Lewrick/Di Giorgio
Live from Crypto Valley

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by

Michael Lewrick

Christian Di Giorgio

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About the authors

"We look forward to a dialogue on the subject of blockchain, crypto and the design of business ecosystems."

Michael Lewrick
Michael has had various roles in recent years. He served as Chief Innovation Officer and laid the foundation for several growth initiatives in industries undergoing digital transformation. In recent years, he has worked intensively on the design of business ecosystems, especially in connection with blockchain as an enabling technology. He has supported various startups and international companies in the design of new business ecosystems and the implementation of disruptive innovations. He is, among others, the co-author of the international bestseller "The Design Thinking Playbook".

https://ch.linkedin.com/in/michael-lewrick

Christian Di Giorgio
Christian has a particular talent: he purposefully transforms business requirements into digital solutions. As a computer scientist and business engineer, he knows both worlds. Over the last two decades, he has designed ICT architectures for complex IT challenges. After his career with IBM and Swisscom, he is now active as a blockchain consultant for large enterprises and startups in Crypto Valley. Customers value Christian's IT expertise and experience, especially in the challenges of integrating blockchain applications into existing IT environments.

https://www.linkedin.com/in/christiandigiorgio

www.crypto-valley-book.com

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The concept of this book

Short statements and important information

The yellow text highlights important information or expert citations.

Characters

Various characters will accompany us through the book, asking questions in accordance with their objectives.

Focus on specific elements

In each section, we have highlighted the topics that are of particular interest to the individual personas.

Examples, use cases & interviews

In each chapter, you will find examples and use cases of makers, enterprises and startups in Crypto Valley.

In a nutshell

At the end of each chapter, the key elements are summarized briefly.

Glossary

Bitcoin	Bitcoin is the most popular and, by market capitalization, the largest digital cryptocurrency.
Blockchain	Blockchain is a type of decentralized ledger (see also DLT). It is a data structure that guarantees immutability and verifiability by using digital signatures and hash codes.
Business Ecosystem	Consists of various actors who work together to create an aggregate value proposition. The design of business ecosystems is a central aspect of every blockchain project.
Cold Storage – Vault	A cold storage is a secure storage facility for digital assets and cryptocurrencies. A vault is disconnected form the Internet as a further security mechanism.
Consensus – Mining	The consensus mechanism prevents the manipulation of the blockchain. A system of incentives (such as "mining") ensures the integrity and consistency of the system.
Distributed Ledger Technology (DLT)	Distributed ledgers use independent computers (referred to as nodes) to record, share and synchronize transactions in their respective electronic ledgers (instead of keeping data centralized as in a traditional ledger).
Ethereum	Ethereum is the most popular public blockchain to implement Smart Contracts and execute ICOs.
Fork	A fork describes the splitting of a blockchain system.

Soft Fork	A soft fork happens when only the software is split. The underlying data structure and the network remain intact. A soft fork is transparent to users and is similar to a software update.
Hard Fork	After a hard fork, there are two versions of the original blockchain (data and networks). The user must decide which version he wants to continue using.
Hashing	Hashing is a cryptographic method to produce a unique "fingerprint" of a digital dataset.
ICO – Initial Coin Offering	ICOs are used to finance a blockchain project or a business. Organizations can issue tokens with different functionality.
TGE – Token Generating Event	A TGE is not necessarily an "offering" in the sense of an ICO. TGEs do not have any promised service or reward in return.
Intermediary	Intermediaries are companies that liaise between agents (the "middlemen") to provide added value such as security, brokerage, and other functions. These include, for example, banks or insurance brokers.
Cryptography	Cryptography is a science for the development of crypto systems. It is the base of a blockchain.
Cryptocurrency	Cryptocurrencies are a digital means of payment that is transferred using the principles of cryptography in a decentralized architecture (e. g. Bitcoin).
Peer-to-Peer	In a peer-to-peer set-up, participants interact directly with each other. All participants have equal rights.

Proof-of-Work (PoW)	PoW prevents an attack on the network by making it unprofitable to produce counterfeit content.
Proof-of-Stake (PoS)	PoS is a different way to validate transactions. The validating nodes receive a share of the transaction fees.
Smart Contract	Smart Contracts are programs that autonomously execute predefined tasks on a blockchain.
Tangle and Hashgraph	Tangle and hashgraph are newly developed data structures used to implement distributed ledgers (DLT) more efficiently than traditional methods.
Token	In the cryptographic world, a "token" represents a "thing of value" on the blockchain.
Token Economics	Token economics is the discipline that describes the functioning principles and economic properties of a token-based system, such as the issued volume, the rights attached to the token, and so on.
Value Streams	All transactions in which values are transferred are defined as value streams, such as money, goods, digital assets, and the like.
Wallet	A wallet holds the private keys used by a user to access his digital assets, e. g. bitcoins.
Whitepaper	It serves the public relations for an ICO and gives an insight into the business model, token economics, technology and overall IT architecture of the project.

The most important icons


Assessment


Bitcoin (cryptocurrency)


Blockchain


Business Ecosystem (design)


Community


DLT (decentralized system)


Law/Regulation


Internet (centralized system)


Interview


Investment & Value


Concept & Idea


Crypto


Roadmap

Smart Contract

Token

Wallet

Foreword by Ralf Glabischnig

- Co-Founder **Crypto Valley Labs**
- Managing Partner **inacta AG**
- Partner **Lakeside Partners AG**

Since 2013, the corridor between Zurich and Zug has been the home of a highly exciting and dynamic environment, the so-called Crypto Valley. Companies and projects like Monetas, Bitcoin Suisse and ultimately Ethereum provided an initial spark and an amazing momentum. The open attitude of the canton and the city of Zug has also had a positive influence on the whole of Switzerland and Liechtenstein. At the beginning of 2018, almost 500 companies with more than 3,000 employees who are intensively involved in blockchain technology in Crypto Valley were registered (see Crypto Valley Directory on page 159). Currently, I see three primary areas of application of blockchain technology:

- **First: cryptocurrencies**, such as Bitcoin, with the original purpose of serving as a means of payment and/or as a store of value.
- **Second: venture capital** for startup companies or projects – primarily in the blockchain area – which secure their financing by means of so-called ICOs (initial coin offerings).
- **Third: process innovations** in many areas of our daily lives, which are heralded by what we call the "Internet of Values", the next generation of the Internet and new business transactions

CRYPTOVALLEY LABS

To support the various applications in the best possible way, my business partners Marco Bumbacher, Mathias Ruch and I have opened the Crypto Valley Labs, under the slogan "The Worldwide Home for Blockchain". With this initiative, we wanted to lay the foundation for an even better networking of the different players and create room for new collaborations and activities. The lab brings talent, capital and infrastructure together.

That is why I am all the more pleased that there is now a book from Crypto Valley. With "Live from Crypto Valley" Michael Lewrick and Christian Di Giorgio have succeeded in creating an exciting resource for cryptoenthusiasts. The book sets the inspiring context and gives at the same time concrete advice on how to start and execute a blockchain project – enjoy reading!

Ralf

"Live from Crypto Valley" is divided into five chapters. The reader is guided step by step through the topic and will thus acquire a good basic knowledge of blockchain.

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