TECHNICAL UNIVERSITY OF CIVIL ENGINEERING OF BUCHAREST
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Title of the thesis:

CONTRIBUTIONS TO STRATEGIC MANAGEMENT OF CONSTRUCTION COMPANIES

Research Report no. 3

CASE STUDY USING INTEGRATED MARKET MANAGERIAL ANALYSIS

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ABSTRACT

Understanding a company potential, in particular of a construction company, and its "health" status diagnostics besides the market where it has its activity, is essential to identify its internal weak points and to strengthen there where it is needed.

The last research report is looking for a *case study of a construction enterprise, based on the access over its databases*. It is intended to apply the integrated market management analysis using the methodology which follows to be developed and to obtain conclusions based on indicators used in the analysis. Based on the obtained conclusions, it will be proposed solutions for growing the potential of the construction company and to fix deficiencies, there where they will be found.

1. Managerial and economic criteria of the integrated analysis of the company

Implementing a strategy is preceded by its realization, and *for realization of a strategy it is needed by data on which it can be grounded*. In this chapter we follow to introduce an integrated managerial analysis methodology of a company, which implies the access to data of the construction company, by which it is desired to set a “diagnostic” for looking the “health” state of the company and to suggest or even to indicate the measures that should be taken by the company management in order to “recover” and, even more, to improve the “physical condition” of it, that should tend to performance. This comparison of the company with a living organism is not at all a random one, if we consider that it is a cell, bigger or smaller, of a living organism which is the macro-economy of a country. Like any living organism, the cells are born, they live until a maturity level followed by a decline and, at the end by their death.

It has been statistically found that a big company, from the west of Europe, had 20 years ago o living life between 40-50 years, but, once with the technological growth, this average was reduced to 15-20 years. In Romania this living life is in average 10 years, more exactly nine years, nine months and 22 days, according to the data from the Trade Register for the year 2015. In “life”, until today, there are only 20 companies founded before 1990.

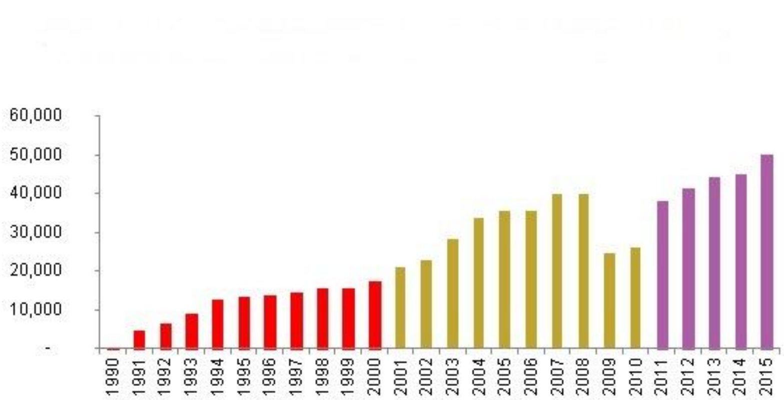

Fig. 1 - Distribution of active companies by year of registration (*Source: Trade Registry*)

Starting from these premises we asked ourself what would be the solutions to increase this age in the actual conditions. A possible answer was given by specialists, economists and engineers, whom suggested that *the innovation is the key to survive* on medium and long term of a company.

In this section it is proposed like a complementary measure to innovation, a *periodic screening* of the company in order to find from the beginning the signs of a possible “disease”, anomaly or risk factors. After it was specified, using this analysis that we want to come in help of the managers, in order to be their own analysts and first evaluators, in this way intervening in time over the signaled deficiencies, using the integrated managerial analysis, in the company.

In this way it can reach different levels of depth, by looking the integrated managerial analysis, those depending by the manager but also by the size of the analyzed company.

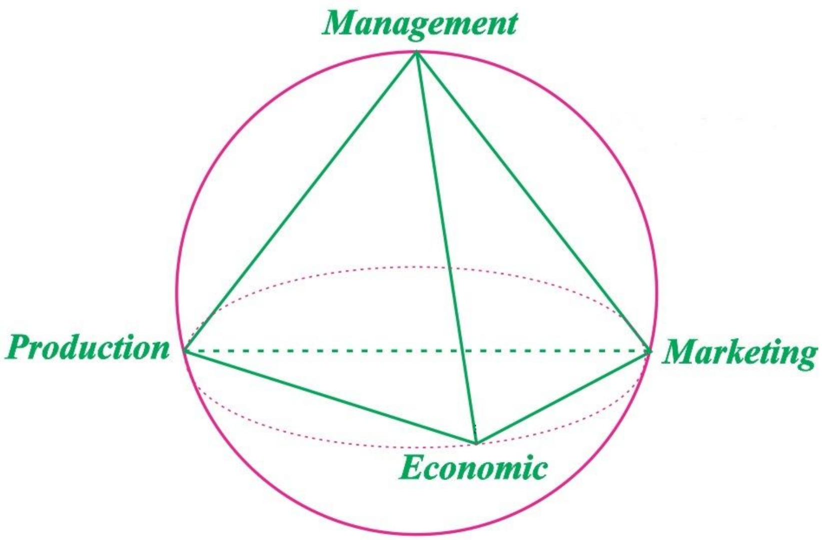

Fig. 2 - The integrated management analysis areas of the analyzed company in the methodology

In this way we can have three types of analysis:

- detailed anlysis, on indicators;
- medium analysis, of directinos;
- summaru analysis, of the field.

The analysis of domains, directions and indicators leads to establish points for each analyzed field, showing to us that if there are concrete results within that domain, and the efficiency grade is the problem of the management and consultant science that interprets the obtained results and they decide what measurements to be taken accordingly. In the following sections it will be shown the evaluation mode of those four fields together with those 64 indicators taken into calculation, where for each indicator it be given a grade from 1 to 5, by whom it is desired to obtain a company screening with relevant results for the leadership.

2. Management domain

The management domain is the first with wich it starts the description on domains of this methodology, starting from the idea that the company management should be the first which desires this kind of analysis because based on it depends the measurements that will be taken later on after finishing the analysis.

The four main domains from the management that would be taken into consideration for the analysis are:

- **Organization - Restructuring Direction (maximum 10 points),**
- **Strategic – Planning – Decision Direction (maximum 15 points),**
- **Informational Systems Direction (maximum 15 points),**
- **Human Resources Direction (maximum 40 pints).**

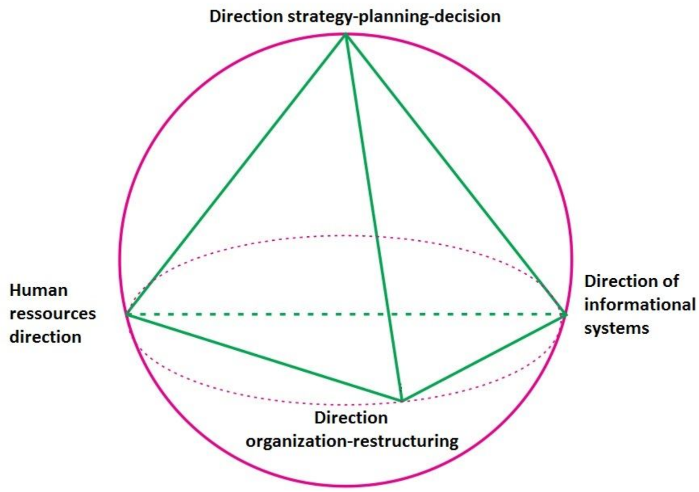

Fig. 3 – Representing on analysis directions of the management domain whose symbol is the sphere

The distribution of the 16 indicators in the four directions will be shown in a table, where each direction has a distinct number of indicators taken into the analysis.

3. Economic domain

The economic domain follows the same organization on four directions, that sums a maximum of 80 points, as follows:

- **Financial – Accountant Direction of the Company (maximum of 20 points),**
- **Cost Economy Direction (maximum of 20 points),**
- **Relation with Bank and Insurance Societies Direction (maximum of 15 points),**
- **Economic Efficiency Direction (maximum of 25 points).**

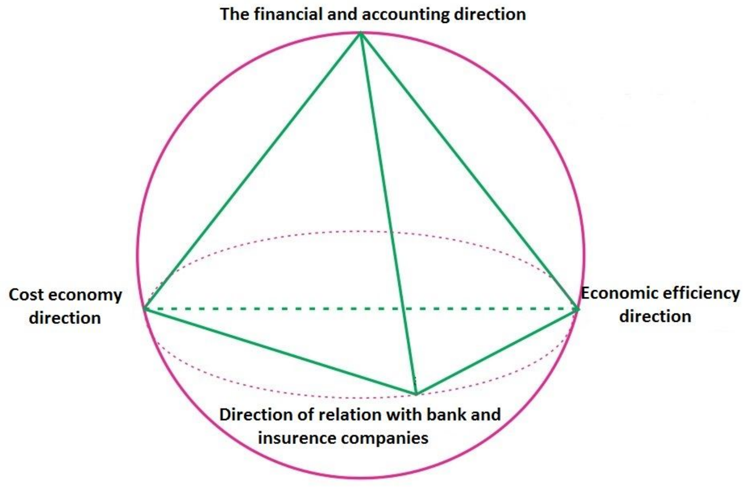

Fig. 4 – Representing on analysis directions of the economic domain whose symbol is the sphere

In this case the share of the four directions is about equal. The distribution of those 16 indicators over the four directions will be shown in a table, where each direction has a distinct number of indicators taken to analyze.

4. Marketing domain

The marketing domain follows the same structure, on four directions, as follows:

- **Product Sales Direction (maximum 25 points),**
- **Study and Marketing Analysis (maximum 20 points),**
- **Image – Promotion Direction (maximum 15 points),**
- **Relation – Contracting Direction (maximum 20 points).**

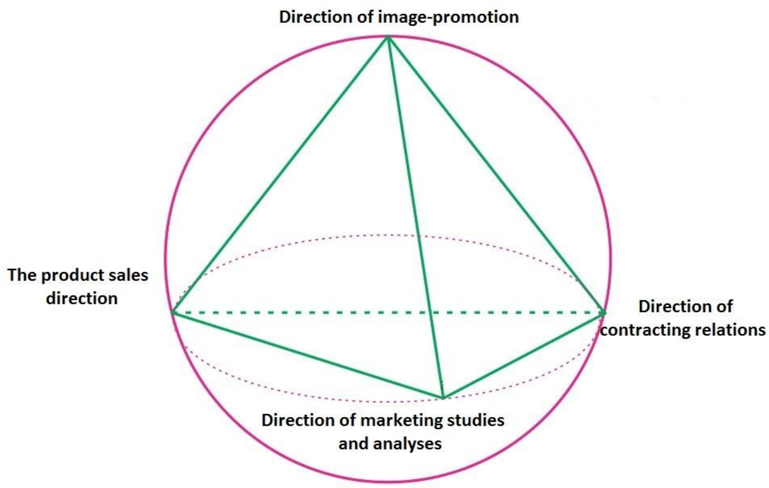

Fig. 5 – Representing on analysis directions of the marketing domain whose symbol is the sphere

The value and the importance of this field is given by the mission that it has, that of maintaining competitive the company on the market, in our case on the constructions market.

5. Production (quality) domain

The production domain follows the same structure, on four directions, as follows:

- **Quality Direction (maximum 35 points),**
- **Production Operation Direction (maximum 20 points),**
- **Technology – Refurbishment Direction (maximum 15 points),**
- **Research – Development Direction (maximum 10 points).**

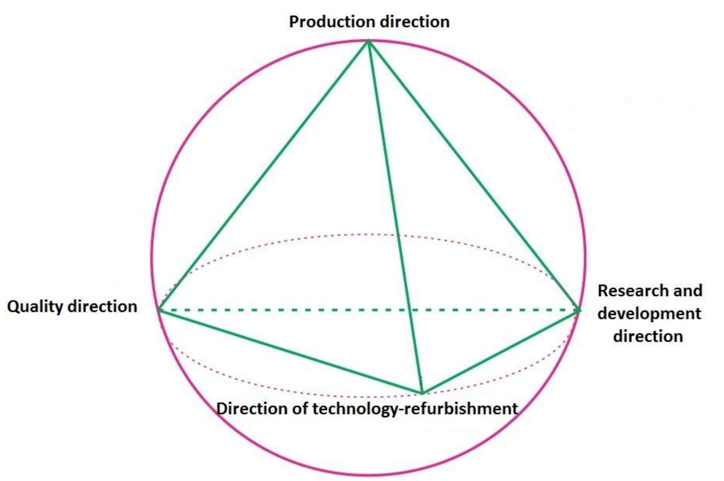

Fig. 6 – Representing on analysis directions of production domain whose symbol is the sphere

Production domain is the one which offers the activity field of the company, here we refer to companies that have the activity field to produce goods, in particular civil constructions.

6. Visualizing the evaluation methodology of the company from the point of view of the integrated management.

Cardinal model

Further, the integrated managerial analysis will contain, for study, only four domains (directions or, equivalent, components):

1) the leadership (the management) of the company (firm),
2) the economy of the firm,
3) the marketing (market) of the company (firm),
4) the production of the company (firm), which means goods and/or services.

Therefore, we are not going to evaluate the *legislation* (*the legal*) where the company has its activity in the sector where it activates, because this component can differ more or less from one country to other and/or from one market to other.

On future, as a possible direction of further research, it can be taken into calculation also the legal component for which it will be introduced analysis criteria in this way.

In the following we will show how we can visualize the research of the integrated management analysis of the company. “*The integrated management of a company is using new managerial concept and systems putting the accent to the systemic processes.*” [9] We’re going to introduce suggestive graphical representations to show us if the system (the company) is or is not in balance. In case of it isn’t, we’re going to see to what the company activity is targeted in order to know where we should act for removing any imbalances. In a wide range, the integrated management of a company is a management system that integrates all the systems and the company (firm) processes in a full frame, which allows the operation like a single unity with unified objectives.

The purpose of the analysis is to seek the optimal efficiency for balancing the potential winnings and losses. “*He assume ensuring the consistency between different domains/functions of that business as well as a harmony between the organization, society and the cultural environment*.” [8] In contrast to the individual management and the collective management, “*the integrated management promotes the balance between different interconnected domains*.”[9]

For the beginning we’re going to evaluate D_k, from the fourth, in order to be able easily to identify the potential of each analyzed domain. In this way we’re going to break down each analyzed domain in four directions Di_k, $k = \overline{1,4}$ and we’re going to obtain in this way the system view of the managerial system reference used by the integrated managerial analysis. Further, based on the achieved sizes by each analyzed direction Di_k, we’re going to be able to determine the gain potential by each domain as well as its resultant.

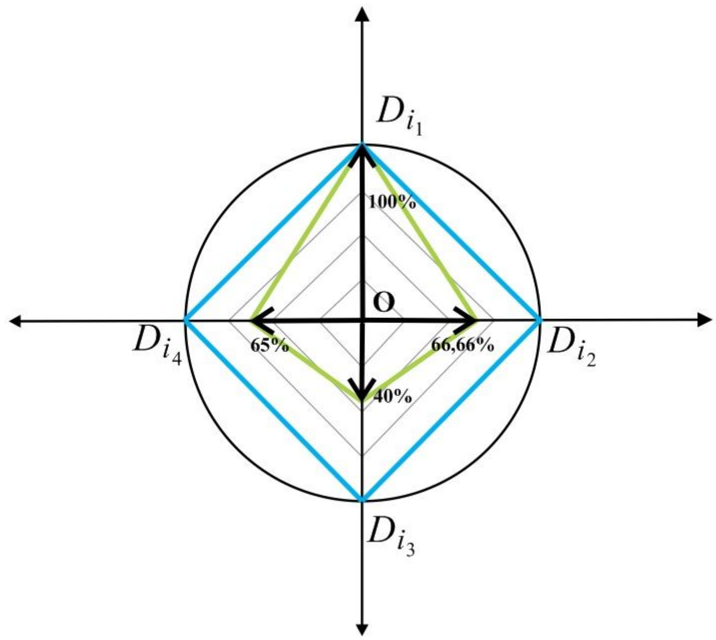

Fig. 7 – Viewing the obtained potential by a company for a cardinal model for a domain D_k

The obtained resultant $\vec{R}_{D_i}$ will show us the existence of an imbalance in the analyzed direction, and its module R_{D_i} will tell us the size of this imbalance, as it can be seen in figure from bellow.

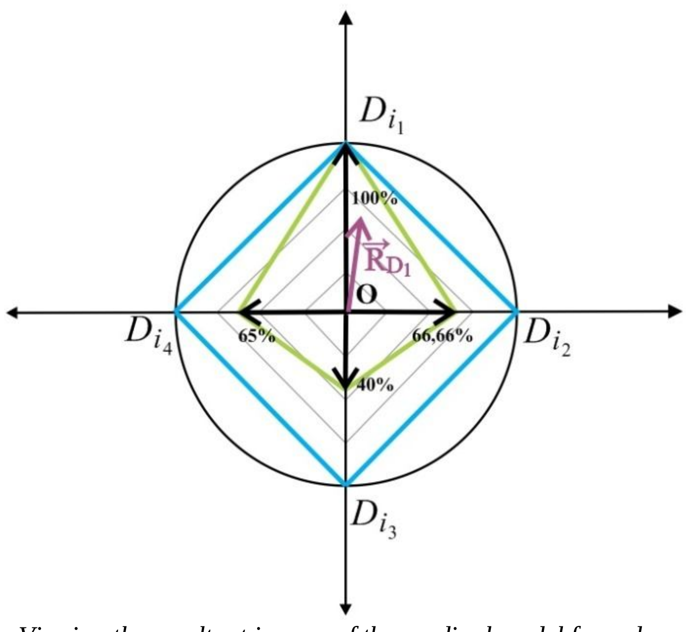

Fig. 8 – Viewing the resultant in case of the cardinal model for a domain D_k

Based on the size of the resultant $\vec{R}_{D_i}$, noted with R_{D_i} , we're going to give an interpretation on the imbalance type faced by the company and we're going to be able to propose solutions for restoring the balance for that domain. In the following there are described below the steps that should be followed by the analyst or/and the manager who is doing the evaluation, steps which are in a number of twelve and which can form, based on future, in a usage guideline of that methodology.

Stages of the integrated managerial analysis	
1.	*Identifying directions of the company in the four analyzed domains (management, economic, marketing, production).*
2.	*Finding the indicators of the company, on each direction from step 1.*
3.	*Evaluation of each indicator by giving a grade from 1 to 5, based on the existence performance in the company for each analyzed indicators.*
4.	*Summing for each direction, of the obtained points within each by analyzing the indicators from step 3.*
5.	*Setting the points for each on of the four analyzed domains by summing all the points of directions within that domain.*
6.	*Obtaining the total score by summing all the points from stop 5.*
7.	*Setting the gained potential in percent by the company for each direction within that domain, based on the points from step 4.*
8.	*Evaluating the gained potential in percent by the company for each domain, within the fourth that were analyzed, and calculating th total percent realized by the company.*
9.	*Finding direction on which the company goes as well as the size of the existed imbalance within that, by calculation the resultant R, based on the described methodology.*
10.	*Realization of a virtual representation of the gained potential by the company by domains and directions for a better view of the obtained results following the integrated analysis.*
11.	*Showing to the evaluator, to the company management, of the obtained results.*
12.	*Interpretation of the results, by the company management, of the shown data at step 11.*

Table 1 – Practical steps of the integrated managerial evaluation for a construction company

7. Growing direction in complexity of the analyzed methodology

We can start from considering only 4 domains, management (leadership), production, economic and marketing (market), shown in the legislative circle and we can extend successive the number of the domains, taken into the analysis, and by the indicators for each domain, going from 8, 16, … , 2^n based on the necessity in the matter of:

a) *the fineness of the analysis*,

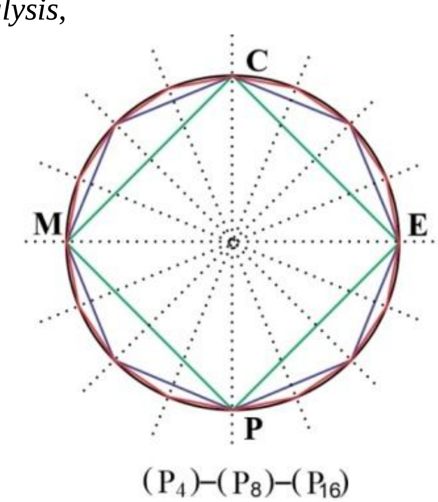

Fig. 9 - Viewing increasing fineness of the analysis integrated management for cardinal case

which of the above describes its optimal value for 16 domains. Beyond this value the error margin is small enough in order to justify the effort in analyzing the fineness of the analysis through the amount of information that should be gained, processed and interpreted.

b) *segment detection* (that's why it is necessary to be as narrow as possible, which involves to take a n as big as possible) *in which there are deficiencies that stops the realization of the ideal situation of growing the company* (*firm*). Obviously, going from the firm managerial analysis to the companies and developing in an exponential way of the information technology and the artificial intelligence, impose this necessity of growing the number of indicators which could be taken by the analysis. The integrated managerial analysis has sens only by the company evaluation and by the management consult. That's why based on the given points to the 64 indicators taken into the analysis it can be realized a score for each direction.

As well as in the company we have the human resource, which has its own internal autonomy of awareness, we conclude that this has an unpredictability grade that cannot be eliminated completely, this is just an example of element that leads to this conclusion. That's why a good manager should be gifted with a goo emotional intelligence in order to know and to motivate and to potentate as good as he can the human resource, that he has in his subordination, in order to touch the maximum potential of this. Therefore searching new domains and sub-domains that should be analyzed should be a desideratum for each company manager in order to increase the resultant grade of precision. But the decision, the strategy and the plan that implies an integrated management analysis goes completely to the company management, the managerial analysis offering only a diagnostic over the "health" status of a company, but not the "medicine" that should be followed by the "patient".

Monitoring and evaluating the obtained results, following the measures taken by the company management, will be taken also using the integrated managerial analysis, that by comparison with the first analysis, can establish if the situation is better in the company and in what domain and direction.

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