

ORGANIZATIONAL CULTURE OF AN ENGINEERING FACULTY WITHIN A CLASSICAL UNIVERSITY

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Abstract: The paper aims at analyzing the type of organizational culture of the Engineering Faculty within the context of the classical university it belongs to, so that one can understand wherefrom to start in order to introduce the changes implied by the Bologna process. Therefore, a detailed research has been made in order to establish the main dimensions of the organizational culture as well as of the values existing within the faculty. The group to be observed consisted of faculty members both from within the faculty and from outside it.

Key words: organizational culture, values, educational change.

1. Introduction

The concept of "culture" is very much in use today. Etymologically, it comes from the Latin verb "colere" - having the meaning of cultivating, adorning. The term would have never changed its initial significance, that of working the field, without Cicero's intervention who associated it to another term, "anumus"- "animi cultura" thus becoming "the culture of the soul", of the spirit. So, the notion is not linked only to individual, spiritual development but it is associated to the idea of collectivity, of a society's people's or country's life. Along with the evolution of the meaning of culture in the second half of the 20th century, the concepts of organizational culture and managerial culture have emerged.

The Dutch specialist Geert Hofstede has identified two meanings of culture [2]:

- culture in a restricted meaning, which he calls "primary culture".
- culture as mental software, called "secondary culture".

About the last one it is said that it is always a collective phenomenon as it is at least partially accepted by people who lived or are living within the same social environment where it had once been learnt. Culture is not inherited but it is learnt. It comes into being not out of genes but from the individual's interactions with the environment. The cultural differences are manifested in different ways. The following four terms cover the global concept almost

completely: symbols, heroes, rituals and values. Figure 1 presents the components of the organizational culture, where the symbols express the most visible manifestations of culture and the values the deepest manifestations, between them being situated the heroes and rituals.

Starting from this presentation, it is interesting to notice the way each of these factors, visible or invisible, are operating on the institutional characteristics of an engineering faculty integrated within a classical university that is to identify the specific traits of the Engineering School of Sibiu. Therefore, we aim to find answers to some legitimate questions within the context of the present changes brought by the Bologna process and by the economic globalization:

- ◆ How does the organizational culture support the reform measures in the higher education system?
- ◆ Which of these values, representations, beliefs can allow the change in education and constitute the fundament of knowledge-based society?
- ◆ How can we change the organizational culture, in order to facilitate both the development of the knowledge-based society and the alignment to the current European educational demands?

The answers to these questions can bring forth the place and the way in which the change has to be accomplished, so that the university can be integrated within the current national and European educational standards.

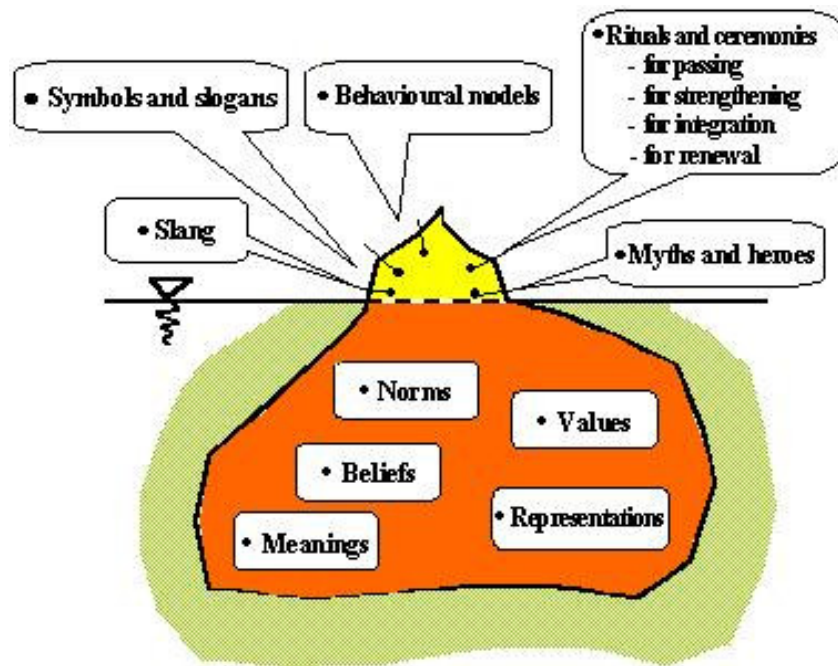


Fig. 1 The iceberg that defines the components of organizational culture

2. Identifying the culture

The interpretation and identification of culture entails the taking into consideration of interferences between the visible, noticeable aspects and the hidden, almost invisible ones. A correct decoding requires an investigation on a longer period of time.

Studies regarding the change in education prove that if a reform measure is not regarded as a cultural change, then the measure fails. Therefore, a change can be successful only if it influences also the prevailing cultural aspects of the respective organization [1].

The concrete 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.

By means of the case study and the associated methods, the research sought to identify both the dimensions of the present culture and the factors that can influence its maintenance and change on different time horizons. The coordinates of the research process of organizational culture have been accomplished with

the help of the approaches defined by the Dutch expert Geert Hofstede [3].

“The distance towards the power” is an important dimension for the future direction of the Faculty. It shows the way in which professors expect and accept the power to be divided unequally. A large distance towards the power reveals the prevalence and preference for authoritative management styles. The score achieved here shows that employees consider the style as one with the stress on authority and its specific methods are the assignment of task but not also of competences and responsibilities towards the faculty members. 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 second dimension, “individualism-collectivism”, refers to the prevalence of individual interests over the group ones, or of the group interests over the individual ones. The score achieved here indicates a stronger orientation towards individualism.

The interpretation of this dimension can start from the fact that links between the members of the Faculty are rather weak as intensity and come up in small groups, in the informal sphere. The

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. Most often the managers ask for information and take the decisions by themselves.

Specific for the individualistic culture is the idea that to speak openly is a trait of an honest person. Communication within the group is reduced to social conversations, even the communication with the students tends to be minimal. Another characteristic of individualistic cultures is the fact that there is a small loyalty towards the group, this being accepted only as long as the individual's interests are being promoted.

The aim of education is being perceived differently within the individualistic society, where the individual's training for a place within a society comes first, leading to training the young people to adjust to new things (new and unknown situations). This reveals a fundamentally positive attitude towards what is new. The goal of learning is less to know how to do and more how to learn. The supposition is that in life you keep learning, even after graduating. Therefore, the organization is trying to supply the necessary qualifications for the "modern man".

The third dimension "masculinity-femininity" refers to the greater social value granted to arrogance within masculine cultures or, to the contrary, to sensitivity and modesty within feminine cultures. The value obtained within the research shows tendencies towards masculinity. The traits identified as being specific for masculine cultures are:

- the strong wish to have opportunities for big gains.
- the need of being acknowledged when outstanding results are achieved.
- the wish to have opportunities to advance to a better position;
- the competitive spirit and the need to have an incentive activity
- the need for order and rigor.

The first conclusion that can be drawn is that the engineering profession belongs predominantly to men, so we could anticipate such a dimension.

The evaluation criteria for professors differs within the masculine and feminine cultures. With the masculine culture, the "brightness" and academic reputation of professors comes as a dominant factor. If such a dimension is put in relation with the one obtained at the level of poor countries, it confirms the rule according to which in poor societies men have priority in instruction and education. Also, in masculine-type societies women teach especially small children while men lecture in universities.

Within a masculine society the manager is a decided and aggressive type, and this word has a positive connotation. He does not offend if he is tougher. The values dominant within the society for the masculine culture are material success and prosperity, money and things. The solving of conflicts is possible by disputing them.

The fourth dimension refers to "avoiding uncertainty". By analyzing the filled-out and returned questionnaires, the registered score indicated a great wish of avoidance. The degree of avoiding uncertainty indicates the way in which the members of a culture feel threatened by uncertain and unknown situations. This feeling is expressed through a negative stress and a need for the predictable, materialized in a need for written, concrete rules. The dominant idea becomes "what is different is dangerous", while with those having a smaller degree of uncertainty avoidance, the slogan becomes "what is different is curious".

It must be said that uncertainty avoidance is not synonymous with risk avoidance. Uncertainty as compared to the risk means the same thing as anxiety as compared to frightening. As long as uncertainty is expressed as risky, it stops to be any source of anxiety. Moreover, avoiding uncertainty leads to a reducing of ambiguity. Cultures where uncertainty is being avoided keep out ambiguous situations.

The need for rules is extremely high for the Faculty of Engineering, it is even emotional. Inner rules and regulations are necessary for the control of the didactic and non-didactic process, although in this case a role is played also by the distance towards power. If this is large, as is the case in the Faculty of Engineering, the exercising of the superiors' authority replaces, to some extent, the need for internal rules. This need for rules is not based on a formal logic, but on a mental one. Beneath those affirmed above, the achieved score indicates that:

- the fixed syllabuses are preferred and the emphasis is placed especially on the correctness of the student's answer;
- it is considered that professors must have the answer to any question;
- there exists a negative attitude towards the students, these being considered as less and less well-trained;
- a resistance towards the new appears, a fact that can affect the way in which the changes are received and implemented, especially in the current context, of the higher education's alignment to the provisions of the Bologna process.

Beneath the identifying of the organization culture's dimensions, the research focused also on the

determination of the set of fundamental values of the group's members. Thus, in first place there is "order" and the age segment which has most chosen this value is under 35, followed by those aged between 46 and 55 years. Avoiding uncertainty and the great distance towards the power are factors that ask for a great need for order. This option can be placed in relation with the engineering training of the staff, it being one that imposes an algorithmization and a logic succession of the unfolded activities. There can also be an explanation linked to the type of society where professors have been trained. The individuals had the same professional path from the beginning until the end of the active life, most often keeping the same organization. Responsibilities were assumed by the state, there were no visible social problems at the level of society and they all outlined an image of "beneficial order". The second place, with 26 points, was occupied by "learning", which is a natural thing if we have in mind that the respondents are professors who grant a special importance to continuous education. Most respondents who chose learning, are within the age segment between 36 and 45 years.

In third position, with only 9 points comes "personal success", a thing in relation with the need for professional promotion, especially as it is backed by those under 35 years old. At equality we have "the people" and "the survival" and these values differ according to the staff within departments.

Taking into account everything that has been presented so far, we have to analyze the existence and specificity conditions of the Faculty of Engineering on the segment of a culture characterized by:

- great distance towards power;
- individualistic culture;
- a tendency towards masculinity;
- a high degree of avoiding uncertainty.

3. The analysis of the Faculty of Engineering

a) the policy of developing the Faculty is at the disposal of the chosen leaders. Both the structure and the construction of the classic university, with an accented autonomy of faculties, and the cultural characteristics invest leaders with discretionary power!

What conclusions can be drawn? There need to be trained and chosen leaders with a managerial education, while administrators and adventurers who can dramatically interrupt or change the organization's "life" must be avoided.

The development policy of the Faculty of Engineering tends to be a personal one, different from that of the university, due to the leaders' personality, to

the heterogeneity of faculties within the university's structure, as well as the uniqueness character of faculties within the composition of the university.

As can be seen from the research, the avoidance of uncertainty is rather high, which translates into the development policy by:

- firm rules in the educational activity, accompanied by correct answers and slogans such as "professors must have an answer for any question", all these being the symptoms of a "routine culture" with the classical picture of the obedient and good student totally in contradiction with the demands of the present engineering education.
- insufficient attitude and involvement in shaping the student's career, in guiding the youth who anyway had a more superficial training in high school than in other periods, this entailing the abandonment of studies or a delay in finalizing them.
- difficulties in integrating within the Bologna process by reluctantly accepting and acknowledging the studies with external mobilities.
- lack of communication (resulting from the individualistic dimension of culture). In a world of integration and globalization, this lack becomes a handicap for the policies and strategies for curricular changes.
- not least, the collectivism of a classic university, such as the one of Sibiu, renders communication and relationing with a faculty characterized by individualism such as is the Faculty of Engineering today, to be rather difficult.

b) Curriculum (design/development/evaluation): currently, at the Faculty of Engineering the curriculum is realized as follows:

- a large part (80%) of the criteria and standards are established by the National Council for Academic Accreditation and Evaluation (CNAAE) at the proposal of specialists from the big polytechnic universities in Romania (Bucharest, Timisoara, Cluj- Napoca, Iassy), the stress being on design-conception, to which are added a series of renewals due to the evolution of CAD/CAM/CAE and the influences of the European Union;
- there is an influence from the group of interests of the departments and members of the Faculty Board;
- also, the university is sending its influences expressed through more management, in more foreign languages, social-human education: communication, history of technics etc..

The curriculum's quality is determined by the conception, methodological knowledge and interests of the leaders, they constituting the second factor of influence after CNAAE. The syllabuses, true

"curricular genes", become "immortal, enduring" in the absence of a dynamic management. They are very slowly renewed, especially as this is specific for a collectivist culture, contrary to the one existing within the faculty at present.

The evaluation realized in the Faculty of Engineering is, to a large degree, standardized, based, in most cases, on reproducing and less on combining, applying. It is perpetuated through applying written exams, composed of test batteries, which are insufficient for the evaluation of the student's professional training. Currently, as the society demands creative, imaginative professionals, with communication and team work abilities, the traditional evaluation mechanism dig at the basement of real performance.

c) the community relationships emphasize a large variety of situations, due to factors which belong both to the traits of the institutions themselves, and to the elements specific for the present social context. There is a good dialogue on these relationships. The local community backs the faculty, assuring support for contracts with different companies or transnational firms, which can create a market for the labor demand. The Faculty of Engineering had a decisive contribution in bringing transnational firms to Sibiu, through the specialists "nursery" it creates, through its curriculum and the training possibilities it offers, according to the companies' wishes (laboratories created in the faculty, faculty members, open environment, ideal for cooperation etc.)

However, some weak points must also be emphasized:

- a weak relationship with industrial high schools, which are not yet convinced by, and openly distrust the revival of technical education.
- the weak relation with the Local Council for Development, materialized through a weak promotion of the idea of technical specialty education.

The direct results of these two weak spots materialize in the doubtful quality of candidates for admission at the faculty, most being mediocre in terms of aspirations and training.

d) the management of human resources: if we take into account the masculinity of the organizational culture, we can accept the idea that the human resource's promotion is done in this idea, which leads us today to have a very high degree of teaching positions filling, even an inflation, inducing distortions of the organizational culture by annulling and chasing away the "heroes".

Both as a consequence of the organization's masculinity and of the uncertainty avoidance, engineers are the promoters of regulations, rules, of the policy of strictly observing the adopted regulations, being very inflexible and willing to compromise in this area, even in the malleable and permissive environment such as the one of a classical university. A consequence of masculinity is also the positive attitude towards contractual competition (contracts, grants etc.) that bring gains, professional acknowledgement, outstanding results, the engineers being the most powerful, in this regard, within the "Lucian Blaga" University of Sibiu.

4. Conclusions

Engineers-leaders are appreciated as managers for their firm and sometimes tough attitude towards the management act, being avoided in action areas where the solving of problems asks for a compromise, for the temporary lowering of expectations, for solutions outside of regulations. The conclusions resulted from the analysis of the Faculty of Engineering's culture can refer to the fact that the employees within the organization will assimilate the "practices" indicated by the organization, while keeping the values specific for the culture they come from and which characterizes them. The index of distance towards power can function as a barometer regarding the level of corruption favored by a certain structure. The index of individualism expresses the suitability of the individuals within the organization to the demands of the present society, a suitability as individuals but not as collectivity. The masculinity index shows that both men and women within this culture have tougher values and the choice of the working place is in direct connection with the opportunities accomplished through career. The uncertainty avoidance index signals a reduced degree of tolerance towards small groups, towards the opening for adopting new technologies and the quantity of time spent for strategic planning within the organization. Knowing all these aspects we can easier understand some gestures, actions and we can guess where we can step in to stimulate positive outcomes of the cultural dimension. Only by being aware of the continuous dynamics of culture, of its division into subcultures, of the way in which these subcultures complete each other or interfere, of the interaction of the faculty's culture with that of the university, we can prevent possible "crises", potential discontinuities that can sometimes have catastrophic results for the life of the organization.

The research presented above is currently used for the following directions of organizational development:

- determining the components of organizational culture that can constitute strong and weak spots of the organization;
- realizing a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis for the organization so as to emphasize the main objectives of the organization;
- realizing researches on the emotional intelligence of the organization's members;
- realizing the organization's managerial plans, so as to allow the changes required by the European integration.

The alignment with a united Europe brings with it mandatory requirements, criteria and standards. Therefore, let us not forget that any change depends on

the culture which promotes it and that the organization's future itself is being influenced by its culture.

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