# PRESENT STATUS OF SMALL AND MEDIUM SIZE ORGANIZATIONS (IMMs) AS REPORTED TO THE PROJECT MANAGEMENT UNDER THE CONDITIONS OF THE NEW ORGANIZATIONAL CONTEXT

Anca Cruceru\*

## **Abstract**

Starting from "the mutations" that are likely to appear inside the project in the context of the information — based economy, society, organization and management, there has been achieved a research at the national level since the main goal consisted in observing, on the one hand, the present status of the small and medium size organizations with reference to the project management, and, on the other hand, in underlying their capacity to assimilate these modifications particularly to be able to adapt to the changes that the new organizational context shall impose.

**Keywords:** IMMs, "mutations", project management, new organizational context

**JEL Classification:** C01, C10, D80, M10, O20, O30

#### 1. Introduction

Based on thorough research on the theoretical concepts related to the organization and management that are based on information, on change and on change management, on the intellectual capital measurement and evaluation, and on the project management, there have been set several "mutations" (modifications) that might appear in the project, and in the project management, as well, out of which some are worth mentioning:

- The information shall stand for the main element that shall assist in the project planning, running and finalization;
- As far as a project is concerned, the information shall fulfill and play the following roles: raw material, production factor and finite product;
  - The organizations shall run projects by applying to mixed teams;
  - The open culture principle shall be promoted for any project;
- The project integration in the organization frame shall be possible by means of implementing the organizational structure referred to as "organization per projects";

\_

<sup>\*</sup> Anca Cruceru is at the Romanian American University in Bucharest. E-mail: cruceruanca@yahoo.com

<sup>&</sup>lt;sup>1</sup> Anca Cruceru, 2011

- The project team members shall become information based employees, and the project manager shall turn into information based manager;
- Both as concerns the knowledge zones and the project management processes, too, there shall be used all the resource categories, the information resource included, and they shall all bring their contribution to the carrying out of the life cycle of the project;
- In order to fulfill the project purpose, there must be carried out actions to capitalize the intellectual capital, etc.

Considering the foregoing ideas as a starting point, research has been done at the national level, and it referred to the IMMs' status ("by a small size organization it is understood that firm that contains 49 employees, at the most; by a medium size organization it is understood that firm that contains between 50 and 249 employees"<sup>2</sup>) as concerns the project management within the new organizational context (economy, society, organization and information – based management).

# 2. The present status of IMMs – as reported to the project management under the new organizational context

Research target:

This research has been realized with the purpose to set the present status of the IMMs, particularly with reference to the below listed aspects:

- Which is the number of companies that develop projects; which is the number of projects that are being run; and which is the typology of the projects that are being run by these ones;
- To what extent the project management theoretical fundamentals are being used while running the respective projects;
- Whether the difference between the concepts of management by project and project management is common knowledge;
- Which is the companies' capability to incorporate, create and develop projects, and, at the same time, to obtain competitive advantages based on these ones;
- Whether the content of information based concepts such as: economy, society, organization and management is known;
- Which is the possibility that companies be able to adapt to the information based organization;
- Which is the companies' capability to apply an information based management;
- Whether it is necessary to create competitive advantages by determining and evaluating the companies' intellectual capital;
  - To set interdependences between the above mentioned elements.

\_

<sup>&</sup>lt;sup>2</sup> Ovidiu Nicolescu, Ciprian Nicolescu, 2008

## Research relevance:

This research has brought its contribution to consolidating these "mutations" that have been briefly presented above, and, at the same time, to determining their usefulness and applicability inside the IMMs. This being the context, the research relevance consists in the possibility to indicate the number of companies that should adapt their project management techniques to the new world – wide tendencies, while using the previously listed ideas as concerns the predictable modifications of the project and of the project management inside the information – based organization, while the target is to increase their performances and to set as many competitive advantages as possible. Also, this research has pointed to those companies that have failed to adapt / are not willing to adapt to the changes that the new organizational context imposes.

## Research development:

This research was carried out in 2009, and it was of a descriptive – exploratory nature. As concerns this research, the evaluation of the information sets, from the quantity and quality point of view, was done with the help of nominal, ordinal and interval scales. The research was based on the dissemination and analysis of a questionnaire that contained 36 close and open questions; dichotomy, trichotomy questions and questions with multiple answers; introductive questions of the pass, information and classification type; and test questions of the filter type.

The research survey included 154 sample companies; this number was agreed to with specialists from the National Council of Small and Average Private Organizations from Romania (CNIPMMR). The organizations within this sample were selected, preponderantly, from those companies whose activities related to consultancy services for financial, fiscal and management domains, this action was directed towards the small and a average size companies that provide such services. All the same, this sample also contained companies that do not provide consultancy services since, at a certain moment, within its life cycle, any company might develop and run such projects.

The questionnaires have been disseminated to the companies by way of the Internet – the e-mail addresses that CNIPMMR made available.

Out of the set sample of organizations, only 102 companies have answered the disseminated questionnaire.

The IBM SPSS Statistics provided soft was used to analyze, correlate and set the differences between the companies' answers.

Further to the careful examination of the results that have been obtained by applying the SPSS software (frequency of answers, descriptive statistics – Frequencies and Descriptives), the below listed information has been collected:

• The highest percentage (64.71%) goes to those companies whose domain of activity is consistent with "7022 CAEN Code – Consultancy activities in Business and Management"; the remaining companies register a relatively low percentage, that is to say: 6920 – 11.76%; 7810 – 2.95%; 7490 – 1.96%; 8299 – 1.96%; 8559 – 1.96%; and the following CAEN Codes: 7312, 6399, 7021, 3299, 7430, 6209, 4322, 4651,

5829, 6311, 4120, 240, 7219 and 6420 represent, each, 1% of the total number of companies;

- The persons who have filled in the questionnaire had the following positions: 60% Administrators and 40% General Managers;
- The turn-over values that the companies registered for the past year were consistent with the below listed ranges:  $0-50,000~\rm RON-17.6\%$ ;  $50,001-100,000~\rm RON-12.7\%$ ;  $100,001-200,000~\rm RON-15.7\%$ ;  $200,001-300,000~\rm RON-7.8\%$ ;  $300,001-500,000~\rm RON-6.9\%$ ;  $500,001-1,000,000~\rm RON-14.7\%$ ; the highest percentage is detained by those companies whose turn-over value exceeds  $1,000,000~\rm RON-24.5\%$ ;
- The weight of the average number of employees is: 1 10 employees 83.3%; 11 50 employees 13.7%; 51 150 employees 2%; more than 151 employees 1%;
- 27.25% of the companies register a labor productivity that ranges between the interval 0-100,000 RON; 23.52% the interval 100,001-500,000 RON and 1.96% the interval 500,001-1,000,000 RON; due to the optional nature of this question, 47.07% of the companies have not provided any answer;
- 79.4% of the companies are micro organizations; 17.6% are small size organizations; 2% are average size organizations; and 1% are big organizations;
- Only 64.70% of the companies have submitted their organizational structure; 64.70% of the organizations have failed to grant the adequate attention to this question;
- At the level of the companies, 80.32% of the personnel structure is made up of women, and 90.19% of the personnel structure is made up of men;
- As concerns the personnel structures per groups of age, the companies register the following percentages: 18 25 years 17.64%; 26 35 years 69.90%; 36 45 years 93.13%, and over the age of 46 years 20.58%;
- As concerns the personnel structures per length of service, the companies register the following percentages: "up to 1 year" -2.94%, the interval "1 -5 years" -86.27%, the interval "6 -9 years" -62.74%, and "more than 9 years" -6.76%;
- As concerns the employees' education level, the companies register as follows: 33.33% "high school"; 98.03% "university"; 39.21% "master degree", and 12.74% "other post university courses";
- As concerns the domain of activity, 29.41% of the companies have listed the most frequently services that the clients request, while 70.59% of them have ignored this question;
- The companies have appreciated the financial economic situation as follows: 4.9% the proposed mark was 5; 20.6% the proposed mark was 6; 32.4% the proposed mark was 7; 26.5% the proposed mark was 8; 11.8% the proposed mark was 9, and 3.9% the proposed mark was 10;

- 57.84% of the companies use the management by way of targets as the management method; 12.74% use the management by way of budgets; 31.4% use the management by way of projects; 4.90% use the management by way of exceptions; 15.68% use the participative type of management; 32.35% use the analysis diagnosis method; 41.17% use the meeting type method; 5.88% use the assigning type method; 3.92% use the brainstorming type method, and 8.82% use other management systems, methods and techniques that have not been mentioned ion the questionnaire; as far as this question is concerned, the following aspect has been noticed: a rather low number of the responding companies applies only one exclusive management method;
  - Only 52% of the companies are being running one or more projects;
- The companies register the below listed weights when they come to analyzing the number of projects they are running:1 project 15.7%; 2 projects 11.8%; 3 projects 10.8%; 4 projects 6.9%; 5 projects 2%; 6 projects 1%; 7 projects 1%; 8 projects 1%, 10 projects 2%, and 48% of the companies were not supposed to answer since this question was conditioned by the previous one;
- The typology of the projects that has been approached / is being approached within the companies has the following weight: 11.76% public financing based projects; 17.64% private financing based projects; 22.54% organizational projects; 4.90% informatics projects; 32.35% development projects; 23.52% investment based projects; 28.43% other types of projects; and 41.17% of the companies have not run / are not being running projects;
- The companies have established that they had observed the theoretical fundamentals of the project management in accordance with the below listed percentages: 1% the proposed mark was "3"; 2.9% the proposed mark was "5"; 14.7% the proposed mark was "6"; 27.5% the proposed mark was "7"; 12.8% the proposed mark was "8", and 41.2% of the sample of companies were not supposed to get back with an answer to this question;
- Only 41.17% of the companies grant a rigorous attention to the planning of the human resources that are involved in the projects;
- Only 20.6% of the companies use a software that is dedicated to the de Project Management;
- Out of the 20 responding companies, only 21.6% use the Primavera Project, whereas 11.66% of them use the Microsoft Office Project;
- Only 44.10% of the companies under survey grant special attention to the management of the quality of the project / projects;
- Out of the 60 responding companies, 96.66% carry out the execution program of the project / projects by using the Gantt graph; 21.66% apply to C.P.M.; 13.33% apply to P.E.R.T., and 13.33% apply to graphical methods; the following aspect has been noticed in connection with this question: a very low number of the responding companies apply exclusively to only one planning method;

- Out of the 60 responding companies, 71.66% approximate the costs in order to be able to draw the project budget by applying to the analogy valuation method; 23.33% to do the same as above, they apply to the parametrical valuation method, and 3.33% to do the same as above, they apply to the definitive valuation method; the following aspect has been noticed in connection with this question: a very low number of the responding companies apply exclusively to only one valuation method;
- Only 9.80% of the companies draw response strategies to project related risk situations;
- Only 46.1% of the companies are aware of the difference between the concept of the management by way of the project and the concept of project management;
- The companies that would be interested in integrating the projects to the best of their abilities, and to develop their own capabilities to run the respective projects with the purpose to obtain one or several competitive advantages do not exceed more than a percentage of 46.07%;
- Out of the 60 responding companies, 61.66% have had no idea regarding the measures they should have taken to be able to incorporate the projects to the best of their abilities and, also, to attempt to develop their own capabilities so as to consequently carry on projects, whereas 21.66% have not submitted any answer to this question;
- Only 60.8% of the companies are aware of the content of concepts such as: economy, society, organization and management, concepts that are information based;
- Only a percentage of 19.6% of the companies consider that they can adapt to the information based organization without having to modify anything from the economic, financial and managerial point of view; 50% consider that they can do that only if they partially or totally re-draw the activities they develop; and 30.4% consider that they are not prepared for this major modification, at least not yet;
- Only 85.3% of the companies consider that the ideas that the new organizational context is attempting to enforce would favour the increase of their performances;
- Only 86.3% of the companies think that the implementation of a project management would be necessary; however, the condition would be that this imply the application of the management by way of projects as a management method;
- Only 69.4% of the companies assert that they own the information that is necessary in view of implementing an information based management;
- Only 71.6% of the companies consider that the measurement and valuation of their intellectual capital would help them obtain a competitive advantage that is so necessary on a saturated market where the competition is so fierce and the request is continuously going down.

Research conclusions:

All the foregoing information sets, together with the ones that have been collected based on correlations, cross interrogations and on the methods that certify the existence / inexistence of discrepancies between certain questions and answers (Correlations, Crosstabs and ANOVA), have made it possible to establish the below listed conclusions to be drawn with reference to this research:

- since the questionnaires have been filled in by the companies' administrators or by their general managers, the answers can be considered as pertinent;
- the domain of activity, herein referred to as "7022 CAEN Code Consultancy activities in Business and Management", has been identified at the majority of the responding companies;
- the domains and objects of the companies' activities exercise influence on the types of projects that have been or are being approached within such companies, while it is the weights that have been registered, in case of organizational, development and investment projects, that have been proven significant;
  - approximately 80% of the companies are micro organizations;
- the companies that have registered a turn over that is bigger than 1,000,000 RON have obtained a majority weight;
- the business turn over that the companies have registered has been determined, to a great extent, by the number of projects that the respective company has been developing;
- almost all the companies have an average number of employees that ranges between 1 and 10;
- the companies that register a higher number of employees indicate an increased capacity to develop and run projects, and, as a consequence, the big number of projects that the company is developing proves their higher capacity to absorb projects, and, therefore, provides more competitive advantages to these ones;
- the more experienced and skilled the companies' employees are (namely a superior education level combined with an average age), the easier it shall be to such companies to adapt to the changes that the new organizational context imposes;
- the intellectual capital capitalization within the companies is limited by the number of employees, and the effects of such a capitalization refer to obtaining competitive advantages and to increasing their diversity (specializations, held positions, etc.);
- the majority of the companies has appreciated the economic financial and managerial situation at the level of the mark "7" favorable situation;
- the companies' financial economic and managerial situations are conditioned, among other things, by the employees' level of training, by their capacity to apply the methods, systems and management techniques that are being used within such companies;

- the method of the management by way of projects is used only by 32 companies;
- only those companies that are aware of the difference between the concept of management by way of projects and the concept of project management shall consider as relevant the introduction of the project management;
- the more extensively the companies have used more project management information sets, the more such companies have managed to better plan the human resources, have realized the need to use a project management software, have granted a particular attention to the project quality management, and have managed to establish, more correctly, the execution projects, have estimated, with more accuracy, the costs related to the said projects, and have drawn strategies to handle risk situations while better understanding the usefulness of these ones to run the projects;
- the choice to use a Project Management software is conditioned too by the turn over that the companies register;
- to adapt to the new organizational context, the great majority of companies shall have to re-draw and re-consider, partially or totally, the activities they develop;
- approximately 85% of the companies consider that the ideas that the new organizational context imposes would be favorable to the increase of their companies' performances;
- the more the companies shall increase their capacity to adapt to the information based organization, the more such companies shall acquire the information they need to apply the information based management;
- approximately 72% of the companies consider that the intellectual capital measurement and valuation could assist to the bringing-up of competitive advantages; this way, to be able, on the one hand, to adapt to an information based organization, and, on the other hand, to be able to implement an information based management, the companies shall have to capitalize the intellectual capital purposefully to obtain an increase of the performances, as well as certain competitive advantages that would be useful in the context of a saturated market where the competition is fierce, and more than that, where the request is continuously going down.

The conclusions of this research, together with the "mutations" that might appear in a project and to the management of this one, have made it possible to enunciate the following assertion: out of the 102 responding companies, approximately 60% could apply the modalities mentioned at the beginning of this article since they are ready to adapt to the information – based organization; they could do that either without changing anything from the economic – financial point of view, or by partially or totally re-draw the activities they develop.

## 3. Conclusion

Due to the fact that the data basis that has been used in order to carry out this research is pertinent from the statistic point of view (as it has been set together with

CNIPMMR specialists), it turned out that the conclusions (results) of the research could be generalized as far as the economic and social practice is concerned.

## References

Alexandru Popovici - "Elemente de econometrie asistată de programul Excel", Editura ProUniversitaria, București, 2008, ISBN 978-973-129-320-2

Amy Gamble - "The Dummy's Guide to Data Analysis Using SPSS", Univariate Statistics,

http://www.aged.tamu.edu/research/readings/Research/2001SPSS\_Guide.pdf, Scripps College, 2001

Anca Cruceru – Teza de doctorat "Perfecționarea managementului de proiect în organizația bazată pe cunoștințe", Cota 132424, Sala Victor Slăvescu, Academia de Studii Economice, București, 2011, (link accesat la data de 26.01.2012) http://www.biblioteca.ase.ro/catalog/detalii.php?c=2&q=Cruceru%2C%20Anca&st=s&tp1=0&tp2=0&tp3=0&tp4=0&tp5=0&tp7=0&ct=132424

Anca Cruceru – "Project Management Adjustment To The New World Trends", Volume 6, Number 1, Spring 2011, pp. 86-96

Andrei Novak - "Statistică. Teorie, aplicații, exerciții", Editura Sylvi, București, 2001, ISBN 973-8258-50-2

Ovidiu Nicolescu, Ciprian Nicolescu – "Intreprenoriatul și managementul întreprinderilor mici și mijlocii. Concepte, abordări, studii de caz", Editura Economică, 2008, ISBN 978-973-709-420-9, pg. 61