



This paper appears in *Managing Modern Organizations Through Information Technology*, Proceedings of the 2005 Information Resources Management Association International Conference, edited by Mehdi Khosrow-Pour. Copyright 2005, Idea Group Inc.

# Webmaster Perceptions of Ethics within an IT Setting

Alfreda Dudley-Sponaugle and Jonathan Lazar

Dept of Computer & Infor. Sciences, Center for Applied Infor. Technology, Universal Usability Laboratory,  
Towson University, 8000 York Rd., Towson, MD 21252, {adudley, jlazar@towson.edu}

## ABSTRACT

While information ethics is frequently discussed in research and education circles, it is important to examine how actual IT professionals perceive the topic of ethics in a workplace setting. In this paper, ethics is framed within the context of web accessibility for webmasters. Webmaster responses to a question on ethics can provide a glimpse into how ethics is perceived in a workplace setting. Implications for managers, policymakers, and webmasters, are discussed.

## INTRODUCTION

In recent media coverage, attention has been focused on the professional's behavioral practices in the workplace. The intensity of this focus is based upon the numerous scandals of improper actions of individuals and organizations. Ethical codes of conduct do exist in businesses. What happened in light of the numerous scandals to these codes, and to organizations' commitment to the practice of ethics in business? Due to fallout over these scandals, professional ethical practices are being reassessed as a major priority in organizations.

In the Information Technology (IT) culture, professionals and organizations put emphasis on proper or improper design procedures and practices. While this is definitely important, increasing awareness of the ethical behavioral practices of the Information Technology professional and organization is becoming crucial.

Information technology is pervasive in all areas of employment; therefore, when considering ethical practices, this component should not be omitted. Information technology professionals and organizations are not different species. However, the ethical practices of IT professionals and organizations are becoming suspect in the light of computer crimes (i.e., fraud, identity theft, embezzlement, etc.). There are a number of possible explanations for this. This problem raises three interesting questions:

One possible explanation is organizational culture. An organization's culture dictates an individual's perception of behavior and responses within its environment. An ethical climate within an organization's culture determines the IT professional's beliefs about "acceptable" or "unacceptable" practices, which can extend to other beliefs such as job satisfaction and organizational commitment (Newton, Wingreen, & Blanton, 2004). Organizations are a reflection of the culture or society in which they function. IT organizations will only make ethics a priority when the culture makes ethics a priority. Another possibility is that there is confusion over the definition of "ethics" in the context of Information Technology practices. In order to define what is an ethically defensible behavior in a given situation, or context, there must be some type of definition of what is or what is not considered an ethical response in a given context. If there are no guidelines or framework of ethics, individuals will assume that there are no norms and will interpret based on their own experiences (Conger, & Loch, 2001). A third possibility is that the education of IT professionals is lacking in the area of ethics. These are all interesting explanations, however, it is important to collect data to determine how (or if) IT professionals perceive ethics in their workplace context.

The authors will report the results of an ethics-related question on a previously collected survey instrument. The general survey instrument related to webmaster's perceptions of accessibility, which is the design of web sites so that people with disabilities can use them. The specific question to be addressed in this paper related to the issue of the IT professional in the context of ethics in their work environment.

## DATA COLLECTION

As part of a larger study of Webmaster perceptions of web accessibility for people with disabilities, a survey was distributed to webmasters, with 175 people responding. The survey asked about knowledge levels of web accessibility, experience using various automated usability testing tools, and whether the web sites in the respondents' control were accessible. See (Lazar, Dudley-Sponaugle, & Greenidge, 2004) for the full results of this study. On the survey, one question was related to the practice of ethics. The responses to that question were not fully analyzed in the 2004 paper. Rather, a few select answers were given as an example in the 2004 paper, as a full examination of the responses was beyond the scope of the 2004 paper. Question number 15 on the survey was *Do you consider ethics in planning and/or updating your current websites? Why or why not?* Ethics, as a term, was not defined for respondents. Rather, it was left open to interpretation, since part of the goal of this question was to gain a better understanding of how webmasters perceive the idea of ethics within the context of their work.

## RESULTS

Given the 175 survey responses, the authors of this paper performed a content analysis to help categorize the responses into categories. In response to the question: *Do you consider ethics in planning and/or updating your current websites? Why or why not?*<sup>27</sup>, most of the respondents did indicate that they considered ethics, but the reasons why varied greatly. Through the content analysis, the following ten categories of responses were established:

1. Yes, I do consider ethics when planning my web site.
2. Yes, because it's the law.
3. Yes, because it's our profession/company code of conduct. (Note: from an ethical point of view, yes, because external law requires it and yes because external policy requires it actually means the same thing).
4. Yes, I do consider ethics but no users with disabilities access my site.
5. Yes, I do consider ethics, but others don't conform.
6. Yes, I do consider ethics, but time/budget restraints make it hard to execute.
7. Yes, I consider ethics, but accessibility for users with disabilities is someone else's responsibility.
8. Yes, we focus on users, as the ethical thing to do, and if users need accessibility, we build it for them.
9. No, I don't consider it.
10. Not sure/I don't understand the question.

For each category of response, 4 sample responses are given. In some categories, there were less than 4 responses, and in that case, all

responses in that category are given. No changes or modifications were made to the respondents' answers.

1. *Yes, I do consider ethics when planning my web site.*

- Absolutely. It's my job as an information professional to consider ethics in planning and/or updating my current websites. There is a lot of information out there that should NOT be posted to a web site
- yes. i work for a web development firm, and i think our website makes a statement as to our philosophies about accessible web development/design
- Yes. Financial services are subject to many existing laws, but we are also dealing with what is, in western cultures, an emotional area where ethics is one of the few important frameworks that points to building trust and loyalty with customers
- Yes. It is always a consideration in any public development I would do. Why is a bit harder - probably because I see ethics as something that should guide all decisions involving other peoples. Not the only guide, of course.

2. *Yes, because it is the law.*

- Yes, in the sense that I will not use material that is not mine unless I have permission from the owner to use it. I also avoid violating the privacy of other individuals.
- I consider compliance with the law when planning/updating current sites. If I were to consider the ethics underpinning section 508 of the Americans with Disabilities act, I'd probably loose my job, since I would have to partake in civil disobedience in order best impliment my ethcal view on the issue
- There is only ONE way to plan and update. That is the right and legal way
- Yes. Government requirements.

3. *Yes, because it's our profession/company code of conduct. (Note: from an ethical point of view, external law and external policy are similar concepts).*

- Yes, it is a primary concern in this business environment
- Yes - its part of the code of my professional body - British Computer Society
- Yes, because our organization is committed to adhering to high standards of ethics
- Our organisation supports blind and visually impaired students, so for us it is not a matter of ethics. It's understood.

4. *Yes, I do consider ethics but no users with disabilities access my site.*

- not as much as i should, i guess. however, i would (and already did) immediately react on comments from disabled users. but these are \*very\* infrequent
- Yes. I have no disabilities, but I always think how hard it is living with certain disabilities. So I try to make this people lives easier
- due to the nature of the web site I worked on this is not necessary

5. *Yes, I do consider ethics, but others don't conform.*

- I do, but my organization doesn't recognize this as a valid justification
- i do, but sadly the powers that be do not. websites are designed by people who care less about blind people and they are paid by executives that only give a crap about flashy wizzy useless content that disabled people can barely use
- I do, but I don't know if the site owners do! It's important to me that the web be accessible to everyone, but since disabled users don't constitute a significant percentage of our user base or target market for our software, it's hard to convince the business owners that accessibility is worth pursuing.

- I prefer to and have sometimes left jobs over ethical issues, but on a day to day basis I have to be guided by what my management wants.

6. *Yes, I do consider ethics, but time/budget restraints make it hard to execute.*

- Not in the short term -> Time issue. However consider getting familiar with the standards to prepare for future developments
- It all boils down which path is easy to follow and which is required. If ensuring accessibility is difficult, i.e requires me to download extra software to test for each case, accessibility is not considered
- Yes, insofar as it is possible within the buget constraints of the projects
- implied insult aside, yes of course we do, there are a myrad of ethical issues involved in participating in the internet, accessibility is one, and in a commercial environment sadly, it falls toward the bottom of the list of priorities. simple cost benefit descision

7. *Yes, I consider ethics, but accessibility for users with disabilities is someone else's responsibility.*

- General Comment: I am aware of the problem of accessibility. Also, I have a general understanding of what's needed to make a website accessible. However, i don't regularly check for accessibility issues. Of course, simple things as alt tags, colors and font-sizes i consider but rarely go beyond. Bobby is next to useless because of its verbose output. Other tools i haven't tried. I guess i still need to overcome the mythos(?) that making a website \*completely\* accessible is too hard and tedious. Btw. This survey would be much more accessible if the input fields were bigger. ;)
- It should be the responsibility of web site creators to make sure that sites are accessible to all

8. *Yes, we focus on users, as the ethical thing to do, and if users need accessibility, we build it for them.*

- I feel that audience is my first concern when planing/updating a site, including those with accessibility issues.
- Not overtly. We don't meet as a team to discuss how to ethically deisgn the site. We do however design not only for visually impaired people, but for people with technological impairments (slow modem, lower resolution, etc.) and as a result we do not force users to download plug-ins or even current browsers to use our collections. Seldom do we kick around the idea of doing something in Flash, for instance, but if we do, the first thing we think of: how do screen readers or other software handle flash?
- yes, because as a public body we have a duty to ensure we contribute to the public good. Could I see the results of this survey?
- Only in so far as we consider that we need to make our content accessible to our constituents

9. *No, I don't consider it.*

- we deliver facts not religion
- no, we make client directed updates, they can think about ethics
- not really. It rarely comes to mind. You are busy to see that the site simply works and that's all
- Not really. It hasn't occurred to me

10. *Not sure/I don't understand the question*

- This question is vague yet leading, like asking me if I try to be a good human being or not, or if they've stopped being an asshole yet. But yes, ethical considerations are very important and often discussed, so I guess I "consider ethics". Why? Because I want to be a good human being and I want to be perceived as one, and I want to do the right thing. Despite the fact that I don't have descriptions on my images, I still feel like I've done the right thing

- Not sure what you're getting at here. You probably should've asked a question about size of company and of web site - that would've helped you interpret your results
- Unsure of what you are defining ethics. I do consider things such as privacy, disclosure of information, factual info, etc
- I'm not sure what you mean by ethics. I would consider re-phrasing this question. We do not display anything pornographic, nor do we spread any agendas which could be considered un-ethical

## ANALYSIS OF RESULTS

It is interesting to see how the respondents use different approaches in applying ethics in their workplace context. For instance, in *categories #1 and #8*, the responses focus on the webmaster's duties and responsibilities. These respondents said that ethics were important, and yes, they focus on accessibility because it's the ethical thing to do. In a philosophical context, the approach applied to ethical situations was the deontology perspective. Deontology approaches ethical problems with a focus on rights and duties of the stakeholders involved. In *categories #2 and #3*, the responses focus on applying ethics based on legal influences, professional codes and organizational standards as guides for ethical application. While law and professional codes are different, from an ethical point of view, most of the respondents view them as the same. In both cases, respondents are saying that they perform this action, not because they feel that it is right, but because an outside entity (law or professional organization) requires them to.

In *category #4*, the responses focus on application of ethical principles; however, the respondents feel that they are ethical, despite not making a web site accessible, because there are no users that need the accessibility built into their site. Since it's impossible to know in advance who is using a web site (Lazar, 2001), there is no way to be certain that no users with disabilities are using your web site. In *category #5*, the responses focus on personal commitment versus organizational commitment. Respondents indicate that they want to focus on ethics and accessibility, but they have trouble convincing others to do so. While unfortunate, this is a realistic problem. Webmasters cannot just say that they want to focus on accessibility, because in some cases, this decision is made at an organizational level. Responses in *category #6* are similar to *category #5*, in that, outside constraints from the organization (time and budget assigned to make web sites accessible) may make it hard for a web site to be accessible, regardless of the personal ethical motivations of the Webmaster.

In *category #7*, the responses focus on an altruistic viewpoint: *I agree in principle with the application of ethics to websites for users with disabilities, but it is not my responsibility to make the application.* This is an interesting paradox, as the webmaster sees why this is important, but at the same time, cannot see that they can help make it happen. In *category #9*, the responses focus on the non-existence or nonparticipation of applied ethics. These respondents simply did not see how ethics was related to accessibility. In *category #10*, the responses focus on the interpretation of the question. The respondents did not know how to interpret or answer this question, because of vagueness. This vagueness seems to be based on the definition of ethics and its relation to web development and design.

## IMPLICATIONS

### Managers

From the survey responses, it is clear that there are some webmasters that really want to focus on accessibility, and feel that it is an ethical issue, but do not have the time at work, the resources at work, or the managerial support, to do so. Managers should be encouraging IT workers to focus on accessibility. Resources should be made available to help webmasters with this. A number of resources exist on this topic area, such as guidelines for web accessibility (see <http://www.w3.org/wai> or <http://www.section508.gov>). It should be noted that the activity of making a web site accessible is a cost-justifiable activity. That is, a web

site that is accessible is more profitable in a number of different ways, and therefore can be analyzed using a cost-benefit analysis (Lazar & Allen, 2005, in press).

### Policy Makers

Based on the responses to this question, it is clear that law and policy both have a major impact on the behavior of IT personnel. One of the major reasons why accessibility has been brought to the forefront of the IT world is the legal requirements in many countries (such as the USA, Portugal, Australia, and the UK) that government information, as well as government expenditures on IT, must be accessible (Paciello, 2000). Law can help ensure accessible IT by increasing the areas of IT that are covered under these laws. Where law cannot apply (e.g. personal technology for individuals), professional codes can help by encouraging designers to consider accessibility. A few respondents to the survey mentioned the possibility of tax breaks for companies or individuals that make their IT products accessible. This is a similar concept to tax breaks for electric cars. While the electric cars themselves might be more expensive, the tax breaks, which encourage good environmental policy, can help lower the cost of the car, making it an easier choice.

### Webmasters

From the webmaster responses, it is clear that webmasters, while generally accepting that ethics is a part of their work, have trouble consistently applying ethics to the topic of web accessibility. Clear guidelines need to be given to webmasters to help guide their actions. Training, documentation, and automated software tools can help webmasters increase their web site accessibility, but these alone will not get the job done. Clear policies can help influence the choices and actions of webmasters.

### Web Developers

While webmasters were the focus of this study, web developers are the ones that generally take responsibility for building a web site in the first place. It would be interesting to determine if web developers, as builders, have different views on ethics from webmasters, who come in to manage a site after it is built. This is fruitful ground for future research.

## SUMMARY

The responses from webmasters help give a better understanding of how they perceive ethics within the workplace context. The results showed that the majority of webmasters do consider ethics in their work context, although they apply it from different ethical perspectives. There were no clear guidelines that could be used or that all respondents agreed upon. Some respondents, although viewing the issue within an ethical context, felt that it was not their personal responsibility to ensure that web sites were accessible. This is an interesting paradox, which requires further study.

The analysis did not give answers or explanations to the three questions that were posed earlier in this paper, however, further research would lead to better understanding of applied ethics in web design and development.

## REFERENCES

- Newton, S.K., Wingreen, S.C., & Blanton, J.E. (2004). The Impact of Organizational Ethical Climate Fit on Information Technology Professional's Job Satisfaction and Organizational Commitment Research in Progress. *Proceedings of the SIGMIS'04*, 35-38.
- Conger, S., & Loch, K. D. (2001). Research Article: Invitation to a Public Debate on Ethical Computer Use. *The DATA BASE for Advances in Information Systems*. Vol. 32 (1), 58-60.
- Preston, D. (1998). What makes professionals so difficult: An investigation into Professional Ethics teaching. *Computers and Society*, June 1998. 58-67.
- Cappel J. J. & Windsor J. C. (1998). A Comparative Investigation of Ethical Decision Making: Information Systems Professionals ver-

- sus Students. The DATA BASE for Advances in Information Systems. Vol. 29 (2), 20-34.
- Harris, J., Cummings, M. & Fogliasso, C. (2002). Ethical Codes and Their Effect on Conduct. Consortium for Computing Sciences Colleges. 259-269.
- Lending, D. & Dillon, T. W. (2004). Perceptions of Accuracy: Effects on Computer Attitudes and Self-Efficacy. *Proceedings of the SIGMIS'04*, 127-128. April 2004.
- Grodzinksey, F. (1999). The practitioner from within: revising the virtues. *Computers and Society*, March 1999. 9-15.
- Lazar, J., Dudley-Sponaugle, A. & Greenidge, K. (2003). Improving web accessibility: a study of webmaster's perceptions. *Computers in Human Behavior*. 20, 269-288.
- Leitch, S. & Warren, M. (2001). Ethics and Electronic Commerce. Australian Computer Society, Inc., 56-59.
- Lazar, J. (2001). *User-Centered Web Development*. Sudbury, MA: Jones and Bartlett Publishers.
- Lazar, J., & Allen, A. (2005, in press). *Cost-justifying Web Accessibility in the Software Engineering Process*. Proceedings of the 2005 International Conference on Human-Computer Interaction (HCII),
- Lazar, J., Dudley-Sponaugle, A., & Greenidge, K. (2004). Improving Web Accessibility: A Study of Webmaster Perceptions. *Computers in Human Behavior*, 20(2), 269-288.
- Newton, S.K., Wingreen, S.C., & Blanton, J.E. (2004). The Impact of Organizational Ethical Climate Fit on Information Technology Professional's Job Satisfaction and Organizational Commitment Research in Progress. *Proceedings of the SIGMIS'04*, 35-38.
- Paciello, M. (2000). *Web Accessibility for People with Disabilities*. Lawrence, KS: CMP Books.

0 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/proceeding-paper/webmaster-perceptions-ethics-within-setting/32565](http://www.igi-global.com/proceeding-paper/webmaster-perceptions-ethics-within-setting/32565)

## Related Content

---

### Gene Expression Analysis based on Ant Colony Optimisation Classification

Gerald Schaefer (2016). *International Journal of Rough Sets and Data Analysis* (pp. 51-59).

[www.irma-international.org/article/gene-expression-analysis-based-on-ant-colony-optimisation-classification/156478](http://www.irma-international.org/article/gene-expression-analysis-based-on-ant-colony-optimisation-classification/156478)

### Quantum Information Science Vis-à-Vis Information Schools

P. K. Paul, D. Chatterjee and A. Bhuiyali (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 4448-4458).

[www.irma-international.org/chapter/quantum-information-science-vis--vis-information-schools/184152](http://www.irma-international.org/chapter/quantum-information-science-vis--vis-information-schools/184152)

### Advanced ICT Methodologies (AIM) in the Construction Industry

M. Reza Hosseini, Saeed Banihashemi, Fahimeh Zaeri and Alireza Adibfar (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 539-550).

[www.irma-international.org/chapter/advanced-ict-methodologies-aim-in-the-construction-industry/183769](http://www.irma-international.org/chapter/advanced-ict-methodologies-aim-in-the-construction-industry/183769)

### Artificial Neural Networks in Physical Therapy

Pablo Escandell-Montero, Yasser Alakhdar, Emilio Soria-Olivas, Josep Benítez and José M. Martínez-Martínez (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 6358-6368).

[www.irma-international.org/chapter/artificial-neural-networks-in-physical-therapy/113092](http://www.irma-international.org/chapter/artificial-neural-networks-in-physical-therapy/113092)

### Assessing the Potential Improvement an Open Systems Development Perspective Could Offer to the Software Evolution Paradigm

James Austin Cowling and Wendy K. Ivins (2016). *International Journal of Information Technologies and Systems Approach* (pp. 68-87).

[www.irma-international.org/article/assessing-the-potential-improvement-an-open-systems-development-perspective-could-offer-to-the-software-evolution-paradigm/152886](http://www.irma-international.org/article/assessing-the-potential-improvement-an-open-systems-development-perspective-could-offer-to-the-software-evolution-paradigm/152886)