A Case Study in Software Licensing

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Involved in an ethical dilemma, Mr Strain is a Professional Engineer that works for a company called Stress Engineering. Mr. Strain has recently discovered that he and his co-workers are violating a license agreement for a particular software package. The violation is that the company has only legally obtained one copy of the software but have it installed on the majority of workstations at Stress Engineering. The license agreement being violated specifically states that if the software is installed on more workstations than paid for then the license fee will be increased. As a Professional Engineer, Mr. Strain has certain ethical obligations to his profession and to himself. Mr. Strain could face penalties from the disciplinary powers of his profession if he does not report the violation. He is also aware of ethical business practices that his company should follow. This paper will show, by using the engineering design process to ethical decision making as proposed by Andrews and Kemper[1], that Mr. Strain should immediately bring the violation of this license agreement to his supervisors to be dealt with.

There are three steps involved in applying the engineering design process to ethical decision making. The first step is that the problem must be recognized. Mr. Strain has discovered that the majority of engineers at Stress Engineering are using software in direct violation of it's license agreement.

The second step is that the information must be gathered and examined so that interested parties can make an informed decision for a course of action to resolve the problem. Mr. Strain has learned that the software license dictates that it may only be used on one workstation, whereas the majority of his co-workers have it installed on their workstations. Moreover, the company has already been violating the license for several months. In this particular case, Mr. Strain is committing professional misconduct as dictated by the Professional Engineers Act since it is regarded as unprofessional to violate a license agreement[1]. It is obvious that he must report this to the correct authority, which in his case would be a supervisor at Stress Engineering. This would result in the company having to purchase the additional required licenses.

The third and final step for solving the problem would be for Mr. Strain to implement the best solution to the problem. In this case the best solution may not be so obvious as one must often deal with other problems such as unethical managers. Mr. Strain should initially report this problem to his supervisor. Along with this he should follow the progress of his supervisors work concerning this problem. It would be ethical to be persistent and find out for sure if the company has allocated the appropriate resources and purchased the additional licenses. It may be in the company’s best interest to appoint an employee to keep track of license agreements and to make sure this problem does not happen again. If the company fails to take any action to resolve this problem, Mr. Strain should go above his supervisor and alert the appropriate agency of the situation. As well, Mr. Strain could resign in protest if no action being taken to amend the situation. Mr. Strain could contact a lawyer to find out if his resignation could be considered wrongful dismissal in a court case [1]. It has therefore been shown by means of applying the engineering design process to ethical decision making that Mr. Strain should report this problem to the appropriate party so they can allocate resources to purchase the required licenses.
There are numerous consequences that would arise and penalties suffered if Mr. Strain does not report the violation of the license agreement. Mr. Strain could lose his license, or have it suspended if the situation concerning the license violation were revealed to a disciplinary committee. Mr. Strain is committing professional misconduct according to section 2-j of the Professional Engineers Act if he fails to report it. This conduct “would reasonably be regarded by the engineering profession as ... unprofessional[3]” and he would be punished by a committee if detected. As a result of not revealing the license violation, Mr. Strain would also be putting his company at a serious financial risk, facing copyright infringement charges. Also through civil or criminal remedy the company could be forced to pay substantially more than the amount of simply purchasing the required licenses[2]. Through civil remedy, the software company would be “entitled to all remedies by way of injunction, damages, accounts, delivery up and otherwise that are or may be conferred by law for the infringement[2].” Stress Engineering may also be forced to pay “part of the profits that the [they have] made from the infringement and that were not taken into account in calculating the damages as the court considers just [2].” The potential consequences of not reporting the license violation are greater than those of reporting and purchasing the required licenses.

By reporting the license violation Mr. Strain would be demonstrating to his colleagues the importance of ethics in the profession of engineering. It is important for professional engineers to uphold public regard for the profession. The code of ethics exists “to protect general public by unscrupulous practitioners,” and “the code also raises the esteem for the entire profession[1].” According to a recent poll compiled by Readers Digest Magazine, Engineers are not among the top professions in which the public has the most confidence [4]. Readers Digest Magazine mistakenly omitted the Engineering Profession from the ballot because they were not aware that engineering was really a profession. It is for this reason that an engineer must do all in their ability to “enhance public regard for the [Engineering] profession by extending the public knowledge thereof[3].” It is clear that reporting the license violation would increase the regard for the profession within Stress Engineering, and those involved at the software company who has created the license. If this violation were exposed without Mr. Strain having brought attention to it, it would be extremely damaging to the reputation of Stress Engineering, as well as to the profession of engineers as a whole. All engineers should strive towards educating the public and raising respect for their profession.

It is beneficial for society that companies follow ethical business practices. Moreover, companies possessing certificates of authorization, which are required by firms that practice engineering, must follow ethical business practices as illustrated in the engineering code of ethics[3]. Software piracy is a widely spread unethical business practice. In 2001 the Canadian Alliance Against Software Theft (CAAST) completed a study in which it found that in the province of Ontario alone, software piracy accounted for a $150 Million dollar loss in retail sales, in which 38% of all software used in Ontario is pirated[5]. The financial loss in the aforementioned figures represent a large amount of damage to the economy. Mr. Strain is a professional engineer and thus for him to not “report a situation that ... may endanger ... the welfare of the public[3]” would be
grounds for revocation of his license to practice. Software piracy is a common problem even with reasonable software licensing fees, as Morgan Barnes, P.Eng, stated in a personal interview, “No one person could justify investing $100,000,000 in developing, say, Autocad. But all would be willing to license the use on one computer for $5000.” Mr. Strain would also be harming the business of his fellow practitioners by being able to provide his company’s services for much cheaper than his competitors do. Since his company would not have purchased all required licenses like his competitors, they would be able to charge less for their services. Therefore it would be ethical for Mr. Strain to report this problem.

One can see that by applying the engineering design process to ethical decision making that Mr. Strain should report the license violation to his supervisor or the appropriate agency. He should do so in order to enhance public regard of his profession, as well as to avoid any damages to the reputation of Stress Engineering that may be consequence of him not reporting the situation. Software piracy is a common practice in today's workplace and it is the duty of Professional Engineers to make the correct ethical decisions to avoid license infringement. Ethics are an important part of our society. This is especially true to the profession of engineering, in which there must be a high level of trust from society in order for the engineers to be able to do their jobs. Engineers such as Mr. Strain must know and abide by the Engineering Code of Ethics in all situations, especially regarding the situation of software license violations. The practice of ethical decision making in the workplace would be beneficial for Professional Engineers and society as a whole.
List of References


[2] Copyright Act

