A SYSTEMIC APPROACH TO IMPROVING PROJECT MANAGEMNT PERFORMANCE

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ABSTRACT

This paper describes how a systemic approach to problem solving was applied to improve project management performance in a UK unitary local authority. This will detail the background to the problem, the approach taken, how a solution was implemented and iterated in practice.

The starting position applied Vickers concept of appreciation reviewing the history and status of project management within the organisation with wide consultation and reflection to ascertain why despite previous interventions project delivery was poor. As part of this enquiry positive deviance was looked for and an appreciation of the reasons for such deviance. Following this appreciative inquiry a systemic framework was designed which built on successes and addressed identified areas of weakness.
The framework comprised three elements:
1. A methodology to ensure that projects undertaken are the right ones and they are done in the right way.
2. A learning and development suite of activities to improve competence.
3. A network of project managers to share good practice and lessons learned.

The framework is principles based to enable it to be applied in differing contexts and disciplines. In the context described in this paper the framework is built on good practice identified from project management and on a suite of learning and development activities to raise organisational capacity and capability to deliver projects successfully.

The methodology element was built on both academic and project management association's Body of Knowledge together with personal experience and knowledge of project management gained from my Master's degree studies 2003-5, certification as PRINCE2 and MSP practitioner and 25 years delivering projects in different sectors.

The second element involved the design and refinement of a suite of learning and development workshops based on the strategic requirement of the organisation. The main component is the licensed project managers development programme (LPMDP) a systemic approach to learning and development which created a learning environment. This programme is aimed at increasing learning ability and uses enquiry based and self-directed learning which is a radical departure from the traditional form of training usually encountered within project management and the UK local government sectors. The LPMDP emphasises the systemic nature of project management stressing context and perspective. The intention is to create a body of project managers who are adaptive in

delivering projects having garnered thorough understanding of the activities and knowledge of the purpose of their projects.

The learning and development suite of workshops are designed with the intention of creating learners not knowers and to be transformative rather than transmissive with exercises designed to elicit information from the delegates and for them to learn from each other.

Action research was chosen as the research method during the implementation of the proposed framework, observing how this works in a unitary authority and evaluate the findings before iterating again. A key element in this method is that the process is iterated and the framework evolves over time. Using action research involved me as practitioner and the research is interpretive and subjective being based largely on interviews and observations. I am aware of my influence as a participant in the learning and development programme as a facilitator and my working within the boundary of the framework; this is a position which soft systems research argues is best.

This research has the potential for application throughout the public sector at a time when funding and value for money within the sector is coming under increasing pressure. The requirement to deliver projects showing a good return on investment is a key priority in the sector at the present time with budgets being greatly reduced following the Comprehensive Spending Review of 2010.

Keywords: Systems thinking, education, learning and development, student centred learning, project management

INTRODUCTION

The problem being addressed in this paper is how to improve the performance of project management within a UK unitary local authority.

Vickers' (1968) idea of appreciative inquiry was used to gain an understanding of the problem and a way to dissolve it. Using this knowledge a framework was designed by adapting Stowell & West's (1994) concept of Client-Led Design. This framework was then introduced into the organisation, the results observed and reflected upon before being iterated. The framework had three main elements:

1. A governance process
2. A learning & development environment
3. A community of practice

This is a multi-disciplinary research project drawing on Systems Thinking, Learning and Development and Project Management utilising an action research approach. In addition to the multi-disciplinary nature of this project a multi method approach was utilised.

A Systemic Approach To Improving Project Management Performance

BACKGROUND

The organisation concerned is a UK unitary local authority which has responsibility for education, social services, leisure, culture, Planning, Environmental Health, Trading Standards, waste collection, housing, traffic and street management, collection of council tax and non-domestic rates, civil contingencies and community safety within its boundary as opposed to district councils who do not have responsibility for education, social services nor roads within their boundary. These services are the responsibility of county councils in the main. Uniquely the organisation being described also has responsibility for an International Ferry Port. This broad responsibility means that the authority undertakes projects of differing types e.g. change initiatives, ICT, construction, civil engineering and traffic engineering. There are 2000 staff employed in the Civic Offices with a further 4000+ off site largely education and social service staff.

In the early years of the new millennium a number of high profile projects struggled to deliver to time, budget or requirements. The council faced criticism both informed and uninformed and from within as well as without. For example the local newspaper frequently ran critical articles detailing project failure and multiple correspondents in the letters page were quick to join in often with little knowledge of the facts.

The organisation was also the subject of a critical report by the District Auditor one comment being "Instead of having in place a strategy which provided a framework for the management of the project, the Council has proceeded by short term expediency and by reacting to events. It is therefore unsurprising that the Council has been outmanoeuvred at times, including by both PSTL and Mowlem." (Childs, 2004) As a result of this the Audit Commission undertook annual reviews to determine the status of proejct manamegemnt within the authority.

As a result the organisation invested primarily in PRINCE2 training and established a role dedicated to improving the delivery of projects. However despite two previous attempts to establish good practice neither had become embedded within the organisation and project delivery was still poor when in 2006 outside consultants, KPMG, were recruited to report on project management and make recommendations on the way forward. This report was issued in June 2007. As part of this review a project maturity self-assessment was carried out using an industry standard format. The result was a maturity level of 1.2 indicating the organisation had some project management awareness.

In December 2007 following staff changes I became responsible for project management and began work to improve the performance of project management in this context.

UNDERPINNING THEORIES

Appreciative inquiry

Vickers (1968 p130) writes of an appreciative system as a continual process of learning which he believes has three phases, "information, valuation and action". (Stowell & West, 1994, p114) build their concept of interpretive organizational analysis on "Vickers notion of appreciaton and Checkland's inquiring system". Stowell & West (1994 pp 33-34 pp114-116) write of gaining "…an appreciation of the problem situation" They go onto to state "By appreciation we mean the learning process expressed by Vickers (1983) and by Checkland (1981)." This appreciation forms the basis of information for their Client-Led Design. West & Thomas (2005) state "By comparison, AIM (Appreciative Inquiry Method) was developed on the premise that expertise is a uniquely human phenomenon: it can be seen as the result of 'facts' and 'rules' that have been put into practice and so is experiential, often tacit; it may be particular to an individual or group, it can be based upon intuition and hunches; furthermore, attempts to make it explicit can sometimes distort it." And "This process is operationalised through a form of some of the modelling techniques used in Soft Systems Methodology … which Checkland and Casar (1986, p. 4) claim can be described as ''an operationalisation of the process Vickers calls 'appreciation'''. Cooperrider also uses Appreciative Inquiry in the following style "A method of changing social systems, is an attempt to generate a collective image of a new and better future by exploring the best of what is and has been." (Bushe, 1995) This suggests that the Cooperrider concept of Appreciative Inquiry concentrates on the positive results and enhances those without considering the negative elements. However it should be noted that (Bushe, 2007) states "After years of focusing on problems and deficits and dysfunction they get entranced with "focusing on the positive" and equate this with AI, but I don't think that is the core of appreciative inquiry."

As part of my review I looked for positive deviance (Jackson and McKergow, 2007, p214) within the organisation where projects had been successfully delivered however the reflection also considered those that were below optimal. This approach I believe accords more closely with Vickers' idea and will give a more holistic view within the problem domain.

The starting place was to attempt to understand why project management was proving so difficult in the organisation and to this end the collection of data was begun. The documents produced as part of the project management process for a number of projects were analysed and consultation with stakeholders across the authority was undertaken. These stakeholders included project managers, senior managers, and managers of support services, as well as staff who were involved with projects. This data was analysed and information derived. I had observed a number of behaviours within the organisation and these experiences added to this body of information.

Project Management

When this work first began as (Winter et al, 2006) writes "Current industry offerings however … tend to centre on particular products – such as PRINCE2 (Office of

Government Commerce, 2005) and MSP (Office of Government Commerce, 2007) – many of which embody some or all of the mainstream ideas in project management" In addition as (Crawford & Nahmias, 2010, p 406) stated "The project management body of knowledge is well defined in standards and guides produced by the project management professional associations."

The main professional association in the UK is the Association for Project Management (APM) which has produced five iterations of its Body of Knowledge (BoK). Additionally the BoKs of the Project Management Institute (PMI) and Project Management Association (PMA) were read.

Johnstone et al, 2006, p 1 describe similar project failures to those experienced within the study organisation "Triggered by several embarrassing (and costly) IT project collapses in New Zealand's public sector, a government report found that effective project control required good governance measures to be in place." Introducing good governance measures seems a popular way of attempting to improve project delivery, one which the external consultants recommended in their report of 2007. (KPMG 2007)

Crawford and Pollack (2004, p 645) report that "Examination of the International Journal of Project Management indicates that the terms 'hard' and 'soft' are entering the language of project management". Martin (2000) states "Both quantitative and qualitative, hard (objectivist, scientific/engineering) and soft (subjectivist, social) skills are needed." In the design phase these concepts were considered especially with regard to the learning and development design. There was a mixture of technical and managerial skills within the learning and development programme. This was an important part of the learning and development design to ensure the delegates were encouraged to learn and practice both hard and soft skills.

Learning and Development

As stated in the section above when this work began the main project management training available was PRINCE2, MSP or certification by a project management professional associations. (Winter et al, 2006). This was mirrored throughout the UK local government. (LGID) The organisation being considered had 32 certified PRINCE2 practitioners of whom18 would not be delivering projects and 32 certified at PRINCE2 foundation level although no staff were certified by any of the project management professional association.

These qualifications follow a traditional linear lifecycle and take no account of complexity or the requirement for soft skills. PRINCE2 is an acronym for Projects IN Controlled Environments and is largely concerned with controlling projects. There is little in the method to inform project managers as to the activities needed to successfully deliver projects. This situation left the organisation thinking it had good project managers whereas staff struggled to deal with complex projects. (Remington and Pollack, 2007, pp 1-12)

RESEARCH DESIGN

Action research was chosen as the research method due to its systemic nature and the fact I was activity involved in the whole intervention as facilitator in the learning and development as well as owner of the governance and designer. As stated earlier Vickers (1968 p130) describes an "Appreciative System as a continual process of learning" so this concept fits with action research as a method. In using action research I need to be aware of my influence as I will be a participant in the learning and development programme as a facilitator and will be working within the boundary of the framework; this is a position which soft systems research argues is best. Stowell (2009, p 889) Burns 2007, p 12 describes a systemic action research approach as shown in Figure 1. This comprises four elements of Plan – Reflect – Observe – Act which are iterated.

The framework was introduced and the existing learning and development workshop continued, then the results reflected on, further workshops were added in and a finally full programme of learning activities designed. This reflective and iterative process was also applied to the other two elements although the time spans were longer.
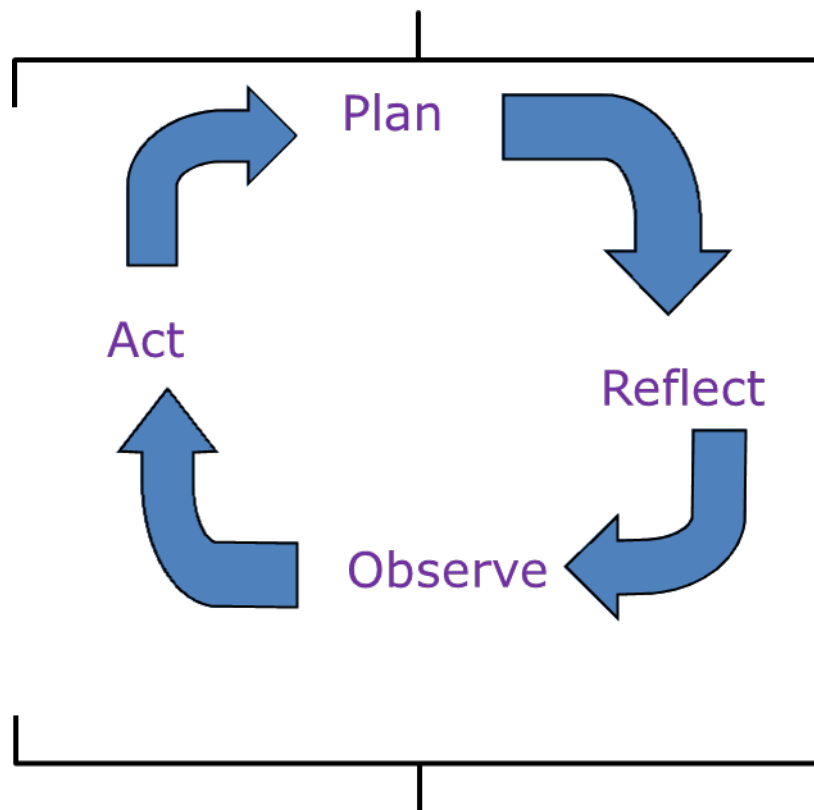

Figure 1. Systemic action research Burns 2007 p 12

ACTIONS

The framework was conceived as a system consisting of three main systems which themselves where composed of further sub-systems. In order to achieve the overall purpose of improving the delivery of projects, information, valuation and action were required in the different areas. As the work progressed boundaries where drawn around the system at various places in the hierarchy dependant upon the area of activity. For example when designing individual workshops a boundary was drawn around that subject area. Then the boundary moved to encompass the whole development programme to understand the impact that the workshop would have on the whole programme, then the boundary was moved to consider how the individual workshop aligned with the overall learning and development strategy and then the boundary applied to the complete framework with further inquiry carried out.

The first activity revolved around consulting with the various stakeholders who included senior managers, project managers, support service managers and staff, and internal project clients. This ensured a pan-organisation view of project management and its properties. From this initial appreciative inquiry it became apparent that projects failed within the organisation for two main reasons:

Inadequate preparation with project teams rushing straight to the delivery phase without gaining knowledge of what was required

Lack of control and monitoring during the project lifecycle

Inadequate preparation manifested itself as poor planning, poor estimation, lack of risk management, no real stakeholder engagement and little understanding of the purpose of their projects. These issues accord with Nelson's, (2007, p 74) findings. In addition poor monitoring of projects ability to deliver expected results meant many projects did not realise the anticipated outcomes and there was no method of stopping projects that no longer met the business requirements.

On two previous occasions attempts had been made to improve project delivery however the organisation was still subject to Audit Commission review and generally projects still failed at some level. The first attempt at improving project management had concentrated on providing PRINCE2 training as a solution combined with project review boards to monitor projects. This was introduced in 2003 following the Childs review. The later attempt started in 2005 and culminated in the KPMG report in 2007. This intervention introduced a new project management methodology PROMPT, albeit based on PRINCE2, a training workshop to teach this methodology and the establishment of a project manager's knowledge network. Ackoff (1983) writes "There are three kinds of thing that can be done about problems – they can be *resolved, solved* or *dissolved."* Ackoff (1983) defines these as resolving requires a solution that is good enough that is satisfices, solving optimises and is a research approach whereas dissolving changes the nature and /or the environment and is a design approach. The earlier attempts at improving project management performance were aimed at resolving, there was no

attempt at dissolving the issue. In the approach being described the intention is to dissolve the problem by changing the nature and environment.

It was soon appreciated that there had been no attempt to fully embed the skills required to successfully deliver projects or the monitoring and reviewing processes needed. There had been no attempt at a design approach so the problem simply reoccurred. The previous attempts had also been top down with no attempt at engaging stakeholders or the project staff who would be expected to comply. Stowell & West, 1994 propose a method of design which they call Client-Led Design and they apply to Information Systems. Two difficulties arise with Client-Led Design, one identifying the clients and two ensuring stakeholders perceive they are involved. The second is a difficulty recognized in project delivery, (Nelson, 2007) I therefore broadened the approach to Stakeholder-Led Design in an attempt to ensure all viewpoints are taken into account. This led me to design a framework comprising three elements

1. A governance process

2. A learning & development environment

3. A community of practice

Figure 2 shows the original representation of this framework.

The framework has been amended as experience added to information and became knowledge. This was especially manifest in the learning and development area.

The governance element was concerned with control and monitoring of projects ensuring the right projects were being done to realise the required benefits and need the objectives of the organisation.

The second element was concerned with raising in-house capability to deliver projects and improve the learning capacity of staff involved in project delivery.

The third element was intended to involve project delivery staff in continuous learning and understanding and create an environment where good practice and lessons learned were shared.

The whole as designed to provide a holistic approach to improving project delivery within the organisation.

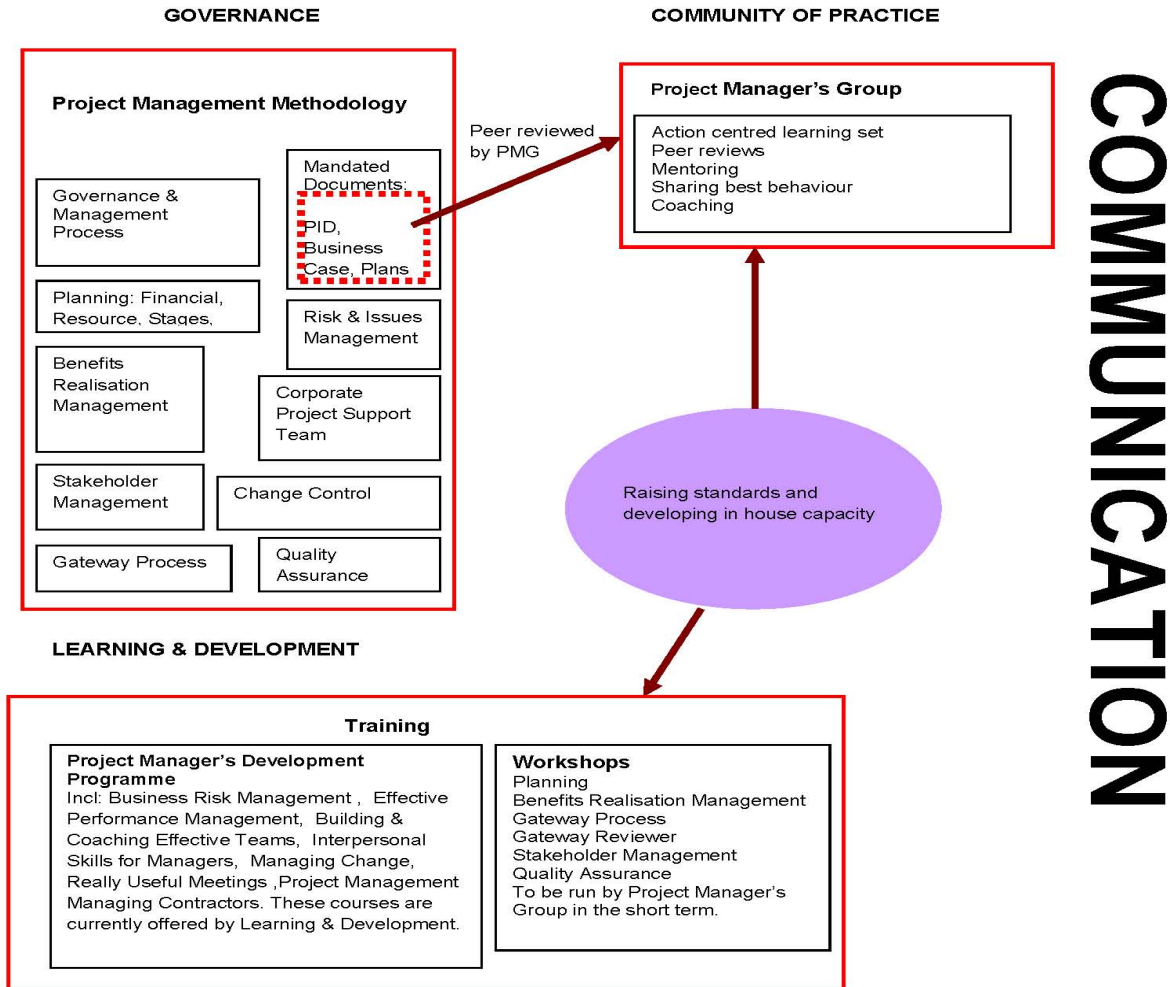# A Systemic Approach To Improving Project Management Performance

GOVERNANCE

COMMUNITY OF PRACTICE

Project Management Methodology

Governance & Management Process

Mandated Documents:

PID, Business Case, Plans

Planning: Financial, Resource, Stages,

Risk & Issues Management

Benefits Realisation Management

Corporate Project Support Team

Stakeholder Management

Change Control

Gateway Process

Quality Assurance

LEARNING & DEVELOPMENT

Project Manager's Group

Action centred learning set
Peer reviews
Mentoring
Sharing best behaviour
Coaching

Peer reviewed by PMG

Raising standards and developing in house capacity

COMMUNICATION

Training

Project Manager's Development Programme
Incl: Business Risk Management , Effective Performance Management, Building & Coaching Effective Teams, Interpersonal Skills for Managers, Managing Change, Really Useful Meetings ,Project Management Managing Contractors. These courses are currently offered by Learning & Development.

Workshops
Planning
Benefits Realisation Management
Gateway Process
Gateway Reviewer
Stakeholder Management
Quality Assurance
To be run by Project Manager's Group in the short term.

Figure 2. The framework

The project management methodology was intended to provide the monitoring and control mechanism and consisted of a governance process, a portfolio approach whereby projects were selected based on their strategic fit and means to stop projects if appropriate. This overarching process was designed and consultations held with all stakeholders and amended in the light of these consultations. In this way the design was Stakeholder-Led and helped to gain acceptance by the stakeholders. I obtained the project management methods of other organisations, read extensively and analysed this data to inform the proposed framework and governance arrangements. Through my involvement with the LGID Project and Programme Management Community of Practice more data and comparisons were available. This involvement helped confirm my belief that the whole framework should be built on the requirement for projects to produce realisable benefits (Bradley, 2006). This meant that as part of the gateway process checks were made to ensure benefits were identified and a realisation plan in place, and that it continued to be viable. This emphasis on benefits also provided a measure of project success. The importance of benefits became a key component of the learning and development activity.

The learning and development work followed phase 1 and was aligned with the project management strategy (Furnham, 1996). The original outline as in Figure 2 evolved into a series of workshops and programmes designed to assist delegates to learn and think about project delivery. In the previous interventions the only learning and development work was either PRINCE2 certification training or an in-house introduction workshop teaching a traditional linear project management. PRINCE2 training involved delegates in attending a 5 day session with a Foundation level examination on day 3 and the practitioner examination on the morning on day 5. Basically this training involved learning and being examined on the PRINCE2 manual and as previously stated apart from planning none of the activities such as stakeholder engagement, benefits management nor are introduced. The single workshop entitled "Introduction to project management" already in place was refined and changed to meet the requirements to place greater emphasis on benefits. After 18 months a programme was designed which was based on the learning and training experiences of the author with individual modules, a real project, review sessions, one to one tutorials and mentors all included to provide a complete learning experience. This programme became known as the Licensed Project Managers Development Programme (LPMDP). The LPMDP had the purpose of improving delivery and the management of projects. As information was obtained De Bono's (1976) teaching thinking was introduced and stress placed on becoming "learners not knowers" (Hinken, 2005).

There has been a realisation that competency based training will serve the project community better (Aikona 2010) and as Winter et al 2006 states "Experience shows however that it is people who deliver successful projects, not methods and tools, and it is people's ability to engage intelligently with the complexity of projects, that is central to the successful management of projects." This accords with my view and became central to the design of the development programme.

Sterling, 2001 suggests that facilitators be transformative rather than transmissive. Ojiako et al 2011, p 268 states "Rather than instructors having the authority to transmit knowledge (Long and Holeton, 2009) educators need to become coaches and facilitators of learning. Consistent with both transformational and social learning theories, educators need to facilitate students studying project management to become creators of knowledge rather than simple knowledge recipients. Such demands require an emphasis on broader learning experiences."

All the learning and development workshops were designed to be transformative and over the iterations emphasis was placed on "Creating learning environments that promote active learning, critical thinking, collaborative learning, and knowledge creation." (Long and Holeton, 2009). To achieve this, the workshops were question and discussion based to establish why, how, what, when and who of the various activities which contribute to successful delivery of projects. This elicited information was applied using simulations and case studies to embed the new knowledge. Delegates also assisted in delivering elements on projects to further practice and embed the new skills.

The third element of the framework was an attempt to create a Community of Practice for the project managers within the organisation. A group called the Project Managers Group was set up and staff involved in the delivery of projects invited to bi-monthly meetings to share experiences. This group was involved in workshops to help inform the design of the framework and this assisted in the Stakeholder-Led design.

A series of seminars was arranged covering topics of interest to the project managers and a core of 14 are regular attendees.

CONCLUSIONS

On reviewing project management within the target organisation now, the delivery of projects has improved with no new stories in the local media for over 12 months. Projects have been stopped when the anticipated benefits no longer realise adequate return on investment and there is no longer the political heat surrounding project management in the organisation. There is still considerable room for improvement and it is too early to assess the operational effectiveness of the LPMDP. However from interviews and observations there are indications of changes in behaviour to a more systemic view of projects. Two years after the framework was starting to be rolled in another self-assessment of project management maturity was carried out. This time the level was considered to be 2.5. From a monitoring of expected benefits projects are now more productive. It is clear that the framework has had a measurable impact.
The approach was based on the following principles:

1. Stakeholder involvement
2. Appreciative inquiry to gain an understanding of the requirements
3. A learning and development suite of workshops to develop learning and embed
4. A Community of Practice to engage and involve project managers

Using Vickers Appreciative Inquiry assisted the collation and understanding of the data and I intend to extend its use to structured workshops (Welch and Akers-Smith, 2007) and in the next iteration of the LPMDP. Strengths of the process lie in the involvement of all stakeholders and designing the framework in a stakeholder-led manner. A development programme for project directors (Senior Responsible Owner in PRINCE2) has been designed with the first workshop on benefits already delivered.

The results are considerably better than the previous attempts and I content that the systemic approach taken is a contributory factor in these results.

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