

The Scourge of the Software Seas:
Software Pirates
Juan Miguel Guhlin

PROBLEM STATEMENT

The question investigated in this study was, "How can software publishers best deal with software pirates, not the corporate software pirates, but the individual software pirates who carry the bulk of software piracy?" This question has been investigated using available data, field research, and ethnographic interviews.

Purpose

The purpose of this study was to determine the causes and effects of software piracy by the individual user, as opposed to corporate software piracy, detail how software pirates disseminate pirated programs, and suggest ways to combat home computer software pirating.

REVIEW OF THE LITERATURE

Twenty years ago, few knew of computers and cared little for them. Now, only a few years later, so many people know about computers and how to manipulate them that the United States computer software industry loses an \$2.4 billion dollars (Markoff, 1992) a year in revenues. Computers have certainly revolutionalized the world. Their entry into businesses, education, medicine, and a variety of fields have left those who use them particularly vulnerable. The brand of computer user receiving the most attention, nationally and internationally, is the software pirate. Software pirates are composed of business executives, doctors, teachers, secretaries, and really, anyone who has access to a computer. Software piracy is defined as follows:

The unauthorized reproduction of software. It is considered a crime under Title 17 of the United States Code. Violation of the copyright law can result in costly fines or jail terms of up to five years (Holmes, 1992).

Software piracy has grown in popularity because, little by

little, it has become the simplest way to acquire software. Some fledgling businesses, in order to cut back on costs, buy only one set of software. They might purchase Microsoft Windows, Microsoft Excel, MS-DOS v5.0, Word for Windows, and Paradox. However, to

save on the almost prohibitive licensing costs, businesses will copy a single-user edition of the software onto more than one computer. This is in clear violation of copyright law. Single-user editions stipulate that the software not be used by more than one person at a time. If a business wants to use a software program at more than one computer workstation at a time, they must purchase a network version or a site-license. Network versions and site-licensing easily run up into thousands of dollars. Some companies even encourage employees to take home extra copies of the software to work at home. This practice is known as "softlining" (Holmes, 1992). Companies are "required to comply with the one software, one computer rule if they have not reached a special arrangement with the software publisher" (Holmes, 1992). Certainly, special arrangements are costly. Watchdog organizations have identified two patterns of corporate piracy. These two patterns are as follows: (a) It is company policy to purchase one copy of commercial software and make additional copies as need arises and (b) An employee brings in a software package and allows someone else to copy it, and it is soon spread among various departments (Mason, 1990).

Businesses face stiff penalties for violating copyright laws. An anti-pirating organization known as the SoftwarePublisher's Association (SPA) has gained a reputation for investigating and prosecuting software pirates. The Association was formed by software publishing companies to combat software piracy. Its main targets are corporations that engage in suspicious software copying. The Association has "raided approximately seventy corporation since 1988, and most of the raids have taken place since November 1990." The Software Publishers Association predicts it will have made one-hundred raids by the end of 1991. Only one of the companies accused of software piracy has been vindicated (Fitzgerald, 1991).

In one situation, Versatron Corporation, a California aerospace design firm, paid a sixty thousand dollar fine for using pirated copies of Lotus 1-2-3 (an electronic accountant's book or spreadsheet program characterized as the mainstay of business computing) and AutoCAD (a computer assisted design program used for designing). Versatron Corporation stated that "it was company policy to buy only one licensed copy of each program and

copy it to all user machines" (Fitzgerald, 1991). In another case, the Software Publisher's Association charged Computer Dynamics Incorporated because it had pirated one thousand, four hundred and sixty copies of several software programs. Computer Dynamics Incorporated used the programs for public training classes and everyday operations. The Software Publisher's Association was tipped off by a Computer Dynamics employee (Nash, 1991). As of summer 1991, the Software Publisher's Association has collected over two million in penalties from software pirates (Wasch, 1991).

Businesses are composed of individuals. The bulk of software piracy is not carried by businesses, but by individual computer users. The reasons as to why they pirate are varied. Some of their reasons include the fact that licensing agreements are confusing, it is easier to justify paying for a program after you have used it for awhile rather than just buying it off the shelf (highlighting the success of shareware, try before you buy software), and software costs are prohibitive. Software piracy "is easy to do and difficult to control. Every computer has the equipment necessary to make a perfect copy of a software product" (Wasch, 1991). Two surveys conducted by James Madison University on computer ethics focused on business executives in the computer industry and college students. The surveys yielded the following results: (a) Over seventy-five percent of business practitioners said they felt ethics could be acquired in a classroom setting and (b) almost half of student respondents admitted to using the computer for unethical practices. The largest group of student hackers and/or pirates were the information systems majors and MBA candidates. The final result of the study was that businesses desiring high ethical standards among employees could not depend on colleges and universities (Forcht, 1991).

Since every computer has the necessary equipment to make perfect copies of software products, the software industry faces an even greater challenge than that posed by businesses and corporations. Hundreds of computers are sold daily in the United States, and even more around the world. Most home computer users have few reservations about copying software from work and bringing it home with them. Furthermore, such software is often passed on to other home computer users who otherwise might not have access to the software. While one might argue the benefits of widespread saturation of software in American homes, the losses in computer revenue certainly cause justifiable alarm for software publishers. Not only do software developers prosecute pirates, they also pass on the cost of lost

revenue to users by "increasing purchase prices, charging for technical support, and raising upgrade fees" (Rawland, 1991).

An intricate network exists internationally composed of individual software users. These software pirates use their computers, modems (a device that allows the computer to use the phone), and special software compression programs (that compact software programs for easier transfer over telephone lines) to send software around the world. Electronic bulletin boards, that is, computers set up to serve as bulletin boards where users can post and respond to messages by calling in with a modem, have served pirates well. Although not the original intent of electronic bulletin boards, software pirates have taken advantage of a bulletin board's upload and download area to send and receive software programs (Uploading sends a program or information to the other computer; downloading gets or receives information from another computer). Computer users, including pirates, use special programs to compress data sent over phone lines. These data compression programs typically put all of the program files into one large file. The compressed program, once spanning several floppy diskettes, now fits on one floppy diskette. The compressed program is easier to handle and thus lends itself to uploading and downloading. It must be noted that compression programs are used by software publishers as well as software pirates.

Electronic bulletin boards "increasingly have become places where users can traffic in pirated software, particularly games" (Alexander, 1991). For example, one bulletin board run by Microsystems Software Inc. gave access to three hundred megabytes of compressed games. Since most game programs average about five megabytes of disk space uncompressed, one megabyte compressed, Microsystem Software Incorporated violated approximately three hundred software licenses. Before Microsystem Software could be investigated more fully, it deleted or removed the pirate section of its electronic bulletin board (Alexander, 1991). This past summer, June 1992, the Federal Bureau of Investigation (FBI) apprehended the system operators of the pirate bulletin board, Davy Jones Locker located in Millbury, Massachusetts. Davy Jones Locker distributed approximately over two hundred illegally copied programs. This crackdown on Davy Jones Locker began the crackdown on bulletin boards that distribute pirated software. The crackdowns began June 1992 as a result of the bill passed by the United States Senate on June 8, 1992 making "illegal distribution of software a felony" (Daly, 1992). The Federal Bureau of Investigation was tipped off by the Software

Publisher's Association.

Studying the causes and effects of software piracy among individual computer users may provide software publishers with insights into how to best address the problem of piracy. While capturing corporate pirates may garner much attention, prosecution of individual pirates and pirate bulletin boards is difficult. Thus, anti-pirating organizations such as the Software Publisher's Association (SPA), the Software Action Group of Europe (SAGE), Business Software Association (BSA), the Federation Against Software Theft (FAST), and the Canadian Alliance Against Software Theft (CAAST) might be able to better address software piracy among home computer users. The primary objectives of this study are to discover the causes and effects of software piracy among home computer users, how software piracy survives despite anti-pirating organizations, and whether software pirates will stop pirating as a result of the June 8, 1992 law on the illegal distribution of software.