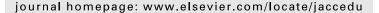


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Educational case

Q-analytics: An ethics case on unlicensed software usage

Charles D. Bailey a,*, Jared S. Soileau b,1

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ABSTRACT

This short role-taking ethics case is designed to provide students with several different perspectives related to the unauthorized/ unlicensed use of software within a realistic accounting setting. Although the case could be considered for use in a variety of accounting classes at both undergraduate and graduate levels with limited preparation, it is likely to be most relevant to Accounting Information Systems, Auditing, Controllership, and Accounting Ethics courses. The case can be read in about ten minutes, after which the class is assigned to groups that deliberate over the concerns of six different roles regarding the software-usage issues implied in the case. The issues are relevant to the students because they will inevitably encounter software-usage problems in their personal or professional lives. Furthermore, they inevitably have been exposed to similar copyright-infringement issues in the realms of music and video, which helps make for a rich class discussion. The case has consistently generated considerable discussion and debate within a graduate-level controllership course. A survey of students from five graduate accounting classes over a 3-year period indicates favorable perceptions of the case.

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1. Introduction

This case provides students an introduction to software piracy, and the legal and ethical consequences of decisions that they may encounter personally or professionally. While the authors have used it only in graduate classes, its simplicity and familiar context – suggest applicability at any level

^a School of Accountancy, 200 Fogelman College Administration Building, The University of Memphis, Memphis, TN 38152-3120, United States

^b Department of Accounting, 3111A Patrick F. Taylor Hall, Louisiana State University, Baton Rouge, LA 70803-6304, United States

^{*} Corresponding author. Tel.: +1 901 678 5614; fax: +1 901 678 0623. E-mail addresses: cbailey2@memphis.edu (C.D. Bailey), jareds@lsu.edu (J.S. Soileau).

¹ Tel.: +1 225 578 6216; fax: +1 225 578 6201.

in the accounting curriculum. The case is inspired by Christensen and Eining's (1994) case,² adopting a sociological perspective in which students are asked to consider their reactions from six viewpoints (of individuals or society) identified within the case. The roles allow participants to identify the actions that should be taken and to discuss factors that might contribute to their decisions as well as the impact of their decisions on other entities identified within the case. The case also provides background information related to the definition and costs of software piracy, the growing awareness and understanding of the phenomenon, incentives for reporting cases of software piracy, and legal, ethical, and reputational considerations of the improper use of software.

Through this case, students will learn about the legal and ethical issues surrounding the illegal copying and use of copyrighted software, commonly referred to as software piracy. The Business Software Alliance (BSA 2011b, p. 2) reports that in 2010 the global piracy rate for PC software was 42%, and that the estimated total packaged PC software losses has, since 2003, nearly doubled to \$58.8B. Although software piracy clearly is illegal, it is exceedingly common, and students are likely not to understand the substantial financial exposure for organizations that actively or passively engage in piracy. It also is likely that accounting students have minimized or not considered the related ethical issues associated with software piracy.

Christensen and Eining (1994) suggest that, based on results of one of their prior research studies (Christensen & Eining, 1991), a lack of awareness of laws as well as confusion about licensing terms may contribute to the prevalence of software piracy. However, more recently Woolley and Eining (2006) find that the understanding of legal concerns regarding software piracy has increased among both violators and non-violators of copyright law. As a result, it is now more difficult to attribute illegal copying and use of software to a lack of knowledge of piracy laws. During this same period, an increasing amount of freeware has become available, which may create confusion regarding whether a particular software application permits copies. Adding to the confusion, some license agreements allow faculty and students of educational institutions to install software on one home computer.

Christensen and Eining (1994) indicate that the legal terms by which licensing agreements explain the number of computers or disk copies permitted under the software license agreement may be confusing (see Appendix C for an example) and thus may result in inadvertent acts of piracy. Regardless, when installing software, users are unlikely to read the license agreement before accepting it, as they already are committed to use the software and realize that they cannot change the licensing terms.

2. Instructional case

The case appears in Appendix D in a form ready for printing and distribution to students. It is intended for use in the classroom with limited prior preparation. Although the case is designed to provide an understanding of software piracy, it should also encourage increased awareness and considerations of various other ethical decisions that students may face currently or during their careers as accounting and business professionals. Using a case-study approach, students evaluate benefits and consequences of potential actions while gaining a better understanding of the implications of their decisions, based on the responses of classmates. While the case addresses software piracy, discussions could also include other copyright infringement examples, including music and video piracy, with which many students identify. In addition, the case may also prompt students to consider possible actions that would be appropriate if they ever encounter a supervisor who instructs them to perform questionable activities.

3. Software piracy

Section 117 of the Copyright Act, *Limitations on exclusive rights: Computer Programs* (Appendix A), indicates that the "owner of a copy of a computer program" (i.e., the licensee) is permitted to make

² That case was much appreciated and used for years by the first author, but now is outdated by technological advances. We contacted the authors and determined that they did not intend to revise their case.

an additional copy for archival/backup purposes for the event of hardware failure. In addition, Section 117 requires the licensee to destroy all backup copies of the software "in the event that continued possession of the computer program should cease to exist." Part (b) of Section 117 requires the licensee to transfer the original and archival copies of the software to the lessee or purchaser in the event that the licensee leases or sells the software to a third party. Part (d) of Section 117 defines maintenance and repair, while part (c) indicates that copying of the software is permitted by a third party for the specific purpose of maintenance or repair.

A key point, however, is that the "owner of a copy of a computer program" is a licensee whose rights are limited by the license. The Business Software Alliance (BSA, 2011a) explains this, as follows:

When you purchase software, you are actually purchasing a license to use it, not the actual software. The license is what tells you how many times you can install the software. If you make more copies of the software than the license permits, you are breaking the law. Whether you are copying, downloading, sharing, selling, or installing multiple copies of software onto personal or work computers, you are committing software piracy. (http://www.bsa.org/)

The BSA defines software piracy as "the unauthorized copying or distribution of copyrighted software. This can be done by copying, downloading, sharing, selling, or installing multiple copies onto personal or work computers" (BSA, 2010a). The BSA identifies the following five common types of software piracy, based primarily on differences in the number of copies made, the media used to distribute copies, the user of the software (individual or company), and whether payment is involved (BSA, 2010a):

- "End User Piracy" includes illegal reproduction of copies of software and use on multiple systems (includes installing an authorized upgrade of an unauthorized application and inappropriate use of academic or other restricted-use software).
- "Client–Server Overuse" involves using more network copies of software at a specific time than the number of licenses purchased.
- "Internet Piracy" includes Internet sites and networks that allow downloading of software to individuals without a legal license to the software.
- "Hard-disk loading" is the practice of installing illegal copies of software on new and used computers for sale.
- "Counterfeiting" is the duplication and sale of illegal copies of software as an authentic product of the legal publisher.

Software piracy is punishable by both civil and criminal penalties. The BSA (www.bsa.org) indicates that civil penalties range from a minimum of the cost of an authorized software license to \$150,000 per illegal copy of the software. In addition to civil penalties, felony criminal penalties for software piracy carry up to \$250,000 in fines and/or a maximum of 5 years in prison.

A common reason why people are willing to use pirated software is the perceived lack of harm. However, the *BSA-IDC Piracy Impact Study* (2010b, p. 2) estimates if the global piracy rate were reduced by a total of 10% over 4 years (2.5% per year), this would result in a global economic impact of \$142B, the creation of 500,000 new high-tech jobs, and generation of \$32B in new tax revenues by 2013.

Both the BSA and the Software & Information Industry Association (SIIA) are dedicated to preventing and prosecuting violations of the relevant copyright law within organizations. In particular, they offer substantial rewards to whistle blowers. Both have hotlines for that purpose, and both offer a reward of up to \$1 million. See Appendix B for descriptions of the missions and activities of these two organizations.

4. Summary

Software usage raises a number of issues that are relevant for accountants regardless of their job descriptions. This case introduces a representative scenario involving an audit manager, her team, the firm's managing partner, the software author, the distributor of the software, and society at large. In the Teaching Notes, suggestions are provided to guide discussion. Time demands are moderate for both the students and the instructor, and the case is suitable for a broad variety of courses including

but not limited to both graduate- and undergraduate-level Accounting Information Systems, Auditing, Controllership, and Accounting Ethics courses.

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Comments and suggestions provided by two anonymous reviewers and the editor, David E. Stout, have significantly improved the quality of this case and teaching notes associated with it.

Appendix A. US Copyright code provisions

§117. Limitations on exclusive rights: computer programs

- (a) Making of additional copy or adaptation by owner of copy. Notwithstanding the provisions of §106, it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:
 - (1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or
 - (2) that such new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful.
- (b) Lease, sale, or other transfer of additional copy or adaptation. Any exact copies prepared in accordance with the provisions of this section may be leased, sold, or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale, or other transfer of all rights in the program. Adaptations so prepared may be transferred only with the authorization of the copyright owner.
- (c) Machine maintenance or repair. Notwithstanding the provisions of §106, it is not an infringement for the owner or lessee of a machine to make or authorize the making of a copy of a computer program if such copy is made solely by virtue of the activation of a machine that lawfully contains an authorized copy of the computer program, for purposes only of maintenance or repair of that machine, if
 - (1) such new copy is used in no other manner and is destroyed immediately after the maintenance or repair is completed; and
 - (2) with respect to any computer program or part thereof that is not necessary for that machine to be activated, such program or part thereof is not accessed or used other than to make such new copy by virtue of the activation of the machine.
- (d) Definitions. For purposes of this section
 - (1) the "maintenance" of a machine is the servicing of the machine in order to make it work in accordance with its original specifications and any changes to those specifications authorized for that machine; and
 - (2) the "repair" of a machine is the restoring of the machine to the state of working in accordance with its original specifications and any changes to those specifications authorized for that machine.

Appendix B. Software publishers' organizations and anti-piracy activities

At least two organizations are actively engaged in programs to reduce software piracy by educating users and prosecuting serious violators. They are the Software & Information Industry Association (SIIA) and the Business Software Alliance (BSA). Their missions are described in the following excerpts from their websites:

The Software & Information Industry Association (SIIA, 2011) is the principal trade association for the software and digital content industry. SIIA provides global services in government relations, business development, corporate education and intellectual property protection to the leading companies that are setting the pace for the digital age.