

# **European International Virtual Congress of Researchers**

**EIVCR  
May 2015**

**Progressive Academic Publishing, UK**  
[www.idpublications.org](http://www.idpublications.org)

## THE MANAGEMENT OF THE PROJECTS WITH MS PROJECT

**Agim Derguti, PhD candidate**  
European University of Tirana  
ALBANIA

### ABSTRACT

The paper will elaborate specifications that has MS Project program and its evolution in the wide usage in management of the projects. The wide range of work tools offered by this program helps managers in all the fields at any moment be able to understand and report on project status, finances, human resources and can make the necessary amendments to complete projects according to a provided dynamic plan. The successful management will be the product of a good planning by making entry of the necessary data required in the program where than the software will analyze all the data and submit reports in a written form, a tabular form or a graphic shape view via Gantt chart.

**Keywords:** project, management, report, diagram.

### INTRODUCTION

The management of the project is used by organizations as a mean for achieving their objectives. The recent decades has been noticed a fast growth of the use of the management of the projects as a necessity of the times to improve the ability in the planning, implementation and control of the activities as well as improvement in a more rational use of the resources. Knowing that projects are complex processes, the management definitely will face the completion of all activities to finalize the project with its purpose, a predicted cost and within the proper time. For any business it is always important to look towards the future, but it would be a big mistake if there are ignored the past experiences. With Microsoft Project, it is easy to ascertain what has influenced in the previous projects to succeed or fail, allowing you to know what to be adopted in the future and what to avoid. Microsoft Project is proposed by Microsoft's manager of the development of the product, Alan M. Boyd. The company had a large number of software projects, and in this case, Microsoft Project will be used as a tool to help in the internal management to the large number of the projects that were in development within the company. Boyd wrote the specifications and hired a local Seattle company to develop a prototype. Commercial versions of the Microsoft Project have been numerous and have had their specifics and have changed over time. The first commercial version was released for DOS in 1984. The subsequent versions for DOS were released during 1985 (V2), 1986 (V3) and 1986 (V4). Later were released and Windows programs from 1990 to 2010. Microsoft Project is one of the programs of the management of the projects software more versatile ever invented. Today professionals from around the world are using this program for project management.

## **THE IMPORTANCE OF USING MS PROJECT**

Microsoft Project is a software program developed and sold by Microsoft, which is designed to assist managers of the project in developing a plan, assigning tasks and resources, tracking progress, managing budgets and analyzing project. Microsoft Project helps managers of the projects, business managers and planners to manage schedules and resources, helps managers to project delivery on time and within the budget. Project management or planning basically involves managing of the resources to complete a specific task and accessible in a certain time frame. Nowadays there are a number of software programs for project management, but definitely one of the simple and versatile programs of management is Microsoft Project. Using this program, the project would mark an important change in the terms of management. Microsoft Project's main modules include project work and project teams, schedules, and finances. Microsoft Project allows its users to set realistic objectives for project teams and customers, creating schedules, allocate resources, and manage of the budgets. Usually project managers need to know exactly what their teams are working at the proper time, how long it is taking every task, when it is expected to complete a certain task, how resources are currently in each task, etc.. This means that MS Project is a great help for all project managers. MS Project can be successfully used for the coordination of a variety of special tasks, helps to put a plan of action, to replenish and organize all the data in order to achieve a goal. MS Project significantly improves the productivity of each project and its use provides the following features: scheduling, cost control and budget management, resource assignments, management of the qualities, progress tracking, and many other opportunities.

## **PLANNING WITH MS PROJECT**

Planning is one of the most important tools needed to manage a project to its completion. The planning process means identifying and rational allocation of resources for a particular project. By making use of this function in MS Project, you can plan a project from the information they have about the project, individual tasks required for the project until completion and resources (people, equipment, materials) necessary to complete those tasks . After the conclusion of the planning, allocation of tasks and resources, starts the completion of the data phase in MS Project. If subsequent changes occur to tasks or resources after the creation of the term, can be done in MS Project updates, taking care not to infringe upon project completion deadline.

## **COST CONTROL AND BUDGET MANAGEMENT WITH MS PROJECT**

The most important aspect of the development of the project is to control the main sources of money and time. To achieve effective control, there must be a plan, which acts as a landmark to monitor and evaluate the performance. It is known that the plan for the management of the cost is budget and the plan for the time management is schedule. Since at the beginning of the project are made the original estimates of the budget and are registered based on the types of resources and equipments required for the particular project. In order to accurately set budgets and manage costs, must be created the schedule and assigned the necessary resources. Senior project managers often are faced with managing multiple projects with different schedules and resources costs. There is a discrepancy between the hours and costs so that the excess of the cost

should be included within the budget of the project. MS-Project provides a cost-effective balance between budget and schedule tools easily controlling the costs of the project.

## **ALLOCATION OF RESOURCES IN MS PROJECT**

Microsoft Project is a software program that allows users to control all aspects of management of the project, including budgeting, planning and resource management. For this reason, MS Project is much used in the industry of the construction and engineering. One of the most important parts, but often overlooked in the process of management of the project it is the allocation of the resources properly. Allocation of the resources in the right form in Microsoft Project will be an important help to keep in track the project from beginning to the end. By allocating resources it is going to be established the link between specific tasks and resources (one or more) needed to complete them. These resources include labor resources (people and equipment needed to complete a task) and material resources (materials or supplies). In the case of allocation of resources should be taken into account:

- Consideration of resource availability when it is calculated the duration of the assignment. This step is important, but often overlooked. The sources should be considered during the preparing of the schedule, not just afterwards. Special attention should be given to the tasks that are congruent (those that occur at the same time), and use the same resources.
- Creation and organization of resources. The best way to keep your resources organized it is by resource sheet. We need to be sure that all resources have obvious names and specify the type of resource. "The jobs" sources are most useful and should be used to categorize people who will spend time working in the office. "The materials" sources should refer to materials used in the work, such as lumber, fuel, etc.. "The cost" sources should be used to find resources that have a clear rate of cost attached to them. Daily rate for renting a crane or a trailer on the ground can be traced as a source of the cost.
- The assigning of each work assignment for a resource. After creating the schedule on the appearance of Gantt chart, you must determine which source or which sources are associated with each task.
- The checking of the allocation of the resources on the resources graph view. After creating the schedule and allocation of the resources, we should check for more sharing. This should be seen in the Gantt chart to analyze the participation of each source in each activity.

## **TRACKING PROGRESS AND THE CRITICAL PATH**

For over 40 years, project managers have used techniques to effectively manage their projects, some of these techniques were initially manually and later were computerized. Two of these techniques are called critical path management (CPM) and the evolution program and the overviews of the techniques (PERT). Technique involves the use of network models to find the relationship between tasks and to identify tasks that are critical to meeting the deadlines. When a large number of overlapping tasks should be used the appropriate tools to indicate which tasks can be delayed and which should be in time. Tasks that cannot be delayed without affecting the date of completion of the project are critical tasks. If a task to be performed on the project schedule and ends at the right time, while other important task is delayed, the date of the completion of the project may be delayed. A series of critical tasks makes up a project's critical

path. In each project important is the outcome within hours, so more attention should be paid to critical path tasks and resources assigned for this duties. If a critical task takes longer than expected or a resource is not available for a critical task, the project will not be completed on the scheduled date. Once you identify the critical path, any delay in any part of the critical path will cause a delay in the entire project and this is the part where managers should focus their efforts. Gantt chart visualization tools that are commonly used by project managers to control and manage the tasks required to complete a project.

## **GANTT CHART - ITS ROLE IN MS PROJECT**

Gantt Chart was developed as a production control tool in 1917 by Henry L. Gantt, an American engineer and social scientist. Gantt Chart has become a favorable tool for use in project management, which provides a graphic illustration of the schedule of the project that assists in planning, coordinating and tracking specific tasks within a project. It is very important that a Gantt chart plans tasks that must be completed, set a time limit for the work, plans allocation of the resources and creates critical paths for tasks.

Each project consists of a series of tasks with different deadlines, all linked together to build the overall plan project. In this process will be established the beginning of the project, the project displays all the relevant tasks in the Gantt Chart and sets the date of the completion of the project. The tasks of the project will be placed in the Gantt Chart, a calendar time line, so it can be moved in the Gantt Chart to the right or left of the screen, then the tasks can be moved forward or back in time. On the left side can be seen the data for tasks in tabular form with rows and columns. Each table row shows the details of a task, such as time of onset, duration and termination. Ms Project allows editing of data for each task in the table or in the Gantt Chart. Each activity is represented by a strip where the position and its length reflects the date of commencement, duration and date of completion of the activity. That means that Gantt Chart allows at the same time be seen:

- Activities to be undertaken,
- The start and the end of each activity,
- The duration of each activity,
- When matching activities with other activities and the duration,
- Date of commencement and completion of the project as a whole

Today, the Gantt chart are most commonly used for tracking the project schedule. Gantt chart have been modified with additional column showing details such as the amount of time estimated to perform each task, the resources needed to complete each activity and the person responsible for the execution of the activity. Gantt chart help managers to allocate resources, particularly in the form of staff hours. Designating specific staff members for each task, the project manager can see exactly how each employee will spend their time during the life of the project. Staff can also see how their individual tasks can be fit into the general framework of the project.

Microsoft Project, allow users to collect data on the total number of hours that staff members will work throughout the life of the project. Gantt chart represents the progress graph, provides quantitative information on the progress of the project where a manager can look at a Gantt chart

and see exactly how tasks are completed and how are in the process. Each manager is called to manage a project where time is the essence, we must use the appropriate tools like Gantt chart to monitor the plan, to work out the impact of changing circumstances and to communicate the changes to all those concerned.

## **BUILDING AND MANAGING LISTS OF TASKS IN MS PROJECT**

In the construction of any project plan, tasks are one of the basic blocks and MS Project that allows manage them easily and efficiently. In MS Project, primary should be prepared a list of tasks with a description and duration for each task, make the connection between them and the determination of the preceding and dependents. Moreover should be assessed the duration of each task.

## **THE ALLOCATION AND MANAGEMENT OF THE RECOURCES IN MS PROJECT**

After building a list of tasks, the next step in the construction of the project plan is the allocation of resources that will work on the tasks that are set before. MS Project makes it possible in a centralized pool of resources can be allocated the resources in certain places. It is going to be created a register of labor resources (people), cost and material resources. All these are integrated automatically from time to time, depending on whether they are active or not, and these resources are related to a based project calendar. The allocation of resources is done starting from the calendar that defines working days and hours available for the project to be carried out. Additionally each source can have their unique calendars to mark the leisure. Can be selected one calendar existed before or to create one based on a standard calendar. Each resource has its own calendar derived from the project calendar. Possible options allow setting days as working days, feast days etc.. Resource management is a key aspect of project management. In simple terms, the resources can be divided into three groups: labor, material and cost. A labor source is someone or something that works in an office and is tracked on the basis of time spent. A source material refers to items that are consumed by a task. Cost resources refer ancillary expenses that are not directly related to the work and materials, such as costs.

## **CONFLICT MANAGEMENT OF RESOURCES IN A PROJECT**

MS Project provides many features that make it easier to navigate complex tasks and tasks lists of resources. For example, there are many different ways to view and filter the data and specific tools for the identification and treatment of resource conflicts. In MS Project, can be solved the conflicts of resources from modified tasks, the setting changes, etc.. To resolve resource conflicts should consider the following tactics:

- Review the availability of resources to the project. For example, change the person's availability from 50 percent to 100 percent.
- Modification of tasks of some sources,
- The addition of a second source for a task for which the super allocated source is busy,
- The replacement of a source with another
- The changes in based -calendar of recources, allowing a source to work more time in a week, etc.

## **ADVANTAGES OF USING MICROSOFT PROJECT**

Application of Microsoft Project offers a wide range of tools, is flexible and has effective tools that can be used by government institutions, builders and business firms to manage their projects. The program also helps to monitor the progress at various stages of project development. Microsoft Project has increased the number of project managers who are using this tool, which have increased many features that are now vital to project management. Microsoft Project is developed by software company the largest and most respected in the world, which provides reliable support of this product. In addition, the success of MS Project training has fueled the growth of the services offered on this product. MS Project provides integration with other products such as MS Word, MS Excel and MS Outlook. MS Project is a desktop application, which means the project manager can work on the project schedule without internet connection.

## **BENEFITS FROM THE USE OF MS PROJECT**

- Simple program,
- Guides users to create and manage projects easily,
- Gives the user an opportunity to save, print and publish your project from one place to another,
- Saves time and cost to users, helps to organize and analyze the data effectively and efficiently,
- Is a flexible program, for the project that is created, if there are changes users can easily change the data,
- Provides visual view and helps users easily understand project schedules,
- Provides guidance and analysis that helps users to easily resolve conflicts in the allocation of the resources , tasks etc.,
- Assist in the analysis and comparison of the estimated current budgets and also identifies discrepancies in it,
- Allows the control for the users,
- Project generated documents can easily be divided with another member of the team and provides effective communication between team members,
- Helps project managers to easily make the design and development of an effective plan to complete the project,
- Helps project managers to easily distribute and allocate scarce resources to different tasks in order to avoid overlapping of duties and consumption of resources,
- Helps project managers to easily follow the progress of the project and compare it with the estimates,
- Helps project managers to easily manage budgets and analyze the workload,
- Provides guidance for inexperienced users of this program,
- Offers easy various models to start and to save time,
- Provides graphical representation of data, etc.

## **CONCLUSION**

At its core, project management is simply the planning, organizing and managing of tasks and resources to accomplish a defined objective, usually with constraints on time and cost. Project

management software such as Microsoft Project helps achieve project goal on time and on budget. Computer software can significantly aid in project management as a tool for recording, calculating, analysing, consolidating and presenting project details. Project management dates back to ancient times, as evidenced by a number of projects well-known but modern tools, techniques and methodologies for project management, such as the Critical Path Method (CPM), Programme Evaluation and Review Techniques (PERT), and Graphical Evaluation and Review Techniques (GERT) were brought to life in the 60s. Using the project management technology can do comprehensive management when managing a project. It has characteristics of timely, rapid, accurate and convenient etc. The implementation process of specific tasks is also the process of project management at the same time, and it is also the process of application of project management software. Microsoft Project is the world's most popular project management software developed. The application is designed to assist project managers in developing plans, assigning resources to tasks, tracking progress, managing budgets and analysing workloads.

## REFERENCES

- Badiru, A. B., and P. S. Pulat: *Comprehensive Project Management: Integrating Optimization Models, Management Principles, and Computers*, Prentice-Hall, Englewood Cliffs, NJ, 1995.
- Besnik S. Skenderi, *Planifikimi i projekteve me MS Project*, 2010
- Dreger, J. B.: *Project Management*, Van Nostrand Reinhold, New York, 1992.
- Elliott, M.: "Buyer's Guide: Project Management Software," *IIE Solutions*, pp. 45–52, March 2001.
- Gido, J. and Clements, J.P. (1999) *Successful Project Management*. South Western Hill, Berkeley.
- ISO/IEC DIS 14589-1 (1996) *Information Technology-Software Product Evaluation*. NY, USA
- Law, D. (1993) *Evaluating Methods and Tools in Software Quality Management*, 17. American Elsevier Publishing Company, Inc., New York.
- Levine, H. (1986) *Project Management Using Microcomputers*. Osborne McGraw, New York City.
- Lin Zefu, Bao Xiaochun. *Applications of Project Management Software [M]*. Beijing: China Machine Press, 2008 (In Chinese)
- Luan Yue. *Software Development Project Management[M]*. Shanghai: Shanghai Jiaotong University Press, 2005
- Mangonie, T.W. (1995) *Mail Surveys: Improving the Quality*. Sage Publication, Nostrand Reintold Company, New York, 129.
- Microsoft Project Standard 2002, Microsoft Corporation, copyright 2002
- Yin Shimei. *The Effective Way of Project Schedule Management[J]*. Shanxi Technology, 2006,(1) (In Chinese)
- Wang Zhu. *Project Management Software Application Analysis[J]*. Technology Innovation Herald, 2008,33 (In Chinese)