

PROJECT TEAM PERFORMANCE: A CONTINUOUS IMPROVEMENT METHODOLOGY

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RESUME

Une étude de cas et un modèle portant sur l'amélioration continue des performances de la gestion de projet par les équipes de projet. Au moyen d'un processus d'aide, les équipes de projet analysent leurs méthodes de gestion de projet et conçoivent, testent et recommandent des modifications à apporter à leur Système certifié de Gestion de la Qualité.

SUMMARY

This paper presents a methodology for continuous improvement of project management performance of project teams. Through a facilitated process, project teams review their project management practices and design, test and recommend changes for inclusion in their certified Quality Management System.

INTRODUCTION

Successful organisations of the future will be those which are able to rapidly respond and adapt to changes in their business environment. Organisations in all industries, and of all sizes are choosing or being forced by the marketplace to manage by projects. At the same time, there is increasing emphasis upon quality. The whole organisation and its people must simultaneously and continuously change and improve.

This challenge can be met by an holistic approach of empowering individuals, through project teams, to continuously change and develop organisational strategy, structure, systems, work practices, and skills.

In this paper we propose a methodology for continuous improvement of project team performance which emphasises:

- the need for a supportive environment
- that the process will only be sustainable if owned by the teams and individuals involved

The methodology has been developed through work by the authors with organisations in both consulting and training contexts. It involves **individuals**, working in project **teams**, on an on-going series of **tasks**, to develop and improve project management **practices**, which are maintained, updated and disseminated through a certified **Quality Management System (QMS)**.

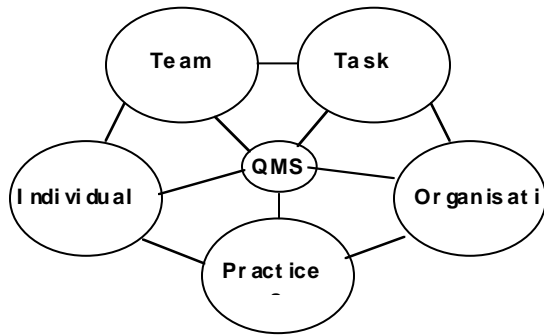


Figure 1

BACKGROUND

Two main theoretical models underpin the methodology proposed here. The first is the concept of **completeness of approach**, as expressed in the McKinsey 7-S Framework [1]. The second model is the philosophy of organisational **self design** as proposed by Mohrman and Cummings [2]. Continuous improvement of project team performance is fostered by the effective and interactive use of a certified **Quality Management System**.

Completeness of approach

The McKinsey 7-S Framework proposes that there are seven dimensions of an organisation which work together to determine overall performance:

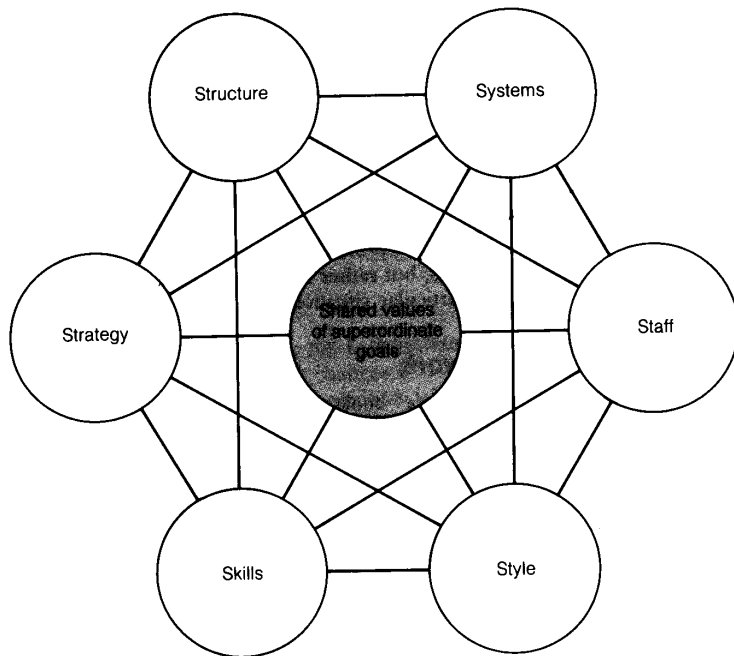


Figure 2 McKinsey 7-S Framework[©]

Strategy: Plans for the allocation of a firm's scarce resources, over time, to reach identified goals

Structure: Definition and allocation of roles within the organisation

Systems: Procedures and work practices; support infrastructure

Staff: Numbers and types of personnel within the organisation

Skills: Distinctive capabilities of personnel or of the organisation as a whole

Style: Cultural style of the organisation and how key managers behave in achieving the organisation's goals

Shared Values: Guiding concepts that are shared by members of the organisation

This is an important checklist for organisational change. Problems in implementation of change can generally be attributed to failure to consider and deal with one or more aspects of the organisation. For example, if new systems are introduced they are unlikely to be readily taken up and correctly used by staff if they are not directly aligned to the organisation's goals and accompanied by an appropriate training programme.

Self design

Self design enables organisations to invent new approaches and tailor innovations to their own situations, continually improve them and modify them if circumstances change. The capacity for self design is fundamental to creating high performance teams and organisations. Self design is an approach that deals with situations where there are competing goals across multiple levels of an organisation. It emphasises repeatable solutions based on a systemic approach to organisational problems. Six points of self design are proposed by Mohrman and Cummings [3]. The process must:

1. Address the systemic nature of any change
2. Be dynamic and iterative
3. Facilitate organisational learning
4. Attend to conflicting goals, needs and interests
5. Occur at multiple levels of the organisation
6. Enable first and second order change ie both fine tuning and radical change

Approaches to corporate change which directly involve the staff affected will be more likely to succeed. While it is possible to impose change from above or by stealth, such methods inevitably result in an underlying atmosphere of disquiet and distrust. What is missing, in particular, is any sense of ownership by those most affected. The sense of ownership is the key element in the philosophy of self design [4].

Ownership of change brings with it a commitment to both implementation and to quality of outcomes. Self design is a process which lends itself to rapid and continuous response to environmental change.

Quality Management Systems

Once project teams are empowered to continuously develop and improve their practices, a system is needed to capture such changes and share them with other teams within the organisation. A certified Quality Management System which is owned by project personnel is a powerful tool for capturing, managing and disseminating performance improvement of teams throughout an organisation.

A Continuous Improvement Methodology for Project Team Performance

The methodology presented here had its origins in work by the authors with a privately owned Australian computing company. It has subsequently been refined through experience with the Government sector.

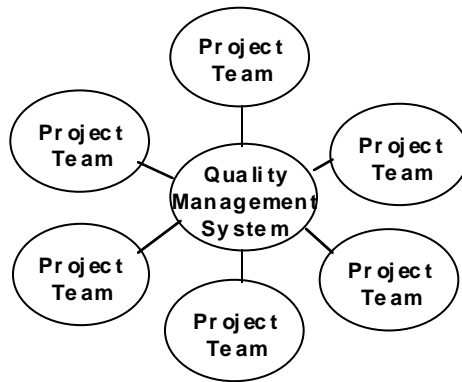


Figure 3

The computer company had recognised that the nature of its business had changed. Company culture, structure and work practices still reflected an open ended, time and materials approach but, driven by the increasing size and complexity of work and a move by clients to fixed price contracts, the majority of work was now project based. It was becoming increasingly apparent that work practices and business approach would need to be modified. The question was how and in what direction.

Management had identified a need to develop a project management culture within the organisation. This stemmed from two major concerns. One was the ability of the organisation to continue to secure and successfully manage increasingly complex projects, the other was a need for improved internal control procedures to ensure the profitability of projects under fixed price contracts. Addressing the latter would also provide a costing database which would serve as a basis for future tender responses and general project quoting.

Like the computer company, the Government sector was faced with fundamental changes in their operating environment. Government enterprises became responsible for transforming themselves into results oriented, self funding operations capable of competing effectively with the private sector [5]. Management by projects, supported by development of project management skills and procedures proved to be a powerful tool in achieving this transformation.

Both the private and public sector organisations began by focusing on the development of project management skills of individuals through training but realised that a more comprehensive and robust approach was required.

The methodology adopted addressed all dimensions of the McKinsey 7-S Framework and is outlined in Figure 4.

Strategy

The process begins with the strategy of the organisation. For the computing company, the strategy was to continue to secure and successfully manage increasingly complex projects. For the Government, the strategies were to change work practices and approaches, improve performance and become self funding.

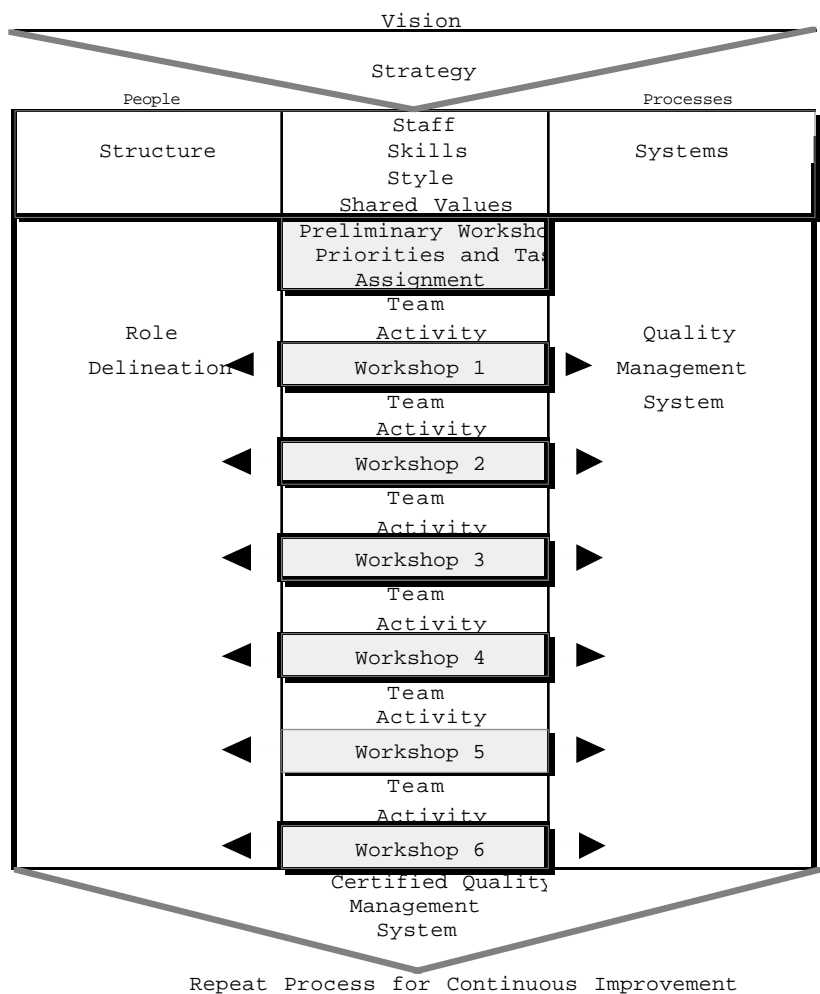


Figure 4

Process

Identify participants

Following the philosophy of self design, project team members are brought together in a facilitated workshop. They identify and prioritise issues to be addressed in order to improve performance. The organisational strategy and size of the organisation will dictate the number of workshops required. An effective number for each workshop is 20 to 30 participants. A 2 to 2.5 day residential workshop provides valuable opportunities for team development and networking between participants which adds strength to the process.

The computing company began the process with a 2.5 day residential workshop for 30 Project Managers and Account Managers. The Account Managers were responsible for initial client contact, negotiation of contracts and financial management, while the Project Managers were responsible for the day to day management of the project once secured. Communication between the two groups was poor and was exacerbated by poor role delineation and a lack of shared terminology and procedures.

Inclusion of participants from different project teams and a range of backgrounds and experience fosters opportunities for knowledge transfer and development of organisational networks.

Identify priorities

The nine Units of the National Competency Standards for Project Management developed under sponsorship of the Australian Institute of Project Management [6] provide a good starting point for identification of issues and priorities for improvement of project team performance. The Competency Units are:

- Project Integration
- Scope Management
- Time Management
- Cost Management
- Risk Management
- Quality Management
- Communications Management
- Human Resource Management
- Procurement Management

These units reflect and are supported by the Project Management Body of Knowledge produced by PMI (USA) [7].

The computing company identified the following priorities:

High priority

- Scope Management
- Risk Management
- Time Management
- Management of the client interface

Medium priority

- Quality Management
- Human Resource Management
- Communications Management

Low with potential to be high priority

- Cost Management
- Procurement Management (contractual aspects)

It is interesting that similar priorities were identified by the Government sector.

Assign Tasks

Having established key issues and priorities, teams volunteer for tasks and agree a program of further workshops and team presentation dates.

For the issue or issues assigned, each team is required to examine the issue

- gather data on current workplace practices

- review current workplace practices

- develop proposals for improvement

- present findings and proposals to other participants

- modify proposals as required

- gain agreement of other participants

- write up new procedures for incorporation in the organisations certified QMS

Workshop Program

In the case of the computer company, a series of six half day workshops were scheduled at two week intervals, allowing time between workshops for teams to carry out their tasks and for all participants to trial proposed procedures and provide feedback. One Government organisation adopted a pattern of 14 half day sessions at weekly intervals.

The initial intensive program should be followed by an ongoing series of sessions at agreed intervals - possibly one or two months - to review the application of procedures in practice, identify and incorporate further improvements. The ongoing program also provides a forum for introduction of new information, sharing and development of skills and experience. This program plays an important part in continuously developing **skills of staff**, as well as **style** and **shared values**.

Results of the workshop program are fed into both the Quality Management System and an ongoing process of role delineation.

Structure

As teams work together to develop and improve work practices and procedures, they should also be reviewing the definition and allocation of roles. An important aspect in the effective performance of teams is clear role definition. In a changing environment roles of teams and team members do not remain static. They require regular maintenance.

Delineation of roles of Project and Account Managers within the computer company was identified as a major problem in terms of team performance. It was a cause for conflict and dissatisfaction. The company had experienced rapid growth and change in the nature of its work and roles which had once appeared clear and well defined were no longer either generally understood, accepted, applicable or appropriate. A complete review and re-definition of roles to match the new work practices and procedures was conducted as part of the workshop program. This should be an ongoing process.

In the Government sector, public servants have come to expect re-structuring as part of their work life. Re-structuring from above occurs as a result of changes of Government as well as performance reviews and policy initiatives. Bureaucratically defined job descriptions can rarely keep pace with the reality of the workplace. There is a need for individuals and teams to take the initiative and carry out their own ongoing role delineation in order to maintain and improve team performance.

Systems

Reviewed and agreed procedures as well as outcomes of role delineation are incorporated in the organisations Quality Management System. In this way they become part of the organisations shared memory and procedures developed by one team or group of teams become available to others. The QMS provides a process for managing and disseminating all the improvements and innovations in procedures and work practices throughout the organisation.

Both the computer company and the Government sector had received certification of their Quality Management Systems. Such certification by an external body provides another level of accountability for the maintenance of the system.

Management of the Program

In keeping with the principles of self design, it is essential that the process be driven and managed by the teams themselves. However, the teams can enhance the success of their programs by involving an external facilitator. In the same way as certification of the QMS provides a level of accountability for maintenance of the systems, an external facilitator can assist in establishing and maintaining the momentum and direction of the program. Individuals and project teams can readily become absorbed in their day to day activities and project deadlines. Involvement of an

external facilitator establishes the project team performance process as another project with its own tasks and deadlines. The external facilitator can also provide a different perspective and input to the program from beyond the boundaries of the organisation and the experience of the participants.

The role of the facilitator can include:

- managing the workshop program
- facilitating the workshops
- recording agreement of decisions and actions proposed at workshops
- providing additional information and support as requested by participants
- bringing a broader perspective, questioning, ensuring the process is not introspective and providing additional ideas, resources and contacts

The facilitator should be on call throughout the program to assist teams and individuals with their tasks between workshops.

In the case of both the computer company and the Government sector, the facilitator was first identified as a trainer to assist in development of project management skills. The role of trainer changed to that of facilitator as the teams realised that, given the right environment and support, they were able to self design not only their own procedures and roles but their own learning experiences. Training and skill development became an inherent part of the team performance improvement program.

CONCLUSION

The methodology proposed in this paper can be used by single project teams or whole organisations to establish a sustainable process of continuous performance improvement. It is a flexible approach with three key elements around which teams and organisations can design programs to suit their own needs and operations. The three key elements are:

Completeness of approach

all dimensions of the team and its business environment must be considered - strategy, structure, skills, staff, shared values, style and systems

Self Design

teams and individuals must design and own their own process for continuous performance improvement

Systems

a Quality Management System is a powerful tool for capturing and disseminating improvements and innovations

Another important element is the use by the project teams of an external facilitator to maintain the momentum of the program and act as an ongoing mentor and resource.

This methodology provides teams and organisations with a flexible, systematic and robust approach for dealing with the need to simultaneously and continuously manage change and improve their performance.

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