Information Systems Ethics in Oman, South Korea, and the USA

Thomas Hilton and Se Hyung "David" Oh MIS Department University of Wisconsin—Eau Claire 105 Garfield Avenue Eau Claire, WI 54701 USA

and

Husain Al-Lawati
Central Bank of the Sultanate of Oman

Abstract

A 30-item, three section IS ethics questionnaire was completed by a convenience sample of 520 bank employees, 129 in the western USA, 176 in the Sultanate of Oman, and 215 in the Republic of South Korea. Section 1 concerned employee use of employer IS resources for personal entertainment, section 2 concerned employee use of employer IS resources for personal gain or the gain of family or friends, and section 3 concerned employer monitoring of employee use of employer IS resources. ANOVA yielded statistically significant differences among the samples on 28 items in all three sections; 14 of these represented differing degrees of commitment but overall agreement on the ethicality of the behavior described; 12 represented actual disagreement as to whether a behavior was ethical or not. Of the 12 actual disagreements, 6 were in section 1 and concerned after-hours use of IS resources, 2 were in section 2 and concerned printing and storing personal documents, and 4 were in section 3 and concerned giving prior notice to employees when monitoring them. In sections 1 and 2, all three samples gave relatively conservative responses, favoring employer rights of ownership over employee rights of possession and use. In section 3, only the US sample answered conservatively; this section generated differences of the greatest magnitude among the three samples. The US sample was the most conservative on 25 items, the Omani sample was most conservative on 4 items; the South Korean sample was most conservative on only 1 item.

Keywords: Information systems, ethics, international, Oman, South Korea, USA, Banking

1. INTRODUCTION

Information is very personal stuff, coming from the human mind as it does (Tsui & Windsor, 2001). Because of this, every culture has developed powerful norms for identifying right or wrong uses of information (Thorne & Saunders, 2002). We call these norms information ethics.

As the information technology (IT) revolution continues, particularly since the

start of the Internet revolution, the cultures of the world have been brought into closer and closer interaction with each other (Guthrie, 1997). Information sharing across cultures has been the forerunner to and continues as the foundation of unprecedented and increasing synergy in international commerce and travel (Karande, Rao, & Singhapakdi, 2002). It thus becomes crucial to clarify culture-specific information ethics as they influence these IT-enabled interactions among world cultures (Newton &

Ford, 1994). Such IT-centric norms are here termed information systems (IS) ethics. Understanding—and reconciling where necessary—the IS ethics of the world's cultures is crucial to the continued progress of humanity toward global peace, freedom, and prosperity.

One way of dividing the world's cultures for studying IS ethics is along the lines of the "Global Triad": the Americas, EMEA (Europe, the Middle East, and Africa), and Asia (Malloch, 2001). While this is admittedly a very rough categorization that overlooks many important cultural variations within each world region, we find it useful as a starting place for comparisons.

In this study we report IS ethics survey research we conducted in three countries, one from each region of the Triad: the (western) USA, the Sultanate of Oman (on the southeast coast of the Arabian Peninsula), and South Korea. Although we do not assert that the IS ethics in each of these countries is entirely typical of IS ethics in its whole region of the Triad, we believe that each provides a basis for fruitful comparison. Moreover, given the current geopolitical state of affairs, we assert that identifying ethical conflicts and common ground among these three countries is particularly relevant.

2. ETHICS ACROSS THE GLOBAL TRIAD

Ethics is defined in different and sometimes conflicting ways throughout the Triad (Regan, 1984, as cited in Udas et al., 1996). As this study aims to explore similarities and differences in IS ethics among the US, Omani, and South Korean cultures, it is important to understand the basis on which the people of these cultures view and define ethics in general.

Ethics in the USA

Historically, religion has had a considerable cultural influence on business ethics throughout the world (Wienen, 1999), and the USA is no exception. However, in the United States today, like other historically Christian countries (Kruckeberg, 1996), religion as influence on defining ethics has been replaced to a degree by secular humanism.

Secular Ethics. Recent definitions of ethics in the USA appear to be based on the secular philosophical views of various schools of thought such as the utilitarian (most popular), teleological, deontological, etc. (Kimberly and Jonathon, 1999). As a result, it is difficult to find in the ethics literature a generally accepted definition of ethics from the western perspective. Still, several definitions of ethics from general and business perspectives offered by scholars from different academic and business domains are considered representative.

Hiller (1986) views ethics as an instrument that "attempts to find good reasons for holding certain values or adopting certain principles or duties as a guide to decision making" (p. 6). Price (as quoted in Kimberly & Jonathon, 1999) defines ethics as "an explanation of what ought to be done and why, the study of why we have the particular belief system that we have, and the analysis of how moral codes relate to what we value" (p. 8). Finally, Cook (1997) espouses "situational ethics," the belief that rules of ethics may change because in certain cases ordinarily acceptable ethical principles may not apply.

US Business Ethics. Newton and Ford (1994) note the cynical view that US "business ethics' is sometimes considered to be an oxymoron," but they also note that "ethics is an issue of growing concern and importance to businesses..." (p. xii). Fort (1998) presents ethical business decisions in a quasi-mathematical form introduced by William Frederick (1995). Fort states, "in this 'Philosopher's Formula,' ethical business behavior (BE) is a function of Kantian rights (RK), Rawlsian justice (JR), and Jamesian utilitarianism (UJ)" (p. 249). In other words, ethics decisions of US businesspeople are based on

- recognition of self-evident rights and duties (per Immanuel Kant—see Kant et al., 2004),
- the interplay of societal justice and individual fairness (per John Rawls—see Rawls, 1999), and
- consideration of practical consequences (per William James as expanded by John Stuart Mill—see Mill & Sher, 2002).

US business ethics writers have also attempted to define globally applicable ethics. According to Buller, Kohls, & Anderson (2000), "global business ethics is the application of moral values and principles to complex cross-cultural situations" (p. 53). This definition of business ethics seems to be general enough to be accepted by most cultures, including those of EMEA and Asia.

Ethics in Oman

Kruckeberg (1996) states that "Islam is the state-sanctioned religion in many Middle East countries..." (p. 187). Similarly, Wienen (1999) writes that "Islam is a driving force behind the cultural development in the Muslim World" (p. 18). This implies that Arab ethics and hence ethics in Oman is influenced significantly by Islam. As a result, the definition of ethics —or "Akhlaq," the comparable term used by Muslims—cannot be defined in isolation from Islam. Knowing this is important for both defining Omani ethics and distinguishing it from ethics in the USA According to Siddiqui (1997, p. 2),

The comparable word for ethics in Islam is Akhlaq, and this is construed as morality. A problem arises when we study akhlag vis-àvis ethics. In western vocabulary the terms "ethics" and "morality" have different origins; one derived from the Greek ethos, "ethics," and the other derived from the Latin mores or "morals." Both mean habits or customs, but the distinction in [western] thought and language has been maintained. One is what is "commonly felt and done" (morals) as opposed to what is "appropriate and rational" (ethics). In Islamic thought, the predominant feature is knowledge of morality (ilm-ul-Akhlag).

The above quote indicates that the term ethics as distinct from morality has no definite equivalent in the Omani culture; rather, Islamic morality is the basis of defining right and wrong in business. In this vein, Abeng (1997, p. 50) states,

Besides its general appreciation for the vocation of business, the Qur'an often speaks about honesty and justice in trade (see Qur'an 6:152; 17:35; 55:9). The Qur'an also presents Allah [God] as the prototype of good conduct. Muslims, therefore, are supposed to emulate Him throughout their lives including, of course, their conduct in business.

The above quote suggests that in the Omani culture business ethics is Islamic and essentially no different from general morality.

Ethics in South Korea

As a country that has long followed the Confucian tradition, Korean culture favors the benefit of an organization or society over that of an individual (Kincaid, 1987). Since the adoption of Confucianism during the Lee dynasty in the 14th century A.D., keeping harmony in the group has been the main focus of education and has been held up as the ideal for society (Yum, 1987). As discussed by De Mente (1998), one of the most important characteristics of Korean culture is the relationship (p. 224):

The Korean perspective was that as long as the parties to any relationship were sincere and gave precedence to personal and humane elements, they would be able to deal with the various circumstances that arose, and the relationship would be solid and achieve its goals.

Therefore it can be said that eventually relationships and circumstances determine ethics in Korea. De Mente (1998) again comments,

The Korean criteria for sin are not based as much on universal absolutes as on the effect actions have on individuals, on the family, on co-workers and friends, and on society at large.

Korean business ethics, then, revolves around building and maintaining relationships within the context of organizational harmony and accord growing out of the Confucian tradition.

Summary of Triad Ethics

It is heartening to find a degree of similarity in US, Omani, and Korean business ethics as presented here. The religion-based morality that underlies business ethics in all three cultures indicates the existence of a foundation for IS ethics that transcends culture to facilitate effective information exchange worldwide. We note, however, that significant vagueness remains in all three definitions as presented here because terms such as honesty, justice, morality, and humaneness are left undefined. That is, similarities notwithstanding, these definitions leave significant doubt as to just what uses of information would be considered right or wrong in the US, Omani, or South Korean cultures. Hence, this study.

3. METHOD

Questionnaire

To help add more detail to the definition of IS ethics around the world, we developed a 30-item questionnaire that poses 30 scenarios in three broad areas: a) 12 items on employee use of employer IS resources for personal entertainment, b) 12 items on employee use of employer IS resources for gain (either their own or that of friends or family), and c) 6 items on employer monitoring of employee use of employer IS resources. Respondents rated the behavior in each scenario on a 5-point Lickert-type scale from "usually unethical" to "usually ethical" (Loch, Conger, & Oz, 1998; Yum, 1987).

Also included in the questionnaire was a section requesting four respondent demographics: gender, age, education level, and management/non-management status. These demographics were included because research indicates that, in general, women, older people, more educated people, and people with management status tend to be more ethically conservative than men, younger people, less educated people, and people with non-management status (cf Gabrys, 2002; Gattiker & Kelley, 1999; and Singhapakdi et al., 2001).

We validated the questionnaire via a pilot test reported in Al-Lawatia & Hilton, 2002. Validation consisted of the following activities. Omani and South Korean nationals translated the English original into Arabic

and Korean, then different Omani and South Korean nationals translated them back into English; the original and back-translated versions were verified as semantically identical. Selected researchers who had established their expertise by publishing peer-reviewed IS ethics research reviewed it content validity. US and non-US respondents completed it and gave feedback on its structure and content; from their responses were calculated a Chronbach's Alpha reliability coefficient for each part of the questionnaire (Part 1: 0.86; Part 2: 0.84; and Part 3: 0.77). Non-respondents were contacted and explained their reasons for declining the questionnaire so the possibility of non-response bias could be eliminated.

Copies of the three versions of the questionnaire are in the appendix at the end of this paper.

Sample and Response Rate

The questionnaire was administered to information workers in three countries, one from each part of the Triad: the USA (California., Idaho, Nevada, and Utah), the Sultanate of Oman, and the Republic of South Korea. We limited the survey to bank employees in each country to keep our samples comparable and because banking industry is relatively well computerized throughout the world (McDonald, 2000). Neither the banks nor the employees were randomly selected; rather the selection was based on willingness to participate in the survey. The distribution and responses are shown in Table 1:

Table 1. Questionnaire Response Rate

			Response
Country	Dist.	Returned	Rate
Oman	250	176	70.4%
S. Korea	250	215	86.0%
USA	283	129	45.6%
Total (n)	783	520	66.4%

Table 1 shows much more robust response rates in Oman and South Korea than in the USA. Checking for possible nonresponse bias led us to conclude that US questionnaire recipients felt more concern about divulging proprietary information than did non-US participants.

All returned questionnaires were deemed usable and were coded for analysis. A number of nonresponses were scattered throughout the returned questionnaires, and so n varies slightly from item to item.

Analysis

Responses from the USA, Oman, and South Korea were compared via analysis of variance (ANOVA, a = 0.025) to look for significant variation in their views of

- employee use of employer IS resources for personal entertainment,
- employee use of employer IS resources for gain (either their own or their friends' or family's), and
- employer monitoring of employee use of employer IS resources.

In addition, responses from each culture to each questionnaire item were compared across the three cultures, and all items together were compared across the three cultures. Alpha was decreased from the traditional value of 0.05 to 0.025 to minimize the risk of a Type I error (erroneously rejecting a null hypothesis), given the large number (34) of ANOVA tests planned in the analysis.

Omani, and South Korean cultures are similar or different in deciding what is right and wrong in information systems (IS) use. In order to explore the similarities and differences in IS ethics among these cultures, bankers in each country were invited to complete a questionnaire with three sections: employee use of employer IS resources for personal entertainment, employee use of employer IS resources for personal gain or the gain of friends or relatives, and the company use of non-trust systems to monitor employee use of its IS resources. Bankers' responses were the dependent variable and the independent variable was culture. Four demographic variables (gender, age, education level, and employment level) were also checked.

In total, 520 respondents participated in this survey: 129 Americans, 176 Omanis, and 215 South Koreans. Demographics of the respondents are presented next, followed by the main analysis.

Respondent Demographics

Information on respondent gender, age, education level, and employment level are summarized in tables 2, 3, 4, and 5.

4. FINDINGS

The main purpose of this study was to identify specifics of how the western US,

				• /					
Table 2. Respondent Gender									
Oman South Korea				L	JSA	Total			
Gender	N	%	n	%	n	%	n	%	
Female	66	37.5	99	47.1	75	58.1	240	46.6	
Male	110	62.5	111	52.9	54	41.9	275	53.4	
Total	176	100.0	210	100.0	129	100.0	515	100.0	

Table 2 shows that the three samples varied somewhat in gender. Just over half of the US respondents were female, but only about

a third of the Omani respondents were female; the South Korean sample was about half female.

Table 3. Respondent Age

	0	man	South	n Korea	ι	ISA	Total	
Age	N	%	n	%	n	%	n	%
Below 20 years old	3	1.7	1	0.5	0	0.0	4	0.8
20 to below 30 years old	82	46.6	78	36.3	28	21.7	188	36.2
30 to below 40 years old	68	38.6	94	43.7	26	20.2	188	36.2
40 to below 50 years old	20	11.4	40	18.6	46	35.7	106	20.4
50 years old and above	3	1.7	2	0.9	29	22.5	34	6.5
Total	176	100.0	215	100.0	129	100.0	520	100.0

Table 3 shows that the Omani sample was youngest on average, followed by the South Korean sample. The US sample was oldest on average. More than three quarters of the

Omani and Korean respondents were below the age of forty, but less than half the US respondents were that age.

Table 4. Respondent Education Level

	0	man	South Korea		ι	JSA	Total	
Education Level	n	%	n	%	n	%	n	%
Below high school	16	9.2	0	0.0	1	0.8	17	5.6
High school	66	38.2	42	19.5	29	22.7	137	31.6
Undergraduate	77	44.5	143	66.5	50	39.1	270	42.2
Graduate	13	7.5	8	3.7	41	32.0	62	17.9
Professional certificate	1	0.6	22	10.2	7	5.5	30	2.7
Total	173	100.0	215	100.0	128	100.0	516	100.0

Table 4 shows that the most common educational level for all samples was the undergraduate. The South Korean sample had the most undergraduate-level and professional-certificate-level respondents, the US sample had the most graduate-level respondents, and the Omani sample had the most high-school-level and below-high-

school-level respondents. In aggregate, then, the US sample reported a slightly higher education level than did the South Korean sample, and the Omani sample reported the lowest education level; however, this demographic is noteworthy for its relative homogeneity.

Table 5. Respondent Employment Position									
	Oman South Korea				l	JSA	Total		
Position	n	%	n	%	n	%	n	%	
Managerial	35	20.2	80	44.0	53	41.1	168	34.7	
Non-managerial	138	79.8	102	56.0	76	58.9	316	65.3	
Total	173	100.0	182	100.0	129	100.0	484	100.0	

Table 5 shows that the South Korean and US samples had similar proportions of management-level respondents (about 40%) and that the Omani sample contained about 20% management-level respondents. This appeared to us to be consistent with the age and education level data, but we also note that this demographic elicited a relatively high (15%) nonresponse rate among South Korean respondents.

Summarizing the demographic data, then, we find that, in general, the US sample contained more females and was older and more highly educated than the other samples; the South Korean sample had a slightly higher proportion of management-level respondents than did the US sample. The South Korean respondents were next in all these categories (except employment position as just described), and the Omani sample contained the fewest females and management-level employees and was younger and less highly educated than the other samples.

Per the literature review, this would indicate that, absent a culture effect, we would expect the US sample to be most conservative, the Omani sample to be most liberal, and the South Korean sample to fall somewhere in between. In the context of this study, ethical conservatism would mean favoring employers' rights of ownership over employees' rights of possession and use; ethical liberality would mean the opposite.

Data Analysis Results

To explore the influence of cultural differences on the IS ethics of bank employees in Oman, South Korea, and the western USA, five null hypotheses were established for testing via ANOVA. Each is listed next with its accompanying dependent (DV) and independent (IV) variables:

Culture does not affect bank employee views on

1. employee use of employer IS resources for personal entertainment.

DV = respondent's average response to all items in questionnaire section 1

IV = respondent's culture

2. employee use of employer IS resources for gain (either their own or friends' or family's).

DV = respondent's average response to all items in questionnaire section 2 IV = respondent's culture

3. employer monitoring of employee use of employer IS resources.

DV = respondent's average response to all items in questionnaire section 3 IV = respondent's culture

4. use of IS resources in general (i.e., all of the issues combined).

DV = respondent's average response to all items in the questionnaire IV = respondent's culture

5. use of IS resources in specific circumstances (i.e., each issue individually).

DV = respondent's response to each item in the questionnaire individually IV = respondent's culture

The results of the ANOVA for the first four hypotheses are summarized in Table 6. The results for hypothesis 5, being too voluminous to include in Table 6, are presented separately in Table 7.

Table 6. One-way ANOVA of Culture Effect on Bank Employee IS Ethics Views (n=520)

Hypothesis	Culture	Mean*	Std. Dev.	df	Mean Sq.	F	Sig. (p)
Hypothesis 1:	USA	3.811	0.961	2	21.99	29.90	0.000**
Culture vs. Section 1	Oman	3.699	0.895				
(Entertainment)	S. Korea	3.162	0.755				
Ulumatha air 2.	LICA	4 221	0.502	2	0.01	22.17	0.000**
Hypothesis 2:		4.321	0.583	2	9.01	23.17	0.000**
Culture vs. Section 2		3.900	0.558				
(Gain)	Oman	3.879	0.721				
Usmathacia 2.	C Varan	2 506	0.757	2	04.63	101.62	0.000**
Hypothesis 3:	S. Korea	3.586	0.757	2	84.62	101.63	0.000**
Culture vs. Section 3	Oman	2.745	0.936				
(Monitoring)	USA	2.188	1.099				
Hypothesis 4.	ПСЛ	2 600	0.612	2	0.00	2 07	0.057
Hypothesis 4:	USA	3.690	0.613	2	0.90	2.87	0.057
Culture vs. All sections	Oman	3.581	0.564				
	S. Korea	3.542	0.521				

NOTE: A vertical line by a pair of culture names indicates that their means cluster together in the Dunnett T3 multiple-comparison test.

Hypothesis 1: Using employer IS resources for personal entertainment. Table 6 indicates that culture does affect respondent views on employee use of employer IS resources for personal entertainment. The multiple-comparison test indicates that South Korean bank employees consider such activity less unethical than do US and Omani bank employees. However, it is noteworthy that all three means are on the same side of the response midpoint, indicating that all three populations believe the activity is generally unethical.

Hypothesis 2: Using employer IS resources for gain. Table 6 indicates that culture does affect respondent views on employee use of employer IS resources for gain (either their own or their friends' or family's). The multiple-comparison test indicates that US bank employees consider this activity more unethical than do South Korean and Omani peers. Again, however, all means fall on the same side of the response midpoint, indicating that all three populations believe the activity is generally unethical.

Hypothesis 3: Monitoring employee IS use. Table 6 indicates that culture does affect respondent views on employers monitoring employee use of employer IS resources. The multiple-comparison test indicates that all three cultures are

^{*1 =} usually ethical, 5 = usually unethical

^{**}statistically significant at a = 0.025

significantly different from each other. Moreover, this difference crosses the response midpoint with South Korean bank employees considering this activity unethical and Omani and US bank employees considering it ethical. We note, however, that the Omani mean response was close to neutral and that this section generated the highest standard deviations, i.e. the least within-sample agreement, of the three.

Hypothesis 4: Ethics views general. Table 6 indicates that culture does not affect respondent views on IS ethics in general. The non-significant f-value is interesting because the sections aggregated for this test did individually yield statistically significant results. We are thus apparently faced with the indication that, while specific IS ethics decisions are affected by culture, one's general IS ethics outlook is not-which is counterintuitive in the extreme. To explain this oddity, we present in Figure 1 a graphical representation of the nine means that were aggregated to test hypothesis 4:

5 4.5 4 USA South Oman 3.5 Korea South 3 Korea Oman 2.5 **USA** 2 1.5 1 Section 1 Section 2 Section 3

Figure 1. Variation in Sample Means for Each Ouestionnaire

Figure 1 shows that the samples of all three cultures essentially traded places with each other from Sections 1 and 2 on the one hand to Section 3 on the other, generating withinsample variability that overwhelms the between-sample variability and thus yields a non-significant f-value. Therefore, it is clearly a mistake to find that culture does not affect bank employees' general IS ethics outlook. Rather, the correct finding is that section 3 generated extreme and opposite

responses from those of sections 1 and 2 and that culture is indeed shown to affect one's general IS ethics outlook.

Hypothesis 5: Item-by-item comparison. To explore the effect of culture within each section of the questionnaire, an ANOVA was conducted for each item individually. With apologies for its length, we present Table 7 to summarize the resulting 30 ANOVA tests.

Table 7. One-way ANOVA of Culture Effect on Detailed IS Ethics Views of Bank Employees (n=520)

Item (ethical issue)	Culture	Mean*	Std. Dev.	df	Mean Sq.	F	Sig. (p)
S1 Q1: Employee uses employer computers for games	USA	4.519	0.936	2	8.282	9.404	0.000**
during work.	S. Korea	4.293	0.775				
during work.	Oman	4.051	1.107				
S1 Q2: Employee uses employer computers for games	Oman	3.364	1.311	2	20.416	12.246	0.000**
after work.	USA	3.252	1.436				
aner work.	S. Korea	2.753	1.180				

S2 Q13: Employee uses employer data for personal

S2 Q14: Employee uses employer data for the gain of

S2 Q15: Employee installs employer-licensed software

S2 Q16: Employee installs employer-licensed software

gain.

family or friends.

on employee's own PC.

on the PC of a friend or relative.

Item (ethical issue)	Culture	Mean*	Std. Dev.	df	Mean Sq.	F	Sig. (p)
S1 Q3: Employee uses employer computers for personal	USA	4.271	1.081	2	17.035	14.690	0.000**
matters during work.	Oman	3.824	1.165				
matters during work.	S. Korea	3.623	0.996				
S1 Q4: Employee uses employer computers for personal	Oman	3.176	1.393	2	32.531	19.090	0.000**
matters after work.	USA	2.853	1.442				
matters after work.	S. Korea	2.364	1.133				
S1 O5: Employee uses employer computers to read on	USA	4.333	1.056	2	28.629	24.062	0.000**
S1 Q5: Employee uses employer computers to read on-	Oman	4.028	1.168				
line newspapers/magazines during work.	S. Korea	3.526	1.045				
C1 O6: Employee uses employer computers to read on	Oman	3.188	1.383	2	50.780	30.882	0.000**
S1 Q6: Employee uses employer computers to read on-	USA	2.953	1.391				
line newspapers/magazines after work.	S. Korea	2.209	1.118				
C1 O7: Employee uses employer computers for Internet	USA	4.450	1.000	2	5.096	5.447	0.005**
S1 Q7: Employee uses employer computers for Internet chatting <i>during</i> work.	Oman	4.429	1.042				
	S. Korea	4.153	0.881				
C4 O0. Franksissa vasa amerikasa asmanikasa farikatasa at	Oman	3.716	1.402	2	53.115	28.370	0.000**
S1 Q8: Employee uses employer computers for Internet	USA	3.380	1.469				
chatting after work.	S. Korea	2.693	1.275				
C1 O0. Employee uses employer computers to access	USA	4.186	1.102	2	38.700	27.447	0.000**
S1 Q9: Employee uses employer computers to access	Oman	3.722	1.268				
an off-site personal email account during work.	S. Korea	3.220	1.168				
C1 O10: Employee yees employer computers to access	USA	3.209	1.423	2	54.454	30.054	0.000**
S1 Q10: Employee uses employer computers to access	Oman	3.136	1.436				
an off-site personal email account after work.	S. Korea	2.238	1.216				
C1 O11, Employee uses ampleyer computers for	USA	4.597	0.888	2	10.139	11.236	0.000**
S1 Q11: Employee uses employer computers for	Oman	4.199	1.080				
developing personal programs during work.	S. Korea	4.107	0.868				
C4 O40: Employee week ampleyer commuters for	USA	3.775	1.376	2	46.575	26.900	0.000**
S1 Q12: Employee uses employer computers for	Oman	3.585	1.358				
developing personal programs after work.	S. Korea	2.819	1.242				

USA

Oman

USA

Oman

USA

Oman

USA

Oman

S. Korea

S. Korea

S. Korea

S. Korea

4.773

4.553

4.392

4.742

4.435

4.335

4.783

4.156

3.977

4.906

4.472

4.228

0.655

0.740

1.058

0.734

0.807

1.062

0.661

1.117

0.888

0.555

0.979

0.791

2

2

2

2

5.390

6.462

7.567 0.001**

8.231 0.000**

27.072 31.655 0.000**

18.333 27.723 0.000**

Table 7. One-way ANOVA of Culture Effect on Detailed IS Ethics Views of Bank Employees (n=520)

USA 3.736 1.169 2 3.760 2.691 0.069 S2 Q17: Employee uses employer e-mail system for 3.480 Oman 1.317 personal e-mail. S. Korea 3.444 1.068 USA 4.469 0.930 2 56.116 43.228 0.000** S2 Q18: Employee uses but does not install employer-S. Korea 3.462 0.985 licensed software on employee's own PC. Oman 3.320 1.418 USA 4.016 1.000 2 20.417 17.314 0.000** S2 Q19: Employee prints personal documents on Oman 3.517 1.219 employer's printer with employer's paper. S. Korea 3.307 1.018 2 19.496 12.567 0.000** **USA** 3.289 1.243 S2 Q20: Employee prints personal documents on S. Korea 2.921 1.123 employer's printer but uses employee's own paper. Oman 2.566 1.383 USA 3.791 1.095 2 42.346 29.652 0.000** S2 Q21: Employee stores personal documents on S. Korea 2.892 1.153 employer's computer. 2.818 Oman 1.310 Proc ISECON 2004, v21 (Newport): §3253 (refereed)

			–		
Table 7 ()ne-way	'ANOVA of Cultu	re Effect on Defai	led IS Ethics Vi	iews of Bank Employees	(n=52())

Table 7. One-way ANOVA of Culture Effect of	n Detaile	ia is eir	lics views		nk Empio	
Item (ethical issue)	Culture	Mean*	Std. Dev.	df	Mean Sq.	F Sig. (p)
S2 Q22: Employee logs into and uses employer's	USA	4.605	0.842	2	10.135	11.379 0.000**
computer using a different employee's password.	Oman	4.460	0.991			
computer using a unierent employee's password.	S. Korea	4.136	0.962			
S2 Q23: Employee discloses sensitive customer	S. Korea	4.795	0.459	2	22.461	25.519 0.000**
information to an authorized third party without customer	Oman	4.443	0.990			
permission.	USA	4.054	1.365			
S2 Q24: Employee discloses sensitive customer	USA	4.899	0.513	2	1.253	3.563 0.029
information to an unauthorized third party without	S. Korea	4.800	0.522			
customer permission.	Oman	4.716	0.716			
S3 Q25: Employer monitors employee e-mail without	S. Korea	4.377	0.769	2	76.101	50.411 0.000**
informing employees.	Oman	3.659	1.433			
	USA	3.023	1.519			
S3 Q26: Employer monitors employee e-mail after	S. Korea	3.210	1.205	2	110.969	71.992 0.000**
informing employees.	Oman	2.028	1.307			
informing employees.	USA	1.727	1.208			
S3 Q27: Employer makes surprise checks for personal	S. Korea	4.260	0.824	2	83.550	57.905 0.000**
documents on employer PCs without informing	Oman	3.580	1.337			
employees of the possibility.	USA	2.828	1.501			
S3 Q28: Employer makes surprise checks for personal	S. Korea	3.140	1.222	2	88.290	55.479 0.000**
documents on employer PCs after informing employees	Oman	2.295	1.370			
of the possibility.	USA	1.703	1.166			
S3 Q29: Employer makes surprise checks for non-	S. Korea	3.814	1.051	2	93.197	52.119 0.000**
employer software on employer PCs without informing	Oman	2.977	1.512			
employees of the possibility.	USA	2.328	1.501			
S3 Q30: Employer makes surprise checks for non-	S. Korea	2.730	1.149	2	57.668	40.566 0.000**
employer software on employer PCs after informing	Oman	1.932	1.268			
employees of the possibility.	USA	1.625	1.157			

NOTE: A vertical line by a pair of culture names indicates that their means cluster together in the Dunnett T3 multiple-comparison test.

Table 7 shows that 28 of the 30 questionnaire items yielded statistically significant ANOVA results. While readers are invited to study all table details, we here note the following points:

• Conservatism vs. liberality. The US sample gave the most conservative responses, favoring employers' rights of ownership over employees' rights of possession in 25 of the 30 items. Moreover, in four of the five items where the US sample was not the most conservative, the US mean response was not statistically significantly different from the more conservative mean. Only in item 23, disclosure of sensitive information to an authorized third party without customer permission, were US respondents statistically significantly less conservative than South Korean and Omani respondents.

- Internal consistency. The Omani sample showed the least internal agreement, producing highest the standard deviations in 22 of the 30 items. Only in items concerning personal entertainment after work were the Omanis consistently surpassed by another sample (the US) in internal disagreement. The South Korean sample exhibited the lowest standard deviation, i.e., the least internal disagreement, on every item.
- Actual disagreement. The South Korean respondents more often disagreed with the other samples on the ethicality of an item than did the Omani or US respondents. That is, when the mean responses of the three samples straddled the response midpoint—when one sample indicated a behavior was ethical and the others indicated it was unethical—the South Korean sample was by itself more often than were the US and Omani samples. The Omani sample

^{*1 =} usually ethical, 5 = usually unethical

^{**}statistically significant at $\alpha = 0.025$

stood alone on only two items (4 and 20), as did the US sample (21 and 27); the South Korean sample stood alone on eight items (2, 6, 8, 10, 12, 26, 28, and 29). Because these 12 items produced

actual disagreement among the samples on the ethicality of a behavior, we here reproduce their data from Table 7 in Table 8:

Table 8. One-way ANOVA of Issues Yielding Actual Disagreement Among Samples (n=520)

Item (ethical issue)	Culture	Mean*		df	Mean Sq.	F Sig. (p)
S1 Q2: Employee uses employer computers for games	Oman	3.364	1.311	2	20.416	12.246 0.000**
after work.	USA	3.252	1.436			
alter work.	S. Korea	2.753	1.180			
S1 Q4: Employee uses employer computers for personal	Oman	3.176	1.393	2	32.531	19.090 0.000**
matters after work.	USA	2.853	1.442			
matters after work.	S. Korea	2.364	1.133			
S1 Q6: Employee uses employer computers to read on-	Oman	3.188	1.383	2	50.780	30.882 0.000**
line newspapers/magazines after work.	USA	2.953	1.391			
inte newspapers/magazines after work.	S. Korea	2.209	1.118			
S1 Q8: Employee uses employer computers for Internet	Oman	3.716	1.402	2	53.115	28.370 0.000**
chatting after work.	USA	3.380	1.469			
Gratting arter work.	S. Korea	2.693	1.275			
S1 Q10: Employee uses employer computers to access	USA	3.209	1.423	2	54.454	30.054 0.000**
an off-site personal email account <i>after</i> work.	Oman	3.136	1.436			
an on-site personal email account after work.	S. Korea	2.238	1.216			
S1 Q12: Employee uses employer computers for	USA	3.775	1.376	2	46.575	26.900 0.000**
developing personal programs after work.	Oman	3.585	1.358			
developing personal programs after work.	S. Korea	2.819	1.242			
S2 Q20: Employee prints personal documents on	USA	3.289	1.243	2	19.496	12.567 0.000**
employer's printer but uses employee's own paper.	S. Korea	2.921	1.123			
employer's printer but uses employee's own paper.	Oman	2.566	1.383			
S2 Q21: Employee stores personal documents on	USA	3.791	1.095	2	42.346	29.652 0.000**
employer's computer.	S. Korea	2.892	1.153			
employer's computer.	Oman	2.818	1.310			
S3 Q26: Employer monitors employee e-mail after	S. Korea	3.210	1.205	2	110.969	71.992 0.000**
informing employees.	Oman	2.028	1.307			
illorning employees.	USA	1.727	1.208			
S3 Q27: Employer makes surprise checks for personal	S. Korea	4.260	0.824	2	83.550	57.905 0.000**
documents on employer PCs without informing employees	Oman	3.580	1.337			
of the possibility.	USA	2.828	1.501			
S3 Q28: Employer makes surprise checks for personal	S. Korea	3.140	1.222	2	88.290	55.479 0.000**
documents on employer PCs after informing employees o	f Oman	2.295	1.370			
the possibility.	USA	1.703	1.166			
S3 Q29: Employer makes surprise checks for non-	S. Korea	3.814	1.051	2	93.197	52.119 0.000**
employer software on employer PCs without informing	0	2.077	1.512			
employer software on employer PGS without informing	Oman	2.977	1.512			

NOTE: A vertical line by a pair of culture names indicates that their means cluster together in the Dunnett T3 multiple-comparison test

Table 8 shows that most of the disagreement occurred over after-work activities and employer monitoring of employees. The differences of greatest magnitude occurred over employer monitoring of employees.

Summary of Results

A three-part, thirty-item questionnaire on IS ethics was completed by bank employees in the western USA, the Sultanate of Oman, and the Republic of South Korea.

Summary of demographic analysis. Per the ethics literature cited elsewhere in this paper, demographic data on the gender,

^{*1 =} usually ethical, 5 = usually unethical

^{**}statistically significant at $\alpha = 0.025$

age, education level, and employment position of respondents showed that, absent a culture effect, the US sample would be expected to respond most conservatively, the South Korean sample most liberally, and the Omani sample in between.

Summary of results by section. The questionnaire was divided into three sections. Section 1 asked about various uses of employer IS resources for personal entertainment, section 2 asked about various uses of employer IS resources for gain (either personal or family), and section 3 asked about employer monitoring of employee use of employer IS resources. ANOVA yielded statistically significant differences among the samples for every section. For section 1, the USA and Oman on the one hand were significantly more conservative than South Korea on the other; however, all three samples were on the conservative side of the response midpoint. For section 2, the USA on the one hand was significantly more conservative than South Korea and Oman on the other; again, all three samples were on the conservative side of the response midpoint. For section 3, the USA was significantly more conservative than Oman, which was significantly more conservative than South Korea; here, the samples actually disagreed, with the US and Omani means falling on the conservative side of the response midpoint and the South Korean mean falling on the liberal side of the response midpoint.

Summary of results by item. The questionnaire contained 30 items, 12 in section 1, 12 in section 2, and 6 in section 3. yielded statistically significant differences among the samples for 28 of the items. The US sample was the most conservative on 25 items, followed by the Omani sample on 4 items and the South Korean sample on 1 item. The Omani sample produced the highest standard deviations (indicating the least internal agreement) on 22 of the items, followed by the US sample on the other 8; the South Korean sample produced the smallest standard deviation (indicating the least internal disagreement) on every item. Twelve items produced actual disagreement about the ethicality of a behavior, with one sample mean falling on one side of the response midpoint and two sample means falling on the other side; 6 of the 12 items were in section 1 and dealt with after-hours activity; 2 items were in section 2 and dealt with printing and storing personal documents; the remaining 4 items, which generated the greatest magnitude of inter-sample disagreement, were in section 3 and dealt with whether or not employers should give prior notice to employees of monitoring activity.

5. DISCUSSION AND CONCLUSIONS

The results of this study indicate that, indeed, bank employees from the Republic of South Korea, the Sultanate of Oman, and the western US do report statistically significant differences on most ethics issues in the questionnaire. It is now our task to place these findings in context to clarify as much as possible the practical implications of these findings.

Disagreement vs. Commitment

Our first point of discussion is that most of statistically significant differences involved small magnitudes and did not cross the response midpoint. In other words, while the differences are not due to chance, neither do they represent actual disagreement about what is ethical and what is not. Rather, we see them as representing differing depths of commitment to the ethicality of a particular behavior.

For example, the analysis by section produced statistically significant differences among the samples for all three sections, but only section 3 (employer monitoring of employee use of employer IS resources) means indicating that produced population (the US) believes such behavior is ethical while the other populations believe it is unethical. The means associated with section 1 indicate to us that western US and Omani bank employees may be more committed to the belief that using employer IS resources for personal entertainment is unethical than are South Korean bank employees, understanding at the same time that South Korean bank employees do believe using employer IS resources for personal entertainment is unethical. We interpret the findings for section 2 similarly. understanding that western US employees may hold more strongly their opinion that using employer IS resources for gain (either personal or family/friends) is

unethical than do Omani or South Korean bank employees, understanding at the same time that Omani and South Korean bank employees do believe that using employer IS resources for the gain of self or family/friends is unethical.

Nuanced Understanding

We view the item-by-item results similarly: while 28 items yielded significant differences, only 12 items produced means on both sides of the response midpoint. We see these 12 items as providing additional detail to our understanding of the analysis by section.

For example, the item-level analysis shows that we can the difference in section 3 between the US sample on one hand and the Omani and South Korean samples on the other as a disagreement over the necessity of employers giving prior notice when monitoring employee use of employer IS resources. Western US bank employees evidently do not see prior notice as a necessity, while Omani and South Korean bank employees evidently do.

Similarly, the ethical conservatism in section 1 expressed more strongly by the US and Omani samples than by the South Korean samples gains depth and nuance when we understand from the item-level analysis that the disagreement centers on after-hours use of employer IS resources for personal entertainment rather than on such activity during work. Everyone seems to agree that playing when one should be working is unethical, but opinions soften somewhat when the play occurs after work.

Our understanding of the conservatism in section 2 expressed more strongly by US bank employees than by their Omani or South Korean counterparts is clearer when we see that the disagreement is more about storing and printing personal documents rather than about the other activities described.

Generalizability

All of the above interpretation assumes that the samples are representative of their respective populations. Unfortunately, the nonrandom method of sampling raises questions in this regard, nor does the demographic analysis settle them.

We noted in the literature review that evidence suggests gender, age, education level, and employment position affect ethics attitudes: women and older people tend to be more conservative, as do people with more education and a higher employment position. We now note that this demographic profile fits the US sample: it was the most conservative, and it was also the most feminine, the oldest, the most highly positioned in employment, and tied with South Korea for the highest education level. If US bank employees in general really possess these traits relative to Oman and South Korea, then all is well. However, if they do not, then the effect of the demographic variables is confounded with the effect of culture and we cannot say that our results are due to a culture effect. The nonrandom sampling technique used in this study leaves us unable to address this issue with finality.

On the other hand, our study yielded some results that do not follow logically from simple demographics. The demographic profile of the Omani sample indicated that it should be the least conservative, but such was not the case. Generally South Korea was the least ethically conservative. We see this as evidence that, whatever confounding may have occurred, there is still a culture effect at work.

Future Research

We believe in the value of cross-cultural IS ethics research as an enabler of the trust and communication essential to liberty, prosperity, and peace throughout the world. We are encouraged to find evidence that the Republic of South Korea, the Sultanate of Oman, and the USA agree on many of their IS ethics views. We are also encouraged to have found indications of differing degrees of commitment—and indications of significant disagreement—within the larger framework. Now that these differences are identified, they can be dealt with via negotiation, accommodation, or assimilation.

We hope other researchers will use our instrument to replicate our study in other cultures. We heartily recommend establishing generalizability to the fullest extent possible in all such efforts.

6. REFERENCES

Abeng T. (1997). Business ethics in Islamic context: Perspectives of a Muslim business leader. Business Ethics Quarterly, 7, (3), 47-54.

Al-Lawatia, H. & Hilton, T. S. E. (2002). Comparing IS ethics in the USA with IS ethics in the Arab world. In M. Khosrow-Pour (Ed.), Proceedings of the Annual Conference of the Information Resource Management Association International (IRMA International).

Buller, P. F., Kohls, J. J., & Anderson, K. S. (2000). Managing conflicts across cultures [Electronic version]. Organizational Dynamics 28, (4), 52-66.

Cook, F. W. (1997). Guidelines for developing a code. Compensation & Benefits Review, 29, (2), 24-28.

De Mente, B. (1988). Korean Etiquette and Ethics in Business, Lincolnwood, IL: NTC Business Books.

Fort, T. L. (1998). Goldilocks and business ethics: A paradigm [Electronic version]. Journal of Corporation Law, 23, (2), 245-276.

Frederick, W. C., (1995). Values, Nature and Culture in the American Corporation, Oxford, UK: Oxford University Press.

Gabrys, E. (2002). The international dimensions of cyber-crime, Part 1 [Electronic version]. Information Systems Security, 11, (4), 21-23.

Gattiker, U. E. & Kelley, M. (1999). Morality and computers: Attitudes and differences in moral judgments. Information Systems Research, 10, (3), 233-254.

Guthrie, R. (1997). The ethics of telework. Information Systems Management, 14, (4), 29-32. Retrieved January 16, 2003, from Business Source Premier Database.

Hiller, M. D. (1986). Ethics and health administration: Ethical decision making in health management. Arlington, Va.: Association of University Programs in Health Administration.

Kant, I., Hatfield, G. (Ed.), Ameriks, K. (Ed.), & Clarke, D. M. (Ed.) (2004). Prolegomena to Any Future Metaphysics That Will Be Able to Come Forward as Science: With Selections from the Critique of Pure Reason. Cambridge, England: Cambridge Texts in the History of Philosophy.

Karande, K., Rao, C. P., & Singhapakdi, A. (2002). Moral philosophies of marketing managers: A comparison of American, Australian, and Malaysian cultures [Electronic version]. European Journal of Marketing 36, (7/8), 768-791.

Kimberly S. & Jonathon S. (1999). Ethical decision making in health care management [Electronic version]. Hospital Topics, 77, (4), 7-13.

Kincaid, D. L. (1987). Communication Theory: Eastern and Western Perspectives. San Diego, CA: Academic Press.

Kruckeberg, D. (1996). A global perspective on public relations ethics. The Middle East Public Relations Review, 22, (2), 181-189.

Loch, K. D., Conger, S. & Oz, E. (1998). Ownership, privacy and monitoring in the workplace: A debate on technology and ethics. Journal of Business Ethics, 17, 653-663.

Malloch, T. R. (2001). Corporations in the world economy: Dynamic innovation. In S. J. Flanagan, E. L. Frost, & R. L. Kugler (Eds.), Challenges of the Global Century - Report of the Project on Globalization and National Security (pp. 637-652) Washington, D.C.: National Defense University Institute for National Strategic Studies.

McDonald, G. (2000). Cross-cultural methodological issues in ethical research. Journal of Business Ethics 27, (1/2), 89-104.

Mill, J. S. & Sher, G. (Ed.) (2002). Utilitarianism. Indianapolis, IN: Hackett Publishing Company.

Newton, L. H. & Ford, M. M. (1994). Taking Sides: Clashing Views on Controversial Issues in Business Ethics and Society. Guilford, CT: The Dushkin Publishing Group, Inc. Rawls, J. (1999). A Theory of Justice, Revised Edition. Cambridge, Massachusetts: Belknap Press.

Regan, T. (1984). Introduction. in T. Regan (ed.), Just Business, New York: Random House, pp. 3-31.

Siddiqui, A. (1997). Ethics in Islam: Key concepts and contemporary challenges. Journal of Moral Education, 26, (4), 423-431. Retrieved October 4, 2001, from Academic Search Elite Database.

Singhapakdi, A., Karande, K., Rao, C. P., & Vitell, S. J. V. (2001). How important are ethics and social responsibility? A multinational study of marketing professionals. European Journal of Marketing 35, (1/2), 133-152.

Thorne, L. & Saunders, S. B. (2002). The socio-cultural embeddedness of individuals' ethical reasoning in organizations (cross-

cultural ethics). Journal of Business Ethics 35, 1-14.

Tsui, J. & Windsor, C. (2001). Some cross-cultural evidence on ethical reasoning. Journal of Business Ethics 31, (2), 143-150.

Udas, K., Fuerst, W. L., & Paradice, D. B. (1996). An investigation of ethical perceptions of public sector M.I.S. professionals. Journal of Business Ethics 15, 721-734.

Wienen I. (1999). Impact of religion on business ethics in Europe and the Muslim world. Frankfurt, Germany: Frankfurt Peter Lang Gmbh.

Yum, J. O. (1987). Korean philosophy and communication. In D. L. Kincaid (Ed.), Communication Theory: Eastern and Western Perspectives. San Diego, CA: Academic Press, pp. 71-86.

Business Information Ethics Questionnaire

Please do not put your name on this questionnaire.

Introduction

This study aims to explore similarities and differences in Information Systems (I.S.) ethics between different cultures. It is hoped to begin identifying specifics of how these two cultures vary in deciding what is 'right' and what is 'wrong' in I.S. ethics issues. We appreciate your cooperation in completing this survey. Please review the instructions carefully and answer the questions sincerely based on your own personal views.

We commit to you that your responses will be kept strictly confidential and that data from your survey will be reported only in group form.

Personal Information

Please tell us a little about yourself by marking the following boxes that best describe you so we will be able to better understand your other responses.

1. Education level:	Below high school Graduate	high school undergraduate professional certificate (ex: CPA)			
2. Sex:	Male	Female			
3. Age:	below 20 years 40 to below 50 years	20 to below 30 years over 50 years	30 to below 40 years		
4. Ethnicity:	African American Hispanic Other	Asian/Pacific Islander Middle Eastern	Caucasian Native American		
5. Position:	non-managerial	managerial			
6. Religious affiliation:					

Instructions:

Based on your personal opinion, please circle one of the five points found beside each of the 30 statements shown on the following pages as follows: 1 if usually ethical, 2 if sometimes ethical, 3 if neutral, 4 if sometimes unethical, or 5 if usually unethical. Please choose one response for every item; do not leave any item unanswered.

Section One

Please read carefully and answer all questions.

Assume that each of the following employee actions *does not have* any negative affect on worker productivity, *it does not lead* to any delays in completing job tasks, and the employer has *no* stated policy relating to the action.

5 = usually unethica							
4=s	omet			ical			
2 = sometim		= net	ıtral İ				
1 = usually eth		licai					
The employee plays games on a company computer <i>during</i> working hours.	1	2	3	4	5		
The employee plays games on a company computer <i>after</i> working hours.	1	2	3	4	5		
The employee does personal work on a company computer <i>during</i> working hours.	1	2	3	4	5		
The employee does personal work on a company computer <i>after</i> working hours.	1	2	3	4	5		
The employee reads online newspapers/magazines for personal enjoyment on a company computer <i>during</i> working hours.	1	2	3	4	5		
The employee reads online newspapers/magazines for personal enjoyment on a company computer <i>after</i> working hours.	1	2	3	4	5		
The employee chats over the Internet with friends or relatives on a company computer <i>during</i> working hours.	1	2	3	4	5		
The employee chats over the Internet with friends or relatives on a company computer <i>after</i> working hours.	1	2	3	4	5		
The employee reads, writes, and sends email using personal email account on a company computer <i>during</i> working hours.	1	2	3	4	5		
The employee reads, writes, and sends email using personal email account on a company computer <i>after</i> working hours.	1	2	3	4	5		
The employee develops computer programs for personal use on a company computer <i>during</i> working hours.	1	2	3	4	5		
The employee develops computer programs for personal use on a company computer <i>after</i> working hours.	1	2	3	4	5		

Section Two

Please read carefully and answer all questions.

Make no special assumptions for each of the following employee actions.

		= usi			nical
4 = 8	somet 3	= net		lcal	
2 = sometim		ical			
1 = usually eth	nical				
The employee uses information from the company database for personal gain. (For example, the company plans to raise prices of some products, so the employee purchases those products early to sell later for a profit.)	1	2	3	4	5
The employee uses information obtained from the company database for the gain of family members or friends. (For example, the company plans to raise prices of some products, so the employee tells relatives or friends to purchase those products early to sell later for a profit.)	1	2	3	4	5
The employee installs company-licensed software on the employee's own personal computer.	1	2	3	4	5
The employee installs company- licensed software on the personally owned computer of a relative or friend.	1	2	3	4	5
The employee receives and sends personal messages using the company email system.	1	2	3	4	5
The employee borrows company-licensed software for personal use on a personally owned computer but does not install the software.	1	2	3	4	5
The employee prints personal documents on a company printer using company paper.	1	2	3	4	5
The employee prints personal documents on company printer using personally owned paper.	1	2	3	4	5
The employee stores personal documents on a company computer.	1	2	3	4	5
The employee logs into and works on a company computer using another employee's password.	1	2	3	4	5
Without obtaining permission from the customer or fellow employee, the employee discloses personal information about a customer or fellow employee to an <i>authorized</i> third person	1	2	3	4	5
Without obtaining permission from the customer or fellow employee, the employee discloses personal information about a customer or fellow employee to an <i>unauthorized</i> _third person.	1	2	3	4	5

Section Three

Please read carefully and answer all questions.

Assume the following actions are taken by company management toward company employees.

Г	5	= usi	uallv	uneth	ical	
5 = usually uneth $4 =$ sometimes unethical						
	3	= neı	ıtral			
2 = sometim	es eth	nical				
1 = usually eth	nical					
Without informing employees, company management monitors employees' e-mail to ensure that it is not used for non-business purposes.	1	2	3	4	5	
After informing employees, company management monitors employees' email to ensure that it is not used for non-business purposes.	1	2	3	4	5	
Without informing employees of the possibility, company management makes surprise examinations of company-owned PCs used by employees to find personal documents.	1	2	3	4	5	
After informing employees of the possibility, company management makes surprise examinations of company-owned PCs used by employees to find personal documents.	1	2	3	4	5	
Without informing employees of the possibility, company management makes surprise examinations of company-owned PCs used by employees to ensure that only software licensed to the company is installed on company computers.	1	2	3	4	5	
After informing employees of the possibility, company management makes surprise examinations of company-owned PCs used by employees to ensure that only software licensed to the company is installed on company computers.	1	2	3	4	5	

Thank you very much for participating in this survey.

يرجى عدم كتابة اسمك على الاستبيان

المقدمة

تهدف هذه الدراسة الى التعرف على اوجه الشبه والاختلاف في النظرة الى الاخلاقيات والسلوكيات المتعلقة بنظم المعلومات التجارية بين كل من مستخدمي الكمبيوترات في سلطنة عمان. ومن المؤمل أن تساعد هذه الدراسة على معرفة الامور التي تختلف فيها هاتان العينتان اللتان تستند شخصيات عناصر هما على ثقافتين مختلفتين (الثقافة الامريكية العربية) و(الثقافة العمانية الاسلامية) في نظرة كل منهما الى ما هو صحيح وما هو خاطئ في مجال استخدام ادوات تقنية المعلومات. لذلك يرجى من الأخ العماني والاخت العمانية التعاون والمشاركة في هذه الدارسة وذلك بتعبئة هذا الاستبيان. وعليه يرجى منهما قراءة التعليمات بتمعن والاجابة على الاسئلة بجدية واهتمام وطبقا لقناعتهما الشخصية.

إننا نؤكد لجميع المشاركين بأن اجاباتهم على اسئلة هذا الاستبيان سوف يتم التعامل معها بغاية السرية. كما أننا نؤكد لهم أنه إذا تقرر نشر البيانات المستخلصة من الاستبيانات فإنه سيتم التعامل معها ضمن مجموعات وليس على اساس فردي.

بياد	ات شخصیه			
.1	المستوى الدراسي:	 اقل من الثانوية العامة دراسات عليا 	□ الثانوية العامة□ مهنـــي	🗆 دراسة جامعية
.2	الجنس:	🗆 ذکر	🗌 انثی	
.3	العمس:	اقل من 20 سنة \Box	 من 20 الى اقل من 30 سنة 	□ من 30 الى اقل من 40 سنة
		 □ من 40 الى اقل من 50 سنة 	□ 50 سنة او اكبر	

تعليمات هامة

بناء على قناعتك الشخصية ، يرجى وضع دائرة على احد الارقام الخمسة المطبوعة امام كل عبارة من العبارات الـ 30 للإستبيان في أقسامه الثلاثة ، وذلك على الوجه التالي: (ضع دائرة على رقم 1 إذا كنت تعتقد ان التصرف الوارد في العبارة اخلاقيا بشكل عام ، او ضع دائرة على رقم 2 إذا كنت تعتقد ان التصرف الوارد في العبارة اخلاقيا احيانا ، او ضع دائرة على رقم 3 إذا كنت تعتقد ان التصرف الوارد في العبارة على رقم 5 إذا كنت تعتقد ان التصرف الوارد في العبارة على رقم 5 إذا كنت تعتقد ان التصرف الوارد في العبارة على رقم 5 إذا كنت تعتقد ان التصرف الوارد في العبارة على رقم 5 إذا كنت تعتقد ان التصرف الوارد في العبارة على رقم 5 إذا كنت تعتقد ان التصرف الوارد في العبارة على رقم 5 إذا كنت تعتقد ان التصرف الوارد في العبارة على الخلاقي بشكل عام).

لقد تم تلخيص هذه التعليمات على هيئة جدول يظهر في القسم العلوي من كل صفحة من الصفحات التي تحتوي على اسئلة الاستبيان.

 = 1

 = 1

 = 2

 = 3

 = 4

 = 4

 = 4

 = 4

 = 5

القسم الاول: (يرجى القراءة بتمعن والاجابة على جميع الاسئلة)

إفترض / إفترضي أن كل تصرف من تصرفات الموظف (الـ 12) التالية ، لا تؤثر سلبا على انتاجيته لا تؤدي ايضا إلى أي تأخير في انجاز الاعمال المسندة اليه. كما أن جهة العمل (أي المؤسسة أو الشركة) ليس لديها لائحة محددة تمنع أو تسمح الاستخدامات الشخصية لمواردها بما في ذلك اجهزة الكمبيوتر.

5	4	3	2	1	يقوم الموظف باللعب على جهاز الكمبيوتر الخاص بالشركة الثناء ساعات العمل	1
5	4	3	2	1	يقوم الموظف باللعب على جهاز الكمبيوتر الخاص بالشركة بعد ساعات العمل	2
5	4	3	2	1	يقوم الموظف بإنجاز أعماله الخاصة على جهاز الكمبيوتر الخاص بالشركة أثناء ساعات العمل	3
5	4	3	2	1	يقوم الموظف بإنجاز أعماله الخاصة على جهاز الكمبيوتر الخاص بالشركة بعد ساعات العمل	4
5	4	3	2	1	أثناء ساعات العمل المحددة يقوم الموظف بقراءة المجلات او الجرائد على الانترنيت من أجل المتعة الشخصية مستخدما كمبيوتر الشركة.	5
5	4	3	2	1	بعد ساعات العمل المحددة يقوم الموظف بقراءة المجلات او الجرائد على الانترنيت من أجل المتعة الشخصية مستخدما كمبيوتر الشركة	6
5	4	3	2	1	أثناء ساعات العمل المحددة يقوم الموظف بالمحادثة عبر الانترنيت مع الاصدقاء او الأقرباء مستخدما كمبيوتر الشركة.	7
5	4	3	2	1	بعد ساعات العمل المحددة يقوم الموظف بالمحادثة عبر الانترنيت مع الاصدقاء او الأقرباء مستخدما كمبيوتر الشركة.	8
5	4	3	2	1	أثناء ساعات العمل المحددة يقوم الموظف بقراءة وكتابة وارسال الرسائل الالكترونية (E-mails) عبر بريده الالكتروني الخاص مستخدما كمبيوتر الشركة.	9
5	4	3	2	1	بعد ساعات العمل المحددة يقوم الموظف بقراءة وكتابة وارسال الرسائل الالكترونية (E-mails) عبر بريده الالكتروني الخاص مستخدما كمبيوتر الشركة.	10
5	4	3	2	1	أثناء ساعات العمل المحددة يقوم الموظف بانتاج برامج كمبيوترية للإستعمال الشخصي مستخدما كمبيوتر الشركة.	11
5	4	3	2	1	بعد ساعات العمل المحددة يقوم الموظف بانتاج برامج كمبيوترية للإستعمال الشخصي مستخدما كمبيوتر الشركة.	12

 1
 أخلاقي بشكل عام

 2
 أخلاقي أحيانا

 3
 عيادي

 4
 غير أخلاقي أحيانا

 5
 غير أخلاقي بشكل عام

القسم الثاني: (يرجى القراءة بتمعن والاجابة على جميع الاسئلة) لا داعي من وضع أية افتراضات حول تصرفات الموظف (الـ 12) التالية:

					يستخدم الموظف المعلومات المخزنة في كمبيوتر الشركة من أجل الكسب	13
5	4	3	2	1	الشخصي (مثال : الشركة بصدد رفع اسعار منتجاتها ، فيقوم الموظف بشراء تلك	
					المنتجات مبكرا من أجل تحقيق الربح).	
					يستخدم الموظف المعلومات المخزنة في كمبيوتر الشركة من أجل إكساب افراد عائلته	14
5	4	3	2	1	او اصدقائه (مثال : الشركة بصدد رفع اسعار منتجاتها ، فيشير الموظف على أقربائه	
					او أصدقائه شراء تلك المنتجات مبكرا من أجل تحقيق الربح).	
5	4	3	2	1	يقوم الموظف بتحميل البرنامج المرخص للشركة في كمبيوتره الشخصي	15
5	4	3	2	1	يقوم الموظف بتحميل البرنامج المرخص للشركة في كمبيوتر أحد اقربائه او اصدقائه	16
5	4	3	2	1	يستخدم الموظف البريد الالكتروني الخاص بالشركة في إرسال و استقبال رسائله	17
	7	3	2	1	الالكترونية الشخصية	
5	4	3	2	1	يستعير الموظف برنامجا مرخصا للشركة للإستخدام الخاص في كمبيوتره الشخصي	18
	4	3	2	1	بدون تحميل ذلك البرنامج الى كمبيوتره الشخصي	
5	4	3	2	1	يطبع الموظف وثائقه الشخصية على طابعة الشركة مستخدما اوراق الشركة.	19
5	4	3	2	1	يطبع الموظف وثائقه الشخصية على طابعة الشركة مستخدما ارواقه الخاصة.	20
5	4	3	2	1	يخزن الموظف وثائقه الشخصية في كمبيوتر الشركة.	21
5	4	3	2	1	يقوم الموظف بالدخول الى كمبيوتر الشركة لإنجاز الأعمال المسندة اليه مستخدما كلمة	22
					مرور موظف آخر.	
5	4	3	2	1	يكشف الموظف الى شخص ثالث مخول/مفوض معلومات شخصية تخص أحد زبائن	23
	7	3		1	الشركة او أحد موظفي الشركة بدون اذنهما.	
5	4	3	2	1	يكشف الموظف الى شخص ثالث غير مخول/مفوض معلومات شخصية تخص أحد	24
	7	3	2	1	زبائن الشركة او أحد موظفي الشركة بدون اذنهما.	

 = 1

 = 2

 = 2

 = 3

 = 4

 = 4

 = 4

 = 4

 = 5

القسم الثالث: (يرجى القراءة بتمعن والاجابة على جميع الاسئلة) إفترض أن ادارة الشركة تقوم بالتصرفات (الـ 6) التالية حيال موظفي الشركة:

5	4	3	2	1	دون اشعار الموظفين مسبقا ، تقوم ادارة الشركة بمراقبة الرسائل الالكترونية للموظفين	25
3	4	3	2	1	من أجل التأكد من عدم استخدامها لغير الاغراض التجارية للشركة.	
5	4	3	2	1	بعد اشعار الموظفين مسبقا ، تقوم ادارة الشركة بمراقبة الرسائل الالكترونية للموظفين	26
3	4	3	2	1	من أجل التأكد من عدم استخدامها لغير الاغراض التجارية للشركة.	
					دون اشعار الموظفين مسبقا باحتمال قيامها بذلك ، تقوم ادارة الشركة بفحص فجائي	27
5	4	3	2	1	لكمبيوترات الشركة المستخدمة من قبل الموظفين بحثا عن الوثائق الشخصية الخاصة	
					يهم.	
					بعد اشعار الموظفين مسبقا باحتمال قيامها بذلك ، تقوم ادارة الشركة بفحص فجائي	28
5	4	3	2	1	لكمبيوترات الشركة المستخدمة من قبل الموظفين بحثًا عن الوثائق الشخصية الخاصة	
					بهم.	
					دون اشعار الموظفين مسبقا باحتمال قيامها بذلك ، تقوم ادارة الشركة بفحص	29
5	4	3	2	1	فجائي لكمبيوترات الشركة المستخدمة من قبل الموظفين للتأكد من أن البرامج المحملة	
					فيها مقتصرة فقط على البرامج المرخصة للشركة.	
					بعد اشعار الموظفين مسبقا باحتمال قيامها بذلك ، تقوم ادارة الشركة بفحص فجائي	30
5	4	3	2	1	لكمبيوترات الشركة المستخدمة من قبل الموظفين للتأكد من أن البرامج المحملة فيها	
					مقتصرة فقط على البرامج المرخصة للشركة.	

لكم جزيل الشكر والتحية من:

직장 내의 정보 통신 관련 윤리 의식 조사

이 설문 조사는 무기명 조사이오니 이름을 기재하지 마시기 바랍니다.

배경 설명

이 설문 조사는 미국과 대한민국의 직장 내 정보 통신 관련 윤리 의식의 공통점과 차이점을 연구 하기 위한 것입니다. 저희들은 이 설문 조사를 토대로 양국의 직장 윤리 기준과 직장 환경의 차 이점에 대해서 연구할 것입니다. 처음부터 끝까지 주의 깊게 읽어 보시고, 자신의 견해를 토대로 성실하게 답변해 주시면 감사 드리겠습니다. 협조에 감사 드립니다.

설문 조사 결과에 대한 보안은 철저하게 지켜질 것입니다.

개인	시삿
70.51	

1. 교육 배경	□ 고졸 미만1	□ 고졸	대종	
	□ 대학원 졸	□ 전문 자격증 소지	자 (예: 공인회계사)	
2. 성별:	□ 남성	□ 여성		
3. 나이:	ㅁ 20세 미만	□ 20세 이상 30세 미만	□ 30 세 이상 40 세 미만	
	□ 40세 이상 50세 미만	□ 50세 이상		
4. 직위:	□ 관리직	□ 관리직 이하		
5. 종 교	□ 기독교	□ 불교	□ 천주교 □ 기	타

답변 방식

자신의 개인적인 견해를 토대로 한 문제 당 다섯 개의 보기 중 하나만을 선택하여 주십시오. 문 제는 30 문제 입니다. (자신이 생각하기에 보기가 윤리적으로 전혀 문제 없다고 생각하시면 1번, 윤리적으로 괜찮다고 생각하시면 2번, 별다른 의견이 없으시면 3번, 윤리적으로 어느 정도 문제 있다고 생각하시면 4번, 윤리적으로 절대 허용될 수 없다고 생각하시면 5번을 골라 주십시오) 매 Section마다 설명이 먼저 제시될 것입니다. 처음부터 끝까지 남김없이 답변해주시면 감사 드리겠 습니다.

Section 1.....(다음 설명을 주의 깊게 읽고 답변해 주십시오.) 다음의 각 행동들이 회사 생산성에 악영향(예: 업무 지연)을 미치지 않고, 회사에도 회사 기물 이용 (특히 컴퓨터)에 대한 제한 방침이 없다고 가정 합니다.

	5 = 윤리적으로 절대 허용돼서는 안	된다.				
	4 = 윤리적으로 어느 정도 문제 있다.					
	3 = 잘 모르겠다.					
	_ 2 = 윤리적으로 괜찮다.					
	1 = 윤리적으로 전혀 문제 없다.					
1.	사원이 <u>일과 시간에</u> 회사 컴퓨터로 컴퓨터 게임을 한다.	1	2	3	4	5
2.	사원이 <u>일과 시간 이후에</u> 회사 컴퓨터로 컴퓨터 게임을 한다.	1	2	3	4	5
3.	사원이 <u>일과 시간에</u> 회사 컴퓨터로 사적인 일을 처리한다.	1	2	3	4	5
4.	사원이 <u>일과 시간 이후에</u> 회사 컴퓨터로 사적인 일을 처리한다.	1	2	3	4	5
5.	사원이 <u>일과 시간에</u> , 회사 일에는 관계 없는, 인터넷 신문이나 인터넷 잡지 등을 회사 컴퓨터로 본다.	1	2	3	4	5
6.	사원이 <u>일과 시간 이후에</u> , 회사 일에는 관계 없는, 인터넷 신문이나 인터넷 잡지 등을 회사 컴퓨터로 본다.	1	2	3	4	5
7.	사원이 <u>일과 시간에</u> 회사 컴퓨터로 친구들과 채팅을 한다.	1	2	3	4	5
8.	사원이 <u>일과 시간 이후에</u> 회사 컴퓨터로 친구들과 채팅을 한다.	1	2	3	4	5
9.	사원이 <u>일과 시간에</u> 회사 컴퓨터로 개인 이메일 계정에 들어가서 이메일을 읽고, 쓰고, 보낸다.	1	2	3	4	5
10.	사원이 <u>일과 시간 이후에</u> 회사 컴퓨터로 개인 이메일 계정에 들어가서 이메일을 읽고, 쓰고, 보낸다.	1	2	3	4	5
11.	사원이 <u>일과 시간에</u> 회사 컴퓨터로, 회사 일에는 관계 없는, 개인적인 컴퓨터 프로그램을 개발한다.	1	2	3	4	5
12.	사원이 <u>일과 시간 이후에</u> 회사 컴퓨터로, 회사 일에는 관계 없는, 개인적인 컴퓨터 프로그램을 개발한다.	1	2	3	4	5

<u>..(다음 설명을 주의 깊게 읽고 답변해 주십시오.)</u> Section 2 아무런 가정 없이, 개인적인 견해를 토대로 답변들을 해주시기 바랍니다.

5 = 윤리적으로 절대 허용돼서는 안	된다.				
4 = 윤리적으로 어느 정도 문제 있다.					
3 = 잘 모르겠다.					
2 = 윤리적으로 괜찮다.					
1 = 윤리적으로 전혀 문제 없다.					
13. 사원이 회사 데이터 베이스에 있는 정보를 사적인 이익을 위해					
이용한다.(예를 들면, 회사에서 어떤 상품 가격을 올리려고 했을		2	3	4	5
때, 사원이 이윤을 남기기 위해 그 상품을 먼저 구매한다.)	1	<u>'</u> ا	٠	4	
14. 사원이 회사 데이터 베이스에 있는 정보를 가족이나 친지들의					
이익을 위해 이용한다.(예를 들면, 회사에서 어떤 상품 가격을					
올리려고 했을 때, 사원이 가족이나 친지들에게 이야기 하여 먼저	1	2	3	4	5
상품을 구매하여 이윤을 남기게 만든다.)					
15. 사원이 회사 컴퓨터 소프트웨어를 자신의 개인 컴퓨터에 설치하고	1	2	3	4	5
사용한다.					<u> </u>
16. 사원이 회사 컴퓨터 소프트웨어를 가족이나 친지들의 컴퓨터에	1	2	3	4	5
설치하고 사용한다. 17. 사원이 회사의 이메일 계정을 자신의 개인적인 이메일 용도로					<u> </u>
17. 사원이 회사의 이배를 제정을 사진의 개한역한 이배를 공포도 	1	2	3	4	5
지흥한다. 18. 사원이 회사 컴퓨터 소프트웨어를 자신의 개인 컴퓨터에서 개인적					<u> </u>
용도로 사용하지만, 인스톨하지는 않는다.		2	3	4	5
011 MONNE, ELENNE WEN.	1	–	,	T	ľ
19. 사원이 회사의 종이를, 회사의 프린터로, 사적인 문서를 출력하는					
용도로 사용한다.	1	2	3	4	5
	_	-	Ť		ľ
20. 사원이 자신의 종이를, 회사의 프린터로, 사진인 문서를 출력하는	·······	_		_	_
용도로 사용한다.	1	2	3	4	5
21. 사원이 자신의 개인적인 문서 파일을 회사 컴퓨터에 저장한다.					_
	1	2	3	4	5
22. 사원이 다른 사원의 패스워드로 회사 컴퓨터에 로그인한 후 업무를					
본다.	1	2	3	4	5
23. 사원이, 고객이나 다른 사원들의 사전 허가를 받지 않고, 고객과					
다른 사원들의 개인적인 정보를, 제휴 회사나 관공서 등에	1	2	3	4	5
제공한다.					
24. 사원이, 고객이나 다른 사원들의 사전 허가를 받지 않고, 고객과					
다른 사원들의 개인적인 정보를, 사적인 이익을 목적으로 제	1	2	3	4	5
3 자에게 제공한다.					

Section 3.....(다음 설명을 주의 깊게 읽고 답변해 주십시오.) 다음 보기들은 회사에서 사원들을 대상으로 하는 정책들이라고 생각하고 답변해 주시기 바랍니다.

5 = 윤리적으로 절대 허용돼서는 안	된다.				
4 = 윤리적으로 어느 정도 문제 있다.					
3 = 잘 모르겠다.					
2 = 윤리적으로 괜찮다.					
1 = 윤리적으로 전혀 문제 없다.					
25. 회사에서, <u>사원들에게 알리지 않은 채</u> , 사원들이 개인적인 용도로					
회사 이메일 계정을 사용하는지 감시한다.	1	2	3	4	5
26. 회사에서, <u>사원들에게 알린 후에</u> , 사원들이 개인적인 용도로 회사					
이메일 계정을 사용하는지 감시한다.	1	2	3	4	5
27. 회사에서, <u>사원들에게 알리지 않은 채</u> , 회사 컴퓨터에 사원들의 개인					
문서 파일이 있는지 불시 검사한다.	1	2	3	4	5
28. 회사에서, <u>사원들에게 알린 후에</u> , 회사 컴퓨터에 사원들의 개인					
문서 파일이 있는지 불시 검사한다.	1	2	3	4	5
29. 회사에서, <u>사원들에게 알리지 않은 채</u> , 회사 컴퓨터에 회사에서 사용					
허가된 프로그램만 설치 되어 있는지 불시 검사 한다.	1	2	3	4	5
30. 회사에서, <u>사원들에게 알린 후에</u> , 회사 컴퓨터에 회사에서 사용					
허가된 프로그램만 설치 되어 있는지 불시 검사 한다.	1	2	3	4	5

수고 하셨습니다.

설문에 협조해 주셔서 진심으로 감사 드립니다.