# Internet Safety Technical Task Force Technology Submission Template

GenMobi Technologies, Inc. / Michael J. Schultz CEO

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## ABSTRACT

GenMobi Technologies, Inc. has created patent pending digital identity validation process called CQR-ID (Secure ID) that are used to verify the true identity or a user online or mobile. The core technology can be adapted to a process that allows parents and their children to be validated through their school relationships and then create an online identity key that can be accepted by any online service provider. When the CQR-ID is combined with the online chat filtering service called CQR-ID Chat the combined product suite is called CQR-ID SN (Secure ID Social network). Going beyond simply validating digital identities the product suite also enables filtering of online chats to prevent grooming, bullying, hatemongering and offensive speech that can be modified by the parent or service provider as weeded.

## Keywords

Identity validation; parental control; strong verification through .

#### **Functional Goals**

Please indicate the functional goals of the submitted technology by checking the relevant box(es):

- X Limit harmful contact between adults and minors
- X Limit harmful contact between minors
- □ Limit/prevent minors from accessing inappropriate content on the Internet
- □ Limit/prevent minors from creating inappropriate content on the Internet
- Limit the availability of illegal content on the Internet
- X Prevent minors from accessing particular sites without parental consent
- X Prevent harassment, unwanted solicitation, and bullying of minors on the Internet

X Other – Mobile Integrated Messenger/Browser provides full protection for children

#### **PROBLEM INTRODUCTION**

Current technologies are limited in their ability to validate children because they either are voluntary, making them susceptible to fraud, or require an intrusive approach that can violate a child's privacy as well as COPPA.

To avoid identity phreaking a solution must be strong at inception and then strong throughout implementation with no easy weaknesses such as PINs or passwords that are easily cracked. A comprehensive solution is also one that attacks all levels of potential threats to children on the internet (and soon mobile). GenMobi Technologies, Inc's solution called CQR-ID SN (Secure ID Social Network) creates validated digital identities for children that can be used by service providers, social networking sites, gaming sites and adult content sites to enable those companies to proactively validate a user's identity and validate their true identity without revealing the user's personal data or exposing them to intrusive identity verification.

As a comprehensive approach GenMobi goes further in offering service providers, etc. the ability to parse all online chat in real-time to obviate the risk of grooming, bullying, hatemongering and offensive speech. These interactions can be stored on a database that holds all interaction data securely and that can only be accessed by legal authorities as well as the database owner. It should be noted that GenMobi will not be the database owner, merely its developer and service provider. This database contains private data on children that makes it too attractive for any for-profit company to own and GenMobi will grant ownership of the database to a non-for-profit organization that is approved by the appropriate governmental authorities.

## PROPOSED SOLUTION

The GenMobi Technologies, Inc. approach to protecting children on the internet is an holistic approach that incorporates digital identity validation of the parent as well as the legal relationship between the parent and child, assignment of a digital identity key that can be used across platforms, services and providers and an open source filtering protocol that proactively monitors in real-time online chats to obviate the risk of grooming, hate or bullying speech.

#### CQR-ID SN (Secure ID Social Network)

This service runs on PERL code operating on a Catalyst Open Source platform on a Linux OS with a MySQL database to log all transactions for compliance reporting purposes as well as enabling any abuse to be identified, the user notified and the appropriate action take to prevent any repeat behavior as well as act as a deterrent to anyone attempting to do harm to children online.

Services that decide to use the digital identity validation incur a one-time NRE charge per user and a minimal

monthly maintenance fee. GenMobi Technologies, Inc. has created a validated identity solution that has a unique approach to child validation in that it first addresses the true identity of the parent or legal guardian, then proactively confirms the legal relationship between the parent and child through their school association and confirming the school validation to prevent any identity phreaking including that of the validating school.

Validating adults is a strong process that has been used successfully by governmental, financial, commercial and institutional bodies for many years and is used by GenMobi in its current products that prevent online fraud. What has been impossible to do is the validation of minors, especially under the age of 16 and this difficulty has been used as an excuse for non-implementation of stronger security and safety offerings by online companies.

## **Identity Validation Process - Parent**

GenMobi first validates adults through a simple browser interface o a secure website whereby the adult furnishes only their name, address and telephone number to start the validation process. A quick review of an address database matches that information to a profile matched to a Social Security Number. That SSN is never shared, even to GenMobi, but is used to generate a series of 4 KBA (Knowledge Based Authentication) questions that contain non-credit related information. The parent must answer all 4 questions correctly in order to be validated.

#### **Identity Validation Process – Child**

Once the parent has been successfully validated their browser will display a child enrollment page that requests the child's name, date of birth, grade in school, school name and address as well as principal's name. This information is used to create a database entry for the child with a cross-reference to the parent and will generate a coded fax page that must be brought to the school for signature and faxing to an 800 number.

A school database will be accessed at this time to confirm that the nominated school exists and register the expected fax number for the school. This paper is then brought to the school for school official signature and faxing back to CQR-ID SN with the receipt generating an outbound call to confirm the fax did indeed originate from the nominated school.

### **Continuing User Validation**

After the child registration paper is generated the adult will be furnished with 15 PCQs (Personalized Challenge Questions) from which they will choose 5 to be their identity authentication key in conjunction with their chosen username.

After selecting 5 PCQs and answering them in duplicate to avoid any mistyped answers the parent is then prompted to select 3 PCQs for the child. For younger children the parent will control the PCQs while older children will most likely opt for themselves.

#### **Online Validation Process**

For those services that use CQR-ID SN keys the user will be required to enter their username and then CQR-ID SN will randomly select one of the PCQs to validate the child user.

For those services that offers both adult and non-adult content an adult validation of CQR-ID SN is available that validates someone as an adult preventing any underage user from simply using their older friend's or parent's computer to enter sites.

## **Online Chat Filter**

CQR-ID CF incorporates filtering software technology now used by enterprises to screen email and other content with a database that logs abuse, time of occurrence, username of abuser and can be programmed to automatically notify the service provider and/or parents of any chat abuse.

CQR-ID CF utilizes a MySQL database to log all transactions and transgressions and open source PERL running on a Catalyst Open Source framework on a Linux OS.

CQR-ID CF provides a second line of defense in the protection of children as it obviates improper chat online and sites that use CQR-ID CF are less likely to be frequented by undesired users who would know that their actions as well as identity can be traced and action against them taken.

### **Content Protection**

The third part of the protection suite is CQR-ID IP that is a content filter that can dynamically review both still and moving images to scan for copyright infringement, adult content, hate, bigoted and religious intolerant images.

The service is customizable to allow settings for specific types of images, copyrighted material, etc. This service utilizes the LTU software that has been used by various governmental and military organizations.

As with all GenMobi products it runs on Linux OS and attaches to a MySQL database for compliance and enforcement purposes.

## EXPERTISE

GenMobi Technologies, Inc. founders and team have well over 150 years of combined experience in high availability systems, database, security, financial, international, mobile, entertainment and start-up experience.

## **COMPANY OVERVIEW**

GenMobi Technologies, Inc. is a privately funded Delaware Corporation founded in 2006 specifically for the purpose of commercializing applications that protect digital identities. Its first two applications CQR-ID MP (Online Merchant Protection) and CQR-ID CP (Credit Protection) are B2B products that attack multi-billion dollar losses in the financial industries sector. These products will launch in September 2008 with multiple Fortune 500 Financial Industry companies, A third product CQR-ID UV (User verification) attacks online identity fraud amongst online users and protects online users in P2P financial (buy/sell) as well as personal interactions by creating identity validation while maintain user anonymity.

All GenMobi products have been designed to be COPPA, Patriot Act and PCI DSS while maintaining the individual's right to privacy.

Michael J. Schultz, CEO, has led a varied and successful career that includes 9 year tenure with GE as a Class A executive, an equally distinguished career at Kanematsu Corporation, a \$35 billion dollar Japanese trading company where he started 5 companies in the high tech field as well as success in the entertainment business in music, TV and film as a producer. Prior to starting GenMobi Mr. Schultz co-founded Gold Communications in Rio de Janeiro, Brazil

His co-founder Karina Goldrajch most recent success was as CEO of Gold Communications that she led successfully to develop and deploy mobile technologies in services to over 60 countries prior to its acquisition in March 2006. Her past successes include leading the International Communication for Petrobras, Brazil's Oil and gas giant while an executive for the PR firm Edelman. While living in Israel Ms. Goldrajch was a team member at the mobile platform company Comverse where she was in product marketing after which she helped Odigo become a leading Instant Messenger product that led to its subsequent acquisition by Comverse.

## **BUSINESS MODEL OVERVIEW**

The CQR-ID SN suite is offered on a SaaS basis so startups, non-profits and organizations that desire to implement child-safe policy will not have a huge start-up cost but be able to "Pay AS They Go". The software developed by GenMobi was designed from the start to be easily integrated into any current system and the SaaS delivery mechanism allows for a fast adoption rate.

#### **Cost Considerations**

CQR-ID SN can be deployed for a nominal cost as Open Source has been used extensively in its development and storage costs have fallen dramatically over the last 5 years. The CQR-ID CF and CQR-ID IP services will require moderate CPU processing power but service providers can offer that protection to parents as a optional paid feature to parents who want to ensure their child's safety online.

A rough estimate of the CQR-ID cost per child validation is \$5 USD with 20% going to the NGOs overseeing the service, 20% the schools that participate in the service and 20% set aside solely for children whose parents are on restrictive budgets to enroll their children at no cost.

The CQR-ID CF service will have a separate monthly charge whose cost will be based on usage. There is a balance between volume savings and CPU usage that needs to be addressed yet. A per child monthly cost estimate is about \$3 USD.

The third product in the CQR-ID SN suite CQR-ID CF has an estimated monthly per user cost of less than \$0.70.

The design of the GenMobi service is that although it is a paid service it incorporates an element whereby an approved NGO will administer the service for those children and their parents who are not able to pay the initial validation cost, estimated to be \$5 who will also receive ongoing protection at no charge until they each the age of maturity,

## MORE INFORMATION

GenMobi Technologies, Inc. website address is <u>www.genmobi.com</u> but the authors would point out that many sections are dark to prevent premature release of proprietary information. For more complete information please contact one of the people below.

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"I certify that I have read and agree to the terms of the Internet Safety Technical Task Force Intellectual Property Policy." The IP Policy can be found at <a href="http://cyber.law.harvard.edu/research/isttf/ippolicy">http://cyber.law.harvard.edu/research/isttf/ippolicy</a>