INFORMATION TECHNOLOGY ETHICS: A RESEARCH FRAMEWORK

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ABSTRACT

Information technology has become so pervasive that opportunities for abuses abound. IT Ethics has taken on increasing importance as the size and complexity of IT issues continues to grow. This paper outlines a research framework to analyze: Do significant ethical differences exist amongst undergraduate and graduate MIS students?

Keywords: Information Technology (IT), Ethics, IT and Ethics

INTRODUCTION

We live in an information society. Most people live and work within the context of information technology (Abratt, Nel, & Higgs, 1992). IT enhances leisure time and enriches culture by expanding the distribution of information, relieves pressures on urban areas by enabling individuals to work from home or remote-site offices (Garcia, 2009), changes the way we work, and the way we work with one another. In terms of productivity and speed of communications, these changes have been mostly positive (Benham, 1995). But what have been the costs? IT introduces change that creates new ethical issues.

Universal Theories and IT

Gates (1995) suggested that the study of computer ethics is needed because there is a vacuum of policies surrounding the new possibilities. He defines computer ethics as the analysis of the nature and social impact of computer technology and the corresponding formulation and justification of policies for the ethical use of such a technology.

RESEARCH METHODOLOGY

Our research centered upon the following research question: Do significant ethical differences exist amongst undergraduate and graduate MIS students in the United States?

The research hypotheses to be tested are as follows:

H1: Computer information systems undergraduate and graduate students have the same ethical beliefs

H2: Female computer information systems students and male computer information systems students have the same ethical beliefs.

To test these hypotheses a subset of five ethical scenarios that were utilized by Athey (2011) to test if significant ethical differences existed amongst manager was used along with one ethical scenario that was developed based upon an actual case from the researcher’s university. According to Jones (2014), “the scenario technique has been shown to be useful in eliciting attitudes by personalizing the issues” (p. 15).
RESULTS

Eighty-seven scenarios were administered and the demographics of the sample population are shown in Table 1. The sample population had more males (70.1%) than females (29.9%).

A Chi-Square test was performed to test each of the three hypotheses. The first hypothesis tested whether undergraduate and graduate computer information systems students hold the same ethical beliefs. Responses from MBA students were not considered as part of this analysis. A p-value was calculated for each of the six scenarios and any value less than .05 was rejected. Scenarios 2 and 6 were rejected on this basis, but scenarios 1, 3, 4, and 5 were accepted.

The second hypothesis tested whether female and male computer information systems students hold the same ethical beliefs. Responses from MBA students were not considered as part of this analysis. A p-value was calculated for each of the six scenarios and any value less than .05 was rejected. Scenarios 1, 2, 3 and 6 were rejected on this basis, but scenarios 4 and 5 were accepted.

The third hypothesis tested whether computer information systems graduate students and masters of business administration graduate students hold the same ethical beliefs. Responses from undergraduate students were not considered as part of this analysis. A p-value was calculated for each of the six scenarios and any value less than .05 was rejected. Scenarios 1, 2, 3 and 6 were rejected on this basis, but scenarios 4 and 5 were accepted.

Table 1. Demographics

<table>
<thead>
<tr>
<th>Gender</th>
<th>Program</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Undergraduate CIS student</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Graduate CIS student</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Graduate MBA student</td>
<td>16</td>
</tr>
<tr>
<td>Male</td>
<td>Undergraduate CIS student</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Graduate CIS student</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Graduate MBA student</td>
<td>15</td>
</tr>
</tbody>
</table>

Figure 1. Technology Adoption Life Cycle
considered as part of this analysis. A p-value was calculated for each of the six scenarios and none of the scenarios exhibited a value less than .05.

CONCLUSIONS

It was very clear from the responses that there were no significant differences in ethical beliefs amongst MBA and MS-CIS graduate students. It should be noted that in both cases the students had not received formal training related to computer ethics within there program of study, though in both cases the topic was covered in sections within their curriculum. The curriculum for the MBA students is changing next year to include a formal course in business ethics that will include information technology related topics.

Based upon the results of our study, we concluded that significant differences existed between male and female computer information systems students in their ethical beliefs. Though as noted previously, there was a small sample population of female students. This is significant because it supports the industry study gender differences that show that software piracy and hacking tend to be more prevalent amongst males than females.

REFERENCES

