

# The future of spam



In the 1930s, the US psychologist Abraham Maslow formulated a theory that according to which, everybody has a series of basic needs that must be covered in a certain order, so that until one has been covered, the next cannot be fulfilled.

These needs start with the most basic physiological needs, such as satisfying hunger and thirst, maintaining an adequate body temperature, etc. If one of these needs is not fulfilled, as it is a basic need, it will take priority over the rest.

The next level includes security and safety needs. It reflects everybody's need to feel safe and protected. In the Western world, they include having a decent home, living in an adequate area of a city, regular employment, etc.

The third level of the Maslow pyramid includes social needs, affection, belonging, and acceptance. These needs cover friendship, love, social recognition, etc.

The fourth and penultimate levels reflect esteem, recognition of the individual for the tasks carried out, such as work or study. The tip of the pyramid is self-actualization. These are the highest needs, the needs that help the individual to find a meaning in life, and include philosophical and religious experiences.

As the Romans confirmed centuries before in their motto "primum vivere deinde philosophari" (Live first, then, philosophize), this philosophy leaves the priorities of the individual very clear. But, what does this have to do with malware?

Spammers target several layers of the Maslow pyramid with a wide range of email messages. If you stop for a moment to think about the history of spam, you will be able to see what messages users have received.

One of the oldest spam messages was about mortgages. Independent real-estate agents and stockbrokers saw spam as a very good system for quickly earning commission. Backed by real investment or mortgage brokers, if clients carried out an operation and they had led the client to the corresponding website, they would earn commission by simply sending several (or several thousand) emails.

This type of spam directly targets the second level of the hierarchy of needs, taking advantage people's need for a home.

Other types of spam attacks that have been carried out for a long time, and will continue doing so until the end of the Internet, are spam message referring to lotteries or casinos, and those that invite users to find love. These correspond to the third level in the Maslow pyramid, and are the most appropriate for computer users. People who have not been able to satisfy the

# The future of spam



basic levels, probably cannot, or even do not want to, access a computer to check their email messages.

Nowadays, there is nothing unusual about using the Internet and computers (especially for anyone reading this article), but on a global level, it is still an item available to very few, those that can afford to buy a computer, or that use a computer at work.

It is true that there are cyber-cafes, which make the Internet available to many people, but very few homeless people are going to worry about spam messages about sexual relationships. Therefore, the third level of the Maslow pyramid is the first level that computer users might need to satisfy. For this reason, the majority of spam targets these levels.

Finally, and another example of classic spam, is the fourth level, which represents esteem. And what better esteem than successful sexual relations? Email messages that promise pills for increasing your sex drive or systems for enlarging sexual organs simply influence this need. As they are repetitive and insistent, you may conclude that they must be effective, that the senders of these messages hit the target, otherwise they would have stopped sending them a long time ago.

There are two levels missing from this structure: the most basic; the first, and the last; the highest level. Obtaining the first level, which represents the basic survival needs, has not been targeted by spam. It has a logical explanation, as the physical survival of people (food and drink) cannot be offered directly via the Internet.

The Internet is not going to provide water or food, or air to breathe. People make sure that they are fed and watered before they connect to the Internet, and they do so in environments in which they can breathe (although there are cyber-cafes for smokers). Therefore, it does not make sense to send spam messages offering an incredible soft drink. It does however, make more sense if it is part of an advertising campaign, but in this case, the level of the pyramid it targets is not the basic level but one of the higher levels (it could fall into level three or four).

The highest level, the tip of the pyramid, could also be targeted, in messages in which spammers 'sell' sects, churches or philosophies of life. This is a very sensitive element, and it is unlikely that someone would adopt a religion (or change religion) because they have been bombarded by email messages. It is true that many religions make the apostolate of its members a virtue, but messages urging people to "convert" cannot be very effective, as they are simply not sent.

However, the idea of the Internet is changing. The web 2.0 philosophy is creating many systems that can be compared to a better life, a future like that offered by many religions to its members. Second life, for example, is

# The future of spam



becoming a refuge for many users to realize their projects, or at least to interact with fellow humans in a different way to that conceived today.

There is a growing number of interactive systems, creating an ideal universe in which maybe nobody is who they are, only who they want to be. Therefore, it is highly possible that in the near future; spam aimed at social networks will appear, targeting the maximum level of the Maslow pyramid: achieving the final aims in life, even if it is in Second Life.

**Fernando de la Cuadra**  
**International Technical Editor**  
Panda Software (<http://www.pandasoftware.com>)  
E-mail: [Fdelacuadra@pandasoftware.com](mailto:Fdelacuadra@pandasoftware.com)