APPLYING THE O.C.A.I. MODEL OF THE ORGANIZATIONAL CULTURE ASSESSMENT INSTRUMENT IN THE INSPECTORATE FOR EMERGENCY SITUATIONS IN THE TIMIȘ COUNTY, „BANAT”

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Abstract
The organizational culture refers to the totality of values and beliefs shared by the members of an institution. Also known in the literature by the term corporate culture, the organizational culture guides the behavior of the employees and motivates them to act with more effectiveness, in order to reach the organization’s objectives. Since the understanding the culture of an organization is decisive for its functioning, the present study aims at analyzing the organizational culture of the Inspectorate for Emergency Situations in the Timiș County, „Banat”, through the O.C.A.I. model elaborated by Quinn and McGrath.

Keywords: organizational culture, the O.C.A.I. Model, the Inspectorate for Emergency Situations in the Timiș County.

1. Introduction
The organizational culture plays an important role in competition, since it supports the energy of the organization and answers the requests coming from outside the institution.

Consistent with the opinion of the renowned Dutch professor Geert Hofstede, the organizational culture can be described as follows:
- it reflects a holistic vision – referring a whole which is bigger than the sum of its component parts;
- it is historically determined – it highlights, to some extent, the organization’s evolution in time;
- it refers to the collective unconscious, as it reflects myths, rituals, symbols;
- it is socially founded, built and maintained by a group of people who form the respective organization together;
- it is difficult to modify – since it regards the intimate resorts of the personality of the organization’s members. In time, the culture can go through some changes, but the rhythm of this process differs from one organization to another.

From a structural point of view, one can distinguish two levels of organizational culture: the visible/outer level and the invisible/inner level. In respect of the first, we are considering the very factual elements which have a strong impact on those who first join this institution: the headquarter of the organization, the office configuration, the furniture, the dress code, the promoted behaviors or the employees’ conduct in their relation with the clients. However, the organizational culture also includes other aspects, such as:
- Short stories – stories regarding important moments and individuals within the institution;
- Heroes – the personnel with exceptional results in word, the outstanding managers, the founders;
- Rites – particular events within the organization (rites of passage, rites of delimitation, rites of accomplishment, rites of overcoming, rites of integration);
- Symbols – heraldry symbols, flags (3)

The literature presents numerous taxonomies of organizational cultures, both descriptive and explanatory, according to different listing criteria. In the opinion of the two above named experts, among the members of an organization or the work teams/groups, there are several important transactions (such as opinions, actions, consents) taking place. Thus, Quinn and McGrath identified four culture types which have the following particularities:

**The SUPPORTIVE (Collaboration) Culture Type - The Culture of Consensus – The Clan:**
- Family-like atmosphere;
- The binding element which keeps the members of the organization united is loyalty, mutual trust;
- Type of leader: facilitator, mentor, parent (focusing on support and interest). The power is exerted in accordance with the informal status;
- Values: open communication, participation, development;
- Effectiveness criteria: the team’s cohesion, the employees’ morale, the employees’ professional development;
- Management: considers that an active participation of the personnel in solving the tasks will raise the commitment to reaching the objectives.

**The AD-HOC (Innovative) Culture Type - The Ideological Culture – Bureaucracy:**
- Dynamic and creative environment;
- The binding element that keeps the members of the organization united is the commitment to innovations and development;
- Type of leader: innovator, has a very clear vision for the future, entrepreneurial character;
- Values: taking risks, sense of initiative;
- Effectiveness criteria: creativity, ability to overcome all obstacles;
- Management: considers that the sense of initiative leads one to new resources.

**The HIERARCHIC Culture Type (Control):**
- Very well structured and controlled environment.
- The binding element that keeps the organization united is well established norms and procedures;
- Type of leader: with a strong sense of order, monitors and coordinates all actions;
- Values: constancy, uniformity, efficiency;
- Effectiveness criteria: meeting deadlines, accomplishing all planned activities with precision;
- Management: considers that a greater control leads to a more efficient mobilization.
The MARKET (competition) Culture Type – the rational culture:
- Result-oriented;
- The binding element of the organization is the general emulation regarding the objectives to reach;
- Type of leader: long-run players, good producers;
- Values: market share, profitability;
- Effectiveness criteria: level of achievement of goals;
- Management: considers that competition is important for the increase of productivity.

On the basis of this taxonomy, K.S. Cameron and R.E. Quinn have drawn up an instrument for the assessment of organizational culture, with a stress on efficiency, practical utility, professional relevance and good applicability. Called the O.C.A.I. model (The Organizational Culture Assessment Instrument), it allows one to draw up the cultural profile based on at least four aspects of organizational culture: the organizational culture type dominant within the organization, the discrepancy between the existing organizational culture and the one preferred, the value of organizational culture as an essential element in the organization process, the assessment of the culture profile of the organization by comparing it with the average profile of the company it belongs to.

Starting from these ideas and from the activity undertaken within the Inspectorate for Emergency Situations “Banat”, our goal is to underline the main characteristic aspects of the organizational culture manifested within this professional emergency service. It is our opinion that the understanding and adequate approach of organizational culture are essential for ensuring a work environment which is favorable for the performance in the respective field.

Short Presentation of the Professional Emergency Services

On December 15, 2004, according to Government Decree no. 1490/2004 and Government Decree no. 1492/2004, professional emergency services in Romania constitute public services falling under the General Inspectorate for Emergency Situations (following the merging of the County Firefighter Groups and the County Inspectorates for Civil Protection).

The Inspectorate for Emergency Situations in the Timiș County, “Banat”, has a legal personality and ensures the planning and mobilization of its own resources for the implementation of the exceptional measures foreseen by the law, as well as for declaring the states of emergency and of war.

The Inspectorate for Emergency Situations in the Timiș County, “Banat”, has the role of management integrator in case of emergencies, on a local level, in its quality as a specialized structure. Thus, it aims at the harmonization of all competencies of the County Management System for Emergency Situations, in order to ensure its constant and efficient functioning. For this goal, several cooperation protocols with institutions, associations, foundations and other organisms have been signed and implemented, in order to join forces for defending life, goods and the environment.

Their fundamental goal is that of solving operational issues which regard the defense of life, goods and the protection of the environment, monitoring risk types in their competence area, analyzing and assessing the operative situation, organizing the
intervention and the specific medical activities in case of cataclysms, offering emergency medical assistance, extrication and psychological assistance, through:

- prompt and highly efficient interventions, falling within the response time settled on European level;
- rational repartition of the forces and means, following the same principle of response time;
- maintaining the foreseeable risks at acceptable levels;
- limiting the loss of lives, the material damages and the negative effects on the environment;
- protecting the citizens.

For all these, the professional emergency services are endowed with: water tankers working with water and foam, auto-mechanic stairways of 30 m, specialized tankers with dust and nitrogen, specialized trucks for extrication, endowed with several other tools and equipment for cutting and unblocking, ambulances endowed with full equipment for emergency interventions, transportation trucks and motor-pumps, etc., served by professional servicemen.

2. The Research Methodology

The Study’s Goal

Analyzing the cultural profile of the Inspectorate for Emergency Situations „Banat” of Timiș County using the O.C.A.I. model elaborated by Quinn and McGrath, with an approach wherein the cultural factor is considered a determinant element for the functioning of this institution.

The Overall Goal: to identify the values afferent to each basic cultural element (existent and desired) for the Inspectorate for Emergency Situations „Banat” of Timiș County, in accordance with the cultural assessment model created and proposed by Quinn and McGrath.

Research Hypotheses

Hyp.1: The cultural profile of the Inspectorate for Emergency Situations „Banat” of Timiș County shows a combination between the hierarchic culture type and the supportive culture type (according to the O.C.A.I. model), considering the type of activities undertaken;

Hyp.2: There are statistically revealed differences regarding the global cultural profile, between the organization culture which exists in the Inspectorate for Emergency Situations „Banat” of Timiș County and the one desired by the employed personnel.

Hyp.3: There are statistically significant differences regarding the fundamental elements of organizational culture of the Inspectorate for Emergency Situations „Banat” of Timiș County (dominant characteristics of the organization, leadership, management of human resources, the organizations’ strategy, organizational values and success criteria – according to the O.C.A.I. model proposed by Kim S. Cameron and Robert E. Quinn), differences between the existing organizational culture and the one desired by the employed personnel.
Participants
The participant subjects to this study were employees of the Inspectorate for Emergency Situations „Banat” in the Timiș County (650 subjects), officers, warrant officers, sergeants and contracted staff, with an average age of 34 years, both genders (being a military institution, most of the employees are of male gender, given that the percentage of men represents 94,8 %), civil state: the majority married (74,6%), with secondary education (34,30% being university graduates) and the average seniority within the professional emergency services being of 8,2 years.

Description of Investigative Instruments
For measuring and quantifying the investigated variables, we have used the following instruments of assessment of organizational culture:

a) Qualitative: a semi-structured interview, the systematic, participative and open observation, the analysis of internal documents: work procedures, internal and external reports, media articles on these institutions, case study.

b) Quantitative:

THE O.C.A.I. TEST The questionnaire is composed of 48 questions divided in two groups: the first measure the culture preferred by the employees. It mentions 6 dimensions regarding specific elements of the organizational culture (dominant characteristics of the organization, administration, management of human resources, the organization’s binding element, the values on which the organization is based, the success criteria) within all institutions. For all the 6 dimensions, there are 4 choices/answers. For each of the 4 statements (for each dimension) must allocate a total of 100 points, in respect of the degree to which they seem to match with the organization they are working at (or would like to be working at, for the dimensions in the second part of the questionnaire). The grading is done in a very simple way: all grades received at the first statement for each dimension (all A answers) are summed up, the sum being then divided by 6. The same will be done for all B, C and D answers. For the second part of the questionnaire (the one for the assessment of the desired culture), the grading is done in the same manner. In the end, there will be 8 scores, 4 results for the first part and 4 results for the second part of the questionnaire. Each score is related to a certain type of culture (Chart 1), indicating therefore the organizational culture type.

<table>
<thead>
<tr>
<th>The Support (Collaborate) Culture</th>
<th>The Adhocracy (Create) Culture</th>
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<tbody>
<tr>
<td>&quot;Oriented cultures are family-like, with a focus on mentoring, nurturing, and doing things together.”</td>
<td>&quot;Oriented cultures are dynamic and entrepreneurial, with a focus on risk-taking, innovation, and doing things first.”</td>
</tr>
<tr>
<td>The Hierarchy (Control) Culture</td>
<td>The Market (Compete) Culture</td>
</tr>
<tr>
<td>&quot;Oriented cultures are structured and controlled, with a focus on efficiency, stability and doing things right.”</td>
<td>&quot;Oriented cultures are results oriented, with a focus on competition, achievement, and getting the job done.”</td>
</tr>
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</table>

Table 1 – Organizational Culture Types

Source: Diagnosing and changing organizational culture: Based on the competing values framework. San-Francisco: John Wiley & Sons. Cameron, K. S., & Quinn, R. E., 2011
Elements of Operational Methodological Analysis and Data Processing

For a more precise statistical data processing, we have applied the statistical program package for social sciences SPSS for Windows, version 11.0.

In order to reach the objectives’ of this study, we have used quantitative and thereafter qualitative analysis of the obtained results. After calculating the first parameters, averages and standard divergences, we have used the test t as a comparison method for pairs of variables, on different aspects included in the hypotheses.

Analyzing and Interpreting the Data

The existing culture refers to the personnel’s perception on the existing and predominant situation within the institution, that is, the image the employees have of the dominant values within the organization, at the time of the filling in of the O.C.A.I. questionnaire. The desired culture stands for the personnel’s option regarding the dominant values of each type of cultural orientation within the organization; in other words, the desired culture is expressed through the employees’ preferences regarding the dominance level of each cultural orientation type (10).

Following the statistical processing of the data, we have reached the following results:

I. Concerning the existent organizational culture:

- the Inspectorate for Emergency Situations „Banat” in the Timiș County is characterized by an hierarchic organizational culture type. This is shown by the great gap (over 10 points) between the average reached by this type of culture (a = 32,83) and the other studied types (a = 21,86 for the market type of culture, a = 22,63 for the ad-hoc type of culture, a = 22,68 for the supportive type of culture).

Hence, even though we are speaking of an organization which is always meeting citizens in their emergency situations, we might have expected to find several elements specific for this type of supportive culture in its organizational culture. However, the quantitative analysis shows that in case of the Inspectorate for Emergency Situations „Banat” in the Timiș County, we are dealing with a dominant organizational culture of hierarchic type, which takes a toll on the behavior and attitudes of the entire personnel. Hypothesis no. 1 has been invalidated.

Beyond the public image of this organization, there also is an organizational culture characterized by bureaucratic mechanisms, where the procedures are governing the undertaken activities, making so that the work environment is strict, with a high degree of formalization and standardization, and the position hierarchy being the main power.

- Analyzing the organizational culture from the perspective of the six fundamental cultural-organizational elements (according to the O.C.A.I. model proposed by Kim S. Cameron and Robert E. Quinn), we can state the fact that the cultural profiles are, to a high degree, as follows:

1- The organization’s particularities: correspond to the hierarchic type (a = 28,99);
2- Leadership: it corresponds to the characteristics of the hierarchic type (a = 32,38);
3- Management of human resources: is one typical for hierarchic culture (a = 34,74);
4- The binding element of the organization: is given in the terms of the supportive culture type (a = 33,82);
5- The organization’s values: are those associated with the hierarchic type of culture 
(a = 24,82);
6- The criteria of success: are presented in the terms of the hierarchic type of culture 
(a = 36,69);

The Inspectorate for Emergency Situations „Banat” in the Timiș County is a complex, 
formal, well organized and coordinated organization, where military orders and 
rulings are visibly making a mark on the whole activity. The binding element which 
keeps the organization’s members united is the mutual respect and the loyalty to the 
institution, aspects which are often imposed by military rules.

II. As to the preferred organizational culture:

- A high grade was reached by the supportive type of culture (a = 33,33), while the 
average values of the other types of organizational cultures rank lower, the difference 
being of more than 10 points, with similar grades, varying between 20,48 (the market 
type of culture) and 23,11 (the ad-hoc type of culture);

The desired organizational culture is therefore a culture that corresponds to the 
specificities of the supportive type of culture.

The employees’ preferences bring to light a few of their needs: the need for an open 
communication (especially on vertical, both going up and going down), the need for 
the decisions to result from consensus and participation.

- Using also primary statistical indicators (the average, the standard discrepancy), the 
cultural profiles of the six fundamental cultural-organizational elements shows a great 
correspondence in drawing up a general profile of the organizational culture:
  - The organization’s particularities: describe a culture of supportive type (a = 24,11);
  - Leadership: presents elements typical for the ad-hoc type of culture (a = 32,14);
  - Management of human resources: is one typical for the supportive type of culture (a 
    = 29,72);
  - The binding element of the organization: corresponds to the specific elements of the 
supportive culture type (a = 39,46);
  - The organization’s values: are similar to the supportive type of culture (a = 24,82);
  - The criteria of success: are the specific ones for the supportive type of culture (a 
    = 36,72);

From the analysis of the above mentioned data, we can conclude that, in terms of the 
quantitative aspect, the 3rd hypothesis is validated.

The results obtained after the statistical processing is also supported by the 
information received from the semi-structured interviews and the systematic, 
participative and open observation, showing very clearly the desire of the Inspectorate 
for Emergency Situations „Banat” in the Timiș County’s personnel’s desire for the 
decisions to be a result of the agreement and active involvement, and for the 
leadership style to be based on support and interest.

After a more detailed statistical analysis, using the test t for pairs of variables (the 
existing and the desired culture) applied to the four types of cultural orientation, we 
have noticed some relevant differences of the average points given for the existent and
those for the desired cultural elements, for all types of organizational cultures studies. This comes to confirm Hypothesis no. 2.

The greatest difference between average values has been received by the hierarchic type of culture (9,75). Considering its positive value, we might state that, in real conditions, the increase of its value will automatically lead to the increase of the personnel’s desire that it be reduced. The difference between the average points for supportive and ad-hoc culture types have negative values, a fact which shows that the employees of the Inspectorate for Emergency Situations „Banat” in the Timiș County might prefer these kinds of cultures to be better represented in their organization.

Certainly, a lesser preference for the hierarchic type of culture could result from the nature of the activities undertaken by the professional emergency services, given that most of them require teamwork, an intense collaboration and the success being most often attributed to the members of the team that intervened (with different qualifications and non-hierarchical).

Furthermore, specialty studies have shown the fact that overall, among organizations supporting the citizens, there are no great differences noticed between the types of cultures, less so when speaking of cultures oriented towards power, which often result in lower grades for the desired culture. The general disapproval of this type of culture is caused by the particularities of the work offered, which, in this case, implies a great deal of collaboration and mutual help.

3. Conclusions and Proposals

The Inspectorate for Emergency Situations „Banat” in the Timiș County is an institution characterized by an ample system of formal procedures and a very well structured and strictly controlled organizational environment.

One of its fundamental objectives is that of building a strong, consistent and convincing status among citizens, and in doing so, it is mainly manifesting the hierarchic organizational culture type, with the characteristics of a military institution, such as discipline and a solid bureaucratic system, where the personnel holding administrative positions is the one to initiate and transmit the values and perspectives to the personnel hired on executive functions.

The personnel holding leading positions must strive to remodel the elements of the existing organizational culture, by facilitating open communication and adopting, in the due context, facilitation and mentoring behaviors; it can also focus more on the morale and the care for the employees, so that the employees’ ability to adapt and their commitment to achieving the objectives may remain as high as possible.

The personnel holding command functions should pay more attention to organizational culture, since it represents an invisible energy lying behind less obvious aspects of the organization, but which has an enormous capacity of motivating employees to take action.

The research study’s report should be presented to the whole management team, as well as to the structure managers, in order to raise awareness of the existing and the desired state of facts, to find the optimal solutions of improvement of the organizational-cultural elements that would facilitate the lowering of professional
stress and the increase of performances at work (such as: developing a supportive management style, encouraging open communication, etc.). (10).

4. Research Limitations and Future Directions

Assessing the organizational culture of the Inspectorate for Emergency Situations „Banat” of Timiș County has been undertaken by using not only the quality investigation methods, but also the O.C.A.I. test, which has a general character, allowing us therefore to build a general overview rather than an in-depth analysis of the causes and results. Therefore, one of the aspects that must by any means be approached in future studies is the use of a bigger and more elaborate test database.

It is possible that the results obtained might show differentiations in terms of the subjects’ gender (male or female), the mission types they participate at (firefighting, SMURD, extrication, pyrotechnic activities, CBRN, search and saving from water and closed spaces) or in terms of the position held (operative or non-operative positions), of the specific activities of the function they fulfill (administrative or executive functions) or the professional status (officers and warrants); therefore, one important aspect to be approached in future studies would be the drawing up of culture profiles also according to these criteria.

By knowing the culture profile of the organization they coordinate, the managers of the respective institution could foresee the success of the strategies to implement for the development of the organization and can set objectives and plan actions in accordance with the organization’s culture and environment.

The present study could support the personnel holding administrative positions and not only, by that it helps them gain a better understanding on the dynamic of the Inspectorate for Emergency Situations „Banat” in the Timiș County from the subjective experiences of the personnel of each intervention team or work group.

Our endeavor could also represent an important premise for the improvement of intra-organizational as well as inter-organizational communication, but also for the improvement of decision making.

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