# TREND OF THE EVOLUTION, PROSPECT AND CONCORDANCE OF THE ORGANIZATIONAL FORMS AND UNITS OF FUNCTIONING OF THE ECONOMIC INFORMATICS SYSTEMS (E.Ic.S.)

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**Abstract:** Are'nt revealed and characterized the evolution, trend and prospect of the development of the organizational forms and units of ensurancing of daily working of the economic informatics systems (E.Ic.S.) Also, are elucidated the gradually progress of the covering of these units of incorruptible field of human economic informational activities, the final prospect of they. It is described and analysed the dimensional concordance of they involving of this field.
**Keywords:** evolution, trend, prospect, concordance, organizational forms, units, functioning, economic informatics systems

**Introduction:**

In the milieu of the considerable volumes and compound composition of information and works exerted concerning them, it requiring the necessity to create the certain organizational premises with a view to facilitate the calculation and incalculation processing of initial data values. The increasing of the promptness of processing, of the quality of obtained in they result informational products at the technical means, effective methods and proceedings, but and the most rational forms of data organizing and organizational units, which ensuring daily working of the E.Ic.S. The firsts is considered internal, but the seconds – external.

The forms of data organizing are considered right internal, because they are'nt achieved on the milieu of supports. Their functioning to depend on the category of latter, their physical (chemical, biological, etc.) features and possibilities methods data organizing on their space. At the same time, the organizational units are deemed as external, since they themselves to referring to the daily organizing, in interconnection and interaction, of all resources (human, technical, technological, etc.) in the shape of the unitary ensemble., what manufacturing the informational products.

**Content: A. The forms of organizing of economic informative (descriptive) information.**

On the route of its evolution, the forms of organizing of the named information were in predicted perspective will be constituted in base of the two categories of supports – manual and technical. In case of the manual, when all procedures and operations are performed by the subject, the information is organized in different ways, the latter being conditioned to their functional categories and predestination. So some of the information is organized as a card index (card index of the primary evidence), another part – in the shape of the ensembles of the folders (dossiers), ring – books stored in the shelves, in planks, etc., as well as and in shape of lists with reference data, prices, rats, etc.

The daily organizing of the information fixed on on the manual supports to taking place individually, at each job and depends of the composition and specific features of solved problems, in what this information is involved, of the possibilities of placing of the supports in relation to their place of processing. The long keeping of information on the manual supports requiring the preliminary elaboration and organization to the one well – built and reasonably made, what mast itself being concretely known and on this basis – involved in various purposes for respectively users.

At mentioned red – handed that the organizing of the information in the manual version, after all,it reducing of the organizing of the supports , on that they itself containing. In this connection itself imposing the recording of multiple times at the same data values in the sets of the documents, as in basis of these values occurring the recognition (identification) of the ownership of the informational entities and their structural and informational processing. Also, and the values pf the attributes physical are separated each from other, but the original otder of their placement on the support, usually, not always it's concordant with all necessary variants for calculating their processing.An exemple of such ways of organizing of information can serve the forms of the account memorial – order and log – order, the forms of the linear foreseeing, etc.

In event of applying the informatics technical means, the fund of the information of leaded object can be organized in the shape of card index, bobbin (reel) index, diskette index, hard disk index, etc. As and for the manual supports, the card index , organized in base of the perforated cards and bands, respectively of the cardboard and of the paper, the logical organization totally depends of physical specific features of these media. Regarding the supports with magnetic properties, this thesis is fair only for the bobbin index.

The data logical organization on the packet of the hard magnetic disks and C.D. packages, as well as on magnetic cylinders (drums) and cards to a certain extent is becomed independent of the physical properties of these media, which allowed to be elaborated and to bring into operation such new organizational modality, managed in programmatically mode, in the form of database. The last essentially itself distinguished on the manual organizational forms and on the others informatics forms at this type through fact that the location and processing (transformation) of values of the informational units itself

occur in automatically mode on account of the elaboration and functioning of their management system under form of the programs complex. Simultaneously, such system does not exclude, but presupposing the application of the magnetic bands, on which can be located all the information with the variable values.

Off the positions of the programming management, the forms of the organization of information created in base of the documents , perforated cards and bands, presupposing the compulsory involve at the subject and therefore for their milieu are'nt features the manual manipulation data. The application of the organized on the basis of the technical supports data processing systems has created the conditions for achieving of such new forms of the organization of the administration of economic informational activities , as the organizational forms of card – tabular the book- keeping automatized tabular, automatic (electronics), as well as the forms of the operative, continuously, current, best forecasting, multifactorial analysis, etc.

The previously elucidated technical forms of data organizing has evolved in the following stages of logical data organization: data elements (elementary, primary units) →separately →data files →ensembles of the data files →data collections →database of managed object.

After how were, at the initial stages underlined above the composition and the volume of the information, as well as and the supports, and the base of theirs were organized, not allowed (sometimes this neither not require) their organizing on the supports under form of the informational entities of great volumes. Latter on such necessity it becomed more acute. Once with this has been established the conditions in order such necessity must be satisfied by informatics means and supports.

The creating of databases and their application in practiceof economic informational activities confirms the fact that in perspective most effective will be those forms of data organization, the logic of their elaboration and functioning don't will depends of physical specific of the support.

The elucidated so far confirms the fact of the trend of performant evolution of economic informational systems through gradual transition from informatics centralized to the distributed systems. That transition is composed not only by the necessity of achievement of the informational connections between objects of diverses hierarchical levels, as well as and of the constitution a unitary informational base for the national economy, but and the development of the informatics technique.

The created situation it contributed to the idea of passing from separately databases to the distributed databases system. The final goal of distributed database system consists in achievement of database it producing concordant a data model of certain category (hierarchical, reticular, relational). In most cases, as a rule, it resort only one type of model, particularly if it is a superior generalized level and through the its agency can be achieved other models. For example, in the current economic informatics activities mainly it operating with relational databases, which, in our opinion, is not justified, as it requires the new interfaces and complicating the process of the problems solving. At given raison most effective would be the use of the reticular model for the achievement of the connections between data flows belonged different management levels – the hierarchical models, etc.

Therefore, the unitary database of entirely managed object must be constructed according to various types of data models , very important remaining achievement of the interconnections between various types of data models of each compartment of unitary database.

**B.The organizational units of functioning of the economic informatics systems (E.Ic.S.)**

The fabrication of any product (finished, semi - finished) or the achievement of certain activity requiring the determination of the composition , succession and modality of effecting of the certain conglomerate of works.

The maintaining , compliance and ensuring of the achievement of these three key factors becoming possible in the case of the elaboration, organizing and functioning of the certain technology, what, in his turn, relies on the some resources (human, financial, material) distributed and used concordant of the necessities of their interconnections and interactions within the framework of unitary process oriented to obtaining a common result.

The every day making of any technology requiring the constitution, putting in action and ensuring of the daily effective functioning of certain organizational unit. In the domain informational economic activities such unit initially is considered right the "calculating installation", but at present – right the "industry of manufacturing the information". But, at the beginning and in present under this notion it understood not something else than the organizational unit of exploitation of the informatics technique.

The variety of these forms and the succession of their functioning were conditioned first of all of the class of technical means (especially, of calculating machines), under their basis they were organized. In its evolution such units are'nt organized in the shape of computing office, station, center, automatized system for the data collection, transmission and processing, the informatics post of the activity of specialist and network of such posts.

For the present and foreseeable prospect the most performance organizational unit of functioning of economic informatics systems (E.Ic.S.) are considered the network of the posts of the activity of specialists (N.Ic.P.A.S.), because it literally are becomed a technical a technical infrastructure of informational processes. Therefore, so far the information "clothing" of the technical coat, or, more precisely, being said, the technique "dictate" the modality of organizing and processing of information, afterwards in the present we are the witnesses of the begin of the "clothing of the informational coat" of the technical means, or, better said, the information influencing the composition and structuring the technique, which confirms the superior level of development the latter. On the route of its evolution such "enterprises of information manufacturing" have covered miscellaneous rays of the economic informative domain, with extended varied composition of the achieved works. About this confessing the content of the table 1.

Table 1. The evolution of covering of the economic informational activities by the organizational units, what ensuring the functioning of the economic informatics systems (E.Ic.S.)

| N/o | The organizational informatics units of functioning of E.Ic.S. | The ray of covering of the informational activities by the organizational units of functioning of E.Ic.S. | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1. | Computing office | A.O. | | | | | | | |
| 2. | Computing station | A.O. | S.P. | | | | | | |
| 3. | Computing center | A.O. | S.P. | I.P. | S.D. | P.D. | U.I. | | |
| 4. | Automatized system for the data collection, transmission and processing | A.O. | S.P.. | I.P. | S.D. | P.D. | U.I. | M.F. | |
| 5. | Informatics post of the activity of specialist | A.O. | S.P. | I.P. | S.D. | P.D. | U.I. | M.F. | |
| 6. | Networc of the informatics posts of the activity of specialists | A.O. | .S.P. | I.P. | S.D. | P.D. | U.I. | M.F. | M.S. |

In the table are allowed the following significations: A.O. – arithmetical operations, S.P. – structural procedures, I.P. – informational procedures, S.D. – standardized decisions, P.D. – procedures of obtaining of the values of the primary informational units, M.F. – management functions, M.S. – management system.

The conventionally of the "enterprise of informational manufacturing" it's motivated by the fact that in physical aspect really so 'enterprise' not working separately of the economic unit – producer of the material goods, constantly being in their composition. This again once abundantly confirms the correctness that affirmation that, not being the mater, the information is indivisibly connected (is not merged) of it, even and in cases , when it is obtained not manually, but automatically, with applying miscellaneous news informatics technical means.

At the presented analysis is clearly the trend of the specialization of informational activities in dependence of their functional content, according of growth of the volume and their. complication . If initially a specialist achieving entirely the informational system ($I_i$S.), afterwards – some group of the specialists (G.S.), each achieving a few one complex of informational problems (C.$I_i$.P.), what subsequently where organized in certain subdivisions (SD) (such as book – keeping, planning department, department of standardization, etc.) that achieving each a few one informational function ($I_i$F.). In it interior the specialists can be organized after complexes of informational function (for example, the book –keepers on the evidence of material values, the book –keepers on the evidence of work and her payment, etc.).

To the last stage and prevalent so far the organizational form of achievement of the informational activities is presented by certain system (orderly conglomerate) of the subdivisions, each of they, fully or partially achieving of informational function, in interior of which the specialists in groups or individually, also, are organized on the complex or on the each informational problem.

At those mentioned it requiring the conclusion that concomitantly with the increasing of the complexity of organizational form it producing the ramification (specialization) even more detailed profoundly of effected informational activities in their framework.

On specified that for informational technologies the specialization has place on the basis of the functional content of examined activity, without their concretization until to the level of procedures and operations. This it producing in case of achievement of this technologies in the composition of informatics organizational units, their evolution is previously elucidated, at that it more putting establishing the followings.

For the economic material milieu entirely itself then producing the automatic achievement of informational (informative, decisional) compartments in case of constitution and functioning of automatic (or automatized) management system (At.(Az).Mg.S.) that are foredoomed it achieving not only the standardized decisions, the complexes of such decisions, but and the decisional functions and entirely the system.,

The automatized management system (Az.M.S.) effecting the same activities something and the automatic (At.M.S.), only that in directly mode. That is why the latter is a unit of the perspective. Physically it will be achieved through the constitution and putting in function of miscellaneous news physical (chemical, biological, etc.) models, what by them connecting will achieving thoroughly both the material part and the informational (informative and decisional) of economic unitary management process.

In such situation any managed object will turn into interconnected and interacted material – informational (informative and decisional) single nucleus, which and constituting the ideal of any management system of material activities.

Analytical the chain of the evolution and of perspective of informatics organizational forms , with indicating of the technical base and the level of extending of the ray of informatics achievement of economic informational activities is presented in the following mode:

C.O.(C.M.K.;A.O.) ⟶C.S.(C.P.M.;O.A.,S.P.) ⟶C.C.(E.C.M.,T.P.D.,T.D.T.;A.O.,S.P.,P.D.,U.I.,M.F.)⟶
⟶Ic.P.A.S.(E.P.C.,D.T.T.;A.O.,S.P.,I.P.,S.D.,P.D.,U.I.,M.F.) ⟶Ic.C.S. (T.D.T.,T.P.D,E.C.M.,E.P.C.;
A.O.,S.P..P.O.I.P.U.I.,S.(T.).D.) ⟶C.N., .Ic.P.A.S.,Ic.N.(T.D.T.,T.P.D.,E.P.C.;A.O.,S.P.,P.O.I.,P.U.I.,S.(T)..D.,
C.D.,M.F.). ⟶At.(Az.) M.S.( T.D.T.,T.P.D.,E.P.C.T.U.I.;A.O.,S.P.,P.O.I.,P.U.I.,S.(T)..D.,C.D.,M.F,M.S.) ⟶
⟶A. U. $M_{I.}$ - $I_I$N.($I_I$.F.M.;M.S.); where:

a) the informatics organizational units: C.O. – computing office; C.S. – computing station, C.C. – computing center, Ic.P.A,S. – informatics post of the activity of specialist, Ic,C. S. – informatics computing system, C.N. – computer network, Ic.N. – informatics network, N.Ic.P.A.S. – network of the informatics posts of the activity of the specialists, A.(Az.).M.S. – automatic(automatic) management system A.U.$M_{I.}$- $I_I$N. – automatic unitary material – informational nucleus;

b) technical base of the organizational units: C.M.K. – computing machines with keyboard, C.P.M..- computing perforational machines, E.C.M. – electronic computing machines, E.P.C. – electronic personal computers, T.P.D. – technique of primary data, T.D.T.- technique of data transmission, T.U.I. – technique of utilization the information, $I_I$.F.M. – informational physical models;

c) area of informatics achievement: A.O. –arithmetical operations, S.P. – structural procedures, P.O.I. – procedures for obtaining the initial information, P.U.I. – procedures of utilization the information,S.(T.) D. – standardized (typized) decisions, C.D. –complex of decisions, M.F. – management functions, M.S. – management system.

**Conclusions:** Therefore, the organizational informatics forms and units have evolved and will evolving from the computing office until the automatic unitary material – informational nucleus, their technical base – from the computing machines with keyboard until – the informational physical models, but the area of covering of informational activities on the informatics means and methods – from the arithmetical operations until management system.

The thoroughly and entirely knowledge of the role, place of the informatics organizational forms and units, as well as and the trend at their evolution will contribute to the constitution and functioning of a unitary system of automatic fabrication at the material, informative and decisional products with ideal performance.

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