

Helping Users Deal with Digital Threats

This article focused on how to protect users that are not experienced with navigating the Internet or how to protect users that do not know how to protect themselves from “digital threats”. The basic approach that the author suggests is to babysit users that are attempting to enter sites that may be a risk or that are inappropriate for them. Their approach is called the Oversee Architecture. It ties together users, service providers, and supervisors.

They point out that the current model relies on one of two methods of serving content. Either you assume trust with everyone and just give them the content or you use an authentication scheme. Obviously one of the major selling points of the Internet is anonymity. Anyone can claim to be whoever they want and it’s almost impossible to validate that claim while still maintaining a reasonable level of usability. Even using credentials is not fool proof. Usernames and passwords are stolen and hijacked on a daily basis and registration tends to suffer from the same issues of anonymity.

The Oversee architecture hopes to solve these problems by creating an extra step between when a request is sent and when it is serviced. This extra step includes an extra bit of credentials checking and if necessary blocking the request or requesting supervision. When the user registers for the site they must give some kind of information that can be easily verified and then they are given an ID card that they can use to access the service from then on. Then they send a request they are then asked for the card. If the card says that they do not meet the requirements of the service more work needs to be done before the request is allowed through.

During registration it may be necessary to have a guardian or something similar that must give permission to the user. This “guardian” is then contacted whenever this particular user gives their ID. Going back to the request from before, since the user did not meet the requirements for the request the guardian is contacted. If the guardian replies and gives consent then the user can continue through and get their requested service. If not, the request is denied. Running with the assumption that the guardian gave consent, the user is not only allowed through but they are also assigned a supervisor. The supervisor will make sure that the user acts within their limits while using the service.

The idea of supervising any real number of users simultaneously is a rather daunting task and one that I question. They suggest using an automated system that will flag things as needed. The problem with this is that some actions are rather hard to monitor accurately and can be fooled by either false positives or tricked into thinking something is acceptable. There are already systems in place to monitor users such as chat filters. People have since come up with clever ways of spelling words so that the filter misses the violation. The same would hold true for the supervisor. Using real people as the supervisor also means you must have a large number of supervisors for a large number of users. This is again a very daunting problem when you consider the size of the Internet community.

I also question how this would work with contacting the guardian. They would have to respond at all times or else accidentally reject the user. This extra step greatly reduces the ability of users to access legitimate content. It would also become a great hassle for a parent,

for instance, to try and keep up with the requests. It is very easy to jump between hundreds of sites within a very small period of time and if a request is sent to them every time a child tries to navigate to a site they will probably disable the service within a week.

Finally there's the problem of how to determine what needs to be monitored. It seems like with the Oversee architecture the web services need to opt in and then remake their site to make it work. Most companies won't see the benefit in doing this and will probably not put in the effort. The illegitimate companies are almost certainly not going to redo their site just to help keep people out. To me this does not seem like an overly effective solution to keeping users safe while online. It doesn't seem to solve any of the problems of existing parental/online management systems.