Information Systems Ethics in U.S. Financial Institutions: A Ten-Year Perspective

- Student Researcher: Heidi Klein
- Faculty Mentor: Dr. Tom Hilton
- Department of Information Systems
- University of Wisconsin- Eau Claire

Introduction

The problem we investigated was how ethics opinions of information workers within U.S. financial institutions have changed over the past ten years with the continued evolution of the Internet. This research is significant because information systems (IS) are increasingly at the very foundation of today's economy. This research gathered data to compare to similar data from ten years ago. The data was collected from Information workers in U.S. financial institutions and concerned information systems ethics.

Theoretical Background

Previous studies have provided literature indicating that various demographics correlate with a person's ethics opinions. Additional literature indicates that opinions of an action's ethicality vary by

- whether the action takes place during or after work hours
- whether the employee receives personal gain or gain for family/friends
- whether the employee is given prior notice before inspection of a company computer

Gender

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Job Position

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Age

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Education Level

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Methodology

Data was collect by administering an online survey to a convenience sample of financial institutions in the Upper Midwest and Mountain West.

The survey contained three sections containing scenarios to judge:

1. use of employer IS resources for entertainment
2. use of employer IS resources for gain
3. employer monitoring of employees

176 complete, usable responses were received out of 550 solicited, for a 32% response rate (pretty good for a study like this).

Results

The current data was compared to the former data via two-tailed, two-sample t-Tests (alpha = 0.025) to ascertain differences in ethics opinions that have evolved over the past decade, a time of marked evolution in the Internet. This data comparison did, in fact, identify ways in which computer ethics opinions have changed over the past decade.

Item Comparison: Sixteen of 30 survey items yielded a statistical difference between samples, but only 4 of the 16 showed actual disagreement between the samples (i.e., the means fell on opposite sides of the response midpoint):

Item	Sample	Mean	Std. Dev.	df	Mean Sq	t-Value	p-Value
S1 Q8: Employee uses employer computers for Internet chatting after work.	Old	3.380	1.469	128	1.425	3.667	0.000
	New	2.773	1.392	175			

Item	Sample	Mean	Std. Dev.	df	Mean Sq	t-Value	p-Value
S1 Q10: Employee uses employer computers to access an off-site personal email account after work.	Old	3.209	1.423	128	1.336	5.607	0.000
	New	2.341	1.268	175			

Item	Sample	Mean	Std. Dev.	df	Mean Sq	t-Value	p-Value
S2 Q17: Employee uses employer e-mail system for personal e-mail.	Old	3.736	1.169	128	1.196	5.021	0.000
	New	3.040	1.216	175			

Item	Sample	Mean	Std. Dev.	df	Mean Sq	t-Value	p-Value
S2 Q20: Employee prints personal documents on employer's printer but uses employee's own paper.	Old	3.289	1.243	128	1.238	3.440	0.001
	New	2.795	1.234	175			

Section Comparison: The aggregated means of all items in each section were also compared between the old and new data to check for differences at the section level.

Section One investigated people's opinions about using employer computer resources for entertainment. This comparison yielded a statistically significant difference between the old and new data sets, the newer data showing a less negative view of using work computers for personal entertainment:

Sample	Mean	Std. Dev.	df	Mean Sq	t-Value	p-Value
Old	3.815	0.651	128	0.710	4.450	0.0022
New	3.449	0.749	175			

Section two investigated people's opinions about using employer resources for gain (personal or family/friends). As in section one, the past respondents agreed with the current respondents that such behavior is generally unethical, but the current respondents were slightly less negative about it.

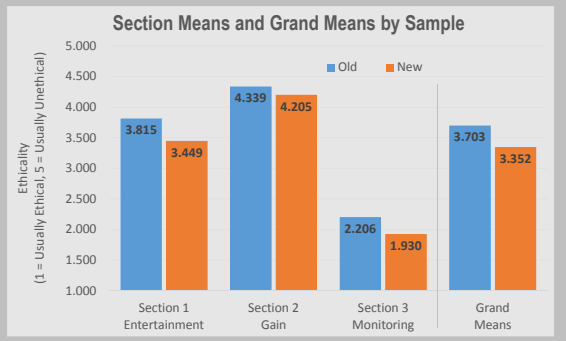
Sample	Mean	Std. Dev.	df	Mean Sq	t-Value	p-Value
Old	4.339	0.541	128	0.487	2.374	0.0182
New	4.205	0.443	175			

Results, continued

Section three investigated people's opinions about employer monitoring of employee use of company computers. The previous data's mean was 2.2, and new data's mean was 1.9, indicating that both samples find the monitoring acceptable with the current respondents being more accepting of monitoring.

Sample	Mean	Std. Dev.	df	Mean Sq	t-Value	p-Value
Old	2.206	0.615	128	0.722	3.296	0.0031
New	1.930	0.792	175			

The following column chart summarizes the section results (as well as the overall comparison described below):



Overall Comparison: The two grand means of all items on the survey, shown on the far right of the chart above, were also compared between the old and new data to check for a difference at the overall level. The grand mean of the past data was 3.703 whereas the current data's mean was 3.352, yielding a statistically significant $^1/_3$-point difference. This difference is the largest in the study, indicating clearly that the previous respondents were slightly more ethically conservative than the current respondents.

Discussion/Conclusion

Assuming these data are generalizable, this study indicates a real (if slight) shift away from rights of ownership and privacy. This seems to be consistent with the general Internet trend toward more self-disclosure and less concern over who owns one's personal data. We also wonder if this shift may be due to financial information workers becoming more familiar with computers and Internet use over the years. Of course, the non-random nature of the samples raises questions about the generalizability of these findings, and so further research is needed to substantiate these findings. We also hope for research in other industries to see whether these findings hold up there as well.

Acknowledgements

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