SOFTWARE PIRACY

We regularly hear reports about the cost to the software industry of software piracy, but are the claims to be taken at face value? Statistics are notoriously biased towards what the author is trying to say.

There are three basic types of software, although these do have their own subsections, as will be discussed later:

1. Commercial software, purchased with a licence for one or more computers. This generally is coupled with some form of support and regular updates to patch errors etc. Sometimes a new version of the software is offered at a reduced rate as "update". This type of software is generally relatively expensive and is often designed to cover specific industrial purposes. The big exception is the various sets of "office" software, which are designed for use in the commercial environment, but can naturally be equally used for various tasks at home. The most common application in this category is, of course, text editing. Most of the other classic "office" applications, such as calculations and data bases are only of limited use in the domestic environment, although they will be used in some cases, particularly now that the more computer-literate generation is growing.
2. Simplified or "lite" versions of the commercial software. These are intended principally for small businesses and enterprises that do not need the complete capabilities of, say, a 3-D modelling system, but must be able to view such documentation and prepare compatible drawings. Again, the "office" environment was a long time not represented in this sector, but has recently started to be available. These will also come with a single or multiple, but limited licence and now mostly be registered with the manufacturer.
3. Free or "open source" software. This is designed for general distribution and has no particular limitations as to use, except that it may not be changed in any way. Naturally, such software has its limitations, but may serve very adequately for many purposes. Practically all types of software are to be found in this category. One notable application distributes the software to read its documents freely, but charges for the software to produce the documents. This policy is arguably the motor behind its ride to a position as industry standard, since you can always be certain that he receiver can decipher whatever is sent, without long discussions about compatibility and versions.

Clearly, there can be no piracy of products that fall into the third category, except for changing of the code or reuse of the code for other purposes, but this does not appear to be a major issue at the moment, so we will concentrate our attention on the first two categories.
Both of these categories contain software that is copied and distributed either free of charge or for a nominal fee. Naturally, the full versions of the software are preferred, but the simplified versions are also to be found, depending on what is available.
This puts our software pirates into two categories of their own:

1. Those who knowingly use a copy of software "borrowed" from work or supplied by friends, who probably acquired it by the same means.
2. Those who prepare copies of software from an original and sell it at a low price through internet auctions or on market stands. Their customers may, in many cases, be unaware that the software has been pirated and simply be pleased to acquire a software package at a bargain price. Some will be quite well aware of the actual source, but still prepared to take this means of saving money.

So who is to be found in these two groups?

1. This group is very widely ranged and consists of school children, people practicing at home with the company software, various private persons with an interest in computers who will try anything that is free and, possibly, very small businesses. Many schools will supply their students with copies of software licensed for the school to enable them to complete homework or learn to use it for technical subjects. A student finishing a technical school with little or no knowledge of the technical software used in their industry will not easily find employment, so a blind eye is turned in many schools to this practice. Schoolwork is often required to be written on computer these days, and again, this is only really possible if some form of text software is available. Those who use company software at home to play with or for their children to complete homework are also a large group. The computer has become a part of our lifestyle in the western hemisphere, and many people are interested in the possibilities opened by the modern generation of powerful number-crunchers. The days of mainframe computers costing hundreds of thousands of dollars is not gone, but the small computer in a network has taken over in many areas, so the professional software that would earlier have required a mainframe connection and a whole basement full of equipment will now run happily on a home computer. There may be a loss of speed, but who cares? The vast majority of these people know full well that what they are doing is not allowed, but consider this as a very minor matter, and would laugh at any suggestion that they should purchase the software officially. The few companies that also do this are saving money that they probably do not have, despite being aware of the risks.
2. The group of people who copy software and distribute it for sale as being genuine are working simply for profit, taking advantage of the simplicity of the process and the high prices of genuine software. The general public is not aware of the penalties for this type of action and is often unsure about recognising the genuine article. Other items in the consumer market are available from many manufacturers as basically identical products, so why should this not be the case with software? Very many are simply duped into buying what they see as a cheap alternative to a brand-marked product.

So what are the real costs to the software companies?
In most cases, school and college students would not be in a position to pay the costs for the expensive commercial software they use in technical subjects, and the schools and colleges are not in a position to supply this to them free of charge. Most schools have licences for software to be used on the premises, but this is not available for the students at home. Theoretically, they will use the computers at school to complete work and practice, but this is generally not possible due to a lack of resources, or classrooms locked because of vandalism. The only way to solve the problem is for the schools to simply distribute the software to their students on the basis of it being only for their use. There is no licence and no direct upgrade possible. Generally, although illegal, this system works quite well. Schools try to copy upgrades and patches for their students, mostly successfully. The snag to the matter is that we educate people in that this is perfectly acceptable practice, despite it being illegal. No-one would think of insisting or even checking that drop-out students erase the software and no longer use it, but this is probably fairly well assured by the fact that they have dropped out in the first place!
One of the best-known software companies has recently started to sell a slightly simplified version of their software in a student package, stating that this is not for commercial use. Naturally, this is being distributed to everybody without regard to their true status as student

or not! Nevertheless it is a definite move in the right direction. Providing an affordable alternative is the first step towards a solution for this problem. The quality is good and it contains all the usual features that are needed.

Other companies also offer free software for student use, but this is in most cases pitifully inadequate and simply not up to the job and no preparation for later commercial practice. It remains to be seen how far the availability of reasonably priced student software will affect sales of the commercial product. One of the factors presumably behind this move is the general attitude that the present software is perfectly adequate and can be used for a length of time without being replaced. Since many software houses have distanced themselves from the idea of upgrade software for older versions at a reduced price, this attitude will probably cause sales of the full commercial software to be limited to new systems, and not as an improvement on older systems.

The new wave of student software is probably intended to bridge this gap somewhat by providing extra revenue. Whether the fears of the others that the production of a student version at greatly reduced price will cut into their sales of the full, commercial version will prove to be correct, or the alternative view that these are complementary products will prevail will remain to be seen.

It is undoubtedly true that someone who has trained on one type of software will tend to remain loyal to it as far as company policies allow and that this is a definite motivation to purchase a type of software, hence the policy of the schools is unlikely to be challenged or mentioned publicly. Nevertheless, there is no reason for forcing our youth into criminal activity! Providing a solution that allows people to use these applications during training legally should be a priority for the software houses that will bring some revenue in the short term, and possibly more in the long term. One of the problems in the computer branch has always been the emphasis on short term results and quick profits, but this attitude will have to change soon to allow for these factors.

Again, the people who use the company software at home for fun cannot really be seen as a risk to the profits of a software company. They would simply spend their time otherwise in the evenings if they did not have this possibility! The matter only then becomes problematic when they begin producing work privately for other companies. This would then definitely be a matter for concern, both for the producers of the software and other companies in the same branch, who have to calculate the costs of software into their prices.

The problem is also geographically different. Most of the software packages originate, at least on paper, from the United States. The prices in Europe tend to be 1.5 to 2 times higher, without considering sales tax of any type, which is generally higher in most European countries. Whilst this may not be of consequence for the run of low-cost software, it is a significant difference when complex design or technical applications are considered. This price differential is often explained by higher support costs or translation costs, but these factors alone cannot be the complete reason. A change in this policy would probably help to reduce the level of use of copies in the commercial field at least. Splitting software packages into easily-upgraded elements would also enable small companies to purchase what they need immediately and then add the extra features in time as and when necessary.

Software piracy is legally a crime, but it is a crime that is still acceptable in our society. Very little has been done to combat it for a number of reasons. One reason is that it is almost universal amongst users of computers. Many people "need" an application once per year and

do not wish to pay the sometimes horrendous cost for the commercial licences. Companies have made no real attempt to combat it until now, since this is a form of free advertising, and the benefits of having it available to students have been mentioned above. It is only now, when the earning curve start to tip downhill that this is seen as a threat to company existence. In reality it is relatively simple to make something extremely difficult to copy. Impossibility is a dream in the computer world these days!

That criminal activity should be hindered and software piracy is, broadly speaking, theft, is quite correct, but the solution is not just to seek out and punish wrong-doers, but to find a solution for all these groups of people who, for one reason or other, wish to use the software, but cannot, or will not, find the means of paying the present market cost. An imaginative solution to this problem could well be the break-through that a company needs to make itself known in every household, provided the product is correct.