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Intellectual Property in the Modern Age

## Intellectual Property in the Modern Age

The discussion of intellectual property is one of the most intriguing debates in the modern technological world. On one hand, some believe that created software should be allowed use by everyone and not owned by a single entity. On the other hand, it can be argued society would not be willing to invest months of time with no financial payoff at the end. With such a wide, ever-shifting landscape, it is important to understand the intricacies of this topic to determine a correct method of moving forward. This paper will discuss the financial impact of patents, the dangers of pirated software, and the argument for free software.

To understand how large the software industry is in the U.S., consider this quote from the Harvard Business Review. "The U.S. government has projected that Chinese companies flouting IP protections costs the American economy as much as \$600 billion every year" (Michel). Big tech corporations invest millions of dollars into their software expecting to be able to market their software to make a profit on their investment. These companies patent their code so they can take these risks with certainty that their efforts can possibly pay off. Patents have not been able to stop the digital pirating, however. According to the BSA Software Alliance, around 37 percent of software installed on personal computers is unlicensed (BSA). This illegal software leads into one of the biggest issues with pirating: malware.

According to data from the Thales Group, there is a one-third chance that installing or purchasing unlicensed software will result with malware on the system (Thales). This becomes a huge problem for the tech industry when the cost to fix these issues is revealed. According to Thales, "The BSA estimates each malware attack can

cost a company \$2.4 million on average and can take up to 50 days to resolve" (Thales). These malware attacks and the hefty costs they bring with them could all be avoided if the software was purchased from the publishers directly instead of pirated. These costs can severely hamper the growth of the tech industry, resulting in the loss of big advancements in the industry.

Richard Stallman, founder of the Free Software Foundation and creator of the GNU Operating System, has been a firm believer that software ownership should never be allowed. He believes that software should be free and available for copying and modification. In his GNU Manifesto, Stallman uses air as an example to demonstrate his point. "Consider a space station where air must be manufactured at great cost: charging each breather per liter of air may be fair, but wearing the metered gas mask all day and all night is intolerable even if everyone can afford to pay the air bill" (Stallman). The ability to copy code, for a programmer, is just as natural as breathing, and it should not be taxed or paywalled. He demonstrated this with his community funding and support with the GNU Operating System.

The topic of whether companies can charge for their code with always be a debated topic, but the world we live in tends to favor the companies instead of someone like Stallman. Software development is a billion-dollar industry, and they receive the patents necessary to do incredible things. One example is seen with Google's wide range of products. Their services are used by millions of people worldwide, and it would be criminal to force them to give out all of their software for free.

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