

Software Piracy Perception and Framework: The Case of Nigeria

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ABSTRACT

This paper provided an overview of software piracy perception of Nigerians. Computer software is an essential component in computers. Humans have increasingly been depending on computers. However the piracy of software is a threat to the software industry. Its increasing threat must be checked so as to sustain the existence and use of computer. Software piracy has a high economic disadvantage to the nation and the developer. This paper first used questionnaire to know the perception of Nigerians on software piracy. A framework was then proposed for the prevention of software piracy.

Keyword: Software Piracy, Nigeria, Violations, Intellectual Properties, Framework, Perception and Protection

CISDI Journal Reference Format

Oveh, R.O., Imala, F.I. & Atenaga, M. (2018): Software Piracy Perception and Framework: The Case of Nigeria. Computing, Information Systems, Development Informatics & Allied Research Journal. Vol 8 No 1. Pp 111-115. Available online at www.cisdijournal.org

1. BACKGROUND TO THE STUDY

Software is a general term primarily used for digitally stored data such as computer programmes and other kinds of information read and written by computers usually in an intangible form (Dictionary Unabridged 2012). According to the Business Dictionary (2015) software is an organized information in the form of operating systems, utilities, programmes and applications that enable computers to work. It consists of carefully organized instructions and code written by programmers in any of the various special computer languages. Software could be system or application software. Computer users around the globe use unlicensed software at an alarming rate despite being well aware of the associated risk (BSA, 2016). Theft of software and other intellectual property has become one of the most visible problems in computing today (Peace, Galletta, and Thong, 2003).

Software piracy includes the unauthorized copying of purchased software. Most software purchased are licenced to one user or computer only and not to several. The licence user or licensee is only permitted to make back-up copies only (Nwogu, 2015). SafeNet (2015) classified software piracy into:

- ❖ Soft lifting: Purchasing a single licensed copy of software and loading it onto several computers contrary to the license terms, for example, sharing software with friends, co-worker and others.
- ❖ Uploading and downloading: Making unauthorized copies of copyrighted software available to end users connected to modem to online service providers and/or the internet.
- ❖ Software counterfeiting: Illegally duplicating and selling copyrighted software in a form designed to make it appear legitimate.
- ❖ Hard disk loading: Installing unauthorized copies of software onto the hard disks of personal computers, often as an incentive for the end user to buy the hardware from that particular hardware dealer.
- ❖ Renting: Unauthorized selling of software for temporary use, like you would in a video.

Banerjee (2004) broadly classified Software piracy into two categories; commercial and enduser piracy. Commercial piracy is the situation where a firm, hereafter referred to as the pirate, illegally reproduces and sells copies of legitimate software thereby competing with the original software producer, hereafter referred to as the monopolist. End-user piracy refers to copying by users for personal consumption but not for commercial purposes. Surveys all around the world report that people commonly use unauthorized software copies (Gan, and Hian Chye Koh, 2006; Lending and Slaughter, 1999). Because the unauthorized copying of software is widespread, companies claim that such behaviour constitutes a serious economic threat (Gan, and Hian Chye Koh, 2006). According to Chen, Chen and Yeh (2012), both Haruvy (2004) and Moores & Dhillon (2000) stated that increase in piracy would indirectly influence the profitability of software developers and the development of intellectual property, and reduce software designers' willingness to engage in software research and development; they also stated that the advancement of science and technology would facilitate the emergence of piracy and an increase in the piracy rate.

Hence, a country's higher level of science and technology means a stronger probability of software piracy and greater financial losses incurred by software vendors. However, a higher level of science and technology means better techniques to prevent piracy from happening. Nigeria as a country is said to rank among countries with cases of software piracy (Okwuke 2014). According to Bhoose (2011), almost half of the world's personal computer users acquire software through illegal means.

2. STATEMENT OF PROBLEM

Legally speaking, intellectual property refers to creations of the mind. They are covered under the law by copyright, patents, and trademarks. The patent and trademark are more often used to protect against competing firms, the copyright is the most widely used method of protecting consumer products, including computer software, music items, and books (Chang, 2002). Copyright is a branch of law that grants authors (writers, musicians, artists and other creators) protection over their works. Such protection consists in providing authors with ownership or property rights (or exploitation rights), which take into account their material interests. Under copyright, authors are entitled to protection against unauthorized use of their works as well as to a possible share in any earnings from its use by the public. There are two main justifications for the legal protection provided by copyright. The first is linked to economic considerations, while the second stems from theories referring to natural law. Nearly all copyright laws have taken into account elements from these two lines of argument, although different countries may give varying emphasis to each of them. From an economic point of view, granting an exclusive right ensures that the author will receive an economic reward for the exploitation of the work for a certain period and hence constitutes an incentive for creativity.

According to justifications based on natural law, on the other hand, each person has a natural right of property to the products of her labour. It is argued that this must also apply in the case of intellectual creations (UNESCO, 2010). The law ensures that inventors earn recognition or financial benefit from their inventions/creation. As regards intellectual property protection, one serious concern for copyright holders is piracy; that is, the unauthorized use of copyrighted goods. When a legal copyright exists, those who wish to gain access to the original copyrighted work must pay the copyright holder the access price. If an individual obtains access without paying a price, that person is said to have incurred an act of piracy. Even though piracy occurs for all types of intellectual property and can take many forms depending on the access type and intellectual property mechanism (Watt, 2001). The emergence of digital technologies poses a new threat to software publishers' revenues because these technologies provide the opportunity for copyright violation to a wide spectrum of users (Gallegos, 1999; Gopal and Sanders, 2000; Moorehouse, 2001).

3. OBJECTIVE

The aim of this paper is in two fold. The first is to assess Nigerian user's perspective of software piracy and its effect. Secondly, proffer solution to software piracy.

4. METHODOLOGY

4.1 The Research Design

Questionnaire was the research instrument used to access the perception of Nigerian users to software piracy. It was structured into two (2) parts: demographic information and user's perception. Eighty (80) questionnaire were administered across four geographical areas in Nigeria (i.e. Lagos, Abuja, Benin City, and Port Harcourt). Fifty (50) questionnaire were returned and used for the analysis.

5. DATA PRESENTATION

The demographic profile of the respondents is presented in Table 1. The respondents were software users. Most of the respondents were male (72.0%) and the highest age range was between 21-30. They constitute the set of people that love using technology and would like to explore.

Table 1: Demographic Information

Item	Frequency	Percentage
Gender		
Male	36	72.0
female	14	28.0
Age of the Respondents		
10 – 20 Years	6	12.0
21-30 Years	22	44.0
31 -40 Years	17	34.0
41 – 50 Years`	3	6.0
50 and above	2	4.0
Total	50	100

Source: Fieldwork: 2017

The data was analyzed using frequency analysis to determine user's perception of software piracy in Nigerian. The Result is presented in Table 2

Table 2: Users Perception

Question	Frequency	Percentage
I understand the meaning of software piracy	43	86.0
Economic factors are an incentive for me to purchase pirated software	49	98.0
Anti-piracy warnings are effective to stop software piracy	23	46.0
I have purchased pirated software in the past?	43	86.0
Purchasing pirated software will affect my social image?	4	8.0
I know of business's that have closed because of software piracy?	43	86.0
Have you purchased original software	1	2.0
Total	50	100

Source: Fieldwork: 2017

6. DISCUSSION OF FINDINGS

Findings are presented in line with the study objectives. Necessary inferences are drawn from some of the From table 2, it shows that respondents have a knowledge of what software piracy is (94%). That means they were aware of what their involvement would have on the developer. It could be seen from their response that economic factor is the major incentive for the purchase of pirated software. The original software is usually expensive for the users hence they opt for a pirated copy which is free or cheaper to obtain. The response shows that anti-piracy warnings are not effective at stopping software piracy, so there is the need to put more measures in place to ensure software users are warned about the effect and consequence of software piracy. The response also shows that despite they know about software piracy and its effect, they still go ahead to pirate the software (86%).

From the response, it shows that the society does not put any negative attachment to those that purchase pirated software, hence 92% were of the opinion that purchasing pirated software did not affect their social image. 86% of the respondents know of business's that have folded up due to software piracy, yet they still engage in software piracy wilfully despite its harmful effect on the business of software developers. Only 1% of the respondents have actually purchased an original software. It goes to show that pirated software usage is the norm in the society, despite the adverse effect on the software development industry. There is therefore the need to have an effective measure to stop software piracy. We therefore propose a framework as shown in figure 1 to prevent software piracy.

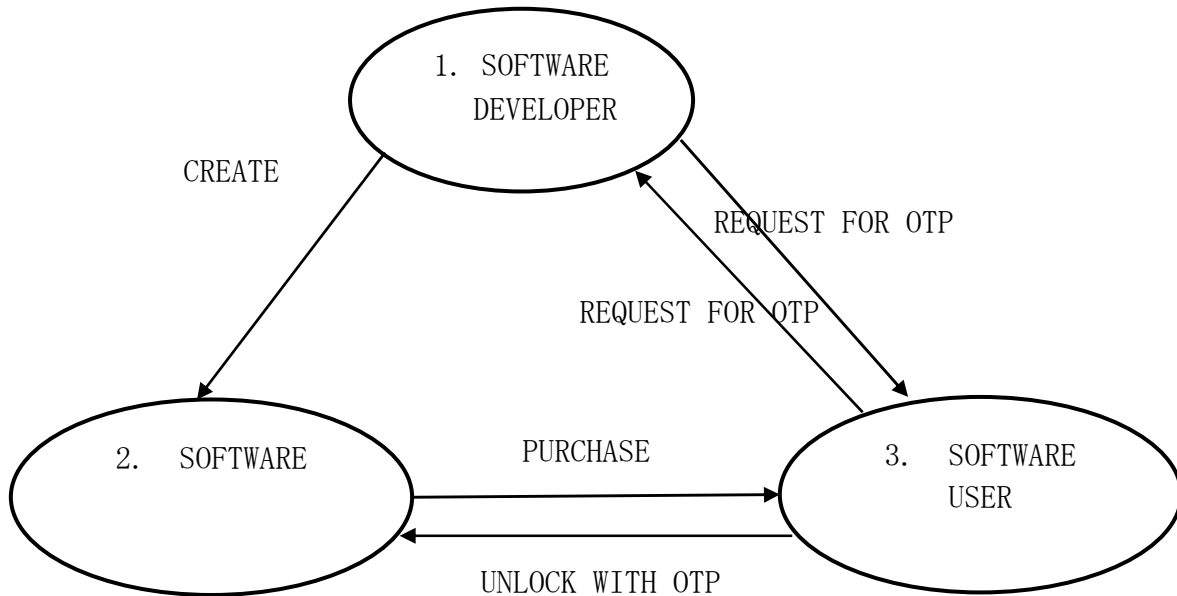


Figure 1: Proposed Framework for Software Piracy Prevention

The proposed framework for software piracy in figure 1 starts with the developer creating the software. The software is purchased by the software user as an end-user or for commercial purpose. The framework has the feature of a One Time Password (OTP) which the software user has to request from the software developer before the software can be activated. An OTP is valid for only one installation of the software.

7. CONCLUDING REMARKS

Software piracy is real and it has negative effect on the economy and the society at large. Though its cause was attributed to the poor standard of living, and the high cost of software, it is not a sufficient reason to engage in the practise. There is the need to put in place stronger measures to ensure that software piracy is reduced or stopped. The framework proposed would go a long way to reduce software piracy if implemented.

8. CONTRIBUTIONS TO KNOWLEDGE

The proposed framework in figure 1 would take the problem of solving piracy a step further if fully implemented.

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