

Digital technology



As digital technology has advanced over the past 50-odd years with a force unprecedented in history, governments, businesses and people around the world have been affected immeasurably. The already enormous and still growing capacities for electronic storage, transmission and rapid manipulation of data changed the modern landscape virtually overnight, making the world unrecognizable in many ways to those of earlier generations. Perhaps with some of the bias that is part of the older generations, it is taken for granted that the changes have included substantial benefits.

However, such fundamental restructuring in society also results in certain disadvantages, on all levels. As we begin to rely on this technology more and more, we in fact become more vulnerable. A potential example of how damaging this reliability can be may become most evident in the next several months as we approach ever closer to the dreaded Y2K. This is a problem that resulted from human laziness and greed. However, it was not meant to be malevolent. Increased opportunities for the industrious to be more productive also allows the criminal mind new avenues for malevolence.

The explosion of the world of information technologies has a negative side: it has opened the door to antisocial and criminal behavior in ways that would never have previously been possible. Computer systems offer some new and highly sophisticated opportunities for law breaking, and they create the potential to commit traditional types of crimes in non-traditional ways. In addition to suffering the economic consequences of computer crime, society relies on computerized systems for almost everything in life, from air, train and bus traffic control to medical service coordination and national security.

Even a small glitch in the operation of these systems can put human lives in danger. Society's dependence on computer systems, therefore, has a profound human dimension. The rapid transnational expansion of large-scale computer networks and the ability to access many systems through regular telephone lines increase the vulnerability of these systems and the opportunity for misuse or criminal activity. The consequences of computer crime may have serious economic costs as well as serious costs in terms of human security.

This paper will discuss various computer crimes, techniques, and tools, as well as dispense some advice on how to prevent it from happening. Some court cases and computer crime stories will also be reviewed. One of the first things that will be discussed is who exactly commits these crimes? Several different types of people commit computer crimes. In fact, the reader of this paper, as well as the author has probably committed some form of computer crime. It is not as impossible as one may think. If you have ever borrowed a friend or relative's software and installed it on your computer, you are guilty of piracy.

The product was not purchased from the company, therefore resulting in a loss of their annual profits. No matter how trivial it may seem, a crime has been committed. This however, is not the type of computer crime that society should be concerned about. The two that many people are familiar with are hackers and crackers. According to The New Hacker's Dictionary, cracker is defined as someone who breaks security on a system. Hacker is defined as a person who enjoys exploring the details of a programmable

system and how to stretch their capabilities; one who programs enthusiastically, even obsessively.

Both crackers and hackers break into computer systems, but their motives are different. Hackers break in for the intellectual challenge, while crackers are more malicious and out to harm or cause damage to a computer system. There are sets of rules that hackers tend to follow. Also, crackers tend to be motivated by profits and/or revenge. As the number of hackers decrease, the number of crackers are increasing. The reason for this is because tools used for breaking into a system are becoming user friendly and are as easy as point and click.