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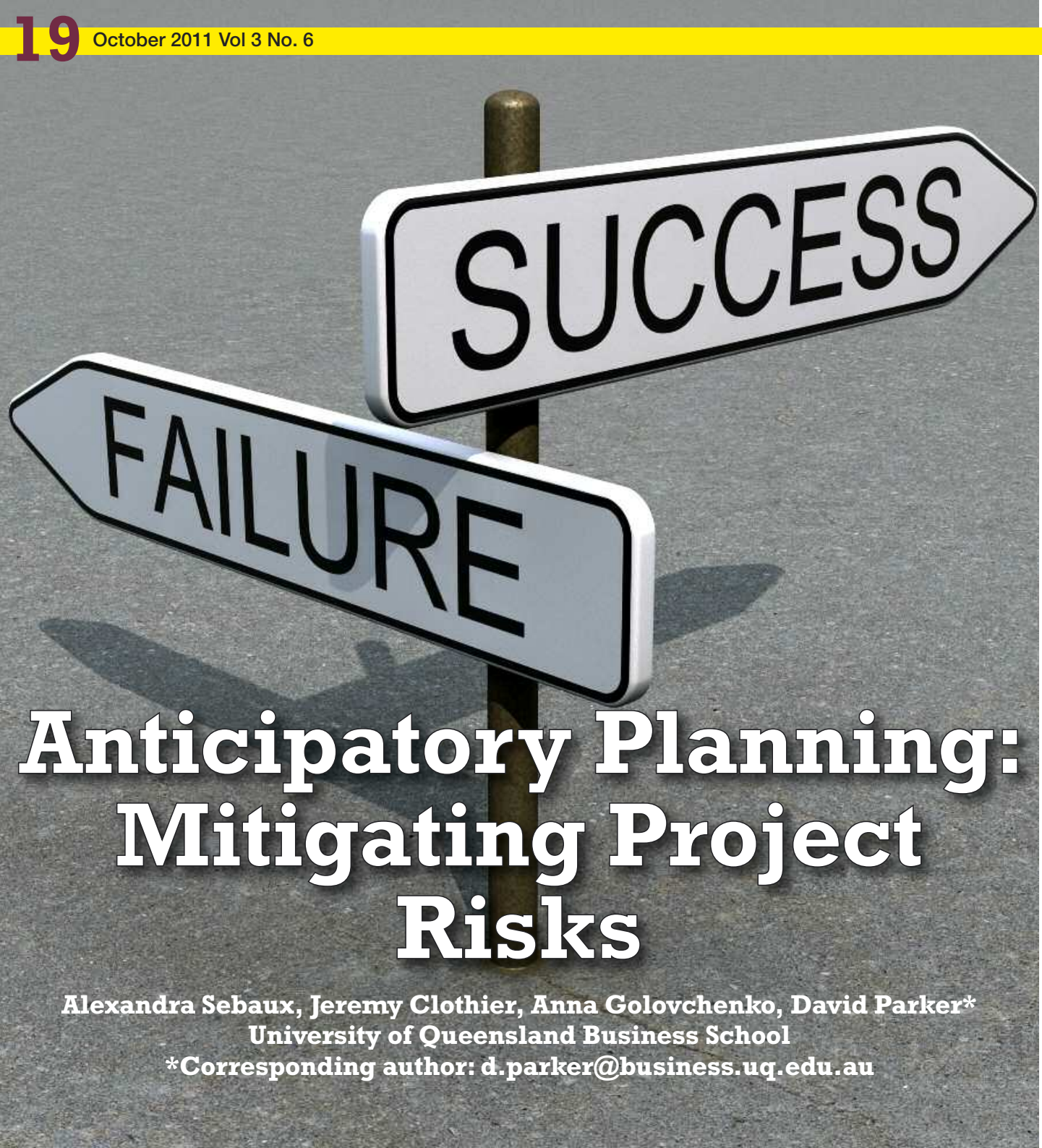

Anticipatory Planning: Mitigating Project Risks

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DEFINITIONS

CAS: Complex Adaptive Systems)

CIO: Chief Information Officer

OEM: Original Equipment Manufacturer

WBS: Work Breakdown Structure

INTRODUCTION

Jim Crear, CIO of Standish Group, a company that has been monitoring IT projects since 1994, revealed in 2009 that the highest rate of IT project failure in over a decade had just been reached – some 68 per cent of projects had been identified as not meeting original targets.

Project failure, in this instance,refers to the cancellation of the project or the ineffectiveness of the project, or a project which has been 'challenged,' that means a project which was not on time, on budget or did not meet the specification (Larson & Gray, 2011).

Many writers have laid blame to such problems with poor plannng - especially at the early stages in project scoping; during the defining and developing stages (Khan, 2006; Mochal, 2004). It is commomn practice, (PMI, 2008; Westland, 2003), to divide a project into four general stages: defining, planning, executing and closing:

The first stage sets the objectives of the project and defines specifications and tasks. It results in the project

scope. The next phase, based on the work breakdown structure (WBS) established during the previous phases, develops schedules, budgets and resources. Importantly, during this phase a risk assessment is completed to determine key factors to monitor during the execution phase.

Meanwhile, cost, time and risk factors should be incrementally monitored and adjusted to respond to changing or unforeseen conditions (Moore, 1991). However, there are no clearly defined transitions from one stage to the next.

Planning, in particular, is an iterative process initialised during the planning phase which is constantly refined during the execution stage (Moore, 1991). A significant amount of the literature suggests that a prominent reason why projects fail is inadequate preparation and planning; and is often caused by inadequate expertise.

The classic life-cycle of typical project planning and development comprises a sequential series of steps including:

- establishing the scope (determining the parameters),
- quality (customers' requirements),
- resources (capitalisation), time (duration of the project execution) and risks (what foreseeable events may change the original planning) (Coley Consulting).

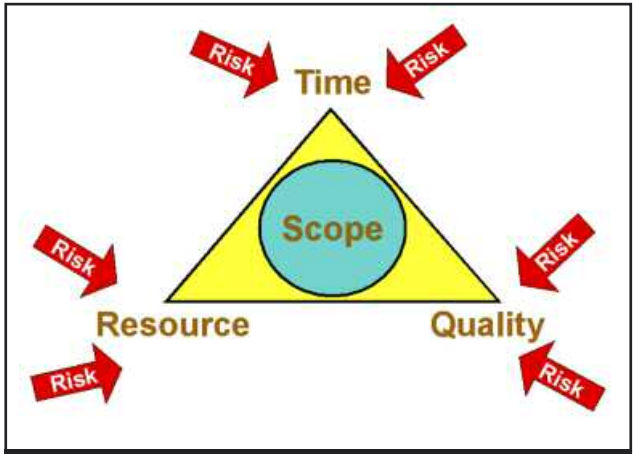

Figure 1 : The characteristics of project planning (Source: Coley Consulting 2011)

This approach to project planning is diagrammatically represented in Figure 1. This somewhat simplistic perspective view of project planning, however, is clearly inadequate when one considers the high rate of project failures. It is worth considering therefore, the decisions made at each stage of the planning sequence and assesses their ability to reduce risks.

SCOPE MANAGEMENT

In the context of a project, the scope defines what will be completed as part of the project (Larson & Gray, 2011), and what functions that the outcomes embrace. This might be regarded as the work required to accomplish and deliver the project (PMI, 2008). Therefore, scope definition is a critical factor - as it is the baseline for all future plans and estimates (Khan, 2006).

In alignment with the project goals and stakeholders' needs (which includes, among other things, customer and sponsor needs), the project team need to define the deliverables of the project, specifying functional requirements and non-functional requirements. However, stakeholders should avoid specifying a solution and should provide objectives and constraints only as they are not the experts and could fail to identify a better solution (Zhen, 2005).

Furthermore, as advised by Larson and Gray (2011), all these requirements have to be SMART

- Specific,
- Measurable,
- Assignable,
- Realistic and
- Time related.

Therefore, they should be as complete and clear as possible to avoid any misunderstanding. Moreover, the project team should also identify the most significant constraints or technical incompatibilities that result in an unrealistic scope. To avoid such a situation, they may need to ask the stakeholders to prioritise their needs using ranking methods such as the MoSCoW method (Hatton, 2008).

M - Must have this requirement to meet the business needs.

S - Should have this requirement if possible, but project success does not rely on it.

C - Could have this requirement if it does not affect anything else in the project.

W - Would like to have this requirement later, but it won't be delivered this time.

When managing a project, it is important to develop a clear understanding of the customers' requirements and their priority. Many projects start with the barest headline list of requirements, only to find later the customers' needs have not been fully understood. Once there is a clear set of requirements, it is important to ensure they are ranked. This helps everyone (customer, project manager, designer, developers) understand the most important requirements, in what order to develop them, and those that won't be delivered if there is pressure on resources.

Alternatively, the Kano model can be adopted (developed by Professor Noriaki Kano in the 80's) (Wang & Ji, 2010). The Kano model is a theory of development and planning to ensure customers' needs are recognised; and which classifies customer preferences into five categories:

1. **Attractive Quality** – These attributes provide satisfaction when achieved fully, but do not cause dissatisfaction when not fulfilled. These are attributes that are not normally expected. Since these types of attributes of quality unexpectedly delight customers, they are often unspoken.
2. **One-dimensional Quality** – These attributes result in satisfaction when fulfilled and dissatisfaction when not fulfilled. These are attributes that are spoken of and ones which companies compete for.
3. **Must-be Quality** – These attributes are taken for granted when fulfilled but result in dissatisfaction when not fulfilled. Since customers expect these attributes and view them as basic, then it is unlikely that they are going to tell the company about them when asked about quality attributes.
4. **Indifferent Quality** – These attributes refer to aspects that are neither good nor bad, and they do not result in either customer satisfaction or customer dissatisfaction.
5. **Reverse Quality** – These attributes refer to a high degree of achievement resulting in dissatisfaction and to the fact that not all customers are alike.

The Airbus decision to specify requirements of the military A400M without refining client's needs resulted in an aircraft no one was interested in (Besnard, 2010).

When the deliverables and requirements have been defined, the limitations of the project have to be specified. This is of crucial importance otherwise inevitable demands for change will occur (Khan, 2006). Indeed, market changes or stakeholders' indecision may imply a need to change the product requirements (Mochal, 2004). In this situation two main problems can be faced: bypassing sponsors' approval which can lead to a loss of support and scope creep. As small scope changes tend not to be recognised as a change (Mochal, 2004), additional work is often accepted without changing the planning.

To deal with change, a change control system has to be established in the early stages of the project (Kerzner, 2009; Larson & Gray, 2011).

Defining explicit limitations helps to define what should be considered as a change, even with small changes. All changes should also be classified depending on their impact on schedule, cost and quality, and a change process should be associated with each categories (Khan, 2006). Communication with stakeholders is once again a critical factor in implementing the change control system.

QUALITY MANAGEMENT

The term "acceptable quality" when in the context of project execution is difficult to define. Basically, it might be asked: "Acceptable to whom?"

By specifying operating tolerance intervals in which performances are acceptable (Westland, 2003), the issue of acceptable quality is somewhat appeased. Having a clear understanding of customers' satisfaction is part of what defines the quality requirements of a project (Kerzner, 2009). But who is the project's customer? Who are the stakeholders?

Critical success factors that include the notion of specificity, being realistic, and communicate with stakeholders are all notions applicable for both technical criteria and technical requirements. Identifying and getting agreement on the appropriate tests to control quality at project milestones is important (Westland, 2003). More recently, research has shown that common causes of project failure in terms of quality is the non-inclusion of particular legal requirements, security, or environmental norms in the quality plan (PMI, 2008). Such omissions are recognised too late because they are not associated with the customer's needs. Quality, and all its implications on risks, has become a dominant issue in project management; often eclipsing time and budget constraints (Kerzner, 2009; Saraph, Benson, & Schroeder, 1989); a point substantiated by the increasing number of organisations becoming certified ISO 9000 compliant (Guler, Guillén, & Macpherson, 2002).

The process quality approach implies adopting key performance indicators (KPI) to evaluate critical measures of quality performance. (Powell, 1995). However, of importance is first to establish the project's key performance questions (KPQs) prior to determining the related project key performance indicators (KPIs). Establishing a generic series of KPQs applicable to all organisational situations is fraught with problems due to their specific qualities. A mistake made by many organisations is to develop KPIs before identifying the KPQs. Such KPQs might address such questions as shown in Table 1.

Key Performance Questions
Is there universal agreement on what the end-goal looks like?
How well are we building active partnerships with our key stakeholders?
How effective is the communications strategy?
How well are we shifting toward an innovative organisation?
How does the outside world view our organisation?
To what extent do we trust each other?
To what level are our employees engaged?
How well are we using the information we possess?
How well are we building our new competencies?
To what extent are we retaining the talent in our organisation?
Are we fostering a culture of continuous improvement?
How well are we managing our allocated financial resources?
Do people feel passionate about working for us?

Table 1. Examples of Key Performance Questions

A KPQ is a management question that captures exactly what it is that people want to know when it comes to project quality performance. The rationale for KPQs is that they provide guidance for collecting relevant and meaningful KPIs and focus our attention on what actually needs to be discussed when we review quality issues. Far too often do we jump straight to designing indicators before we are clear about what it is that we want to know.

TIME MANAGEMENT

Another criterion of a project's perceived success is in respect to meeting deadlines (Mochal, 2003). Moore (1991) explains that during the planning stage of the project, identifying time requirements should be a scientific exercise. Yet, in most cases it is done informally or crudely estimated.

An efficient identification of timeframes might be based on Larson and Gray's observation (2011) that the longer the duration, the more inaccurate the estimation. Thus, the Project Management Institute (PMI, 2008) advises to deconstruct the WBS work package into smaller activities, with reduced durations. Typically 100 days is a notional event time.

Baccarini (1999) gives three other possible problems related to time planning. First, projects have a tendency to progress at a slower rate than expected, especially in their first month; second, if and when delays occur they tend to escalate; third, most tentative unplanned recovery fails and even creates the basis for further delays.

However, an alternative view is held by Vandersluis (2001), stating that project managers focus too much on the planning process and not enough on what happens once the plan is put into action. It is argued that, "if plans were perfect, we wouldn't need project managers" (Matta & Ashkenas, 2003 p.67). Rather, it is proposed to highlight the importance of implementing tracking processes from the early stages of the project, to be able to understand the reasons for delays and find relevant solutions, (the logic being that when delays are observed, nobody knows what happened).

COST MANAGEMENT

"Many projects that could be successful are viewed as failures because they overshoot their budgets and their

deadlines"(Mochal, 2003). The elements of this costing process are necessary to determine how long a project should take, develop cash flow needs, develop time-phased budgets and establish a project baseline (Larson & Gray, 2011).

Estimates of cost should be applied to all project resources including labour, materials, equipment, services, facilities and other contingency costs (PMI, 2008). For example, as argued by Cooke-Davies (2001) in relation to hardware and software budgets, many companies overlook the need for significant maintenance. Typical monthly maintenance costs range from five to ten per cent of the initial development of infrastructure budget and should be planned for accordingly.

Larson and Gray (2011) provide a solution to ensure "unknowns" are accounted for in the final budget. They argue that to compensate for the problem of actual cost exceeding the estimated cost, some project managers adjust the total estimated costs by a multiplier.

Other ways to estimate total costs that inform the final budget include: breaking down the project into smaller tasks (Moore, 1991); aggregating costs into indirect and overhead costs; asking knowledgeable professionals in the field of their past experiences; or using previous projects as a template and scaling the values to the project in question (PMI, 2008). Gray and Larson & Gray (2011) say it is "best practice" among leading project management organisations to create and maintain an estimating database which includes data on past project estimates and actual.

RISK MANAGEMENT

"*No matter how thorough the initial project planning, no matter how rational the work program and schedule, nothing ever goes as planned*" (Moore, 1991, p.214). Indeed, investing in lengthy planning may be non-cost-effective, and far better to undertake incremental monitoring (Kerzner, 2009).

There appears to be a management view that the more planning conducted the less the impact of risks and may prevent from unnecessary failures (Matta & Ashkenas, 2003). Matta and Ashkenas (2003) identify two other risks:

1. the "white space risk", which is the risk associated with tasks not planned; and
2. the "integration risk", which can occur at the end of the project if disparate tasks cannot come together.

This kind of risk, among others, can hardly be avoided by an adequate planning; this is why contingency plans also have to be developed up-front so project teams will be able to react quickly if necessary (PMI, 2008; Westland, 2003). Given the unpredictability of external factors (GFC, weather conditions, etc), risk management, it is argued, is a vital undertaking (Khan, 2006). One example of disastrous consequences of the lack of contingency and continuity planning can be shown with the BP oil spill in 2010 (Macalister & Goldenberg, 2011).

Up-front planning for contingency is one approach to mitigate risk (Jedd, 2005) and to develop recovery plans in case of unforseen event (Felstead, 2005). According to the PMI (2008) risk management should be done in four steps, three of which have to be done during the early stages of the project:

1. the first stage is the identification of all the possible risks, looking at technical risks, external risks, organisational risks or management risks;
2. the second stage is the assessment of these risks to evaluate which ones are acceptable and which ones have to be resourced;
3. the third stage is the development stage where strategies and contingency plans are developed;
4. the last stage consists in monitoring all the identified risks.

Felstead (2005) suggested a similar model for risk management:

1. Identify;
2. Evaluate risks;
3. Treat risk;
4. Monitor and review;
5. Communicate and consult.

His last step emphasises once more the importance of a good communication with key stakeholders.

AGILE PROJECT MANAGEMENT

Conventionally, project risks are addressed through structural, and reductionist task-breakdown; with perceived risks managed through complex up-front planning. However, the last decade has taught us that we need agile project-based management (Parker, 2008). Such techniques exploit our understanding of autonomous human behaviour ie, complex adaptive systems (CAS) (Parker, 2010).

A widely held view based on traditional project management theory (Atkinson, 1999) assumes that:

- Tight control procedures are needed to regulate change
- Hierarchical organisational structures are means of establishing order
- Increased control results in increased order and reduction of risks
- Organisations must be rigid, static hierarchies
- Employees are an interchangeable resource
- Problems are solved by allocation to a specific accountable person
- Projects and risks are adequately predictable to be managed through complex time-consuming, up-front planning

Project-based organisations (for example Nokia, amongst several others) have begun to build the concept of complex adaptive systems (CAS) into their project management assumptions and practices. The concept of CAS suggests that project managers also need a set of simple guiding practices that provide a framework within which to manage, rather than a set of rigid instructions (Parker, 2008). This management framework provides teams implementing agile methodologies with:

- An intrinsic ability to deal with change.
- A view of organisations as fluid, adaptive systems composed of intelligent people.
- A recognition of the limits of external control in establishing order; and of the role of intelligent control that employs self-organisation.
- An overall problem solving approach that is humanistic in that it regards people as skilled and valuable stakeholders in the management of a team.
- It relies on the collective ability of autonomous teams as the basic problem solving mechanism.
- It limits up-front planning to a minimum based on an assumption of unpredictability; and instead, lays stress on adaptability to changing conditions.

WHAT IS WRONG WITH TRADITIONAL PROJECT MANAGEMENT?

Traditional project-lifecycle development methodologies

grew out of a need to control ever-larger (sometimes mega) projects, and the difficulties of estimating and managing these efforts to reliably deliver results (Pinto & Mantel,1990). Invariably, such projects venture into 'uncharted' areas, where there is no, or limited, prior experience. These methodologies drew heavily on the principles from engineering, such as construction management. As a result, they stressed predictability (one has to plan every last detail of a bridge or building before it is built), and linear development cycles – requirements that led to analysis which, in turn, led to an emphasis on design and development. Along with predictability, project managers inherited a deterministic, reductionist approach that relied on task-breakdown, and was predicated on stability – stable requirements, analysis and established design. This rigidity was also marked by a tendency towards slavish process "compliance" as a means of project control.

While these methodologies may have worked for some organisations in the past, and may still work in other circumstances, for many companies these methodologies only added cost and complexity while providing a false sense of security by exhaustively planning, measuring, and controlling. Huge costs are often sunk in premature planning (Shenhar et al. 2001), without the rapid iterative development and continuous feedback from customers (internal and external) that we have come to realise are prerequisites for success.

Regardless of the particular methodology, the traditional project manager is often seen as a "taskmaster" who develops and controls the master plan that documents (often in excruciating detail) the tasks, dependencies, and resources required to deliver the end product. The project manager then monitors the status of tasks and adjusts the plan as necessary.

A POSSIBLE SOLUTION: PROJECT MANAGER AS VISIONARY LEADER

The best project managers are not just organisers – they combine business vision, communication skills, soft management skills and technical savvy with the ability to plan, coordinate, and execute (Thomsett, 2002). In essence, they are not just managers – they are leaders.

While this has always been the case, agile project management places a higher premium on the leadership skills than ever before. For example, teams in Nokia create and monitor their own iteration plans in collaboration with the customers ie, internal/external receivers in the cycle of events (Parker, 2009):

- The customer creates stories (features) and prioritises them based on business value.
- The developers divide up the tasks themselves as they work and measure progress for each iteration (time-boxed development cycle), adjusting plans with the customer as necessary.

Agile methodologies free the project manager from the drudgery of being a taskmaster, thereby enabling a focus on being a leader – someone who keeps the spotlight on the vision, who inspires the team, who promotes teamwork and collaboration, who champions the project and removes obstacles to progress (Turner & Müller, 2005). Rather than being an operational controller, the project manager can become an adaptive leader.

The basic phases of an agile development project are really no different from those of any other project. You still must define and initiate the project, plan for the project, execute the plan, and monitor and control the results. But, the manner in which these steps are accomplished are different and require the project manager to retrofit what they know about traditional management to a new way of thinking – namely, the process of complex adaptive systems (CAS). The practices outlined below provide a framework for project managers working in this way.

THE PROJECT TEAM AS A COMPLEX ADAPTIVE SYSTEM

As the literature will attest, traditional command-and-control management is largely derived from the principles of Frederick Taylor's "scientific management." Taylor's scientific management approach was based in turn on the seventeenth century science of Newton that saw the world as a vast and magnificently ordered "clockwork universe" governed by the classical laws of nature. Scientific management is recognised as the prime mover in lifting the "working masses" in developed countries to new levels of affluence in the 20th century.

In today's world, however, we have trouble imposing command-and-control management on teams because "working masses" have been replaced by "knowledge workers". In the OEM (original equipment manufacturer) industry, for example, we have situations where skilled engineers and scientists are often worth as much or more to their employers than their managers. In Taylor's world, it was the manager who had the specialised problem solving knowledge. In ours, this key problem solving knowledge resides with the knowledge workers, and not the manager. So, how do we adapt project management techniques to deal with this key reality?

Leadership in agile projects encompass a very different style to 'conventional' project management (Parker, 2010). Fundamentally, there are significant philosophical differences, specifically:

- **Guiding Vision:** when a project vision is translated into a statement of the greater purpose of the organisation, and communicated to all members of the team, it serves as a field that has a powerful effect on their behaviour. It can permeate the project environment and influence team behaviour in extremely positive ways, much more so than a simple task can. The vision needs to become a guiding force that helps the team make consistent choices, rather than embody an elusive end-state on a piece of paper.

  The agile manager, can guide the team and continuously influence team behaviour by defining, disseminating and sustaining a guiding vision. At the outset of the project, there is a need to work closely with the customer to understand the vision for the project, how it is expected to support business goals, and how it will be used. To promote team ownership of the vision, there must be group discussion with the team to build a joint project vision. A strong grasp of the vision will help the team through difficult decisions about business value and priority and keep them focused on and inspired by the ultimate goal.

  The traditional process of reducing project tasks into ever-smaller components for assignment and tracking, often causes degeneration into "fractal" tasks; tasks at ever repeated smaller scales. The traditional tool for guidance – a project plan with fractal tasks – often has tasks at too small a level to be really meaningful.

Instead, there is a need to maintain a focus on the "forest over the trees" and promote a planning process that keeps tasks at a level that sets intent and desired outcome, while preserving flexibility for the team innovation and autonomy. Throughout the project, the leader must gently guide the team to maintain focus on the vision. Everyday decisions and interactions are opportunities to reinforce the vision and create positive energy. One must be beware of actions that are not consistent with the vision and message, this kind of dissonance creates the negative energy that deflates teams.

- **Self-organisation and emergent order:** are due in part to rich interactions between agents in a CAS. These phenomena are explained by expressing the sum of the interactions of a CAS as connectivity with each agent working in alignment with other agents. It is this connectivity that we argue can be manifested through teamwork and collaboration.

We have all seen that when people work together leveraging complementary individual strengths the results can be exceptional. But getting people to work this way can be a challenge and it cannot happen by mandate. The project manager's role is to actively facilitate collaboration and establish the conditions for good relationships.

A good relationship among team members starts with the project manager's relationship with the team members. The leader sets the standard and is the role model for the others. The leader needs to take steps to get to know each team member as a person – know what makes each tick outside of work and what motivates each of them at work. In addition, by treating each person with respect one is able to establish the model for working relationships.

In addition to getting to know the team members, the leader should help team members get to know each other by creating opportunities under the right conditions. To set the right conditions, it is necessary to establish an environment in which team members treat each other with respect. There may be a need to intervene to stop disrespectful behaviour.

We recognise that many managers may not be able to pick and choose their team but, if at all possible, the first practical step in building a collaborative team is selecting team members with the right attitude and complementary skills. Particularly, if the organisation has not worked with lean thinking before, the team members should be people who are adaptable and willing to try new ways of working; although having a few non-believers can have its advantages.

In theory, lean teams have no experts – all developers work on all aspects (Scott-Young & Samson, 2007). In reality, sometimes experts are needed when the team is learning some new tools or a specific component requires technology with which the organisation has no experience. You must ensure that the role of experts and learning goals are clearly defined in order to achieve positive collaboration.

This initial stage of the project also provides the project manager with opportunities to get to know the team members and help them get to know each other. The time-honoured team-camp can be combined with techniques often using sessions such as sharing personal and professional information. In addition, the project manager should ensure that the physical workspace is arranged in a way that facilitates collaborative activities such as pair programming and team problem solving. Ideally, the team should be located in an open space with both individual and common areas.

Keep in mind that such open but close quarters have the potential to both encourage and inhibit collaboration. Some people may not be comfortable bringing their technical problems to the group. You should be finding ways to gradually get developers used to this mode of working such as beginning with pair programming and smaller groups and demonstrating that bringing a problem to the group is not a sign of weakness. Some developers want to ask for help but aren't good at coming out with it.

Planning sessions are fertile ground for developing a common understanding and respect between the developers and the client – something that is often sadly lacking in many projects. With the right kind of leadership, as the project progresses these sessions can become highly collaborative and creative resulting in improved morale and a better product. Basic facilitation techniques such as making sure all parties have an opportunity to speak, summarising and confirming, and drawing out concerns can help to build the team collective.

There are many situations that can impede collaboration such as disrespectful treatment, egotism, and nonperforming team members. The project manager must monitor the team dynamics and decide when to intervene.

The lean practices provide the team with a flexible structure within which to work. To use agile methods with simple rules, they must be explicitly stated and agreed to by all members of the team at the outset, although the team should have the ability to modify practices that are not working or add new practices.

In a CAS, information is the lifeblood of change and adaptation (Ng et al, 2008). Interactions between people involve the exchange of information. The richness of the interactions between people therefore, depends in large part on the openness of the information.

For an agile team to be able to adapt, information must be open and free flowing. Traditional managers have long prevented this openness and freedom because of a fear that it will result in chaos (Schaubroeck et al, 2007). Because of this fear, traditional managers have controlled information and meted it out on a "need to know" basis. On traditionally managed projects, teams often feel like they don't know what is going on – only the project manager has the "master plan" and only the project manager interacts with project sponsor.

In the agile world, information is freed to leverage its power. Agile practices, for example, promote open access to information– story cards are public property, as is visible documentation of all status information such as the tracking data. Collective project language ownership encourages everyone to contribute to the project. Customer and developer are placed in close proximity via on-site customer to promote an open exchange of information.

- **Light Touch: Apply just enough control to foster emergent order.**

In traditional management, everything is seen through the

prism of control: change control, risk control and most importantly – people control (Müller & Turner, 2010). Elaborate methodologies, tools and practices have been evolved to try and "manage" an out-of-control world. But tools fail when neat linear task-breakdowns cannot easily accommodate cyclical processes, and neat schedules require frequent updating to reflect the reality of changing dates and circumstances. Complex start-to-finish plans laid out in advance of a project carry a certain naïve optimism that the future won't stray too far from what has been laid out.

In the zealousness of imposing more and more control, managers seem to have forgotten the original purpose of control – to create order. As traditional managers, we had come to believe that more control would give us more order. Unfortunately, this conventional view doesn't really help us in the uncertain real world because life is characterised by probabilities, not certainties.

As experience teaches, all unforeseen events can befall the best of plans in an instant. Skilled professionals do not take well to micromanagement. Tools and techniques reach their limitations quickly when used inappropriately.

Instead, if we realise that increased control does not cause increased order, we can approach management with courage, we can recognise that we don't know everything in advance, so we can't really plan it all out on a project plan in detail. We don't really know when things are going to get done in advance, so we can't really pinpoint when they will be done in detail in a project schedule. So, we will need to relinquish some control in the interests of achieving greater order. Therefore, we have established the final principle – apply "just enough" control.

Without any control at all, there exists a certain level of order due to self-organisation, depending on the team skills and dynamics. Initially, as control increases, order increases somewhat linearly, and reaches a narrow plateau quickly, decreasing very rapidly afterwards.

Of course, the conventional view holds that the initial condition of no control starts off without any order at all, with an increasing linear relationship. Visionary control is a delicate mix of emergent and imposed order. To impose order, you must direct some control, but do it with a "light touch".

With a progressive "light-touch" mindset, the Project Manager should:

- Lay out project plans at a high-enough level to give the team room for innovation, creativity and rapid response to dynamic environments.
- Ensure that the project plans are synchronised with your guiding vision, and that they are based on functionality to be delivered and not tasks.
- Give teams a level of autonomy to quickly adapt solutions to changing situations on their own.
- Dismantle rigid command-and-control structures to allow teams to follow a more adaptive, organic model.
- Step back from the project and give the team a chance to self-organise.

Of course, viewed too closely, this emergent order may seem like disorder or chaos to the conventional eye. But to the courageous project manager, who is willing to relinquish some control, the rewards of this practice are manifold – a dynamic and fulfilled team, innovative solutions and continuous adaptation.

- **Agile Vigilance:** The common thread throughout all the stages is this final practice (Parker, 2010). The most interesting behaviour occurs at the border between order and chaos – unpredictable enough to be interesting and ordered enough to avoid falling into chaos.

  It is our contention that the most creative and agile work of a team occurs at this hypothetical edge of chaos.

CONCLUSION

Adequate preparation and planning, it is widely argued, is necessary but not a sufficient condition for success. This may explain why the majority of projects fail. Without planning, that encompasses:

- scope management,
- quality management,
- time management,
- human resources management,
- cost management, and
- risk management,

A project is a lose combination of activities. Moreover, it is likely to fail because it implies a lack of agreement between stakeholders; and it does not provide contingency plans.

However, even with thorough planning, other methods need to be employed to tightly manage and keep the project on track. These methods include;

- incrementally monitoring and adjusting project plans to respond to changing environments or unforeseen circumstances;
- consistently communicating all plans to all involved and associated with the project, and in particular, end users.

Alternatively, an agile project philosophy might be considered, using complex adaptive processes. Here, a far more 'hands-off' approach is taken; and people are empowered to make decisions. Of course, all good things come with a price. The price of agility on the edge of chaos is eternal vigilance. In leading a team by establishing a guiding vision, fostering teamwork and cooperation, setting simple rules, championing open information, and managing with a light touch, the job of the agile leader has been likened to herding cats – each person has his or her own ideas, and is likely to behave in accordance with those ideas. But new ideas need to be tried – the current approach to planning and project management is clearly not working.

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More information request Sebaux 1011 to progbus@pbinstitute.net

Excerpts of Chairman's Report to AOQ-QLD AGM

Continued from page 18

- a blog and
- LinkedIn.

LinkedIn is working very well.

3RD PARTY CERTIFICATION

We have retained our ISO9001 3rd Party Certification.

CARBON FOOTPRINT

We have established AOQ-Qld as a 'carbon neutral' organisation.

- We have received a Certificate of Carbon Management.
- We continue negotiating with our trainers to reduce their carbon footprint by reducing the amount of paper they hand out in notes, etc.

TRAINING PROGRAMS

RTO Partnerships

We are renegotiating the current arrangement with ACPE.

We have signed an MOU with Axiom College as another RTO.

We are negotiating with Independent Inspections as another RTO.

LEAN SIX SIGMA TRAINING

This has become one of our leading activities and we are continuing to expand:

We seek additional Lean Six Sigma Master Black Belts to allow further expansion.

We have identified an opportunity to expand in this area in Western Australia.

AUDITOR TRAINING (QUALITY & ENVIRONMENT)

Auditor Training Centre continues to provide Auditing training in 2011

We are registered to deliver these Diplomas/Certificates

- Diploma in Laboratory Management
- Diploma in Quality (Auditing) (Management)
- Certificate IV in Frontline Management
- Diploma of Project Management
- Certificate III and IV in Competitive Manufacturing

CONSULTING

A number of consultancies have been completed during the year and consulting continues to be a small but constant part of our business.

CONFERENCES PLANNED FOR 2012

Lean Six Sigma 2012 - Planned for 23-24 April, 2012. Elizabeth Keim has agreed to be the Keynote Speaker.

Entrepreneur2012

TRAINING FACILITIES

AOQ-QLD has signed with Training-Choice for next twelve months.

GRIFFITH UNIVERSITY

AOQ-QLD will again sponsor the Griffith Innovation Challenge by providing mentors, judges as well as sponsorship in 2011. The program was launched recently.

THE INDUSTRY ASSISTANCE PROGRAM (IAP)

A student was engaged to update and improve our web presence. This project was completed successfully.

The World trusts Minitab for the right tools.

Chefs know the right pan for their dish. Carpenters know the right blade for their wood. Artists know the right brush for their paint.

Quality professionals know Minitab makes the tools they need to deliver results. And research has shown Minitab customers get better results from their improvement projects.

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herramientas adecuadas

올바른 도구

outils adaptés

správné nástroje

価値あるツール

правильный инструмент

odpowiednie narzedzia

Passende Werkzeuge

权威的工具

ferramentas adequadas

Call for Papers / Presentations / Case Studies / Seminars

The Progressing Business Institute conferences for 2012

LeanSixSigma2012
23-24 April 2012

Theme:
Strategic Insights from Research and Practice in Lean Six Sigma

Streams: Deployment, Project Delivery

Type of Presentation:
Research, Practice, Case Study

Technology:
Lean, Six Sigma, Lean Six Sigma

Closing Date for Abstracts:
31 January 2012

www.pbinstitute.net/LeanSixSigma2012.htm

AgedCare2012
May 2012

Theme:
Optimising Knowledge Transfer Through Effective Management Systems

Streams:
Management Systems, Quality, Auditing, Management Training, Lean, Six Sigma

Type of Presentation:
Research, Practice, Case Study

Closing Date for Abstracts:
28 February 2012

www.pbinstitute.net/AgedCare2012.htm

Pharma2012
July 2012

Theme:
Improved Management Structures for Delivery of Bottom Line

Streams:
Management Systems, Quality, Auditing, Management Training, Lean, Six Sigma

Type of Presentation:
Research, Practice, Case Study

Closing Date for Abstracts:
30 April 2012

www.pbinstitute.net/Pharma2012.htm

EnergySummit2012
August 2012

Streams:
TBA

www.pbinstitute.net/EnergySummit2012.htm

BusImprove2012
September 2012

Theme:
Be Ready For Recovery

www.pbinstitute.net/BusImprove2012.htm

Continuity Forum PTY LTD

Sharing knowledge, experience and promoting best practice in business continuity and disaster recovery planning

We are an active network of organisations that share an interest in seeing that their business continuity and disaster recovery plans are resilient and continually reviewed.

Our goals:

- Provide a forum for discussion on business continuity and disaster recovery
- Educate and inform members and the business continuity community
- Encourage development and implementation of business continuity plans

Our members:

A variety of blue-chip companies from:

Banking and Finance
Government
Security
Transport
Utilities
IT and Telecommunications
Manufacturing
Retail

Member benefits:

- **Member and specialist meetings in Australia and New Zealand**
- **Conferences and Training**
- **Surveys and Benchmarking**
- **Resources and Member Support**

EventsCalendar@www.continuity.net.au

*Visit our website **www.continuity.net.au** for more information or email support@continuity.net.au to be added to our email alert list.*