowned for its **highly skilled, international workforce** (no. 1 in INSEAD Global Talent Competitiveness Index, 2020). Companies can draw on a large pool of talent and proximity to **renowned research institutes**:

- The two federal science and technology institutions in Lausanne and Zurich (**EPFL and ETH Zurich**) have been recognized as global leaders in crypto education (Coinbase, 2019).

- The **Center for Digital Trust (C4DT)** in Lausanne combines EPFL's renowned expertise in cybersecurity, sensitive data protection as well as blockchain and smart-contracting technology with the capabilities of 12 institutional and industrial partners.

- The **University of Geneva**, the **CREA School** in Geneva and the **Crypto Valley Academy** in Zug offer continuing education programs in DLT, including blockchain.

- The **Bosch Internet of Things Lab** is a cooperation between the **University of St. Gallen**, **ETH Zurich** and the Bosch Group. Among other focus areas, the Lab is investigating the business potential of blockchain technology and artificial intelligence.

- The **first university blockchain professorship** in the world was created at the University of Basel in 2018.

- The **Blockchain Center at the University of Zurich** is led by 22 professors who work to investigate blockchain topics from a multidisciplinary perspective. It has become the most active academic cluster in Switzerland.

- In 2016, the city of Zug became the **first state authority in the world to accept Bitcoin** as an official means of payment. The world took notice, making Zug a preferred location for new business ventures in the blockchain sector. In the meantime, Zug has also developed a "digital identity" (eID) based on blockchain.

- **Neuchâtel** has developed a stable and comprehensive ecosystem in the field of blockchain, offering **banking on-boarding solutions** for businesses. The area provides a strong network of academic, financial, legal and institutional partners and has produced strong players over the years, such as Bity, DFINITY, NYM Technologies, or Tokenestate.

- The DFINITY blockchain-based computer network in Switzerland was founded in 2016 and has research centers in Zurich, Palo Alto and San Francisco. It is estimated to be worth around 2 billion US dollars.

- In 2018, the Zug-based company 21Shares, formerly known as Amun, launched the **world's first crypto exchange-traded products (ETPs)** on the Swiss Stock Exchange. According to CEO Hany Rashwan, the fintech company chose Switzerland to launch their product after a thorough evaluation of 28 different jurisdictions.

International Rankings for Innovation
Global Innovation Index (GII) 2020

Country	Rank
Switzerland	1
Sweden	2
USA	3
United Kingdom	4
The Netherlands	5
Denmark	6
Finland	7
Singapore	8
Germany	9
South Korea	10

Source: World Intellectual Property Organization WIPO, 2020

- Other regions in Switzerland to launch blockchain pilot projects with university support include the city and canton of Schaffhausen, which offer an eID with a blockchain interface. The cities of Chiasso (canton of Ticino) and Zermatt (canton of Valais) also started accepting tax payments in Bitcoin.

A SAFE PLAYGROUND FOR INDUSTRY APPLICATIONS
With its high **density of corporate headquarters** and an **established blockchain-savvy ecosystem**, Switzerland offers both a **collaborative network** and **legal certainty** for introducing blockchain-based applications across industries, e.g.:

- Basel-based Novartis initiated the EU-backed PharmaLedger project – a 29-member blockchain consortium of 12 global pharma companies with the aim of enabling healthcare innovation for **supply chain**, clinical trials and health data.

- In 2019, Vevey-based Nestlé announced the launch of an open blockchain pilot to allow consumers to **track and trace** their products.

- Geneva-based watch manufacturer Vacheron Constantin uses a certification process supported by blockchain technology to combat **counterfeiting**.

- IBM has been the leader of the enterprise blockchain market and a key player in many global blockchain projects. IBM set up its European R+D laboratory back in 1956 in Zurich where it works to cultivate close relationships with academic and industrial partners.

- Geneva-based MKS, CoinShares and Blockchain are the shareholders behind DGLD, a digital asset (token) representing allocated physical gold stored in a Swiss vault and tokenized with a side-chain built on the Bitcoin network.

- Swiss blockchain events are developing into **key industry meetings** for scientists and practitioners from all over the world:
  - Blockchain Economic Forum, Davos
  - Blockchain Leadership Summit, Basel
  - Crypto Finance Conference, St Moritz
  - CryptoMountain Rocks, Davos
  - CV Summit, Zug
  - Annual Blockchain Congress, Geneva
  - Infrachain, Bern
  - Swiss Blockchain Winter School (jointly organized by EPFL, ETH Zurich and IACR Cryptology School)

- Home to leading international organizations and to the world's most advanced blockchain ecosystem, Switzerland is the **logical choice for global bodies** involved in shaping the future of blockchain technology. These include the Capital Markets and Technology Association (**CMTA**) and the Global Blockchain Business Council (**GBBC**) in Geneva, the Crypto Valley Association (**CVA**) in Zug, as well as the Swiss Association of Crypto Investors (**SACI**) in Lugano.

COSTS AND FINANCING

- Showing growth of more than 80 percent, in 2019 investment in Swiss startups **broke through the 2 billion Swiss franc barrier for the first time**. Startups in ICT, including fintech, attracted a total of 1.2 billion Swiss francs.

- Valuation of the **top 50** companies in the Crypto Valley reached **25.3 billion US dollars** at the end of December 2019. The total funding of the top 50 companies comprised 4 billion US dollars. The total number of firms in Crypto Valley is 842 (2019).

- The Crypto Valley counts **five unicorns** (projects valued at more than 1 billion US dollars): Ethereum (USD 14.4 billion), Dfinity (USD 2 billion), Polkadot (USD 1.2 billion), Bitmain (USD 1 billion), Libra (USD 1 billion).

CONDITIONS AND MARKET ACCESS

- The Swiss authorities take a **technology-agnostic, bottom-up approach.** Instead of introducing a blockchain law, it aims to selectively integrate new technologies into the existing legislation and provide an **innovation-friendly regulatory framework**. A brief history:

- Swiss authorities began to remove barriers to entry for fintech back in 2016, introducing a **sandbox** regime in 2017.

- In 2018, the Swiss Financial Market Supervisory Authority FINMA became the **first regulator in the world to publish clear guidelines** on ICOs and classifications for tokens. Later that year, the Geneva cantonal authorities released the very first guide dedicated to supporting ICO project promoters.

- Since the beginning of 2019, it has been possible to obtain a **fintech license**, allowing public deposits of up to 100 million Swiss francs to be accepted. This simplifies blockchain and crypto companies' access to the Swiss market.

- In 2019, FINMA granted banking licenses to Swiss-based SEBA and Sygnum, making them the **world's first crypto banks**.

- In June 2020, the Swiss authorities passed a legislative package impacting around a dozen financial laws and **bringing favorable changes for the blockchain and DLT sector**. It was also decided to leave untouched the respective tax laws, which are considered to be quite favorable.

- With its international nature and its multicultural tradition, **Geneva** provides a **dynamic and innovative setting for token generation projects**. The Directorate General for Economic Development, Research, and Innovation (DG EDRI) of the State of Geneva offers entrepreneurs the possibility of obtaining an evaluation of their token generation project and facilitates access to the Geneva ecosystem.

The Top 10 Most Blockchain-Friendly Countries in Europe

Country	Ranking
Switzerland	1
Gibraltar	2
Malta	3
United Kingdom	4
Denmark	5
Germany	6
Portugal	7
Netherlands	8
Finland	9
Belarus	10

Source: BlockShow Europe 2018

ETHEREUM: A SUCCESS STORY MADE IN SWITZERLAND
Ethereum Foundation was founded by blockchain gurus Vitalik Buterin and Mihai Alisie in the canton of Zug in 2014. Ethereum is a global, open-source platform for decentralized applications. It has since become the world's second-most significant cryptocurrency after Bitcoin. Its rapid success attracted many more blockchain companies in and around the area of Zug and accelerated the formation of today's Crypto Valley.

TESTIMONIAL

We had a good feeling about Switzerland right from the start. In addition to its long history of national sovereignty, neutrality and professional excellence, it has been a pleasure to work with forward-thinking regulators and other partners who are passionately committed to making the crypto-nation vision a reality.

HANY RASHWAN
CEO 21Shares
21shares.com

CURRENT DEVELOPMENTS

· The Swiss Stock Exchange is building the f**irst market infrastructure in the world** to offer a fully integrated trading, settlement and custody service **for digital assets (Six Digital Exchange SDX)**. A prototype has already been launched, and the full launch is expected by the end of 2020.

· Swiss-based Sygnum, the world's first crypto bank, launched a **digital token pegged to the Swiss franc** in March 2020. The DCHF aims to create a bridge between digital assets and traditional foreign exchange. The token ultimately aims to ensure that transactions are processed with increased efficiency.

· Crypto Valley has been a hot spot for the **tokenization of real estate**. In early 2020, Swiss-based real estate company Brick-Mark purchased a building on Zurich's fashion mile for 130 million Swiss francs. It was the largest transaction ever made on the blockchain.

· In May 2019, **Libra Networks** was established in Geneva with the support of **Facebook**, to develop a new type of digital payment solution based on stablecoins. Following international controversy, the original project has since been modified to meet regulatory concerns. It applied for a Swiss payment system license in spring 2020.

· The Swiss Crypto Valley has been hit hard by COVID-19. However, the crisis has also moved forward blockchain use cases that are mostly financially based, and it highlighted the positive effects of a technology that is based on distributed networks.

CONTACTS AND FURTHER INFORMATION

Authorities and Regulators

State Secretariat for International Finance SIF
www.sif.admin.ch
> Blockchain

Swiss Financial Market Supervisory Authority FINMA
Fintech Desk
www.finma.ch, fintech@finma.ch
Tel: +41 31 327 16 16
> ICO guidelines

Associations and Networks

bitcoinassociation.ch
blockchain.uzh.ch
blockchainfederation.ch
cif.unibas.ch
cmta.ch
coworking-neuchatel.ch
creageneve.com
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cryptovalley-academy.org
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gbbcouncil.org
genevafin.tech
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Innovation and Startup Promotion

bpropulsion.com
bvventures.ch
cvvc.com
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fusionpartners.ch
f10.ch
innovation.thomsonreuters.com

kickstart-innovation.com
masschallenge.org/programs-switzerland
microcity.ch
resilient-studios.com
swissfinancestartups.com
swissparks.ch
swissstartupfactory.com
trustsquare.ch

Publications and Tools

Crypto Valley Map
cryptovalley.directory

Federal Council report: Legal framework for distributed ledger technology and blockchain in Switzerland - An overview with a focus on the financial sector
admin.ch

Digital Token Generations in the Canton of Geneva/DLT: A State-of-the-Art Ecosystem
ge.ch

Swiss Venture Capital Report 2020
startupticker.ch

CV VC Top 50 Report H2/2019
cvvc.com/top50

S-GE Resources

Tech Location Switzerland
s-ge.com/tech

Handbook for Investors
s-ge.com/handbookforinvestors

More fact sheets on Switzerland as a business location
s-ge.com/factsheets