Milenium III Organizations and their Assets

Ecaterina Necșulescu[1]

Abstract: Between organizations and technology has always been an inter-conditioning, that the economic progress requires some fashionable technology for organizations, while the organizations are supporting from the financial point of view, directly or indirectly, the technological progress. The informational technologies and communication offered few opportunities of which the organizations benefited at all levels of its structures. The informational system of accounting is subject to challenges as we face the novelties. This paper aims to highlight the trends of development of the organizations and the impact on the informational system of accounting of the new adopted challenges.

Keywords: organization; intangible assets; virtualization; organizational structures

1. Introduction

Since the early twentieth century there were a lot of classification criteria of the organizational structures that have evolved with the conceptual developments of the organizational theory. Thus, we can talk about a particular taxonomy of the organizations as are supporting Burdus and Caprarescu (Burdus & Caprarescu, 1999).

An organization is characterized by a so called organizational structure. This structure of an organization induces to the outside environment, as supports and Y-F. Livian (Livian, 2001, p. 53), an image of internal stability. An image between elements and of a structural ensemble that is not visible from the outside, but from the inside, only to its members. A significant contribution to the definition of organizational structure has H. Mintzberg in 1982, which supports the idea that it is*… the total amount of means used for the division of work in different activities and to ensure consistent coordination between activities.*

Thus, is reached at formal structuring of positions, functions, procedures, communication circuits, meetings, hierarchies, commissions, committees and others, as well as at informal structuring such as daily interactions, competences,

[1]Senior Lecturer, PhD, Faculty of Economic Sciences, "Danubius" University of Galati, Address: 3 Galati Boulevard, 800654 Galati, Romania, Tel.: +40.372.361.102, fax: +40.372.361.290, Corresponding Author: necsulescu.ecaterina@univ-danubius.ro.

cultural belonging, affinities, etc. Regarding the classification of the organizational structures we deal with well defined criteria, between which we distinguish:

Structuring on functions that corresponds to some small and medium sized organizations, where the productive side is slightly differentiated and where cropping correspond to the five functions discussed above.

Structuring after the divided criterion is recommended to the organizations of medium sized organizations for which the market and products are diversified. In this type of criteria we identify:

The geographical criterion in which the division is made on products, market, etc.;

Autonomy criterion assigned to the division;

Completeness criterion, that sent us to the functional architecture.

Structuring on projects or programs, this aims towards the orientation around the discontinuous operations, such as the activities from different sectors of activity, such as aviation, informatics sector, etc.

The matrix structure that takes into account two criteria simultaneously that leads to a hierarchy both vertically and horizontally.

The four structures that are put in relation on two coordinates by the J – L. Lemoigne in 1974 (Lemoigne, 1974), as seen in figure nr. 1.1. So, there are considered the degree of complexity of exploitation and the uncertainty degree existent in environment where the organization operates.

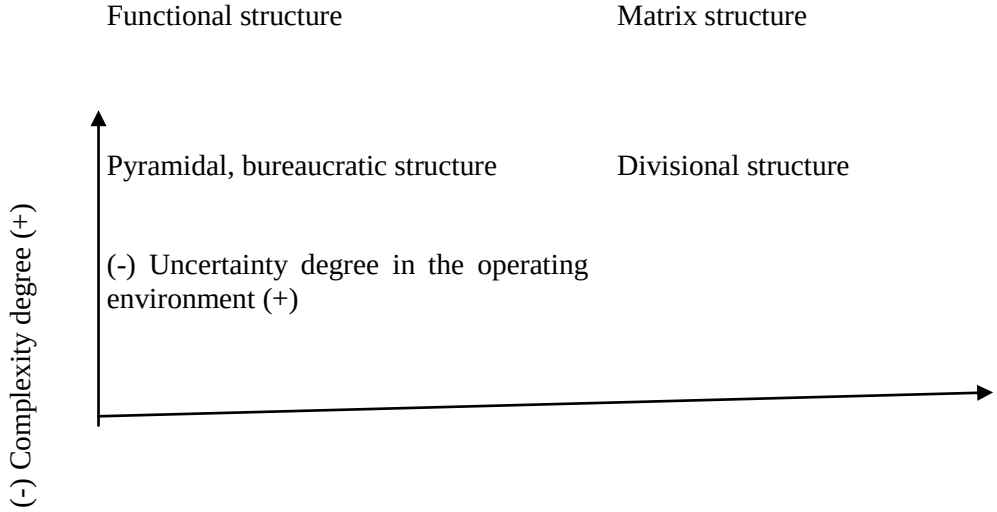

Figure 1.1 Representation of relations between the organizational structures

Source: (Lemoigne, 1974)

2. Organization an new informational and communication technologies

After building the firs electronic computer in the mid twentieth century and the development of informatics systems of management from 1970s, the organization had to regularly update their technologies to be competitive in the competitive battle to grab customers. The specialty literature[1] abounds that there will always be new technologies that will be assimilated by organizations and that the tomorrow organization will be totally different than the one of today.

Between organizations and technology has always been an inter-conditioning, that the economic progress requires some fashionable technology for organizations, while the organizations are supporting from the financial point of view, directly or indirectly, the technological progress.

The informational and communication technologies (ITC) are a collection of technological fields, such as informatics, electronics and communications, which develop simultaneously and interdependently (Tugui, 2003, p. 22).

The Department of Commerce and Industry of Great Britain in 1993 gave the following definition framework for the informational and communication technologies *"collection, storage and transmission of information as voice, image, text and numeric based on microelectronics, through combining the informatics with telecommunications "* (Lucey, 1993, p. 212) (Dumitriu, 2001, p. 28). This definition allows us to distinguish two obvious components, namely:

The actual informational technologies, which refers to the two components hard and soft;

Communicational technologies consisted of networks, wireless optical transmissions, ISDN, communications standards, etc.

In his paper "*Generalized informatics products for accounting*" (Tugui, 2003, pp. 32-41), Al. Tugui, lists the main technologies that are marking the economic and accounting field, as follows:

The Internet with its applications, including: Intranet, Extranet, groupware[2], Internet EDI (Georgescu, 2002, pp. 235-236)[3], email, e-marketing, e-learning, discussions on Internet (forums, meeting groups, newsgroups), chat (in real time), electronic commerce (e-commerce with the following business models : electronic store (e-shop), e-procurement , e-auction, e-mall, third part marketplace, virtual communities, etc), remote connectivity, virtual universes, capture radio and TV programs etc. We add to this informational and communication technologies found in vogue, such as: Grid Computing and Cloud Computing.

[1] Handay, C., (2000), Unimaginable future, in (Hesselbein, Goldsmith, Beckhard, 2000, pp. 274-278*)*
[2] Collaboratively working
[3] Electronic Data Interchange. For details concerning EDI see (Dumitriu, 2001, pp. 70-71)

Optical character recognition;

ATMs;

Electronic realization of meetings

Electronic management of documents;

Artificial intelligence and its applications;

Multimedia systems;

Tele-presence;

Web computers;

Speech recognition voice;

Digital television, etc.

At technologies listed above we add business intelligence, collaborative applications, ERP applications, virtual technologies for business, education and health, such as Second Life, which already gets momentum in the value creation process.

An organization subject to informational and communication technologies must agree to become increasingly virtual, as C. Handy[1] was stating, we can describe what they do, but we cannot see them.

In other words, the informational and communication technologies have provided some opportunities by the organizations that have benefited oat all levels of its structures. Among these are:

Digitization of some processes within the organization;

Facilitating the intra and inter organizational communication;

Appearance of valuable assets which contributed greatly to the overall value of the organization, as for example: chains of online stores.

Creating the premises and management conditions more efficient of the processes and resources available to them;

A more flexible of the organizations;

A more open to everything new;

A greater focus on its intangible assets.

[1] Handay, C., (2000). *Unmanageable future*, in Hesselbein, F., Goldsmith, M., Beckhard, R. Edts., p. 275.

3. Ideas to Take into Account for Passing To The Modern and Post-Modern Organization

The traditional organization, specific to the most part of the twentieth century is part of the analysis and the forecasting of the necessary qualities for the modern organization.

M. Hammer[1] makes a very fine comparison between the two organizations. Thus, the traditional organizational culture was based on the mutual understanding between workers and management as representatives of the holders of organizations. In turn, the understanding meant obedience and diligence at work in exchange for the work place. Currently the new organization starts from a customer which has changed lot in that it is only interested in results. Thus, instead of *the understanding* from the traditional companies appeared a favorable environment for *an exchange* of harnessing the opportunities, both for the employees and for management, to total commitment to show initiative in creating value for clients and finally for owners. In this way it offers freedom and personal development opportunities to all people involved in organization, from worker to manager, provided by customer's satisfaction.

Thus, we see that today most organizations wish to gain the trust of its customers and employees, in the conditions of a world characterized by more and more uncertainty and through changes without borders.

Now more than 50 years, in 1959, Peter Ducker was the one who argued that *the informatics procession of information leads to radical changes in organizations*. (Livian, 2001, p. 212) And we must admit that he was right.

In other 40 years, in 1997, Peter Drucker completed the *Introduction* at the *work The Future of the Organization*, published in 2000 and in Romania with the title *Organization of the future* with a remark made in a simple and clear way: *We are heading towards the new organizations*.

We want to accept or not the conclusion of P. Drucker, remains the option of each of us! But before accepting or not, it is necessary to put in a virtual balance the traditional and modern or post-modern organization next to the new trends already recorded and taken in the organizational theory along with which we add the pressure of the new technologies. Thus, we will get to the simple conclusion that P. Drucker was and this time right. However, there are and opinions[2] according to which the *new forms* of organization are not so new, and the innovative process of the late twentieth century is not so large compared to the late nineteenth century.

[1] (Hammer, 2000, *Soul of the new organization*, in Hesselbein, Goldsmith, Beckhard, 2000, p. 29)
[2] Pfeffer, J. (2000), *Will the organization of future the mistakes from the past*? in Hesselbein, Goldsmith, Beckhard, *Organization of future*, p. 41.

A proponent of diversity management, Th. Roosvelt Jr. (Thomas, 2000:241), believes that the future organizations cannot afford to keep the tight and outdated notions of diversity. Thus, Thomas establishes a set of qualities that the organization must cultivate within in order to prosper in the future, including:

Commitment to a common mission and vision (Thomas, 2000:245)

Efficiency;

Capacity of reflections and learning;

Self-empowerment while is looking for something new;

Multifunctional roles;

Performance Management;

Strategic thinking;

Cultural renewal;

Continuous searching and learning.

At their turn, Somerville and Mroz[1] offers a set of seven tips inspired from the examples of success companies, regarding the future organization, so that to obtain performance from all points of view, including of the owners, as follows:

Employing the organization in order to achieve a noble purpose;

Imposing of a responsible leadership;

Encouraging multidisciplinary teams;

Encouraging the organic partnership;

Promoting knowledge networks;

Catalyze of global search;

Adherence to change.

4. About the Assets of Modern and Post-Modern Organizations

Adam Smith, the classic of the political economy, argued rightly 400 hundred years ago, that a nation is even richer as it has a larger population. We wonder to what extent this statement remains valid today, in the conditions of new economy, and of the new informatics and communication technologies, which have brought and will bring many changes required by the future trends.

[1] Somerville, I., Mroz, J.-E. (2000), New competences for a new world, in Hesselbein, Goldsmith, Beckhard, 2000, p. 58-68.

In terms of technological progresses the human society has recorded three stages (Cornish, 2004, pp. 14-18), namely: *agricultural revolution* that began in the Near East 11.000 years ago, the *industrial revolution* marked by the replacement of water pumping technology from the British Mines with steam engines around 1750 and the *cybernetic revolution* started in 1937 with the first digital computer design and the construction/completion of it in 1944. Each of these three technological states has imposed specific assets, depending on what was most important, on the specific level of technological development.

The organizations specific the agricultural era, have put in the center of their attention the assets characteristic of that period. We refer especially to land and agricultural inventory necessary for work, including the work animals and constructions used in storage products. Of course, there were considered and other assets, such as money and precious metals and even slaves that worked that land.

However, not all these assets were incorporated into the accounting plan, but only a part of these which is related to the stock products and goods, to a part of farming stock and of course those who were in debt after selling those products or as a result of various forms of borrowing.

We notice so that there were assets of agricultural nature which were not took into account for their implementation in accounting plan. We support this idea with an example related to the arrangements of the agricultural terrains in order to irrigate them, which were not reflected in the wealth of the property people. The borrowing and lending institutions, as well as other organizations such as the religious ones or of shipping fell in the same trend of recording specific assets, indicating that it was possible not to have some assets specific to the agricultural organizations.

The organizations specific to the industrial age took first in account all specific assets of agricultural era to which were added the industrial equipments that have made their presence felt in manufacturing, factories and plants/ Over time, next to the industrial equipments there were included steam and electricity transport means, including the railways and roads.

Towards the end of the eighteenth century there are occurring certain assets of the patents, trademarks, concessions, which were not reflected in the accounting until the late nineteenth century. At the beginning of the twentieth century we find that with the traditional assets of the industrial era appear and assets of intangible nature that are found in the balances of the organizations. Thus we find an approach almost exhaustive from the accounting perspective of all the assets in physical form, to which are added and a part of the assets without physical form, such as: patents, trademarks, licenses, concessions and more.

The organizations specific to the cybernetic era, take into their portfolio all the categories of the assets specific to the agricultural and industrial era and adds assets with a pronounced intangible character of informatics nature. Thus occurred the

assets of digital nature, such as software, licenses, which are treated in accounting terms as any other intangible asset but and assets which are not recognized in accounting such as the virtual computer networks. In the last decades of the twentieth century arose specialized bodies in the treatment of intangible assets, but and standards of uniform application of the rules that are affecting them. Of course that and in this period are assets that are not recognized in accounting terms, which make their presence felt in turnover, but they cannot be clearly identified and assessed.

Even if we discuss of the cybernetic era, there are opinions according which the most precious assets for organizations are the people involved in these and which is the success recipe of any modern and post-modern organizations.

5. Conclusions and Proposals

The accounting has as main task to reflect the initial state of the patrimony, of the economic and financial processes and phenomena which is taking place within an organization in a reporting period, as well as of the final status of it.

In the conditions of extension that receives the assets of informatics nature, with major influences on the production processes and services, from the perspective of redesign and digitizes a significant part of the tasks related to supply, production, procurement, sale and subsequent collection, the informational system of the accounting is subject to some challenges to the extent of novelties with which we are facing. Among these challenges we have limited few that we think are important:

Daily extending of the informatics assets and hence of the virtual assets most often identifiable and generators of reliable economic benefits, imposes to accounting a continuous application of the specific test of recognizing the new occurred assets;

Virtualization of the own procedures, techniques and methods specific to the application of accounting technique. For example, the work in collaborative environment with the use of integrated applications and those of groupware category can lead to a better quality of the accounting information, increased data processing security, while reducing the risks of traditional or partially integrated methods;

Potential technologies that are in vogue (such as, electronic signature, cloud computing, etc.) may require radical reorganization of the data flow from the accounting recognition to the treasurer control , as well as and the necessity to update the rules for recognition of some patrimonial elements, including for those of intangible assets;

Successful implementation of some technologies of accounting and financial auditing could directly bring benefits both to the organization concerned, as and to the society as an entire, by limiting some illegal practices.

We believe that the virtualization of the processes and phenomena from within the economic entity will finally lead to an increase of the importance and share of intangible assets in total assets of the new organizations, which will help at the increase of the direct and indirect benefits, recognized by accounting. At the same time, we will find a greater evidence of the existence of intangible assets which cannot be drawn from the commercial estate.

6. References

Burdus, E.; Caprarescu, G. (1999). *Fundamentals of organization management*. Bucharest: Economic.

Cornish, E. (2004). *Futuring. The Exploration of the Future*. Maryland: World Future Society.

Dumitriu, F. (2001). *Informational accounting system in the modern enterprise*. Iaşi: Junimea.

Georgescu, M. (2002). *Market in transition. Transition in market.* Iaşi: Sedcom Libris.

Hesselbein, F.; Goldsmith, M.; Beckhard, R. Edts. (2000). *Organization of future.* Bucharest: Teora.

Livian, Y.-F. (2001). *Organisational. Theories et pratique*. Paris: Dunod.

Lemoigne, J.-L. (1974). *Les systemes de decision dans les organizations.* Paris: PUF.

Lucey, T. (1993). *Management Information Systems.* London: DP Publications Ltd.

Somerville, I.; Mroz, J.-E. (2000). *New competences for a new world*, in Hesselbein, F., Goldsmith, M., Beckhard, R. Edts.

Tugui, Al. (2003). *Generalized informatics products for accounting.* Bucharest: CECCAR.