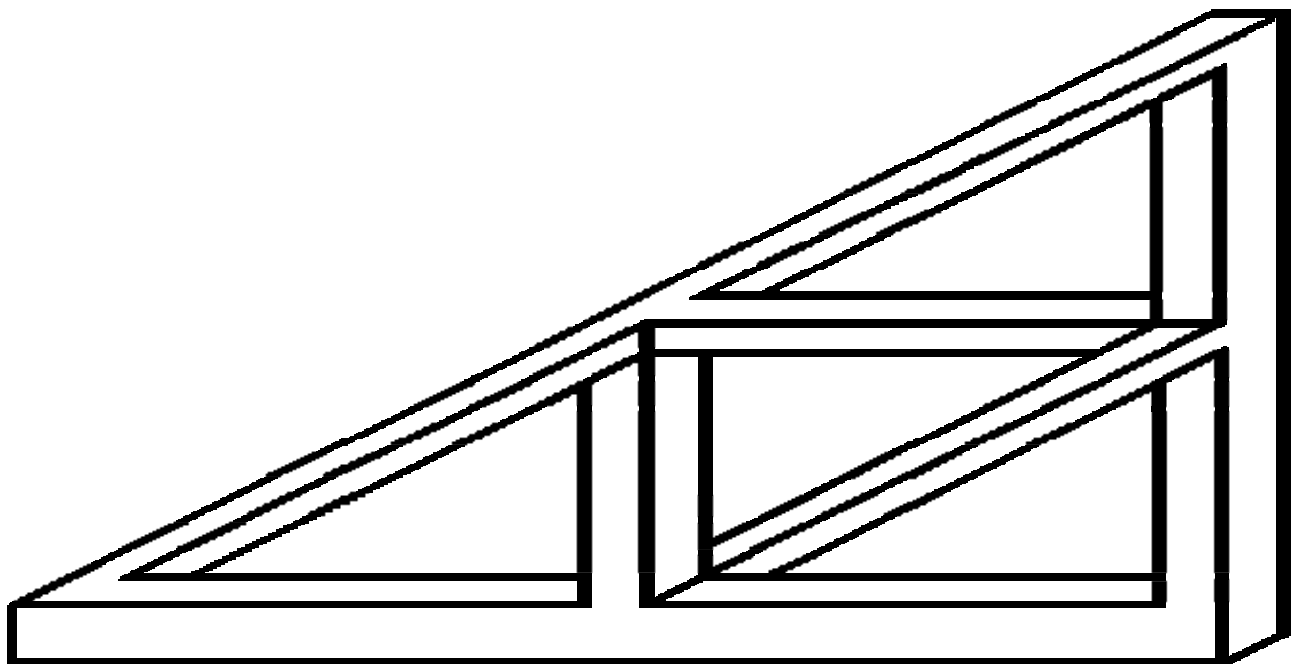


A Simple Approach to Project Management

Simon's Observations on Projects – SOOP



Who we Are

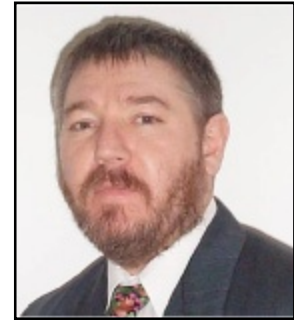
Simon's experience applies to technically complex, large-scale blue-chip environments within finance and banking, defence, oil & gas, government and not-for-profit.

Simon spent 11 years at the London Stock Exchange, where he was well trained. Since leaving in 1990 Simon has run Logical Model Ltd (LMLtd) mixing training, mentoring and consulting assignments.

Roles include set-up of programme offices (eg for £100m programmes), Rationalisation of Mid-Range IT Service Delivery in a retail bank, Reorganisation of the management structures in a \$6bn GE-Capital subsidiary, implementing an IT Governance framework using CobiT™ for a UN agency

Simon covers the full spectrum of project topics, tools and techniques from establishing an initial basic structured approach to topics such as Advanced scheduling, Leading Complex Projects, and Performing Project Recovery.

Simon is PMP, PRINCE2™, MoR and CGEIT qualified and also delivers APM aligned training. Simon was previously a PRINCE2™ examiner. LMLtd is audited and authorised by APMG to train in and administer P2 exams..



Email Contact

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Logical Model Ltd's Services, Courses and Contact Details

A typical LML assistance cycle to an organisation might run:

- *Session 1: Orientation for all stakeholders*
- 2. *1 day training in planning for Sponsor & project management team's*
- 3. *Facilitated workshop to define project goal & deliverables*
- 4. *Project manager & technician's training in planning*
- 5. *Facilitated workshops to define team tasks, schedule and resourcing*
- 6. *Routine facilitated progress assessment (repeated until support is unneeded)*
- 7. *Periodic facilitated steering committees (repeated until support is unneeded)*
- 8. *Facilitated close-out meeting for the project*
- 9. *Facilitated benefits realisation review (until unneeded).*

Simon's Observations on PM

SOOP: Simple PM

Running a project is never going to be simple but the steps and techniques to plan and track its status are. Some run in sequence and some in parallel.

The Steps

The steps in total are these: Listen to those with influence who determine what result is wanted and help them define how to judge it is delivered. Listen to those with influence who determine how to create the desired results. Then arrange the steps into any updateable representation that works for you of the time and resources to create the required results.

Next allocate the work, monitor progress achieved and take day-by-day corrective actions until the result is created and then stop.

Monitoring tells you status versus expectation and these two can vary when any of: wants, expectations or approach change or when progress is better or worse than expected.

Planning Step One: Who Matters?

First consider who has an opinion that matters. These are the people you will need to communicate with as you go. Of all the opinions two orientations are detectable: those interested in the end result or product/ impact/ change and those interested in the process of achieving the result.

We can categorise these as Customer & Supplier interests. There may be lots of politics within and between each group especially if interests are not well aligned.

Step Two: Gather the Customer's View of 'What'

When we know who has an influential opinion about what the end result should look like several approaches are possible depending on a variety of factors: do they know what they want?, Is there one person with power or a web of politics and alliances?

You might ask the person paying the bill to state what they want and when you know the answer share it with everyone else (a suggestion for how to state

'what' is described below). This is good when the bill payer has authority to "make it happen" and clarity of results.

Or you might gather the customer representative together to discuss what is wanted – often called a 'workshop': it is a better approach when commitment is required and/ or end point is unclear.

This "step" may be an hour or several months.

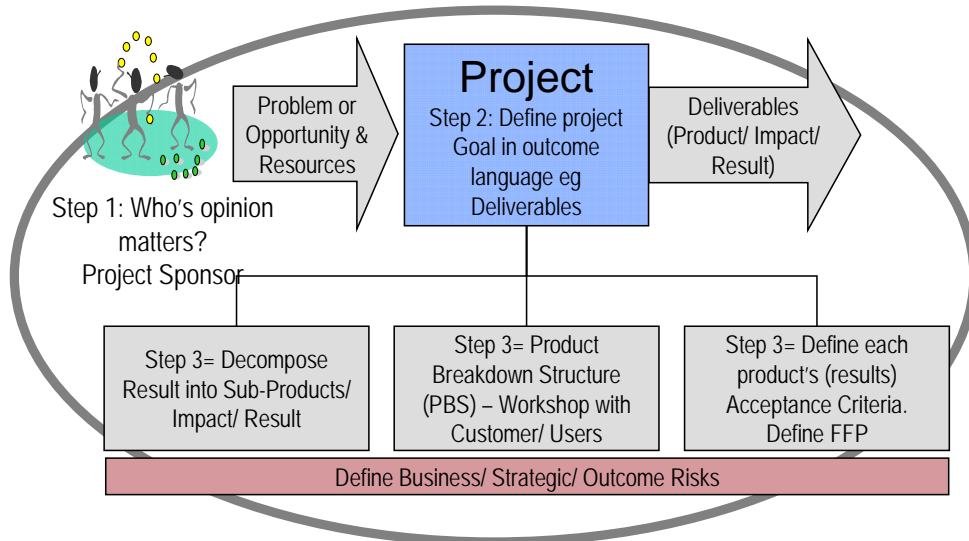
Adding PM skills to staff competencies is 40% "know what to do" and 60% supportive culture

LML focus on competency development. We provide training within a context of transition to the work-place.

Staff returning to the work-place with new knowledge & ideas need managers who are conscious of the supporting activities that deliver skills from newly acquired knowledge.

LML provides the complete skill development package.

The Planning Process Define 'What' and Commercial Risk

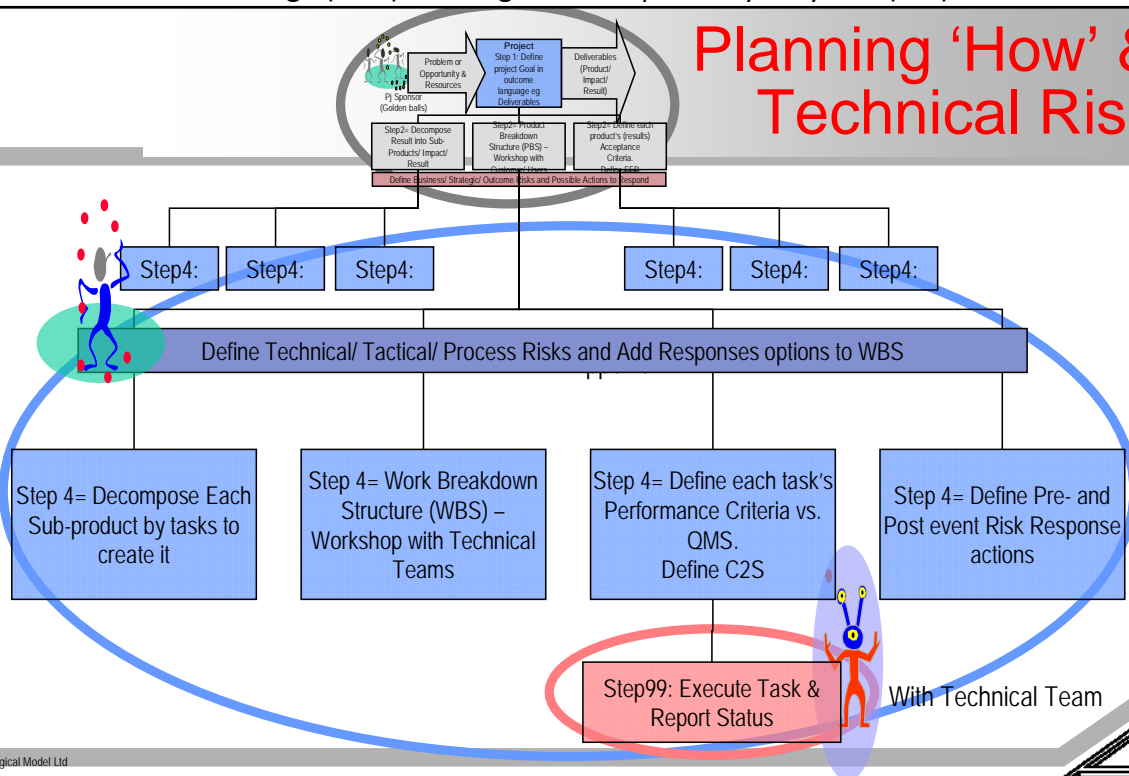


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FFP = Product's Fitness for Purpose

LML Course materials reflect themes to aid learning, for example The project manager below 'thinks with a grey, business head' and manages the teams of technicians whose team leaders must manage (blue) to a degree while primarily they 'do' (red).

Planning 'How' & Technical Risk



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QMS = Quality Management System (Organisational Standards)
C2S = Process Conformance to Specification/ Quality Management System

Running Workshops

When conducting a workshop to define end point with a group here are some pointers. First by leading the workshop you easily establish yourself in a position of authority as the PM simply by calling the meeting and leading its conduct. Second inviting contribution builds shared understanding and allows expression of doubts which if resolved leads to belief.

Involvement, understanding and belief are rewritten as motivation.

To run the workshop firstly as leader be on your feet. Split the assembled company into groups of between 2 and 5 people. The group work is best done around white-boards, flip-charts – people on their feet (or – second best – virtually with shared desktop software if people are geographically dispersed).

In the call to meeting ask attendees to arrive having identified the key words or phrases that describe attributes the solution should possess like “cheap” or “use-friendly” or “without disrupting end of year”. At the session ask the groups to

Those who think education is expensive have not accounted what they pay for ignorance.

Attendees after a training course need opportunity to practice skills 'back@work', a manager who understands that new ways take practice to be performed well, and a source of support to ask questions of and seek advice from.

LML's approach mentors the manager and the trainee.

share their key words. Look for and explore contradictions in expectations (eg cheap and quick and feature rich).

A simple guideline is “faster, better, cheaper: pick two”, and an alternate is “one attribute constrained, one controlled, and the other(s) consequential”.

Stating 'what'

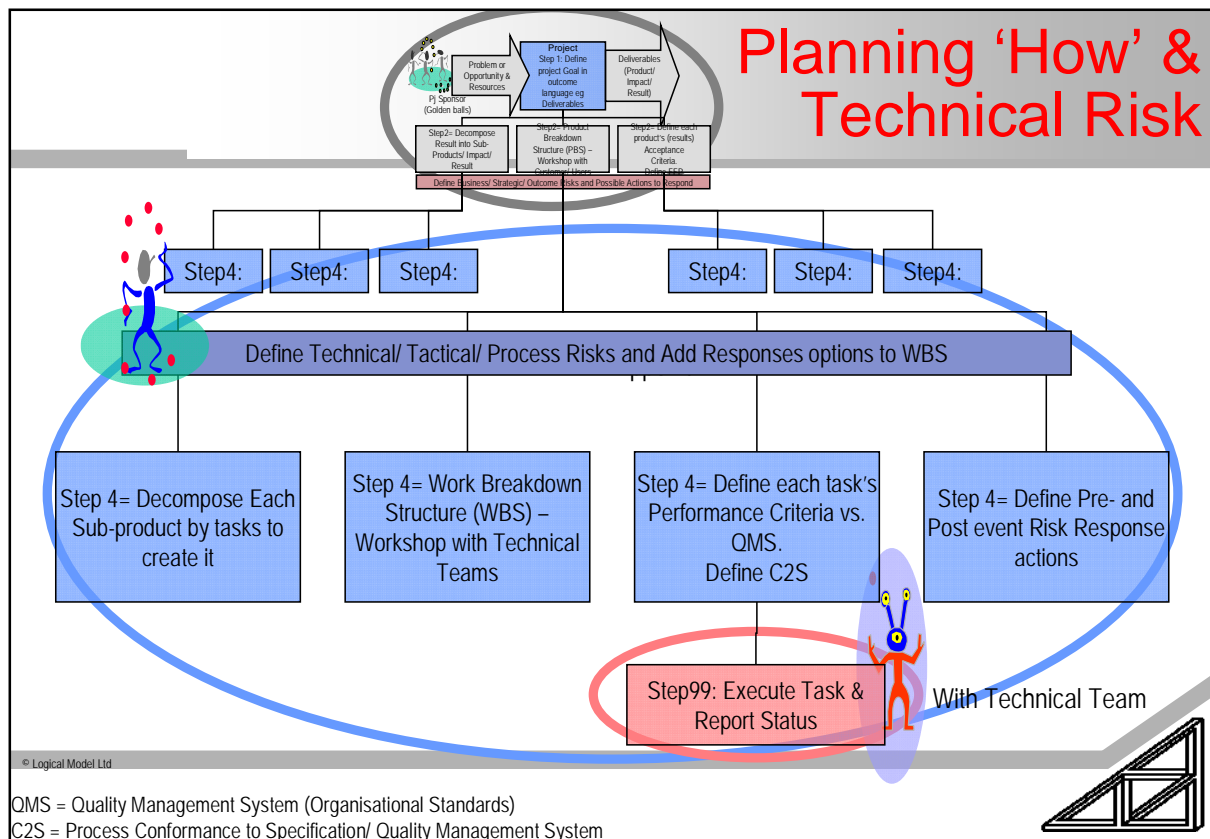
Next split back into (different?) groups and ask participants to construct a sentence or short paragraph that uses the key words to describe the world when the project is over. Again ask the groups to share and debate expectations. Look for a commitment to a final description of the project's affect on the world. Ask explicitly at the workshop – make eye contact with each person - for commitment. Note those who are dissenters, quiet etc for future follow-up and early warning of political issues.

Step Three: Refine 'What' With 'How Good'

Lastly create groups and ask them to list the individual products or results or deliverables or impacts or changes that they would see in their work area when the project is over. Insist that they express “how would they know the project has delivered” in black and white terms and the acceptance criteria for each result.

Acceptance criteria define ‘how good’ or the ‘grade’ or ‘quality’ the result must be to meet the customer's expectations.

If results are large, complex or intangible (eg “New Out of Town Logistics Centre” or “Culture of Care for the Customer”) break the final results/ deliverables down into component results/ deliverables. **At this point you may consider assistance from a facilitator with knowledge of “Product Breakdown Structures” is worthwhile.**



Step Four: Gather the Supplier's View on 'How'

Armed with a list of product/ results/ impacts/ outcomes and each product's acceptance criteria and black and white tests for deliver gather those with the technical competencies to create the results. Again this "step" may last hours or months.

The workshop approach is still ideal as it encourages sharing, mutual understanding, cross-fertilisation of ideas, appreciation of mutual interdependency and establishes the PM's authority to conduct the project.

Turn 'what' to 'how'

For each customer 'what' the technical suppliers (your team of direct reports) are charged with describing 'how'. They must explain the development life-cycle of the 'what's including all working practices required to reach customer acceptance criteria. These 'how's are the tasks that

will be recorded in the schedule in later planning steps.

Each 'how' should be at the level you will delegate responsibility to take action, release portions of the project's allocated resources and receive status reports of "all well" or "help needed".

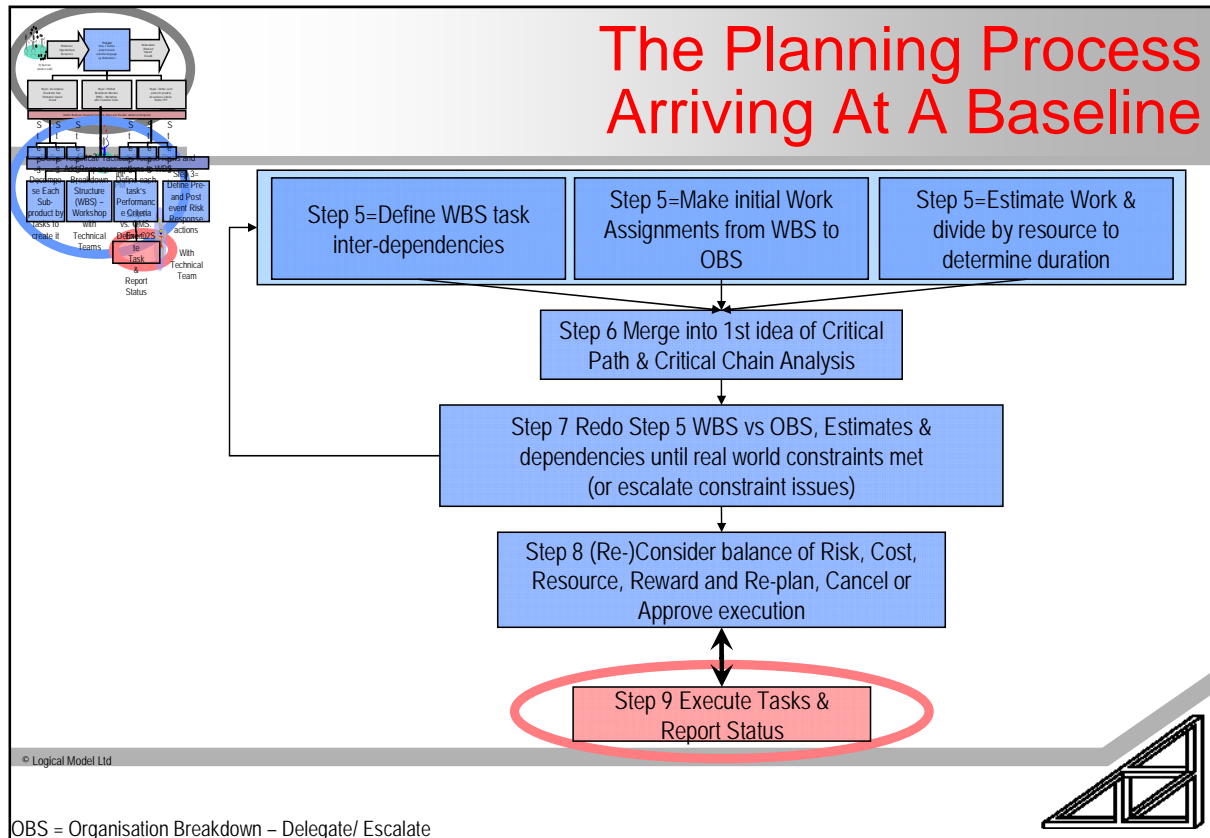
For example for an Out-Of-Town Logistics Centre the task you as PM delegate could be "establish building with full infrastructure" or "acquire land with planning permission" or "telephone property companies to locate candidate sites". For each task ensure that relevant method statements or work standards are defined and agreed between customer and supplier interests. As PM you may act on behalf of either party at times to arrive at an agreed 'what' and 'how'.

When what and how are known "scope" is known. A project whose scope is unclear and/ or unstable will be matched in the next steps with a schedule and budget that includes flexibility for adjustment. Only text-book projects have fully defined

scope before they start. Real world projects often lack full definition even after they are 'complete'!

with knowledge of "Work Breakdown Structures" would be worthwhile.

There may come a point at which you consider the assistance from a facilitator



Step Five, Step Five and Step Five

Three things to do, all of which depend on each other to a degree, and thus need to be repeated and refined. IE these steps are iterative. They are sequence the work with people and resources assigned for as long as is estimated will be needed.

To establish control there needs to be agreement on who does what when with what resources and then monitoring that intention and reality are 'close-enough' to achieve desired results.

Assign Resources

Tasks need resources (people, tools and materials) assigned to establish coordination and agreement on cost. Also

the time and cost of each task is determined by the number and quality of resources allocated. In total the task cost and time will define project schedule and cash-flow. To determine finalised resource assignments each task's real calendar dates need to be assessed, which is a combination of dependencies and durations.

To restate: 1) task plus dependency plus assigned resources defines durations and schedule 2) resource consumption across time equals outgoing cash-flow.

The most pragmatic approach is to estimate durations and define dependencies. Determine possible dates versus resource levels required and then to adjust for reality. Typically we find that

an 'ideal' schedule creates unacceptable work peaks and troughs for our resources that need to be resolved by reshuffling assignments to match reality.

Describe Task Dependencies

Tasks undertaken by the various technical disciplines have dependencies upon each other which need to be understood by both ends of the dependency. A practical approach is to write each task on a sticky-note and stick to an office wall or window in work-order. Perhaps by putting flip-chart paper up first (sticky notes will fall off white-boards and some walls after a very short time!). This step is usefully part of the "translation of what into how" workshop.

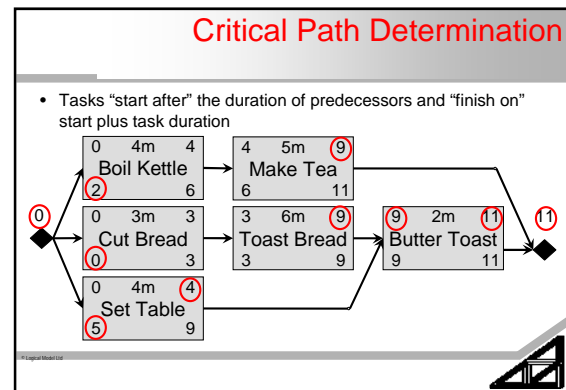
Each technical discipline should describe their work steps to their peers in 7 ±2 steps, then when all 'parallel' work streams are described interdependencies between streams can be added. Working back from the end result often combines well with working forward.

As a guideline the set of steps undertaken by a peer group should be circa 50. IE vary the granularity of description to target 50 items. If the technical capability is low then 50 may be too many (and cost and schedule will be looser), if the group is very experienced then they will be able to cope with more than 50 but probably don't need the extra detail to still be in control.

If each participant is a sub-project or team manager then they should later run a similar workshop for their reports with a 50 item target for each result within their area of responsibility. With just one tier of team leaders up to 50x50 tasks is a big project!

The dependencies allow individuals and groups to see upon whom they are dependant. Knowing who supplies one's inputs creates opportunity to discuss

acceptance criteria for hand-over of responsibilities along the project's path to completion. IE defines where review points should be defined.



A facilitator with knowledge of creating precedence diagrams and conducting critical path analysis may be a help as number and significance of

LML: Training, Mentoring and Consultancy in:

- basic project management tools and techniques,
- project control using PRINCE2™,
- governance, ownership and sponsorship of change,
- master-classes in project risk management,
- master-classes in project quality management,
- master-classes in earned-value management, critical chain analysis.

Support to managers in embedding skills

Creation of Project Offices, Centres of Excellence and project quality systems

interdependencies between people and tasks increase.

Estimating Durations and Costs

Each task is a contributor to the project's end state and is a component of the project's budget and schedule.

Budget is the sum of resources consumed. Schedule the result of task durations plus dependencies. Resource needs and durations are assessed by estimating. Estimating must always start with the technical 'dimensions' of the project's achievements eg one million bricks laid. Then divide the technical effort by resource productivity and availability eg 120 bricks per hour times 5 brick layers times 7 hours per day 5 days per week = 48 weeks elapsed.

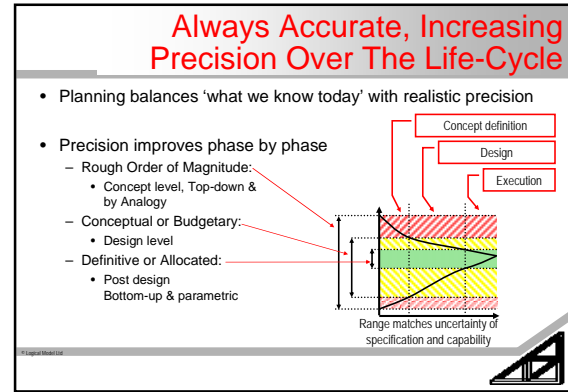
An estimate has two properties: accuracy and precision. The only way to estimate any quantity reliably is with a range of best to worst case. To be reliable every estimate must be accurate. Inaccurate is useless. A range allows that the final value will lie between the minimum and maximum value and thus the estimate is truthful; accurate.

Estimates should be as precise as needed and no more. Lower levels of precision are the 'cost' of accurate estimate when less is known. With more research or experience precision can be increased.

What is Precise Enough?

To answer "precise enough?" we must consider what the purpose of an estimate is. Estimates are used to apportion resource and coordinate activity. EG: enough string to tie-up a parcel and to deliver it to the post-office in time to catch the post.

As a rule of thumb start with a single value 'expected' for all estimates. As project schedule and budget emerge from the details of planning some estimates can be revisited to increase their precision.



If project schedule, cost, scope, quality etc are under the closest of scrutiny then some expertise in estimating tools and techniques may be a useful to guide your subject matter experts in how to estimate and express risk.

Are We Done Planning? Not Quiet!

So far we have identified those with influence who judge the project's end result and helped them define the acceptance criteria to be applied. Used those with technical expertise to define, sequence, and estimate the work to create the result.

A few repetitions of the steps and a project plan is emerging that is widely understood, its grey and foggy spots are known and its problems areas have been discussed and the 'best' approach agreed (hopefully). Foggy spots or perhaps we might say 'risks' need to be considered.

Adding Risk to the Baseline Plan

Handling risk can be made to be endlessly complex but doesn't have to be for the vast majority of projects. The simple approach starts by describing them well which enables the formulation of responses.

For every uncertainty in the plan there are the factors that cause it and there are the results if it happens. If both are described then actions can be assessed and those considered worthwhile figured into the project plan. For example "we may be late" is an outcome without a cause. We

can formulate responses to use if we are late but cannot from this description formulate ways to avoid it.

Where descriptions tell us there is possibility of something good happening then add resourced actions (new tasks) to the agreed plan to improve the chance, and equally for the “to be avoided if possible” add actions to the plan. IE affect probability of occurrence.

It is also prudent to create plan “B” that will be added to or replace plan “A” should the uncertainty actually occur. IE affect the size of the impact.

Ready to Set the Base-Line

We have a schedule of resourced tasks that create the customer’s desired result while fending-off threats and embracing opportunities. If the world works entirely to plan we are done. Send the team out to do the tasks and the project will be delivered.

Planning’s first pay-off is that everyone understands how their actions contribute to the required end-result and will be able to make situational decisions in that context. Planning’s second payoff is that everyone’s involvement will have improved the elusive ‘buy-in’ to motivate them to make the required decisions.

Reality normally invades in unforeseen ways and pretty soon we will be ‘off-plan’.

If planning has been a team exercise up-to this point then re-planning will be a trivial case of minor adjustments selected from

previously discussed options. If planning was performed as a single person activity then the cynics will be telling everyone how they were right that “it was obvious that it would never work” and the general team member will be wondering what ‘central control’ want done next, just at the time when ‘central control’ is busiest with problem resolution.

Being in Control

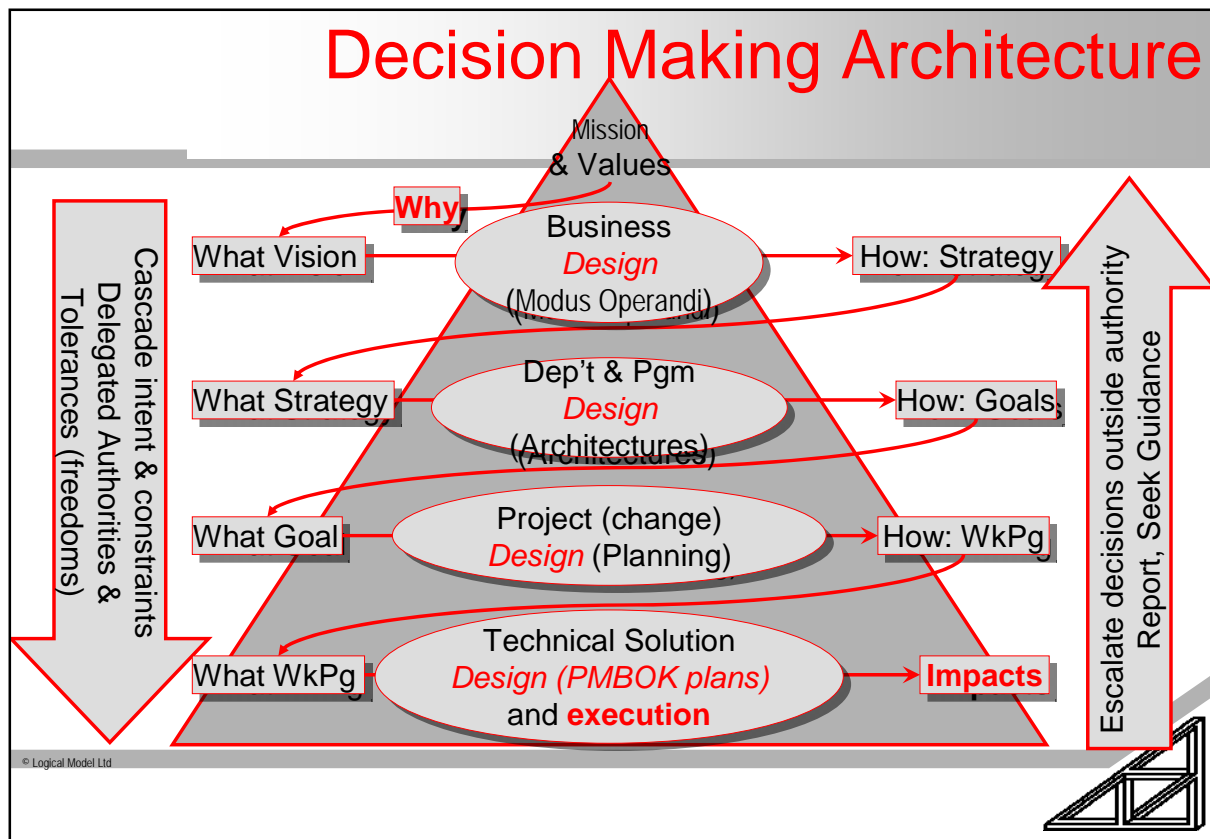
Creating the plan established the basis for control. Being in control means reviewing what is the best action that is available today? Often that means minor corrections to consolidate gains or correct losses versus plan.

To be able to assess status versus baseline requires that progress is monitored and compared to baseline in all the project’s dimensions; achievement of scope, to time and to cost.

Reporting and Escalation

If planning has been performed well then now is the time that planning generates its third pay-off: when changes versus plan are desirable everyone starts with a rich context of options available. Project participants know the contribution required from them and the affect of decisions they make

Where they can assess that decisions will affect other people’s results they can instigate appropriate dialogue.



Escalation

There are two circumstances in a project that require passing decisions to others. Either we do not have the authority to make the decision or we do not have the knowledge to make the decision.

The normal term for passing on the need for a decision is 'escalation' but that clashes with the concept of technically more specialist/ capable resources 'lower' in an organisation's management hierarchy.

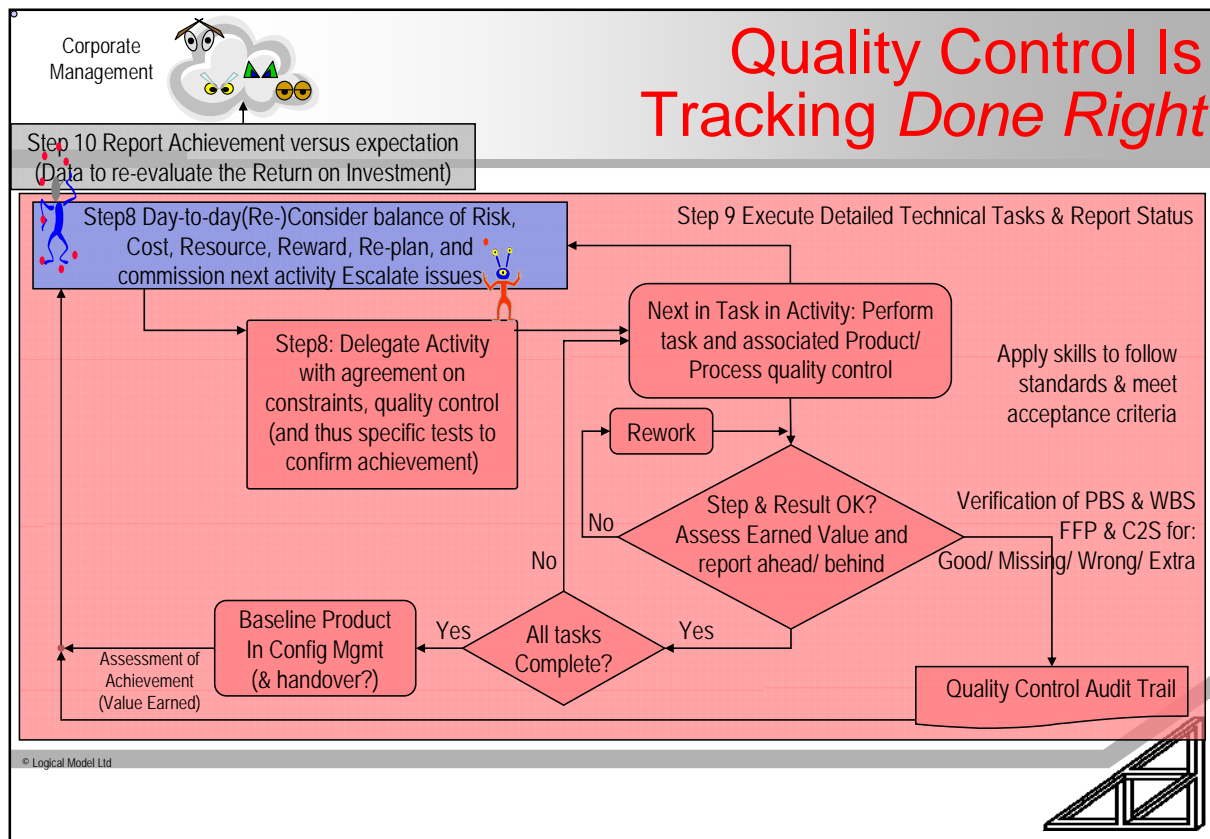
Applying Corrections

When we are off baseline correction may be useful – but is not always worthwhile. Being off-baseline comes in four forms that are the combination of customer led and supplier led, optional and mandatory.

Optional customer led change is the classic "Request for Change" to which the

project manager's answer should always be "Yes, of course. Let me tell you the cost when we have re-planned to accommodate the change. I'll present our currently agreed baseline and potential new baseline (of cost schedule scope etc) for your consideration and reassessment of the Return on Investment".

At the opposite end of the spectrum is mandatory change. Normally this is caused by failure of specification, failure of capability versus plan or discovery of something previously unknown (good or bad). To plan pretending these things will not happen is naïve, so "smart" planning builds flexibility into the project's approach, decision making and constraints.



Control = Change to (yesterday's) Intentions

Control means changing the plan to describe what we will do in future given progress to date and if future progress is as is now expected.

Changing the plan is entirely a repeat of the previously seen planning steps of "Who matters? what do they want?, how will we create it?, constrained by what task, resource or other dependencies?"

The only difference from when we encountered the eight steps earlier is then we started with a clean(er) sheet and now we plan with more constraining factors.

To know that a change is desirable means we have to be able to plot where we are now versus where we expected to be. The plan says where we expected to be so the missing piece is to know where we are.

Measuring Accomplishment

All tracking of status rests upon the foundations of measuring accomplishment. Measuring of accomplishment is generally harder than people envisage. What to measure can only be defined by those with technical skills in the creation of the project's results. Deliverables with physical form are always much easier to measure than ones with cultural or intellectual content.

Sadly for many control regimes the tracking of hours consumed is no use for measurement of progress. When combined with reliable progress measures then tracking resource consumption is useful for forecasting project 'estimate to complete' (ETC).

Count Tasks 100% Complete

To track accomplishment the safest method is to count tasks 100% complete. 100% complete means the quality standards that were to be applied to the

task's work were followed (perhaps an audit trail exists to prove use) and the quality standards or acceptance criteria for the task's product have been confirmed to be met by the recipient.

What is verified complete in this way should be compared with the schedule to confirm that tasks crucial to on-time delivery are progressing as expected and tasks verified complete should be compared to resource consumption for assessment of achievement versus expected cost.

Another common pit-fall is that projects compare expenditure to date with cash-flow expectation without triangulation with accomplishment resulting in an assessment without meaning.

Project Purpose

Often overlooked is the question of "why are we doing this?". No project is ever (should ever) be run for its own sake. The only reason to run a project is as an enabler to business-as-usual. In BAU benefits are returned to the organisation's owners (private or public) as reward for providing capital and taking risk.

The real 'test' of any project is the use that its deliverables are put to and thus the effect of its results on the organisation.

Defining A Project's End At Its Start

When well started a (simple) project's sponsor and project manager can state clearly what the world will look like after the project is complete.

The description paints a vision of future-operations that can be lucidly described to others. The vision will be complete in breadth and significant factors but is unlikely to be complete in detail.

As the project progresses questions of technical detail will be thrown-up and the technical staff should be able to resolve them with 'downward, technical escalation' within understood constraints.

As the project progresses contradictions in expectations or constraints will be exposed, questions of preferences or resolution of strategic detail will emerge and be escalated upwards.

When the project concludes the real work starts, the exploitation of new capability to repay the cost and effort of its creation.

When a Projects Are Not Simple

Projects can expand from the simple in several directions.

The project may involve many people, and or many technologies and or many cultures (EG Artist and Engineer as well as Oriental and Western). The goal may be unclear: "What ever I want is different from what we currently have", "I'll know it when I see it" or the means to accomplish it may not yet be known "A cure for cancer" or all of the above.

More Sophisticated Approaches

The simple approach is never wrong and always applies. It is not always enough on its own. Tools, approaches, techniques and insights exist that extend capability but they are beyond the scope of this paper. You'll need to call us on +44 (0) 845 2 57 57 07