

## MANAGING BY VALUES – a case study at IPEN

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### ABSTRACT

The aim of the study conducted at ENERGY AND NUCLEAR RESEARCH INSTITUTE – IPEN was to identify the underlying values of its culture. The hierarchical values identified with the perception of the employee constituent one of the most important part of this study. Why conduct organizational research values taking into account the employees perception? The reason is simple – ORGANIZATIONS DON'T MANAGE THEIR VALUES, PEOPLE DO! Nowadays, organizational values behavior is no longer a philosophical choice it is a requisite for survival. On fieldwork were employed the quantitative and qualitative methods utilized to gather primary data. The questionnaire utilized on quantitative method contains a list with 38 value, each one followed by a parenthetical explanation that clarifies its meaning. Respondents rated value on a 6-point scale from, in response to the question: *How important is each values for the organizational life?* This evaluation was done in two levels of perception: REAL and IDEAL plans. The population investigated on this method was constituent by 1000 employees and 553 questionnaires were returned. On qualitative method it was used one semi-structured interview with 12 questions, applied on a sample constituent by 15 most influent persons of the organization. As conclusion it is important to say that the culture of excellence should be based on the commitment of all the employees, on a common purpose and a set of values aligned with the organization practices, and that, employees can build an organization to be proud of and also to be a pleasant place to work.

**Key words:** Organization Values; Managing by Values; Organization Culture

### RESUMO

O objetivo do estudo conduzido no Instituto de Pesquisas Energéticas e Nucleares – IPEN foi identificar os valores submersos na cultura desta organização. Identificar os valores organizacionais a partir da percepção dos empregados desta organização foi a abordagem mais importante deste trabalho. Porque a percepção das pessoas a cerca dos valores de uma organização é tão valiosa? A resposta é simples! – SÃO AS PESSOAS QUE FAZEM A GESTÃO DOS VALORES! Entender como as organizações se comportam e como se tornam bem-sucedidas não se trata mais um tema filosófico, mais sim, de uma questão de sobrevivência das organizações. Para a obtenção de dados primários foram utilizados dois instrumentos: (1) *Questionário de Valores Organizacionais*, aplicado à população constituída por 1000 servidores do IPEN, onde, numa escala de 0 a 6 os indivíduos deveriam responder a seguinte pergunta: *“Na sua opinião, quanto cada um desses valores são importantes como princípios orientadores da vida organizacional de sua instituição?”* Essa avaliação levou em consideração dois planos de percepção – o REAL e o IDEAL. Um total de 553 questionários foram retornados; (2) *Questionário Semi-Estruturado de Entrevista*, contendo 12 perguntas baseadas em questões fundamentais o qual, foi aplicado a uma amostra de 15 pessoas-chave da instituição. Como conclusão, observa-se que as organizações bem sucedidas ter empregados comprometimento e os valores alinhados às práticas organizacionais são de fundamental importância.

**Descritores:** Valores Organizacionais; Gestão de Valores; Cultura Organizacional

## INTRODUCTION

There is a 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 [1].

In recent years, there has been growing interest in the analysis of individual values in relation to work values in general, Salomon H. Schwartz from the Hebrew University of Jerusalem, Israel, has conducted a trans-cultural research on more than 60 nations around the world, in order to explain the ways in which individual's value priorities are related to their attitudes, behavior and roles in connection to their work and social experiences [2]; [3]; [4].

The theory of cultural values postulated by Schwartz [5] was later adapted by Tamayo et al. [6] for organizations also, not only in terms of countries as theorized by Schwartz, since organizations are constituted by individuals.

Tamayo et al. [6] presented six types of values, structured along three bipolar dimensions that refer to three basic issues confronting all organizations

The first basic issue 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 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 *Egalitarianism* system are: equality, social justice, freedom, responsibility and honesty.

The third basic issue 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 change or exploit. Value types that express the response *Harmony* are: unity with nature, protecting the environment, world of beauty.

In sum, the author supports that those three bipolar dimensions can be utilized to predict and understand different organizations 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).

## The question is – How Cultures Form?

The original culture is derived from the founder's philosophy and then the actions of current top management set the general climate of what is acceptable behavior and what is not. How employees are to be socialized will depend both on the degree of success achieved in matching new employees values to those of the organizations in the selection process and on top management's preference for socialization methods.

## METHOD

The aim of the study conducted at IPEN was to identify the underlying values of its culture. For this purpose, on fieldwork were used two methods to gather primary data from the employees and from founders, with quantitative methods [7] and qualitative methods [8].

"...no method grants privileged to truth...and all research approaches are embodied in cultural practice that post modernists seek to make explicit [7]."

### The Quantitative Method

The instrument constructed by Tamayo and Gondin [9] used at the present research to get the perception of the employees of IPEN,

had a list with 38 values associated to five motivational factors as shown on Table 1 below.

TABLE 1. Distribution of each value according to motivational factors

| MOTIVATIONAL FACTORS    | DISTRIBUTION OF 38 VALUES   |
|-------------------------|---|
| EFFICACY and 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 of the Quantitative Method

The population investigated had a complete coverage of 1000 employees of IPEN (data from August 2001). 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 this research, it was established itinerant presentations to cover the whole institution, explaining why and how this was going to be done.

Respondents should rate 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? The instrument was adapted specifically to the present case, with the introduction of the IDEAL plan, in order to make possible the management of values for later work. The total of 553 questionnaires were turned back, i.e. 55.3%. The parameters used in data analysis of the quantitative method were: median of responses; maximum and minimum notes; abstention; amplitude; mode and standard deviation.

### The Qualitative Method

An organization's current customs, traditions, and general way of doing things are largely due to what has done before and the degree of success it has had with those endeavors. This leads us to the ultimate source of an organization's culture: ITS FOUNDERS.

Several decades of research done by Schein [10] shows that the more efficient way to identify values underlying on culture is by interviewing organization members (the term - members are here referred to: founders, former presidents, directors and managers). They have a vision of what the organization should be. They

have a major impact on that organization's early culture. They are the key to capture the proclaiming values transmitted by them.

To get primary data from members a semi-structured query for interview, with 12 questions, was accomplished on a sample of 16 members. These members interviewed expressed their opinion about the foundation of its institution, the most important events for organization life especially about mission and values and may others facts. The content of those interviews had contributed greatly to this study and also for the organization since the recorded material will be given to the institution's library.

### Samples and Procedures of the Qualitative Method

All 15 members were interviewed face-to-face, tape recorded with their permission with duration time about 40 minutes. Transcriptions were made using Microsoft Word, this constituent the first hand documents. The oral contents were recorded on K7 tape, later were compacted on MP3 format and stored on CD ROM and DVD format, to be handle to IPEN's Library disposable.

Since dialogues are focused more on the thinking process and how perceptions and cognitions are preformed by the past experiences, oral contents have to be analyzed with special techniques. In fact, "contents analysis" as described by Selltiz is a technique available to process mass speech [11]. This organizational research utilized a software programme called "Sphnix" [12], to process the analysis of the interview contents.

### DATA ANALYSIS

**Quantitative Method** - The parameters used in data analysis were: median of responses; maximum and minimum notes; abstention;

amplitude; mode and standard deviation. The Standard Deviation (SD) is the most important measure of dispersion as it is of great use in many of the statistical technique, when the SD is near one it means that there has been uniformity

of responses. The total area under a normal curve is always one. As show in Table 2 and 3 below, the SD it's near one meaning uniformity of responses [13].

TABLE 2. Hierarchical Values established on REAL Plan

| VALUES                | Standard Deviation |
|-----------------------|--------------------|
| EFFICIENCY            | 1° - 1, 31         |
| COMPETENCY            | 2° - 1, 33         |
| AUTONOMY              | 3° - 1, 33         |
| PROFESSIONAL ATTITUDE | 4° - 1, 36         |
| FRIENDSHIP            | 5° - 1, 36         |

TABLE 3. Hierarchical Values established on IDEAL Plan

| VALUES                           | Standard Deviation |
|----------------------------------|--------------------|
| RECOGNITION                      | 1° - 0, 94         |
| QUALIFICATION HUMAN RESOURCES    | 2° - 0, 95         |
| QUALITY                          | 3° - 0, 97         |
| EFFICIENCY                       | 4° - 1, 01         |
| MODERNIZATION MATERIAL RESOURCES | 5° - 1, 03         |

#### Performance Indicators

Managing by Values means that an organization knows how to deals with levels of satisfaction and in-satisfaction to reduce the *Gap on Alignment Action Plan* [14]. The index of satisfactions or in satisfaction identified on the culture, found by calculating the difference between the medium rate of the employees

perception, on REAL and IDEAL plan, may give some guidelines on how to better organizational clime and how perform policies and strategies alignment with action plan.

As shown on Table 4 below, the value Carrier Planning has the biggest difference, i.e. has a higher-level of in satisfaction.

TABLE 4. Managing by Values

| INSATISFACTION       | Real - Ideal =index |
|----------------------|---------------------|
| CARRIER PLANNING (a) | 3, 081 *            |
| RECOGNITION          | 2, 70 *             |
| PLANNING             | 2, 29 *             |

a. \*Index of Higher in satisfaction

As shown on Table 5 below, the value Tradition has the lowest difference, i.e. has

lowest-level of in satisfaction or higher level of satisfaction.

TABLE 5. Managing by Values

| SATISFACTION  | Real - Ideal =index |
|---------------|---------------------|
| OBEDIENCE     | 0, 95 *             |
| HIERARCHY     | 0, 94 *             |
| TRADITION (b) | 0, 61 *             |

b. \*Index of Higher satisfaction

#### Using Indicators tools.

According to the Maslow [15] human needs that are in the lower hierarchy must be at least partially met before a person will try to satisfy higher-level of their needs. In other words,

basic needs must be met before reaching next level of satisfaction. For this reason, managing by values is a powerful process that focuses an organization on common behavioral expectations and provides the platform for effective empowerment. Being values-aligned does not

occur without changes in habits, practices and attitudes. According to Blanchard and O'Connor [15], "When aligned around shared values and united in a common purpose, ordinary people accomplish extraordinary results and give their organization a competitive edge".

**Qualitative Method** - The software Sphinx was used to help in the process of counting the words

selected in the contents of the interviews. This software was conceived in France - "Le Sphinx Développement" adapted to windows version, exclusively distributed by Freitas & Cunha [12].

The Table 6 below presents the abstract of VALUES mentioned by founders as those that were transmitted.

TABLE 6 - Abstract data from Qualitative Method

| VALUES MENTIONED BY INTERVIEWERS | C* |
|----------------------------------|----|
| COMPETENCY                       | 68 |
| QUALITY                          | 30 |
| HIERARCHY                        | 13 |

C\*= number of times words were mentioned

Organization culture is concerned with how employees perceive the characteristics of its organization's culture, not with whether or not they like them. A dominant culture expresses the core values that are shared by a majority of the organization's members. When we talk about an organization's culture, we are referring to its dominant culture. Subcultures tend to develop in large organizations to reflect common problems, situations, or experiences that members face. These subcultures are likely to be defined by department designations and geographical separation.

Organization researches like this one, measuring the congruence of values perceived by employees and values transmitted by organization's member, will help managers to increase behavioral consistency and to stronger

organization culture. Culture is the social glue that helps hold the organization together and by providing appropriate standards for what employees should say and do [16].

## RESULTS AND DISCUSSION

The results here presented will help organizations managers to well observe its culture and see that aligned values improves and serves as a sense-making and control mechanism that guides and shapes the attitudes and behavior of employees. At quantitative analyses were examined the responses given on REAL and IDEAL plan. Table 7 and 8, presents on REAL and IDEAL plan respectively, the result of the first 10 values hierarchies.

TABLE 7. Results according to REAL plan (hierarchies of 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 RESOUCES | 28° | Employee Valorization   |
| FRIENDSHIP                   | 5°  | Work Integration        |
| RESEARCH STIMULUS            | 30° | Innovation              |

TABLE 8. Results according to IDEAL plan (hierarchies of first 10 values)

| VALUES                           | SD  | COEFFICIENT             |
|----------------------------------|-----|-------------------------|
| HONESTITY                        | 13° | Employee Valorization   |
| PLANNING CARRIER                 | 6°  | Employee Valorization   |
| RECOGNITION                      | 1°  | Employee Valorization   |
| PROBITY                          | 11° | Innovation              |
| QUALIFICATION 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 |

The Work Theory applied in order to explore the significance of work for people as vehicle for reaching important goals.

As shown on Table 9 below, considering only the first 10 values, the culture of IPEN on REAL plan emphasizes values related to:

➤ **Autonomy** - indicating members of the organization as autonomous individuals;

➤ **Hierarchy** - indicating that the organization has hierarchical structure; and

➤ **Master** - indicating how the organization deals with social environmental – in this case, IPEN deals with others institutions showing its **quality, productivity, efficiency and efficacy** strong values presented on the organization culture.

TABLE 9. Values identified on REAL Plan

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

As shown on Table 10 below, the culture of IPEN on IDEAL plan wants to emphasize values related to:

➤ **Autonomy** – indicating that employees seeds for personal growth and opportunities to better creativity and autonomy in their work;

➤ **Egalitarianism** – indicating employees is deserving similar opportunities for every one; and

➤ **Master** - indicating that organization power is demonstrated by dealing with others institutions showing the **quality and efficiency of their work**.

TABLE 10. Values identified on IDEAL PLAN

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

From the point of view of the 15 members interviewed those were the six values strongly present on organization culture: **Competency, Challenge, Quality, Hierarchy, Purposes and Planning**. This result is highly congruent with the employee's perception meaning that founders and other managers that followed them had transmitted values that until today has immeasurable impact on IPEN culture.

Taking into account the historical context of the organization, one important part of this study, the current challenging answer of the employees on many and different, internal or external situations, had demonstrated that the organization values were determinant of the successful responses and the above all that they were capable of undergoing change.

One of the organization member interviewed made a very special statement, he said:

***"If we succeed keeping our culture with our values alive we will keep the organization alive. I think that an organization culture has to be maintained and also has to be transmitted with daily practices to new employees. All the best has to be done to make them fix and absorb our culture, this is the only way to assure IPEN culture alive."***

Since 1976, IPEN has a branch of activities on Education area, the Post Graduation Program, this activities has been keeping its culture alive as considered by all members interviewed. The Post Graduation programme has been one of the best vehicle for transmission of values to younger generation.

According to Lipman:

***"No matter who teaches, when or to whom, always teaches values."*** [17].

## CONCLUSION

As conclusion it is important to say that the culture of excellence should be based on the commitment of all the employees, on a common purpose and a set of values aligned with: individual practices; team practices and organization daily practices. Employees must

realize that they can build an organization to be proud of and a pleasant place to work with satisfaction.

IPEN has a strong culture and its genuine success does not come from proclaiming its values, but from consistently putting them into daily action, that's how employees and managers at this institution stand for.

As member of this organization and the principal author of this paper it's recommended a new research to be conducted, in about one. On this new study it's important to stratify the sample by gender, grade of instruction, occupational functional and department and for how long they are working for the organization. It's recommended to use a different instrument of this one employed. With this next research it can be probably verified if there is a relevant discrepancy of perception of values, taking in to account different groups of employees.

Moreover it's suggested for others Brazilian Research Institutions to conduct similar study for identification of the underlying values of its culture. This is a powerful tool for managing an institution on a common behavioral and objective focusing for a better and continuous improvement of the organization.

Finally, by examining the results of this research we observed that IPEN had emphasized values compatible to its performance established, on its 46 years of existence.

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