

# Is Hoax a Cyber Security Problem?

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## Abstract

A while back, I wrote a paper on cyber security and included a section on hoax. That section was edited out because it was considered out of topic. Not a cyber security problem. In this paper, I argue that hoax is a cyber security problem.

## 1 Introduction

Cyber security is a hot topic these days. There are numerous incidents (events) related to cyber security, ranging from (cyber) frauds to (cyber) war. Statistics are available to support this. However, not many mentioned hoax as a cyber security issue.

Many view information security as technical problems, such as hacking (or cracking, the proper term) networks and applications. It should be noted that there are non-technical issues related to information security. For example, in business, the failure of IT system can disrupt business. Thus, there is a need for disaster recovery plan (DRP), business continuity planning (BCP), and so on. In IT security terminology, this is an availability aspect. The point is, IT is not a business issue.

In information security, we have a technique (methodology?) called social engineering to gain information via social approach. This is a prove that information security is not only technical in nature.

## 2 Hoax

What is a hoax? [Definition]

Hoaxes are distributed to many channels, such as fake news sites, social media accounts, WhatsApp groups, and other internet-based services. (Text messaging or SMS is also a means to distributed hoaxes, but they are not popular since there are costs related to distributing these hoaxes via text messaging.)

Some examples of fake news sites are ... They often use names or domain names that are similar to popular domains. Could this be considered a typo squatting problem?

Many people consider hoax not a cyber security problem.

Hoax is a news (social?) problem. Hoax uses news sites (albeit fake ones) to propagate. Thus, hoax is a journalism problem. Therefore, it should be dealt by “dewan pers” (in Indonesia).

Hoax is distributed via IT-related products. Thus this is a cyber security problem. It is similar to other crimes or frauds committed through IT systems. For example, there are scams in auction sites, fake (bank) transactions. These are conventional crimes carried through IT-system. They are considered as cyber crimes, cyber security problems.

(But, if a person is committing a crime through telephone, is it considered a cyber crime? or conventional crime?)

### 3 Dealing with Hoaxes

There are several approaches to deal with hoaxes. The first aspect is to detect hoaxes. The next step is what to do after we know that the message is hoax. We have a choice of removing it, doing nothing, or contributing to the dissemination of that hoax.

[Detecting hoax.]

Removing hoax. One technical approach to deal with hoaxes is to borrow methods in dealing with spam, malware (virus), cyber porn, or cyber gambling. One method is to filter the domain name (DNS) of the site hosting the hoaxes. Problems related to this approach are (1) who is responsible of judging whether it is hoax or not? (2) who manages the filter list, (3) how do ISP or users use this filter list?

Using filter list to combat hoax is still problematic, since users can easily create a new domain. A better approach would be to “follow the money”, as being used to fight cyber gambling.

In Indonesia, the authority dealing with this problem is in one roof; Ministry of Communication and Informatics. In theory, it should be easier to create regulation related to this.

### 4 Concluding Remarks

Hoax is a cyber security problem.

Dealing with hoax can be done using controls used to deal with other security problems; such as using filtering, and regulation.

What makes a problem, a cyber security problem?