

# MODELS DRIVING INTERPERSONAL RELATIONSHIPS IN ENERGETICS ENTERPRISES AND INSTITUTIONS TO DEVELOP ENTREPRENEURIAL CULTURE

FŐCZE IULIU, ALBUȚ – DANA DANIEL

[dalbut@uorada.ro](mailto:dalbut@uorada.ro)

**Abstract:** In an economy that dominates the competition, manager, a trader should not be limited solely to obtain and maximize profit but to concern that employees have a sense of total involvement in the company's future. Motivation is the process by which managers determine their subordinates to achieve the best possible performance, giving them reason to do so. Managers have the task of creating the conditions for harmonization of individuals with personal goals of the organization. Therefore the main issues developed in this publication refers to interpersonal communication class system analysis and proposal for development of innovative interdisciplinary communication based on organizational computer network. Interpersonal communication techniques are presented as a prerequisite for forming organizational culture, human resource performance model to improve relations that open communication on channel productive interdisciplinary-competitive market, culture, communication and correlation approach as risk-based operational research operators. Particular emphasis is given modeling leadership interpersonal communication processes when applying motivational theory of work and develop a novel concept pilot computer assisted communication processes as the basis of labor productivity growth.

**Key words:** energetics enterprises, entrepreneurial culture, management, motivational theory

## 1. MOTIVATION MODELS WORK TEAMS AND EXECUTIVE MANAGERS

A business manager, in an economy that dominates the competition, should not be limited solely to obtain profit, but to concern that employees have a sense of total involvement in the company's future. Motivation is the process by which managers determine their subordinates to achieve the best possible performance, giving them reason to do so. Leading corporations like General Motors, IBM, Coca-Cola managed to achieve prestige through motivation and training programs for managerial staff. Managers have the task of creating the conditions for harmonization of individuals with personal goals of the organization.

Managers must observe the behavior of employees,

to identify and activate them grounds to work to guide the performance, the objectives of the organization. Since individuals have different behaviors, the task managers is difficult and requires hard work. Employees have different needs and expectations and trying to satisfy different ways. They are able to direct behavior to achieve the sources of subsistence and pursue outstanding performance and recognition of others. Business goals can be made by how the manager reacts or not to conduct employee motivation to choose the suitable means and the best time of application. Only by motivating employees can be trained to engage in all the company's existence and future.

Motivation is economic and social factors which determine individual performance and achievement level of organization. The company has to reward contribution to its progress, and successful initiative to develop and give subjective dimension of work, improve employee opinion on his work at the firm and its products.

Degot saying in L'entreprise, symbolique lieu "as motivation has two dimensions:

- Objective dimension of inequality in rewarding effect using labor as the main motivational source. A cash reward differentiation according to position held, qualifications, efficiency and performance is a great way of reasoning. Organization can create their own system of pay and benefits strategy and materials as motivating her profile.

- Size subjective effect using motivational rewards nepecuniare main source. There are employees who may be motivated in what they do and the ways other than money, materials.

Man is determined to work for some psychological needs: the need to know the nature of work and how that can be done, the future security needs, the need to learn through work, need to engage in physical exercise less monotonous work, need to decide and to take initiative, need for social contact and positive recognition within the firm, the need to serve objectives. The seven needs were identified by Emery and Thorsud in "Form and content of industrial democracy."

### 1.1. Best motivational

Motivation should not be considered and interpreted as an end in itself, but placed in the service of high performance. From the perspective of various forms of human activity which is interested in the value of motivation and its propulsive efficiency. Human behavior is initiated and controlled by motivation toward a goal

which is to satisfy a need. Employee may be motivated knowing and personal needs and giving him the opportunity to meet their goals as a company are met, motivation and performance between relationships of mutual conditioning.

Individual and organizational performance is determined by the individual's value system, its values, their degree of motivation and satisfaction. Employee work motivation is confident that he will get to meet their needs at a time by executing a certain job under certain conditions.

Manager must find the means to achieve business objectives mean and personal needs of employees in the process to ensure performance objectives of managers and employees do not always coincide, ideally, motivation and performance are mutually appropriate as a manager and team its management, employees carry out their own needs. Mental, physical and spiritual determined needs. This balance can be fragile and very little take, a different need arises immediately after a need was met, causing an imbalance which again will make it individual to remotiveze. according to their reactions to employee conduct, or managers can not influence satisfaction and thus performance, in the definition must take into account the intensity, type and relations between reasons, the only reasons best not isolated, but the whole motivational structure of personality. Optimum has a personal motivation and a group. Motivation is personal but social contexts and work product.

Employee motivation to achieve Performance is determined by two sets of factors: internal or external or

individual and organizational. The two factors categories of affecting the behavior of interacting reasons.

Motivational theories are examined individual factors or organizational factors or theories are two types of factors combine to explain human behavior. Tooth relationship motivation and intensity level of complexity of the task performance is dependent on the employee has to fulfill.

Research has shown that in simple tasks, repetitive tasks with automated behaviors, with few options to resolve, as the intensity increases motivation, increase level, where complex tasks are associated increases in motivation, to a point, with increased performance, after which the latter decreases.

This has been demonstrated by Y. Erkes and D. Odson. This happens because simple tasks, with one or two correct answers, their differentiation is easy, is not adversely affected by growth. If complex tasks, the presence of several action alternatives difficult motivational impulse action, increasing its intensity discrimination is bad, discernment and critical evaluation.

The efficiency also depends on the relationship between motivational intensity and difficulty of the task facing the individual. Since there exists a correlation greater fitness, the activity and effectiveness will be ensured in this context, emerged the idea of the best motivational, ie an optimal intensity of motivation to enable achieving high performance or at least incomplete.

Model-oriented motivation management success can be traced on Fig (1).

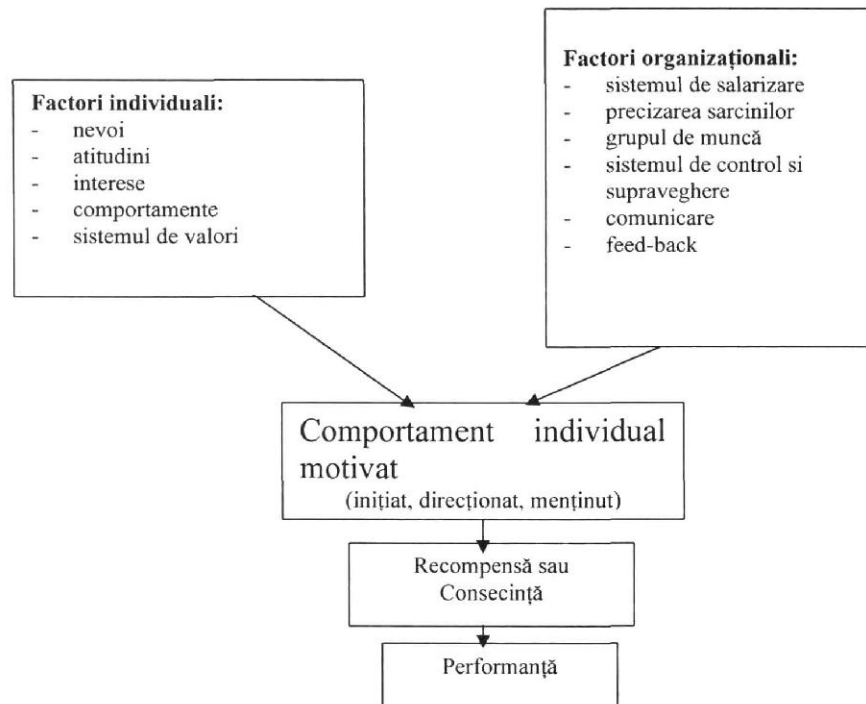


Fig. 1. General model of motivation focused on managerial success

Optimal motivation can speak in two situations:

1) the difficulty of the task is correctly perceived by the subject, in this case optimal motivational means equivalence relationship between two variable quantities. If task difficulty is greater, means that we need a higher intensity of motivation to carry it, if the average difficulty of the task, a moderate incentive is enough to meet her.

2) the difficulty of the task is incorrectly perceived by the subject. In this case the individual has either overrated or underrated the significance or difficulty of the task. Following the subject will not be able to mobilize the energies and efforts to achieve adequate pregnancy. In an individual case will be submotivativ and work conditions of energy deficit which will eventually lead to pregnancy failure in the latter individual is supramotivat and act under a power surplus, which could disrupt and stress and may spend energy just before facing the task.

Optimal motivation is achieved by action on the two variables that come into play:

- Get used to charge people with the best and correct difficulty of the task (by drawing attention to its importance, highlighting the difficult moments)

- By manipulating the intensity of motivation to increase or decrease them (the introduction of strong emotions, anxiety, fear).

If organizations do not need to thank us with any performance but the best possible performance, which marks not only a personality but a realization of the opportunities they strive. Motivational stimulus to push towards progress and autodepășiri obvious level is called aspiration. It is good that the aspiration to be a little more opportunities now to have a positive effect.

An organization must create the motivation to fulfill the performance incentive. Individual performance can have three forms of expression:

1. Productivity is defined as the ratio of outputs (outputs) and inputs (input s) activity. Many human resource management activities directly related to individual productivity (paid staff, assessment, training, etc..) Positions fluctuation may affect productivity and absenteeism.

Individual productivity is equivalent to the effectiveness or efficiency and is calculated as the quantity of goods produced by an employee in a certain number of hours. Besides efforts to increase productivity and longer intake without education, job qualifications and experience, technological means and tools used.

Findings of labor productivity can be achieved by finding the total cost of labor per unit of product by comparing the average salary of employees productivity. Labour productivity is influenced by factors relating to the introduction of technical progress, the factors concerning the impact of performance management (staff motivation), factors such as bio-psycho-social (living and working conditions).

Correlations should be sought:

- The dynamic labor productivity and wage
- Wage growth to changes in consumer prices
- The ratio between minimum wage and maximum wage

2. Innovation is another form of performance is achieved in some areas and in new ways of doing work in new products or services. Innovation is a creative

behavior, to be fostered and maintained to ensure the progress of the organization. Managers must leave a certain autonomy and independence of employees in innovation.

3. Loyalty determines and explains the desired performance of managers. A loyal employee is an asset to the organization, he having full confidence in the firm and its managers and to prove that a total dedication. Loyalty is the element that gives stability to employees. Lack of loyalty shows that people are prone to leave the organization or the minimum efforts, sabotage, theft and absenteeism. Managers must carefully select staff, familiar with the needs of employees and to create conditions for their satisfaction. The employee, in turn, in exchange for obtaining a high individual productivity. Effort and loyalty in exchange for his loyalty expected from the company.

Managers to improve loyalty, have the following task:

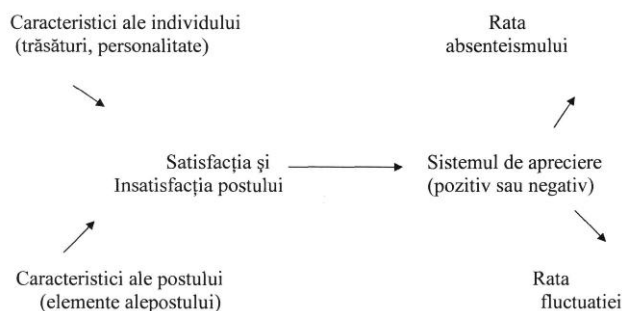
- Encourage employees to participate in decisions
- To communicate more with them
- Competitive and to reward prizes to use for great results
- To provide training and development of staff
- Give opportunities to promote the organization, to meet the career development
- To reduce class differences

Organizations must develop employee loyalty to increase productivity, stability and progress.

## 1.2. Creating job satisfaction

Job satisfaction can lead to confidence in the organization, which means that employees' expectations were fulfilled: the desired salary, recognition, report better with managers and colleagues and the company philosophy and organizational culture, each dimension contributed to the feeling of satisfaction at work . Job satisfaction depends on both the individual and job characteristics. Comparisons with the position held expectations affect satisfaction.

Dissatisfaction occurs when employee expectations have been disappointed on his work. Dissatisfaction may lead to absenteeism and turnover in the organization.



**Fig. 2. Causal model: satisfaction, absenteeism, turnover**

Employee absenteeism has a negative effect on the organization, but can not be reduced to zero. Absenteeism is expensive since the allowances, compensation, awards are granted even if the employee is absent. Through absenteeism, short or long term, reduce productivity and

employment may occur additional costs for replacement of absent others. Employees who have high job satisfaction are less absent than those who are dissatisfied with the work they perform and the rewards received.

Managers need to understand better the causes of absenteeism to one better able to control, must find ways to combat absenteeism and motivating employees by providing good returns for one frequency, with smaller prizes for those days of absence due. Manager may absenteeism control methods:

- Discipline
- Encourage positive
- Combination of the two

Methods include positive reinforcement that people are motivated not to be absent in that provides money, free time, recognition or other rewards for achieving performance standards and at work. Combined approach implies a gain for the desired behavior or punishment given for improper behavior. Organizations that practice high salaries and have high rates of absenteeism because employees can afford to "buy" leisure.

Businesses that require medical certificates and have strict rules in this area have a low absenteeism rate.

Staff turnover is a problem and is costly to the organization when employees leave the workplace and should be replaced. If the company can not provide the employee needs it will seek the solution to settle them outside the unit.

There will be reduced productivity, increased costs of recruiting, selecting and hiring new people, increase training time and training new employees.

External factors that determine the fluctuation are:

- Another post better
- Lack of a strong union to protect employee rights and interests

- Low unemployment rate

Internal factors that determine the fluctuation are:

- Low pay
- Low job satisfaction
- That work is disorganized

Fluctuation may be voluntary or involuntary avoidable or unavoidable. Because it is related to satisfaction, the correlation between expected rewards and satisfaction of their employees can reduce the problems caused by fluctuation. Managers can prevent fluctuation through good motivating employees through a fair and equitable payment system or a better employee orientation. Workers who receive training and retraining, which are placed in positions appropriate to their preparation, are less inclined to leave the organization.

## **2. SYSTEM OF STEERING ADVANCE BUSINESSES AND INSTITUTIONS THAT PROMOTE THE SUPERVISOR OF HUMAN RESOURCES ORGANIZATIONAL CULTURE**

Steering system operating in a complex and competitive field in constant motion to provide the appropriate provisions, mechanisms and procedures to adapt to the environment, to assure the necessary flexibility to respond adequately to changes in factors it.

A pilot scheme to ensure good thought to complicate decisions piloting the use of modeling or call systemic problem requires the simulation process for finding the optimal solution is desired. Procuparea central to anticipate any running event occupies a place of his head. Nobody invests resources without an effort to put it in cumopnă with results expected in the objectives pursued. Diverstiatea scale and works as a forward-looking terminology that accompanies them have proved to be the result of continuous natural science and its ramifications. And science is imminent and that function to predict the fate of their discoveries and their effects on the human condition. Without a proactive technical information system, the pilot of a company may not achieve that balance needed to carry out Intense and organization processes.

A proactive information system - AIS is an interconnected set of activities for collecting, recording, processing, transmitting and storing the information carried by specialized personnel using methods and operating procedures, and intelligent computer setting in motion a whole resources, information channels and processes.

Anticipatory expert system - SEA - system is based on techniques of artificial intelligence software, which stores knowledge of human experts in the field of management forecasts and projections and use them to solve difficult problems in this area.

Expert system development methodology is related anticipatory forecasts. Methodology is the estimate for building and improving anticipatory expert system. Logical development requires the presence trinomial forecasts diagnosis - prognosis - plan / program, the three components being in the inter-relationship of information and compliance methodology.

An inference engine of an SEA must take the trinomial diagnosis-prognosis - plan / program in a range expressed in given conditions. the trinomial presented diagnosis provides information required to prepare various kinds of predictions. Element forecast provides information on the program element systematically worked to establish more complex forecasts. Cycle is repeated continuously, depending on circumstances and conditions in November.

Diagnosis is the synthetic expression of diagnostic analysis performed on the previous period, until the opening of the new forecast period. Analysts need diagnosis is required for a quantitative and qualitative knowledge of running the economy, technology, etc., In the previous period and its status today, revealing the trends also outlined. Retrospective period covered diagnosis is mainly determined by the duration forecasting future periods. It is considered that the two periods must have the same duration.

Forecasting activity, which may be technological, economic, trade, human factor, requires a whole system of retrospective and prospective analysis, forecasts completed by different categories: overall, the areas, main products, the main issues on sectors etc. . The main steps of the forecasting work are shown in Figure (3) and (4).

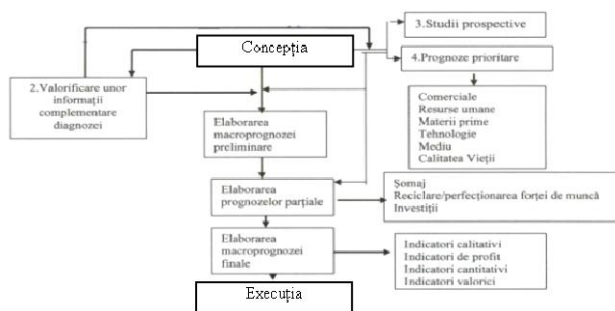


Fig. 3. Stages of development

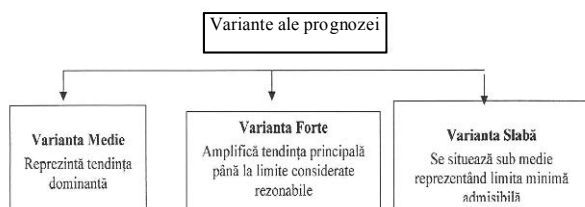


Fig. 4. Variants retained expert system anticipatory

### 3. DECISION MODEL APPLIED IN UNCERTAIN UNIVERSE

Except decisions consist of simple maximum or minimum value choices from a range of values, complex real situations bring decision-maker faced with difficult problems, both due to lack of information regarding the driving system, and / or the environment as it evolves and because of disturbances that can affect decision-making programs developed substantially, making it necessary to review their permanence.

Substantiation methods and techniques of decision under risk and uncertainty make use of estimates instead of clear values, the probabilities, often subjective, for assessing the consequences of assumptions or decisions.

These estimates and subjective possibilities can be evaluated by extrapolation of conclusions drawn in a process of learning from the past, for some processes that do not edit grammar conduct, or simply based on assumptions more or less inspired. Of course, knowledge and control of a large number of factors that may influence the system state in which the decision relates is entitled to a preference, but this is not always possible. Therefore, based on estimated production probabilities of various events or conditions as may be appreciated the consequences of various decisions and potential outcomes in a broader time horizon, may be adopted certain policies and strategies such as succession decisions, especially if it is possible to update information quickly.

A certain degree of knowledge or even estimate before a decision is necessary, and could it be I just appreciate the economic value. Information may be obtained through various channels such as marketing research - for commercial activities - for understanding market demand for various goods, etc. Laboratory experiments. But the degree of confidence to conclusions based on these routes is generally below 100%.

To base decisions on an analysis of risk and uncertainty is in fact the scientific method of research,

which comprises:

- Full and correct definition of the problem (operation performed quite difficult because of vague, imposed by the lack of information);
- Establish action alternatives and their characteristics, without being neglected those that seem unlikely to be satisfactory;
- Setting all the strings of events, or as many of them can lead to the decision for each alternative;
- Impact assessment at the end of each string so determined;
- Assessing the probabilities of achieving each of the potential outcomes;
- Sensitivity analysis ranking the set of action alternatives, ranking prepared by a method suitable for single or multi-criteria analysis;
- Global final analysis and decision making. It is important to stress events with the greatest potential influence on the results of applying each decision choice.

Decisions under risk is always adopted on the basis of assumptions about the potential outcomes for each variant decision in part and, of course, depending on the preference of decision maker for these results. All previous information of the decision of the decision-maker has solved the problem of determining a so-called "structure of trust" relative to the possible consequences of each option setting decisions [64].

Degree of confidence in achieving a particular result in the application of decision alternatives is assessed by values in the range [0, 1], which impart the character of subjective probability, assessed only by extreme values. In addition, it could adopt and subjective assumptions about the distribution of values that "probability" in the interval, for example, uniform distribution (echiprobabile values), exponential, etc.. This approach differs from the application of vague sets theory (fuzzy), which is assessed a graph of belonging to a given range values through a convenient measure chosen.

If we note with  $M(x, y)$  distribution of subjective assessment of decision  $x$  with  $y$  and use the result of J. Neumann, An axiomatic. Morgenstern utility concept applied to expected results, we can use to determine the optimal variant decizionale mathematical expectation utility maximization criterion defined by a relationship of the form:

$$E(x) = \sum_{y \in Y_1(x)} u(y)M(x, y) + \int_{Y_2(x)} u(y)M(x, y)d(y) \quad (1)$$

where:  $Y_1$  – is the field of discrete, isolated and  $Y_2$  – continuously variable range of values of  $y$  by  $x$ .

That are associated with this criterion and minimize the spread (variance), defined by:

$$V(x) = \sum_{y \in Y_1(x)} (u(y) - E(x))^2 M(x, y) + \int_{Y_2(x)} (u(y) - E(x))^2 M(x, y) dy \quad (2)$$

A relatively simple example will illustrate the above somewhat. If a military action may be favorable outcome

(win, 1) or unfavorable (losses, -1), and before you prepare and initiate research indicates response strategy planned enemy action, the chance of success 0.5 the failure of all of 0.5, it is interesting to study this strategy need real knowledge of the enemy response.

Situation may be represented by a tree graph, called the decision tree. Are variations in its decision nodes or states of the system.

Tree node contains an initial decision on obtaining information on potential response of the enemy, showing two alternatives of conduct - to get information - or not.

Successful action has estimated the possibility of 0.5. The enemy strategy S1 acts as if the action succeeds and as strategy S2, if it fails. They are previously known information. Noting the value that decision Bif and when j and Pij the probability of the j situation and implementing the decision, hoping to gain mathematical and decision is

$$\sum_j^1 P_{ij} B_{ij}$$

If the probability of producing situation j is independent of the chosen decision, noting it with PJ, the mathematical expectation of gain from implementing the decision and will be

$$\sum_j P_j B_{ij}$$

Decision criterion for determining the choice is to maximize the mathematical expectation of gain, namely:

$$\max_i E(B_i) = \max_i \left( \sum_j P_{ij} B_{ij} \right) \quad (3)$$

In game theory corresponding attitude ensure maximum mathematical expectation of the minimum gain is known as Wald's criterion or the maximum criterion.

More courageous attitude, the greater risk to the possibility of obtaining a higher gain corresponds Hurwicz's criterion, the maximization of utility, which it introduced indirectly by assessing obviously subjective judge optimism.

J. von Neumann and O. Morgenstern introduced the concept of utility as that determines the conduct of decision-maker, directing it toward decision "good" in terms of risk. This size, utility, defined by the fact arbitrary, assigned each variant decision will determine the maximum value, which is the optimal decision option. If the condition causing the different results of operations decision-maker has assigned certain subjective probabilities, and it is associated with the performance of the utility values - the maximum for the most favorable outcome, at least for the worst, and for intermediate values by interpolation (linear or nonlinear) - then  $\sum_j P_j u_{ij} = u_i$  determine the usefulness of decision behavior i.

Such, the entire decision making process, that process of synthesis of the most satisfactory decision can be

represented as a cybernetic process with several phases, the transition from one phase to another is determined by the speed with which the system is changing and updating information.

Cybernetic system synthesis scheme that decision is shown in Figure (6).

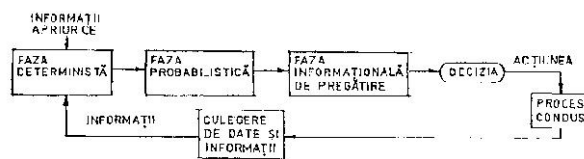


Fig. 6. Phases of decision-making process leading

- The deterministic phase is defined and structured decision problem, determining the main components and key variables that influence the decision. Random nature of the variables is ignored in this phase. For example, in the management field, a deterministic model phase will include: defining the relevant state variables and their relationship, an indication of decision variables, setting preferences (priorities), define the measure for decision quality, however apart from nature random processes, thus operating with deterministic value.
- The probabilistic phase we consider some variables that are affected by uncertainty as to involve:
  - The association distribution functions of random variables core values;
  - Setting conditions for evaluating the results according to the state decision (cases) due to uncontrollable environment (environmental lottery);
  - Setting preferences in terms of risk;
  - Determining the decision variant satisfactory
  - Analysis of sensitivity to variation of model parameters or work rules (preferences, environment, etc.).

The management literature is devoted to offering guidance on painting full range of decision rationale approach between these two extremes are, on the one hand, and logical and mathematical modeling to total, on the other hand, intuition and even premonitions makers who been successful.

It is indisputable that that sense of effective decision-maker - which is probably a rapid conjunction with the participation of the subconscious, the current data in the past for making projections on the future - there. With favorable competition of chance, it can lead to very effective results. But modeling the background, trying to make full use, the scientifically based information and procedures to imitate the way decisions are sound background in forms more or less developed, the essence of conceptual models. Therefore successful makers behavior is more carefully studied and even "fingerprint" of the so-called system "expert" - programs that mimic this behavior in typical situations in which it has been verified. However, quantitative analysis models are indispensable in problems where the set of alternatives and evaluation criteria make it difficult - if not impossible, to use no harsher term of irresponsible - leaving the decision to the discretion of intuition or decision-maker desires. Moreover, this analysis of all possible options in a decision situation is recognized as a characteristic of Japanese management style, as opposed

to the classic Western European field leaves much broader insight into the decision.

#### 4. COMPETITION GUIDELINES FOR DESIGNING STRUCTURE OF HUMAN RESOURCES

Contemporary global society is facing a reduction in increasingly large resources. Practically, at present, in any activity there can be limitless resources or enough, but the more limited resources.

In a competitive market position and establish a company's success depends essentially on how they are exploited limited resources available, the respective financial resources, information, technical materials, energy and human.

Its central objective is to conduct an efficient economic activity, ie to achieve a desired profit from marketing the products from the factory and / or services they render.

For company business is truly profitable performance must be linked to the console with the use of limited resources available.

Human resources are the most valuable because of how each person works daily at the post they occupy depends on effective leverage other resources.

It is also necessary to pay greater attention to design the company's organizational structure (characterized by flexibility and reduced operating costs), rational sizing of each compartment, rational distribution of tasks of each position, both aiming to make full use capacity for occupant job creation and effective use of his daily working time. During the same management team at the head of the company, it must define the purpose, mission strategies and tactics "of economic development company.

These are reflected in the overall objectives and targets (the function) is then broken down by department, departments and workstations.

Prioritize these goals and their breakdown by levels of hierarchical organizational structure is shown in Fig. (8.6).

Given the analysis on "operational charging station design organizational structure, we can say that specific work and / or tasks assigned to a post which determines:

- Items on which it is advisable to employ male person;
- Items that are recommended hiring female persons;
- Items that can engage people both male and female persons.

Knowing the specific tasks assigned to a post also allows setting următorilor factors:

- the training of the employee whose job it is assigned (higher education, average etc.).
- minimum age required to work;
- Maximum recommended age when post-employment.

General objectives and areas of activity of the company, the performance set, also requires the full use of daily working time of each employee.

Reaching this goal involves determining the time each job can be completed and / or job task assigned to the performance set in accordance with actual conditions in which the company operates.

On this basis, then determine the full use of the occupant's daily working time job.

The operational items (man-machinery) compartments production schedules recommended developing detailed analysis of work process through which a given work. Development of these graphics should work breakdown process in its component operations strict order of succession and interdependence of these operations.

Proposed improved methods to ensure proper operations increased share of control and technical (which improves the economic effect at work) and reduce the weighting of transport operations, expectations and storage (which increases the economic effort) in total time in That work is done.

Applying this method can be extended to other posts within the company's organizational structure. It is recommended to use the above method for items of work and / or tasks with a lower complexity and repeated several times in the daily working time company employee.

For items that include tasks with high complexity and degree of low or very low repeatability of time horizons (eg Department of Planning, R & D) is accepted principles and relations PERT calculation method used for determining the duration of achieving assigned job tasks (eg cost and price antecalculația for project design and technology project requested by a customer).

In such cases it is necessary.

- Distribution of load station components operations in strict compliance with the order, sequence and interdependencies between them;

- For each operation are three of life assessments of achievement:

- optimistic duration ( $a_{ij}$ ) - minimum operation termination "ij" where there are circumstances most favorable complex.
- most probable duration (middle) the end of Operation "ij" with the best chance of achieving normal working conditions.
- pessimistic duration ( $b_{ij}$ ) termination of the operation "ij" appears worst when complex circumstances, but excluding all extraordinary situations.

Based on these three estimates is the average duration and dispersion of Operation "ij" with the following relationships:

$$\bar{t}_{ij} = \frac{a_{ij} + b_{ij} + 4m_{ij}}{6} \text{ and } \sigma_{ij}^2 = \left[ \frac{b_{ij} - a_{ij}}{6} \right]^2 \quad (4)$$

To achieve the above objectives are proposing a new method for testing, orientation, recruitment in the post, improving training and promoting employees based on company criteria "effective power" on the job. Algorithm applying this method is as follows:

=> Specifying tasks and conditions of employment for each position and department of the company's organizational structure (as those specified above);

=> Crowd setting specific criteria against which to quantify results in job tasks to be tested;

=> Crowd structuring criteria of maximum and minimum criteria;

=> Setting maximum values of these criteria can be obtained in real operating conditions S1) (company leader in the design process, the minimum allowable values at the level of performance of job duties can be accepted and (S2) their average value (bij), where:

$I \in I_n$  - is set to a class of employees specified in the structural organization of the company, subject to testing;

$J \in I_n$  - is set to a class specified employees in the structural organization of the company, subject to testing;

$J \in I_m$  - set specific criteria on which quantifies the effective power after the employee tested;

Develop test forms. The forms will have two parts: the first concerns inherent creative ability of the employee and his second behavioral changes. For stations operators recommended that testing be accompanied by practical work. Design in this way to meet different demands on the form:

# Structure employed only in the capacity of creation;

# Structure of employees solely on the basis of behavioral changes;

# Structure of employees taking into account both components of the intrinsic power of the employee;

=> Establish the practice of testing technology deployment;

=> Processing test results, which is the model "meant" adapted scope of this investigation:

$$C_{efi} = ax \prod_{j \in S_1} \left( \frac{a_{ij}}{A_{Ij}} \right)^{g_i} \prod_{j \in S_2} \left( \frac{a_{ij}}{A_{Ij}} \right)^{g_i} \quad (5)$$

where:

$a = 1000$  - the constant indicating the maximum effective power station employee in circumstances corresponding driver design process;

$A_{Ij}$ , the maximum income that an employee would get his appropriate reference;

$J \in S_1$  - set up criteria;

$J \in S_1$  - set minimum criteria;

$A_{ij}$ , - the size of the result obtained by the employee and the criterion  $j$ ;

$i$  - coefficient of importance (weight)  $C_{efi}$  size criteria. $\gamma$

Importance coefficients calculation is based methods used in decision theory.

Develop assessment scale.

The following classes are proposed structure, the reference  $C_{efi} = 1000$ ;

Class I - base of company employees

1000-850 and  $fog = (a_{ij})$  (b)

Class II - employees should be particularly monitored daily, and policy makers must deal with increasing their professional training.

(b)  $(S_2) \geq 850-500$  and  $fog = (a_{ij})$

Class III - employees to be employed on other jobs, according to the criterion of actual job competence, or to be oriented toward other businesses as job performance in tasks can not be accepted

$Fog < 500$  and  $(a_{ij}) < (S_2)$ .

The performance evaluation process involved a number of cases that may alter results. The main error sources are:

- The standards vary from one person to another, in the evaluation process should avoid the use of different standards for people with similar functions, and the assessor to have sufficient arguments to approve and correct assessment.

- Assessment of time between the assessment used information generated at different times in this respect, a balance must be achieved as regards the share of recent events and old. Employees become more conscientious when they come from grant descriptions. This deficiency may be limited if it shall register all critical incidents.

- Evaluator subjectivity. These errors may result in over-or undervaluation of employee performance.

- Halo effect. This effect occurs when the evaluator uses the evaluation of a criterion or set of criteria to cover certain weaknesses or to enhance the appreciation of people. Specify the criteria for accurate assessment of employee evaluation or a single feature can reduce the halo.

- Failure of contrast. The error arises from the comparison between them and performance standards. Consequently, the most poorly rated in a group may be more efficient than the best of a weak group.

## 5. CONCLUSIONS

Tepretico, pencil on practical steps in its general thesis entitled - "to improve interpersonal communication relations in enterprises and institutions" - refers to the following issues:

- Analysis of the classical system of communication between people and the proposed development of innovative interdisciplinary communication based on organizational computer network.

- Presentation of interpersonal communication techniques as prerequisite training culture.

- Modeling the opening performance of human resource to improve relations on channel productive interdisciplinary communication, competitive market.

- Culture, communication and correlation approach as risk-based operational research operators.

- Selecting neurogenetic expert systems equipped with PLCs for boosting growth in soft quality of communication processes.

- Modeling interpersonal communication management processes when applying motivational theory of work and develop a novel concept pilot computer assisted communication processes as the basis of labor productivity growth.

- Develop a novel methodology for assessing human resource skills promovatoare holistic organizational culture in enterprises and local universities and beyond.

Selection of interpersonal communication techniques and outlining operational details of the specific organizational culture of productive enterprises.

- Addressing a systemic view of correlations arhemo-culture-as-communication and risk optimization capture significant elements of man-labor relations and environmental. Also outlined in concrete premises for training managers and quality products executants with built-in program theory cardinalelor quantifying human resource complement to disturbance.



- Computerization of interpersonal communication processes ensure practical application of pilotage anticipatory production systems which reduces risk and creates significant savings of resources.
- Application development decisions innovative organizational culture in enterprises and institutions of higher education is the experimental argument that the author wishes to oversee further as a specialist in this new interdisciplinary field of activity.
- Designing a new assessment methodology of human resource competence organizational culture that promotes holistic techniques based on the calculation of indicators, economic, financial and communications. These calculations reveal significant for the practical purpose of the work are carried out operational research with a mathematical model based on mathematical facts.

## REFERENCES

- [1]. A. Carabulea - Theory of Archemes Aplied to the Optimal Development of Power System – Buletinul UPB – 1988/1989
- [2]. F. Landy, J.L. Farr - The Measurement of Work Performance – Models Theory and Applications Academic Press, Inc. Orlando, Florida – 1983
- [3]. A. Carabulea ș.a. - The Concept of Manaerial empathi, Modelling with Referential Inward Open Dinamic Systems – USA – 1996
- [4]. R. Ciriță - Reingineria sistemelor polifuncționale, Universitatea Transilvania Brașov – 2003
- [5]. M. Hammer, J. Champy - Reeengineering the corporation. It's Time to Terhing Your Assuptions, Soundview Executive Book Summaries, 1988
- [6]. W.E.Baker - Networking Smart How to Build Relationship for Success, Soundview Executive Book Summaries, 1998
- [7]. R. Apostol - Managementul Resurselor umane în concepție arhemică a cercetării operaționale U.P.B. 2004
- [8]. E. Turban, E. McLean, J. Wetherbe - Information Tehnology for Management, Wiley and Sons New York – 1999
- [9]. V. Sgârțiu ș.a. - Diagnoza produselor și a sistemelor. Editura Matrix București – 2002
- [10]. A.Carabulea - Reingineria resurselor umane. Editura Politehnic Press – 2008