

An Investigation of Ethical Perceptions of Public Sector MIS Professionals

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ABSTRACT. Management information system (MIS) professionals have a central role in technology development, determining how technology is used in organizations, and the effects it has on clients and society. MIS stakeholders have expressed concern regarding MIS professional's role in computer crime, and security of electronically stored information. It is recognized that MIS professionals must make decisions based on their professional ethics. The Association for Computing Machinery (ACM) and the Data Processing Management Association (DPMA) have developed codes of ethics to help guide practitioners with ethical professional decision making. In this study, a model was developed from the combined ACM and DPMA codes of ethics and used in the construction of a survey instrument. The survey was conducted using public sector MIS pro-

professionals, and findings relative to the influences that codes of ethics, ethical enforcement systems, and membership in professional organizations has on ethical perception were studied. In addition, the influence that ethical obligation to particular constituencies had on respondents' ethical attitudes was also investigated. The study indicated that ethical obligation of public sector MIS professionals is stronger for management and employers than for peers, society, or clients.

Introduction

The conduct exhibited by management information systems (MIS) as a profession, individual practitioners of the science, and computer users has been of serious concern to many members of the population that the profession serves (Vitell and Davis, 1990). The concern has been generated by highly publicized computer related crimes (Bologna, 1987), and the perceived lack of adequate computer security systems (Johnson, 1988). The relatively short history of the MIS profession and lack of universally accepted professional standards (Parker *et al.*, 1990; Vitell and Davis, 1990) has resulted in a call for increased government regulation of MIS practice (Gardner *et al.*, 1989; Hughes, 1988).

The purpose of this study was to investigate the perception of public sector MIS professionals regarding ethical issues as they relate to MIS functions. A questionnaire was used to gather responses from subjects regarding ethical situations, personal characteristics, and organizational characteristics. The questionnaire was developed from the ACM and the DPMA codes of ethics.

Issues regarding the perception of ethical issues, existence of organizational ethics codes

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and their relative effectiveness directly relate to the problems of illegal and unethical behavior within the MIS area. If codes of ethics seem to help provide an environment which is conducive to socially desired, responsible, and professional behavior within the MIS area, there may be increased impetus to view relevant MIS issues from a perspective which includes formal organizational policy. In addition, if certain variables relate to the effectiveness of the ethics codes, they should be considered while evaluating an existing code or developing one for the first time.

A second view of ethics focuses on the nature of the ethical dilemma rather than specific attributes of the MIS professional or the MIS organization. Findings of what types of issues MIS professionals perceive as relevant, or which stakeholders command a high degree of ethical obligation from the MIS professional, may point to policy decisions, practice, and future study.

Background

This section provides a brief survey of the relevant areas associated with the development of this study. A definition of ethics, and discussions of ethics in MIS, the role of ethics codes for organizations and society, ethics models, and the public sector dichotomy of bureaucratic and democratic ideals help frame the context of the study.

Defining ethics

Normative ethics provide the philosophical basis for establishing principles that are morally correct. As there is no universally accepted philosophical base, ethics are often measured by many conflicting standards (Regan, 1984). Most people seem to fit the ethical principle to a particular situation. Therefore, to be meaningfully applied to the business environment, a general definition of practical ethics must be flexible. Lewis (1985) offered a definition of business ethics in "Defining 'Business Ethics': Like Nailing Jello to a Wall." From his research, Lewis arrived at the following definition of business ethics: "Business

ethics is moral rules, standards, codes, or principles which provide guidelines for right and truthful behavior in specific situations" (p. 382). According to this definition, ethical codes are more than a tool to support ethical behavior; they are fundamental to the definition of ethics.

Ethics in MIS

Presumably, MIS professionals struggle with the same types of ethical issues faced by other business professionals. Ethical dilemmas regarding conflict of interest, theft, equal opportunity, and environmental impact cut across professions. In addition to these general concerns, several issues that apply specifically to the information systems (IS) profession are raised in the literature.

The nature of computer technology renders the ethical issues encountered by IS professionals unique. Parker *et al.* (1990) contended that "advancements in computer and data communications technology have resulted in the need to reevaluate the application of ethical principles and establish new agreements on ethical practices" (p. 113). Information on electronic and magnetic storage media lends itself to ease of reproduction, theft, and contamination; raising issues regarding, propriety rights, property rights, privacy, plagiarism, misuse, and freedom of expression (Parker *et al.*, 1990; Vitell and Davis, 1990). Because of the growing benefits accrued from access to computers, Johnson (1985) suggested that there may be circumstances in which access to computers, computer skills, computer professionals, and decision making about computer applications could be construed as rights.

The most encompassing, and possibly the most pervasive, inquiry made in the literature involves the role that IS professionals should take in determining how their work is applied and to what end it serves (Clarke, 1988; Rosenberg, 1991; Vitell and Davis, 1990). Implicit in this query is the issue of prioritizing obligations to different stakeholders who are affected by the system. Several recent studies speak to these issues.

Recent studies of MIS, business, and engi-

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neering students indicate that undergraduate students have a different perception of ethically acceptable behavior than do experienced MIS professionals (Athey, 1993; Gardner *et al.*, 1989; Paradice, 1990).

These studies provide insights regarding possible conflicts and sources of misunderstanding among members of the IS profession about issues on which all professions are judged.

Vitell and Davis' (1990) study showed that the MIS professionals surveyed felt they had many opportunities to engage in unethical behavior, but that MIS managers rarely did. Forcht (1991) surveyed chief executive officers on the 1988 listing of Datamation 100 companies. She asked subjects to respond to statements concerning ethical behavior. Forcht's only conclusion was that "It would appear that the CEOs responding hold some very high ethical standards personally and expect their companies to abide by these same standards" (Forcht, 1991, p. 67).

The reviewed MIS ethics studies indicate the importance that IS professionals place on ethics and the potential benefits of ethical training for students and new professionals. Experienced professionals have a strong commitment to ethical behavior and feel as if they can distinguish unethical practices from acceptable practices. These findings seem contradictory to the evidence provided by citations in popular and academic literature of ethical transgressions of MIS professionals (Bequai, 1984; Hughes, 1988; Vitell and Davis, 1990).

Codes of ethics

Frankel (1989) referred to the relationship between professions and society as "the society-profession nexus" (p. 109). He indicated that society and professions are constantly engaged in a negotiation that defines the terms of their relationship. At the crux of the negotiations are the opposing forces of the public's demand for accountability and the profession's desire for autonomy. Because the profession operates as a contributing member of society, society can grant the profession autonomy, or if the profession becomes obnoxious, remove the privilege

(Frankel, 1989). Due to the agency responsibility that the profession owes to its stakeholders, the profession is expected to provide its members with regulations in which to adhere.

One way to attain autonomy is to practice self-regulation. Self-regulation can occur at the firm, industry, or business level, and is practiced when the entity establishes its own standards of behavior that are independent of externally imposed regulations or are complementary to outside regulations (Hemphill, 1992). Codes of ethics may facilitate self-regulation by helping the organization come to terms with its social responsibilities and serve as a sign of good intentions (L'Etang, 1992). Formal codes of ethics have served to define professional values (Anderson *et al.*, 1993; Trevino, 1986), set standards (Murphy and Laczniak, 1981), and inform members of the profession what the standards are (Dean, 1992). In review, formal codes of ethics exist to enhance professionalism, help ensure autonomy through self-regulation, and help define the organization's obligations to society.

Models

Conceptual models offer a common framework and language in which to discuss ethical issues. Factors and relationships that guide ethical decision making and behavior are often modeled. Ferrell and Gresham (1985), Stead *et al.* (1990) and Trevino (1986) include referent others and codes of ethics as factors influencing ethical decision making in organizations. In Ferrell and Gresham's model, codes of ethics and significant others served as moderating variables for opportunity to behave unethically. In the model offered by Stead *et al.* (1990), codes of ethics and the behavior of referent others served as organizational factors influencing individual factors and ultimately ethical behavior. Trevino posited that referent others and codes of ethics when part of the organizational culture influence an individual's cognitive moral development. These models illustrate how codes of ethics and system stakeholders have been incorporated into decision making models.

The public sector

Scholars of public administration have engaged in discussion and debate regarding the relative influence democratic ideals and bureaucratic ideals should have on the philosophy and practice of public administration (Denhardt, 1989; Dobel, 1990; Hejka-Ekins, 1988). Denhardt (1989) described democratic ideals as those that are substantive, include justice, individual rights, and liberty. Bureaucratic ideals are instrumental, and include due process, efficiency, standardization, and well-defined structures of authority.

Fundamental tensions that exist between democratic and bureaucratic ideals rest in their relationship and function. In the U.S., bureaucratic ideals are meant only as tools to achieve democratic ideals. In practice, the legitimacy of the public administration function is judged in terms of bureaucratic ideals and not by the quality of the democratic ideals achieved (Denhardt, 1989). The tension between bureaucratic and democratic ideals has resulted in emphasis being placed on bureaucratic ideals both in the educational setting (Hejka-Ekins, 1988) and in practice (Denhardt, 1989).

Propositions

The literature suggests the possibility of conflict between organizational and personal factors, and the ethical beliefs of organizational participants. Three propositions were developed to investigate the relationships between organizational and personal characteristics and reported ethical beliefs. A fourth proposition was developed to investigate possible relationships between to whom an obligation is owed and reported ethical beliefs. Provided below are the propositions and rationale for their inclusion in this study.

- (1) *A positive relationship exists between the existence of a code of ethics and perception of ethics issues.* Ethics codes are generally considered good tools for increasing ethical awareness. If this is true, increased awareness of ethical issues will result.
- (2) *A positive relationship exists between the existence of a code of ethics coupled with the*

existence of systems that support the code. Such systems include access to the code, rules developed to support the code, and enforcement of the code.

- (3) *A positive relationship exists between membership in a professional association and perception of ethical issues.* As previously illustrated, there is a connection between professionalism, self regulation, and ethical behavior. Membership in a professional association may indicate a commitment to the profession that translates into impetus for being sensitive to ethical issues.
- (4) *Perception of ethical issues will vary according to which constituency is owed an obligation.* Employees in the public sector will likely have a strong sense of obligation to both management and the employer. The public sector employee may also feel a special obligation to society, but as indicated in the literature review, bureaucratic ideals are generally given primacy over democratic ideals.

Methodology

The subjects

The identified population was public sector MIS professionals in federal and state agencies. The sample was drawn from the state and federal agency sections of the *Directory of Top Computer Executives*, Spring 1992, East edition (Applied Computer Research Inc., 1992). The East edition includes entries from 22 eastern states.

The heuristic used to select entries in the directory was based on size. Installations with an annual DP budget of at least \$250,000 were included. The criterion tended to limit the directory to installations dominated by general purpose mainframe computing. The personnel listed in the directory were divided according to function. When available, the individual listed as "computer operations" personnel was selected for the survey.

The sample was selected using a stratified random sampling technique. The members of the frame were first divided into state employees and

(strongly disagree) indicated the highest degree of consistency with the values forwarded by the ACM and DPMA codes. The remaining 24 statements were structured such that a response of 1 (strongly agree) indicated the highest degree of consistency with the values favored by the ACM and DPMA codes. The statements were presented randomly in the questionnaire.

Pre-testing

An original set of 46 statements was distributed to 5 MIS professionals employed in a public institution of higher education. The MIS professionals were asked to read the statements and provide feedback regarding structure, clarity, and appropriateness. Several statements were identified as somewhat offensive or unclear. The statements were subsequently rewritten.

In a second pre-test, a set of statements was distributed to 9 MIS professionals employed in the MIS department of a large commercial research organization. The MIS professionals were provided with the set of 46 statements and a copy of the ethics/obligation model matrix. The participants were instructed to read the statements and indicate in which matrix cell they felt the statement most closely fit. They were told that the statements need not be evenly distributed throughout the matrix, and were encouraged to comment on the model being used and the quality of the statements. Once again, the comments were considered and the questions rewritten where appropriate. Forty six statements were used during pre-testing to reinforce that the statements need not be evenly distributed in the matrix. The extra statement was eliminated after pre-testing was completed.

The quantitative results garnered from the pre-test suggested an acceptable degree of construct validity (see Table II, Pre-test summary). The frequency of the participants who identified the correct ethical issue was substantial – 67%. This rate of selecting the correct cell is significantly greater than the 6.67% chance of randomly selecting a correct cell.

In summary, content validity for the final set of statements was established through qualitative

TABLE II
Summary of the results of the pre-test

Unit of measure	Frequency correct
Cell	0.67
Column	0.89
Row	0.74
Column or row	0.95

interpretation of comments offered from the 14 pre-test participants and the use of endorsed codes of ethics as a method of developing the set of statements. Basing the statements on codes of ethics ensured that the content of the statements was relevant to ethical issues pertinent to MIS professionals. Pre-test participants indicated that all of the questions dealt with ethical issues.

Analysis

Data analysis was conducted in three parts. First, a chi-square test for independence was conducted based on several variables, including: (a) existence of a code of ethics; (b) existence of a code of ethics and a system to support the code; and (c) membership in a professional organization. The cross tabulations of the above cited variables were run against the responses to statements 1 through 45 on the survey. The Pearson chi-square was used, and the variables were considered independent when the observed significance level of the test was less than or equal to 0.05.

For the chi-square analysis, all responses were standardized on a scale from 1 through 7 in which values of 1, 2, and 3 indicated consistency with the values favored by the ACM and DPMA codes. A value of 1 showed the strongest degree of agreement with the values. Values of 7, 6, and 5 indicated inconsistency with the values favored by the ACM and DPMA codes. A response of 4 indicated a neutral response. Values of 7, 6, and 5 were aggregated and assigned a value of 5 because so few responses were rated on the unethical end of the scale that using unaggregated data often left cells in the table empty. Consequently, the resulting scale ran as follows:

1 = very ethical, 2 = ethical, 3 = weak ethical, 4 = neutral, and 5 = unethical.

The second and third types of analysis were descriptive. Frequency distributions of the average response for individual respondents and for individual statements were constructed. Descriptive statistics were generated for both distributions, including: mean, median, range, lower quartile, upper quartile, and inner quartile range. Box plots were developed for the two distributions and all data points lying outside of the upper and lower hinges were isolated for further analysis. The use of box plots as graphical descriptors based on quartiles offers a structure for data analysis and heuristics for: (a) identifying skew; (b) identifying data that falls outside of the center of the distribution; and (c) identifying data points that require additional study. Responses in the top quartile are on the average less in agreement with the ACM and DPMA codes of ethics than those average responses in the bottom quartile.

In the second analysis, the *respondents* whose average response fell in the top and bottom quartile of the distribution were compared to each other, relative to their personal characteristics and the characteristics of their organizations. In the third analysis, the *statements* whose average response fell in the top and bottom of the average response distribution were identified as having characteristics associated with obligation in the ethics matrix. The cells in the ethics matrix were divided into 2 subgroups. Subgroup 1 included those cells that addressed issues relating to *obligation to management* and *obligation to employer*, representing *Bureaucratic ideals*. Subgroup 2 included those cells that addressed issues relating to *obligation to peers and the profession*, *obligation to society*, and *obligation to client*, representing *democratic ideals*.

Results

Chi-square analysis

The chi-square tests for independence did not strongly support propositions 1, 2 or 3. Statement number 14 – an MIS professional does not have

an obligation to inform a prospective client about the degree to which he/she meets various sought-after qualifications – was the only statement that showed statistical significance at the 0.05 level for the existence of a code of ethics. No other statement showed significance when tested against the existence of a code of ethics and a support system for the code or membership in a professional organization.

Analysis of respondents in the bottom or top quartile

The characteristics of *respondents* whose average response fell in the bottom and top quartile of the mean response distribution were studied and compared to determine if their personal and organizational profiles tended to differ. The extreme quartiles were selected because these groups represent the individual respondents whose perceptions differed, on the whole, most greatly. A qualitative analysis of all the information known about the respondents was conducted to reveal combinations of characteristics that may have related to respondents' perceptions. If such information was suggested, additional quantitative study could have been pursued.

The results from this analysis were consistent with the findings of the chi-square tests in that there was little difference in the average age, average total work experience, average MIS experience, average educational level, the existence of a code of ethics and membership in a professional organization between the respondents who responded in a manner most consistent with the ethical values put forth in the ACM and DPMA codes of ethics versus those respondents who responded most inconsistently.

Analysis of statements in the bottom or top quartile

The characteristics of questionnaire *statements* whose average response fell in the bottom or top quartile of the mean response distribution were studied and compared to determine if the constituency to which an obligation is owed is related to perception of ethical acceptability (see Table III, Results of statements). This qualita-

TABLE III
Results of statements that fell in the bottom or top quartile of the mean response distribution

Number of statements	45
Mean	2.39
Minimum observation	1.34
Maximum observation	4.92
Median value	2.10
Lower quartile	1.87
Upper quartile	2.85
Inner quartile range	0.98

tive analysis of respondents' ethical perception relative to obligation was conducted in an attempt to gain some insight regarding the tendency for public sector MIS professionals to favor bureaucratic or democratic ideals.

Analysis of statements whose average response fell in the extremes of the distribution showed a difference in the way members of the sample view ethical issues relative to their obligation to management and employer, and obligation to client, society, and peers. The results support proposition #4 – perception of ethical issues will vary according to which constituency is owed an obligation. The public sector MIS professionals tended to show a stronger obligation to bureaucratic constituents than democratic constituents on those statements which on the average received responses that were least consistent with the ACM and DPMA codes. Statements in the bottom quartile were not sensitive to obligation.

Bureaucratic obligations are obligations to management and employer, while democratic obligations are obligations to society, client, and peers. Eighty two percent of the statements in

the top quartile – 9 of 11 – were associated with democratic obligations. Fifty eight percent of the statements in the bottom quartile – 7 of 12 were associated with democratic obligations.

A Box plot of the mean response by statement (see Fig. 1, Box plot) illustrated that the distribution was skewed to the right and that the median average response of 2.1 was in agreement with the ACM and DPMA ethical standards. The difference between the median and left inner boundary is 0.76, while the difference between the median and right inner boundary is 2.22 and the difference between the median and maximum observation is 2.82. One of the statements relating to obligation to society fell between the inner and outer boundaries in the top quartile. One possible explanation for the statement falling outside of the inner boundary is that in addition to an obligation to society, the statement is also associated with the responsibility to use one's special knowledge and skills for the advancement of human welfare, which may include many democratic ideals. The three statements with the highest mean responses fell into this category.

Discussion

The chi-square analysis indicated that membership in a professional organization and existence of an organizational code of ethics, with or without a support system, have little or no bearing on the perception of ethical issues in the sample of public sector MIS personnel surveyed. These results force rejection of the first 3 propositions. However, there is evidence that supports proposition #4 concerning obligation to a particular constituency group. The study of statements that received a high mean response in the

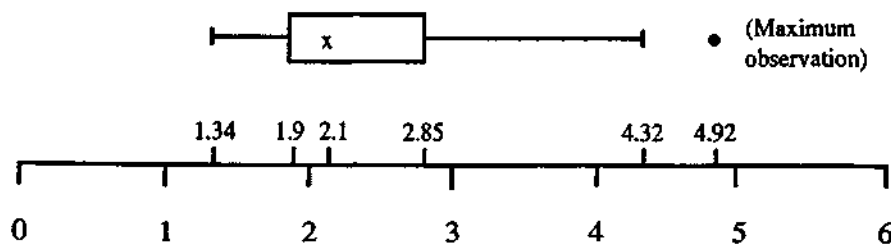


Fig. 1. Box plot of mean response of statement.

top quartile indicated that the public sector MIS personnel surveyed perceive ethical issues differently based on the group to whom that obligation is owed.

Previous studies of how ethics codes affect employees' attitudes have not yielded consistent results. This study indicates that a direct relationship between the existence of a code and perception of certain ethical issues does not exist for the individuals sampled. There may be several ways to explain this result. The MIS professionals surveyed may not take codes of ethics seriously. They may derive their ethics from sources other than their work environment. They may identify themselves with being public administrators rather than MIS professionals, and as such are bound to a common set of ethical standards that are similar to those forwarded by the ACM and DPMA. In any case, the existence of an organizational code of ethics with or without a support system does not explain the surveyed variation in perception of ethical issues of the individuals.

The finding of no significant relationship between membership in a professional organization and the perception of certain ethical issues among the individuals sampled suggests only that membership has little affect on perception of ethics, not that the existence of a professional organization has little affect on the overall perception of ethical behavior among members of the profession.

The third analysis, which indicated that a difference exists between bureaucratic obligations and democratic obligations in regard to ethical issues, suggests that public sector MIS employees feel a stronger ethical responsibility to their superiors than to their peers or to the groups they serve. This finding is consistent with previous studies that have investigated the public sector dichotomy between bureaucratic ideals and democratic ideals (Denhardt, 1989; Dobel, 1990; Hejka-Ekins, 1988; Nigro and Richardson, 1990). This finding may explain why the other variables tested for independence showed little significance. Members of public sector MIS organizations may be so strongly influenced by the norms of the organization in regard to ethical obligation to bureaucratic superiors that the influence of other professional standards are mitigated.

The ethics models previously discussed attribute influence on ethical philosophy and ethical decision making to significant others (Ferrell and Gresham, 1985), and organizational factors (Stead *et al.*, 1990). The interactionist model of ethical decision making in organizations (Trevino, 1986) suggests that organizational culture and immediate job context strongly influence cognitive moral development. The models suggest that the public sector ethos may strongly influence ethical philosophy and decision making. Once an organization adopts an ethical philosophy, differential association and role set theory (Ferrell and Gresham, 1985; Ferrell *et al.*, 1983) support the organizationally favored ideology and resulting behavior will be reinforced and solidified.

These findings and propositions suggest that bureaucratic leaders are likely to have the most amount of influence on public sector MIS professional's perceptions of ethical issues. Those employees that enter the organization with ethical values that challenge the system's may be forced to socialize or leave. After an employee accepts the public sector ideology, their experiences external to the public sector will tend to reinforce their ethical paradigm and be cemented, minimizing the influence of other factors.

Obviously, there is nothing inherently wrong with the development of an organizational ethic. Occasionally, the organizational standard and the professional standard may conflict, possibly causing friction for the individuals involved. In this study, the data shows a high level of overall consistency with the standards promoted by the ACM and DPMA. The findings also indicate that tension and conflict may result when democratic and bureaucratic ideals stand in opposition. This source of conflict is much more subtle than determining if an action is ethically acceptable or not, and demands further study.

Limitations on generalization and interpretation

There are two limitations of this study that need to be mentioned. First, although 85 data points is adequate for chi-square analysis, a larger sample size would have been preferable. The problem

of having cells with less than 5 values was reduced by aggregating the unethical responses into one value. In addition, application of the results to geographic areas outside of the eastern United States should be made with caution. Second, there is the issue of self response reporting bias. Strong evidence suggest that social desirability response bias has particularly strong effects on ethics research (Randall and Fernandes, 1991), however, there is also evidence that indicates that social desirability bias in responses is reduced with increased levels of anonymity (Bradburn *et al.*, 1979). Therefore, all responses in this study were entirely anonymous unless the respondent chose to provide an address to receive a review of the findings. The strict conditions of anonymity prevented the use of follow-up techniques to increase the response rate.

Conclusion

The ethics model employed in this study provides a convenient way of incorporating the espoused beliefs and values of the two largest and most

influential MIS professional organizations into the research design. Because it is the implied responsibility of professional associations to take a leading role in defining the profession, inclusion of the ACM and DPMA perspective in the analysis tool itself is of significant utility.

By using an ethics model similar to that used in this study, organizational ethics may be studied in terms of differential strength of obligation to a set of organizational entities. Such an approach could indicate which organizational stakeholders have the highest potential for affecting ethical change within the organization. Studies of this nature could be of interest to management, consumer organizations, legislators, employee organizations, and regulatory agencies.

The findings of this study provide an explanation for the variability of results found in many ethics studies. Using obligation to organizational groups as an influencing factor for perception of ethical issues, it follows that in public sector MIS organizations, management, and employers will likely possess more influence than other organizational stakeholders to make codes of ethics meaningful.

Appendix

Questionnaire

This questionnaire is divided into two parts. Please answer the following questions to the best of your ability. Your responses will be kept in strict confidence. Thank you for your participation in this study. If you decide to not participate, please return the blank survey.

Part 1

Please indicate how strongly you agree or disagree with the following statements by circling the appropriate response to the left of the statement. Please use the following scale when marking your response:

1 = Strongly agree 2 = Agree 3 = Slightly agree 4 = Neutral
5 = Slightly disagree 6 = Disagree 7 = Strongly disagree

- 1 2 3 4 5 6 7 Pertinent information systems issues must be fully and fairly disclosed to management, even if such disclosures result in budget reductions for the MIS area.
- 1 2 3 4 5 6 7 An MIS professional's failure to express a professional opinion to employers regarding the deleterious effects that a proposed system is likely to have on the quality of public education is ethically acceptable.
- 1 2 3 4 5 6 7 To knowingly allow one's work to be used in a socially irresponsible way is unethical.

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- 1 2 3 4 5 6 7 MIS professional associations should provide a forum for the discussion and investigation of the MIS professional's role in the advancement of human welfare.
- 1 2 3 4 5 6 7 If a system that is requested by management appears to compromise the privacy of individuals whose personal information is stored in the system, the MIS professional is obligated to see that management is made aware of the significance of privacy related issues.
- 1 2 3 4 5 6 7 It is ethically acceptable for an MIS professional to remain silent about an act, conducted as part of an MIS assignments, which violated a law or social standard, even if the professional is directed to remain silent by an immediate supervisor.
- 1 2 3 4 5 6 7 Failing to present management with factual and objective information is unethical.
- 1 2 3 4 5 6 7 It is acceptable for an MIS professional to purchase organizational computer equipment from a sales representative who is a relative, without first notifying an employer of the relationship.
- 1 2 3 4 5 6 7 Full disclosure to management of all pertinent MIS related activities is one of the obligations that MIS professionals have to management.
- 1 2 3 4 5 6 7 It is ethically acceptable for an MIS professional to intentionally misrepresent his/her qualifications or credentials to present or prospective clients.
- 1 2 3 4 5 6 7 Failing to inform management about your own role in an inappropriate professional act is ethically acceptable.
- 1 2 3 4 5 6 7 Failing to give proper credit to other MIS professionals for contributions that they have made on a project, paper, or presentation that you have produced or authored is unethical.
- 1 2 3 4 5 6 7 Any attempt by an MIS professional to undermine the legal system after violating a local, state, or federal law while conducting professional duties is unethical.
- 1 2 3 4 5 6 7 An MIS professional does not have an obligation to inform a prospective client about the degree to which he/she meets various sought-after qualifications.
- 1 2 3 4 5 6 7 It is ethically acceptable for an MIS professional to refuse to participate in any effort to further the public's awareness of how the MIS profession affects their quality of life.
- 1 2 3 4 5 6 7 If a client questions the need to invest limited resources in the proper data security measures for the personal data of individuals that has been collected for use in the system, the MIS professional must educate the client regarding the possible consequences of unsecured systems, even if doing so may result in the loss of the client.
- 1 2 3 4 5 6 7 Although an MIS professional could easily and safely shift responsibility for a failed project from himself to another colleague, he/she must not do so under any circumstances.
- 1 2 3 4 5 6 7 When making MIS related recommendations to an employer, the MIS professional is obligated to explain the possible ramifications of accepting and rejecting the recommendation.
- 1 2 3 4 5 6 7 An MIS professional must avoid intentionally using language, terminology, and examples that are beyond the experience and knowledge of other professionals while acting as the MIS authority on a group project.
- 1 2 3 4 5 6 7 An MIS professional's failure to notify his/her employer of a potential conflict of interest is ethically acceptable.
- 1 2 3 4 5 6 7 If a system that an MIS professional has designed fails due to a misunderstanding in the user specifications, and causes the client damages, the MIS professional is not obligated to step forward and accept his/her rightful proportion of the responsibility.
- 1 2 3 4 5 6 7 An MIS professional's failure to communicate issues regarding health, privacy, and the general welfare of the public to management, when management appears ignorant or insensitive to those issues as they relate to MIS, is unethical.

- 1 2 3 4 5 6 7 An MIS professional's failure to consider the health, privacy, and general welfare of the public in the performance of his/her work is ethically acceptable.
- 1 2 3 4 5 6 7 Information systems or MIS practices that are legal and beneficial to the organization, but on the aggregate have a negative impact on the quality of life of those affected by the system, are ethically unacceptable.
- 1 2 3 4 5 6 7 An attempt by an MIS professional to exonerate himself/herself from, or limit his/her liability to clients, for his/her personal malpractice is unethical.
- 1 2 3 4 5 6 7 An MIS professional involved in a project does not have an obligation to actively question and bring to light deficiencies in an information system being implemented due to the political agenda of a senior member of the organization, even if it be wasteful of public funds.
- 1 2 3 4 5 6 7 When an MIS professional is building a system to user specifications that require excessive collection of personal data on individuals and does not adequately limit authorized access to the data, the professional must inform his/her employer.
- 1 2 3 4 5 6 7 An MIS professional has an obligation to his/her client to recommend an information system which not only complies with laws, but which contributes to the betterment of social conditions.
- 1 2 3 4 5 6 7 Refusing to cooperate constructively with other professionals while endeavoring to understand and identify MIS related problems is unethical.
- 1 2 3 4 5 6 7 An MIS professional's failure to accept responsibility for a group decision in which he/she actively participated is ethically acceptable.
- 1 2 3 4 5 6 7 It is acceptable for an MIS professional to exaggerate the degree of progress made on a system to a client.
- 1 2 3 4 5 6 7 The use of organizational computer resources by an MIS professional to maintain a membership listing and to occasionally print mailing labels for a social organization to which he/she belongs is acceptable.
- 1 2 3 4 5 6 7 An MIS professional has no obligation to management to keep his/her professional knowledge up to date.
- 1 2 3 4 5 6 7 An MIS professional is obliged to inform management about the failure to complete an assignment, even if management would otherwise not find out.
- 1 2 3 4 5 6 7 Management has the right to direct an MIS professional to work on an assignment which is part of a system that will likely have a negative impact on the environment.
- 1 2 3 4 5 6 7 Management has the right to expect an MIS professional to be not only technically competent, but to also have an understanding of how his/her work affects the quality of life of all those affected by his/her work.
- 1 2 3 4 5 6 7 It is acceptable for an MIS professional to attempt to gain personal advantage by withholding MIS related information from a peer who is working on a medical records system for a municipal hospital.
- 1 2 3 4 5 6 7 An MIS professional who has falsely charged a colleague with partaking in unethical practices has an obligation to make amends to the damaged party.
- 1 2 3 4 5 6 7 It is ethically acceptable for an MIS professional to develop a project which he/she feels is wasteful of public funds.
- 1 2 3 4 5 6 7 Society has a legitimate expectation that an MIS professional will make retribution for any and all socially irresponsible acts committed while assuming his/her professional role.
- 1 2 3 4 5 6 7 An MIS professional's failure to properly qualify himself/herself to an employer when expressing an opinion outside of an area of competence is unethical.

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