Qwyit LLC – **Security Engineering: Introducing QwyitChip™ (H/W FPGA), *The World's Fastest Encryption Chip*. We will create/build the QwyitLab™ as a demo laboratory for superior Qwyit™ security tech proliferation**

PROBLEM

Nothing is more tragic than the *entire digital security industry* continually creating, offering and adamantly insisting on using the same constantly failing fundamentals: Why isn't everything secure?

There's no universal, simple, fits-everywhere security method – Current methods are: too big, too complex, too slow, too insecure

Networks have become multi-dimensional where End-to-End authentication/encryption is impossible w/current methods

SOLUTION

Qwyit will introduce QwyitChip™: our superior, universal, world's fastest FPGA Hardware Security Module to the $15B HSM marketplace.

Along with the accompanying identical QwyitSDK™ software module, it replaces the need for external, separate, ineffective, costly new H/W. QwyitChip™ performs the QCy™ Authentic Encryption cipher over 3,150 times faster than current tech, in only 200 SLOC: delivering the two H/W industry demands: Speed and Efficiency.

MARKET

According to Market Research, **the global Hardware Security Modules Market was valued at USD 581.05 million in 2017 and is projected to reach USD 15.20 billion by 2025**, growing at a CAGR of 12.8% from 2018 to 2025.
This entire market is based on using current, ineffective security methods that are the cornerstone of the de facto-failed S/W approach of the last 50 digital-era years. Our solution is a new *internal* HSM.

COMPETITION

The HSM market is comprised of several global and foreign participants, such as Thales, Gemalto, Hewlett Packard Enterprise, Swift, Utimaco, IBM, ATOS SE, Ultra Electronics, Futurex, Yubico.

While this may seem daunting, none of them are focused on delivering *internal* HSMs. In this regard, our 'competitors' in the FPGA, CPU/GPU marketplaces are potential partners, since our tech is so small it fits in/on FPGA array products: Altera, Xilinx, Microsemi, Atmel, Achronix, Cypress Semiconductor, Intel Corporation, Texas Instruments, and Lattice.

SALES AND MARKETING

We will create/build the QwyitLab™ as a demonstration laboratory for superior Qwyit® security technology proliferation.

Exactly as the well-known Dolby® Labs was created/succeeded in proliferating their superior component sound technology by creating/introducing it into marketplace areas by building prototype sound products and demonstrating these to marketplace participants, we will do the same with our superior component Qwyit™ cyber-technology by creating/introducing it into data communications/storage marketplaces initially; financial and other marketplaces in future

TEAM

Paul McGough - Founder and *CTO*
Telecommunications and security systems expert w/over 35 years experience. Over three decades, Paul's been an inventor, and entrepreneur while holding senior positions with AOL, CSC and SAIC. He has 10+ years of highly classified government secure communication project work. Paul co-founded Qwyit®, is CTO, Chief Scientist, Qwyit® inventor and patent author.

Michael Fortkort - Co-Founder and *COO*
Chief Operating Officer, Qwyit and General Counsel. Mr. Fortkort is a registered patent and corporate lawyer w/over 25 years startup experience. He's worked with Paul and the Qwyit technology since 1998, co-founding this iteration of Qwyit together. Mr. Fortkort also founded a transportation company (Chariots For Hire), and serves as its Chairman of the Board.

CURRENT STATUS

Complete, multiple independent reviews provide assurance that our methods deliver to their claims and specifications

- **QwyitChip™ FPGA architecture, demos, Verilog code available**
- **QwyitSDK™ available in multiple platforms (C, C++, Java)**
- **QwyitKey™ prototype-ready**
- **12 Patents Granted** (11 US, 1 Japan), other patents pending
- 40+ White Papers (technology, application, marketing, documentation)
- Reference Software (test vectors, bias testing, primitives)
- 7 different example (historical) applications

FINANCIAL PLAN

$750K to Initiate, Staff and Operate QwyitLab™ for 1 Year

$450K to fund QwyitLab™ for 1 year (Product prototypes in FPGA chips, initial device IoT) - Hire 3 Cyber-Engineers 1 H/W (QwyitChip™), 1 S/W (QwyitSDK™), 1 Web Programmer (QwyitKey™)

$150K: Sales/Marketing activities/support for 1 Year Develop/create introductions/awareness in Market prospects, bringing them to the QwyitLab™, demonstrating prototype products. Generate/Manage licensing sales cycles

$150K: Executive Management and Lab Build/Outfit Product/prototype design. Lab design, materials & devices budget. General corporate activities

Revenue: $0-200K anticipated License Revenue and/or paid prototype development/production, Q4, Y1

[Out year anticipated Revenue potential: See Dolby Labs, and Intel chip manufacture ☺]