NEW CHALLENGES FOR THE INFORMATION SYSTEM

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Abstract: Today there is necessity of developing modern informative ethic codexes. They include privacy, accuracy, ownership and access to information. Informative systems affect on the change of the organizational structure and its activities.

Informative systems contain a large number of components on several locations and are therefore exposed to danger of negative influences (Intentional and unintentional). Therefore their protection which is necessary is possible with the development of controlling strategies.

1.INFORMATIVE ETHIC CODEXS

Ethics is a philosophy branch dealing with contemplations about the concept of what is considered to be right and what is to be considered to be wrong. There are various definitions on ethics: "moral codex for specific professions', or "agreement among people to work on the right and to avoid working on the wrong" and many other. In one of the oldest ethic codex "The Ten Commitments" there are specific regulations**,** about what is right and what is wrong to be done. Hence, it has to be clear that what is considered not to be ethical does not mean that is illegal. In many of the cases organizations and/or individuals have faced with the decision ethic, not thinking if they have brake a law, meaning if this is legal. Today in a complex environment, definition about what is right and what is wrong are not always clear.

In most of the cases companies and professional organization develop their own codexes. The ethic codex is a collection of principals thought out as a guide for the members of the company or the organization. Diversity of IT applications and the increased use of the technology are creating different bases of ethics. The attempt to put these bases in an ethical frame was taken from R.O. Mason and others who have made categorization of the ethic basis in four types:

Basis of privacy: gathering, classification and categorization of information for individuals.

The basis of accuracy: legitimacy, value and correctness of the information which are gathered and processed.

Basis of ownership and value of the information (intellectual ownership)

Basis of accessibility, which is the right to gain the information and to charge in order to get the information.

The privacy and the stands different subjects of different people. Generally the right to privacy is to be left alone and the right to be free personally could be transferred to others. These rights are for individuals, groups and institutions.

The definition about privacy can be interpreted very widely. Hancs the following two ules are basis:

1. The right to privacy is not absolute one. The privacy has to be balanced in accordance with the needs of the society and the public.
2. The public right o knowledge is supreme in the individual rights of privacy.

These two rules show why it's difficult in some situations to determinate offer a regulation of privacy.

The electronic monitor is the basic problem in accordance with American Civil Liberation Union (ACLU). Workers have very limited protection from electronic monitoring. ACLU has officially stated that ten million computer users were monitored (watched) in most of the cases without knowing. The watch independently if was made from corporation is concerning the right to privacy (for instance personal e-mail).

The private (personal information) in database. Information about individuals are stored in many databases. One of the most transparent locations about such registration of data are credit announcing agencies. Other places where private information can be stored are: banks and financial institutions, cable TV, telephone and attentative companies, employee, companies which are under hypothecs and residence, companies for equipment loans, schools and universities, supermarkets, post offices, government agencies, libraries, hospitals, insurance companies. Also every fulfilled questionnaire in some internet analyses is usually ending in a database.

Information announced on internet pages as group news. Every day there are more and more websites, group news, and electronic forums in a shape of talk rooms on internet but also in the inner web corporations. It is calculated that in 2001 there where 45 million users more than 220 000 public bulletin pages from all types.

The private codex and the ways of behavior. One of the ways to protect the privacy is to develop a personal ways of behavior or rules which can help the organization to avoid legal problems. In many corporations, management in high levels has started to look together to look for compatibility to gather bigger number of private information about consumers, clients and employed and to bear the responsibilities to make sure that the collected information mining the individual is protected.

International aspects of privacy. There is a big difference between countries in terms of established respect and regulation of privacy. Some countries such Sweden and Canada have very strict laws whilst others have smaller regulation. For instance in 2001 Italy, Spain, Portugal and Greece are in a process of development of legislative of rights of individual to control personal data in the government or in the user database and other law and ethical related laws. Whilst the countries of the Balkan are at the beginning of the regulation of privacy. The existing changing of standards could stop the flow of information among the countries of European Union. In order to overcome this problem the Commission of European Union has published a Guide about all country members in which the rights of individuals are approved to gain information about them and to correct the mistakes. Transfer of the data "In" and "Out" the state without knowledge of the government and the authoritarian organs or inclusion of individuals is increasing the number of problems that appear in relation with the privacy. Who has the legitimate right to registries in different countries? As the time passes the question of this problem becomes more complicated. Governments have to develop laws and standards which will be in competence to fight with the rapid increasing of the development of information technology in direction to resolve some of these problems regarding the privacy. The organization for economic cooperation and development (OECD) in Europe has prepared maybe the most appropriate set of Guidelines which are mending for protection of the individual privacy in the electronic area. Whilst the countries of the Balkan have to make their maximum effort in order to develop assistant in order to protect the privacy of information. The

problem of intellectual ownership is important for those who establish income which is enough for life by using the knowledge in specific area. The intellectual ownership is an ownership based on criteria's by individuals or corporations, which is protected by the law of trade secret, the law of copyright and patent.

The trade secret is intellectual work as a business plan, which is considered as a secret of the company and is not based on public information. For example a strategic plan of corporation.

Patent is a document that enables the owner the full right of innovations in twenty years.

Author right is law determent permeation that enables the intellectual creators' ownership for life time as creator plus 50 years. The owners are entitled to charge honorarium for each person who would like to copy his/her work. Federal Computer copyright act from USA enables a protection for objective codes, but the problem is that is not clear what is what and what is to be protected. The most common intellectual ownership is software. The copying of the software without paying to the owner (for instance giving a disc to a friend to install it on his computer) is violation of copyright and its major problem in the software trade. In the computer era the copyright law was provoked and a need for international regulation occurred in 1996 the world organization for international ownership (WIPO) have initiated the need of copyright regarding the intellectual work delivered on the internet. More than sixteen member countries of WIPO still attend to establish a bridge between cultural and political differences and to NASTAPAT with international agreement.

2. INFLUENCE OF IT OVER THE ORGANIZATIONS

The use of Information technology (IT) and lately the web use contributes towards many organizational changes specially in the areas as: development, authority, power, the way of living of employed, monitoring, management work etc. In these areas IT influences a lot of the changes of organizational structure and activities.

IT can provoke almost complete change in the organizations their structure, monitor and power of distribution.

IT allows decrease number of managers and experts which means less staff and managers. Hierarchical structures organizations will result as well with decrease with complete employment number, the number of employees, changing the technique of work processes, increased productivity of the employees and capability for of employed workers on low levels to execute work from higher levels with help of information system.

The fact that the work of the employed people is made on linear basis and electronically basis provides and opportunity for bigger electronically supervision. For professional workers the goal of the work is measured with competition of a project, "Old ways of sub vision" understands stronger accent of the completion of the work, and smaller accent on the personal contacts and office plaice. This is very important for the employed people in the geographically spread locations.

Knowledge is power- this fact is understood and accepted by generations. The development o the computer systems change the structures of power and governess inside an organization. The combat for the control over the computer work, the destruction of the network of the company and the information on resources have become one of the most visible conflicts in many private and public organizations.

The expert systems for instance can decrease the power over some professional groups. On the other hand individuals who control the electronic trade organizations are able to achieve reasonable knowledge, power and status.

IT affects satisfaction level of work, the careeners of employees' functional areas and management obligations. Lot of work activities will be eliminated.

The satisfaction of the work is linked with the satisfaction of the employed, the company, status and productivity. The changes in the satisfaction of work appear when the work is very organized for instance when the electronic trade is changing the distribution marketing system. IT seeks towards a high level of computer science education of the employed and with

this fact develops a need of additional education and professionalism of the employed. This way IT can influence on the level of building a career.

IT influences all functional relationships with a special accent on the management work. IT can change the models of decision making processes and provides time for the managers to spend more time on activity planning through previous evaluation of a potential risk. Also the collecting of information with a goal for improved decision making now can be preformed without difficulty. IT has a goal to decrease the time needed to complete every step in the decision making process. Going form this, nowadays managers can work on less number of tasks during a day, and to complete the tasks with higher quality. The personal communication is substituted with electronic mail and computerized conferences.

IT can increase the employ productivity, by reconstruction the content of work and by this the satisfaction of work. This is why one of the basic concerns of the employed is the sustainability of the working place. This problem is not a new one, it occurred with the appearance of the industrial revolution and imputing of the autoimmunization.

The computers become more smart and faster so the labor is substituted with machines which enable competition. This is why big number of people belief that IT leads to massive unemployment but other don't think this way.

The basic goals of IT are to increase the productivity to use opinions and knowledge of individuals and to be oriented towards consumers.

IT has negative psychological effect such are: depression, loneliness because people work and purchase from their homes.

Increscent of labor burden and/or the responsibilities can effect with work stress. Lot of employed people fail information disappointment because other people are better than them in computer use and this can be negative effect on health and the productivity of employed.

The responsibility of the manager is to help in the facility of the feelings of employed trough unburdening of labor among the workers, highering of bigger number of workers and/or reconstruction of activities.

IT enables high equality of life. The improvements are at the area of health care, it helps un-professionalized persons in completing tasks that seek skill and proficiency (for ex. Tax.Cat.nysscpa.org is expert system which can help in preparing of taxes; Mysimon.com enables the consumers with information about products etc.), robots, complete hard and risky jobs are improving combat against criminal, enables telecommunications etc.

By preparing of telecommunications the employed can work at home in clients' offices or while traveling using a computer connected with their job place. This number of people is becoming bigger. The telecommunication is used both in big corporations and small businesses. Telecommunication has number of potential benefits for the employed, the employee and the society.

Hence telecommunications have potential dangers. The major negative aspects for employed are increased feeling of isolation, disappointments in social interaction, lower pay in some cases) and invisibility of working place (which can bring to slower premonition in the working place). The negative aspects for managers are the control of work, potential problems linked with security of data, expenses for preparation and high cost for buying and maintaining to telecommunication equipment.

Still the positive aspects are bigger than the negative aspects are used by more and more companies who are pleased by the use of telecommunication services.

The telecommunication contributes to the increscent of productivity. This is because the telecommunication decreases the reasons of illusionary disease. The worker is able to rest a little longer in the morning and to start with work when he/she is ready.

The telecommunication helps to the managers to decrease misunderstandings with workers regarding the work, and the worker will be more responsible his/her obligations. Still some of the workers need to work in person with others and for this group of workers telecommunication is not the best option. Also all work can not be done with the help of telecommunication.

3. SESURITY AND PROTECTION OF INFORMATION SYSTEM

The information system contains a large number of components in several locations. This brings us to a conclusion that every information system is vulnerable to lot potential hazards. Vulnerability of the information system is increasing with development of networks. Threats for information systems can be classified as intentional and unintentional

Unintentional threats can be divided in three categories: human mistakes, hazard environment and unsuccessful information system.

The human mistakes can occur in the design of hardware or the information system in programming, collecting of database input data and instruction.

Hazard environment include earthquake, floods, electronic damage, fire, explosions, radioactive waste materials and etc. These hazards can break the normal computer operation and result with long waiting and with big expenses in recovering the computer program and files.

The unsuccessfulness of the information system can be result of poor production or defect materials.

Intentional un-functionality can happen because of lack of experience and on purpose are: stilling data, inappropriate use of data, stilling equipment or programs on purpose manipulation on the management, input processing, transfer or programming of data, infection of viruses etc. Higher numbers of international laws are treated as computer criminal.

Crime can be made trough outsiders interior (interior members) that enter the computer system or trough insiders (inner members) who have access to computer system, but have no permit ion. A Hacker is a term that describes outsiders who enter the computer system. And Kracker is dangerous hacker who can be serious problem for companies. The computer crimes are lead by few mutual motives: economical, ideological, and psychological, egocentrically.

Methods of attack: non- permitted taking of data and techniques of programming.

Non-permitted taking of data is the most common entrance and its use by insiders.

This is in regard with entering wrong in fabricated data in the computer or changing and erasing of the existing data. The technique of programming modify the computer program directly or indirectly. The most common method of attack is virus. The virus is expanding through the computer system and destroys the program and the data. But the informational system enables control defensive mechanism that is designed to protect all components: the specifics to data, software, hardware and networks. Their implementation seeks for defensive strategy. Major types of defensive strategies are:

1. Control for prevention with a goal to prevent a specific mistake to occur, rejecting access. The prevention is very important in places where potential damage is on high level.
2. Discovering of preventive measure maybe is not always excused but unprotected systems are vulnerable to attack.
3. Management of damages understands minimization of the laws that occurred in the functioning. The consumers would like to have their systems capable of work after the damage made as soon as possible. This is enabling by use of tolerant system for mistakes which enable a work of the system while the reparation lusts.
4. Reparation is consisting of a plan which explains how to repair the damage information system as soon as possible.
5. The correction of damaged system can stop occurrence of another problem.

The control of information system can be divided in 2 major groups: general (systematical control) and control of the activities.

The general control are used for protection system as a unity and are obtaining physical control, access control, safety ness control of data, communication (network control) and administration control.

Biometric control is automatic method of verification of identity of person speed of physical and behavior characteristics. The most use controls are the following: hands geometry, voice, signature, recognition of face characteristics, fingerprints, scanning of eye iris etc. Other

general controls are: control for preventive action for misunderstanding or bad interpretation and control for system development. An accent is put on administrative control and communication (network control).

The controls of the activities are constantly integrated in application (these are part of software and usually are recognized as legitimate rules. The classification is following: control of input, control of process and control of output.

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