Abstract

The success of public and business activities fundamentally depends on the management through decisions. In our opinion, a synchronism between public and business management is a must in order to find proper solutions, especially in crisis time. On the other hand, there should be differences regarding the main components’ importance and the attention paid to them. We consider that illustrative of a future development of integrated mechanisms is to analyze if there is convergence of opinions regarding the role of four main coordinates for the achievement of an effective management: (1) The mission of the institution; (2) The knowledge effects (competence/proficiency); (3) The desired change; (4) The managerial decision basis. The study focused on the six possible connections that can be established between these coordinates, the accumulated junction of the subjects’ opinions pointing out the similarities and differences between the two studied groups (the public and the private environment). The work aims at building up a matrix of contingency and searching for some maximum or minimum zone within the matrix. The conclusion is that in the first instance importance is given to prognosis and ways of responsibility and meantime the diagnose-analysis and systems balancing basically are not taken into consideration. The results point towards the fact that managers are not used with an integrated overview and a systemic approach to the phenomena.

Keyword: public management, business management, confluences, synchronism, matrix

JEL Classification: M10, H83, C83

I. Introduction

The economy has seen along the time, predictable developments, but also sudden changes brought about mainly by the emergence of some crises. The economists concern focuses on the prediction mechanisms suitable for these major breaking-off moments or changes that can occur, but mostly on the forms of counteracting their

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negative effects. In our opinion the management of the economic issues within these periods of time is very important for shortening the “life cycle” of the phenomena and counteracting their effects.

The adjustment of the socio-economic system can be achieved only under the condition of two major components involvement, the state and the economic environment (business environment). In the context of an economic crisis, the way the executive power understands to propose and implement a program of protection, counteracting, support, discouragement measures, etc. to bring about a fast adjustment of the market mechanisms is fundamental to the creation of the necessary framework for the development of similar mechanisms at micro-economic level.

To obtain the foreseen results it is imperative that the business environment involve, also by dialogue, in the integrated effort. The lack of convergence between the actions of the two components is, in our opinion, the most dangerous breach that can endanger the whole system.

The questions to which the authors are looking for answers are: “Success factors for public and private institutions reside in the link between mission – knowledge – change – decision process?”, and “Is this the same for the public and the private sector?”

In this context, we consider that illustrative of a future development of integrated mechanisms for reacting to disturbing large phenomena is to analyze if there are, in the public sector managers’ opinion, convergence of their opinions regarding the role of four main coordinates for the achievement of an effective management: (1) The mission of the institution; (2) The knowledge effects (competence/proficiency); (3) The desired change; (4) The managerial decision basis.

The relevance of the study consists in highlighting the existing link and the importance of the components given by studied subjects and in identifying similarities or disparities between the public and the private sector. At the same time, the construction of the link is made by items and it is important to know the perception of the subjects of their contribution. This will give information on potential gaps that are influencing the performance of the institutions. By getting information on the strong and weak points an adjustment process could be designed, such as amending the curricula, designing the training programs, using new managerial methods, increasing the active involvement of the employee in the managerial process, etc.

The scientific area is responsible of finding solutions, designing procedures, techniques, methods and, furthermore, of finding new theories in order to cover deficient areas and to build up a proper relation between the sectors. On the other hand, the results of the study could provide practical information for the educational system: whether to revise the main topics, to add the missing parts or to leave more space for the interdisciplinary approach and the holistic overview and to focus on the development of the abilities of the professionals.

II. The research hypotheses

The hypotheses that this work wishes to examine come from the existence of similitude-convergence and difference-divergence between the subjects opinions’ regarding the role and importance of the correlations between the institution mission,
the managers’ proficiency, the desired change and the basic elements in the two sectors. In our opinion, we can thus identify potential factors of success or failure in the context of an emerging crisis.

The established hypotheses are:
1 – There are differences in opinion between the public sector and the private one;
2 – The junction of the main and secondary accumulation represents key elements in the most favorable management decisions;
3 – The discovery of anomalies can signal possible weak points.

Using further the convergence points, one can draw up action programs so that both components harmonize the decisions, with the end to regulate promptly and flexibly the system.

III. The research methodology

The study focused on six possible connections that can be established between these coordinates, the accumulated junction of the subjects’ opinions, pointing out the similarities and differences between the two studied groups (the public and the private environment).

The present research has exploratory content and considers several topics: organization membership, the number of employees, the organization's mission, the skills of the management professionals, the education required by management activities, the knowledge required for management professionals, the effects of modern theories on knowledge management, the elements of change in the public sector for a quality management, the elements of the decision process. The paper is focused on the potential correlation between four elements: the organization’s mission (mission), the required knowledge for the management professionals and the effects of knowing the new management paradigm (knowledge), the elements of change in the public sector as a result of a quality management (change) and the elements of the decision making process (decision).

The target collectivity was that of employees in the public sector and business aged over 18 years from Bucharest, Timisoara, Târgoviste and Constanta.

The sampling method entailed the proportion of the respondents from the public sector together with the proportion of the respondents from the business environment, with an estimated error of 3.14%. We decided to involve similar volumes of samples from both sectors in order to have compatible blocks of data.

In this case, we are dealing with estimation through a confidence interval \([p-\Delta; p+\Delta]\) according to the equation for the sample volume:

\[
n = \frac{t^2 p(1-p)}{\Delta^2} = 667 \tag{1}
\]

where: 
- \(n\) = sample volume;
- \(t\) = value for the Student distribution for the confidence interval of 90% and \(n>300\);
- \(p = 0.54\), with the mention that the term \(p(1-p)\) is relatively constant;
- \(\Delta = 3.14\%\).
The sample volume is structured as follows: 362 respondents from the public sector (according to the preferential probability) and 305 from the business environment (according to the non-preferential probability).

The questionnaire method was the survey in the field with interviewers. The questionnaire had ten questions, but only four were considered in the paper. Each of the studied questions was of closed type and had six answer options. The subjects had the possibility to mark one or multiple options (the full text of the questionnaire is presented in Appendix 13). Also, the full matrix of the options is presented in Table 1.

The recorded answers were centralized in an Excel file. Data were transformed into codes: 1 for the presence of the answer and 0 for its absence. Thus, for the four questions with six options each, four data blocks were obtained:

$$Q_{s,i,k}, \text{ with } s=1...4, i=1...667, k=1...6.$$  

A sample of the data blocks is presented in Appendix 2.

The convergence table was built with a subroutine in Visual Basic, according to the following equation:

$$V_{s1,s2,i,k} = \begin{cases} +1 & \text{for } Q_{s1,i,k} =1 \text{ and } Q_{s2,i,k} =1 \\ 0 & \text{for } Q_{s1,i,k} =0 \text{ and } Q_{s2,i,k} =0 \end{cases}$$

Tables of convergences were built, denoted by $C_1,C_2,...,C_i,...,C_6$, showing the frequency of synchronic answers for the six pairs of options:

$C_1$: Mission – Knowledge effects  
$C_2$: Mission – Change  
$C_3$: Mission – Decision  
$C_4$: Knowledge effects – Change  
$C_5$: Knowledge effects – Decision  
$C_6$: Change - Decision

The subjects’ options for characteristics are presented in Table 1.

### Table 1  
**The possible options for the analyzed parameters**

<table>
<thead>
<tr>
<th>Mission</th>
<th>Decision</th>
<th>Knowledge</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product/service</td>
<td>Diagnose-analysis</td>
<td>Bureaucracy cut</td>
<td>Education</td>
</tr>
<tr>
<td>Market share</td>
<td>Prognoses</td>
<td>Activity efficiency</td>
<td>Way of designation</td>
</tr>
<tr>
<td>Staff</td>
<td>Effects estimation</td>
<td>Products/services improvement</td>
<td>Way of estimation</td>
</tr>
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<td>Immediate action</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Segments of target beneficiaries</td>
<td>System balancing</td>
<td>Profit-making increase</td>
<td>Ways of responsibilities</td>
</tr>
</tbody>
</table>

3 The appendix can be found on the journal site: http://rjef.ipe.ro.
Each subject had the freedom to mark as “important” one or more options for each characteristic.

In our opinion, the analysis of the convergences is based on building up a matrix of contingency and on the search for some maximum or minimum zone within the matrix (Appendix 3). The method is frequently used in the study of issues regarding possible classifications.

As a statistical method, it takes into account the hypothesis that a component of a group can place itself in a convergence or divergence zone, depending on its place near a maximum or minimum junction in a contingency.

The place of each element is given by the simultaneity of a subjects’ group opinion for the specific state of each variable $V_{s,i,k}$, resulting a database comprising the answers of all subjects who are or will be in a managerial position.

The general term of the $V$ matrix is:

$$V_{s,i,k}, \text{ where: } s=1, \ldots, 4, \text{ i}=1, \ldots, 667, \text{ k}=1, \ldots, 6$$ \[3\]

Individually, we get four vectors, as follows:

$V_{1,i,k}$ – answers regarding the institution’s mission;

$V_{2,i,k}$ – answers regarding the identified effects of knowledge;

$V_{3,i,k}$ – answers regarding the change;

$V_{4,i,k}$ – answers regarding the education of the management decision-makers.

To identify the relations between the four characteristics, convergence tables for pairs of vectors $V_{s,i,k}$ were built, according to the general model:

$$C_{1,2}^{r_1, r_2, t_1, t_2} = \sum (V_{r_1, i, t_1} : V_{r_2, i, t_2}) \text{ for } V_{r_1, i, t_1} ≠ 0 \text{ and } V_{r_2, i, t_2} ≠ 0$$ \[4\]

where: $r_1=1, \ldots, 4; r_2= r_1, \ldots, 4; i=1, \ldots, 668$ and $t_1, t_2=1, \ldots, 6$.

On the basis of the convergence tables, the weights of the answer frequency in total were calculated, since they are relevant. Thus, a set of tables is obtained, which in the next stage offered the possibility to identify the absolute values of the maximum.

$$M C_{1,2}^{r_1, r_2, t_1, t_2} = \text{max} (C_{1,2}^{r_1, r_2, t_1, t_2})$$ \[5\]

The local maximums are placed near the absolute maximum, according to the answer attributes for the four characteristics.

### IV. The research results

Considering the values obtained, the following conclusions are presented for the six pairs of registered characteristics.

**C1: Mission-Knowledge effects**

In the public sector, the majority perception registers the maximum value for the connection between the Market share-Products/services improvement and second largest values for Market share-Red tape cut and Market share-Improvement of institution’s communication with its beneficiaries (Figure 1). Regarding the private sector, the maximum value is for Market share-Products/services improvement, and
the second largest values are those of Market share-Communication improvement, Market share-More responsible employees, but also Product/service-Products/services improvement, Product/service-Improvement of institution’s communication with its beneficiaries, Product/service-More responsible employees.

Thus, a common element for the first place in the case of both sectors is pointed out, namely the pair Market share-Products/services improvement, while on the second place the public sector places Market share-Red tape cut, and the private sector Market share-More responsible employees, both sectors choosing also for a second place Market share-Improvement of institution’s communication with beneficiaries. Together, Market share-Products/services improvement remains on the first place, the second place combining all the options of the two environments (see Figure 1).

**Figure 1**

Mission and knowledge in the public sector

C2: Mission-Change

The connection between mission and change is pointed out by the private sector as being determined by Market share-Ways of responsibility in the first place and, secondly, by Product/service-Ways of responsibility; Market share-Preparation; Market share-Way of designation (Figure 2 – dark marks for maximum values, light marks for the second level).
For the public sector, the perception is placed first on the relation Staff-Ways of responsibility and, secondly, on Product/service and Way of designation, Ways of estimation, Ways of motivation/personal interest and Ways of responsibility (Figure 3 – dark marks for maximum values, light marks for second level).

Figure 2

Mission and change in the private sector

Figure 3

Mission and change in the public sector
One may see that the main place is common to both environments and in the second one only the junction Product/service-Ways of responsibility is common, the others being different. An analysis of the whole sample points out the continuation of these two options with the same level, while the others are spread in the zone of irrelevancy.

**C3: Mission-Decision**

Regarding the correlation between mission and decision, the perception in the public sector shows as essential the connection between Market share-Immediate action and, in the second place, Market share-Prognoses and Dysfunction removal (see the light solid arrow in Figure 4). In the private sector, the connection is made through Market share and Prognoses in the first place and Market share-Effects estimation, Immediate action, Dysfunction removal and Product/service-Prognoses, Effects estimation (see the dark solid arrow in Figure 4).

For all the observations, both the relation Market share-Prognoses and Market place-Immediate action stay in the most important place.

One may notice that the values for the weights of the correlated options ranged within a rather narrow space, namely 2-8%. In the table Mission-Decision appears a first discrepancy, meaning that the Diagnose analysis and the System balancing are options that register many times a null weight or one of 1% at most.

**C4: Knowledge effects-Change**

In the public sector, one may see that most of the options are grouped mainly in the junction between Products/services improvement and Way of responsibility. In the second place, the options gather at the junction Way of motivation-Products/services improvement; Way of responsibility-Profit-making increase; Way of responsibility-More responsible employees; Ways of motivation-Profit-making increase; Way of designation-Products/services improvement; Way of designation-More responsible employees; registering a rather large spread and giving importance to a significant
number of options. Figure 5 shows the results for the public sector’s highest value by dark solid arrow and for the second largest values by light dotted arrows.

**Figure 5**

**Knowledge and change in the public sector**

The results for the private sector and the conclusion for the entire sample are presented in Figure 6. In the private sector, the options are grouped only around three axes, namely: Products/services improvement and Ways of responsibility, which register the maximum value (dark solid arrow) and Ways of responsibility-Profitmaking increase together with Way of designation-Product/services improvement, which register second largest values (dark dotted arrows).

**Figure 6**

**Knowledge and change in the private sector**
It results that for the whole sample five elements are important: Ways of responsibility and Way of designation and Profit-making increase, Products/services improvement and More responsible employees (falling arrows).

**C5: Knowledge effects-Decision**

Figure 7

Figure 7 shows the results of the subjects’ options for knowledge effects and decision-making in the public sector. Thus, the subjects’ opinions in the public sector come together around two axes: Prognoses-More responsible employees and Prognoses-Products/services improvement (see the solid dark arrows). In the second place, two other axes are identifiable: Immediate action-More responsible employees and Immediate action-Products/services improvement (see the light dotted arrows). Practically, two components of the two studied axes/directions are pointed out.

Figure 8

Knowledge and decision in the private sector
The private sector, in its turn, registers a larger spread of options, placing on the first place Prognoses-Products/services improvement, similarly to the public sector, and Dysfunction removal-Products/services improvement (solid dark arrows). The second place is more uneven, gathering Prognoses-Communication improvement; Prognoses-More responsible employees; Immediate action-Products/services improvement; Effects estimation-Products/services improvement (dotted dark arrow).

This dispersion continues also for the whole sample, this pointing out the importance of More responsible employees, Communication improvement, Products/services improvement, Profit-making increase and Dysfunction removal, Immediate action, Effects estimation, respectively (the flowing arrows in Figure 8).

**C6: Change-Decision**

The relation between change and decision registers the maximum values for the public sector in the case of Prognoses-Ways of responsibility and the second largest ones in that of Immediate action-Ways of responsibility, Dysfunction removal-Ways of responsibility (the light bars in Figure 9).

In the private sector, the maximum is registered for the pair of options Prognoses-Proficiency levels, in the second place one finding the options line for Proficiency levels and Effects estimation and Effects estimation, Immediate action and Dysfunction removal (dark bars in Figure 9).

**Change and decision in the public sector**

![Figure 9](image)

Regarding the whole sample, it is obvious, as in the other cases where the decision was aimed at the subjects’ options, that they almost do not attach importance to Diagnose-analysis and System balancing. The maximum values are placed on the axes Prognoses and Way of designation, Proficiency levels, Ways of responsibility. As for the rest, the option spread rather uniformly, so that no second level is formed.
The elements considered of importance by the subjects are shown in Figure 9.

V. Conclusions

The study points out three basic aspects regarding the existing options for the importance of the analyzed components in four directions, namely company's mission, knowledge effects, decision-making process and the change mechanisms, and the classification of these options of the studied pairs.

A first finding is that there are differences of the obtained values expressed as frequency of simultaneous options, but these do not register very strong polarizations. This fact leads us toward a first conclusion, namely between the two studied sectors the differences in opinion and perception are not so significant as to justify management segregation.

A second aspect is that the diagnose-analysis and the balancing of the system are practically missing as possible options of the subjects. Better said, the subjects almost ignored them, and in our opinion this is a very important and even critical aspect. This fact shows that either ignoring the importance of the two components, or having poor education or fearing to approach more complex components. The lack of interest in the system balancing can signal the absence of an integrated vision and of the potential for a complex approach to the matters. We consider that this conclusion of the study has to be explored more deeply to find out the causes that determined this option and to act accordingly.

A third finding is that out of 216 possible connections between the six components of the four analyzed directions in six pairs classified simultaneously, the following options have strong correlations between them:

1. Market share-Products/services improvement
2. Market share-Immediate action
3. Market share-Prognoses
4. Staff-Ways of responsibility
5. Market share-Ways of responsibility
6. Product/Service-Ways of responsibility
7. Products/services improvement-Ways of responsibilities
8. Products/services improvement-Prognoses
9. Ways of responsibility-Prognoses
10. Proficiency levels-Prognoses
11. Way of designation-Prognoses

That means that the subjects’ options placed in the first echelon of significance 5% of the possible variants.

Table 2 shows the four directions with the possible options and the frequency of the components in the relation that polarized the maximum of options. Thus, Prognoses and Ways of responsibility are placed on the first level, meaning that the subjects think that knowledge is very important, even the presumptive one of the future period, for
making decisions in accordance with the possible coordinates of evolution (dark gray background). The individual responsibility of each participant in the decision process, but also in the operational one, is, also, a significant component, as it springs from the premise that in such a way everyone would be directly concerned with the wellbeing of the institution, either public or private.

In a second position it is Market share, pointing out the fact that the subjects are aware of the necessity that the institution is related to its market share (grid background). The institutional and personal performance cannot be estimated or quantified outside the desires, needs and perceptions of the beneficiaries and consumers, respectively. Also, at the same level there is products/services improvement as a form of referring to the market expectations.

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<td>Diagnose-analysis</td>
<td>Bureaucracy cut</td>
<td>Education</td>
</tr>
<tr>
<td>Market share (4)</td>
<td>Prognoses (5)</td>
<td>Activity efficiency</td>
<td>Way of designation (1)</td>
</tr>
<tr>
<td>Staff (1)</td>
<td>Effects estimation</td>
<td>Products/services improvement (3)</td>
<td>Way of performance estimation</td>
</tr>
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<td>Ways of responsibility (5)</td>
</tr>
</tbody>
</table>

The third level is represented by Product/service and Staff, clearly very important elements for defining and implementing the institution’s mission (light gray background). The way of designation of management and its proficiency level can determine distortions both through the accession of inadequate persons to management and decision-making positions and through inflexible, slow mechanisms in the decision-making process, leading to fatal delays in solving problems. Beside them is Immediate action, pointing out that the subjects know the importance of the reaction time in obtaining the foreseen results.

In the last place there are, as we already have shown, Diagnose-analysis and System balancing (Bold Italic). The Price and Promotion/show are placed on the last level seemingly not a contradiction, but Red tape cut and Profit-making increase need to be discussed regarding the motives that placed them, in the subjects’ options, in this position (Italic).
VI. Further research

A further development of the study will give the opportunity to research more deeply the subjects’ motivation, at least regarding the options that are under question, and will allow better education of the persons in managerial positions who have the responsibility of decisions, both in the public and the private sector.

A direction for further research could be to see if the absence of subjects’ opinions regarding diagnose-analysis and system balance as key aspects of the decision-making process comes from poor knowledge of the subjects, having less developed analytical and overview skills, or from an incorrect understanding.

The link between the public and business sectors has to be studied from different perspectives to assess better the differences and the similarities that may influence performance. Against this background, designing new methods, techniques and tools able to respond to the present challenges of both sectors represents a priority.

The possibility of knowledge transfer from the business sector to the public administration must be employed by taking into account researches on perception, opportunity, potential effects, and estimated risks. In addition, the development of models (optimization of sectors’ performance, economic and regional development, management, product/services improvement, policies implementation, etc.) should take into consideration the skills of the personnel and knowledge management in the studied sectors.

Comparative studies on knowledge, skills, activities, expectations provide the educational system with reliable information for further development of the educational programs. It is well known that the public sector is mainly oriented to vocational abilities and the business sector to profitable jobs.

A broader subject to be taken into consideration as further research is the harmonization of the decision-making processes between the sectors starting from present findings and completing them with a larger approach to the systems’ components. Reaching a potential architecture of the integration of the studied system and of the strong links that may determine high performance is a final target of spot-specific studies.

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