GENERAL CONSIDERATIONS ON THE PROJECT MANAGEMENT
ASSISTED BY COMPUTER FOR ROMANIAN COMPANIES

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Abstract: This paper is a statistical study about the use of software tools dedicated to project management in Romania. This paper is not intended to daunting for Romanian projects users or Romanian Project Managers, but aims to increase optimum Pareto efficiency in Project Management through efficient use of software tools for planning, analysis and monitoring of projects. Subject of this paper it is "General considerations on the Project Management assisted by computer for Romanian companies". Choosing the theme of this article is not random, it continuing series of articles published for strengthen of scientific research in the Doctorate studies that I followed since 2005.

Keywords: Project Management, Romania, Microsoft Project, Primavera, EPM.
1 Introduction

Project Management is a relatively recently developed, and its importance has seen major growth due to the fact that, at European and international scale, more and more actions are held in some projects. Resources used by these projects (especially financial ones) have a role in increasing economic development and their application area is growing.

It is noted that Project Management, as organizational unit alone, or integrated in primary organizational structure of the institution or company, is only one of possible forms of secondary organizational structure. Similar structures occur frequently in organizations due to market pressures or strategic needs, which it lists here only for information: organizational structure product oriented (product management), organizational structure customer oriented (customer management), organizational structure oriented to strategic areas (strategic management) or parallel career structures for young professionals to promote staff training and leadership for the future. These structures operate in parallel with the primary structure, functionally and fulfill a specific purpose. In case of Project Management, it is the achievement of complex tasks with a high degree of uniqueness and innovation in a limited period.

2 General consideration of Romanian Project Management

The project represents an amount of activities that lead to a common purpose and requires a significant consumption of resources (human, material, financial, equipment, documentation time). Implementation of a project involves an initial time, a final time of the project, so, a period to achieve. Initial moment is considered that in which it decide to move at planning and design and the final one that in which is closed last planned project activity.

Project Management consists in planning, organization and management (control) tasks and resources which aim to achieve a specific objective in terms of the existence of constraints on time, resources and costs.

In Romania, after 1989, one of the fundamental changes that have occurred is that businesses are determined, largely, by offer and request. In an economy like this, there is a need for estimates. Need to know from the start if the product will be or not marketable, or will or not be a success. A study of project is many times cheaper than a negative result of a project.
Another impetus for the development of Project Management in our country was determined by the requirement that trade relations with investors, suppliers, customers from abroad, to be based solely on projects. This has led to the development management system based on principles and rules laid down by European Union Directives and International Standards.

3 Use of software tools in Project Management

3.1 International situation
An effective Project Management requires that relevant information be obtained quickly analyzed and appropriate.

Today, specialists in Project Management and project teams have a wide range of software for tracking and monitoring projects. Can better understand if we think at the three major components with will work a Project Manager: cost, time and quality. If we want to modify a component, will affect the other two, for example if we want to finish the project quickly (time), probably will cost more (cost) or the product will don’t have the specify parameters (quality). Certainly, we can take advantage of these interrelated and find new alternatives.

It is very difficult to finish a project exactly as you planned, i.e. to make a product with specified parameters, on time and to maintain initial budget. Must taken into account with responsibility for managing human resources and materials through a rigorous planning using all available resources (hardware and software), through periodic review of progress and tolerance achievement allowed in implementation, through risk analysis and minimize these impact over the project.

Current technology offers facilities like monitoring progress of projects, the management tasks, work flow management and support for resources analysis.

The software products for Project Management contain, in addition of schedule deadlines and terms programming for completion of activities using network graphs, the possibility of scheduling resource and costs (labor, equipment, materials). Additional, outside of activities programming, it can be realize a project to control them, where through can compare original schedules with the actual schedules and may be elaborate updated status reports who comparing the actual situation with appropriate initial planning.

An obvious advantage of the introduction of automated programs planning activities consists in the fact
that due to high speed computing, can introduce several simulation deployment, to choosing the optimal variant, with the most favorable economic. In this way it can be alternate the situations regarding availability, cost and schedule deadlines for determine optimal completion of activities.

Value of market segment of dedicated software solutions for Project Management, globally, is currently raising at three billion dollars, according to IDC – member of IDG. Related market segments, such as portfolio management and project life cycle management, provides an additional opportunity estimated at 10 billion dollars, with net margins of 20-30% and a result of investment estimated at a value of five to eight times in less than two years.

### 3.2 National situation

In Romania, according to statistical of the National Office of Commerce Register in Romania, since December 1990 to February 2009 the economic situation looks like this:

<table>
<thead>
<tr>
<th>Capital</th>
<th>Companies type</th>
<th>Companies no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>PF</td>
<td>494,471</td>
<td>26,28</td>
</tr>
<tr>
<td></td>
<td>SNC</td>
<td>32,673</td>
<td>1,74</td>
</tr>
<tr>
<td></td>
<td>SCS</td>
<td>1,600</td>
<td>0,09</td>
</tr>
<tr>
<td></td>
<td>SRL</td>
<td>1,299,622</td>
<td>69,07</td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>33,427</td>
<td>1,78</td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>2,037</td>
<td>0,11</td>
</tr>
<tr>
<td></td>
<td>APJ</td>
<td>5,476</td>
<td>0,44</td>
</tr>
<tr>
<td>Public</td>
<td>Government Business Enterprise</td>
<td>1,352</td>
<td>0,07</td>
</tr>
<tr>
<td></td>
<td>Commercial companies</td>
<td>2,382</td>
<td>0,13</td>
</tr>
<tr>
<td>Mixed</td>
<td>Commercial companies</td>
<td>8,624</td>
<td>0,46</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td><strong>1,881,664</strong></td>
<td></td>
</tr>
<tr>
<td>Erased</td>
<td></td>
<td>567,663</td>
<td>0,30</td>
</tr>
<tr>
<td>Dissolved</td>
<td></td>
<td>57,773</td>
<td>0,03</td>
</tr>
<tr>
<td><strong>TOTAL COMPANIES</strong></td>
<td></td>
<td><strong>1,256,228</strong></td>
<td></td>
</tr>
</tbody>
</table>

Regarding of territorial administration, Romania has 41 counties and Bucharest municipality, 262 cities of which 80 municipalities, the 2,686 commune (13,285 villages). From here, we can deduce that there are 42 county councils and 2,996 mayors. The Government operates a number of 18 ministries and more than 100 government agencies and NGOs.
In conclusion, in Romania currently operates 1,256,228 economic agents, 3038 administrative organizations, 18 ministries and more than 100 government agencies and NGOs. This means a total of 1,259,384 structures that currently unrolling, in presumptive, projects.

If we try to reduce this area and to report only the macro-financial structures, we can say that there are a total of 48,941 economics structures. Of course this estimate is not correct just because we deliberately excluded the limited liability societies.

Strategic players in the Romanian market of software instruments specialized in Project Management are Primavera and Microsoft, which offers the best known solutions for Project Management of the market. According to allegations of TotalSoft - Primavera distributor - until 2009 they managed the implementation of 430 Primavera products in the Romanian business environment. Microsoft Romania has not disclosed the number of distributions of MS Project in Romania, but we can estimate if we take in consideration the Magic-Quadrant of Gartner Research (Figure 1) as being somewhere around 350 products. Certainly many companies successfully using other software products dedicated to Project Management, mostly OpenSource and we affirm like a final conclusion, that the number of users of software dedicated for Project Management in Romania stand over the 1000.

![Figure 1](image-url)  
**Figure 1** Magic Quadrant with disposal of companies who producing software for Project Management

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663
This means that approximately 0.08% of all structures that developing projects in Romania or about 2% of macro-financial structures using software tools dedicated to Project Management.

Some international statistics (The Standish Group International, Incorporated, 1995), (Robbins-Gioia, 2001) stated that only one of five projects are successful, the rest, being in the category of projects with issues that are closed and abandoned before completion. During this period of crisis, we can begin to see increasingly of more unfinished projects or who will not succeed to bring the benefits that have been forecasted when they are launched.

According TotalSoft without Project Management assisted by computer, in a sample of 126 large scale Romanian projects has been recorded only 18% chance of success, namely:

- 42% recorded delays;
- 33% have exceeded the budget;
- 13% reported complaints or have some litigation.

![Failure causes for unmanaged projects.](image)

**Figure 2** Failure causes for unmanaged projects.

### 4 Conclusions

Not all projects are as originally, established between the customer, sponsor and performer. Some projects exceed their budget, others are extended and some even stop without reaching the desired results. There are cases where the project is subject to change.

The statistics presented in this paper are converging to the following ideas:
1 unattended a project is more likely to fail than to succeed;
2 approximately 1 of 5 projects can make full satisfaction;
3 large projects are more likely to fail;

The success of a project resulting from a mixture of many and difficult conditions. The presentation of these conditions - provided by these surveys - it is always useful, of course, reviewing it before and during a strategic project.

5 References