

Building enterprise project management capability 13

Audits, health checks, reviews and benchmarking

by Professor J. Rodney Turner

Over the past year, my series of articles has considered how to improve enterprise project management capability. Soon I will be starting a new, shorter series of articles on matching the project manager's leadership style and competence to the type of project for increased project success.

However, before finishing this series, I am going to discuss audits, health checks, reviews and benchmarking. These are important tools in learning and knowledge management, helping to identify weaknesses in current capability and thus possible areas of improvement. In this article I will be describing:

- definitions of audits, health checks, reviews and benchmarking
- the application of these tools to assessing the capability of the project-based organization
- the application of these tools to performance assessment of the individual project
- conducting a project management audit.

Definitions

Reviews, health checks, and audits are essentially variants of similar things.

Reviews

A review is a normal check of project progress or project performance conducted according to a predetermined schedule. Reviews may be calendar driven or event driven.

Calendar-driven reviews: These are conducted as part of the normal control cycle, (Turner, 1999). Current project performance data is gathered, analyzed and converted into reports:

- for the project manager and project team to control progress
- for senior management, particularly the sponsor, as discussed in an earlier article.

Event-driven reviews: These are normally held at the achievement of a project milestone, or stage gate. Stage-gate reviews are now very common, held at completion of project stages. Figure 1 illustrates a gateway review process, from my book on managing Web projects (Turner, 2003). At the end of each stage of the project a review is conducted to determine if the work of the previous stage has been properly conducted and if it is still worthwhile proceeding with the project. In the early stages of a project, stage-gate reviews will be go/no go

decisions, part of the benefits management process. The business case will be reviewed in the light of information generated during the last stage of the process to determine if it is still worthwhile proceeding with the project. In later stages, reviews may be go/go back decisions. Has the work of the last stage of the project been adequately done to enable progression to the next stage, or is further work necessary?

In my book (Turner, 1999), I suggest that stage-gate reviews are essential for a project to progress through the early stages, and for ensuring that a project is financially viable. When you start a project, the information available can be very inaccurate. You think the project is profitable, and at the best case it is highly profitable, but at the worse case it might be unprofitable. However, based on the information available, you decide to proceed (ready to discover), and commit a small amount of resource to the feasibility study. Through the feasibility study, you generate more information, and reduce the uncertainty of your estimates. It is still not enough to proceed, but enough to commit a larger number of resources to the design process (ready to design). Through the design process you gather enough information to reduce uncertainty, enough to take the final go/no go decision, and proceed to implementation, (ready to develop).

I once worked with an organization where the next stage gate (ready to deploy) on its product development projects was also a go/no go decision. They asked themselves if the market was still there to make it worthwhile releasing the product. However, on most projects, once you proceed to implementation, you commit your self irreversibly to proceed to completion; so you want to know that the decision is made using accurate data, not available at initial concept.

One particular event-driven review is the post-completion review. Here you review overall progress on the project, see how you did, and do two things:

- record performance data in your history files to help estimate future projects
- see if there are any lessons on what you did well and what you did badly to help the development of your overall project management capability.

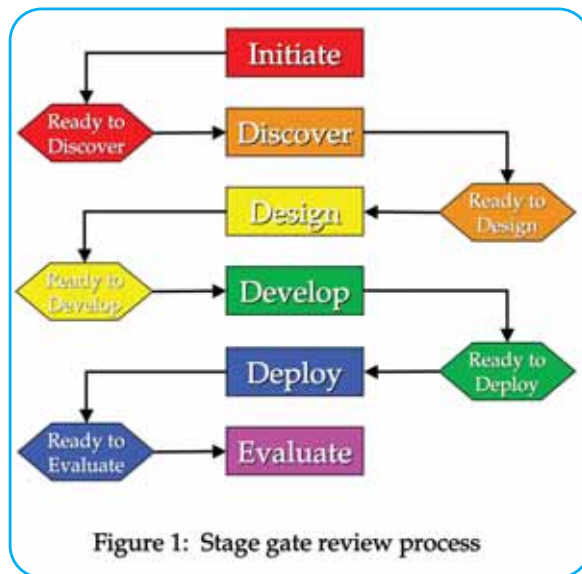


Figure 1: Stage gate review process

In the articles on learning and knowledge management, I discussed the problem of deferral of learning, putting it off until the end. Learning about how you did should be built into all the stage-gate reviews.

Health checks

Health checks are ad hoc reviews, conducted by the project team, to do a one-off assessment of the health of a project or of the project context. In my books (Turner, 1999; Turner and Simister, 2000), I suggest you may conduct two types of health check:

Project health check: This is a check of the performance of a project: The team step back from the project for half a day, or a day, just to check that it has been properly set up, that all the relevant controls are in place and are being properly used, so that the project is progressing to a likely successful outcome. It is very easy, once you are in the thick of a project, not to think about whether it has been properly established. You are so busy working that you can't think about whether it is being done properly. And it seems impossible to take time to step back from the coalface for half a day, or a day, to consider how you are doing. But it is better to spend half a day to discover a mistake that might cost weeks or months, than to rush headlong only to discover the mistake when it is too late. Project health checks are not the same things as stage-gate reviews. Stage-gate reviews are go/no-go/go-back decisions based on an assessment of the business plan, using the data currently available to the project. Health checks should be conducted about a quarter of the way into the design and execution stages, to check that they have been properly established and that they are progressing to a likely successful conclusion.

Project management capability health checks:

These are an assessment of the project management capability of the organization. I have termed these 'Projectivity health checks'. I will describe them in the next section, though they have now largely been superseded by benchmarking and the application of maturity models.

Audits

Audits are essentially the same as health checks, except that they are conducted by external, independent auditors. It is useful for the project team to step back and consider how they are doing, but because they are close to the problem, they can still miss a serious mistake. If a project is highly critical to an organization, of high strategic value, and a significant commitment of (financial) resources, the parent organization may want to ensure it has been properly set up and so will invite independent auditors to take a look. However, it is essential for the auditors to adopt a supportive approach, ie, they are there to help the project team achieve a successful outcome, rather than an attitude that they are there to check up on the project team. The latter approach can induce considerable resistance from the project team, and a reluctance to help. If, however, the auditors are supportive and work with the project team in a spirit of partnership, then the audit process can be very valuable.

Some post-completion audits are conducted to find out why a failed project failed so catastrophically. Then the auditors' role is to check up on the project team and they may meet with resistance. But if the project team have failed badly, they may be feeling guilty and so may offer little resistance. I have conducted post-completion audits where members of the project team try to blame each other, or senior management, and have collaborated with me in trying to blame each other. Often they were unaware of their own contribution to the failure, and in collaborating condemned themselves as well.

Benchmarking

Benchmarking is essentially different from reviews, audits and health checks. Its emphasis is on determining how the project is being managed in comparison to the organization's standards of best practice, whether it is financially viable, and to learn from successes and failures to improve the organization's standards. The emphasis of benchmarking is to compare the organization's standards and its project performance to industry current best practice. Benchmarking may be quantitative or qualitative.

Quantitative: In quantitative benchmarking, an organization compares its project performance against other projects from the industry. It doesn't compare against individual projects, but against the mean and standard deviation of a collection of projects.

Qualitative: In qualitative benchmarking, the organization compares its standard procedures against industry standards. This is closely linked to project management maturity. Maturity models, in effect, provide questionnaires for qualitative benchmarking.

Assessing the capability of the project-based organization

I will be discussing two things in this section:

1. Projectivity health checks
2. Qualitative benchmarking or maturity.

Projectivity health checks

Through a projectivity health check, an organization will attempt to assess whether its project management procedures meet best practice. Through a series of questions that force the organization to assess its procedures, it will assess whether they meet its needs for project effectiveness. In my books (Turner, 1999, Turner and Simister, 2000), I give possible questionnaires. There is not space to reproduce them here but I can describe their coverage and application.

In an earlier article, I said an organization should be competent at three things:

1. its application of the project life cycle,

including go/no-go/go-back decisions at stage-gate reviews

2. its application of the project management life cycle
3. its management of the project management functions or knowledge areas.

So, to assess its project management capability, an organization should develop a set of questions (or use mine), which ask:

Project life cycle

- How well do we initiate projects?
- How well do we make the decision to proceed to feasibility?
- How well do we conduct feasibility studies?
- How well do we make the decision to proceed to design?
- How well do we plan and design projects?
- How well do we conduct investment appraisal and take the decision to proceed to execution?
- How well do we plan, execute and control projects?
- How well do we take the decision to proceed to closure?
- How well do we finish the work, commission the asset and achieve the benefit?
- How well do we conduct post-completion reviews?

Project management life cycle

- How well do we plan projects?
- How well do we assign roles and responsibilities for undertaking projects?
- How well do we assign resources to projects?
- How well do we control progress on projects?

Tools and techniques

- Do we use appropriate tools and techniques on our projects?
- Do we tailor our procedures appropriately to the size and type of projects?
- How well do we manage scope?
- How well do we manage project organization?
- How well do we manage cost?

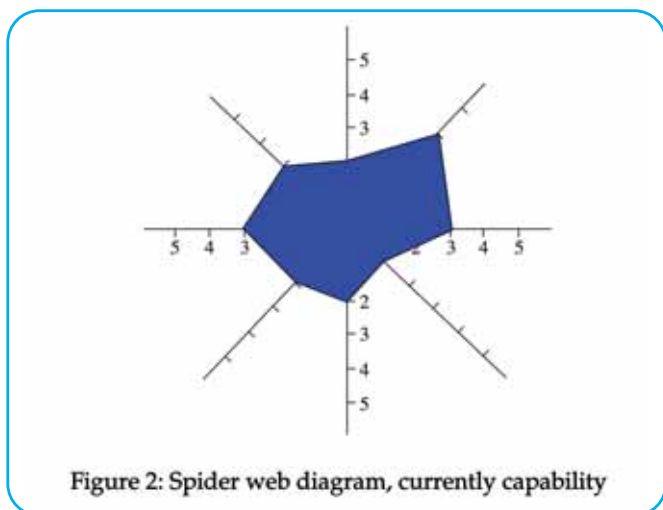


Figure 2: Spider web diagram, currently capability

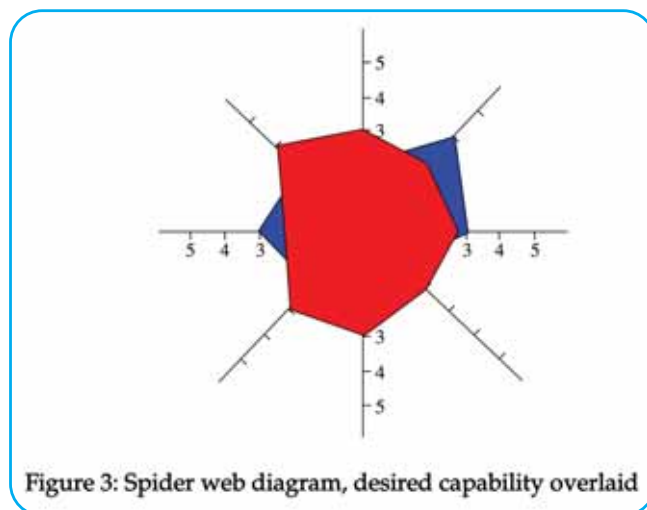


Figure 3: Spider web diagram, desired capability overlaid

- How well do we manage time?
- How well do we manage quality?
- How well do we manage risk?
- How well do we manage communication?
- How well do we manage project procurement?
- How well do we manage human resources?
- How well do we manage anything else that is important?

What I suggest is that you ask people from different departments to complete the questionnaires and look for areas where:

- they agree that you are weak
- they have differences of opinion about whether you are weak or strong.

In conducting a health check you are assessing how well you think you are doing against what you think you should be doing.

Benchmarking

In benchmarking you are trying to assess your performance against industry best practice. Huemann (2004) suggests that there are four steps in benchmarking:

1. Understand the detail of your own processes
2. Analyze the processes of others
3. Compare your performance with that of the others
4. Close any gaps identified.

As I have said, project management maturity models provide a ready set of questions to help you both analyze your own processes and those of others. However, many benchmarking communities also exist. The Human Systems network operates benchmarking communities in Europe, North America, Australia and Hong Kong, and will shortly open a network in China. In comparing your performance, it is common to prepare a spider-web diagram (Figures 2 and 3). First you plot your own performance, Figure 2, against parameters that you consider important on a scale of, say, 1 to 6. Then you plot the performance of others, Figure 3. The gaps will be obvious.

Figure 3 may also represent the standard you need to achieve to reach the next level of maturity. One slight problem is that the maturity models require you to achieve a defined standard against all the parameters, regardless of your own needs as an organization. Against one or two parameters you may not need to achieve the standard defined, and against one or two others you may feel you need to achieve a higher standard. So, conducting your own benchmarking exercise enables you to tailor the standards to your own

needs. Against that, the maturity models provide a ready-made set of questions.

Assessing the performance of an individual project

I will discuss two things in this section:

1. conducting health checks on individual projects
2. qualitative benchmarking of individual project performance.

Health checks on individual projects

To conduct a health check on an individual project, I suggest you develop a questionnaire to help you investigate key points. Questionnaires are suggested in my book, (Turner, 1999; Turner and Simister, 2000). There is not space to repeat them here, but they may cover issues like:

- Are the project objectives understood and accepted by all?
- Are the success criteria and key performance indicators understood and accepted by all?
- Are the success factors understood and accepted by all?
- Have appropriate tools and techniques been adopted to help achieve the success factors and success criteria?
- Has the project been well planned?
- Are the tools and techniques being properly applied?
- Is the project being well controlled, with the right progress data being gathered and analyzed in the right way, and useful reports produced to control progress?

Again, the questionnaire should be completed by all project team members, and other people, including the users and other stakeholders. You should focus on:

- where team members disagree about the answers
- where they all agree that the project is not being well managed.

Quantitative benchmarking

It is sometimes possible to benchmark project performance against industry databases. For instance, the European Construction Institute and the Construction Industry Institute maintain a benchmarking database. Members can enter project performance data for individual projects and compare their performance to all the projects currently in the database.

This does not give members direct comparison of their projects to those of their competitors, but they are able to see how they are performing in comparison to industry norms.

Members are then able to improve their performance in areas where they are weak.

Conducting a project management audit

As I said earlier, an audit is conducted, on behalf of the project owner, by external people to help ensure that a project has been set up and is being managed in a way to ensure success. In my book I suggest a seven-step process for conducting an audit:

1. Conduct interviews
2. Analyze data
3. Sample management reports
4. Compare against standards of best practice
5. Repeat steps 1 to 4 as necessary
6. Identify strengths and weaknesses
7. Define opportunities for improvement.

Huemann (2004) suggests a seven-step process, based on more recent experience:

1. Analyze the situation
2. Plan the audit
3. Prepare for the audit
4. Conduct the audit
5. Generate the report
6. Present the results to the project owner
7. Terminate the audit.

She suggests that step four, the audit itself, consists of four sub-processes:

- 4.1 Analyze documentation, including control data and control reports
- 4.2 Conduct interviews with the project team as necessary
- 4.3 Observe the project team in action
- 4.4 Ask the project team to assess their own performance, perhaps against a health check.

Audits and emotions

Audits can be highly emotionally charged. The project team can feel embattled. It is important for the auditors to work with the project team, to help them see that they are there to help the project team successfully achieve their objectives.

References

- Huemann, M., 'Improving quality in projects and programmes', in Morris, P.W.G and Pinto, J.K., (eds), *The Wiley Guide to Managing Projects*, Wiley, New York, ISBN: 0-471-23302-1.
- Turner, J.R., 1999, *The Handbook of Project Based Management*, 2nd edition, McGraw-Hill, London, ISBN: 0-07-709161-2.
- Turner, J.R., 2004, *Managing Web Projects: The Management of Large Projects and Programmes for Web-space Delivery*, Gower, Aldershot, ISBN: 0-566-08567-4.
- Turner, J.R. and Simister, S.J., (eds), 2000, *The Gower Handbook of Project Management*, 3rd edition, Gower, Aldershot, ISBN: 0-566-08138-5.

Rodney Turner is Professor of Project Management at the Lille Graduate School of Management, and chief executive of EuroProjex: the European Centre for Project Excellence, a network of trainers and consultants in project management. He is the author or editor of nine books. Past chairman of the APM, he has also helped to establish the Benelux Region of the European Construction Institute as foundation Operations Director. Rodney received PMI's 2004 Research Achievement Award at the Global Congress in Prague in April 2004.

E-mail: rodneysturner@europrojex.co.uk

This article was first published in Chinese, in *Project Management Technology*, published China Machine Press, Beijing.

