# PRACTICAL CASES: CRYPTO INVESTMENTS FROM A TAX, AML AND ACCOUNTING PERSPECTIVE
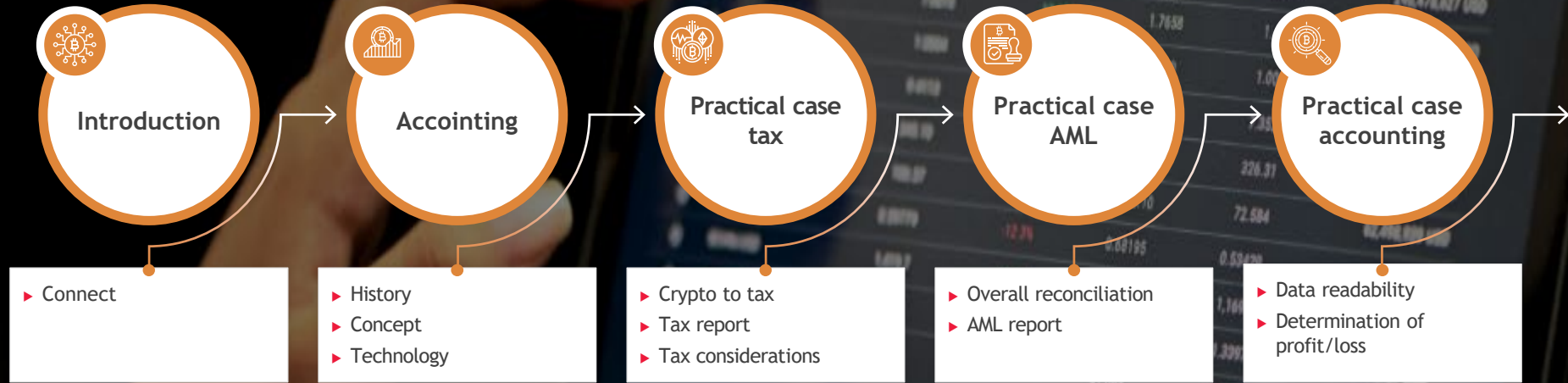
STEP Lucerne/Zug Centre 1st June 2022

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# Content

**Introduction**

**Accointing**

**Practical case tax**

**Practical case AML**

**Practical case accounting**

- ▸ Connect

- ▸ History
- ▸ Concept
- ▸ Technology

- ▸ Crypto to tax
- ▸ Tax report
- ▸ Tax considerations

- ▸ Overall reconciliation
- ▸ AML report

- ▸ Data readability
- ▸ Determination of profit/loss

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# SECTION 1

## INTRODUCTION

Connect

Audience survey

Practical Case

# Connect with us

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SECTION 2
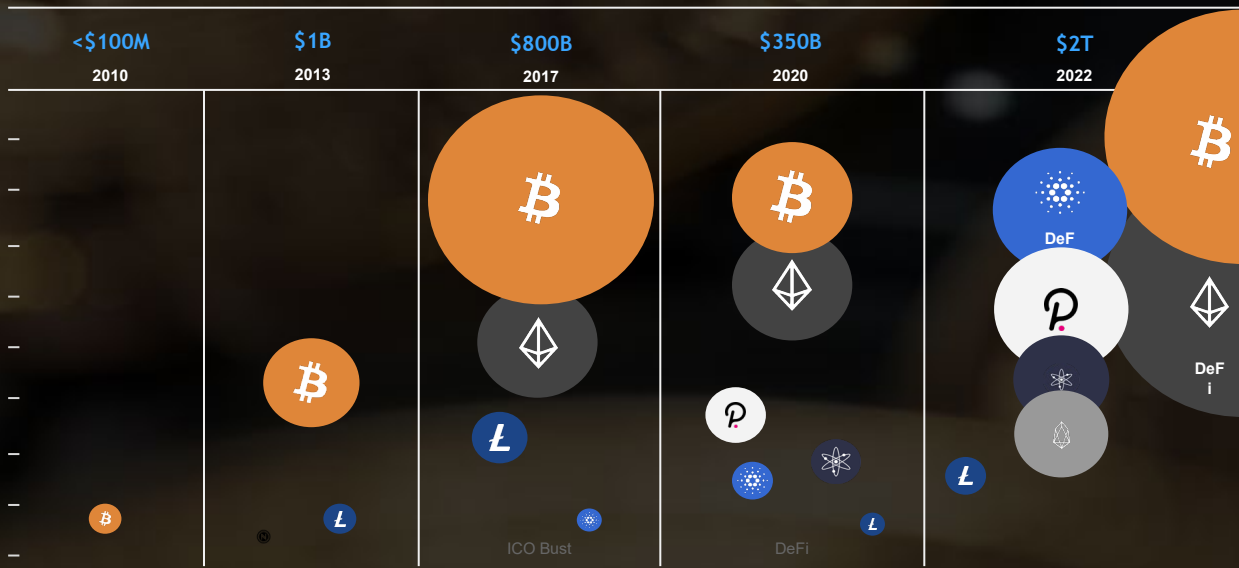
PRESENTATION OF
ACCOINTING AND ITS
SOLUTION

History

Concept

Technology

# The evolution of cryptocurrencies
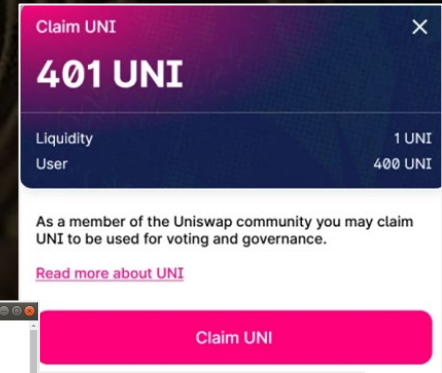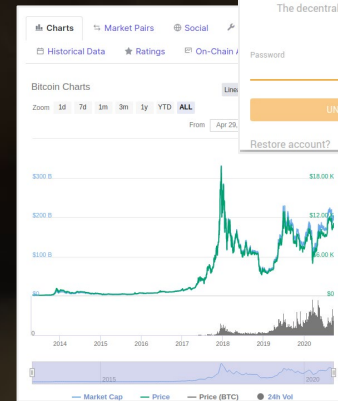## Bitcoin – The leading cryptocurrency

- On October 31st, 2008, Satoshi Nakamoto published the Bitcoin white paper

- The last Bitcoin is going to be mined in 2140

- 0.000000001 BTC is one Satoshi

- What is the pizza day?

- More than 100,000 Bitcoin millionaires

- 20% of Bitcoin is lost forever

**Bitcoin Genesis Block**
Raw Hex Version

# The evolution of cryptocurrencies
More than just Bitcoin
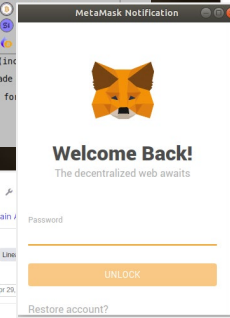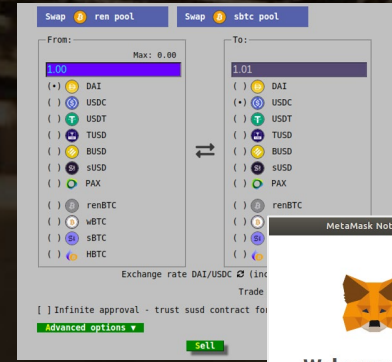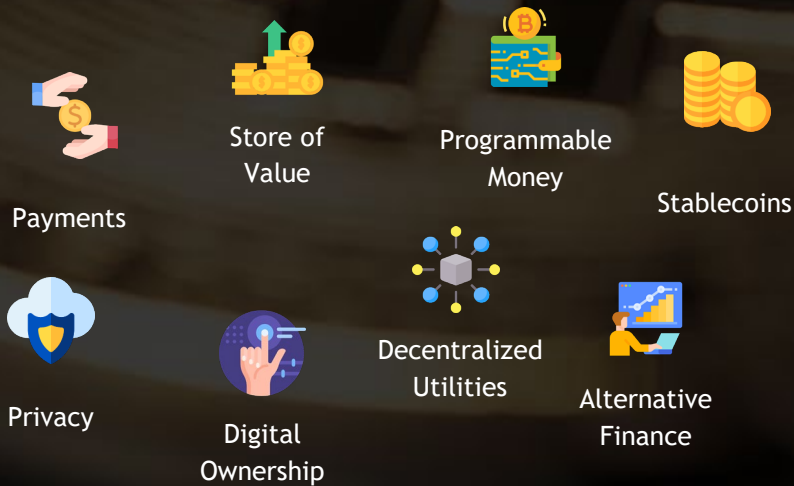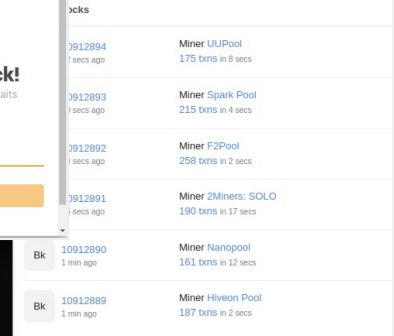
- Different types of tokens

- Highest-selling NFT "The First 5000 Days" was sold for 70 million

- Market capitalization from 100M to 2T

- Almost 20.000 cryptocurrencies

- More than 500 exchanges

- 300 million users own cryptocurrencies

Payment

Security

Utility

Stable-coins

Non-fungible

| <$100M | $1B | $800B | $350B | $2T |
|--------|-----|-------|-------|-----|
| 2010 | 2013 | 2017 | 2020 | 2022 |

ICO Bust

DeFi

DeFi

DeFi

# Use case of cryptocurrencies
## The complexity

Crypto moves at an incredible pace and for a user to sort their data is unbearable. As crypto grows, it will only become more complex.

Payments

Store of Value

Programmable Money

Stablecoins

Privacy

Digital Ownership

Decentralized Utilities

Alternative Finance

# All in One – Portfolio Tracking Solution
## Stay on top of the things

**1** **Sync of all Addresses and Exchanges**

API, Public Address, CSV or Template

It's key to have a direct connection to verify transactions directly from the blockchain

### Direct Connection
(API, Public Wallet Address, OAuth)

| | | | | | |
|---|---|---|---|---|---|
| Abra | Airbitz | ArcBit | Argent | Atomic Wallet | Bibox |
| Binance | Binance Chain | Binance DEX | Binance.je | Binance Smart Chain | Binance.us |
| Bitcoin | Bitcoin Cash | Bitfreezer | BitGo | BitMex | Bitpanda |
| Bitpanda Pro | BitStamp | Bittrex | Blade | Blockchain | Block.io |
| BRD | Cardano | Celsius Network | Choice | Coinbase | Coinbase Pro |
| Coinbase Wallet | CoinPayments | Coins | CoinSpot | Crypterium | Cryptocrit |
| Crypto Finance | Dash | Decred | Deribit | Deversifi | DigiByte |

# All in One – Portfolio Tracking Solution
## Stay on top of the things

**2** **Reconciliation of the data**

Accointing.com detects missing information and automatically connects internal transactions for the user

Remaining transactions with an unknown sender or receiver need to be classified

| | Date | Type | Sold or withdrawn | Wallet | Bought or deposited | Classification | Clear |
|---|---|---|---|---|---|---|---|
| ☐ | 04.03.21 19:11 | Deposit API | | → | 0.19304 (ETH) Ethereum | | ⌄ |
| ☐ | 04.03.21 14:33 | Deposit API | 0x85b931a32a0725be...d69b | → | 0.08890294 (ETH) Ethereum | | ⌄ |
| ☐ | 25.11.20 09:51 | Deposit API | 0x8f22f2063d253846...0c8f | → | 3.14265442 (ETH) Ethereum | | ⌄ |
| ☐ | 25.11.20 08:42 | Withdraw API | 0xbbd5bebac63a25e1...3a5d -3.15309479 (ETH) Ethereum | → | 0xbbd5bebac63a25e11a9...3a5d | | ⌄ |
| ☐ | 01.10.20 19:55 | Withdraw API | -0.00 (ETH) Ethereum | → | 0x3e66b66fd1d0b02fda6...2f21 | | ⌄ |
| ☐ | 17.09.20 15:03 | Withdraw API | -404.17104 (UNI) Ethereum | → | 0xe38a8350eb677e...46b6 | Swap | ⌄ |
| ☐ | 17.09.20 15:03 | Deposit API | 0xe38a8350eb677e...46b6 | → | 2.7775661 (ETH) Ethereum | Swap | ⌄ |
| ☐ | 17.09.20 14:24 | Withdraw API | -0.00 (ETH) Ethereum | → | 0x1f9840a85d5af5bf1d1...f984 | | ⌄ |
| ☐ | 17.09.20 14:18 | Deposit API | 0x090d4613473dee04...256e | → | 404.17104 (UNI) Ethereum | | ⌄ |
| ☐ | 17.09.20 14:08 | Deposit API | 0x340d693ed55d7ba1...5bdc | → | 0.50 (ETH) Ethereum | | ⌄ |

New | Duplicate | Delete | Classify | Show needs review | Export full history | Search: quantity, currency, tx ID, c...
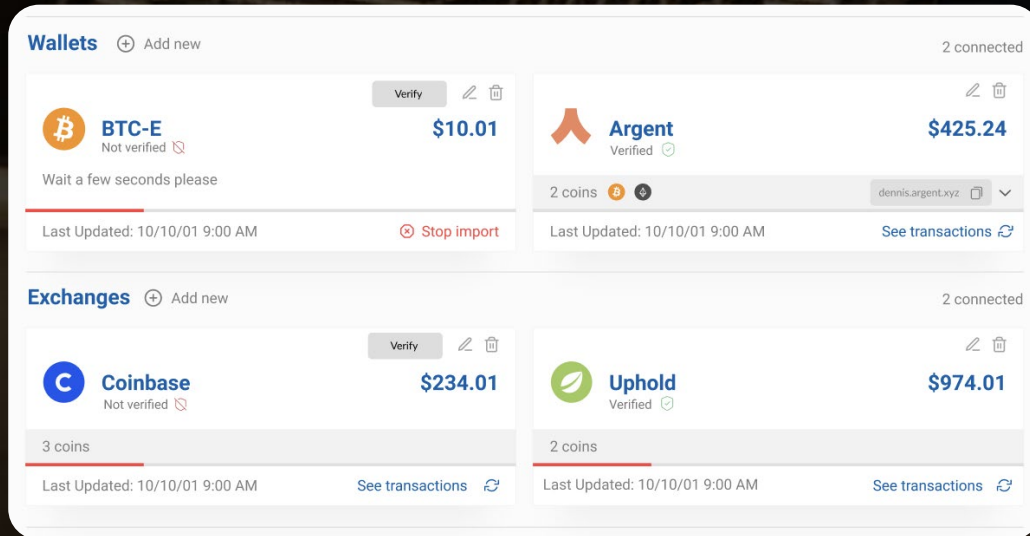
# All in One – Portfolio Tracking Solution

Stay on top of the things

## 3 Tracking solution

Accointing.com records all crypto transactions of the connected addresses and exchanges with an automatic sync on a daily basis

They are up to date with all the new trades and transactions and have a real-time portfolio overview

**Wallets** ⊕ Add new                                          2 connected

| | | |
|---|---|---|
| Verify ✏ 🗑 | | ✏ 🗑 |
| ₿ **BTC-E** Not verified 🚫 | $10.01 | ⚘ **Argent** Verified 🛡 | $425.24 |
| Wait a few seconds please | | 2 coins ₿ ◈ | dennis.argent.xyz 📋 ⌄ |
| Last Updated: 10/10/01 9:00 AM | ⊗ Stop import | Last Updated: 10/10/01 9:00 AM | See transactions ⟳ |

**Exchanges** ⊕ Add new                                        2 connected

| | | |
|---|---|---|
| Verify ✏ 🗑 | | ✏ 🗑 |
| ⓒ **Coinbase** Not verified 🚫 | $234.01 | 🍃 **Uphold** Verified 🛡 | $974.01 |
| 3 coins | | 2 coins | |
| Last Updated: 10/10/01 9:00 AM | See transactions ⟳ | Last Updated: 10/10/01 9:00 AM | See transactions ⟳ |

SECTION 3

PRACTICAL CASE IN THE AREA OF TAX

Crypto to tax

Tax report

Tax consideration

# Practical case – for tax purposes

## Starting point

- Initial investment $ 100k in BTC
- Massive increase over the last years
- Extended his trading activities
- No reporting done so far
- What are the challenges and next recommended steps?

## Details of Person X

- 3 Wallets for DEFI activities
- 1 Centralized exchange account
- Ø 50 trades a day

**Bitcoin to USD Chart**

| Price | Market Cap | TradingView |

1D  7D  1M  3M  1Y  YTD  ALL  LOG

70.0K
60.0K
50.0K
40.0K
30.0K
20.0K
10.0K
145

USD     2014    2015    2016    2017    2018    2019    2020    2021    2022

CoinMarketCap

**1** Initial investment 1 BTC ≈ 100 $

**2** Investment now 1 BTC ≈ $ 30k

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# Recommended steps for the transfer from crypto to tax

Steps to be performed within the client user account in Accointing for Person X

| Step | | Description |
|---|---|---|
| 1 | **Data request and processing** | • Pulling all the information available for the public addresses from the blockchains<br>• Pulling or requesting the data from the exchanges |
| 2 | **Analysis and adjust data if necessary** | • Bring the collected data in a readable form and upload them on Accointing (interface between the exchange/wallet and the tax environment) |
| 3 | **Classification of income/ review steps** | • Classification of income streams (mining, airdrops, bounty, staking, etc.)<br>• Performance of the review steps<br>• Overall reconciliation / report of unclassified or reconciled transactions |
| 4 | **Tax consideration** | • Tax consideration on a case-by-case basis with regard to the existent tax regulations<br>– Switzerland: declaration of the annual tax return |

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# Overview of the tax report

Elements of the tax report of Person X
– Overview (1/2)



| | | |
|---|---|---|
| 112.062,44 CHF * | 488.273,94 CHF * | 376.211,49 CHF |
| Bestand 01.01.21 | Bestand 31.12.21 | Gesamte Wertentwicklung |

* basiert auf den CoinMarketCap.com Preisdaten / Portfoliowert (ESTV Preisquelle) zum 31.12. folgt auf Seite 3

| | | |
|---|---|---|
| 17.201,42 CHF | 236.256,52 CHF | 122.753,56 CHF |
| Steuerbare Vermögenserträge | Realisierte steuerfreie Kapitalgewinne | Übrige Wertveränderungen |

## Steuerbare Vermögenserträge aus Kryptowährungen

| Klassifikationen Einzahlungen | Summe in CHF |
|---|---|
| Einkommen aus Staking | 4.608,02 |
| Einkommen | 5.236,87 |
| Mining | 179,91 |
| Airdrop | 7.162,44 |
| Margin Gewinn | 14,17 |
| Summe | 17.201,42 |

## Realisierte steuerfreie Kapitalgewinne / -verluste aus dem Handel mit Kryptowährungen

| Kategorie | Gewinn | Verluste | Gebühren | Summe in CHF |
|---|---|---|---|---|
| Swap | 25.426,92 | 1.079,15 | 682,05 | 23.665,72 |
| Verkauf | 224.815,85 | 11.427,30 | 797,75 | 212.590,80 |
| Gesamtsumme | | | | 236.256,52 |

15

# Overview of the tax report

Elements of the tax report of Person X
– Overview (2/2)

| Kategorie Einzahlungen | Summe in CHF |
|---|---|
| Ausgleichen | 23.313,04 |
| ICO | 525,53 |
| Keine Klassifizierung | 3.961,09 |
| Mittel einzahlen | 73.078,21 |
| Schenkung | 34,08 |
| Swap | 48.081,61 |
| **Gesamtsumme** | **148.993,56** |

| Kategorie Auszahlungen | Summe in CHF |
|---|---|
| Bezahlung | -895,03 |
| Gebühr | -43,41 |
| ICO | -1.518,44 |
| Keine Klassifizierung | -6.499,65 |
| Marginverlust | -30,54 |
| Mittel auszahlen | -101.696,73 |
| Swap | -52.071,34 |
| **Gesamtsumme** | **-162.755,14** |

| Weitere Wertveränderungen | Summe in CHF |
|---|---|
| Interne Transaktionsgebühren | 817,35 |
| Unrealisierte Gewinne und Verluste | 135.697,79 |
| **Summe** | **136.515,14** |

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# Tax consideration
Interpretation of the tax report - for private investors (1) vs. crypto traders (2)

**1**

- Income tax: taxable income from investment vs. tax free capital gains (Art. 20 DFT vs. Art. 16 al. 3 DFT)
- Wealth tax: The taxable assets are valued at the end of the tax period (basically at the FMV)
  – 30% reduction based on circular letter 28 published by the Swiss Tax Conference possible?
  - What about tokens which are not in the disposal of an individual at year end?
- Not tax relevant for private investors: unrealized capital gains / expenses / fees with regard to the executed transactions

**2**

- The conditions of a professional securities trader in circular letter #36, are applied to professional crypto traders.
- Assessment is made on a case-by-case basis and in specific cases it is recommended that a ruling be submitted in advance to the competent tax authorities.
- The main Conditions of circular letter #36:
  - The incomes from crypto investments (incl. realized capital gains) are less than 50% of the taxable net income
  - Transaction volume: The crypto assets are only in your possession for a short time (less 6 months) before disposal and a high trade frequency is visible (I.e., the crypto assets at the end of the year is not five times the amount held at the beginning of the year)
  - Borrowed capital: In order to realize the transaction volume, the investment is financed with borrowed capital (e.g., bank loans).

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# Tax consideration

## Person X – Tax consideration

**2021**

- Assessment for private investor vs. crypto trader
- Basically, if full-time employed the chances are high to qualify as private investor
- Income tax: taxable income from investment (crypto investment), such as staking, mining, nodes income and others
- Wealth tax: The taxable assets are valued at the end of the tax period (basically at the FMV)
- Not tax relevant for private investors: unrealized capital gains / expenses / fees with regard to the executed transactions

**Prior year**

- Non-compliance with the wealth and potential income tax declaration in prior years
- Basically, a non-punishable voluntary disclosure procedure could be initiated (10 years backwards period)
- Conditions:
  - the evasion is not known to any tax authority
  - Person X unconditionally supports the administration in the assessment of the subsequent tax; and
  - Person X makes serious efforts to pay the additional tax owed.

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SECTION 4

PRACTICAL CASE IN THE AREA
OF ANTI-MONEY-LAUNDERING

Overall
reconciliation

AML Report

# Practical case – for AML purposes

## Starting point

- Initial investment $ 100k in BTC
- Massive increase over the last years
- Tax reporting done
- Intends to cash out
- What are the challenges and next recommended steps?

## Details of Person X

- 3 Wallets for DEFI activities
- 1 Centralized exchange account
- Ø 50 trades a day

**Bitcoin to USD Chart**

Price   Market Cap   TradingView

1D  7D  1M  3M  1Y  YTD  ALL  LOG

1  Initial investment 1 BTC ≈ 100 $

2  Investment now 1 BTC ≈ $ 30k

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# Proof of transactions / Anti money laundering
## It is key to know about the full cashflow

Initial investment of $ 100k

Cash out $ 2 Mio

Receiving / sending from and to Banks

**Receiving crypto rewards such as airdrops, staking, etc. from a third party**

$

$

**On top of the tax requirements person X must additionally fulfil the bank requirements – what are the challenges**

- Centralized exchanges and unhosted wallets do not recommend per default know your customer (KYC) tasks – everyone can open an account and use any email address (i.e., mickey.mouse@disney.com)
- Bank compliance required evidence for the source of funds (initial investment -> inflow from external)

**How can we solve these challenges and report accordingly?**

**Internal transactions**

**Bitcoin Wallet**

**Wallet B**

**CEX A**

**Wallet C**

$

?

**Sending crypto for payments, fees, etc.**

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# Proof of transaction report I
## It is key to know about the full cashflow

**1** Portfolio overview
Numbers of accounts

The portfolio overview presents the fair value at reporting date and the status of the ownership verification of the accounts

**2** Portfolio information

A brief overview about the portfolio allocation and the major investments plus a bar chart with the information how the transaction has been imported

**3** Wallets and exchanges

This section shows all wallets and exchanges together with the status of the ownership verification

**4** Report information

This section includes additional information such as:
• Transaction volume
• What is a verified wallet
• The difference between an API and a manual import
• etc.



Proof of Transactions Report
Multiple-Depot Version, FIFO, GMT+1
Report Date: 01.03.2022    Currency: CHF    First Transaction: 12.03.19    Total Transactions: 36,472

| Portfolio Value as of Report Date * | Verified Accounts * | Unverified Accounts |
|---|---|---|
| 4,500,984 | 7 | 1 |

Transaction Volume *

| 89.53% | API Connected * | 6,01% | Verified & Manual * | 4,46% | Unverified & Manual * |
|---|---|---|---|---|---|
| | 8,632,196 | | 578,900 | | 378,655 |

Portfolio Information
Portfolio Allocation

41.25% BTC
35.51% ETH
11.76% AVAX
11.48% Other

Wallet connection based on Portfolio value *
84,77% API    15,23% Manual

Wallets

| Trezor | Verified 1,435,678 | Metamask ETH | Verified 1,109,283 | Metamask BSC | Verified 342,666 |
|---|---|---|---|---|---|

Exchanges

| Kraken | Verified 904,567 | Mercatox | Verified 267,868 | Bitfinex | Verified 38,800 |
|---|---|---|---|---|---|
| Binance | Verified 23,467 | Bitmart | Unverified 378,655 | | |

★ All amounts in CHF unless otherwise noted. The value is rounded to the nearest integer.
Transaction Volume represents gross volume based on fmv in CHF at time of activity, including transfers between wallets.
A verified wallet represents that the user has verified ownership and we can attest to his ownership of the wallet.
API vs Manual represents the manner in which data was obtained from exchanges & blockchains.
Wallet balances and allocations are based on fair market value at the time of the report.

ACCOINTING    March 1, 2022    Page 1 - Summary

22

# Proof of transaction report II
## It is key to know about the full cashflow

**1 Summary of all assets**

Overview of all tokens and currencies the clients hold at reporting date including type, price source, amount in tokens and value converted in FIAT

**2 Verified and transaction are API imported**

-> highest level of security
A verified wallet, means that the user has proven his ownership. API imported means, the data has been directly imported automatically via an Application Programming Interface (API), this ensures that the client had no chance to manipulate the data.

**3 Verified and transaction are manually imported**

-> medium level of security
Still a verified wallet, but the data has been imported via a csv file (excel). We requested the data directly from the exchange and upload them into Accointing. This process still ensures that the client had no chance to manipulate the data.

**4 Unverified transactions and manually imported**

-> lowest level of security
An unverified wallet, means that the user has not or was not able to prove his ownership. Manually imported means the transaction has been added completely manual and the client had the chance to manipulate the data.



Proof of Transactions Report — Multiple-Depot version, FIFO, GMT+1. Report Date: 01.03.2022, Currency: CHF

### Summary of all assets

| Name | Asset | Type of asset | Price source | Amount | Value * |
|---|---|---|---|---|---|
| Bitcoin | BTC | Cryptocurrency | Coinmarketcap | 15.464895 | 1,856,468 |
| Ethereum | ETH | Cryptocurrency | Coinmarketcap | 584.847390 | 1,598,147 |
| Avalanche | AVAX | Cryptocurrency | Coinmarketcap | 6,830.027633 | 529,308 |
| Tether | USDT | Cryptocurrency | Coinmarketcap | 234,943.683638 | 216,903 |
| TRON | TRX | Cryptocurrency | Coinmarketcap | 2,445,634.643577 | 139,212 |
| Euro | EUR | Fiat | Coinmarketcap | 123,454.345653 | 126,132 |
| USD | USD | Fiat | Coinmarketcap | 34,468.356796 | 31,827 |
| Helium | HNT | Cryptocurrency | Coinmarketcap | 134,34567 | 2,987 |
| **Total** | | | | | **4,500,984** |

### Verified Transaction Volume - API Imported

| Verified Wallets | Transaction Volume | Holdings | Inflow from external | Outflow to external |
|---|---|---|---|---|
| Trezor | 2,055,709 | 1,435,678 | 53,944 | 87,300 |
| Metamask ETH | 638,430 | 1,109,283 | 433,665 | 43,978 |
| Metamask BSC | 3,355,786 | 342,666 | 5,612 | 1,080,269 |
| Kraken | 2,085,726 | 904,567 | 53,245 | 0 |
| Binance | 496,545 | 23,467 | 85,876 | 67,474 |
| **Total** | **8,632,196** | **3,815,661** | **632,342** | **1,279,021** |

### Verified Transaction Volume - Manually imported

| Verified Wallets | Transaction Volume | Holdings | Inflow from external | Outflow to external |
|---|---|---|---|---|
| Mercatox | 524,545 | 267,868 | 4,568 | 124 |
| Bitfinex | 54,355 | 38,800 | 25,432 | 23,423 |
| **Total** | **578,900** | **306,668** | **30,000** | **23,547** |

### Unverified Transaction Volume - Manually imported

| Not verified Wallets | Transaction Volume | Holdings | Inflow from external | Outflow to external |
|---|---|---|---|---|
| Bitmart | 430,423 | 378,655 | 32,423 | 14,334 |
| **Total** | **430,423** | **378,655** | **32,423** | **14,334** |

| **Gran Total** | **9,641,519** | **4,500,984** | **694,765** | **1,316,902** |

* All amounts in CHF unless otherwise noted. The value is rounded to the nearest integer.

March 1, 2022 — Page 2

23

# Proof of transaction report III
## It is key to know about the full cashflow

**1** → **Inflow from external**

For AML purposes the source of funds is essential, hence in the report are all inflow transactions from external disclosed separately and depending on the internal compliance additional evidences are needed.

**2** ← **Outflow to external**

For AML purposes all outflow to external are not crucial but relevant for the entire analysis.

**3** > **Transaction Volume and Holding**

The transaction volume shows the overall volume traded on this account / wallet.
And holdings is the breakdown to the account / wallet of the summary of all assets.

### Verified Transaction Volume - API Imported

| Verified Wallets | Transaction Volume | Holdings | Inflow from external | Outflow to external |
|---|---|---|---|---|
| Trezor | 2,055,709 | 1,435,678 | 53,944 | 87,300 |
| Metamask ETH | 638,430 | 1,109,283 | 433,665 | 43,978 |
| Metamask BSC | 3,355,786 | 342,666 | 5,612 | 1,080,269 |
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### Verified Transaction Volume - Manually imported

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### Unverified Transaction Volume - Manually imported

| Not verified Wallets | Transaction Volume | Holdings | Inflow from external | Outflow to external |
|---|---|---|---|---|
| Bitmart | 430,423 | 378,655 | 32,423 | 14,334 |
| **Total** | **430,423** | **378,655** | **32,423** | **14,334** |

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# Proof of transaction report IV
## It is key to know about the full cashflow
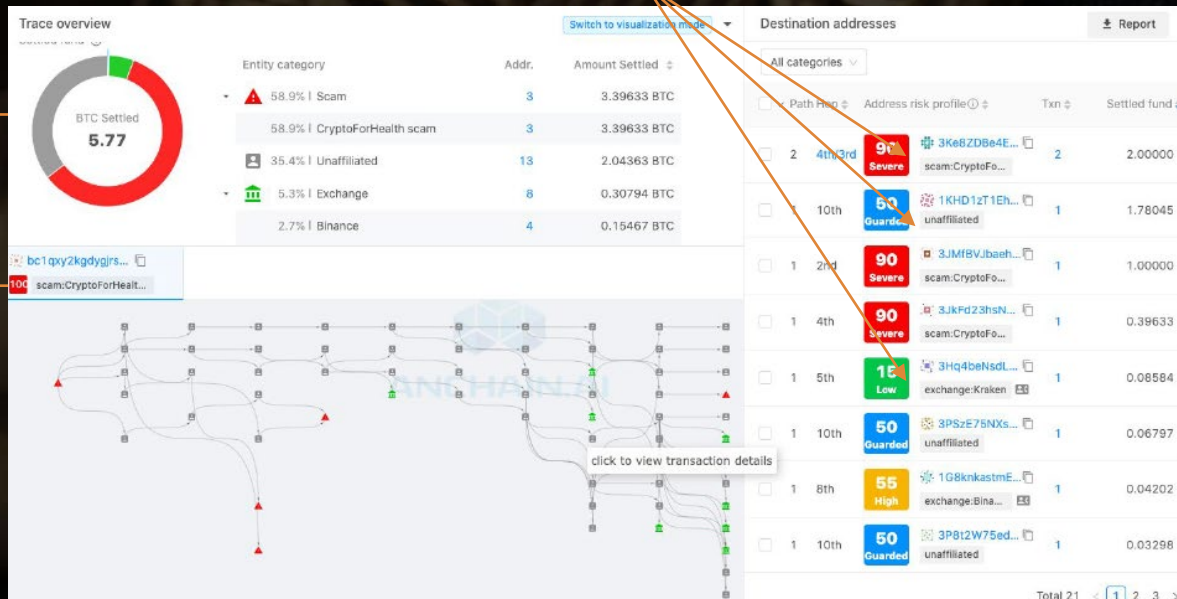
**Labels: scam, unclassified, exchange, unaffiliated, etc.**

**Inflow from external**

**Outflow to external**

All in- and outflows from and to external which can not be verified via the API or other third-party evidence will then run through a third-party service. With the this additional service the unknown transaction will be labelled and reported as such.



25

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# Practical case – for accounting purposes

## Starting point

- Initial investment $ 100k in BTC
- Tax reporting done
- Source of funds confirmed
- Intends to establish a corporate entity to run the trading activities
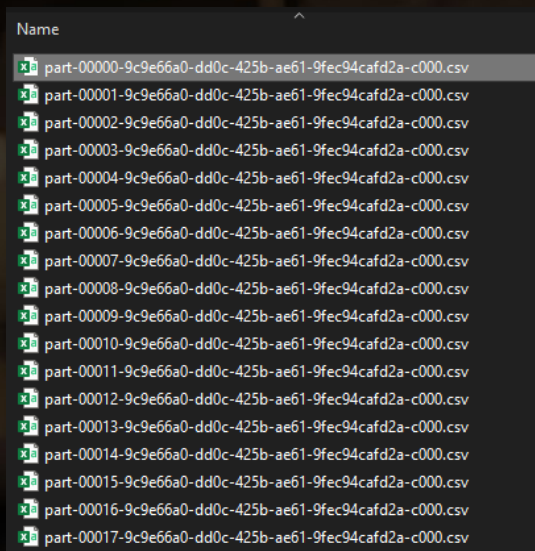- What are the challenges and next recommended steps?

## Details of Person X

3 Wallets for decentralized trading

1 Centralized exchange account

Ø 1 000 trades a day

**Name**

part-00000-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00001-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00002-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00003-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00004-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00005-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00006-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00007-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00008-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00009-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00010-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00011-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00012-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00013-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00014-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00015-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00016-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv
part-00017-9c9e66a0-dd0c-425b-ae61-9fec94cafd2a-c000.csv

Several excel spreadsheets

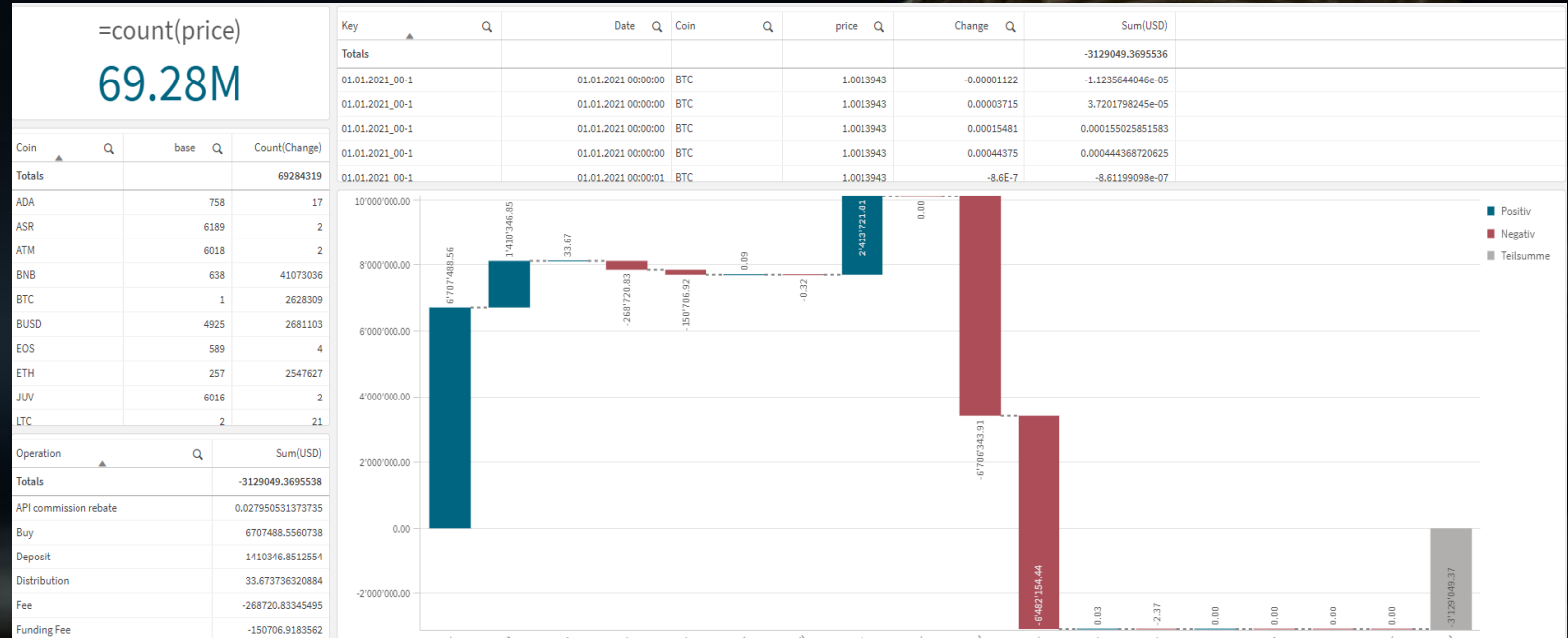| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1 | User_ID,UTC_Time,Account,Operation,Coin,Change,Remark | | | | | |
| 2 | 48843698,2020-09-17 22:45:46,Spot,Deposit,USDT,996.00000000,"" | | | | | |
| 3 | 48843698,2020-09-17 22:51:09,Spot,Deposit,USDT,382934.80473800,"" | | | | | |
| 4 | 48843698,2020-09-17 22:56:33,Spot,Deposit,BTC,0.48817612,"" | | | | | |
| 5 | 48843698,2020-09-17 22:59:13,Spot,Transaction Related,BTC,-0.00390320,"" | | | | | |
| 6 | 48843698,2020-09-17 22:59:13,Spot,Fee,BNB,-0.04234500,"" | | | | | |
| 7 | 48843698,2020-09-17 22:59:13,Spot,Transaction Related,BTC,-0.00019512,"" | | | | | |
| 8 | 48843698,2020-09-17 22:59:13,Spot,Fee,BNB,-0.00173250,"" | | | | | |
| 9 | 48843698,2020-09-17 22:59:13,Spot,Buy,BNB,0.08000000,"" | | | | | |
| 10 | 48843698,2020-09-17 22:59:13,Spot,Buy,BNB,120.00000000,"" | | | | | |
| 11 | 48843698,2020-09-17 22:59:13,Spot,Fee,BNB,-0.09000000,"" | | | | | |
| 12 | 48843698,2020-09-17 22:59:13,Spot,Buy,BNB,0.50000000,"" | | | | | |
| 13 | 48843698,2020-09-17 22:59:13,Spot,Buy,BNB,0.65000000,"" | | | | | |
| 14 | 48843698,2020-09-17 22:59:13,Spot,Fee,BNB,-0.00037500,"" | | | | | |
| 15 | 48843698,2020-09-17 22:59:13,Spot,Fee,BNB,-0.00006000,"" | | | | | |
| 16 | 48843698,2020-09-17 22:59:13,Spot,Fee,BNB,-0.00004500,"" | | | | | |
| 17 | 48843698,2020-09-17 22:59:13,Spot,Transaction Related,BTC,-0.00158548,"" | | | | | |
| 18 | 48843698,2020-09-17 22:59:13,Spot,Buy,BNB,2.31000000,"" | | | | | |
| 19 | 48843698,2020-09-17 22:59:13,Spot,Fee,BNB,-0.00048750,"" | | | | | |
| 20 | 48843698,2020-09-17 22:59:13,Spot,Transaction Related,BTC,-0.13772287,"" | | | | | |
| 21 | 48843698,2020-09-17 22:59:13,Spot,Buy,BNB,0.93000000,"" | | | | | |
| 22 | 48843698,2020-09-17 22:59:13,Spot,Fee,BNB,-0.00120000,"" | | | | | |
| 23 | 48843698,2020-09-17 22:59:13,Spot,Buy,BNB,0.11000000,"" | | | | | |

Excel content

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# Practical case in the area of accounting

## Result from data structure

Outcome from our data analytical tool:

# Practical case in the area of accounting

## Data structure

If an automatic record is not feasible, manual work is needed
- for sake of illustration, here an example:

| | timeExecuted | type | boughtQuantity | boughtCurrency | boughtCurrencyId | soldQuantity | soldCurrency | soldCurrencyId | feeQuantity | feeCurrency | classification | txId |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | timeExecuted | type | boughtQuantity | boughtCurrency | boughtCurrencyId | soldQuantity | soldCurrency | soldCurrencyId | feeQuantity | feeCurrency | classification | txId |
| 2 | 23.11.2017 | deposit | 100 | EUR | 2089 | | | | 0 | EUR | add_funds | e17546e6-ca8d-5ffb-b4c5-6adc02733833 |
| 3 | 23.11.2017 | order | 0.01358865 | BTC | 1 | 96.16 | EUR | 2089 | 3.84 | EUR | | e17546e6-ca8d-5ffb-b4c5-6adc02733833 |
| 4 | 23.11.2017 | withdraw | | | | 0.00698 | BTC | 1 | 0.00035435 | BTC | payment | 3b4b6efe4637428f19b8daca7d119e943797bcacbc34efbf005d6571389be95b |
| 5 | 12.01.2018 | deposit | 200 | EUR | 2089 | | | | 0 | EUR | add_funds | 39d4f6e8-2235-5d85-b101-31160db3b728 |
| 6 | 12.01.2018 | order | 0.01673133 | BTC | 1 | 192.33 | EUR | 2089 | 7.67 | EUR | | 39d4f6e8-2235-5d85-b101-31160db3b728 |
| 7 | 12.01.2018 | withdraw | | | | 0.008646 | BTC | 1 | 0.00115057 | BTC | payment | 37cfcb9a70cfebe5f20fca8d15126d20a06e9cad984c7257cbdd563c25032479 |
| 8 | 08.12.2020 | deposit | 100 | EUR | 2089 | | | | 0 | EUR | add_funds | eb3fc8eb-da42-57bc-a3d5-380c55134232 |
| 9 | 08.12.2020 | order | 0.00616152 | BTC | 1 | 96.16 | EUR | 2089 | 3.84 | EUR | | eb3fc8eb-da42-57bc-a3d5-380c55134232 |
| 10 | 13.12.2020 | deposit | 20 | EUR | 2089 | | | | 0 | EUR | add_funds | a96c21fb-3a26-5ffa-ae35-f38b2b38fced |
| 11 | 13.12.2020 | order | 0.03818766 | ETH | 257 | 18.51 | EUR | 2089 | 1.49 | EUR | | a96c21fb-3a26-5ffa-ae35-f38b2b38fced |

Time consuming exercise – we highly recommend
to seek for an automated process

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# Practical case in the area of accounting I

Profit/Loss determination via the balance sheet opening and closing balances

Starting point: initial transfer in January of 40 Bitcoins @ USD 30'000 totalling to USD 1'200'000

| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | USD | | | | | | | | | |
| 2 | | Transaction | Month | Quantity Bitcoins | moving average price | Selling price | Cogs | Total selling value | realised profit /loss (-) | Open balance @ cost |
| 4 | | Sell | Januray | -20 | 30'000 | 45'000 | 600'000 | 900'000 | 300'000 | 600'000 |
| 5 | | Sell | February | -15 | 30'000 | 48'000 | 450'000 | 720'000 | 270'000 | 150'000 |
| 6 | | Sell | May | -3 | 30'000 | 52'000 | 90'000 | 156'000 | 66'000 | 60'000 |
| 7 | | Sell | June | -2 | 30'000 | 55'000 | 60'000 | 110'000 | 50'000 | 0 |
| 8 | | Endbalance | 30 June | 0 | | | 1'200'000 | 1'886'000 | 686'000 | |

Ending balance as of 30 June: 0 Bitcoins and a total realized profit of USD 686'000

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# Practical case in the area of accounting II

Profit/Loss determination via the balance sheet opening and closing balances

| | A | B | C | G | H | I |
|---|---|---|---|---|---|---|
| 1 | USD | | | | | |
| 2 | Transaction | Month | | Cogs | Total selling value | realised profit /loss (-) |
| 8 | Endbalance | 30 June | | 1'200'000 | 1'886'000 | 686'000 |

### Second half of the year, rebuying of 40 BTC @ total cost price USD 1'639'000

| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 10 | | Transaction | Month | Quantity Bitcoins | moving average price | buying price | | Total market value | unrealised profit /loss (-) | Open balance @ cost |
| 11 | | Buy | July | 10 | 53'000 | 53'000 | 0 | 530'000 | | 530'000 |
| 12 | | Buy | August | 15 | 48'200 | 45'000 | 0 | 675'000 | | 1'205'000 |
| 13 | | Buy | September | 7 | 44'219 | 30'000 | 0 | 210'000 | | 1'415'000 |
| 14 | | Buy | Oktober | 8 | 40'975 | 28'000 | 0 | 224'000 | | 1'639'000 |
| 15 | | Endbalance | 31 December | 40 | | | @ historical cost price | 1'639'000 | 761'000 | 1'639'000 |

| | A | B | C | D | E | F | J |
|---|---|---|---|---|---|---|---|
| 10 | | Transaction | Month | Quantity Bitcoins | moving average price | buying price | Open balance @ cost |
| 17 | | Endbalance | 31 December | 40 | @ Market value/ fair value | 60'000 | 2'400'000 |

### Market value as of 31 December USD 60'000 / BTC = 2.4 Mio. USD

# Practical case in the area of accounting III

Profit/Loss determination via the balance sheet opening and closing balances

| | A | B | D | F | J |
|---|---|---|---|---|---|
| 10 | | Transaction | Quantity Bitcoins | buying price | Open balance @ cost |
| 26 | | | | | |
| 27 | | Open balance | 40 | 30'000 | 1'200'000 |
| 28 | | Ending balance | 40 | 60'000 | 2'400'000 |
| 29 | | | | | |
| 30 | | Delta | | | 1'200'000 |

| realised profit /loss (-) | unrealised profit /loss (-) |
|---|---|
| 300'000 | |
| 270'000 | |
| 66'000 | |
| 50'000 | |
| 686'000 | 761'000 |

Potential hide effect

| | | |
|---|---|---|
| Profit & loss impact | 1'447'000 | 1'200'000 |
| Delta value / % | 247'000 | 21 |

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# Summary and key take aways

▶ Have a (automated) solution in place to link the crypto activities to the FIAT environment (BDO & Accointing)

▶ Be aware of the market challenges and understand your customers business activities (AML and tax report)

▶ Establish a consistent accounting approach - i.e., accounting manual (Accounting)

▶ Conduct an overall reconciliation process to secure the completeness of the transactions and balances

‼ For these reasons and to develop new solutions, BDO and Accointing have entered into a strong partnership ‼

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# Question and Apèro