Research Paper

Computer Science

Addressing the Challenges of Computer Software Anti-Piracy in Developing Countries: Copyright Issues in IT Market

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ABSTRACT

The protection of intellectual property rights is an important aspect in the development of any country. Despite measures undertaken both at international level and efforts by individual and law enforcement agencies, software piracy, and one form of violating intellectual property rights still persist. Certain challenges pose a threat to these efforts of curbing computer software piracy in developing countries although they may be evident also in developed countries. Other challenges to computer software anti-piracy measures discussed in this paper include inadequate reinforcement of the law, collectivism behavior and novelty seeking among users, social acceptance of pirated software, belief that software piracy act as a means of transferring technology and Inadequate knowledge on the consequences of software piracy. Certain remedies are necessary to come up with anti-piracy policies. Some of the remedies presented include proper legislation and enforcement of the law on pirated software, educating the users on the consequences of software piracy, lowering prices of legitimate software, creation and implementation of computer usage policies among others.

Keywords : software piracy, anti-piracy, intellectual property rights, legitimate software, legislation

INTRODUCTION

The computer software piracy, "a problem that will not go away" as McDonald and Christopher Roberts (1994) puts it, is a problem that has manifested itself over decades and especially in developing countries. According to Saleh Al Sharari (2006), it is estimated that approximately 36% of all computer software worldwide is pirated with the highest statistics recorded mostly in developing countries. For instance, as he puts it, during the first annual BSA and IDC Global software piracy in 2004, the study showed that china led in software piracy with 92% followed by Vietnam (82%) and Kenya, a representative of developing countries in this paper following a distant at 80%. Saleh Al Sharari (2006) observed that many users are caught up in piracy without their knowledge.

Computer software piracy has got its own consequences some of which are hard to bear. Md.mahbubur, Rahim et al (2000) argues that software piracy may lead to disruption of social values. As they put it, if a child observes an adult committing software piracy, which is a crime, he/she may emulate the behavior, which may influence the child in thinking that other forms of crimes are also acceptable. Saleh Al Sharari (2006) noted that in the year 2003 alone, 30 billion dollars were lost due to software piracy. The following are the challenges of software ant-piracy efforts and their remedies.

CHALLENGES

Attractive Pricing of Pirated Software.

The costs of the original software are extremely high compared to those of pirated software (Eric Kin wai- Lau, 2006). Many computer software users are value conscious when purchasing software and they would rather go for the cheaper alternatives so long as they serve the same purpose. According to a study conducted by Eric Kin wai Lau (2007) in one of the Chinese universities, many respondents argued that although pirated software was cheaper than the original software, the two versions are completely the same. Many consumers see software manufacturers as being out to exploit them with ex-

orbitant prices of the original software. Swee. Hoon Ang et al (2006) explains that the more value conscious one was, the more likely he/she is to get involved in software piracy. The manufacturers of software should recognize that piracy would not end as long as the price gap remains wide (Fang Wang, Hongxia Zhang, 2005) and therefore they should consider lowering the prices of the original software.

According to Eric Kin Wai Lau (2007), attitudes towards pirated software are more enhanced by low-income levels of many computer users in many developing countries. If poverty levels are high and since one would want to use software, they will prefer the pirated version since it was cheap. A case is given where the cost of most office suites originals goes for US $300 while the pirated version going for as little as US $25. This automatically will drive the user towards the pirated version (Eric kin wai Lau, 2006).

Strong Demand for Software Due to Rapid Growth in Information Technology

With the rapid growth of Information Technology, computer software packages become outdated within no time (Eric kin wai Lau, 2006). The implications are that new versions of the original software become unavailable to many users. Since consumers need these packages, their only option is the pirated version that is readily available.

Inadequate Reinforcement of the Law

Inappropriate legislation of the law and its reinforcement has hampered with efforts to prevent software piracy. Many software users in many developing countries are not aware of the legal implications of software piracy (Theo Papadopoulos, 2004) and that they will see nothing wrong whether they use the original or the pirated versions of the software. As Eric kin wai Lau puts it, many software users have little or no knowledge at all of copyright law or the consequences of software piracy. They will always engage in software piracy so long as everybody else is doing it. Legislation as a means of curbing

piracy is further complicated by the differences in legal systems of different countries (Gael McDonald and Christopher Roberts, 1994).

Collectivism Behavior

Many cultures in developing countries are more groups oriented and this leads to the violation of intellectual property rights. According to Fang Wang et al (2005), software users who are group oriented have a common attitude of sharing what they have. This means that they are more likely to share computer software leading to increased piracy. Their belief is that if you visit my house and go with a copy of my software, you are doing so with my permission and thus you are committing no offence. In such other cultures, consumers are informationally susceptible where they buy software based on the opinions of others. They depend on other peoples' decisions on the quality of particular software. Others are normative susceptible where they make purchase decisions so as to impress others (Swee Hoon Ang et al, 2001). In all these situations, the behavior of consumers is influenced by others and this leads to group shopping increasing purchases of pirated software. According to Md.madbubur Rahim et al (2000), collectivism behavior is also common among academicians where they share copies of pirated software.

Novelty Seeking

This is personal gratification where the consumer will use pirated software to fulfill his/her own self-interest. According to Swee. Hoon Ang et al (2001) novelty seeking concerns an orientation towards self accomplishment, recognition by other people and enjoying good and finer things in life. Consequently, this will boost a consumers' attitude towards pirated software to achieve his/her interest. Software piracy is just a means of trying and testing new software and especially if computer literacy levels are low in a particular country (Fang Wang, Hongxia, Zhang, Hengjia Zang, 2005).

Belief that Software piracy act as transfer of knowledge

Most of the developing countries view software piracy as a means of transferring technology. According to Eric Kin- Wai Lau (2006), they argue that developed countries are selfish in technological advancement and that they prevent technological development in those countries in the name of what they call protection of intellectual property rights. According to Gael McDonald and Christopher Roberts (1994), these countries view software piracy as a roadmap to economic development and homegrown innovation. They cite examples of Hong Kong, Japan, Korea, Singapore and Taiwan which have resolved to invitation of piracy to economic growth and some of which have managed so far after the world war.

Unethical Consumer Behavior

Many software users tend to think that it is those selling the software who are guilty of pirating and that they hold no legal responsibility (Fang Wang et al, 2005). As they put it, they convince themselves that illegal copying of software is not a proper crime and are not likely to be caught in the crime. According to Eric Kin- Wai Lau (2006), many other users have little respect for those people who use original software and they see them as stupid. Due to this, these particular users will engage themselves in software piracy even if they know what they are doing is wrong. According to Swee Hoon *et al* (2001), other consumers' don't realize that it is unethical to buy pirated software although they know that they are not being fair to the manufacturers.

Inadequate knowledge on the Consequences of Software Piracy

In developed countries, there is no such a thing like educating a consumer who well knows that piracy is not allowed (Fang Wang, et al, 2005). However in many developing countries and given that there is newly expanding market growth, an education process is required to inform the consumers that it is wrong to pirate as the majority have no such knowledge. If the consumers do not know that the pirate's customer is as guilty as the pirate, they are unlikely to cease from software

piracy than when they are aware of the consequences involved when caught in the act. Eric Kin -Wai Lau (2007) adds that consumer users of software in most developing countries have no knowledge of the copyright law and this leads to leniency towards software piracy. They would not mind buying pirated software as long as everybody else within the society is doing it. Inadequacy of knowledge on the consequences of software piracy contributes positively to the leniency towards software piracy. A case is given in Jordan where the penalty for violating copyright law was set at a sentence for not less than three months and a fine of not less than JD 1000 to organizations and consumers violating copyright (Saleh Al Sharari, 2006), after which there were reported reduction in software piracy.

REMEDIES TO THE CHALLENGES

Proper Legislation and enforcement

To attain anti-piracy worldwide, there should be proper legislation followed by re-enforcement of the laws. Developing countries need to establish common laws pertaining software piracy. Sween Hoon Ang et al (2001) maintains that governments should educate their people followed by re-enforcement of the law. According to Michael Seadle (2005), there should be private enforcement where groups like the recording industry association of America (RIAA) are entrusted to protect intellectual property rights of their holders. If they believe that large numbers of people have infringed against other people's property rights, they file lawsuits against them. He further maintains that there should be also international enforcement and majorly in the Internet. Organizations such as RIAA should extend their enforcement to other countries other than their own and bring copyright infringers to courts (Michael Seadle, 2005). Saleh Al Sharari (2006) suggests that government authorities should also build the capacity of judges so as to be able to handle computer software piracy cases, as many of them do not even differentiate between legal and pirated software. There should be combined efforts by private investigative organizations (Gael McDonald, 1994). He cites organizations like Pinkertons, which protects copyright infringements of their clients. There should also be hefty fines and jail sentences for software pirators.

Education to Both Buyers and Sellers

As Fang Wang et al (2005) puts, many people in most developing countries may not be aware whether they are breaking the law or not in using pirated software. He suggests that there should be educational programmes to inform the pirate customer that he is also guilt of an offence just like the pirate.

There should be also continued campaigns about intellectual property rights and copyright targeting software developers and exporters to educate them about laws against software piracy (Saleh Al Sharari 2006). He maintains that computer software piracy is a crime committed to those exporting the software. According to software publishers Association (1998), students in colleges and universities should be made aware of software compliance. He also argues that institutions and schools should incorporate copyright lessons in their curricula. Eric Kin- wai Lau (2006) suggests education to young computer users to change their views and attitudes on intellectual property rights. He adds that many of young users use pirated software with full knowledge that it's a crime. They only need to change their altitudes and have positive orientation on legal software. According to Md.mahbubur Rahim (2000), educational institutions together with software vendors should embark on seminars and workshops aimed at explaining the rationale of not using pirated software.

Lowering the Prices of Legitimate Software

As it was cited in the challenges facing software anti-piracy measures, many Consumers attach value consciousness on their purchasing behavior (Eric Kin –wai Lau, 2006). They would prefer to go for cheaper alternatives so long as they all serve the same purpose. According to Eric kin wai Lau (2007) reducing the prices of the legitimate software will help in changing the attitudes of consumers on software piracy. He

maintains that manufacturers' should also provide discounts to users who may not afford the legal software and may be free software to students and academicians. Theo Papadopoulos (2004) recommends that software manufacturers' should lower price of original software even if their profit goes down. The losses they undergo through piracy are huge and are just equivalent to reducing the prices of original software with the aim of eliminating piracy. According to Eric kin- Lau (2007), the CD-Rom market pirated software emerged as a result of reduced price and same quality products

Introduction of Homegrown Innovations through Localization of Software Manufacturers

According to P.Trott et al (2007), most developing countries view software piracy as a way of transferring new technologies in those countries. They argue that restrictions on the development of software hinder innovations. Imitations on software technology have enhanced transfer of new knowledge, and employment in developing economies. Consequently, this aspect of viewing piracy as a transfer of technology has led to non-consensual acquisition of technological knowledge. P. Trott et al (2007), maintains that the developed economies should localize their markets in developing economies to prevent piracy. A case is given of the Republic of China where investors from foreign countries must involve local manufacturers whenever they want to produce goods for use in china. This will not only reduce prices of original software as no import taxes are imposed, but also to legitimately acquire skills on how to manufacture the same products. This will ensure that piracy is controlled. According to Gael McDonald et al (1994), developing economies view genuine product manufacturers as having their own self-interest in charging super-premium prices on original software. They argue that direct imports of software products with the locals being involved only during distribution and marketing at retail level contributes directly to piracy. The developing countries argue that profits are returned to the home origins of the product. Localization of markets will also ensure that software products are readily available in the local market. Md. Mahbubur Rahim et al (2000) maintains that there are so many bureaucratic procedures in the acquisition of software. If the manufacturers are localized, there will be no delays in software acquisition and this could decrease software piracy.

Creating and implementing Computer Usage Policy including Software and Internet Access

With the advancement in information technology, there has been increased numbers of new computer users and new markets have emerged (Saleh Al sharari, 2006). This has led to continual increases in transmission speeds to meet the demand of increasingly new users. Consequently, online software piracy has increased among most young users as they distribute software via the Internet. According to software publishers Association (1998), most college students hide behind their campus network and illegally distribute copies of software to one another. He further suggests that students and university staff should sign a policy on usage of their schools' computer system. A strict monitoring will follow this and any violators will lose their privileges. There should also be licenses issued in order to acquire software materials. According to Md.Mahbubur Rahim et al (2000), a code of ethics should be published and circulated among academics to read, understand, sign it and adhere to it. Any violation of such a code should lead to denial of Internet access. Sirigidi Subba Rao (2003) asserts that technical protection services should be offered in addition to licenses.

CONCLUSION

The losses associated with computer software Piracy are enormous. First it calls for continued law enforcement and legal actions whose associated costs are very high. Also it acts as a channel of spreading computer viruses hampering data protection efforts. Piracy also violates the intellectual property rights and manufacturers may be discouraged from hopes of developing any computer software industry not forgetting the disruption of social values leading to perception that even other forms of crime are acceptable as well. Despite efforts put in place to curb software piracy, it still remains a threat and more so in developing countries. In order to eliminate the vice, there needs to be combined efforts from different stakeholders including policy makers, business people, journalists, domestic and international organizations and even individuals.

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