

IDENTIFICATION OF ORGANIZATION VALUES ACCORDING TO THE PERCEPTION OF THE EMPLOYEES OF THE ENERGETIC AND NUCLEAR RESEARCH INSTITUTE- IPEN

Márcia Orrico Pupak*; Edson Roman*; José Augusto Perrota*; Ana Cláudia M. Feher*; Adriana B. V. B. Magalhães*; Maria Lúcia Gili Massi*; Antonio Cesar Amaru Maximiano **; José Roberto Rogero*.

*Energetic and Nuclear Research Institute-IPEN;
Av. Lineu Prestes, 2.242

05508-900 Butantã, São Paulo, SP, Brasil.

** Economy, Administration and Accounting Faculty of the University of São Paulo – FEA/USP
Av. Prof. Luciano Gualberto, 908.

05508-900- Cidade Universitária, São Paulo, SP, Brasil.

ABSTRACT

The purpose of this research was to identify the organizational values, according to the perception of employees of the Energetic and Nuclear Research Institute - IPEN. The instrument used in this research was the "Organization Values Questionnaire". This survey contains a list with 38 values, each followed by a parenthetical explanation that clarifies its meaning. Respondents rated each value on a 6-point scale from, less important (0) to very important (6), in response to the question: How important is each values for the organizational life? This evaluation should be done in two levels of perception: REAL plan, and IDEAL plan. The population investigated was constituent by 1000 employees. The total of 553, i.e. 55.3%, questionnaires were turned back. As result, it was identified on REAL plan, values related to coefficient as EFFICIENCY, EFFICACY and MANAGEMENT. On IDEAL plan, they were related to EMPLOYEE VALORIZATION and INOVATION coefficient. As consequence, the institutional commitment is to form working groups, inside the Strategic Planning Revision, in order to elaborate the Core Values, based on the values identified on this research.

Keywords: organizational values; identification of values; IPEN values.

I. INTRODUCTION

All of us, who take on many challenges every day, make the organization a success. Living together with our mission, values and institutional objectives is the key to build an organization of which we can be proud [1].

The purpose of this research was to identify the organizational values, according to the perception of employees of the Energetic and Nuclear Research Institute – IPEN.

There is general agreement in the literature that values do not influence people's activity directly, but rather indirectly, through attitudes and goals. Thus, values are seen as a source of motivation for individual action. With respect to the societal level, values define norms and shared goals, which elicit and guide collective action. The identification of values for an organization may give some guidelines on how to conduct organizational policies and strategies [2].

The first basic issue to be presented on this article, before the description of the research conducted on IPEN, is to define the nature and the relation between the basic individual values and work values (organizational).

Basic Individual Values and Work Values. From the point of view of the theory of basic human values, work goals or values are specific expressions of general values in the work setting.

Basic Individual Values. A trans-cultural research conducted on more than 65 nations around the world identified ten universal types of values.

This research has been conducted in order to explain the ways in which individual's value priorities relate to their attitudes, behavior and roles in connection to their work and social experiences. As result of this trans-cultural survey, it was compiled the "Schwartz Theory" [3]. This theory has two core components. First, it specifies ten motivationally distinct types of values that are postulated to be recognized by members of most societies and to encompass the different types of values that guide them. Second, it specifies how these ten types of values relate dynamically to one another [4].

That is, it specifies which values are compatible and mutually supportive, and which is opposed and likely to conflict with one another. The theory defines values as desirable, trans-situational goals that vary in importance as guiding principals in people's life [5].

The crucial content aspect that distinguishes among values is the type of motivational goals they express. Values represent in the form of conscious goals, responses to three universal requirements with which all individuals and societies must cope:

- (1) Individuals needs – e.g. feed, sex activities of biological organisms and others;
- (2) Social interaction needs – e.g. friendship, relationship, and others;
- (3) Group survival needs – e.g. religious and sport groups, country and nations collective needs and others.

The Motivationally Theory of Values is derived from those three universal requirements. TABLE 1 presents these ten motivationally value types, defining each value in terms of its central goals and to what interest they serve.

TABLE 1. Motivationally Theory of Values.

Values	Goals	Interest
POWER	Social status and prestige, control or dominance over people and resources.	Individual
ACHIEVEMENT	Personal success through demonstrating competence according to social standards.	Individual
HEDONISM	Pleasure and sensuous gratification for oneself.	Individual
STIMULATION	Excitement, novelty and challenge in life.	Individual
SELF-DIRECTION	Independent thought and action choosing, creating, exploring.	Individual
UNIVERSALISM	Understanding, appreciation, tolerance and protection for the welfare of all people and for nature.	Individual and Collective
BENEVOLENCE	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact.	Collective
TRADITION	Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provides.	Collective
CONFORMITY	Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms.	Collective
SECURITY	Safety, harmony and stability of society, of relationships, and of self.	Individual and Collective

The key to identifying the structure of value relations is the assumption that actions taken in the pursuit of each type of values have psychological, practical, and social consequences that may conflict or may be compatible with the pursuit of other value types [6].

The total value structure is organized into two sets of opposing order values types that forms two bipolar dimensions, as described below.

The first bipolar dimension:

Self-Transcendence versus Self-Enhancement.-

On the pole Self-Transcendence, values such as Universalism and Benevolence, emphasize acceptance of others as equals and all matters concerning their welfare. On the other pole, in opposition is Self-Enhancement, with values such as Power and Achievement that emphasize the pursuit of one’s relative success and dominance over others.

Hedonism (pleasure and sensuous gratification for oneself) includes elements of both Self-Enhancement and Openness to Change.

The second bipolar dimension:

Openness to Change versus Conservatism. -

On the pole Openness to Change, values such as Self-direction and Stimulation, emphasizes own independent thought and action, open mind to new path, creativity and innovation. On the other pole, in opposition is Conservatism, with values such as Security, Conformity and Tradition that emphasize submissive self-restriction and maintenance of the “status-quo” of the society and family.

Work Values. A survey conducted on more than 49 nations from around the world, in order to gives answers to the meaning of work in individual’s life and its influence on cultural value priorities. As result of this research it was compiled a theory, constituent with six types of work values, structured along three polar dimensions, as described below [7] and [8].

The first basic issue confronting all societies is to define the nature of the relation between the *individual and collectivism*.

The first pole of the first dimension describes the collectivism, with a set of values labeled as *Conservatism*. As conservatism the collectivity wants to emphasize the maintenance of the “status quo” of the group. The opposite pole of this dimension describes the individualism, with a set of values labeled *Autonomous*. As autonomous, individuals want to emphasize the desirability and the independence in pursuing their own ideas, intellectual directions and affective experiences.

The second basic issue that confronts all societies is to guarantee *responsible performance that will preserve the social structure*.

The first pole of the second dimension describes the *hierarchical organization systems* in which different power ensure social responsible behavior and where societal member must accept that they are inferior to some as well as superior to others. Values types that express an organization *Hierarchy* system are: social power, authority, humility and wealth. The opposite pole of this dimension describes the *Egalitarianism systems* that emphasize selfish interests in favor of voluntary commitment to promoting the welfare of others. Values types that express an organization *Egalitarianisms* system are: equality, social justice, freedom, responsibility and honesty.

The third basic issue that confronts all societies is the *relation of humankind to the natural and social world*.

The first pole of the third dimension describes those societal members of an organization that act directly to change and Master the social world around. Values types of Mastering emphasize on getting ahead through active self-assertion are: ambition, success, daring and competence. An opposing resolution of this issue is to accept the world as it is, trying to fit in rather than to of change or exploit. Value types that express the response *Harmony* are: unity with nature, protecting the environment, world of beauty.

In sum, the author's theory supports that those three bipolar dimensions can be utilized to predict and understand national differences and work-related issues, such as:

- (1) Autonomy *versus* Conservatism (values related to organization problem concerning the dichotomy individual - group);
- (2) Hierarchy *versus* Egalitarianism (values related to organization management structure);
- (3) Mastery *versus* Harmony. (values related to organizational inter-relationship with social world and nature).

Finally, considering both "Individual Values" and "Work Values", evenly it refers to the goals, rewards and motivations people seek through their work or private life's. They are expressions of more general human values in the context of the work setting. For this reason both theory were employed to inform the profile of the organization of this survey: Energetic and Nuclear Research Institute- IPEN [9] and [10].

How to study organization values? Organization values may be studied by using, basically, three methods of analyses:

- (1) Official documents – e.g. annual reports, chronological documents and all sort of writhen documents produced at the organization. The most common inconvenient of this method is the dichotomy between what is said, writhen and what is practiced at the organization;
- (2) Medium Sample Data – this method consist in taking one small sample to represent the totality of the organization members;
- (3) Analyses of the Perceptions of employees – this method consist in using instruments to identify the perception of the organization members [11].

This third method was chosen to identify the organizational values of the IPEN, according to the perception of employees [12].

II. METHOD

Instrument. The instrument used in this research was the "Organization Values Questionnaire", [13], that included a list with 38 values, chosen to cover the comprehensive set of ten values described on TABLE 1. The task of each respondent was to rate, on a scale from 0 to 6, the importance of each value as guiding principles in organizational life. It was asked to respondents, to

consider the rating in two levels of perception: REAL plan, and IDEAL plan. This instrument was adapted specifically to IPEN, with the introduction of the IDEAL plan, in order to make possible the management of values for later work with some groups, constituent by chosen employees of the Institute, in order to elaborate the Core Values. The instrument also presented an open question, for further inclusions of values not listed on the instrument. TABLE 2, presents the distribution of each of the 38 values according to the coefficient established on the instrument.

TABLE 2. Distribution of each value according to coefficient established on the instrument.

COEFFICIENT	DISTRIBUTION 38 VALUES
EFFICACY/ EFFICIENCY	Competency, Compromising, Dedication, Efficacy, Efficiency, Planning, Punctuality, Productivity, Quality. Total: 09 values.
WORK INTEGRATION	Openness, Friendship, Benefit, Coworker, Competitively, Cooperation, Creativity, Democracy, Flexibility, Sociability. Total: 10 values.
MANAGEMENT	Supervision, Hierarchy, Obedience, Organization, Professional Attitude, Controlling, Tradition. Total 07 values.
INNOVATION	Research Stimulus, Inter-organizational integration, Modernization Material Resources, Probity. Total: 04 values.
EMPLOYEE VALORIZATION	Harmony, Honesty, Justice, Carrier Planning, Politeness, Qualification Human Resources, Recognition, Respect. Total: 08 values.

Samples and Procedures. The population investigated was the universe of 1084 employees of IPEN, but effectively 1000 were consulted since the others were dismissed from their duty of work. The procedure to inform the survey to all employees was established in accordance with the Division of Human Resources of the Institute, in order to obtain the attention and more adherences to the purpose of the research, it was established itinerant presentations to cover the whole institution. The total of 553 questionnaires were turned back, i.e. 55.3%. The survey started on August 27, 2001 and by September 21 all analyses was done and the result was presented to employees.

Data Analysis. The parameters used in data analysis were: median of responses; maximum and minimum notes; abstention; amplitude; mode and standard deviation. The standard deviation is the most important measure of dispersion as it is of great use in many of the statistical techniques. The total area under a normal curve is always one, for this, both examples as show in TABLE

3 and 4 the SD it's near one, so this means there is a uniformity of responses [14].

TABLE 3. Hierarchical Values established on **REAL** Plan, according to standard deviation, (five first one's).

VALUES	Standard Deviation
EFFICIENCY	1° - 1,318519
COMPETENCY	2° - 1,333065
AUTONOMY	3° - 1,338595
PROFESSIONAL ATTITUDE	4° - 1,364002
FRIENDSHIP	5° - 1,365647

TABLE 4. Hierarchical Values established on **IDEAL** Plan, according to standard deviation, (five first one's).

VALUES	Standard Deviation
RECOGNITION	1° - 0,942436
QUALITICATION HUMAN RESOURCES	2° - 0,959319
QUALITY	3° - 0,979524
EFFICIENCY	4° - 1,014324
MODERNIZATION MATERIAL RESOURCES	5° - 1,032259

As said at the Introduction, the identification of values for an organization may give some guidelines on how to conduct organizational policies and strategies. Therefore, managing for values means deals with satisfaction and in-satisfaction index. The index was found calculating the difference between the medium rate of values on REAL and the IDEAL. As shown on TABLE 5, the value - Carrier Planning has the biggest difference and on TABLE 6, the value Tradition has the lowest difference.

TABLE 5. Managing for Values.

INSATISFACTION	R-I=index
CARRIER PLANNING (a)	3,081531
RECOGNITION	2,701341
PLANNING	2,294177
JUSTICE	2,285064
DEMOCRACY	2,244348
MODERNIZATION MATERIAL RESOURCES	2,243031
HONESTITY	2,163113
RESPECT	2,074342
PROBITY	2,008602
COOPERATION	1,971677

a. Higher in-satisfaction.

TABLE 6. Managing for Values.

SATISFACTION	R-I=index
FRIENDSHIP	1,530955
PROFESSIONAL ATTITUDE	1,522851
SUPERVISION	1,420063
FISCALIZATION	1,415921
COMPETITIVITY	1,315497
PRODUTIVITY	1,239617
PONTUALITY	1,230556
OBEDIENCE	0,951431
HIERARCHY	0,940708
TRADITION (b)	0,61704

b. Higher satisfaction.

III. RESULTS AND DISCUSSION

First we examined the responses given on REAL and IDEAL plan. As shown on TABLE 7, the first 10 values rated on REAL plan were those presented with the coefficient of the instrument. Then, the first 10 values rated, also, on IDEAL plan as shown on TABLE 8.

TABLE 7. Result of the survey according to the responses on REAL plan (first 10 values).

VALUES	SD	COEFFICIENT
COMPETENCY	2°	Efficacy and Efficiency
QUALITY	12°	Efficacy and Efficiency
HIERARCHY	25°	Management
PRODUTIVITY	14°	Efficacy and Efficiency
EFFICIENCY	1°	Efficacy and Efficiency
OBEDIENCE	17°	Management
EFFICACY	9°	Efficacy and Efficiency
QUALIFICATION HUMAN RESOURCES	28°	Employee Valorization
FRIENDSHIP	5°	Work Integration
RESEARCH STIMULUS	30°	Innovation

TABLE 8. Result of the survey according to the responses on IDEAL plan (first 10 values).

VALUES	SD	COEFFICIENT
HONESTITY	13°	Employee Valorization
PLANNING CARRIER	6°	Employee Valorization
RECOGNITION	1°	Employee Valorization
PROBITY	11°	Innovation
QUALITICATION HUMAN RESOURCES	2°	Employee Valorization
RESEARCH STIMULUS	20°	Innovation
COMPETENCY	8°	Efficacy And Efficiency
QUALITY	3°	Efficacy and Efficiency
MODERNIZATION MATERIAL RESOURCES	5°	Innovation
EFFICIENCY	4°	Efficacy and Efficiency

Second, we applied the work theory in order to explore the significance of work for people as a vehicle for reaching important goals. As shown on TABLE 9, considering only the first 10 values rated, the culture of IPEN on REAL plan emphasizes values related to *Autonomy* - indicating members of the organization as autonomous individuals; *Hierarchy* - hierarchical organization structure; and *Master* - deals with social environmental with quality, productivity, efficiency and efficacy.

TABLE 9. Work Theory applied on IPEN-REAL PLAN.

<u>AUTONOMY</u> 1 ⁰ - COMPETENCY 8 ⁰ - QUALIFICATION HUMAN RESOURCES 10 ⁰ - RESEARCH STIMULUS	<u>CONSERVATISM</u> 9 ⁰ - FRIENDSHIP
<u>HIERARCHY</u> 3 ⁰ - HIERARCHY 6 ⁰ - OBEDIENCE	<u>EGALITARIANISM</u>
<u>HARMONY</u>	<u>MASTER</u> 2 ⁰ - QUALITY 4 ⁰ - PRODUCTIVITY 5 ⁰ - EFFICIENCY 7 ⁰ - EFFICACY

As shown on TABLE 10, the culture of IPEN on IDEAL plan wants to emphasize values related to *Autonomy* – people who seek personal growth or opportunities for creativity and autonomy in their work; *Egalitarianism* – all workers as deserving similar opportunities; and *Master* - the power of the organization is demonstrated with quality and efficiency.

TABLE 10. Work Theory applied on IPEN- IDEAL PLAN.

<u>AUTONOMY</u> 5 ⁰ - QUALIFICATION HUMAN RESOURCES 6 ⁰ - RESEARCH STIMULUS 7 ⁰ -COMPETENCY 9 ⁰ - MODERNIZATION MATERIAL RESOURCES	<u>CONSERVATISM</u> 2 ⁰ - PLANNING CARRIER 4 ⁰ -PROBITY
<u>HIERARCHY</u>	<u>EGALITARIANISM</u> 1 ⁰ - HONESTY 3 ⁰ - RECOGNITION
<u>HARMONY</u>	<u>MASTER</u> 8 ⁰ - QUALITY 10 ⁰ - EFFICIENCY

As consequence, the institutional commitment is to form, inside the Strategic Planning Revision, working groups constituent by chosen employees in order to

elaborate the Core Values of the Institute based on the values identified on this research.

Finally, by examining the results of this research we should say that IPEN had emphasized values compatible to its performance established, on its 46 years of existence, as the most competent institution on nuclear field and its application in all Latin America.

REFERENCES

- [1] <http://www.abnamro.com/com/about/bp.asp>
A compass to guide us on our journey; Managing for Value; Mission and Values. The www.abnamro.com site is published by: ABN AMRO Bank N.V., Gustav Mahlerlaan 10, 1082 PP Amsterdam, The Netherlands, Copyright 1998-2000.
- [2] ROE, ROBERT A., **Values and Work: Empirical Findings and Theoretical Perspective**, Applied Psychology: An International Review, vol.48 (1), p 1-21, 1999.
- [3] SCHWARTZ, S. H., **Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries.** In M. Zanna (Ed.), Advances in experimental social psychology. New York: Academic Press, 1992.
- [4] SCHWARTZ, S. H., **Toward a universal psychological structure of human values**, Journal of Personality and Social Psychology, vol. 53, p 550-562, 1987.
- [5] SCHWARTZ, S. H., **Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications**, Journal of Personality and Social Psychology, vol. 58, p. 878-891, 1990.
- [6] ROS, MARIA; SCHWARTZ, H.; SURKISS, SHOSHANA, **Basis Individual Values, Work Values, and the Meaning of Work**, Applied Psychology: An International Review, vol. 48(1), p 49-71, 1999.
- [7] SCHWARTZ, H. SHALOM, **A Theory of Cultural Values and Some Implications of Work**, Applied Psychology: An International Review, vol 48(1), p 23-47, 1999.
- [8] MOW INTERNATIONAL RESEARCH TEAM, **The meaning of working**, New York: Academic, 1987.
- [9] ROCKEACH, M., **The nature of human values**, New York: Free Press, 1973.
- [10] HOFSTEDE, G., **Culture's consequences: International differences in work related values**, Beverly Hills, CA: Sage, 1980.

[11] TAMAYO, A., **Valores Organizacionais. In: Tamayo, A.; BORGES-ANDRADE, J. E. and CODO W.**, Trabalho, organizações e cultura. São Paulo, Cooperativa de Autores Associados, p. 175-193, 1996.

[12] SUPER, D. E., **The work values inventory.** BOSTON: Houghton Mifflin, 1969.

[13] TAMAYO, A.; GONDIN, M. G. C., **Escala de Valores Organizacionais.** Revista de Administração, v. 31, p. 62-72, abril/junho 1996.

[14] CASWELL, FRED, **Sucess in Statistics**, p. 81-118, Consultant Editor Helen Wright, M. A., Ph.D., 1982.