The Role of the Office in the Informational Society

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Abstract

The present rapid and unpredictable changes, determine both economic and cultural structures to adapt to new informational technologies through an adequate furnishing of the offices which, by nature, receive, process and convey information in view to substantiate decisions. Within infodocumentary structures, the office is not only the interface between decision and execution, but it is also the subsystem in which most of the working processes are going on.

Keywords: management, organization, office, information

Organization

Most of the working processes in the library are divided into organizational subdivisions such as services and offices.

In his work entitled "Office Management", J. C. Denyer defined the office as the working place of the office workers (1). The definition is obsolete, the modern concept of office actually identifying itself with the "activity" and not with "the place".

The office can be described as a structural element in which information is gathered, and then it is used in different present or future working process. The information can refer to production, management, marketing or other aspects of an enterprise. The existence of an organization or institution is based on the office functioning.

Whether it is a governmental department, business enterprise or educational institution, the office is vital for their functioning.

All the execution processes and activities which are closely linked to management are based on the office.

G. Mills and O. Standingfort in their work entitled "Modern Office Management", shows that the purpose of the office is: "…to provide communication and stacking services." (2). In the management process of an organization, the importance of the office results from much more aspects:

a) the office is the informational centre, the data base of an organization; any kind of data and information, past or present, is provided in the office-the information provided by the office represents the basis for previsions, planning and control.

b) the office stands for means of communication through which information goes from top to bottom, but also the other way around; no matter how gifted the managers are, the organization would fail if the goals, the decisions, the policy of the company or the results were not sent in a certain way;

c) the office provides a good coordination for the varied activities in an organization;

d) the office stands for support in the managing control, providing the estimation and improvement of the subordinates, in view to obtain the company's goals;

e) the office has an essential role within the human relationships, needing an effective organization; the payment, other kinds of reward belong to the responsibilities of an office;

f) the office is the connection between shareholders and company; the issue of shareholder certificates, the transfer of shares, the dividends, the meetings of the company and the answer to different matters of the shareholders are very important and cannot happen without the help of the office; this one must also act as a service department for creditors;

g) the office is the link between the organization and its clients, it manages the requests, the orders, the complaints through direct contact;

h) the office connects different governmental departments to the organization, being responsible as well as for favorable image of the organization to the public.

The management of the office can thus be defined such as the process through which several jobs are put together in a managing subdivision in view to accomplish the established goals.

Koonts and O'Donell, two British experts in the management field, suggest a logical method of organization of the modern office, to comprise the following stages (3):

1. Establishing the goals of the enterprise (company);
2. Formulating the goals which derive from the basic ones, the policy and the plans;
3. Determining the activities necessary to obtain the established goals;
4. Enumerating and classifying these activities;
5. Selecting the activities according to the material and human resources and finding the best method to use them;
6. Choosing the leader of each group of authority necessary for developing these activities;
7. Connecting these groups, horizontally and vertically, through authority relationships and informational systems;
8. There are two types of activities within the modern office: basic activities (routine activities) and management activities. The basic activities of the office consider information.

A conspectus of the main routine activities is presented in the table below. 1

Table 1.

Basic Activities of the Modern Office

Activity	Goal	Result
1. Creating	Data issuing	Data existence and availability
2. Collecting	Data gathering in view to processing and stocking	Data volume and place identification
3. Reading	Data interpreting (words, symbols and characters)	Data awareness
4. Writing, data introduction	Data introduction (figures, texts, images) through typing and processing	Beginning data processing
5. Registering and printing (Data issue)	Data turning into an accessible form in order to be easily read and in order to obtain the processing results	Achieving data processing
6. Data sorting	Data classification	Data classification according to some criteria
7. Data delivery	Data delivery to different destination	Data availability for different purposes/places
8. Calculation	Mathematical data coordination, if necessary	Figures are added, subtracted, multiplied and divided
9. Comparison	Data accuracy (if they are complete)	Qualitative and quantitative data analyses
10.Stocking	Data memorizing for a future use	Data become available when they are necessary

The administration activities (Table 2) are part of the administrative manager of the office; these are auxiliary functions which improve the efficiency of the activity in the office.

Table 2.

Management activities

Activity	Goal	Result
1. Management activity	Planning, organizing, controlling, motivating	Attaining the goals
2. Designing office systems	Facilitating the management activity	Eliminating the errors, a better coordination and relieving the manager's routine tasks
3. Designing and controlling the forms	Facilitating the acquisition and conveying the information	Stocking only necessary information, as well as providing a specific localization for each item of information requested
4. Controlling the acquisition and supplies	Facilitating the purchasing flux and of scientific stocking of office-supplies and other material supplies	The availability of supplies at any time, at the most convenient time
5. Choosing and purchasing computers, the equipment and office furniture	Facilitating and purchasing the most performant equipment, as well as their maintenance	Using the equipment performantly as well as the minimization of discomfort at the working place
6. Selecting, hiring, training and paying the office staff	Selecting and optimal use of the human resources	Efficient manpower and a low labor price
7. Registering and protecting the good	Receiving the public's reactions with the management actions	Avoiding losses and labor interruptions
8. Public relations	Matching the public's reactions with the management actions	Building up a good image to the public's eye

If we were to choose as an example a secretariat office, present in each institution, the main activities and the time assigned to them, according to the statistics of an American company, are present in table 3.

Table 3.

The main activities in a secretariat office

Activity	Percentage from the total working time %
Reading	1.7
Writing	3.5
Editing/Working with cards	37.8
Checking	3.9
Copying	6.2
Arranging the mail in envelops	3.5
Sorting, distributing, picking up the mail	10.5
Debates with the leading staff	4.3
Short handing	5.5
Putting down notes in the agenda	2.6
Phone communication	10.5
Keeping records	7.2
Others	3

A survey of the activities demonstrates the importance of the relationships between the management and the secretariat and the very short time spent with the rest of the staff. The great amount of time the secretary spends in processing data on the computer is to be noticed as well. This observation is suitable for every organization's offices.

The organization systems of the offices undergo a permanent change. The organizational subdivisions are arranged, modified and combined in different other forms. All these things should eliminate a phenomenon which has been suffocating for years and that not even the latest technologies seemed to stop. That is: bureaucracy.

Skeptically, Peter Drucker used to say: "We do not have the least reason to consider that in the developed countries the costs or labor legislation will be reduced… another pile of papers to be filled in, other complaints, arrangement (4)."

Automatization

The acknowledgement of the special role of the electronics in society, the big impact of the means of communication, the rapid evolution and presence in all fields of the socio-economic activity of the IT, represent some of the characteristics of the contemporary technical-scientific revolution.

In the past years, the world-wide development of electronics and IT is characterized by new elements, due especially to the progress of microelectronics, to the evolution of the microprocessors, of the industrial robots and to the artificial intelligence, as well as to the changes brought in the structure in which computers are used. Electronics and informatics (IT), through their impact on society make up domains which somehow establish in the future.

The present development stage, called the IT era or the computers and the Internet era, has to convey and process the information at a distance.

At the same time it is to be noticed a change of mentality of the employees and of the traditional view within economic organizations, the new technologies being totally turned up-side- down. A huge amount of data and information as well as the necessary instruments needed to store them, made the electronic equipment to be indispensable.

At present there are a number of technologies with a special impact on the activity of companies and offices. The computerized systems newly introduced have extensively changed the structure and the activities within the office, enabling the information to be stored and conveyed. In an office, the information is not only figures but also texts, images etc., which must be managed and processed in order to cope with the users' needs.

The office systems make up a combination of technologies which represent the basis of communication among people, and conveying data in different ways as well as a basis for the activities of those who take decisions and those in the operational system.

The functions of the equipment specific to the office systems are the same as to other IT systems: data access, storage, processing and localizing. The technical equipment can be used in order to manipulate, and process the information as well as taking decisions.

Any social-economic organization can be considered as a number of people and goals, as means of production and information, a mixture of individual and general interests. These people function through messages, having the role of conveying the information necessary to develop the activity.

Each specific human activity in different structures has specific information. The information becomes useful to someone should it be requested by an information consumer, no matter deciding on accomplishes. Between the transmitter and the receiver the information goes through specific ways, being modified, purposed to be processed in order to be useful to the goals established by the information consumer. All these activities and means are to be formed within the informational system.

Every specific activity has specific informational system, which must provide enough and proper information at an operational level requested by the user. The informational system can be considered as the nervous system of the basic activities in which it functions.

Lest the reciprocal influence effect between the informational system and the basic system should be positive; there must be a total agreement between them. The informational activity is important both for the whole system and for its managing elements (production, research-development, financial-accountancy functions). You cannot consider an improvement of the social-economic activity without appropriately improving the informational-decisional system, such as you cannot consider an improvement of the informational system without and increasing of the activity of that system.

Besides increasing the data to be processed and the need of providing appropriate data to those who decide, the use of technical calculation means is requested by other factors as well:

1. The need of an appropriate management;
2. To remove the differences between the productive segment and the administrative one;
3. The need of using advanced methods of evidence, control and analyses;

4. Freeing the staff from routine;
5. Creating integrating systems of data processing;
6. Cutting the managing staff;
7. Structuring data basis according to the principle of registering them only once.

What happens within a company is oriented towards increasing the level by knowledge through turning simple data into information and then into knowledge.

There is a deep disagreement between the use of information and controlling it, and the need of innovation.

The new era is one of computers used for writing text and estimating sales as well as using them in the outer space.

Having the ability of processing a great number of data and information, computers are used more and more in office activities.

It is hard to analyze the advantages a computer brings to an organization, and through the most important are:

a. Preparing a great number of information;
b. The possibility of checking the information at a high speed;
c. Indirect financial uses through different kinds of users;
d. Reducing the boring work of the employees, taking over a series of routine activities;
e. Improving the managing checking process;
f. Totally removing the errors of processing and data sending;
g. A high level of flexibility using different programs and procedures.

Besides all these advantages, there are also disadvantages, when using computers, such as: a high price, the technological progress which can turn them into worn-out equipment, frauds through computers.

Computers can read the information introduced in their memory, can stock it, can do all kinds of mathematical equations, they can interpret the results and offer necessary information at the right moment. Computers can be used both at the higher level of the management, as well as at the lower one.

In an office activity, computers are used as follows:

1. Preparing the payment papers;
2. Keeping an evidence of the stocks up-dating it;
3. Book-keeping the sales;
4. Controlling the budget;
5. Controlling the production;
6. Enabling communication.

The ever growing number of phenomena appeared in the past few years, together with the use of the personal computer, show that the information security cannot be disregarded anymore.

There are occasional congresses which draw attention to factories with IT systems in view to promote them. The conclusion drown by these congresses shows that the information security is closely linked to a certain mood, and the factories and their leading staff must get a close look at the risks they might take, the environment where they develop their activity, in the absence of a unique model of informatics security.

The "fortress" syndrome is applied by every factory in its way, but although 85% from those who are responsible for the information security are concerned with data savings (in the absence of a unique model of informatics security) and 75% hold control, we can notice that in more than 25% of the informatics accidents such situations were not foreseen.

In accordance with the many experts' opinion, the strategic importance of the informatics in the factory's life is underestimated and 30% from the leading staff uphold the idea that security is ineffective. This phenomenon is actually more complex, because the security and the risks estimation is not only a strictly mathematical problem, being necessary to consider all the factors involved: the global space of the factory, the technical needs, the functional organization, the human element etc.

From the already stated arguments it results that it is necessary to study the types of losses as follows:

a. Losses owing to the equipment: they refer to the cost of the repairs or replacement of the worn out equipment. The informatics accidents don't have only material causes. Some of them can become a real threat to the society such as the case of a medical application (USA) which caused some victims as not all the sections of the program were checked;
b. Financial or clients losses;
c. Losses owing to the viruses ("logical bombs")

Within small factories the same person is in charge both with operating and administrating the informatics system and its security.

The theft of equipment is also to be noticed such as: computers, printer, modem, mouse devices etc. the consequences are owing to the activity interruption.

If piracy can be stopped through the author right law, not the same thing can be done in the case of the lack of information. The traffic with the export companies and those of high technology being the most exposed.

The more information is required, the bigger the concern to protect it is. Even from the moment software is installed certain security measures are

to be imposed, such as: the surveillance of the main entrance, to stop the unauthorized persons, to prevent the fire. Besides them, the protection of the software products, of the line data, and of data in batch processing systems (serial processing) will be checked.

Certain data and programs must be strictly confidential. A great deal of on-line data must be copied at times in order not to be affected of damaged.

Data protection can be regarded from two points of view: data integrity and accuracy. Data integrity implies its protection on the elimination of the damages that can be caused by the equipment or by some software problems. In the batch system data processing is sequential and when data is updated, the whole index is recopied, as part of the process. It is generally assumed that they are protected if two updated index generations are preserved.

Organization, protection, surveillance and redundancy are key words which imply a proper security. In this respect, there are different solutions that can be easy or complicated, total or partial. It is important to make a security scheme to suit the factory.

Tendencies

Technologies with the new organizing ways determined a new terminology. Today almost everyone heard of the “office computerization” or of “the office of the future”.

In the future, computers will become cheaper and more powerful due to the ever growing technological progress. A similar quantity of present computerized power will be 20%–30% cheaper in the future.

Personal computers are replaced by new ones every two years and even earlier.

The secondary storage capacity becomes better with 50% per year.

The need of interlocking systems will provide computer data to the users and managers. All kinds of data communication will be widely spread and more and more companies will invest in commercial data base services.

There will be an increasing interest in the expert systems and artificial intelligence, which will facilitate the construction of the knowledge basis and of the interference procedures. The managers of the informatics systems will be increasingly concerned with the organizing activity, influencing it. At present, the most prosperous branch of the artificial intelligence may be that of the expert systems meant to solve problems in specialty domains.

The expert systems take over the knowledge based on a direct report, or an experience, acquired by the specialist, referring to a well determined

set of matters, and it assures the task of solving them, having in view to minimize the users' interference in the solving process.

The rapid extension of the expert systems had as a permanent support the development of a specialized category of complex instruments meant for this domain, called "frame systems" or "tyre systems", which allow the efficient takeover of the specific takeover of the specific knowledge-from the specialty domain for which that expert system is conceived,

One of the goals of the research activity in the expert system domain requires that the computer user should become "invisible". Besides standard knowledge, basically all the other is to be introduced in the computer memory buy the future user, in view to solve some problems that the one who conceived the system will never know. The latter's intelligence becomes only part of the initial selling price of the product.

From this point of view the most significant aspect refers to the knowledge encoding. Thus, a large and sophisticated knowledge base can be created, in order to be acquired, stored and distributed lest the ones who are interested should require it.

In a time when the scientific language is so varied, and the human's mind finds it more and more difficult to analyze large amount of information, the perspective of a future integration of the expert systems offers a stimulating alternative.

"The first stage of human organization which proved its efficiency from antiquity, almost in the present day was and still is the pyramidal one. This kind of structure, used in the army during the Romans time, and afterwards in the church organization, was taken over in factories such as General Motors and IBM for a while, to be then replaced by more flexible types which ensured a greater flexibility of the production and informing process." (5) stated Jay R Galbraith.

The organizations and companies, in which information prevails, suppose rapid communication, intercommunication between managers and workers, direct and strong links among all the workers and the managers of the production process.

The principle "high-tech-high-touch" has in view a high technology which implies intense relationship among people, cooperation, a higher interpersonal interaction to supply the human empty space created by the relationship between man and machine.

Peter Drucker, an American sociologist and economist in his work reiterates the pyramid concept but in a new vision: "in an institution based on information, science will mainly be at the foot of the pyramid, where the direct producers are. Today, as well as in the future, organization will be less

hierarchical. The side organization will enable spontaneous transfunctional contacts, bringing to a better communication and coordination." (6)

The business frame is dramatically changing and the role of the staff within the organization is also changing. Closely linked to a more rapid decisional process, decentralization can lead to fragmentation, multiplication, lack of coordination within the organization. The model of the distributed organization is the one in which one changing form the managing into the subsidiary area. The hierarchy is thus decreasing. In many cases the organizations must understand the importance of preserving some confidential information, thus having an advantage in the competition.

The following lists consists of some attributes which describe the new way of organization compared to the old one (table 4).

Table 4.

Ways of organization (comparison)

New	Old
Dynamic	Steady
The abundance of information	The lack of information
Global	Local
Adjustable sizes	Big sizes
Production and clients oriented	Functional
Skills oriented	Activity oriented
Team spirit	Individualistic spirit
Involvement	Command, control
Side network (horizontal)	Hierarchical

Basically, there is a new organizational logic according to all the managing systems of an organization. The new organizations must adapt the self-structuring system concerning the managing activity. In many cases, the new structure needs an advanced technology and it would be too much to ask for perfection from the beginning.

The office of the future will have an advanced technology and its users will have to cope with it, and will also have to participate in its development. The concept includes the following elements:

- A rapid data storage and localization;
- Sending and receiving messages;
- Systems of decisional support;
- Labor distribution in different places;

Its basic functional elements are:

- Preparing and reproducing the documents;
- Communications;
- Information storage and localization on different backgrounds.

The office systems which have been created recently belong to the informational system and its goals and tasks belong to the general goals and tasks of the organization,

Computers make labor easier in the administrative compartment and it also changes the aspect of the working place.

In nowadays society, in which the exchange background is the informational one, very important data to the leading staff can be sent from different geographic areas, even from means of transport. In the same way appeared "the mobile offices" or "home offices", from which different transactions with partners from their working places are done.

Powerful companies from the USA such as General Motors or IBM include psychological facts in the production of goods, thing that will represent the quality landmark of production in the future.

Birotics studies the computerization of the offices, attributing the notion of organizational integration the power of an operating concept. It will be applied everywhere, as the new technologies allow both the growth of efficiency and also a less physical effort. The new technologies will create special working conditions; will also improve comfort, security and satisfaction.

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