The Professional and Applied Ethics Constituents of IT Specialists and Users

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Abstract

By declining human spiritual belongings, the lack of ethics is considered as a major calamity of modern age. Disrespecting ethical codes and constituents in organizations and societies has caused that some ethical abnormal to be highlighted and involve the mind of managers and relevant authorities. Human get away of God believing and ethics – orientation as well as the lack of a clear and precise definition of ethical prism in organizations have caused unethical behaviors.

In the meantime, superiority and value of any organization depends on using ethical constituents in decision making and implementing the plans. The result and fruit of ethics and respecting ethical principles are human excellence in organization as well human mental and spiritual health improvement. Destructive and abnormal behaviors that are common in various organizational arenas including IT are the result of disrespecting ethical – orientation among users and specialists and the lack of God believing among them. IT is undeniable fact of information age that has paramount incorrect and negative points despite of its positive ones.

In present study, it is attempted to clarify the aims of morality and to review the concepts of ethics in IT in order to modify the conceptions of IT users and specialists on ethical issues and to provide those constituents that can impact on making the behavior of IT users and specialists more ethical and can mitigate abnormal behaviors.

Keywords: Ethics, professional ethics, destructive behaviors, information technology, computer

Introduction

"Ethics decline" is considered as one of the obvious outcomes of "modern age de-enchanting" (Shaygan, 2001: 17) which has caused resorting to schools such as hedonism, pragmatism and utilitarianism. Due to the attendance of uncommitted staff, organizations are facing with disadvantages of some workers. Such problems cause that ethics and ethical constituents considered by managers and relevant authorities. Therefore, ethic – orientation issue and defining organizational ethical prism are the most important concerns of all organizational managers.

Ethics study in various fields such as psychology, medicine, law, commerce, organization, accounting, information and so on has caused the adoption of principles and rules that are considered as basis for value and ethical activities in such fields. IT is an arena in which ethics is seen less. We will less observe unethical and destructive behaviors if ethics is accepted as a principle in IT and using computer, if people think about ethical constituents and institutionalize those constituents which should respected in IT and the actors of this field believe them.

Due to its newness, IT is a field in which ethical issues are less studied. Among destructive behaviors in IT, one can point out disallowed accesses, electronic assets burglary, sending viruses and destructive wombs, racism, libel and disturbances (Johnson, 1999: 2). Conger and Loch (1995) mentioned spam in Internet, copying protected software, incorrect data and algorithms, incompetent control of accesses and abusing websites as the ethical problems faced by IT specialists (Payne and Landry, 2005: 75). The failure of policymakers, managers and staff in organizing ethical issues in virtual ambiences and IT would damage other successes. Therefore, it is vital to address this issue and clarify its aspects.

Problem Description

Addressing ethical issues by researchers is due to *live in ethical crisis age* (Stoner, 2000: 168; Zahedi, 2000: 231). An unethical behavior in organizations is converted to an important problem for all members of community. Ethical activities and behaviors in organizations is a concern of actors and researchers. People are worried on improper behavior of organizations and managers are concerned about employees' immoral action (Kincaid et al., 2008).

Destructive behaviors challenge organizational values and norms and prevent organizational desired performance. In 1995, Robinson and Bent reported that 33 to 75 percent of employees involve in such behaviors as burglary, online fraud, sabotage and so on (Lea Evans, 2003: 14).

In a research by Ivancevich et al (2005), 23 organizational misbehaviors and unethical issues were identified: arson, blackmail, bribery, bullying, cheating, discrimination, dishonesty, espionage, fraud, incivility, intimidation, kickbacks, lying, misinformation, privacy violation, revenge, sabotage, sexual harassment, substance abuse, burglary, threats and whistle blowing (Li-Ping Tang et al, 2005).

These show that unethical behaviors have been yet existed in workplaces (Calluzzo and Cante, 2004: 301). Information and communication technology is an area where one can see employees' destructive behaviors. Due to its virtual nature in which people are identified, it is more abused. In polling at late 1999 among 1244 employees and 1438 clients, the members of Vault.com indicated that 56% of employees and 51% of contractors believe that non working web navigators impact on productivity negatively. However, 90% of respondents confessed that such behaviors are unethical. In the same polling, 83% of respondents confirmed that they send and receive personal emails at their work.

Considering the widespread unethical issues in IT and the high importance of IT share in the performance of public organizations and trading institutes, well ethical activities in using all aspects of IT among the employees are vital for organization and society (Stone and Henry, 2003: 337).

Ethics

As a capital, ethics is the best asset of human. This neglected global issue is too important that the believers and possessors of ethics are called "society spirit. Ethics is a part of principles, ideals and advantages which can dominate all aspects of human and organizational life. In ancient literature, ethics is addressed as a value, scientific, official and managerial issue so that we observe clearly the commitment to ethics in Islam:

"Those people who clean their heart of bad ethics are prosperous and those people who do not commit to an ethical system and recourse to contamination would hurt (Shams Sura, 9 – 10 verses)."

In value system, only being well is not sufficient to create an ethical value. Additionally, the motivation of the actor should be also good and divine. Therefore, in contrary to many philosophies that believe ethics is an outer issue, in Islamic value system, ethics is an inner issue.

Ethics is an inner state which invites human to perform jobs without any need to think (Noory Ghomshei, 2010: 41). According to Plato, ethics variables include: justice, enjoyment, reality, privilege, prosperity, beautifulness, love and braveness. These mean "the domination of traditions" and personal cultural perceptions (Wood and Rentschler, 2003: 344 – 350).

Ethics is recognized as a rational and sustainable system to determine false/true in specialized activities and policies. Overall, ethics addresses to standards of false/true behaviors (Fisher & Boon, 2007: 1561). Velasques believes that ethics is to study spiritual and conscientious standards of a person or a society (Sensson & Wood, 2003: 178). Ethics is defined as a concept of a correct and fair action or behavior (Freeman and Gilbert, 1988).

In another definition, ethics is imaged as individual or collective principles such as good/bad, false/true and acceptable/unacceptable (Rosenbrock, 1995: 18). If we consider ethics as synonym to morality, then it means an individual's capability to select between good/bad, false/true and acceptable/unacceptable. Ethics involves free decisions by persons who are informed and rational. They are responsible, accountable and committed (Laudon, 1995: 5).

Comparing ethics and laws and showing which one is more comprehensive and more complete, Pemberton mentioned that ethics always adopts higher standards than law so no one should be dissatisfied when he/she sees that an unethical behavior is legal (Calluzzo and Cante, 2004: 303). Ethics is an inner commitment to a good life instead of commitment to implement a set of laws and rules (Buchholz and Rosenthal, 2005). Compared to law, ethics enjoys below privileges:

- Ethics mitigates human demands and prevents going to extremes
- Ethics is a guarantee to implement law
- Ethics enhances and breeds human spiritual aspect
- Ethics protects human belief (Javadi Amoli, 2002)

Ethical action is considered as a behavior and the root of this behavior is nothing than attitude, beliefs and, more importantly, value. Velasques (1999) believes that "value is considered as attitudes and statements on an objective or the traits of such objective. Values show the ideals in personal or social contexts (Joyner and Payne, 2002)". Figure 1 outlines the way of converting values to ethical (unethical) behavior and action.

Figure 1: The cycle of converting value to an ethical behavior and action (Payne and Landy, 2005)
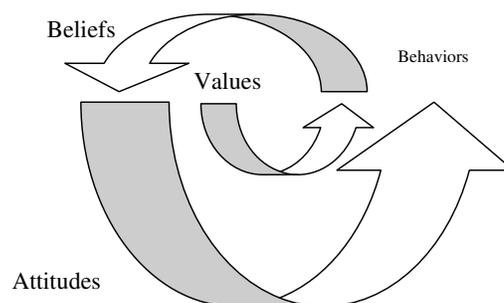
According to DeGerge, ethical principles of a society and individuals' behaviors relate to values and traditions that practicing them is accepted as false/true by a society or a group. Likewise, ethical principles are added to social laws such prohibitions and legal penalties in order to prevent illegal acts (DeGerge, 1986).

Ethics in IT

A concern of IT specialists and ethics connoisseurs is whether it is fair to read personal files of other people; when it is right to use a software devised by another person; is it right to use the line of another person? (Oz, 1993) such questions lead to study common destructive behaviors in this field. Ethical discussions that mitigate such behaviors should be studied.

Ethics in IT is new emerging area of information, mental health and communications in information age enhanced and evolved through worldwide web and its related technologies. One can describe information ethics not only as a technical development but also as a spiritual state, thinking and a global public movement.

In his paper "Online Ethics", Johnson indicates that established legal and technical facilities are not sufficient to prevent implausible behaviors with regard to computers and IT. He says that the only hope to establish and implement well professional ethics is to define a subset of ethics in IT and internalizing behavioral norms in people that are created and accepted socially (Payne and Landry, 2005: 75).

For many years, Johnson's book "Computer Ethics" was the best scientific reference in this field. Johnson believed that one can resolve ethical problems in computer and IT field by extending ethics current theories to ethics science. However, he does not believe that computers have created new problems. Rather, he believes that computers have made previous problems more complicated so the problems are seemed new (Johnson, 1985; Johnson, 1999).

People tend to understand which behaviors are implausible, undesired or improper. If ethical laws can help internalization of understandings by users, specialists, staff and managers of plausible behaviors, an ethical guideline to control their behavior will be facilitated. Such kind of internalization of IT ethics can be effective as a internal control on plausible behaviors.

In reviewing ethics in IT, Basse (1993) explained that there are three determinants which distinguish professional from non-professional people. They include:

1. Professional people are skilful in their working field,
2. Beneficiaries rely upon this specialized knowledge that is not available to most people.
3. A high potential number of people may be impacted by actions or goods of professional people.

The work of IT experts can impact the life, health, budget, freedom and the future of customers or any member of the society and/or organizational staff. It is particularly true when someone is going to consider complexities, risks and ambiguities toward IT specialists in the field of computer or their tasks.

Ethical and legal constituents set by IT specialists are defined traits that are similar to Basse's ideas. Table 1 is a comparison of ethical and legal constituents of IT specialists by considering what Basse has defined for professional people in a given job.

Table 1: The traits of IT specialists and adoption with professional people traits (Payne and Landry, 2005: 76)

Basse (2003)	Professional ethical laws
The person should be a specialist and possess specialized knowledge not available to most customers	Knowledge and high standard skills
The specialist should be responsible and should have enough information on the field he/she is employed.	Public trust to IT knowledge and skills
Sometimes, many people are seriously impacted by the operations of IT specialists	Commitment to determined professional laws
--	Respectful relations

Individual Ethical Constituents for IT Users

Scientists have reminded the application of IT without ethics. To the same reason, scientists, thinkers and connoisseurs are looking for a group of principles and constituents to decrease IT ethical traps and to eliminate them finally. Such constituents and principles are created to impact beneficiaries positively. Below, some ethical constituents are mentioned that are in the format of an applied prism not commands and they can help users and specialists to utilize this new phenomenon correctly.

1. Users' Rationality and Thinking

Science is the treasure, guide, life, wisdom, source of advantage and the base of any goodness by which people grow and they achieve their rationality and thinking. Human wisdom guides him in perfectionism movements. Thinking and rationality are important requirements to breed people. Rationality causes that human bred as a meaningful, idealist and aesthetic entity. Human identifies the affairs by the power of rationality, recognizes the problems, improves his/her relations and finally paves the ground for growth and perfection by utilizing existing tools.

On this basis, one way to mitigate negative aspects and deviations is to improve the knowledge, awareness and right cultural and ethical breeding of users. If users can utilize ICT by their own thinking and rationality, it will be a very positive and efficient technology which transforms human knowledge.

2. Self-Control

When we address and being aware of ourselves, control becomes an inner factor. IT users should have self-control and avoid the domination of external forces and temptations. In this case, whatever they control is their inner factor.

3. Transparency

One of the main principles and basic measures in global business ethics prism is transparency. It means to perform the affairs truthfully, sincerely, without any deceit and by keeping work processes and records. Usually, business depends on ethical pillars. The prerequisite of understanding and disseminating such target is transparency. It is repeatedly pointed out in Islam that "someone who deceits us is not one of us." "If buyers and sellers hide the facts and deceit, the blessing of their transaction will be removed (Ali and Al-Qwaihan, 2008: 11 -15).

Transparency is a process by which information on current actions, decisions and statuses will be achievable, observable and understandable. Transparency is shaped by free information flow. In rapid-growing IT field, users should be transparent in providing information and prepare information needed by other people through honesty and avoiding deceit.

4. Truthfulness

It is contrary to hypocrisy. It listens to inner conscientiousness and respects nobleness all the time. It involves right ethical behaviors despite of external pressures. Truthfulness in job does not mean to reveal all organizational facts and disseminating all details. Rather, it points to those issues that employees should be informed of them in the organization. Regarding the importance of truthfulness, one can read in article 47 of Nahjolbalagheh: "the value of man depends to his effort and his truthfulness depends on his generosity." Article 67 reads: "a truthful person is on the way of deliverance while liar is the edge of perdition." In virtual ambience where the possibility to identify the identity of people is difficult, users should set truthfulness as their top priority and should encourage others to truthfulness in their behavior, actions and words.

5. Honesty

It means that users should be as trustees of organization and beneficiaries and they should be serious and loyal with regard to organizational operation in IT field. Honesty causes intellectual – cultural orientation as well as real security and real professional ethics in modern globe. The honesty of IT specialists is achieved through protecting such information as users' names and passwords to which specialists have access.

6. Privacy

Today, privacy is exposed to dangers never happened before the emergence of IT. Privacy is a part of personal right that should be owned only by the same person. As people own their other rights and assets, privacy ownership should be done by the same person. Therefore, one can not own the rights of other people otherwise he/she achieves their permission and he/she cannot enter their privacy without their permission. Regarding privacy, verses 27 and 28 of Noor Sura read:

> *"Believers, do not enter houses other than your houses until you first ask permission and greet with peace the people thereof; that is better for you in order that you remember. And if you do not find anyone there, do not enter it until permission is given to you. And if you are told 'return', so return that is purer for you; and Allah knows the things you do."*

Conclusion

In all religions, a fundamental pillar for prosperity in human material and spiritual life is ethics and ethical privileges because that ethics enforces social interactions. Ethics has not only a social but also an organizational aspect and considering such constituent can promote organizational ethics and mitigate abnormal behaviors to the minimum level. The most common organizational unethical and destructive behaviors are seen in IT and computer field.

As two open systems, ethics and IT impact each other so that changes in utilizing one influences over another one. As an inner behavior, ethics determines the orientation of targets in informational virtual ambiences. By respecting mentioned ethical constituents, one can achieve following results:

- Converting the society to an ethical one in which merit behaviors are disseminated.
- Implementing professional ethical constituents in organization causes that such constituents considered as measures for IT users' self-report.
- More recognition of users and specialists on ethical concepts that should be respected in information community.
- Building an informational and virtual community in which all actions of users and specialists are centered on the Divine submission.

References
[1] Ali, Abbas J. Al-Owaihan, Abdullah. (2008), *Islamic work ethic: a critical review Cross Cultural Management*: An International Journal Vol. 15 No. 1, 2008. Pp. 5-19.
[2] Buchholz, R. A., Rosenthal, S. B. (2005), *The Spirit of Entrepreneurship and the Qualities of Moral decision making: Toward a Unifying Framework*, Journal of Business Ethics, Vol. 60, pp. 307–315.
[3] Calluzzo, Vincent J. and Cante, Charls J. (2004), *Ethic in Information Technology and Software Use*; Journal of Business Ethic, vol. 51. Pp 301-312.
[4] De George, Richard, R. (1986), *Business Ethic* (2nd Edition), New York: Mc Milan Publishing

[5]   Fisher, Joise & Bonn Ingrid. (2007), ***International Strategic and Ethic: Exploring the Tension between Head Office and Subsidiaries***, Management Decision, vol. 45, No. 10, Pp 1560-1572.

[6]   Freeman, R. Edward, Gilbert, Daniel R. (1988), ***corporate strategy and the search for ethic***. Prentice Hall (Englewood Cliffs, NJ)

[7]   Javadi Amoli, Abdullah (2002), ***Agents' Ethics***, Tehran, Governmental Management Training Center.

[8]   Johnson, Deborah G. (1985), ***Computer Ethic***, Prentice-Hall, 2nd Edition, 1994

[9]   Johnson, Deborah G. (1999), ***Computer Ethic in the 21st Century***, a Keynote Address at ethic comp99 Conference, Rome, Italy, October, 1999; Published in Spinello, Richard A. and Herman

[10]   T. Tavani, eds. (2001), ***Reading in Cyber Ethic***, Jones and Bartlett.

[11]   Joyner, B.E. and Payne, D. (2002) Evolution and implementation: a study of values, business ethics and corporate social responsibility; Journal of Business Ethics 41, 297—311.

[12]   Kincaid, C. S., Baloglu, S., Corsun, D. (2008), ***Modeling ethics: The impact of management actions on restaurant workers***, ethical optimism, International Journal of hospitality management, Vol. 27, pp. 470–477.

[13]   Laudon, Kenneth C. (1995), ***Information Systems: A Problem-Solving Approach***, Harcourt School, 3rd Edition.

[14]   Lee Evans, Amanda (2003), ***Counterproductive group behavior***, a dissertation submitted to Florida Institute of Technology.

[15]   Li- Ping tang, T, Chen, Y-Z & Sutarso, T. (2008), ***bad apples in bad (Business) Barrels. The love of money, Machiavellianism, risk, tolerance & unethical behavior***, management decision, Vol.46 No.2 Pp: 243-263

[16]   Noory Ghomshei (2010), ***Official ethics***, Qom, Successful Youth Publications.

[17]   Oz, E. (1993), ***Ethical standards for computer professionals: a comparative analysis of four major codes***. Journal of Business Ethics 12 (1993), 709—727.

[18]   Payne, Dinah and Landry, Brett J. L. (2005), ***Similarities in Business and IT Professional Ethics: the Need for and Development of a Comprehensive Code of Ethic***, Journal of Business Ethic, Vol. 62. Pp 73-85.

[19]   Rosenbrock, Howard. (1995), ***Ethics and Intellectual Structures***, Ethics and Intellectual Structures; No 19.Pp 18-28.

[20]   Sensson, Goran & Wood, Grey (2003), ***The Dynamics of Business Ethics: A Swedish Public Sector: a PUBSEC Scale***, The international Journal of Public Sector Management, Vol. 17, No. 2.

[21]   Shaygan, Darius (2001), ***new incantation: forty-piece identity and mobile thinking***, translated by Fatemeh Valini, Tehran: Farzan.

[22]   Stone, Robert W. and Henry John W. (2003), ***Identifying and Developing Measures of Information Technology Ethical Work Climates***, Journal of Business Ethics, Vol. 46, Pp 337-350

[23]   Stoner, James F. et al (2000), ***Management***, translated by Ali Parsaeian et al, Tehran, Cultural Research Office

[24]   Wood Grey & Rentschler, Ruth (2003), ***Ethical Behavior the Means for Creating & Maintaining Better Reputations in Arts Organizational***, Management Decision, Vol. 41, No. 61

[25]   Zahedi, Shamsolsadat (2000), ***Transnational and global management: a comparative attitude***, Tehran, Samt Publications.