

Foreword

Since the beginning of time, new technologies have evolved to influence society, creating new possibilities and making our lives easier. Information Technology (IT) is one of these. IT has created new social and ethical dilemmas by influencing and producing situations that can conflict with existing laws, rules, traditional ethical and moral principles as well as cultural norms and values.

Our daily lives are dependent on information technology. The same technology that can be used to enhance our lives in turn may make our lives very difficult. As IT technology rapidly advances, it could create significant social problems. While the human intellect and societal order is creeping onward at linear speed, technology is racing exponentially. The rate of technology growth and the doubling speed of computers every 18 months makes it very difficult for humans to adjust to change. Recently, the famed British physicist *Stephen Hawk* said, “if humans hope to compete with the rising tide of artificial intelligence, they will have to improve through genetic engineering.” He added, “So the danger is real that they (computers) develop intelligence and take over the world.” This statement shows the significance of either controlling the technology or changing the human behavior toward it.

Today, we see the negative effect of IT with activities such as invasion of privacy, infringement of property rights, breach of security, and the denial of access to the rightful owners of the information in our lives. If this trend continues, the advancement of computing technology will add to the frustrations of IT users.

Historically, IT professionals as a group have not been overly concerned with questions of social misuses related to computing. As a matter of fact, a majority of negative affects of IT related activities are ignored by the IT community, businesses, and the industry either as a consequence of publicity or because they are complacent about computers. Information technology, especially the Internet, was built on the assumption of an open society and trust. The assumption was that scientists trust each other and can share their discovery with the other members of the society free from negative consequences such as violations of security.

If we assert that every IT professional has certain rights, we should also assert that the same group of people also has responsibilities, which include responsibilities to oneself, employer, profession, and the community at large. Individuals should have the right to privacy, accuracy, property, and accessibility to information systems.

While individuals and professional IT organizations have tried to address these issues, the whole IT community remains on the sidelines and needs to address social problems arising from IT and develop a set of guidelines. The IT community deserves

to have social integrity and autonomy. Integrity is defined as “a matter of self-respect,” such as being true to oneself and living responsibly in light of one’s limitations. Self-respect provides society the opportunities to develop the best social and professional integrity and allow greater personal integrity on the part of its members.

To protect society from the infringement of its rights by certain elements, a set of rules and laws must be written. But in this global environment, legislating the Internet has its own drawbacks. First of all, which country’s laws are applicable when the client and the server machines are located in two different countries thousands of miles apart? And since what is illegal in one country may not be illegal in another country, which entity will judge the lawbreakers? How can laws be unified in an environment that must deal with multiple languages, multiple cultures, multiple governments, and multiple geographical entities? How will the difference between people with different interests, customs, mores, and traditions be resolved? Who is going to speak on behalf of the community as a whole?

As Deborah Johnson and Helen Nissenbaum indicated, “We must decide these issues of ethics as a community of professionals and then present them to society as a whole. No matter what laws are passed, and no matter how good security measures might become, they will not be enough for us to have completely secure systems.” The members of the IT community need to understand the importance of respecting privacy and data ownership.

The best way to implement and enforce ethical and social responsibilities in the IT environment is to educate IT professionals. Ethical and societal issues in information technology education should produce IT graduates aware of social and ethical issues created by computers. The IT professionals need to understand their role in contributing to society and human well-being is an essential aim of computing professionals. Also, the minimization of negative consequences of computing systems, including threats to health and safety, should be the paramount goal of all IT professionals.

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