

## Integrated Administration of the Organizations Informational Resources

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*Organizations grow and develop continuously and information volume grows in the same rhythm, which makes from improvement or changing the old counting systems an imperative. More and more companies, instead of continuing to invest in small applications choose integrated informational solutions, which are adapted to the user's daily needs from, all decisional levels. Although apparently profitable from the costs point of view, small applications assure only the simple economical solutions between clients, partners, furnisors, and employees. For high business volume companies, this kind of applications become useless in a short time, fact that involves extra sustained investitions.*

**Keywords:** organization management, informatic solution, data volume, information system, benefit and economic performances.

### Introduction

On the Romanian market, there are a multitude of applications and solutions which helps in different percentages the processes capitalization. The most complete is an integrated informatic system, which assure data availability for all the administrative departments.

The dates are retained in a single database, common for all the modulus and informatic components, which represent and administrate a specific businessprocess (production, furnishing, financial-accountantship etc).

The high grade of codification and appliance in the beneficiary specific assure, for such work devices, the needed flexibility in a competitive environment.

The concept of the integrated informatic system has evaluated from the legitim desire to the process and the business relationships, to the optimization of the resources use in an organization.

The integrated informatic system is a software solution which reduces the manufacture and furnishes the exact information in real time in order to finalize some viable decisions for medium and long strategies.

### 2. Information and management

In all the organizations, especially in small and medium organizations, the operations are rarely corect perceived. These organizations expects the decisions foundation, the control activity and plans preparation based on the

use of the informations obtained from formal sources- for example, from the strategic and integrated management( MIS) of the organization or from the informal sources, as corect discussions, call-centers, social contacts etc.

Despite all the difficulties, the manager needs relevant informations in order to assist at the planification, control and foundation of the decision.

The relevant information is characterized by:

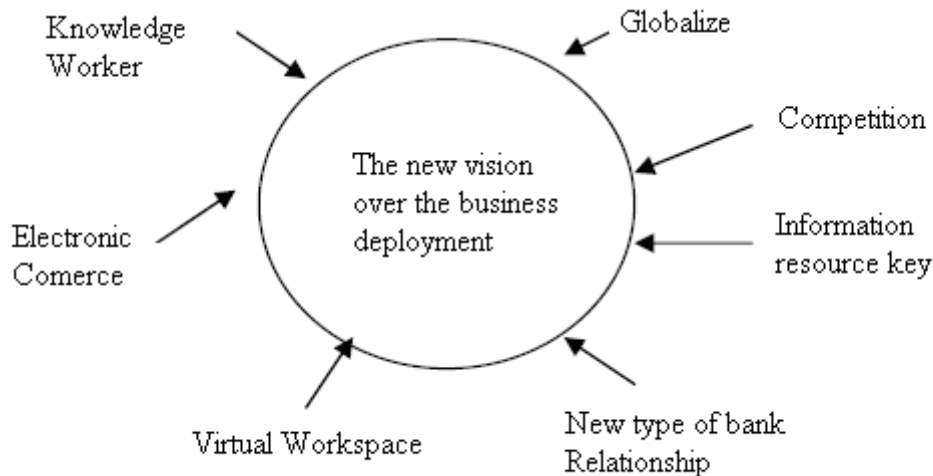
- the increase of the knowledge grade;
- reducing the indeterminacy;
- is useful for the goal.

The impact of the information technology can be feeled from inside, not only from outside. Every organization must have five interdependent elements:

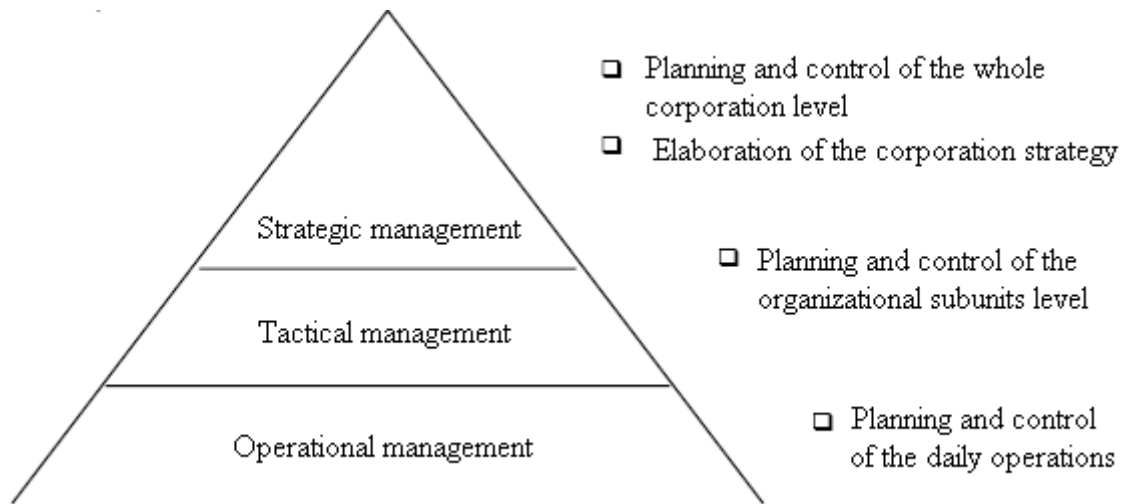
- the organizatoric structure;
- the management and the business process;
- the informatic technology;
- the organization strategy;
- the employees and the organization culture.

These components must be in an equilibrium state and this state will be maintained as long as there are no semnificative changes in the external or in the internal environment.

The IT component has a special dynamic, This determine qualitative movements on the others components. The IT dynamic component is being resigned at the organization strategy level, offering tools and resources in order to analyze and foundate the strategy.



**Fig.1.** IT impact over the organization



**Fig.2.** The management levels in the organization

The informatics system of the firm must integrate informatic subsystems which accomplish the informational specific needs for every managerial plateau region (figure 2).

**2.1. Information characterization and the informational system**

The information concept in an organization sense is more complex and stiffer than its common sense. The information emerges as a result of the understood and interpreted dates by the message receiver. The user and not only the issuer are implied in the conversion of the dates into informations.

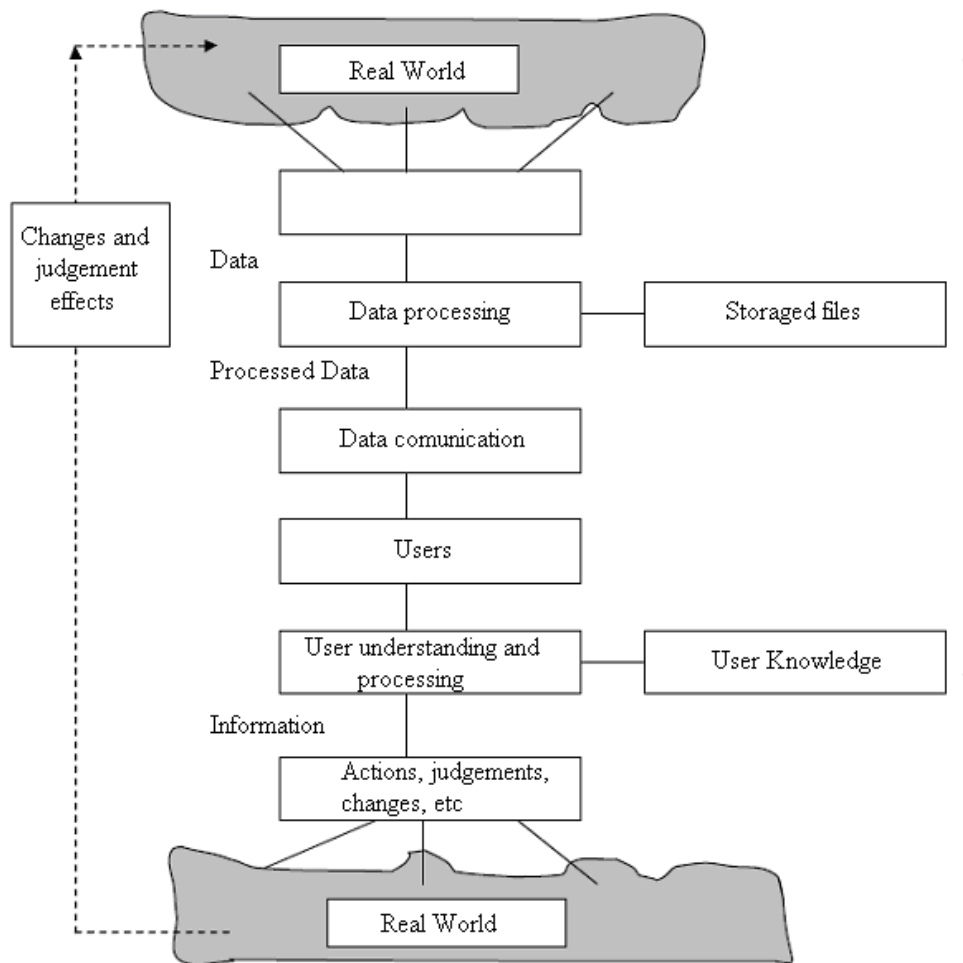
In organizations practice, the trend is to have more information, more accuracy, and more

news.

The information is the best only if implies positive results of the decisional process, other ways the information has no value.

Catching and operating, recording and processing the dates implies certain costs are not producing values. Only after the communication and well interpretation of the dates by the receiver, appears the value by using the information in the decisional process.

Only differentiating dates and the information, by the recognition of the user key role, allows to realize an informational system model – generally approved, no matter if is manufacture or computer work.



**Fig.3.** Informational system model

The economic integration is not only a technical orientation act, but also needs economic process architecture, applications and technical levels, with separated concepts and interfaces accepted by all the participants. It is registered a services approach in order to establish an agreement between the economic and the IT. A separated integration level allows connecting services, accepting that the economic process and the services portofolium to have its own change cycle. This reflect that the approach appears congruent between the requested services by the economic process and the fact that there are already furnished in a system package, platforms and new components.

The perception that the integration in tight correlative with the technologies is improper. Actually, the economic architecture alignment its implementation is more complex. All the applications gauge a common component, tech-

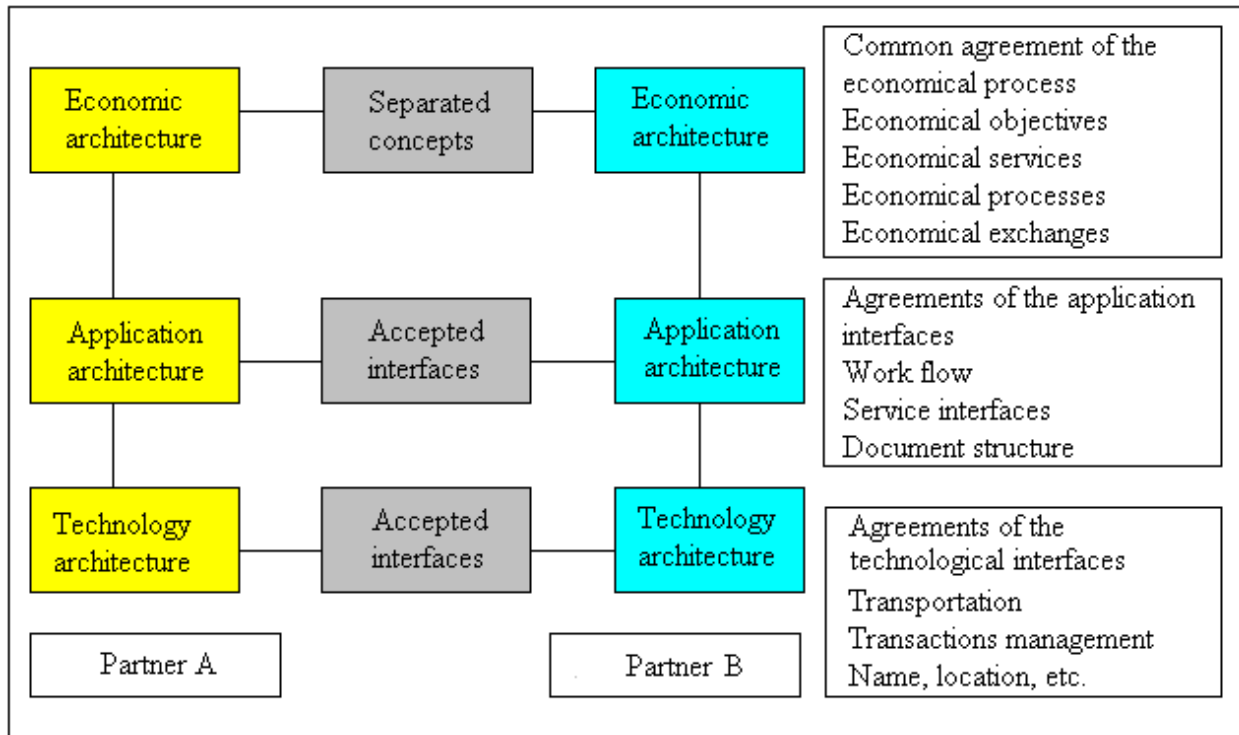
nological (COM, J2EE, CORBA components) and the technologies transmission is evenly implemented by all applications. Or, even if these utilize new Web services, this solves issues of the technical integration but not the issues of the semantic integration.

### 3. Information costs and modern management of the organizations

The computer is used in a variety of activities, making peoples work more efficient and more agreeable.

No matter the domain, during the time, the dates is harvests, processed, stocked, synthesized and finally used in all days work.

In time, people overtake informations which help them to have a more efficient activity. Thereby, they arrive in a situation where the activity depends of the access, in fruitful time, to the informations.



**Fig.4.** Architectural levels of economical integration.

In these conditions, appears the next question: how much values this information and what percentage has in a total value of an informatic system?

Even if the information quality is determined, there are specific methods of numeric measurements: the costs of the information reconstruction or the losses resulted by its accidental disappearance.

Supposing there is a simple informatic system formed by a medium PC, print and general software and 1700 RON accountancy. This system is used almost a year for accountancy and for evidence of clients, purveyors, contracts and correspondence... By using this system results 20 MB of information (approximative 10000 A4 papers). Thereby, the reconstruction of 20 MB will cost:

| Department      | Cost     | Time    |
|-----------------|----------|---------|
| Sales&Marketing | 1700 RON | 19 days |
| Accountancy     | 2700 RON | 21 days |

The information from this system values between 1700 and 2700 RON, at least as the hardware and the software components together. If we talk about information from domains as production, research or analyzation, the value is even bigger. Considering also that the certain organization has an “insecure evolution” on the market during the dates reconstruction, we arrive at the conclusion that the information is the most valuable component of an informatic system.

In the model from the figure 1 emerges the problem of the information cost. Even if, by

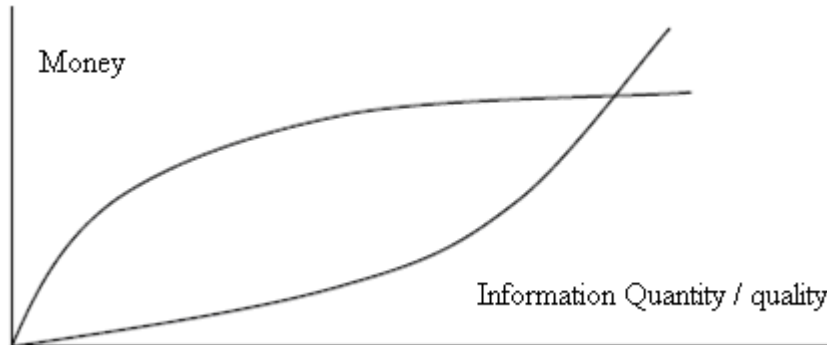
present technologies there is a dramatic diminuation, the typical relationship between the cost and the quantity/ quality of the information is in figure 5.

The quality information is defined as information utilized as a source in the value creation. The experience based on research shows that good information has the next qualities:

- is relevant for the goal
- is enough exact for the goal
- is enough complete for the issue that must be resolved
- emerge from a trustful source

- is being communicated to the appropriate agent
- is being communicated fast
- is placed on an appropriate detailed level

- is communicated by an appropriate communication channel
- is clear for the user.



**Fig.5.** Information costs models

Obviously, there must be accomplished some conditions before considering the information viable (comportamental and social factors).

#### 4. Administration informatics systems

The administration informatics systems are defined by speciality literature following two approaches:

- a) marching out from the informations and its support
- b) marching out from the functions that the administration informatic system must accomplish.

In first case, the administration informatic system represent the assembly of the used informations in firm, the resources and procedures of the identification, collection, stockating and processing of the informations.

In the second approach, it is marching out from the goal of the administration informatic system which is proffering the information requested by the user in the wanted form and at the opportune moment in order to take decisions.

The administration informatic system supposes defining: the administration domains, dates, models and administration rules.

For example, in an organization with production activity, and/or commercial is beeing identified the next administration rules:

- the furnishing is beeing realized when the effective stock disceases under the normal

stock

- the materials evaluation is beeing realised as per FIFO needed
- working materials are beeing stocked in one or more administrations
- for the second quality products, the price is reduced with 5%.

For example, a bank, for the informatics system regarding current account operations, has the next administration rules:

- the minim hip is 1000000 RON;
- the payments are realised until the minimum hip;
- the calculated interests for accounts are 11% per year;
- it can be recorded maximum 2 persons with signature right.

By the domain notion we can arrive at the administration informatics subsystem concept, determined on function criterions.

#### 4.1. Parameters of performance for financial-accounting informatics systems

The quality of information influences in a high way the performances of the financial-accounting department, the achievement of the targets that the organization suggested for itself. There are two interpretations for performance: one that develops a stabile situation of the system and another that gets into the light the dynamism, the new in the considered domain.

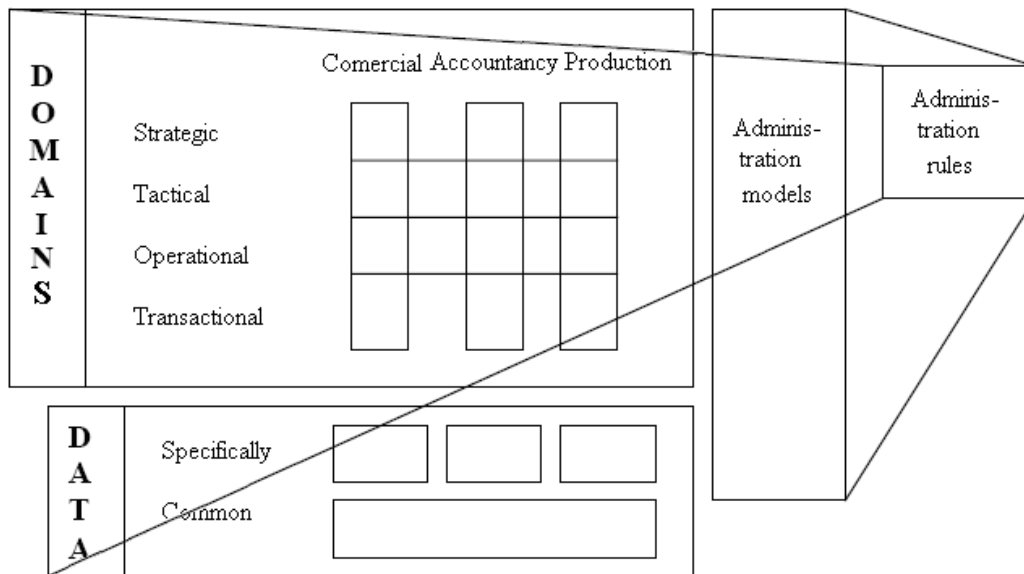


Fig.6. Definition of the informatic system

The medium accountancy profit is induced by the benefits obtained by the other segments of organization or by itself like a result of using informational products. The obtained results are appropriate by the relation:

**Number of works** (quantitative aspect), « **time** » **work content** (qualitative aspect) (1)

One of the appraisal criterions is the economic criterion. Its use watches the projects type and the processes decision stage.

There are two big scale marks in establishment of the dimension of informatized accountancy: some wich supervise the costs and the advantages and others which make a complex analyse in the perspective of choosing the investition.

For the informatized accountancy zone, there are put into the light many aprons and measurements of efficiency:

♦ *the global efficiency coeficient of financial-accountancy informatic system (Keg):*

$$Keg = (Ec + As) / (Chi + Che) \quad (2)$$

where:

**Ec** – economies resulted through the introduction of information and communication technologies;

**As** – suplimentary accumulation;

**Chi** – implementing expenses;

**Che** – expenses for system exploitation.

The less the accovering period of the informatic character expenses is, the higher would

be the standards and will be registered extra accumulations.

♦ *the recover period of expenses is inversely proportional with the global efficiency coeficient (Dr):*

$$Dr = 1/Keg \quad (3)$$

There are taken into consideration all the expenses and the informatical system is considered efficient if  $Keg > 1$ , and  $Dr < 5$ .

The performances are depending also on the optimal dimension of the financial-accounting informational system.

### 5. Conclusions

Informational system is actually a reflection of one organization's structure, no matter if this is a searching institution, a works one, a hospital or a university.

Every organization is divided in functional units departments or services. Every component of an organization has its own informational system which asists the operational, tactical and strategical management. The management system of information on the whole organization integrates and combines these components.

So that an organization profits at maximum level of an informatic project, and the solutions asimilation to be fastly done by the users, its own employees must be involved in all the implementary stages: choosing some decision factors from the user which allow the allot of the needed resources and involves in the good

development of it, the key employees which in their turn give information in the analyse stage, the IT specialists have an important influence in technical infrastructures settlement. The project management of an information system realisation is materialized by information application, abilities, instruments and adequated techniques for the realisation of projects activities in the conditions that the needs and the expectations of the users are satisfied. Even tough the superior management is the main decision factor when talking about buying informatic solutions, strong influence factors are the IT manager and the financial one.

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