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Moral Philosophy and Ethical Decision Making in an Information Technology Dilemma

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ABSTRACT

This study explores the fundamental philosophical differences found in the ethical decision making approaches of students enrolled in a Management Information Systems (MIS) course required at an accredited university in New England. The decision choices of the students were classified according to five widely accepted theories of ethics: (a) Axiological, (b) Deontological, (c) Perfectionist, (d) Utilitarian, and (e) Relativistic. Based on their major areas of study, students were classified into three categories: (1) Arts & Sciences majors, (2) Business majors, and (3) Information Technology majors.

The analysis of 103 decisions confirms the existence of statistically significant differences among students in their ethical approaches to resolving an information technology dilemma based on their major areas of study. While the Arts & Sciences majors prefer Utilitarian ethics, Business majors prefer Axiological, and Information Technology majors favor Relativistic approach. Some possible reasons behind these differences are discussed in the paper.

Keywords
Theories of ethics, Ethical decision making, Information Technology ethics, Moral philosophy and Information Technology

INTRODUCTION

With the growing use of Information and Communications Technology (ICT) in organizations and the increasing incidence of its accidental or deliberate misuse, the subject of Information Technology (IT) ethics has acquired considerable importance in society. Underscoring the importance of the discipline, a number of academic journals dedicated to the subject of IT ethics are now being published in Europe and the US, e.g., the Journal of Ethics and Information Technology, the International Review of Information Ethics, The ETHICOMP Journal, and the Journal of Information, Communication & Ethics in Society. Similarly, many books have been published on the subject recently addressing issues such as the digital divide, data protection, information privacy, software piracy, computer crime, software copyright, intellectual property, digital superhighway, cyber-stalking, and professional codes for computer ethics (Adam, 2005; Reynolds, 2006; Stamatellos, 2007; Schultz, 2005). Major professional organization in the US and other countries such as the Association for Computing Machinery (ACM), the Institute of Electrical and Electronics Engineers (IEEE), the British Computer Society (BCS), and the Canadian Information Processing Society (CIPS) have promulgated comprehensive codes of ethics for their members (Davis, et. al., 1997). The ethical issues involved in the application and deployment of ICT are being addressed under different terms such as "computer ethics," "cyber ethics," and "information technology ethics." The broader term “information ethics,” however, also includes media ethics and the socio-cultural dimensions of an information society.

According to the Encyclopedia Britannica, ethics is “the branch of philosophy that is concerned with what is morally good or bad, right and wrong” (Gewirth, 1986). Information Technology ethics, therefore, is defined as the application of classical principles of moral philosophy to modern information and communications technology. This definition of information technology ethics is considered most appropriate for this discussion because of its primary focus on classical approaches to resolving ethical dilemmas. Although the problems of ethics have existed in the world since the dawn of civilization, they have been exacerbated by ICT due to its easy and inexpensive availability and ubiquitous presence in organizations and society. The tremendous power of this technology to collect, store, transmit, and transform information in its multiple forms...
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is generating numerous ethical dilemmas. At the same time, the inability of the legal profession to delineate the boundaries of acceptable and unacceptable uses of ICT due to rapid changes has enhanced the role of ethics in the past two decades. An argument is being advanced by some philosophers and scientists that the issues involved in ICT ethics are not unique and, therefore, the old principles of ethics are perfectly applicable to the new technology environment. Consequently, a proper understanding of the existing ethical frameworks can be helpful in finding a solution to the emerging ethical problems in ICT. These principles can be taught in academic programs in information technology and business administration at colleges and universities. Graduate and undergraduate courses in management information systems are now being offered at many universities, demanded by companies employing the graduates of these programs and promoted by professional organizations in ICT and business management. Curriculum guidelines for undergraduate programs from the ACM, IEEE, and other professional organizations concerning ethics in information systems courses have been promulgated since the 1990’s (Oz, 1993). For example, the IS ’97 model curriculum and guidelines for undergraduate degree programs in information systems jointly proposed by the ACM and the Association for Information Systems (AIS) have recommended the teaching of ethics in the “IS ’97.1: Fundamentals of Information Systems” course.

Information Technology ethics has also become an important area of academic research (Mingers and Walsham, 2010). Comparative studies of ICT ethics have investigated the cross-cultural differences among ICT professionals from China, Hong Kong, Taiwan and the United States (Eining, et. al., 1993). In these studies, significant differences were found among the Chinese and US students on the degree of importance each group attached to ethics in management decision making. Other studies have explored the gender differences in ICT ethics and found that the prevailing “hacker ethic” is largely a “masculine, libertarian approach that elevates freedom of speech over the rights of vulnerable members of society” (Adam, 2005). These studies suggest that a feminist approach to cyber-ethics would be a more rational and caring approach because it values the experiences of men and women equally. The effect of cultural differences on ethical decision making has been studied among Chinese ICT professionals (Martinsons and Ma, 2009), and the differences on this issue between IT professionals from China and Japan are identified in other studies (Davison, et. al., 2009). Some researchers have demonstrated that a Kantian deontological ethic is perfectly suitable in ICT situations (Ess, et. al, 2008; Myskja, 2008) while others have called for Spinoza’s ethics to be applied in ICT decisions. Litzky (2008) examined the impact of education on ICT ethics and found that for a given ethical situation, students who took a course in IT ethics made different decisions from those who did not. Woodward (2007) studied 122 information technology students at a Midwestern university and found a correlation between the ethical reasoning ability of students and their ICT decision making capabilities. Similarly, Haines and Leonard (2007) have found that gender is the most important demographic characteristic that influences ethical decision making capabilities of ICT professionals, and Okleshen and Hoyt (1996) found differences between business and non-business students from New Zealand and the United States in their perceptions on ethical issues.

None of the academic studies, however, directly addresses the relationship between the accepted theories of ethics and the ethical choices made by ICT decision makers with different demographic characteristics. The influence of classical thought on emerging ethical dilemmas in information technology thus remains unrecognized due to the unfamiliarity with the classical principles among ICT students and professionals. It is assumed that the time-honored principles of ethics are not relevant to the differences of gender, national origin, professional preference, educational background, or the economic status of individuals. The objective of this paper is to investigate the relationship between the fundamental guiding principles of ethics and its current practice in ICT. This is accomplished by exploring the differences in decision making among students studying arts & sciences, business administration, or information technology at an AACSB accredited university in the New England region of the United States. Five decision choices for an ICT related ethical dilemma were presented to 103 students from different major fields of study. Each student selected only one solution which belonged to a particular foundational theory of ethics. The differences among students based on these choices of solutions are examined and interpreted in this research.

THE PHILOSOPHICAL FOUNDATIONS OF ETHICAL DECISION MAKING

The rapid globalization of business organizations and the dominance of ICT in managing them are creating unprecedented social and technological transformations. These transformations are engendering behavioral changes that surpass the capacity of legal systems to define them and delineate their boundaries. The nebulosity of the existing legal environments is creating an enhanced role for ethics in addressing the emerging issues of behavioral ambiguity concerning the deployment and utilization of information and communications technology. A holistic perspective on the critical issues of ethics is necessary to answer the question, “Why should one be ethical?” One of the premises of this investigation is that a proper understanding of the foundational beliefs of ethical conduct and their historical progression is necessary to answer this question. In the evolution of ethics in the Western world, some philosophers have emphasized the differences between
subjective values and objective facts, arguing that ethical behavior is a matter of personal decisions or social conventions. Others have derived their ethical beliefs from a larger view of nature, human beings, and their interactions. Despite the impressive scope of the philosophical discourse and its extended historical evolution, the problems of ethics have persisted. The theoretical foundations of the discourse on ethics were laid in the Classical Age and reinforced in the Age of Enlightenment. These foundations are being reexamined in the present age for their relevance to the prevailing presence of information and communications technology in all domains of human endeavor. From an array of principles proposed during the past two millennia, five clearly discernible theories of ethics have been selected in this paper to be discussed within the context of management decision making in the evolving global ICT environment. Each of these theories is introduced in this section, along with its historical antecedents and important tenets.

1. Axiological Ethics: Derived from the Greek language word “axios” which means “value” or “worth,” axiology is literally the science of determining the value of an action for individuals or organizations (Findlay, 1970). This term can be applied as easily to economics and finance as to ethics and aesthetics (Carpenter, 1991). Philosophers distinguish between “instrumental” value indicating what is good as a means, and “intrinsic” value representing what is good as an end. Axiological ethics means that actions are right or wrong based on their “intrinsic” goodness regardless of their economic consequences. In determining the ethical propriety of an action in a business organization, axiology emphasizes the inherent happiness of the stakeholders generated from the decisions made by employees or managers.

2. Deontological Ethics: Known as the theory of rights and based on the Greek word “deontos” which mean “that which is obligatory,” deontological ethics focuses on the obligations and duties that various members of society have towards one another. In the Kantian version of deontological ethics, these duties can be determined by a rational process identified as the “categorical imperative.” According to deontological ethics, members of society have an unconditional obligation to be honest and respectful to others regardless of the financial consequences of their behavior (Gaus, 2001; Jones and Parkers, 2005; Louden, 1996). Reinforcing the importance of the deontological perspective, recent studies have demonstrated that long-term consequences of unethical behavior in organizations cannot be compensated by short-term economic consequences (Gotis and Kortezi, 2007; Micewski and Troy, 2007).

3. Perfectionist Ethics: According to the Stanford Encyclopedia of Philosophy, the moral theory of perfectionism expects individuals to live and promote lives that are objectively good. According to the perfectionist principle, each human being has an unconditional, non-derivative duty to move towards a high degree of perfection which includes one’s own “good” and the good of others. Rationality in decision making, realization of the finest things in life independent of the development of human nature, and perfection in art, culture, literature, science and technology are identified as some examples of objective “good” (Arneson, 1999; Foot, 2003).

4. Utilitarian Ethics: Although the origins of utilitarian ethics can be traced to the Greek philosopher Epicurus, as a modern moral philosophical conception it was formulated by two British intellectuals of the 19th century, Jeremy Bentham, James Mill, and John Stewart Mill. The essential principles of utilitarian ethics are based on the premise that moral worth of an action depends entirely on its contribution to overall perceivable utility for society. It is identified as the “greatest happiness principle” whose objective is to generate “the greatest good for the greatest number of people” in a clearly defined and measurable way. Later in the century, John Stewart Mill provided a more sophisticated explanation of utilitarianism in his famous essay on the subject by including qualitative aspects of pleasure that were initially defined by Bentham in purely quantitative terms (Hollingsworth and Hall, 1992; Rosen, 2003). Mill’s association with the East India Company makes the utilitarian ethics an extremely relevant moral philosophy for modern multinational corporations for whom information and communications technology is indispensible.

5. Relativistic Ethics: Decisions based on the relativistic principle are a matter of personal preference or social agreement rather than some higher facet of human nature or moral philosophy. In its ontological interpretation, ethical relativism means that two entirely conflicting moral judgments passed by two persons on the same ethical issue can be correct because their perspectives are derived from two different socially constructed moral universes (Haldane, 2006; Hayry, 2005; Tannsjo, 2007).

Since these foundational theories of ethics have traditionally been taught in courses offered in philosophy departments in academic institutions, students of sciences, business administration, and information technology related disciplines are often unfamiliar with them. However, the discussion of these principles is now diffusing into research on business and ICT due to the growing importance of ethics to business professionals in these disciplines (Gotis and Kortezi, 2008; Hollingsworth, et. al., 1992; McGee, 2010; Micewski and Troy, 2007).
Methodology:

Over a period of four semesters, 103 undergraduate students in 6 sections of an MIS course at an AACSB accredited university with extensive graduate and undergraduate programs in business administration were given an ethical dilemma to analyze and make a decision. This simulated case was based on a hypothetical situation involving a decision to purchase software at low cost in a newly formed hypothetical country in Central Asia called “Novistan.” To ensure that the decisions made by students were not biased by the moral underpinning of the theories of ethics, the five theories identified in this paper were not explained to them before they made their decisions on the situation presented to them.

The short simulated case presented the following scenario to the students. A hypothetical US based information technology corporation, Glovosoft, Inc., with headquarters in Boston opens a subsidiary in a fictitious Central Asian country named Novistan. The subsidiary in Novistan has expanded rapidly and now needs to obtain and install some specialized software on 30 desktop computers in its offices. A very senior and experienced manager, Larry Higgins, from the US is posted in Novistan by Glovosoft as the chief operating officer of the subsidiary with a software budget of $60,000 per year. Higgins needs to decide how to obtain this software which costs $150,000 in the US from its developer, Unosoft, but the prices vary in the global markets depending on the terms of purchase and licensing agreement, and the reputation of the suppliers. Higgins calls a meeting of his local employees, some of whom are from the US, to decide the appropriate course of action.

The five serious alternatives developed by these employees to solve the problem with limited financial resources are (a) purchase inexpensive software in Novistan from a local supplier of unknown reputation with no licensing requirements, (b) purchase a full corporate license in the US from Unosoft, (c) purchase a 10 user license in the US for $30,000 and run 3 shifts of 10 employees in Novistan, (d) purchase software from a certified local dealer for $20,000 with no licensing requirements, and (e) replace Larry Higgins by a local citizen of Novistan and let him decide the desirable course of action. These alternatives are listed in the second column of Table 1 in greater detail. To meet the objectives of this research, each choice was deliberatively crafted to belong to only one of the five foundational philosophical theories identified in the previous sections of this paper. The justification of each choice belonging to a particular category of ethics is provided in column 3 of the table. Each ethical choice contains a tolerable level of vagueness to create a realistic dilemma. The decision alternatives that are patently illegal and perfectly legal present no dilemmas because they provide a clear yes or no choice. Ethics become relevant only when the rules and laws are vague and moral choices require thinking on the boundaries of right and wrong.

At the end of the general discussion of the situation context, students were asked to make a decision to resolve the ethical dilemma faced by Higgins by selecting only one of the five choices. Each student was expected to provide a one-paragraph, well reasoned justification for selecting a choice as the best alternative considering the totality of the circumstances. As the last column of Table 1 indicates, 28 students selected the axiological choice, 19 deontological, 17 perfectionist, 20 utilitarian, and 19 relativistic.

Among the three majors to which these students belonged, Business was predominant with 43 (41.7%) of the students. The number of students who identified themselves as Arts & Sciences, and Information Technology majors were 31 (30.1%) and 29 (28.2%), respectively. The number of students selecting different ethical choices is shown in the cluster bar chart in Figure 1. The chart gives a visual indication that a dominant majority of Business majors selected Axiological (value/worth) ethics as their preferred option to solve the ethical dilemmas. The chart also indicates that the dominant choices for Arts & Science majors were Utilitarian ethics, while for the Information Technology majors it was Relativistic ethics.
### Table 1: Decision choices pertaining to different theories of ethics

<table>
<thead>
<tr>
<th>Ethics theory</th>
<th>Decision choice</th>
<th>Justification</th>
<th>Selected by (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axiological Ethics</td>
<td>Purchase a copy of the inexpensive software from a local dealer in Novistan without any licensing requirements. This solution will cost only $10,000. The savings can be used to hire 5 more employees in the company in a country with very high rate of unemployment and help bridge the global digital divide.</td>
<td>Axiological justification: Most cost effective solution to the problem; guaranties high intrinsic value to the company and Novistan society.</td>
<td>28</td>
</tr>
<tr>
<td>Deontological Ethics</td>
<td>Authorize the expatriate manager to purchase software in the US and install it on computers in Novistan in compliance with the laws of the host country. As a financial consequence, the high expenses in the US will require retrenching 10 of the staff in the IT group.</td>
<td>Deontological justification: The expatriate manager has an unconditional obligation to follow US and international laws and also establish an example of high moral conduct on the part of a US company in a foreign country.</td>
<td>19</td>
</tr>
<tr>
<td>Perfectionist Ethics</td>
<td>Install software purchased from Unosoft in the US on only 10 computers and let employees work in three shifts with retraining during the daytime. Local employees in Novistan show no enthusiasm for this solution.</td>
<td>Perfectionist justification: This solution complies with the laws of the US, WTO, and Novistan. Encourages employees to follow US standards of ethics and the opportunity for perfection through retraining.</td>
<td>17</td>
</tr>
<tr>
<td>Utilitarian Ethics</td>
<td>Purchase software from a certified local software company at most cost effective terms. Install it on all computers in compliance with the local laws. Use the savings to give all low paid employees a 5% salary raise.</td>
<td>Utilitarian justification: This solution guarantees maximum happiness to the maximum number of stakeholders in the organization, and complies with the laws of Novistan.</td>
<td>20</td>
</tr>
<tr>
<td>Relativistic Ethics</td>
<td>Glovosoft should hire a local manager for its IT operations who will then decide how to obtain the software locally, based on the local conventions, business practices, and ethical standards.</td>
<td>Relativistic justification: Recognizing that US standards of conduct are impracticable in Novistan, the expatriate manager can follow his own code of ethics.</td>
<td>19</td>
</tr>
</tbody>
</table>

### ANALYSIS AND DISCUSSION OF RESULTS

Although justifiable conclusions about the ethical preferences of students belonging to various majors can be drawn from the visual observation of the bar chart, a Chi-square test with Cross-tabulations was performed to confirm the observed outcome. The results of this test are summarized in Tables 2 and 3 below. Table 2 contains the cross-tabulations of majors vs ethics, and Table 3 shows the Chi-Square values. The differences, according to the Chi-Square value, are significant at the probability of 2.2% (p=.022) and the Likelihood Ratio at the probability of 3.1% (p=.031). The dominant choice of Arts & Sciences majors is “Utilitarian.” Since Arts & Sciences majors are known to have a more altruistic outlook on life, the
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observation is justified. The least frequently selected choice in this group (12.9%) was “relativistic” which is quite opposite to the choice selected by the highest percentage of Information Technology majors (37.9%). Contrary to general expectations, it appears that Arts & Sciences students in this course do not seem to subscribe to the relativistic free-for-all of ethical viewpoints. They do seem to have a more precise notion of what is ethical or unethical in ICT related decision making.

This university has the reputation of having a very focused and job-centered student body in its undergraduate business administration program. The “Axiological” choice, where the worth of the decision determines its ethical acceptability, selected by a majority (39.5%) of students confirms this notion. For Business students, the “economic worth” appears to be the greatest justification of “being ethical,” although this is considered a narrow interpretation of Axiology. The least popular choices among the Business students are Relativistic and Utilitarian. Business students, most of whom were accountancy, finance, and marketing majors, have an academic training based on precise formulas and clearly defined terminology which makes them less relativistic or utilitarian in their approach to decision making.

The predominant choice among the Information Technology majors was “Relativistic” ethics (39.9%) while the least frequently selected choice among this group (10.3%) was “Deontological” or the “obligatory” concept of ethical responsibility. In a rapidly evolving discipline whose roots are not very deep and traditions not well established, the prevalence of this choice can be expected. In ICT, the boundaries between what is legal and ethical, and what is illegal and unethical, are not clearly marked. In addition, the outsourcing of software development and business processes to different countries and cultural traditions is creating confusion about the borders of ethical behavior. A flexible decision making approach in the ethical dilemmas faced by managers in the global ICT environment is essential to cope with these rapid changes and the students seem to understand it. This explains why ethical relativism is the widespread choice among the
students, the future ICT managers in organizations. The least popular decision choice of this group happens to be on the opposite side in the spectrum of choices. Ethical relativism diminishes the importance of a rigid sense of obligatory conduct which is difficult to practice in the shifting economic climate of global business.

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>Percent/count</th>
<th>Axiological</th>
<th>Deontological</th>
<th>Perfectionist</th>
<th>Relativistic</th>
<th>Utilitarian</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Sciences</td>
<td>Count</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>% within MAJOR</td>
<td>16.1%</td>
<td>19.4%</td>
<td>19.4%</td>
<td>12.9%</td>
<td>32.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within ETHICS</td>
<td>17.9%</td>
<td>31.6%</td>
<td>35.3%</td>
<td>20.0%</td>
<td>52.6%</td>
<td>30.1%</td>
</tr>
<tr>
<td></td>
<td>% of total</td>
<td>4.9%</td>
<td>5.8%</td>
<td>5.8%</td>
<td>3.9%</td>
<td>9.7%</td>
<td>30.1%</td>
</tr>
<tr>
<td>Business</td>
<td>Count</td>
<td>17</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>% within MAJOR</td>
<td>39.5%</td>
<td>23.3%</td>
<td>14.0%</td>
<td>11.6%</td>
<td>11.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within ETHICS</td>
<td>60.7%</td>
<td>52.6%</td>
<td>35.3%</td>
<td>25.0%</td>
<td>26.3%</td>
<td>41.7%</td>
</tr>
<tr>
<td></td>
<td>% of total</td>
<td>16.5%</td>
<td>9.7%</td>
<td>5.8%</td>
<td>4.9%</td>
<td>4.9%</td>
<td>41.7%</td>
</tr>
<tr>
<td>Info. Tech.</td>
<td>Count</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>11</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>% within MAJOR</td>
<td>20.7%</td>
<td>10.3%</td>
<td>17.2%</td>
<td>37.9%</td>
<td>13.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within ETHICS</td>
<td>21.4%</td>
<td>15.8%</td>
<td>29.4%</td>
<td>55.0%</td>
<td>21.1%</td>
<td>28.2%</td>
</tr>
<tr>
<td></td>
<td>% of total</td>
<td>5.8%</td>
<td>2.9%</td>
<td>4.9%</td>
<td>10.7%</td>
<td>3.9%</td>
<td>28.2%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>28</td>
<td>19</td>
<td>17</td>
<td>20</td>
<td>19</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>% within MAJOR</td>
<td>27.2%</td>
<td>18.4%</td>
<td>16.5%</td>
<td>19.4%</td>
<td>18.4%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within ETHICS</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% of total</td>
<td>27.2%</td>
<td>18.4%</td>
<td>16.5%</td>
<td>19.4%</td>
<td>18.4%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 2: Cross-tabulations of Major versus Ethics

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>17.943a</td>
<td>8</td>
<td>.022</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>16.882</td>
<td>8</td>
<td>.031</td>
</tr>
</tbody>
</table>

a. 1 cells (6.7%) have expected count less than 5. The minimum expected count is 4.79.

Table 3: Significance of Chi-Square and Likelihood Ratio

CONCLUSION:

This paper brings into focus the fundamental philosophical differences on ethical issues among students pursuing different academic majors. Since these students will play important leadership roles in business organizations in the future, the implications of these differences to business and society are profound. Although numerous psychological and social factors influence ethical choices among human beings, the preponderance of ethical relativism among IT majors presents a challenge to the existing moral and legal conventions of society. A continuous evolution of the legal and professional frameworks and
widely accepted codes of conducts are necessary to avoid the confusion of relativism in ethical decision making. It can also be argued that a lack of understanding of the foundational principles of the classical and contemporary ethics can create confusion among students and practitioners of ethics about the true purpose of “being ethical.” The narrow training imparted to students in various professional fields further restricts the development of a comprehensive vision of ethical decision making. The findings of this research highlight the need for training Business and Information Technology students more broadly, and Arts & Sciences students more practically. A broader training of Business and IT students will give them a better appreciation of the underlying philosophical principles of ethics and create a greater awareness of obligatory requirements of ethical conduct for the greater good regardless of the financial consequences. It will give Arts & Sciences students a better appreciation of the practical problems in ICT decision making and the difficulty of being good in real circumstances. It can convince Business students to be less narrowly focused on the financial objectives of the organization. A proper understanding of the theories of ethics can also lead to their integration with the basic principles of ICT management and create innovative organizational designs that integrate ethics as an essential building block in organizational architecture. These designs are likely to address the issues of justice and human worth in corporations with a greater sense of fairness. Despite the limited scope of this study, its findings raise some important questions for information technology, ethics, diversity, and organizational decision making. The existence of these significant differences among students warrants an investigation of the ethical proclivities of practicing ICT managers in multinational corporations on the basis of their demographic characteristics.

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