

PIPMG - Pharmaceutical Industry Project Management Group

Spring Meeting – 20th/21st November 2007 – Sunningdale Park, Ascot

FIT FOR PURPOSE PROJECT MANAGEMENT ?

Chaired by Tom Halliwell (Roche) and Moira Thomson (Fulcrum)

Introduction

Success in developing medicines depends on application of project management skills, processes and systems to maintain quality, timescale, cost and product-value. As with cars, it's tempting to believe that the newest, fastest or most sophisticated means of getting there must be the best.

This meeting challenged some of the assumptions about best practice, emphasised the importance of people in the process and encouraged the adoption of a pragmatic approach.

Project Management Maturity – What is it, and is it important ?

Stephen Allport (Human Systems Ltd)

The extent to which an organisation commits to managing projects effectively is a measure of its ability to deliver. The concept of PM maturity implies that this cannot be acquired overnight. Rather it is something that is considered, developed and perfected over time. It's not surprising that many attempts have been made to codify and measure it.

Amongst at least 30 established models, OPM3 (the Organisational Project Management Maturity Model of the Project Management Institute) is becoming a recognised standard. OPM3 recognises 586 areas of best practice at the levels of project, programme & portfolio management. The development of maturity begins with standardisation of best practices and progresses through control, measurement and continual improvement.

Much of the benefit from close examination of best practices is simply in raising awareness. Often the measured results are not obviously linked with the means of improvement; e.g. project duration may best be controlled by assigning accountability and effective risk management. Maturity is not just a function of process-improvement – the development of PM practitioners from novice to expert, through identifiable stages, is a major factor in an organisation's capacity to deliver. "People make Projects work."

Like populations in biology, the maturation process can over-run into decline and stagnation. Could this be because of a smug feeling that no further optimisation is necessary, or because people don't feel ownership of processes already established ? It follows that PM practices need continually to be revitalised to maintain the effectiveness that comes from maturity. The change itself can be invigorating – possibly through the Hawthorne Effect (1920s experiments showed that performance improved when workers received increased attention).

Evidence was presented that mature companies tend to meet schedule and budget more reliably than those less mature. Put another way - higher project performance is associated with higher levels of PM maturity. Overall, the Pharma industry appears only 60% as mature as the Engineering and Construction sector - but the maturity models probably do not measure the (changing) imperatives for Pharma. For instance, 21st century R&D productivity depends on forming alliances & outsourcing – requiring negotiating, facilitating & contract-management capabilities not well represented in existing maturity-models.

A more holistic view of maturity shifts the emphasis from factors affecting individual processes to the building of an enterprise-wide capability. Here, value is placed on leadership and a culture that supports process-improvement; skills, methodologies and mechanisms for managing process-redesign are fostered. Ownership of processes moves up the organisation to a more strategic level. Improvement in maturity is rewarded.

While awareness of PM maturity is desirable, the way you select the means of measurement needs to be adapted to the nature of the business and changing times. Blindly counting up your score is like putting lipstick on a pig (it's still a pig).

Behaviour-Driven Project Success

Pete Harpum & Inge Fisher (Harpum Consulting)

Following on from the important observation that "People make Projects work," there is much value in trying to discover the behavioural factors that lead to successful projects. In order to make the discoveries useful, the success factors need to be built in to a Competency Framework – a 'specification' for the capabilities needed for effective participation in projects.

A lot of the important research in this field is quite old (Morris & Hough (1987); Baker, Murphy & Fisher (1974); Pinto & Slevin (1988)) so it's surprising that the behaviours are not already commonplace. Maybe not, though - considering the hard-bitten "just do it" attitude that has been traditional amongst project managers in some sectors.

Clear and honest communication is central - even over the seemingly simple definition of what constitutes project-success. Neither the development of the Concorde aircraft nor the building of the Sydney Opera House would be considered successful projects according to hard quantitative measures. The authority of quality assurance requires high-level sponsorship. Beware of the dangerous mixture of urgency and technical uncertainty (e.g. the Challenger Shuttle disaster).

A lot of the best practice identified could be summarised by 'seeing others points-of-view,' or application of emotional intelligence to interpersonal interactions, during the phases of a project. Consideration of political, social and cultural factors can be as important as setting the budget. Recognition (of people & factors), and caution, are common in the list of positive behaviours. Baker et al showed that 77% of project-success was due to effective co-ordination and good team-client relations.

Pinto & Slevin identified 10 critical success factors : Clearly defined mission; top management support; detailed schedule plans; client consultation; careful recruitment; technical resources; client acceptance; monitoring & feedback; communication; troubleshooting. All require some element of "soft skills."

Implementation of these critical success factors can be difficult, depending on the personalities of the participants. How can action-oriented individuals be encouraged to join in with risk workshops ? Where's the SOP for active listening ? Supportive informal relations are not enforceable! Job-mobility can negate discipline & governance.

Aspects of maturity models relating to behaviour may not be directly transferable from engineering to pharma so a gap-analysis is a necessary part of the development of a competency framework.

What are competencies ? Whiddett & Hollyforde define them as: "... behaviours that individuals demonstrate when undertaking job-relevant tasks effectively within a given organisational context.". Skills (even communication-skills) and knowledge are not competencies. For example, a skilled young driver with a good knowledge of the Highway Code may crash their car because of a missing behavioural competency.

Competency frameworks are essential to selection, development and appraisal – but they will vary according to line-function. They can begin with core competencies (common to all jobs) and draw from a 'library' of all the competencies that might be relevant. They should be clear & unambiguous, and their relevance needs to be understood.

The process follows a familiar pattern of involving end-users, gathering requirements, keeping people informed, analysis, validation, communication - but development of a competency framework must begin with an understanding of what the organisation needs to be good at, and a commitment to achieve the improvement.

References

Morris, P.W.G., Hough, H (1987), in *The Anatomy of Major Projects – a study of the reality of Project Management*, Pub: John Wiley & Sons (Chichester)

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Whiddett, S. & Hollyforde, S (2003), *A Practical Guide to Competencies: How to enhance individual and organisational performance*. Chartered Institute of Personnel and Development. London.

Project Management Systems and Tools

Aize Smink (Chiltern International)

It's easy to be seduced into believing that a new system or tool will solve all the problems of running a successful project. The adoption of tools & systems is not necessarily a sign of, or a means to, PM maturity. This walk through the experience of a Clinical CRO was structured around the life-cycle of a project. What needs doing when, and by whom, is much more important than the systems themselves. Start with a feasibility study and assess risks before moving on to implementation.

Planning. CROs need careful resource management to draw upon the right skills & experience and, for an international supplier, this extends to location as well. Cost-modelling is also central to a successful project proposal – but the GIGO principle applies to this, as to all modelling. It's well established that attention to risk and prevention of its effects can maintain schedule and budget - critical risks being those with highest probability x impact. The project plan should be fit for purpose to generate a realistic schedule but not so detailed that its maintenance becomes an end in itself. There is a lot to be said for lists of What & When !

Execution. Project Management competence is not in using the systems but in making good judgements and decisions. During the conduct of the project, issues must be identified and resolved quickly, and priorities determined. The tools & systems facilitate this by providing data and allowing 'what-if' evaluations. Decisions, expectations and outcomes are communicated.

Control. Monitoring of operational and financial metrics allows a continuous healthcheck on the project. A 'traffic-light' system can help to alert the PM when these metrics stray out of their nominal limits.

Clinical CROs have the added complexities of managing international regulatory & local ethics requirements plus, of course, the patient-data.

Some organisations and commercial software-suppliers attempt to integrate all these systems - and there are benefits in sharing information (e.g. resource & budget) across projects. However, there is a tendency for over-engineered systems to inhibit individual action and it is, after all, people and their experience that make projects work.

Table Workshop 1 - Project Management Processes

What PM Tools & Processes are needed ?

- Scheduling & planning - MS Project, Planisware OPX2-Pharma
- Risk, Cost, Resource, Portfolio analysis & forecasting - Excel
- Communication - Powerpoint, E-room, Live Link
- Budget & Financial Tools
- Risk Register - distinguish micro & macro risks
- Decision Trails and Trees
- Status Reporting
- Capturing Project-knowledge (storytelling)
- Document Management
- Lean 6 Sigma
- Maintain Product-strategy documentation
- Change-control on Project scope & definition
- Standardised training & SOPs for PM in some cos
- Team Training & Development records
- Competency matrices
- Appraisal within matrix - 360' feedback
- Project Charter sets out 'matrix-rules'
- Avoid SOP-overload

Are all the Tools & Processes valuable and worthwhile?

- Depends on organisation
- Tools encourage complete & uniform data-capture
- Team reports improve quality of information (less filtering)
- Preference for quick tools that are not heavily data-dependent !
- Need to allow for different depth of detail depending on use & audience
- Recording & reporting are time-consuming - must justify effort
- Report should come from whoever is responsible for delivery
- Portfolio reporting requires integration of multiple systems
- Portals to systems may require double handling of info if not shared
- Information provided is not always well utilised
- Natural evolution with time and numbers of projects
- Standardised templates need flexibility because of diverse activity
- File-sharing & Excel databases are not good IT but can be effective
- Learnings at milestones - independent facilitator - formality varies
- Systems enable transparency and can encourage discussion
- Critical Chain not much used

How are are Tools & Processes used for Management Reporting ?

- Identify issues requiring senior management decisions
- Management need reassurance of what reports to expect and when
- Lobbying and 'structuring' information to facilitate decisions
- Dashboards to aid awareness of Key Performance Indicators
- TPP & Risk - Constant review especially at Stages & Gates
- Stakeholder mgt prominent in big cos (pre-meetings)
- Central PM reporting benefits from uniform good practice
- Reporting should cover different levels of technical & strategic detail
- Feedback from report-recipients is invaluable

Table Workshop 2 – Organisational Structure and Project Success

Where does influence lie ?

- CRO operates on tight fixed budget, schedule & deliverables
- Smallco driven by (CFO-owned) budget but capable of rapid decision-making
- Internal Resource more significant than External spend (large co.)
- Budget control is at Portfolio Level (large co.)
- Budget ownership varies between Project and Line-function
- Senior line managers can subvert portfolio decisions on resource (large co.)
- New risks, TPP Budget, Schedule change require authorisation
- Functions & Projects compete for resource
- Quality of Senior Management input depends a lot on personality
- Line managers allocate their representative - only nominal consultation
- Poor line representation on teams is not managed well
- Difficult to get line-function to change its representative on the team
- Avoid decisions being taken by the function, outside team

Performance and Reward

- Team goals related to bonus
- Project-related bonus component varies with level of seniority
- Spot-rewards for high performance
- Careful administration to demonstrate fairness - can demotivate
- Reward the means of delivery as well as the achievement
- Consider impact of public vs. private recognition
- Individual bonus for team-related performance
- Reward is complex in a matrix & team environment
- Team Polo Shirt – before or after the project ?
- Celebration related to success - stakeholder involvement
- How often is a 'quick kill' celebrated ? (Res vs. Dev goals)
- Milestone Contracts

Can Teams influence Board-level Decision-making ?

- Project Charter clarifies remits of teams & boards
- Conflict can occur amongst Team, Line & top management
- Structure depends on size of company & culture (and personalities)
- Management & Business Strategy should be communicated to the teams
- PM has influence but not usually authority
- PM tracks budget but does not always control it
- PM & Teams make recommendations on critical decisions
- Balanced matrix leads to better decisions
- Line reps on team should communicate upwards
- Line should empower team members and recognise their matrix performance
- Small teams tend to have better communication
- Geography can introduce complications
- Bigger Projects are better resourced and generate more management interest
- Level of line-function input depends on degree of team empowerment
- Balance of Cost- vs. Time-focus varies
- Should not need to present at every Project Review Board
- Core team and relevant functions present to PRB, not whole team

PIPMG Spring Meeting 20th/21st May 2008 - Hilton Metropole, London

“Responding to Change, Maximising Value of Products in Development”

Effective product development requires continual adaptation to both corporate and non-corporate decisions.

Companies aim to optimize value by linking Life Cycle and Portfolio Management with Corporate Strategy, balancing the level of investment with the level of risk.

However, strategic objectives are commonly influenced not only by business strategy, but also market forces, and changes in regulatory guidance.

To reduce time-to-market and to maximize return on investment, optimal product development requires a link between strategic objectives and the development plan, with effective and timely decision making in response to change.

Successful Project management is key in the implementation and absorption of these changes to ensure that delivery of projects with optimal value is retained.

With its proven mixture of expert input and facilitated workshops, this meeting will review how effective Project Management can facilitate and respond to different demands. Speakers will address the current market, pre-clinical and clinical development, and the latest regulatory environment.

Late-stage, marketed product life-cycle management and the factors influencing value will be addressed at the PIPMG Autumn meeting.

Phil Dolamore