Internet Safety Technical Task Force Technology Submission

Red Star hs/Kelly Maloney

ABSTRACT

The Double Secure Entry Age Verification Solution model offered by Red Star hs, a Washington State corporation, provides a comprehensive and flexible approach to delivering a safe online experience to minors by leveraging trusted sources such as our Educational System (ES), and the resources of Social Networking Sites (SNS). By utilizing the ES' validated age information for students, SNS can offer "parentally opted-in" students the ability to create Profiles which are flagged and restricted to appropriate areas of the SNS. This is done through sources that have undergone a vetting process and have connected from pre-defined and secure sources. Once created, these age-differentiated, minor-designated profiles can be accessed from any location. The SNS further employs a variety of safety and security features to protect minors. See redstarhs.com for more information on additional options, such as, utilizing Microsoft's LiveID as a single UN/PW source for all SNSs.

KEYWORDS

- Double secure entry (or) Double secure log-in—the requirement for youth to only be able to create a SNS UN/PW through an age-validated, secure site
- **Multi-layered security features**—multiple safety and security features or measures to keep minors safe
- Delivery methods—the various methods that can be utilized in order to validate minors' ages (usually an entity associated with education or youth programs)
- SNS—Social Networking Sites
- Walk Aways—a logged in user who walks away from the computer
- White-List—A list that contains entities or addresses that have been preapproved and are trusted
- **VPN**—Virtual Private Network, a secure tunnel between SNS and age-verification entities

FUNCTIONAL GOALS

- X Limit harmful contact between adults and minors
- X Limit harmful contact between minors
- X Limit/prevent minors from creating inappropriate content on the Internet
- X Limit the availability of illegal content on the Internet
- X Prevent harassment, unwanted solicitation, and bullying of minors on the Internet
- X Other Prevent identification theft of a minor

PROBLEM INTRODUCTION

This age verification solution creates a partnership between SNS and the institutions we trust our children to—the educational system (public, private and other, and youth programs), while utilizing existing technologies and being nimble to utilize new, safer technologies as they are introduced, creating new delivery methods to:

- 1) Limit harmful contact between adults and minors— Parents opt-in, letting their children participate in the program. Minors create UN/PW specific to SNS through validating entity. One such method is double security login, in which minors log into their school's online grades account through the UN/PW given to them by schools. Once minor is in secure grades online site, they create a SNS UN/PW. Another option is to have students create their SNS UN/PW through the school's already vetted IP address (or VPN, etc.), using the UN/PWs provided to them by the school district (UN may be student ID number). After students access the secure areas, they then create a second set of UN/PWs that they can use from any location to access the secure areas of the SNS. The second UN allows SNSs to know which area to allow the student to access based on age-validated code that is attached to the UN. This UN/DOB code tracks with the student through the years, determining which age level the minor should be in and when the minor becomes an adult so they are automatically deleted from the system. There are other scenarios that are easily adaptable for various systems. This limits/prevents adults from logging into the age-verified areas of the SNS. For a possible case in which an adult utilizes a computer that is already logged into the ageverified site, precautions include an automatic log-out if the profile of the minor is idle for a specified period of time. Also the adult has to enter the minor's UN/PW in order to access another minor's profile.
- 2) Limit harmful contact between minors, prevent harassment and forms of bullying, prevent ID theft—achieved through the use of static screens which cannot be copied. The only person who can change (paste, upload, copy, edit, delete) information on a profile is the owner of the profile. However, minor may have the option of giving permissions to certain friends to copy images.
- 3) Limit harmful contact between minors; limit/prevent minors from creating inappropriate content on the Internet, prevent harassment, unwanted solicitation, and bullying of minors—pre-screened adults (full background checks) monitor sites full time, kids self police, key words and

phrases are automatically flagged for review or, in extreme cases, not allowed. Sites are divided into age groups to limit the ability of an older teen contacting a younger teen.

Inappropriate behavior is handled based on severity—some cases will result in warnings, others are blocked from using site, others may be investigated for criminal behaviors.

PROPOSED SOLUTION

See Diagram (1)

All Delivery Methods limit the ability of an adult to access the restricted areas of the SNS that are for minors only.

Delivery method 1) Through a pre-defined vetting process, an entity (such as a School) becomes a "trusted source" for UN/PW creation. Following the establishment of trust, a secure connection mechanism, in this case a "white list" of trusted sources (by IP address or VPN) is then established. The minor logs uses his school district assigned UN/PW on the vetted source to access the secure SNS site UN/PW page. Here, they create a second UN/PW specific to the SNS with DOB information. (See below for continued details.)

Delivery method 2) Collaborate with educational system and grades online entity where minors log into their grades online accounts with passwords provided to them by educational system. While logged into grades online account, they create SNS UN/PW with the DOB code. (See below for continued details.)

In all delivery method cases, UN/PW is coded depending on minor's DOB, month and year of birth, student ID, or other non-confidential information that doesn't reveal the minor's identity. This code becomes "dash code" after minor's self-selected user name. (Simplified ex.: Minor born October 1993 self selects UN "tiger." Full UN is then "tiger-1093.") This allows system to know which age level the minor should be routed to and when to reroute the minor to the next older age level and/or out of the system when the minor turns 20 (or graduates or leaves the educational system).

When minors log into restricted areas of SNS they are routed to further restricted areas broken down by age categories. This limits the ability of an older minor contacting a younger minor.

When a logged in minor wants to access the profile of a friend, they have to re-enter their user name and password. This limits the ability of adults from making contact with another minor should the adult take advantage of access on a computer where a minor is already logged in and has walked away from the computer.

When a profile is idle for a specified amount of time, an automatic time-out occurs, resulting in automatic log out. The minor has to log back in to get back to her profile. This

limits the ability of adults from making contact with another minor should the adult take advantage of access on a computer where a minor is already logged in and has walked away from the computer.

Images and content will be static to prevent someone from copying them for use in ID theft or cyberbullying. Users will have the option of allowing specified friends to use the copy functionality.

Inappropriate words, terms and phrases will be identified constantly and when a user utilizes them, his account will be flagged and/or the content in question will be automatically deleted, a further administrative review will take place, and the user will be warned and/or blocked depending on the level of the violation.

Technical Attributes

Technical attributes include the double secure entry in which minors log into one secure web site to create a second set of log ins. This second set of log in information is coded based on date of birth. In some cases, students may be able to bypass the first log in if they are at a school entity that has validated their ages and the entity has provided secure, static IP addresses to the SNS, or in a similar situation using a VPN. Then the student creates the age-coded log in information through the secure, static IP address or VPN, directly in the SNS's secure log in area. After log in, technical attributes include automatic time out, additional log in requirements for progressing to other profiles, coded identification of words and terms, and noncopy-able images and content.

Use Cases

The user's experience should be very similar to what it is currently on SNSs. The differences being how/where they acquire their UN/PW, being routed to age-appropriate areas of the site, having 24/7 administrative oversight, having to re-log in if they walk away from their computer, having to re-enter their UN/PW to go to a friend's profile, and having to allow a friend to copy images and content.

What Solution Solves/What it Doesn't Solve

This process-oriented, technical solution limits or prevents harmful contact between adults and minors; harmful contact between minors; minors from creating inappropriate content on the Internet; the availability of illegal content on the Internet; harassment, unwanted solicitation, and bullying of minors on the Internet; and identification theft of a minor. It does not limit minors from accessing inappropriate sites or inappropriate content on the Internet accessed outside participating SNS.

Strengths and Weaknesses

Strengths: low-cost implementation, collaborative solution that allows for parental opt-in and multi-layers of security features. Easy industry adoption and standardization. Provides several delivery methods and the ability to customize to meet the needs of the delivery method. Adoption rate by key audiences likely to be high when offered through educational system. Parents will appreciate the security features. Non-scientific surveys show 100 percent of minor respondents and 100 percent of parental respondents welcome a safer, more secure alternative to current SNSs. 85% of these same parents say civil immunity for the ES is okay and a higher degree of oversight is okay. Lawmakers in Washington State are drafting legislation to give civil immunity to ES. This could be done on a federal level, as well.

Weaknesses: Liability issues for the ES and some parents and minors may feel there is too much oversight.

Implementation Requirements

Minimal since it is mostly process oriented. Some software and user training may be necessary for the coding of the birthdates; the oversight; the technical aspects of accepting the static IP addresses; setting up the secure, age-differentiated sections of the site; the static image and content controls; the word and term identifiers; and the time out functionality.

Technical Standards for Implementation

For static IP delivery method, the technical standard is Internet Protocol, which rests with the SNSs. The "dash-code" identifier rests with the SNSs.

For VPN delivery method, the technical standard is Virtual Private Network, which rests with the SNSs. The "dash-code" identifier rests with the SNSs.

For the double secure entry through entity or grades online secure web site, the technical standard is what the partnered grades online site uses and rests at the entity at which the UN/PW is created. In this case, the "dash code" identifier is a part of the UN/PW provider's system.

Use of Law and Policy

This can be done without implementing new policies or laws. However, it will have a higher success rate if the ES is granted civil immunity so they can collaborate with prescreened, secure sites.

Viability in US and Internationally

This is possible to do anywhere there is basic technology. If kids are on SNSs, this solution can be applied.

Effectiveness to Date

This solution has not been put into operation. The concept has been in development since 2004. During this time, the principal has met with Washington State's Office of the Superintendent of Public Instruction, school districts and attorneys to overcome obstacles, and is working with the Washington State Legislature to create a bill that will be presented to both the Senate and the House to provide civil immunity for the educational system in the case where all required diligence is done in advance.

EXPERTISE

Kelly Maloney, founder/Red Star hs-owner/kmConsulting, has 16 years experience bringing new products and services to market utilizing her expertise in branding, PR, media relations, advertising, search engine optimization and more.

WA Senator Tracey Eide and Rep. Skip Priest cosponsoring a bill for the '08-'09 Legislative Session to provide civil immunity for ESs that work with SNS.

Robert Martin, sole proprietor/TronixSoft. 20 yrs in technology; technology consultant; former senior network administrator responsible for securing a multi-organization network; responsible for policy creation/enforcement; firewall mgmt; server, desktop, remote access security.

COMPANY OVERVIEW

Red Star hs is a for-profit corporation doing business in WA State since '05. The proposed age verification solution and the term "double secure entry" are patented under the corporation Red Star hs. Founder, Kelly Maloney, provides all capital for all aspects of the organization. There are currently no revenues. Customer base is limited to an agreement between Red Star hs and the Boys & Girls Clubs of Federal Way and Auburn, and the teen center EX3, in the case it is chosen as a delivery method. This solution is easily scalable so growth can occur relatively quickly.

Key Team Members (in addition to those listed above:

Tom Murphy, super. of Federal Way Public Schools; Tim Kilgallon, CEO FreeClear; Dan Bogart, VP Sterling Savings Bank; Joe Erickson/Kelli Arntzen, MD, cofounders Westside Dermatology; Brianne Kampbell, attorney Brown Yando & Kampbell, PLLC; Mike Dziak, owner EVI Productions

BUSINESS MODEL OVERVIEW

Direct and indirect costs to SNS include legal use of the patented process(es). Non profits, start-up sites and services, and other organizations not able to afford full price for the legal use of patented process could possibly take advantage of a reduced fee structure.

MORE INFORMATION

www.redstarhs.com -- Video, Flow Charts, option details

CONTACT INFORMATION

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CERTIFICATION

"I certify that I have read and agree to the terms of the Internet Safety Technical Task Force Intellectual Property Policy."

