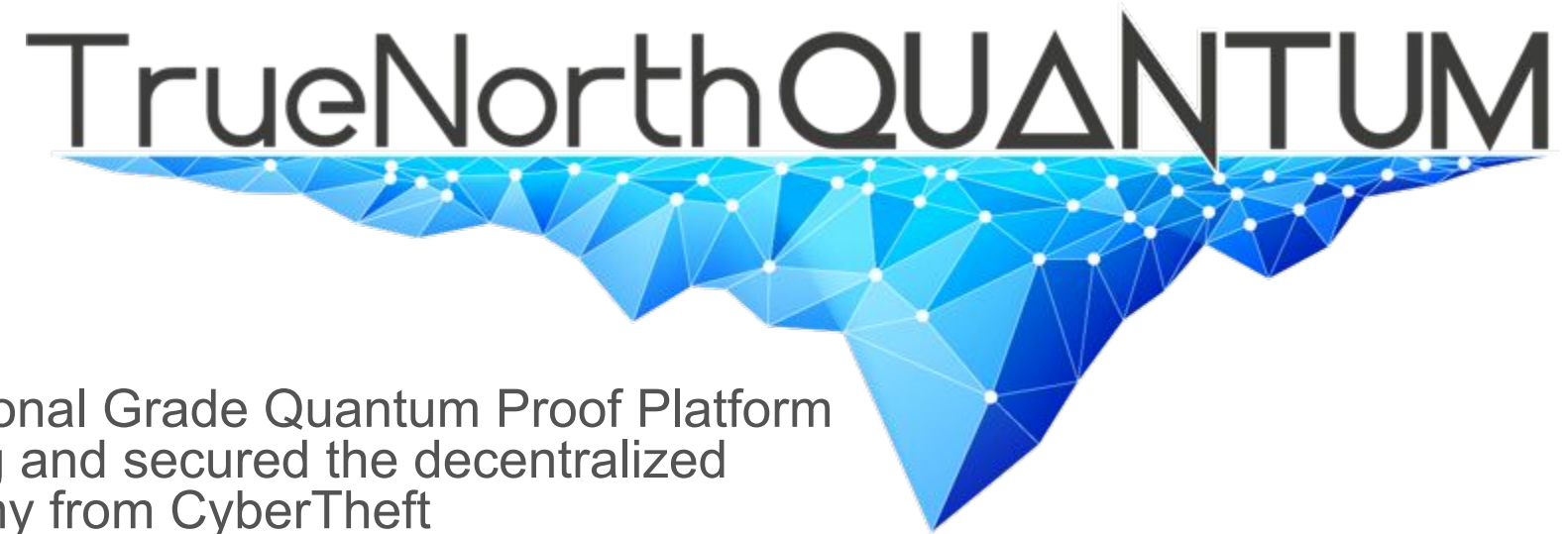




Institutional Grade Quantum Proof Platform
insuring and secured the decentralized
economy from CyberTheft

Investor Presentation

October 2021

Confidential Information – DO NOT COPY



Disclaimer

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Certain statements included in this Presentation constitute forward-looking statements or forward looking information under applicable securities legislation. Such forward-looking statements or information are provided for the purpose of providing information about management's current expectations and plans relating to the future. Readers are cautioned that reliance on such information may not be appropriate for other purposes, such as making investment decisions. Forward-looking statements or information typically contain statements with words such as "anticipate", "believe", "expect", "plan", "intend", "estimate", "propose", "project" or similar words suggesting future outcomes or statements regarding an outlook. Forward-looking statements or information concerning the Company in this Presentation may include, but are not limited to, statements or information with respect to: guidance, forecasts and related assumptions; capital spending and availability of cash; expected potential of the Company's projects and the economics thereof; business strategy and objectives and plans and the timing, associated costs and results thereof. Forward-looking statements or information are based on a number of factors and assumptions which have been used to develop such statements and information but which may prove to be incorrect. The Company believes that the expectations reflected in such forward-looking statements or information are reasonable; however, undue reliance should not be placed on forward-looking statements because the Company can give no assurance that such expectations will prove to be correct. In addition to other factors and assumptions which may be identified in this Presentation, assumptions have been made regarding, among other things: the impact of increasing competition; the timely receipt of any required regulatory approvals; the ability of the Company to retain and obtain qualified staff, equipment and services in a timely and cost efficient manner; the ability of the Company to operate in a safe, efficient and effective manner; the ability of the Company to obtain financing on acceptable terms; the timing and costs of operating the Company's business; the regulatory framework regarding the Company's projects. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which have been used.

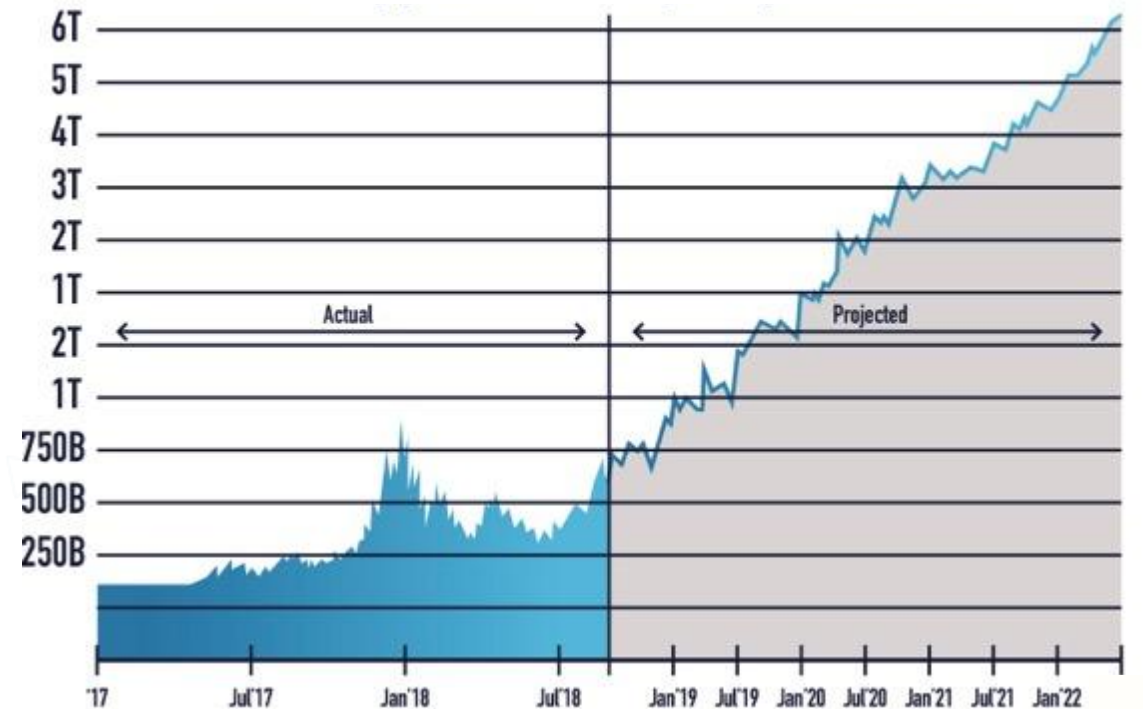
Forward-looking statements or information are based on current expectations, estimates and projections that involve a number of risks and uncertainties which could cause actual results to differ materially from those anticipated by the Company and described in the forward-looking statements or information. These risks and uncertainties may cause actual results to differ materially from the forward-looking statements or information. The forward-looking statements or information contained in this Presentation are made as of the date hereof and the Company undertakes no obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise unless required by applicable securities laws. The forward-looking statements or information contained in this Presentation are expressly qualified in their entirety by this cautionary statement.



Projected Growth Of Crypto Currency **USD\$6 Trillion by 2022**

- Adoption by the world's largest financial institutions will accelerate the growth of CryptoCurrencies into becoming a significant asset class.
- Insured CryptoAssets will facilitate this growth.
- Projected to grow to USD\$6 Trillion by 2022 from \$250M today.
- The world's largest Institutions will not put their Balance Sheets at risk.
- The challenge is Crypto and Cyber crimes are growing at a record pace, slowing adoption.

Total Cryptocurrency Capitalization



www.bitcoinprice.com



#1 Threat in 2018 is Cyber Crime

- #1 Threat for 2018 is CyberCrime associated with Cryptocurrency and CryptoMining Operations
- CyberCriminals are using Cryptocurrency to fund their activities and then using the large CryptoMining facilities to launch massive attacks on the world's largest corporations, institutions and governments

“In the first half of 2018 \$1.75B of Cryptocurrency theft occurred compared to \$2.3B from 2011 to 2018 YTD. 2018 is shaping up to be a record year for CryptoTheft.”

- Biggest Bitcoin hack: Mt Gox. Around 800,000 BTC, equivalent of \$450 million USD at time of event was lost.
- Biggest Ethereum hack: The DAO Incident. About 3,600,000 ETH, equivalent of \$60 million USD, was lost in this hack. This caused the eventual hard fork of the Ethereum blockchain.
- Most notable recent hack: Coincheck reported loss of 500,000,000 NEM, equivalent of \$400 million USD. This event raised serious discussion regarding crypto exchange regulations.
- Company with most notable hacks recorded: Bitcoinica wins the spot with 3 recorded hacks, resulting in a total reported loss of over 78,000 BTC
- Estimated USD Loss From Top Hacks and Scams (2011-2018 YTD): ~ \$2.3 Billion USD

Theft by Coin 2011 - 2018

Name	Reported Loss (Crypto)	Reported Loss (USD)	Occurred On	Source(s)
Bithumb Exchange hack	2,016 BTC 2,219 ETH 692 BCH 5,227,490 XRP	\$17,000,000	June 2018	Cointelegraph Bithumb Report
Coinrail Exchange hack	1,927 ETH 2.6 billion NPXS 93 million ATX 831 million DENT	\$40,000,000	June 2018	CoinDesk
Misconfigured Ethereum Clients Incident	38,680 ETH	\$20,000,000	2018 Ongoing	Bleeping Computer
MyEtherWallet DNS hack	215 ETH	\$152,000	April 2018	Forbes
Coinsecure Theft	438 BTC	\$3,300,000	April 2018	CoinDesk
South Korean Bitcoin Pyramid Scheme	N/A	\$20,000,000	April 2018	CoinDesk
GainBitcoin India Ponzi Scheme	N/A	\$300,000,000	April 2018	Cointelegraph
Dantang coin Ponzi	N/A	\$13,000,000	April 2018	CryptocurrencyNews
iFan/Pincoin Token Scam	N/A	\$650,000,000	April 2018	VNExpress
BTC Global Ponzi Scam	N/A	\$50,000,000	Mar 2018	CoinDesk

1.7 million BTC

304k LTC

30 million USDT

670k XLM

2.6 billion NPXS

4.54 million ETH

500 million NEM

17 million NANO

93 million ATX

831 million DENT

5.2 million XRP

Source: <https://www.cryptoaware.org/resources/notable-cryptocurrency-hacks/#download-form>



2018 Cyber Crime

Cyber crime is setting records in 2018. Large denial of service attacks, morphing NetBots, complex phishing and malware vectors are putting the entire internet at risk



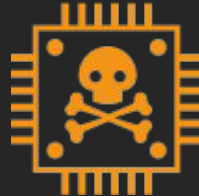
#1 CryptoCrime

Coin theft from wallets and exchanges and hijacking miners computing power for launching malicious botnets.



#2 BotNets

22% of internet traffic is BotNet's for cybercrime, morphic malware, hive nets and swarmbots using artificial intelligence along with the weaponization of IoT devices. 40% of all user logins are bad botnets.



#3 BotNets

22% of internet traffic is BotNet's for cybercrime, morphic malware, hive nets and swarmbots using artificial intelligence along with the weaponization of IoT devices. 40% of all user logins are bad botnets.



#4 DDoS Attack

1.7Tbps DDoS attack - Largest attack ever recorded was in March of 2018 with a ransom note for \$15,000.00 payment to stop. The attack used cached memory from unprotected servers planted with malware.



#5 Ransomware

Ransomware has increased from every 2 minutes in 2015 to every 40 seconds in 2017 and is projected to be every 14 seconds by the end of 2019. The damages have gone from \$325M in 2015 to \$5B in 2017 and to a projected \$11.5B by the end of 2019



#6 Cybercrime

CyberCrime has increased from \$3T in 2015 and is estimated to top \$6T before the end of 2021.

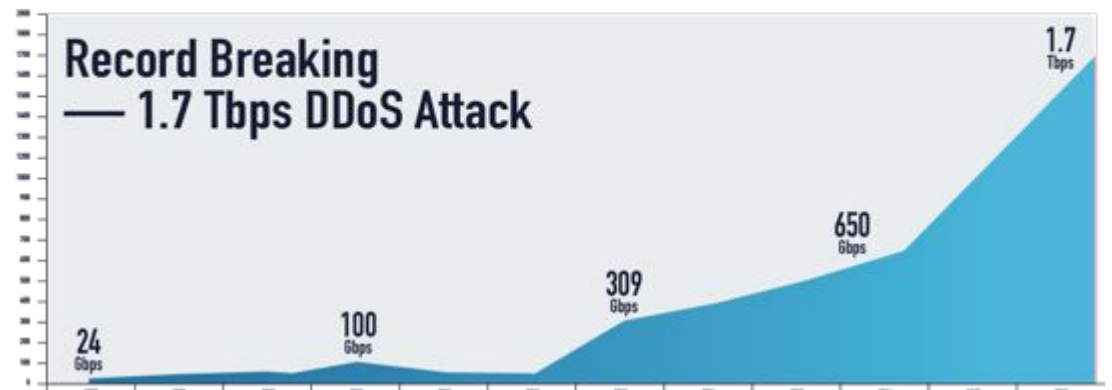
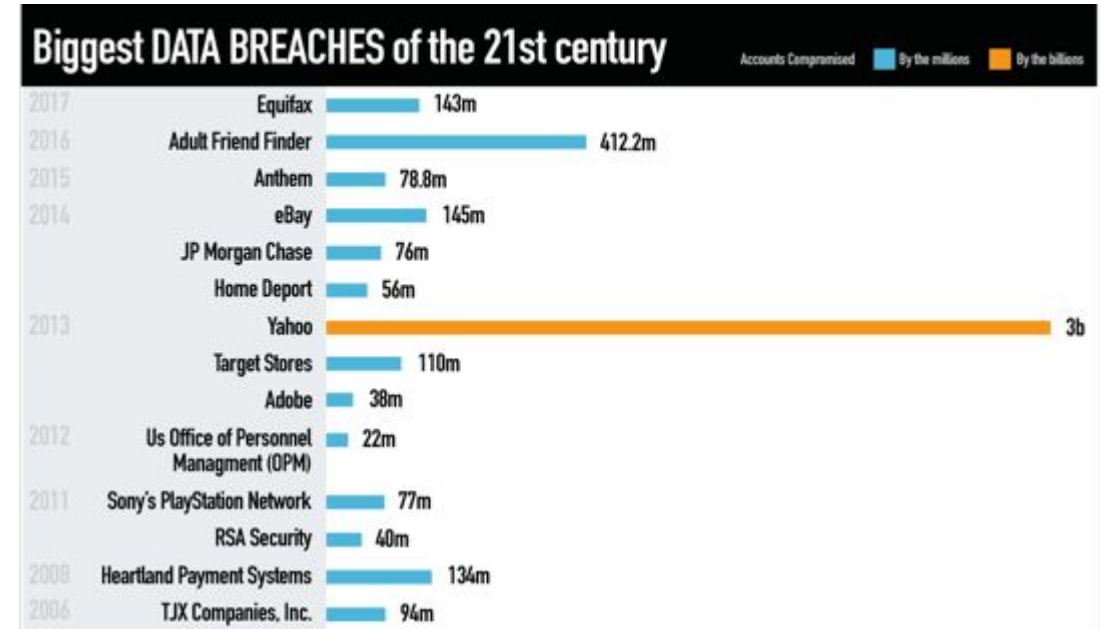


Under Attack - Internet Devices Are Being Weaponized

- Some of the largest corporations in the world are under attack 24/7.
- The largest internet service provider in Europe suffered the largest DDoS attack ever using a distributed memory caching system that's unsecured using thousands of mis-configured servers exposed to the internet.

Day to Day Example of Reported Breaches and Hacks

- Mar 29:** Under Armor, personal information 150 million users
- Mar 28:** City of Baltimore emergency dispatch system shut down by a ransomware attack
- Mar 20:** Orbitz (division of Expedia) 880,000 credit card information was stolen
- Mar 20:** UK Lottery advises a breach of 10.5 million accounts
- Mar 14:** Amazon through a Jewelry supplies exposes 1.3 million users personal information
- Mar 12:** BJC Healthcare personal patient data exposed on 33,000 records
- Mar 09:** 350,000 students information stolen from a virtual high school
- Mar 02:** Equifax compromised 147 million peoples information costing \$275 million in security upgrades
- Feb 20:** SnapChat accounts posted to a public web site 55,851 accounts exposed
- Feb 15:** Fedex exposes 119,000 customers data through Amazon servers
Swisscom breached 800,000 customer files and data stolen



<https://cybersecurityventures.com/data-breach-and-cyberattack-diary-report/>



The next attack – Quantum Computers

Quantum proofing is the next Y2K scale problem but 5x to 10X larger in cost

Estimated cost of Quantum proofing

\$3 to \$6 Trillion

- Quantum Computers are 5 to 10 years away and pose a huge threat to the current security systems
- The world's entire IT infrastructure is at risk and needs to be Quantum Proofed
- The digital signature scheme used in the blockchain to authenticate transactions is completely vulnerable
- The ideal quantum computer can attack a Bitcoin Key and evaluate all possible private keys simultaneously with a high probability to return the correct answer.
- Elliptic Curve security used in the smart phones is also not quantum proofed and can be broken in seconds using a Quantum Computer using Shor's Algorithm
- Any system using RSA, Public/Private key, and Elliptic Curve will be easily broken with Quantum



Blockchain Is Evolving The Internet

Multiple Industries Are Ripe For Disruption from Blockchain

- **Banking Industry:** Storage and transfer of money peer to peer eliminates the need for traditional banking.
- **Real Estate:** Empowering home owners and buyers by eliminating middlemen through a tokenization process.
- **Healthcare:** Securing patient data and putting the control of the data into the hands of the patient with new monetization models for the use of that data.
- **Political:** Secure *tokenization* of the election process.
- **Video and Entertainment:** Ownership rights and usage embedded in the video allowing for decentralized distribution.
- **Financial Services:** Stock Exchanges, trading, insurance, commodities, are all set for disruption.
- **CryptoExchanges:** New technology will eliminate the mining process and move the functionality to the exchange.

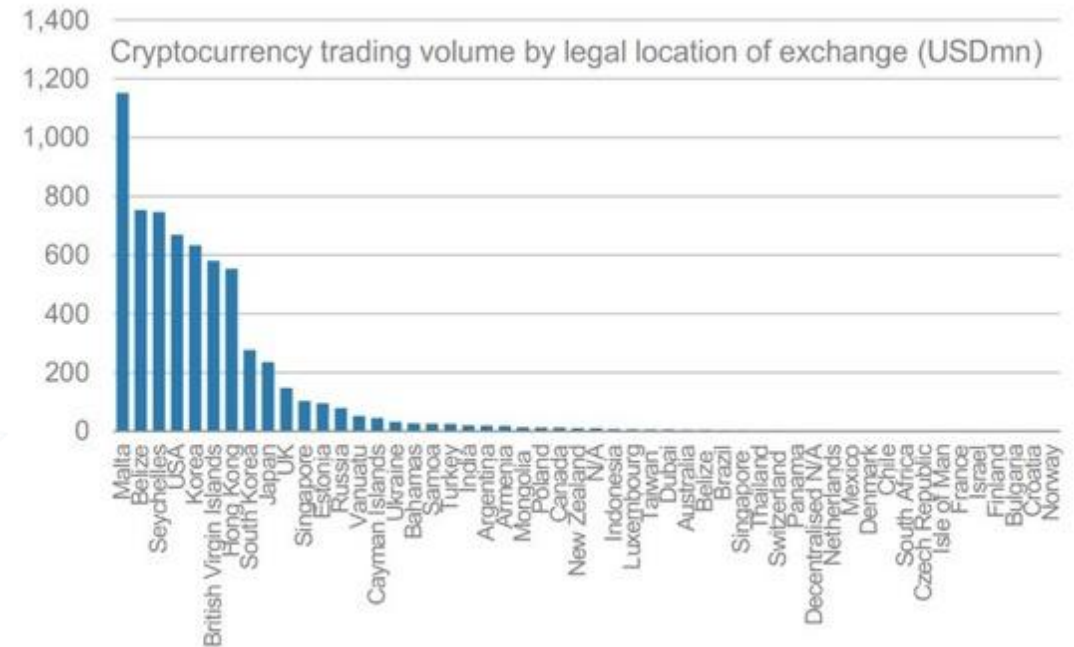
Secure, insurable commercial transactions will eliminate middleman and transaction inefficiencies.



Crypto Will Go Mainstream when trust is established

- Offshore jurisdictions will decline as crypto goes mainstream with major institutions.
- When the Banks enter the market with their trusted brand the market will evolve
- The offshore wallets and assets will rapidly migrate to the trusted brands

Exhibit 1: Most cryptocurrency trading is moving to a base in Malta



Source: CoinMarketCap.com, company websites, Morgan Stanley Research; For this chart Binance is in Malta and OKEx in Belize. Volume from one day in April but the relative exchange rankings are still comparable if several days are averaged.

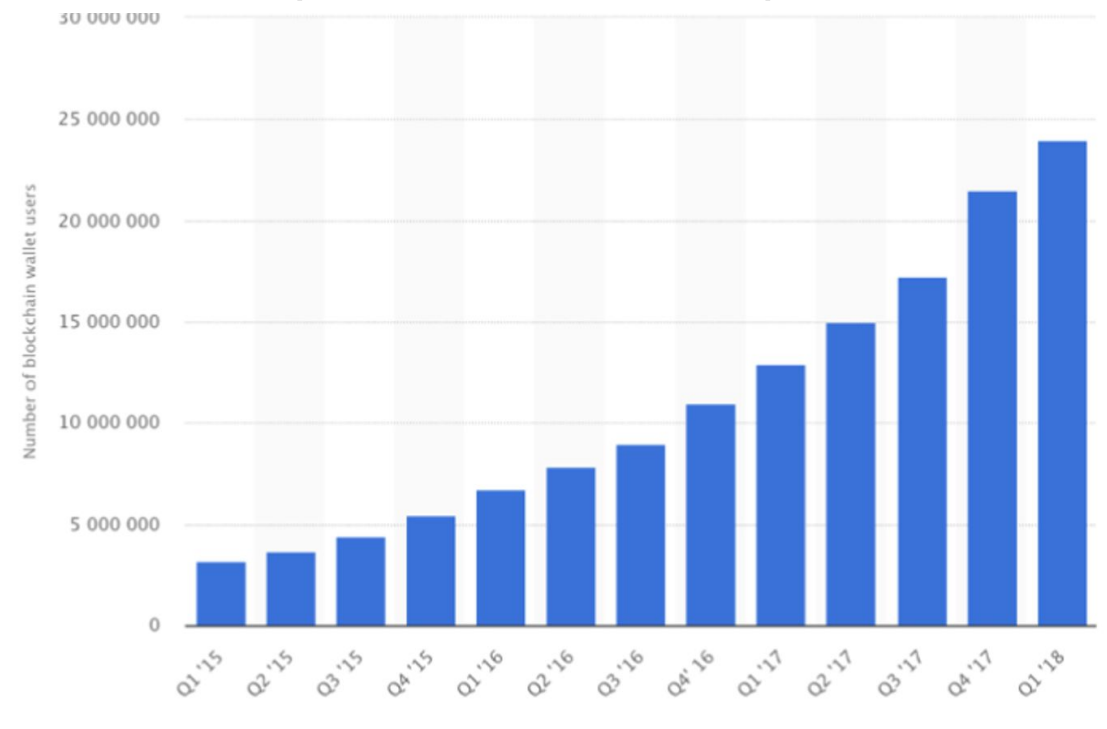


Scope of the Market

- 25 million CryptoWallets are up for grabs and \$270B in CryptoAssets.
- User asset migration is easy to do in the Blockchain.
- Once these assets move to a trusted institution they will not be moving for a long time.

TrueNorth Quantum is engineering Northern Shield to become the world's first secure, insurable trading platform providing users with peace of mind when transferring crypto currency.

Number of Blockchain wallet users worldwide from 1st quarter 2015 to 3rd quarter 2018

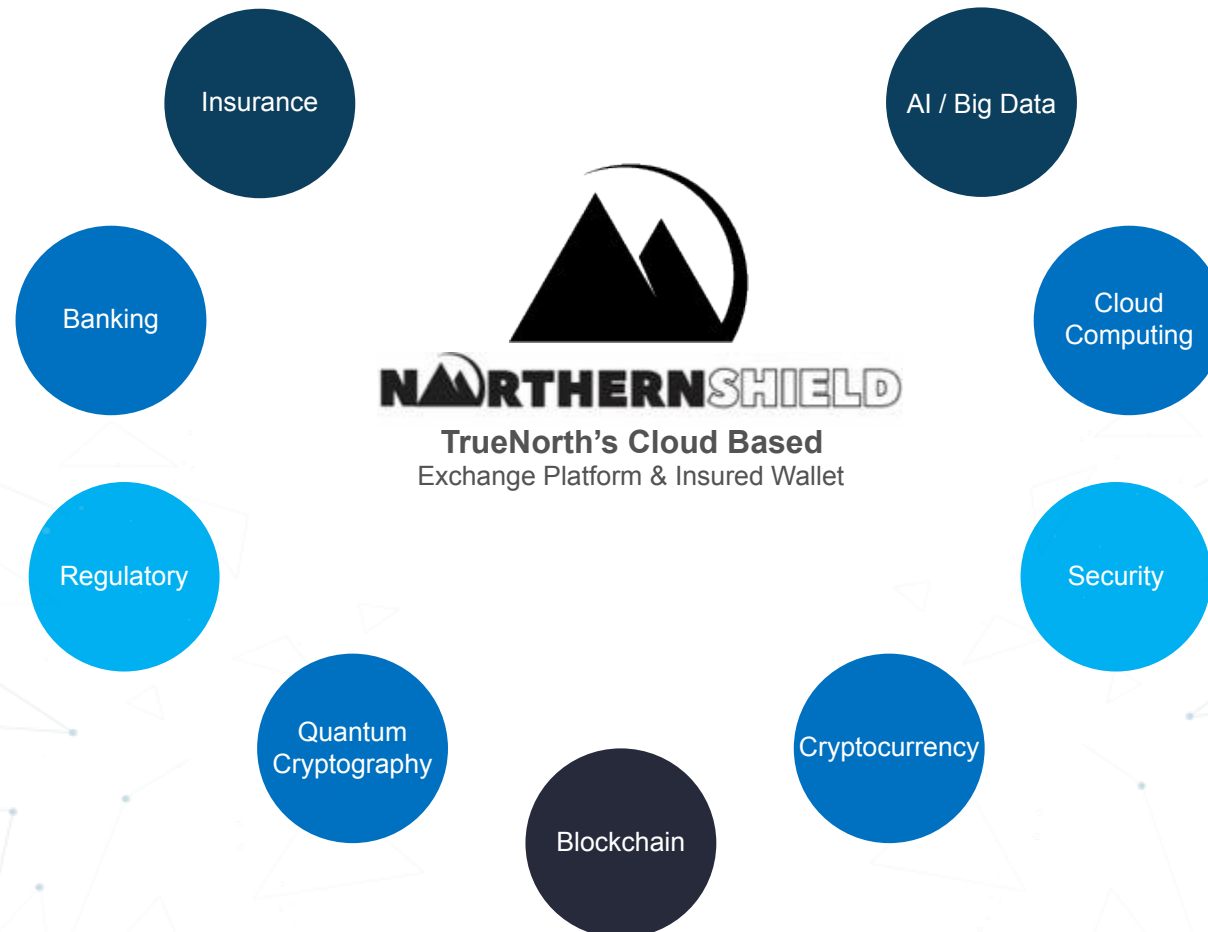


Source: statista.com



TrueNorth's Convergence Strategy

Bringing institutional grade technology to the CryptoMarket.





TrueNorth's Northern Shield Exchange Platform Changing The Future

Today

1. Crypto exchanges are being forced offshore into suspect jurisdictions
2. Traditional money services are intermittent
3. Liquidity conversion of crypto to Fiat currency is unreliable
4. Regulators are closing exchanges down
5. Law suits are progressing against securities based tokens
6. Users accounts are getting hacked, keys are being stolen
7. Under capitalized exchanges – cannot afford latest security technologies and implementations

Tomorrow

1. Exchanges onshore run by the world's largest institutions
2. Trust has been brought to the block chain and cryptocurrency
3. Tightly integrated retail and commercial banking services, seamless between the crypto and fiat currency worlds
4. Regulatory and compliance frameworks already in place
5. Large capital base for legal support
6. Capital to implement the proper security infrastructure and fault tolerant design
7. User accounts insured against cyberattacks, mass adoption and scale within large institutions



The Millennial – Wealth Transfer

The greatest wealth transfer in history to the Millennial - \$30 Trillion USD



66%

of children fire their parents' financial adviser after they receive an inheritance.

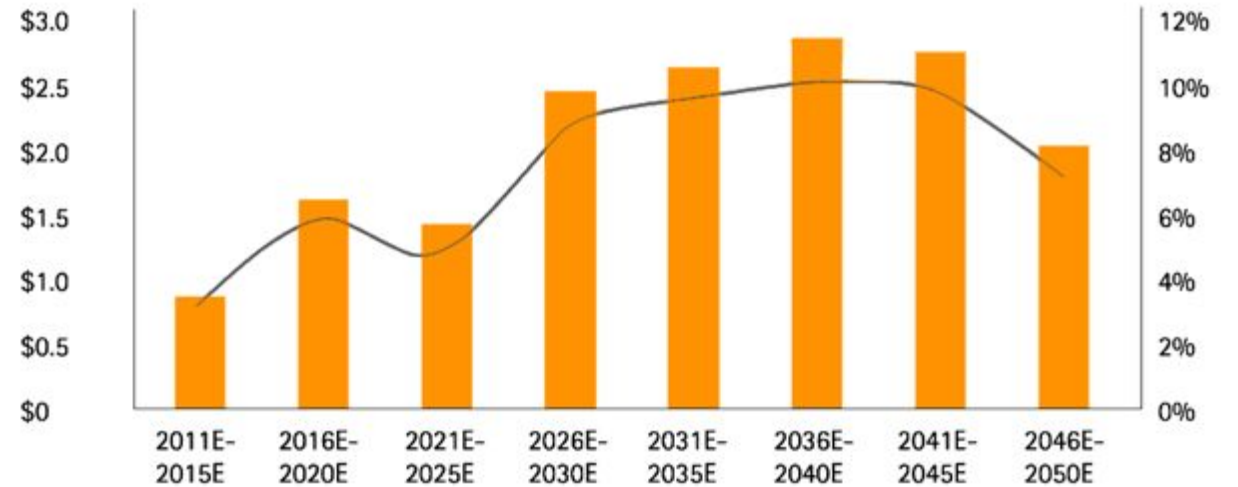
Source: InvestmentNews Data

- 2032 will be the peak transfer
- Most Millennials will not use their parents investment advisor
- CryptoCurrency and Tokens will be a Millennial investment instrument
- Transparency, real time and online 24/7 is what they demand

Figure 1. US Investable Assets Transferred by Year

Investable Assets (\$ Trillions)

% of Total US Investable Assets



Investable Assets Transferred

% of total US Investable Assets

Source: June 2012 Accenture report on wealth transfer



Our Insured Solution

Bringing Bank level custody and insurance to new age applications for the decentralized economy

Platform Solution

Digital Custody

The first digital and quantum proof warm/cold and frozen storage, insuring the private key within the trusted Bank environment

Crypto Exchange

First micro-services architecture with information identity verification, authentication and authorization built into every instruction

Token/Blockchain Apps

Disruptive Applications using the Blockchain will interface to the North Shield to obtain private key custody, insurance and the advanced/secure north Shield

The Northern Shield – Quantum proof transaction platform for token based applications

Security Threat

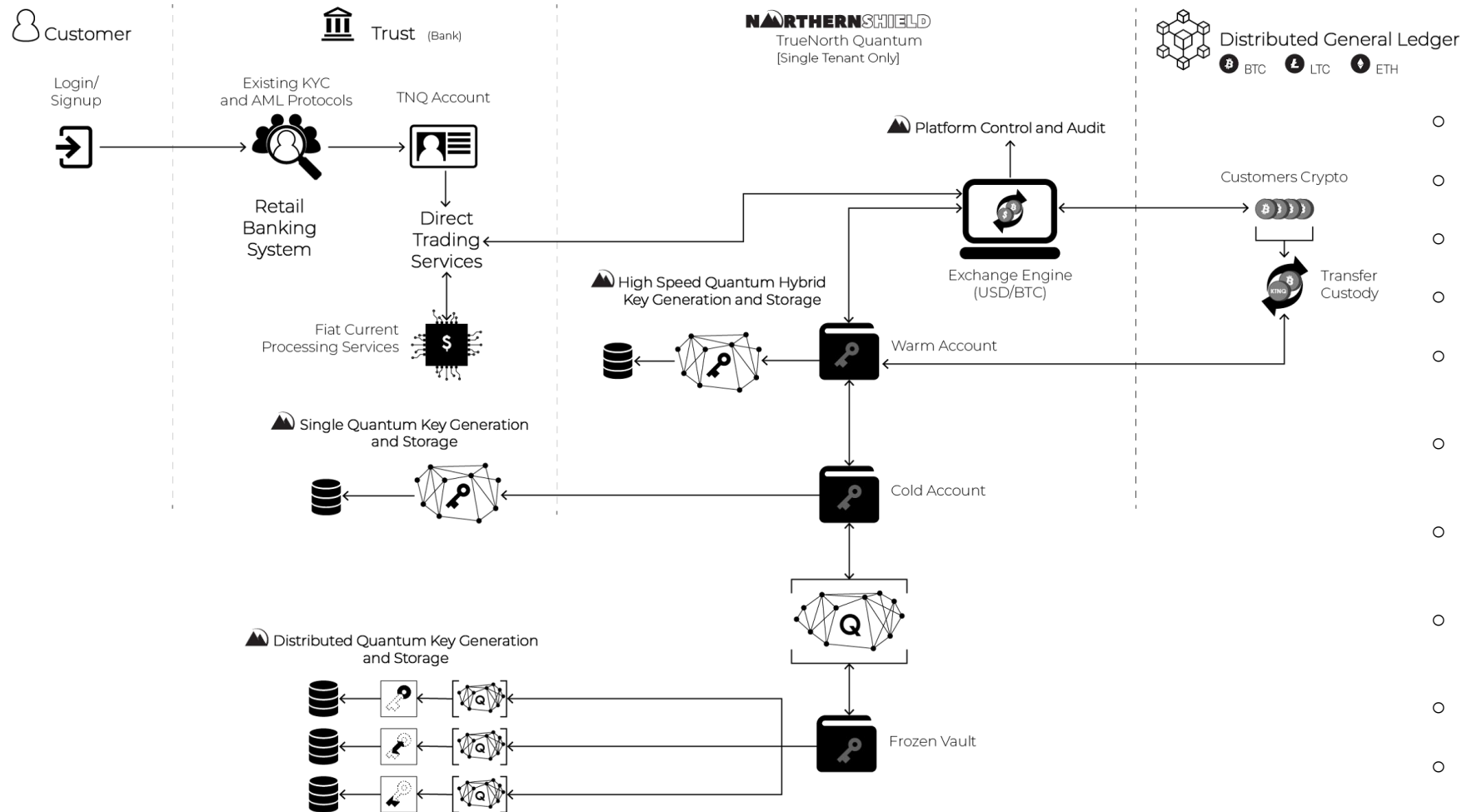
Addressing Today's Cyber Crime Threat...

...and Tomorrow's Quantum Threat



The Northern Shield

Application Operating System for the Block Chain with Insured Quantum Proof Custody and Execution Platform



- The Northern Shield has two applications built, secured and insured: Custody and Exchange
- The client's private key is quantum encrypted and stored within the trusted environment of the bank
- The underlying platform and audit is an encrypted micro service architecture
- Every session and message is authenticated and authorized before execution
- Every message is recorded in a black box where analytics can be used for fraud, compliance and audit capability
- The Warm Account is live for trading but the private key is encrypted with a Quantum Hybrid for performance (Quantum Proof Elliptic Curve)
- The Cold Account encrypts the private key within the Bank's trusted server environment using a quantum cryptographic key
- The Frozen Vault is for long term storage of the private key where the quantum key generation is distributed
- This is a Platform as a Service Single Tenant Service only
- Can be hosted inside the Trust Bank server farms or bare metal providers like IBM



Trusted and Insured Custody

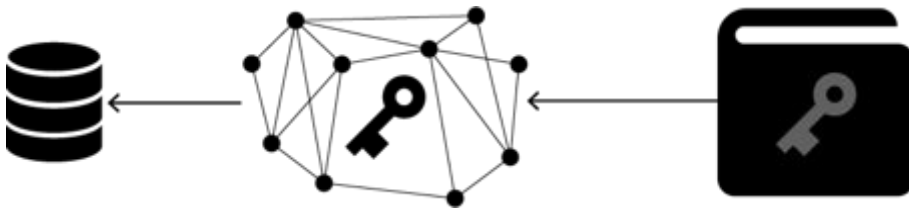
The arrival of insurable Crypto-custody will lead to mass adoption of Cryptocurrencies and blockchain apps.

- Financial institutions will not put their balance sheets at risk until cyber theft can be insured against.
- The masses will not move their assets into Cryptocurrencies until they are protected.
- Insurance will be priced based on the asset value and will range from 50 bps to 200 bps depending on Warm, Cold or Frozen vault storage.
- Mix between warm, cold and frozen storage will dictate monthly insurance costs.
- Storage dynamically allocated by the user and priced monthly.





High Speed Quantum Hybrid
Key Generation and Storage



Quantum Proof Warm Custody

Quantum computers will break current elliptic curve and PKI

- Developed in conjunction with a leading team of scientists from University of Waterloo Institute of Quantum Computing
- Next generation elliptic curve is quantum proof using a hybrid of Supersingular Isogeny based cryptography
- Hybrid algorithm for securing the blockchain key, quantum proof with strong authentication, identity verification and authorization for every transaction
- Warm wallet will automatically transfer key to cold storage after a defined amount of time securing the assets
- The NSA in Aug 2015 announced plans to transition to quantum proof algorithms



Single Quantum Proof Key Generation and Storage



Trust (bank)



Northern Shield

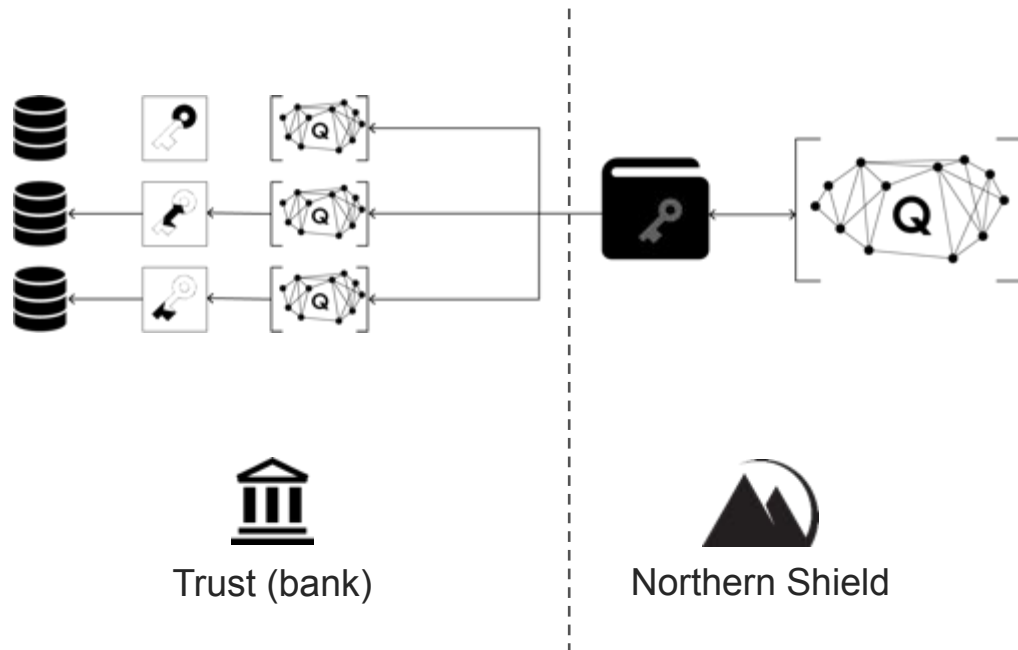
Quantum Proof Cryptographic Digital Cold Custody

Private Key quantum encrypted within the Bank's Trusted environment

- A single quantum proof key and algorithm will be used to encrypt the users private key
- Generated and stored within the Bank Trusted environment
- Private key can be recovered within seconds and moved to the warm account for trade execution
- User defines amount of assets assigned to cold custody and duration before its moved to the frozen Vault.
- Future development is FPGA hardware accelerated processing modules for key generation and security



Distributed Quantum Proof Key
Generation and Storage



Quantum proof Cryptography with Distributed Key - Digital Frozen Custody

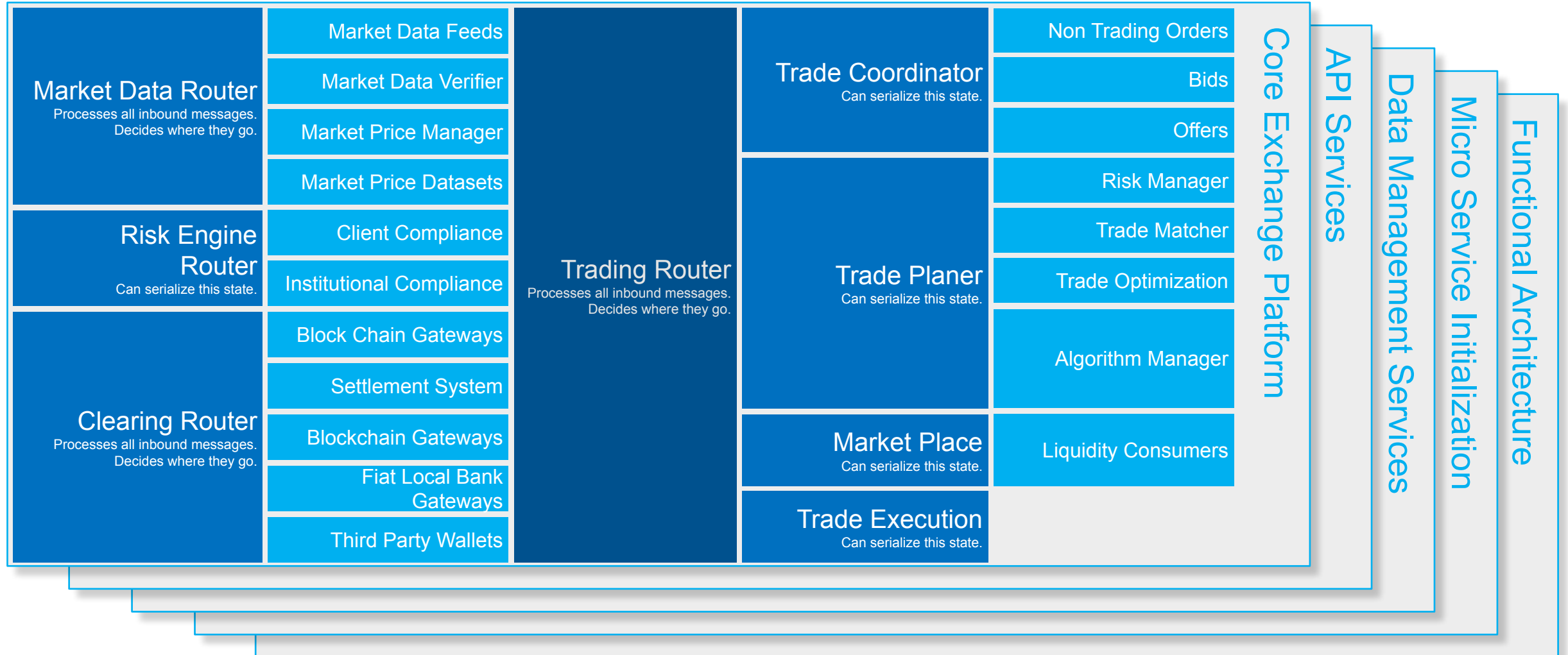
Quantum proof cryptography to produce
key across multiple servers

- A distributed quantum proof cryptographic algorithm generates the key across multiple servers and the entire key is never stored in a single location
- Distributed Hardware & HSM Physically Protected (FIPS 140-2 Level3) with Quantum cryptographic algorithms implemented in hardware
- All key generation and encryption runs within the trusted bank environment
- Designed to store a large amount of assets that are not required for trading, need to be extremely secured



Micro-Services Architecture with encrypted messaging

Quantum proofed exchange platform





Customer

Login/
Signup



Existing KYC
and AML Protocols



Retail
Banking
System

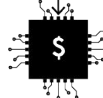
Trust (Bank)

TNQ Account



Direct
Trading
Services

Fiat Current
Processing Services



Single Quantum Key Generation
and Storage



Distributed Quantum Key Generation
and Storage



1

2

3

Trusted Integration to the Banks

Quantum proofed infrastructure combined with the Bank's proven trusted platform

1. Account information file integration, security sign in and authentication, customer information, KYC file, and profile direct trading platform user systems, tight integration into existing trading systems for users. Order creation and execution, account balances, currency conversion, real time pricing information and market data
2. Encrypted link for private key storage to encryption services and storage
3. Multi-Encrypted links for distributed key generation and storage across n number of servers.



Applications of the Decentralized Economy – Web 3.0

Trust with Insurance will accelerate the adoption of new age applications

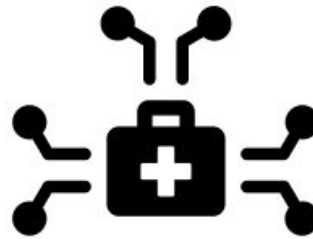
AgTech



FinTech - Payments



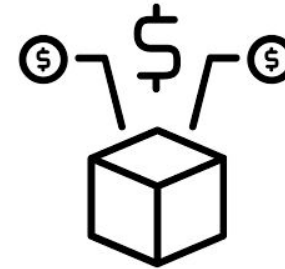
MedTech



InsureTech



DeFi

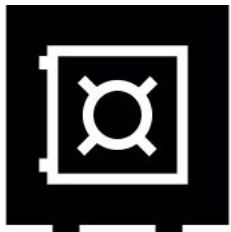


WellnessTech



Northern Shield API

Custody – Private Key



Crypto-Transaction Engine



Scalable Quantum Proof Encryption



The Northern Shield – highly scalable, secured micro services platform

Revenue Model: Custody (20-50 bps on Assets under Protection) and 10-25 bps on transaction trade value – Platform as a Service (PAAS)



Current Application Clients and Focus

Building Decentralized Applications to shift the Power to the Client

MedTech



Qanik DX Inc: building a global bio-defense application that shifts the control into the hands of the consumer away from the control of the governments which have a terrible track record in controlling COVID-19. Qanik's military grade biodefense technology will decentralize testing in phase one, and then to the consumer at Home. FDA EAU submission being reviewed and prioritized by the FDA.

Revenue Model: Services \$100-200K per month app dev., Transaction Rev.: \$0.50 per test and \$0.25 per User/month



WellnessTech



GO Nutraceuticals Inc: building a decentralized wellness application where the patient owns the data and through the use of Smart Contracts will get paid for the use of the data for drug development and healthcare research. It's "Patients Like Me" correlated around cannabis strain and health condition using Realtime patient data, AI and Big Data analytics.

Revenue Model: \$100-200K per month app dev. Transaction Rev: \$1.00 per manufactured bottle of CBDA or THCA, 50% net revenue share of sale of data to Pharma/Govt/Healthcare





Current Application Clients and Focus

(page 2)

Building Decentralized Applications to shift the Power to the Client

AgTech

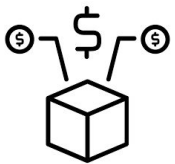


Phytonomous Inc: decentralizing live plant testing for Hemp and Cannabis growers using autonomous robot workers and streaming critical molecular data in real time to a global commodities exchange where futures markets for the crops are established. Connecting the farmer direct to the buyer – no middleman. Pharma grade quality control on every plant, every day through the life of the plant.

PHYTONOMOUS INC 

Revenue Model: \$100-200K per month app dev. Transaction Rev: 10% of the crop sales annually, 50% of data sales

DeFi



Social4orce Inc: empowers the millennial investor to invest directly into the most promising start up companies using the Human Velocity platform which is the Bloomberg of Start Ups. Decentralizing investment banking with this AI driven platform that guides the start up on an operational model that is scored into an Investor Index allowing the investor to invest in the highest scoring company. The Score is insured for loss. Different scoring model for each company stage of development.



Revenue Model: \$100-200K per month app dev. Transaction Rev: Subscription Model for Startups and Investors, Transaction pricing for AI generated due diligence reports, Insurance fee sharing

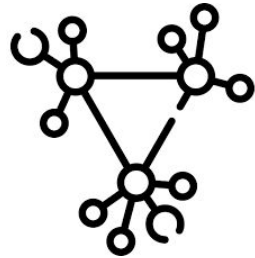


Investing in the Next Big Decentralized App

\$50-75 million allocated for equity investing from the REG A Registration



Global Disruption



Decentralized Applications



\$2-5M Equity Investment



Transaction Rev Share

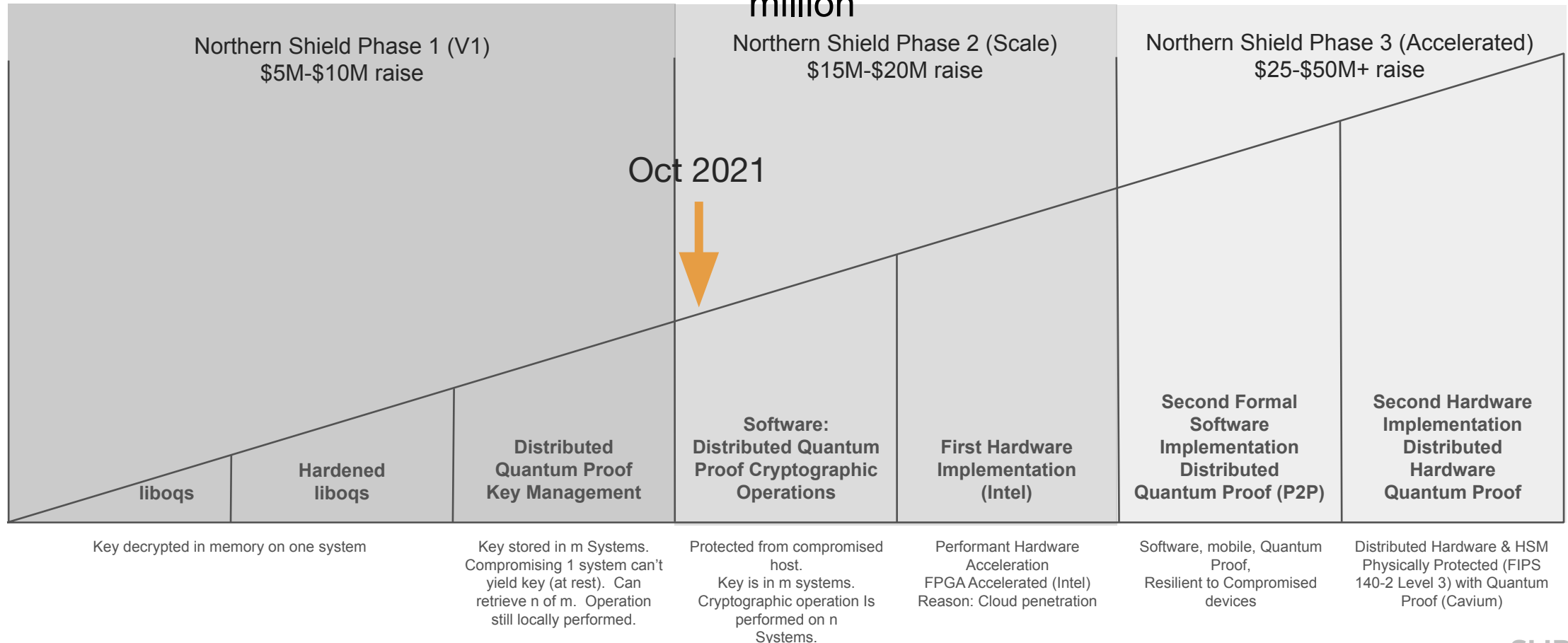
Investment Criteria

1. Emerging decentralization that can disrupt on a global scale and build out rapidly on the Northern Shield
2. Application domain expertise within the target investment
3. Invest \$2-5M take a major equity stake
4. Propensity to go public sooner on the OTC or CSE markets providing earlier liquidity
5. TNQ capital markets team will assist in the go public process, provide market liquidity and trading support
6. Revenue immediately back to TNQ for app development services
7. Transaction revenues to TNQ on providing the Northern Shield as a PaaS



Product Development, Deploy Timeline and Capital Requirements

Phased approach to implementation and capital spend - Reg A Registration Tier 1 - \$75 million

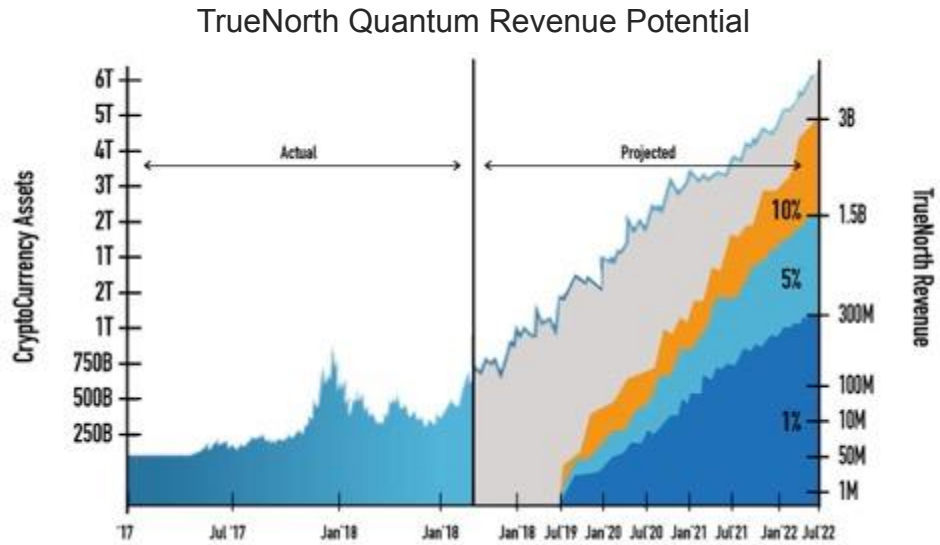




Revenue Model

Combination of Recurring and One Time High Margin Revenues

1. **Northern Shield Platform as a Service Fees**
Crypto currency exchanges will be charged a fee of ~ 50 BPS (0.5%) on assets under administration;
2. **Platform Integration Services Fees**
Estimated at \$250,000 to \$1,000,000 per blockchain application development



www.bitcoinprice.com

TrueNorth Revenue Analysis Based on CryptoCurrency Assets Under Administration

Total CryptoCurrency Assets 2022 (USD)	\$6,000,000,000,000	\$6,000,000,000,000	\$6,000,000,000,000
TrueNorth's Northern Shield Market Share	1%	5%	10%
Insurable Assets based on Market Share	\$60,000,000,000	\$300,000,000,000	\$600,000,000,000
Potential Annual TrueNorth Revenue – 50 BPS	\$300,000,000	\$1,500,000,000	\$3,000,000,000



Board of Directors & TrueNorth Team



Gary Bartholomew

Chairman & CEO – Serial entrepreneur, over 12 tech start ups, creation of \$1.5B in market cap, public and private company exits. University of Waterloo founding advisor MBET and GBDA and graduate BSc. 1983



David Mironov

Independent Director – 35 Years experience in financial markets, wealth management and compliance and governance. Both private and public company experience.



Doug Beynon

Independent Director – Dr. Benyon is a seasoned entrepreneur, executive, advisor, mentor and investor with over 35 years of senior management experience. He has been directly and indirectly involved in commercializing multiple early-stage technology companies. PhD Engineering



Michele Mosca

Quantum Scientist – Founder and Professor at the Institute of Quantum Computing, University of Waterloo, CEO and Founder of EvolutionQ Inc., a quantum research team in quantum algorithms and quantum safe cryptography.



Bryce Bonneville

Corporate Compliance and Governance – Specializing in Canadian securities law, corporate finance and mergers and acquisitions. Focus on early stage, development stage companies both private, going public and publicly listed.



Anthony Ng

Platform and Security Architect, 25 years experience in large scale cloud based technologies and CyberSecurity. Past exits Intellitactics, Prolexic to Akimai



Quantum Team

World Leaders in Quantum Risk, Cryptography and Computing



evolution 
www.evolutionq.com

Michele Mosca

University of Waterloo's Michele Mosca and his team within Evolution Q contain the top minds in quantum and will lead the quantum strategy providing the architecture and specific implementation for *quantum resistance* and *quantum cryptography* for private block chain key digital storage for TrueNorth Quantum.

Current Projects:

- Quantum Safe cryptography
- Quantum algorithms and complexity
- Methods for mapping quantum circuits to realistic architectures.

Affiliations:

- Department of Combinatorics & Optimization, University of Waterloo
- Perimeter Institute for Theoretical Physics, Waterloo (Founding Member and Associate Faculty)
- David R. Cheriton School of Computer Science, University of Waterloo (cross-appointed)
- Department of Physics & Astronomy, University of Waterloo (cross-appointed)
- Guelph-Waterloo Physics Institute
- Centre for Applied Cryptographic Research, University of Waterloo
- Institute for Computer Research, University of Waterloo



Corporate Information

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