
[The author is an expert of software quality and Project Management. This white Paper deals with a new revolutionary approach in training project professionals for leading their projects successfully. Readers are welcome to suggest new topics and share their comments with the author at ribhu@qmentors.com].

White Paper: Competency Based Training on Project Management

- Ribhu Nath Lavania

Introduction

Deployment of teams under a suitable and competent manager to achieve a set of stakeholder needs is normally termed as a project. Projects have planned start and end dates and terminate once the defined objectives are met. Unlike government or private sector departmental operations, projects start with small team, ramp up their resources, ramp down towards the end of the project and then close down. Be it developing a national highway linking several provinces, raising an aircraft, or managing a small software development, leading teams to achieve planned and changing stakeholder needs within the scope and then dismantling the team are all examples of projects.

Legacy

An enormous amount of resources deployed by management of organizations in private and public sectors are wasted every year on account of failed projects, more so in the service industry. According to published data, up to 40% of organizational budgets of service companies at times are spent to meet price of non-conformance. The biggest contributor to this failure is lack of knowledge of project management and fact based decision making. Lack of planning leads to more failures than lack of implementing the plans in the right manner. Recent researches at Harvard Business School show that number of years of prior experience in managing similar projects does not help much, training does if the knowledge acquired during the training sessions is implemented in the right way.

In any organization, effective management of organizational assets is critical to business success. The same applies to project management.

In recent years the industry is experiencing fatal failures on account of ineffective change management and lack of project management skills. The basics are forgotten in the zeal to meet targets and that results in disasters for the organization and the society at large. Training and implementing the knowledge acquired from trainings has not been used effectively to meet organizational goals. Practical implementation hints and success factors are normally not covered in training sessions. That results in mere certifications. The basic need of adding value to the organizational business objectives is still not achieved. Lack of sensitivity to organizational goals leaves the investments in training initiatives more or less ineffective.

Needless to say that industry lacks knowledge and experience in two of the above aspects: using quality concepts as an enabler to the success of projects and metrics (measurements) based decision making.

To aid the managements to lead their projects to success, a number of courses are available worldwide. How many actually add value is anybody's guess.

Proposed Contents of Project Management Training

This White Paper seeks to find out ways to evolve such value adding training programs. It also recommends using the latest software, tools and techniques for imparting **Competency Based Training** which really adds value to the trainees and their organizations. This approach is in line with ISO/IEC 17024. Such a training program should include not only all levels of disciplines within the project management but more importantly the practical aspects of project management. Such practical aspects like success factors & barriers in the success of projects, implementation hints, soft skills, etiquettes, managing multi cultural/ multi location teams are essential ingredients of this training. They are considered equal enablers in the success of projects as the topics related to project management knowledge areas. What more, each of the competency based trainings is tweaked suitably for trainee's qualifications, past experience and even personality traits? Further, different versions of this training may be prepared for beginners and experienced project managers and also subject matter experts. Suitable versions of competency based training material may be developed to target specific industry sectors like software, infrastructure and aviation. Specialized trainings for project management knowledge areas like those on estimation techniques, domain, technology and soft skills are imparted depending upon the needs of trainees. Broad training contents of such training may be:

A. Collection of information for each training participant in a secured way

1. Examining each training participant's resume to know relevant details about him/ her
2. Collecting further relevant details of his/ her prior qualifications and industry and/ or academic experience
3. Review of information collected above (and maintaining full confidentiality)
4. Examine personal attributes of each training participant
5. Drawing Hogan Leadership Profile of each training participant
6. Determining to which industry segment the participant belongs (this helps the trainer to provide or arrange relevant industry specific information to the participant)
7. Collection of participants' feedback and its analysis leading to adequate preventive/ corrective actions

B. Delivery of Competency Based Project Management Training

1. Overview of basic concepts of project management
2. Overview of basic concepts of "Quality as an enabler to project's success"
3. Project life cycle activities like initiating, planning, implementation, controlling and closure
4. Project risk management
5. Project Change Management
6. Managing uncertainties- how to beat 'Murphy's law'
7. Importance of metrics based approach in tracking the projects to success
8. Adequate knowledge of statistical techniques and use of Excel sheets to manage most of the data based decision making
9. Quality Models and Standards, as applicable to Project Management
10. Applying the concepts of QA & QC
11. Establishing that reviews are much more effective than defect identification and closure
12. Knowledge of success factors, barriers and practical hints for ensuring project's success

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13. Providing an excellent repository of reference material available for training participants; and
 14. *Maintaining the training participant's knowledge base at least for three years time frame*

Establishing Effectiveness and Efficiency of Such a training

It becomes an ongoing challenge to provide personality specific training to each of the training participants which is effective and value adding as well as efficient in the sense it does not unduly eat into organizational resources by each tutor. So, how to achieve this goal

in today's scene when the industry as a whole is going for cost optimization in each walk of life?

The only way is to move towards web based online training having:

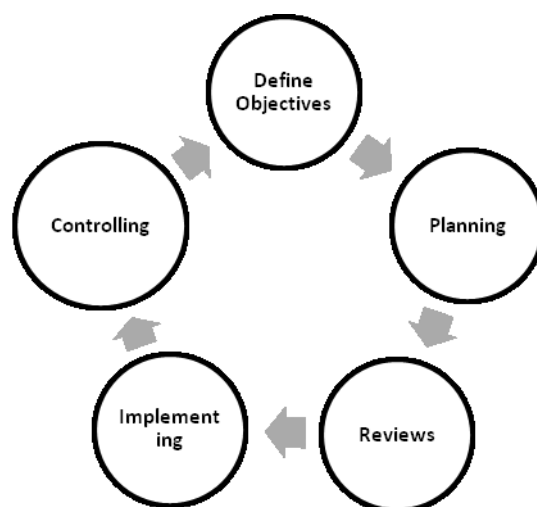
- a. Learning Management System (LMS) developed for collecting candidate specific data in a secured way
- b. Training material on Project Management
- c. Various quizzes, assessments and case studies. The LMS should be capable of conducting the assessments automatically in most of the cases.

Even though most of the participant specific and knowledge specific training delivery can be managed automatically, one to one tutor and trainee interactions are a must in clarifying issues from both sides and assessing portions of the knowledge gained which can't be assessed in auto mode.

The right solution is therefore a balanced mix of web based solutions and tutor- trainee personal interactions wherever necessary. Now, what if the tutor and trainee are not at the same location? Solution lies in the appropriate use of video conferencing. As an alternative, audio-visual messengers like Skype may be used.

Continual Improvement of Competency Based Training

The whole process of competency based project management training has to be continually improved based on PDCA model of Dr. Deming. Flow chart mentioned below may be used for improving the training material, delivery of training, assessments and reference material provided in the LMS or elsewhere.



In addition, training providers may run small PDCA based improvement cycles for identified weak areas. Planning must be considered a top priority in running the whole initiative of training business. Like so many projects, the training industry does not take planning at the priority it deserves. A good benchmark is deploying at least 30% of the effort in planning.

Project Management Centre of Excellence

Some of the training organizations develop and maintain 'Centers of Excellence' for specialized areas like Project Management. Such centers become a knowledge base over a period of time and start contributing to international and national benchmarks. Project Management programs conducted by such organizations are comparatively more effective than others.

Such organizations also offer certifications on successful completion of their competency based courses. In the unlikely situation where a course participant is not able to qualify in a quiz, case study or an exam, reference material is available in the 'centre of excellence' library for deeper understanding of issues involved. Sometimes, the faculty suggest additional 'remedial measures' before organizing subsequently rounds of exams.

Train the Trainer (TTT) Scheme

Obviously, such a specialized training can be provided only by *highly experienced and extremely well trained training facilitators*. They are able to conduct online as well as traditional classroom trainings in an effective manner. They are also able to provide peer support to candidates and ensure their Professional Leadership Development during and after the training and associated certification.

Very few organizations are able to attract and retain such trainers. Those who can, become market leaders. One such organization where I am also involved is ACI Global Pty. Ltd., Sydney, Australia (<http://www.aciglobal.com.au/>). This organization also maintains a community blog called "Quality Guru" (<http://www.thequalityguru.com/>) wherein Quality and Project Management professionals amongst others may participate and express their views for mutual benefits.

Conclusions

Soft skills, benchmarks, proven best practices and common sense play as important role in the success of Projects as the technical and domain specific issues. Competency based training of project professionals therefore proves to be much more value adding to organizations as compared to traditional trainings.

References:

1. QualityMentors library at <http://swqualitymentors.com/refencelibrary.aspx>
2. ACI Global 'Members Only' Library within the site <http://aciglobal.com.au/>
3. CMMI based best practices
4. Published benchmarks on Project Management