Human Resources Management through Organisational Culture in an Engineering School

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Abstract: The aim of the present paper is to study, starting from the research carried out on the dimensions of the organisational culture of the Faculty of Engineering of Sibiu, Romania, the manner in which these influence the human resources management. Therefore, it analyses the professional integration of the academic human resources, as well as their professional training and the career development. These dimensions have a direct impact on the professional evolution of academic staff, as well as on the possibilities to motivate them. Performance appraisal too is influenced by these cultural dimensions, by means of the manner in which it is perceived by those involved. All these aspects are studied taking into account the requirements of today's society, requirements that ask for changes imposed by the Bologna process.

Key-Words: Organisational culture, professional integration, career development, performance appraisal, motivation, organisational changes

1. Introduction

The "Hermann Oberth" Faculty of Engineering from the "Lucian Blaga" University of Sibiu is part of the organisational "roots" of this institution, because starting from this base constituted 30 years ago, later evolved the university's "branches", nowadays comprising 10 faculties. In the context of a classical university, the technical faculty might be regarded with circumspection, even with curiosity. Certainly, however, it cannot be overlooked and the quality of the education provided by this school was once more certified by its positioning on 9th place in a national classification of faculties. Therefore, all the more interesting and necessary it is to study the connection between organisational culture and the academic staff's professional development.

The realised research has aimed to analyse how the visible or invisible factors act on the institutional characteristics of an engineering faculty integrated in a classical university, i.e. to identify the specific traits of the engineering school from Sibiu.

The actual research on the organizational culture of the Faculty of Engineering used the case study as a method of qualitative-type investigation. There have been used the following methods:
- direct observation of the university environment and the behavior of the educational partners.
- the questionnaire - there have been two types of questionnaires: for those within the faculty and for those from outside it.
- the analysis of documents linked to the education process and to the faculty's current activity.

The questionnaires were sent by e-mail to the faculty members (to a number of 124 persons), the answers being also returned by e-mail. The percentage of internal respondents was of 77.41%, while that of faculty members from outside the Faculty of Engineering, who teach at this faculty, was of 81.3%. The coordinates of the research process on the organisational culture were realised by means of the approaches defined by the Dutch specialist Geert Hofstede. From the analysis of results, following conclusions could be drawn:

1.1 Distance towards power

Within institutions, the distance is proportional to the degree of authority centralisation and with the autocratic level of management. The score achieved here shows that employees consider the style as one with the stress on authority. Formal aspects prevail in the communication process, informal discussions between managers and employees being quite rare. The latter most often wait to be told what to do and accept with difficulty to be involved in activities that entail additional responsibilities, especially if they have not been directly informed by their manager.

The centralisation and the autocratic leadership come from the "mental programming" of society members, characterising those being in hierarchically inferior positions. It is very possible that the large distance towards power is the effect of a long period (almost 50 years) of centralism, the manner by which the communist state did exercise its power, strengthening this dimension and having now the same means of expression.

The results obtained must be put in direct relation with that obtained by Romania, in a classification of countries with regard to the distance towards power. It can be seen that the conclusions of the present study coincide with the one made by Hofstede. The value of the index can also be explained through the short distance from the type of communist and authoritarian society that Romanians left in 1989.

1.2 Individualism-collectivism

The second dimension "individualism-collectivism" refers to the prevalence of individual interests over the group ones and the group ones towards the individual ones. The research emphasises the fact that the activity's participative dimension is rather small, that management decisions are of the managers' competence and employees have to carry them out, being involved in analyses and debates only if their direct managers consider necessary such an intervention. A characteristic of individualistic cultures is the small loyalty to the group, this being accepted as long as the interests of the individual are being promoted. In a direct relationship with the "hierarchy of human needs" of Maslow, for the individualistic culture there is a tendency to place self-achievement first.

The achieved dimension is overlapping with the national one. Romanians are characterised by individualism (pushed even towards anarchy) but also by the lack of appetite for private initiative. Their sense of solidarity, specific for collectivism, is a mechanical one, that does not come from conscientised moral convictions, but rather from an outer, forced imposing. As an organisation, however, we do not have a healthy individualism that would allow construction.

1.3 Masculinity-femininity

This dimension refers to the greater social value granted to arrogance within masculine cultures, or, on the contrary, to sensitivity and modesty within feminine cultures. The value obtained from the questionnaires displays an obvious tendency towards masculinity.

The characteristic features of masculine cultures are: the strong wish to have opportunities for big gains; the need to be acknowledged, when special outcomes are obtained; the need for career promotion; the competitive sense and the need for a stimulating activity; the need for order and strictness.

1.4 Avoiding uncertainty

The degree of avoiding the uncertainty indicates the way in which members of a culture feel threatened by unknown or uncertain situations. This feeling is expressed by a negative stress and a need for predictable situations, materialized in the need for written, concrete rules.

Applying the questionnaires, a high need for avoiding uncertainty resulted. In cultures characterized by a high level of avoiding uncertainty, the dominant idea becomes "what is different is dangerous".

Within cultures where avoiding the uncertainty is strong, inner rules and regulations are needed to control the teaching process and the non-teaching one, although in this case a role is played also by the distance towards power. If the distance is great, as in the case of the Faculty of Engineering, the exercising of authority by the superiors replaces, to some extent, the need for inner rules. This need for rules and regulations is not based on a formal logic, but on a mental one.

It is interesting to note that on national level, the need to avoid uncertainty is small, which is related to the fact that the Romanian people is a fatalistic people. Also, even the Romanian Orthodox Church practices more the outer signs of the faith, observing the norms and rites, which contributes to a low uncertainty avoidance. The explanation of this dimension's differentiation resides in the fact that, by the nature of their profession, engineers are not and cannot be fatalistic, because the engineering activity does not allow failures. Any possible failure is a new beginning on the road of designing, discovering, imagining. Moreover, the engineering profession, associated to the teaching profession, presumes a certain strictness, algorithmisation, in which there is no fatality but precision, concreteness and rigour.

1.5 Long-term or short-term orientation

The fifth dimension admitted by Hofstede, but discovered and commented especially by Michael Bond, is the "confucianistic" dimension of long-term or short-term orientation. It refers to identifying the preoccupations for maintaining certain traditions in institutions, for the fulfillment of the social obligations as much as the system allows through the specific norms, rules and laws. Cultures with a long-term orientation are characterized by insistence, perseverance, reflection, attention towards position differences. Short-term oriented cultures emphasize femininity, personal stability, a good reputation, social fineness.

For the studied organization, an intertwining of the two characteristic types can be noticed, since the score emphasizes a median position, difficult to comment on, because it is rather an alternance of short-term and long-term orientation. There can be no reference to an analysis at national level, as the statistics based on large-scale investigations are

missing. Nevertheless, from the analysis of sociological studies regarding the Romanians' culture, we can say that they are closer to nations with short-term orientations, because they do not persevere towards long-term results, are not inclined towards self-subordination, there being an attraction towards anarchy noticed by many researchers, and they are preoccupied to achieve quick results.

It can be stated that the engineering professional training tends to induce in the interviewed persons a long-term orientation, but the national component brings, in many instances, the inclination towards a short term.

2. The relationship between cultural dimensions and professional development (career development)

Starting from the defining of dimensions identified for the Faculty of Engineering of Sibiu, one can carry out their analysis, by means of following criteria:
- professional integration;
- professional training and career development;
- assessment of professional performances.

Professional integration implies: the individual's adaptation to the organisational work climate; adoption by the individual of the values promoted by the organisation; acceptance of the relationships mechanisms; compliance with the rules accepted by the organisation; forming of loyalty towards the organisation; setting up of formal and informal relationships with the group's members.

Professional training can be revealed by: forming and developing of technical abilities, for the mastering of the profession-specific vocabulary, knowledge of specific methods and techniques; personality – communication abilities, capability to work in a collective, cooperation spirit, the power of personal example, wish for continuous learning etc; forming of an analytical and synthetic spirit, for the correct interpretation of information; innovative, reflexive character, capability to critically examine problems, to discern etc.; forming of other skills: self-trust, self-containment, organisation spirit, duty sentiment, correctness, moral integrity etc.

Career development can be dimensioned by focusing on following directions:
- integration of the individual needs and aspirations into the organisational needs and aspirations;
- identification and preservation of the best employees, of those with sure professional perspectives, by satisfying their professional needs and their personal aspirations on short and long term;
- elaboration of career plans or the introduction of promotion schemes for competent employees for which no adequate positions are available;

- counseling and support for competitive employees for the achievement of their personal objectives in accordance with their potential, needs and aspirations and with their contribution within the organisation;
- development of new career paths for the orientation of individuals in as many directions as possible;
- obtaining of mutual advantages, both for the organisation and for its employees.

In order to realise the assessment of performances, it is recommended to:
- define the position - in order to make sure that the manager and the subordinate are in full agreement with regard to what is expected from the subordinate and in accordance with performance standards;
- assess performances - implies the comparison between the performance effectively realised by the subordinate and the one determined in the previous stage;
- obtain a feed-back - progresses and performances achieved by the subordinate are discussed and plans are launched for any needed development of the subordinate;

Based on these dimensions and criteria, the idea matrix presented in figure 1 can be realised:

By analysing the idea matrix, various interpretations can be made, function of the involved variables. Thus, with regard to professional integration:

1.1 In the case of a great distance towards power, as is the case in the analysed organisation:
- the managers' decisions are easily accepted;
- the values promoted inside the organisation are subordinated to the idea of authority and domination;
- relationships mechanisms are accepted;
- differentiated positions of the managers and the subordinates are accepted;
- within the organisation there is docility and submission;
- managers are treated with respect;
- it is expected that all decisions come from the managers.

1.2 The expression of professional integration by means of the individualistic dimensions, is the case in the analysed organisation, reveals:
- the possibility of appearance of a conflict between the organisation's objectives and values and the own objectives and values;
- the professional integration is rather difficult, due to the cultivation of ego-centrism by the individuals;
- there exists only a reduced loyalty towards the organisation;
- between the group's members only few informal relationships exist;
- self-achievement is what matters, even against the organisation's achievements;

Fig. 1 The idea matrix

1.3. The analysed organisation has a strong orientation towards masculinity, which influences professional integration in following ways:
- the own pursued values are material success and prosperity. They can often be in conflict with the organisation's values and expectations;
- individuals are arrogant, ambitious and tough, and these epithets do not always guarantee a good integration;
- emphasis is placed on competition between colleagues and on performance, to the detriment of the idea of "collegiality", "comradeship" etc.;
- women are slightly disconsidered and misappreciated.

1.4 An intense avoidance of uncertainty, like it appears in the case of the Faculty of Engineering, is derived, with regard to integration, in following manner:
- the workplace security and stability is highly appreciated;
- there exists an emotional need to work, to be occupied;
- there exists a high tendency towards punctuality and precision;
- it is assumed that managers have and must have the answer to any question;
- inflexible work schedules, with standardised professional tasks, are preferred;
- the protest of other members of the organisation must be repressed;
- there exists a cold attitude towards younger members, sometimes with hostile accents.

1.5 For the studied organisation, the detected orientation has a median position, expressed, at the level of professional integration, through:
- individuals characterised by perseverance, temperance, seriousness;

- relationships are organised with regard to the professional status;
- (when needed) a shame feeling is manifested;
- mutuality in salutes, favours, gifts etc. is required;
- the group's traditions are observed;
- the group's honour is protected.
The last three elements are characteristics that originate in the short-term orientation that is specific to the Romanian people.

Regarding the professional training and the career development, the idea chart emphasises aspects such as:

2.1 From the point of view of distance towards power:
- professional training programmes are organised by the managers for subordinates. Managers don't take part in these programs, or take part as professors;
- trainings are used for realising differentiated remunerations and positionings;
- managers decide what professional needs the employees have and how much the professional development should be expanded;
- managers decide on the professional careers and the subordinates accept the professional routes, considering that "managers know better what is good for them".

2.2 The organisation's masculinity is reflected in the fact that:
- it is considered that if you do a "good job", the desired promotion must follow;
- people are always in search of professional development opportunities, (because they associate it with success and money);
- it is considered that for promotion in the career, no means are immoral;

- each step for the career development is considered to be a challenge and should be tackled front-on, with courage.

2.4 The high desire to avoid uncertainty is translated through the idea that:
- there must exist rules, regulations and laws which describe the possibility for a person to affirm himself, to develop in the professional sense;
- "professional routes" must have the same algorithm, because their change induces mistrust and suspicion;
- promotion should be realised hierarchically, step by step, "jumping" over stages being unacceptable;
- there is a need for a "periodisation" of the promotion to career phases (each 2 years, each 5 years etc.);
- resistance to any attempt at innovation with regard to professional development;
- training programmes must be identical for all employees engaged on the same professional routes;
- the young employees must wait for their turn to be promoted;
- competitors for the same position can never be friends.

2.5 The medium-term orientation, in direct relationship with professional training and career development, strengthens the arguments presented above:
- there exists the conviction that by adopting a behaviour that denotes perseverance, the desired position can be achieved;
- the relationships that can play a positive role in professional development are capitalised;
- temperance is the base for decisions related even to professional development.

The last analysis criterion is related to performance assessment. In direct relationship with this criterion, each of the organisational culture's dimensions are represented as follows:

3.1 The great distance towards power:
- assessment is accepted both as a hierarchisation action and as being followed by salaries/rewards differentiated according to the performances;
- the definition of the position's contents and of the distribution of activities is realised through the manager's authority and competence;
- the agreed and accepted assessment systems are hierarchical ones, those where subordinates (students) are assessing their superiors (the professors) being less credible!

3.2 The organisation's individualism:
- favours the assessment of professional performances on an individual base;
- participants express openly their point of view regarding the evaluation's contents and the colleagues' performances (the slogan "talking openly is characteristic for an honest person);
- a negative assessment brings with it the loss of respectability;

- people accept assessment only by means of rules (regulations).

3.3 The organisation's masculinity is reflected in:
- a high stiffness of the assessment operation exists (only according to the proposed algorithm);
- assessment is considered to be a challenge, a test which has to be always passed well, because failures are not accepted;
- a positive assessment brings with it an aura of "hero" of the organisation;
- the strong ones must be supported.

3.4 Avoiding uncertainty is visible in the performance assessment, if one takes into account that:
- the assessment has to be done always according to firm, precise regulations which do not allow interpretations;
- there is opposition to adopting a new assessment system that brings new criteria and standards;
- the assessments' objectives must be always known in advance.

3.5 The medium-term orientation brings with it arguments like:
- assessments are oriented towards emphasising a good reputation;
- assessments are rigorous, detailed, closely following the individual's evolution;
- elements related to the continuity of traditions, of customs etc. are capitalised;
- a negative assessment covers the receiver with shame;
- the "protection of honour", if the individuals' interests demand it;
- mutuality in evaluation.

3. Conclusions

(i) From the configuration point of view, the Faculty of Engineering has a "temple"-type culture, characterized by following elements:
- it has big organizational dimensions (members);
- it is divided in several departments that form the "columns" on which the temple stays and in which specific subcultures appear;
- the values and perspectives of the temple are given by its "roof", are clear and accessible;
- discipline, respect of procedures, the internal order regulations are the directing lines;
- the individual's perspective in a culture like this is narrow and related to fulfilling a specific role;
- it is unsatisfactory for the ambitious persons, who will aspire either to power or will leave the organization.

(ii) According to the accepted risk level point of view, the faculty's organization's culture is one of "process" type, characterized by slow reactions and low risk, having as fundament an algorithmisation based on strict rules and procedures.

(iii) According to the type of transaction that ties the individual to the organization:

- the organization's profile has both bureaucracy and hierarchy cultural elements.
- the organization has conservative and cautious leaders and the employees' agreement is being obtained by control;
- the dominant values are order and formalism.

The conclusions resulting from the analysis of the Faculty of Engineering culture's influence upon career development may refer to the fact that employees within the organization will assimilate the "practices" the organization indicates, but will maintain the values of the culture they came from and that characterise them.

(iv) Considering all that was presented so far, we can advance the possible evolutions of the culture, starting with determining indexes:

- first, a reduction of the distance towards power is requested, translated in the changing plan through the transit from the autocrat leadership to a predominantly consultative one, with the increase of trust in the employees;
- the deviation of "process orientation" towards the direction of "people orientation", with the reinforcement of the individuals' motivation for the organization they belong to.
- the reduction of uncertainty evasion level, through responsibility taking and individual initiative stimulation, encouragement of decision and risk taking.
- the slow reduction of masculinity (a thing likely to obtain, if we follow the research made. They showed that in the countries with a feminine national culture, like Romania, the masculinity trends decrease in time).

(v) Knowing all these aspects we can understand more easily certain gestures, actions and we can interfere to stimulate the positive effects of the cultural dimension. Only by being aware of the continuous dynamics of culture, of its division in specific subcultures, of the way these subcultures complete each other, of the interaction of the faculty's and university's culture we can prevent the possible "crises", discontinuities that sometimes may have catastrophic effects on the life of the organization. Let's not forget that any change is addicted to the culture that promotes it and the organization's future itself is influenced by its culture.

The research carried out is useful for the management of the Faculty of Engineering, at least due to arguments such as:

- knowing the culture is useful for the understanding of behaviours, expectations and motivations of the organisation's personnel;
- the management plan for the future will have to be realised taking into account the organisation's specifics, the manner in which its members expect and accept changes, so that it does not remain an utopical document;
- knowing the culture's specifics, inappropriate reactions due to surprising situations can be prevented, these often generating conflicts, misunderstandings and disturbances in the collective's life.

Powerful cultures often have a high level of stiffness and inflexibility and are threatened by the lack of sensitivity for internal and external changes, fact that is a danger for the organization's "healthy" life.

The most important thing in understanding a culture is to obtain a comparative and critical perspective. The fact that we have been talking about that organization's culture, usually for such a short time, is due to the lack of visibility of the culture. When it becomes visible, we are sure we can change it instantly. We set up new rules, values which we present to the members of the organization and we ask them to assimilate and apply them. Such a behavior is exaggerated. The culture of the organization has as effect the success and the performances of the organization, but they change with difficulty, if the organization is not a teaching one. This makes the cultural change to become a viable alternative. Let's not forget that for the future flexible cultures, adapted to the new and progresses are being asked for. We do hope that at the Faculty of Engineering of the "Lucian Blaga" University we will be able to certify the qualities of an organization that is learning.

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