

Construction Project Portfolio Analysis Using P6 Eppm Tool

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Abstract : Project Portfolio Management (PPM) is the centralized management of the processes, methods, and technologies used by project managers and project management offices (PMOs) to analyze and collectively manage current or proposed projects based on characteristics. A group of decision makers within an organization, led by a Project Management Office director, evaluates the returns, benefits and prioritization of each project to determine the best way to invest the organization's capital and human resources. The PPM group will examine each potential project to first determine if the project is supporting the goals and objectives of the business. The best projects and programs are those that support the goals of the organization and can be performed using the available resources, such as people, money, facilities, and equipment. With the help of this management process, project managers and project management offices focus on forecasting and analyzing the returns per project implementation in the portfolio. PPM is a formal approach that an organization can use to prioritize and benefit from projects.

Key Words: Planning, Scheduling, Updating, Project Management, Primavera P6 EPPM

INTRODUCTION

PPM (project and portfolio management) is a formal approach that an organization can use to prioritize and benefit from projects. This approach examines the risk-reward of each project, the available funds, the likelihood of a project's duration, and the expected outcomes. A group of decision makers within an organization, led by a Project Management Office director, evaluates the returns, benefits and prioritization of each project to determine the best way to invest the organization's capital and human resources. PPM does not involve running the projects, but it does involve choosing which projects to execute and how to fund them. The PPM group will examine each potential project to first determine if the project is supporting the goals and objectives of the business. Projects that fail this first criteria, are eliminated from selection. The PPM group will also examine the interconnections and contingencies among projects. These relationships can affect the ranking, prioritization, funding and selection of projects within the portfolio. Finally, the PPM group will monitor projects that are in motion. Poorly performing projects may affect other projects within the portfolio, so a consistent monitoring of portfolio projects is needed. Project portfolio management is the practice of selecting and investing in the best projects and programs an organization performs. The best projects and programs are those that support the goals of the organization and can be performed using the available resources, such as people, money, facilities, and equipment. A project is a unique activity that the organization performs that has a beginning and an end, creates one or many products or services, and consumes resources in creating deliverables. A program is a group of related projects that are managed together to achieve specific goals of the organization. You could view the relationship between portfolio, programs, and projects as a hierarchy, as shown here. Note that the portfolio can contain programs and individual projects..

II. LITERATURE REVIEW

2.1 Enterprise Project Management using Primavera P6 EPPM By Akshay R. Kohli (12 Dec-2017)

Efficient project management is the need of the hour and it is the sole responsibility of the project manager to ensure the functioning of the project according to its allotted budget and deadlines. For any construction project, proper planning, scheduling, effective resource allocation and updating the activities is extremely essential to optimize the project and establish maximum budget maximization. Improper scheduling, irregular monitoring and poor handling of the ongoing activities increases the project duration and amount with a substantial margin. As a result, it is essential to undertake large-scale management projects efficiently with the help of computer aided software. The primary objective of this paper is to understand the principles of planning, scheduling, resource allocation and leveling along with efficient project management of a construction building. The step by step methodology to undertake a project has been explained and the ultimate usage of Primavera P6 Enterprise Project Portfolio Management (EPPM) has been summarized

2.2 Renard Yung Jhien Siew (April 10, 2015)

Integrating Sustainability into Construction Project Portfolio Management

Construction project portfolio management has a large impact on many companies as they are often confronted with having more projects to select from than the resources available to execute them. Selecting the wrong projects will lead to wasted resources and loss of benefits which may have been gained by focussing on other projects. While there have been many discussions surrounding portfolio theory, there is currently a lack of framework which integrates sustainability into construction project portfolio management. This paper departs from existing frameworks (which focus more on monetary gains in projects) by proposing robust methods to account for sustainability across two critical stages: I. Screening; II. Optimal portfolio selection. Under the screening stage, sustainability project criteria are proposed followed by the use of second order moment thinking to account for uncertainty in sustainability measurements. The outputs from the screening stage are then used for developing an efficient frontier which facilitates the selection of an optimal portfolio from a sustainability perspective. The originality of this paper is that it aims to integrate sustainability thinking into construction project portfolio management which has not been attempted.

III. METHODOLOGY

In this project work, using some method like NPV,IRR,C/B Ratio,Pay back period .find out best project to align organization strategic objective like vision

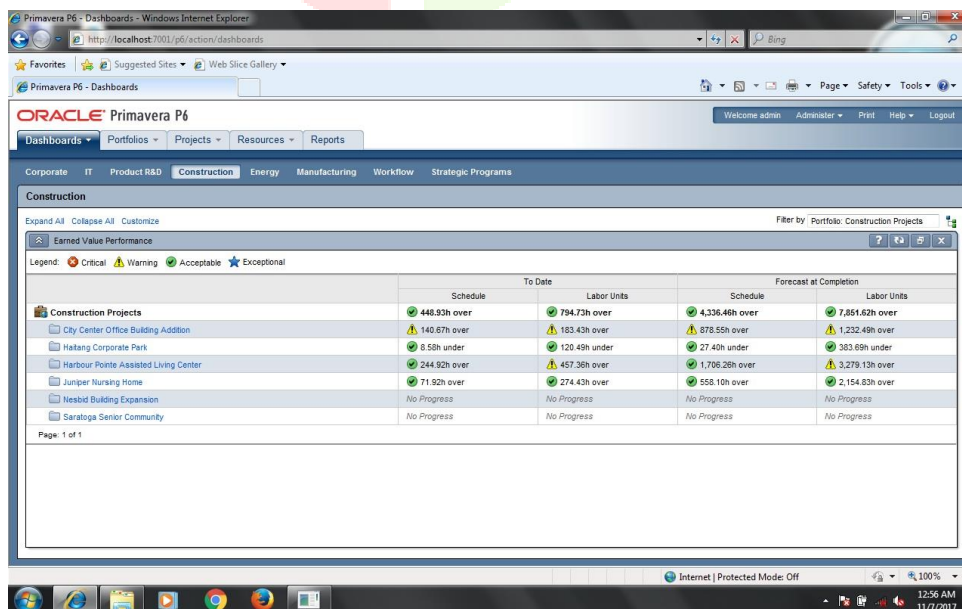
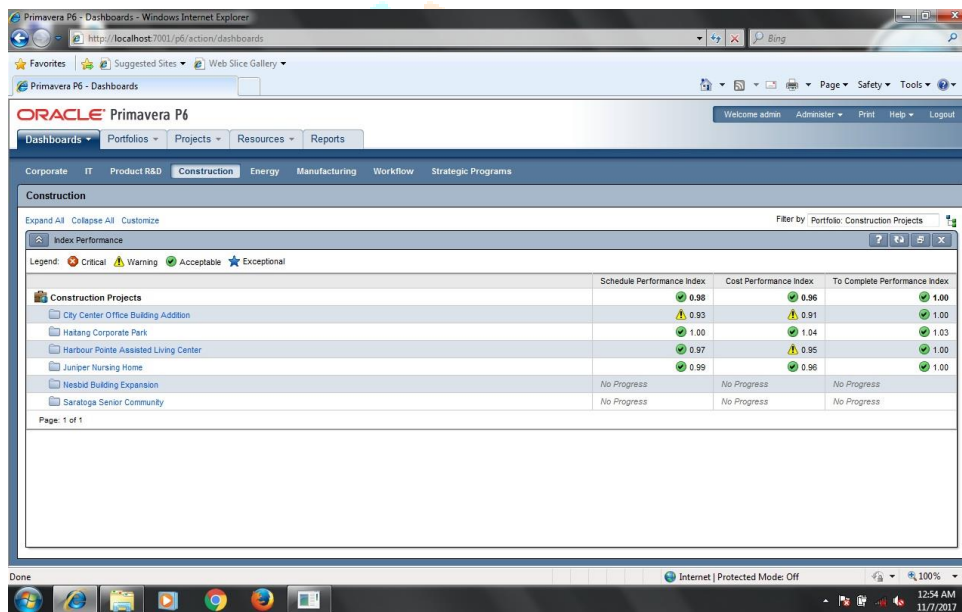
Procedure of work:

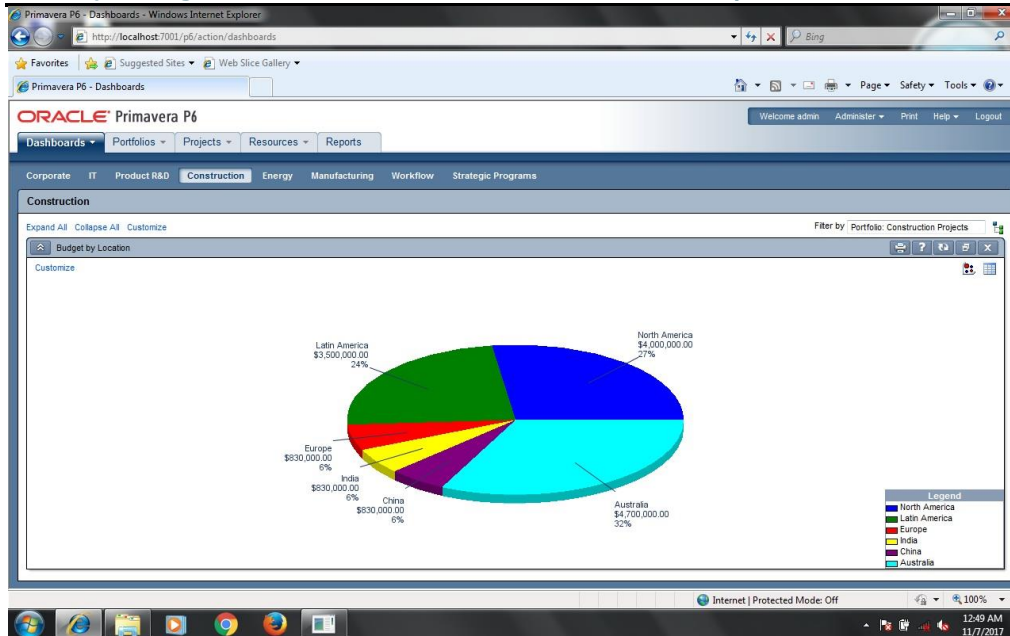
- Step 1: Study of organization vision and mission
- Step 2: Using analogous method(history) and bottom up method select the best
- Step 3: Develop schedule of selected project
- Step 4: Create a portfolio Monitoring and controlling portfolio
- Step 4: Develop dashboard

Objective:

- To study organization’s vision and missions
- To select the best construction project in an organization to fulfill strategic objective by using economic Measures.
- To develop project schedule of construction project
- Monitoring and controlling portfolio.
- Portfolio analysis and develop the dashboard using primavera web.

IV. RESULTS AND DISCUSSION





V. CONCLUSION

1. from above result it can be concluded that by using primavera software we can select best project in as organization to achieve a vision or goal of company .
2. The best selection of project to align with organization strategic objective
3. Using this technique or software plan and schedule project at high level to assign resource

VI. ACKNOWLEDGMENT

I am very thankful to guide Prof. R.D.Shinde HOD Civil Engineering Department for their encouragement, guidance and support in every phase of this work. Their valuable advice, suggestions and support was very useful at every time in the work. Special thanks to directors of Construction Company, project managers and engineers for cooperation in data collection from their sites in Nashik

REFERENCES

- [1]. A guide to the PROJECT MANAGEMENT BODY OF KNOWLEDGE (POMBOK) fifth edition
- [2] selection of key performance indicators as a key for successful implementation of eppm bsc model in pharmaceutical industry milan ikonik1, * - dražen kostelac1 - tonči mikac1 (2013)
- [3] Portfolio management for investment projects in the construction industry Alexander Kozlov1, and Ev geny Shnyrenkov2 (2016)
- [4]. Siva, T.N., Sri Lakshmana, K., (2016). "Schedule and Resources Optimization using Primavera in Metro Rail Project". International Journal of Mechanical and Production Engineering,
- [5] Akash, W., Dattatray, S., (2016). "Project Management using Primavera P68.2". International Journal of Innovations in Engineering Research and Technology
- [6] Mohd Ilyas, A., Brijbhushan, S., Maneeth P.D., (2017). "Planning, Scheduling, Resource Allocating and Tracking of Residential (G+2) Villa using Primavera P6". International Research Journal of Engineering and Technology
- [7] Sushant P., Rajendra, S., Vijay, K., (2016). "Planning, Scheduling and Resource Optimization of Multiple Projects using Oracle Primavera P6". International Journal of Research in Engineering and Technology
- [8] Raghunath, R., Harish, N., (2016). "Planning and Resource Scheduling of Residential (G+7) Project Using Primavera". International Journal of Innovative Research in Science Engineering and Technology