



Improving Portfolio, Programme and Project Financial Control

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White Paper
June 2011

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Executive summary

At a time of limited funds, there is a compelling case for a shift in financial management thinking across the capital investment portfolio of programmes.

The benefit to portfolio boards, programme directors and project managers is that by improving understanding and implementing best practice in financial management, and by increasing the skill set of those involved, there is an increase in levels of financial maturity. With this comes improved portfolio investment decision-making, better returns on investments, greater accuracy of forecasted spend and the capability to deliver portfolios on budget, thereby removing cost overruns.

Effective financial management is about the need for portfolios to be more financially innovative, adapting to reflect the changing landscape. It must also address current financial issues and make a significant contribution to the ability of departments and organizations to reduce spend, and to focus the available funds on the correct portfolio of programmes which will deliver the greatest benefit realization at the lowest cost.

To deliver tangible savings, improved benefit realization and better cost management, a portfolio-wide cohesive standardization in core practices and approach must be introduced, adopted and implemented.

This White Paper sets out how best to improve and implement coordinated corporate financial control across the organization's portfolio of investment-led change programmes and initiatives. These will be delivered through a financial methodology, as an enhancement to Portfolio, Programme and Project Offices (P3O®), and through improved financial skills training across government organizations in which stakeholders learn demonstrable best practice. The portfolio will deliver a set of financial management and control enhancements, which connect into the core principle from Managing Successful Programmes (MSP®). This defines programme management as the action of carrying out the coordinated organization, direction and implementation of a dossier of projects, and transformation activities (i.e. the programme) to achieve outcomes and realize benefits that are of strategic importance to the organization.

Portfolio

Reiling (2008)¹ describes portfolio management as 'a process that is clearly characterised by business leadership alignment. Priorities are set through an appropriate value optimisation process for the organisation.' According to the OGC (2010)², 'portfolio management describes the management of an organisation's portfolio of business change initiatives. It is a coordinated collection of collected processes and decisions that together produce the most effective balance of organisational change and business as usual.'

In this White Paper we show how these aims might be achieved by the introduction of a seven-step approach for the creation of an appropriate financial structure and governance.

Programme

'Programme Management is coordinating a group of related, and interdependent, projects that support a common strategic objective' (JISC, 2009).³ Our method should increase employees' financial awareness and improve their financial management knowledge, thereby inculcating financial management values throughout the organization and its programmes.

Project

PRINCE2® is now recognized as 'a de facto standard for project management' (OGC).⁴ Our approach is complementary to PRINCE2; however, we will only focus on projects which are part of a wider programme of activity. Using a consistent approach, we can ensure the portfolio delivers a standard set of guidelines. We focus on financial pain points and on how to mitigate financial issues to deliver strong financial reporting and control.

Naturally, financial control within an organization does not cease when a project is delivered and therefore we shall review best practice in total cost of ownership (TCO) as part of our overall approach.

The desired change will materialize through the implementation of a structured approach to financial management (see Figure 1). This change must be started at portfolio level, with the portfolio acting as the catalyst to provide governance to programme and project levels. The outcome will be enhanced decision-making and stronger financial control throughout the portfolio.

Strong financial management and governance can only be executed if the portfolio executive provides sponsorship of these core processes, and champions financial management as an integral part of their strategic aims and objectives. Sponsors must understand the need for appropriate staff training and development in financial control and ensure such investment in staff is undertaken. This should produce a higher return on investment and a reduction in the cost of delivery.

Financial control is delivered through financial management development and the up-skilling of those working throughout the portfolio. The financial working methods are set at the portfolio level, where the governance, structure and control mechanisms are established and agreed, and then adopted by the programmes or projects below them to ensure standardization.

It is very important that the financial function is seen as central to the efficient management of the portfolio, rather than peripheral, as the structure created by the introduction of improved financial controls can only work properly if financial control is fully integrated into the core of the portfolio.

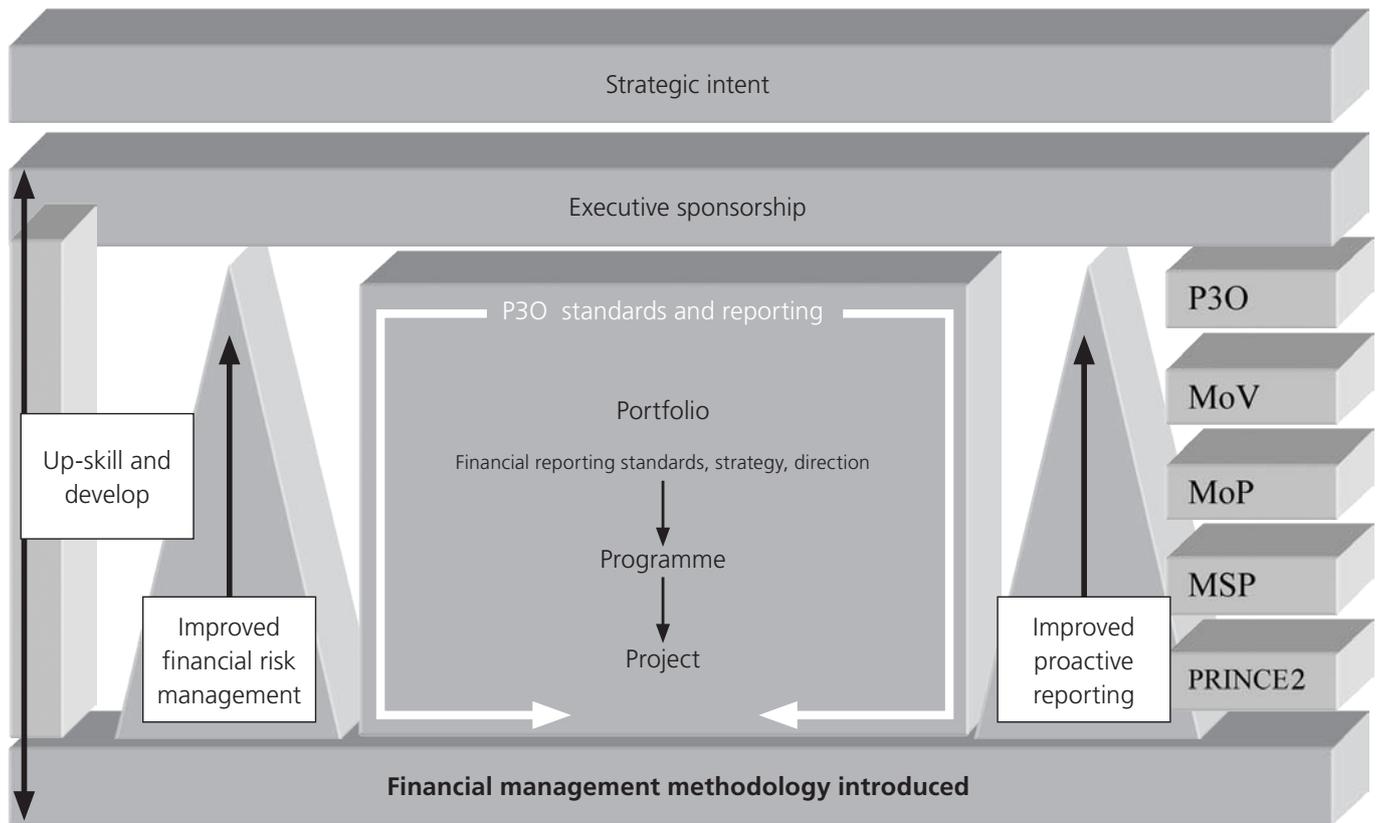


Figure 1 Diagrammatic structured financial management approach

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Improved financial control is delivered through a developed ‘financial management methodology’, complementing and building upon the cost and financial management methods delivered through Best Management Practice, such as Management of Portfolios (MoP)TM, Managing Successful Programmes (MSP), and PRINCE2.

Once best financial practice has been established, two very clear improvements are then enabled. Firstly, an improved quality of reporting from the project level up to the portfolio level ensures that investment decisions are based on high-quality data. Secondly, risk management is improved to deliver an early warning of financial risk which allows the portfolio to manage, remove and mitigate potential overspends.

Through this combination of actions and the development and implementation of proactive reporting, increased financial maturity is realized along with increased investment decision-making, which in turn improves returns and delivers programmes on budget.

Introduction

Financial management is ‘A process which brings together budgeting, accountancy, financial reporting, internal control, auditing, financial/commercial aspects of procurement, financial performance of benefit’ (Smith and Fingar, 2003).⁶

The challenge and situation addressed by this White Paper

Financial Management Magazine (CIMA, 2003)⁷ recognized underdevelopment of budgetary controls and management information, corresponding with poor issue and risk management as reasons for project failure.

Eight years on, project management techniques have advanced through the Portfolio, Programme and Project Management Maturity Model (P3M3[®]). Whilst the ‘visibility’ of financial management maturity has improved in this period, it is still an often-overlooked topic. This must now be addressed by implementing a centrally managed, structured framework of robust financial management, governance and control which is understood and accessible to everyone (adapted from the Asian World Bank, 1999).⁸

In 2008, the National Audit Office (NAO) stated the following as reasons for financial failings:

- The inability to integrate financial and operational performance information
- Poor forecasting capability, leading either to departmental overspends or (where unanticipated underspends were not identified early) losing reallocation opportunities.

Why improve financial management and where is the opportunity?

There are several reasons why financial management should be introduced in an organization:

- The organization's capability to immediately reduce spend is significantly improved by targeting areas of financial pain (those currently at, or at high risk of, overspend) while at the same time implementing controls and adopting procedures which reduce the likelihood of overspending in the future.
- The return on investment in improving financial management is considerable:
 - Delivering more programmes for less money
 - Only added-value programmes are started or continued, immediately saving funds as fewer programmes are approved
 - Approval is only given where there is a strong business case, tangible benefits and the capabilities available to deliver strong governance and control structures
 - Higher investment returns as projects are delivered on budget
 - Reduced overspend by delivering improved efficiency programmes
 - Financial management up-skilling incorporated into everyday ways of working, providing a lifelong improved financial management structure
 - Reducing total cost of ownership by implementing greater due diligence on future ongoing costs
 - Improved decision-making due to higher-quality financial management
 - Lower portfolio office costs as 'lean' financial reporting and management are embedded.
- To deliver the P3M3 aim of a greater level of financial maturity through:
 - Portfolios: established standards for investment management
 - Programmes: standard central approach to financial management
 - Projects: manage expenditure in accordance with organizational guidelines.
- Delivering a financial management and reporting structure that allows efficient control of value management initiatives provides the correct information required to direct management of value implementation (OGC, 2010).⁹

Change will ultimately be the result of capping functional budgets, enhancing budgeting, improving financial management and allowing greater cross-fiscal financial control.

1 Portfolio-level financial control

The focus of any financial management development is the portfolio, as this is where the investment decision is made and where all programmes and projects will look for governance and control.

The first step is to develop and standardize the approach a board takes when considering which programme or project to invest in. The foundation of *what* needs to be done is within the P3M3 Maturity Model PfM: Financial Management (OGC, 2010)². This describes a fiscal framework which advocates procedures for strong budget implementation, accounting and reporting, procurement, and strong internal and external oversight.

A seven-step approach (CJM, 2010)⁵ should be used to work on the delivery of the 'how'. Its aim is to ensure that the total change investment is coherent, prioritized and scrutinized, building upon the financial management aspect of product delivery within the PfM cycle (P3M3 version 2.1, OGC, 2010).²

The seven steps to embedding the 'what?'

The following seven steps are aimed at gradually building up the skill set required by the executive board and their senior managers to deliver a new kind of portfolio financial control. All decision-makers should be given training, mentoring and coaching on improving financial awareness, financial development and on enhancing their capability to challenge the financials of portfolios.

Step 1 Creating the portfolio

An agreed portfolio financial ceiling is introduced, the ceiling being the fixed maximum a portfolio can spend in a single financial year, which is aimed at delivering an expected set of benefits.

Setting the ceiling on what a portfolio can spend ensures that firm boundaries are provided for the executive to work within. This restriction of access to funds and the understanding of the programmes that no 'new' funds are available, and that they must deliver within the budget allocated to them or the programme ceases, is the first step in building greater financial control mechanisms across the portfolio.

Central to this idea is the knowledge that, if within a portfolio one programme overspends, another programme within that portfolio must reduce spend to compensate.

Step 2 Cost estimation

Cost estimation is the process of calculating the probable total cost of a portfolio on the basis of the best available information. All too often, cost estimation has been regarded as nothing more than a bureaucratic method of delivering budgets. This has meant that cost estimation has not generally been given the priority and attention it deserves. We believe

that the use of ‘best practice’ in cost estimation throughout the project lifecycle leads to the most efficient use of scarce public resources and mitigates against the risk of cost overruns. Accurate cost estimates help deliver on-budget portfolios and provide higher levels of financial certainty (adapted from Australian Government paper into cost estimation, 2008).¹⁰ The comments in Table 1 illustrate some of the common criticisms and associated responses.

Table 1 Understanding common budgeting problems helps ensure your budgeting procedures work

Budgeting problem	Budgeting solution
Adds little or no value to a department	Share relevant information between employees responsible for different functions
All the year is focused on meeting or beating budget	Create realistic and up-to-date budgets
Too much pressure, especially on sales targets	Always carry out a rolling forecast
Budget not developed	Start from scratch (bottom up) using only last year’s historical data
More guesswork than reality	Those closer to the ‘coalface’ will have better assumptions
Departmental ‘tower’ mentality	Better cooperation between different functions

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There are a number of estimation techniques in common use and we must consider a standard approach to their utilization across the portfolio.

Top-down estimation This delivers senior management control; however, it requires management to be specific in their expectations. It often fails to take into account the detailed knowledge and expertise of some lower-level employees.

Historic estimation Data from a historical closed project are extrapolated to compute the estimates for the new project. The accuracy of this approach is dependent on two key factors: the quality of the assumptions made and the similarity of the comparative programme to the new one.

Bottom-up estimation This is the ‘blank white sheet’ approach to budgeting and involves the following:

- Breaking down each activity to its smallest part, relating it to the end deliverable and costing it
- Using knowledge from other sources as to what the cost might be
- Using external advice as to what the cost might be

- Considering, at the lowest level possible, the risks and opportunities various courses of action may have on the financial cost
 - Full resource requirement analysis and costing.
- Ultimately, a blend of approaches is probably best in estimating a project’s cost, taking into account all historical data whilst extracting input on estimates from key subject matter experts (see Figure 2). Importantly, there are steps we can take to improve success rates:
- Commit adequate funding to the process to allow an accurate cost estimation exercise to take place. This process is also more time-consuming than others, so this must be taken into account
 - Include ‘subject matter experts’ in the process of gathering information to increase the estimate’s reliability
 - Use industry best practice and benchmarking
 - Identify which costs are not under the control of the programme, as those outside their direct control pose a particular area of risk
 - Challenge all assumptions
 - Ensure the quality of data input into the estimation process is as high as possible.

Step 3 Investment decisions – distributing the agreed portfolio fund

Once the portfolio ceiling has been set, decisions must be made on how best to allocate the available funds to ensure the best return on investment.

The first action is to standardize and formalize the appraisal mechanism, which allows us to compare and contrast competing programmes. If not, the review becomes at best haphazard, and more likely near impossible.

As with all aspects of this seven-step model, the approach implemented at a portfolio level must be replicated throughout the programme and project. This ensures that all aspects of a portfolio have been formally prioritized to ensure the maximum benefit for the investment made.

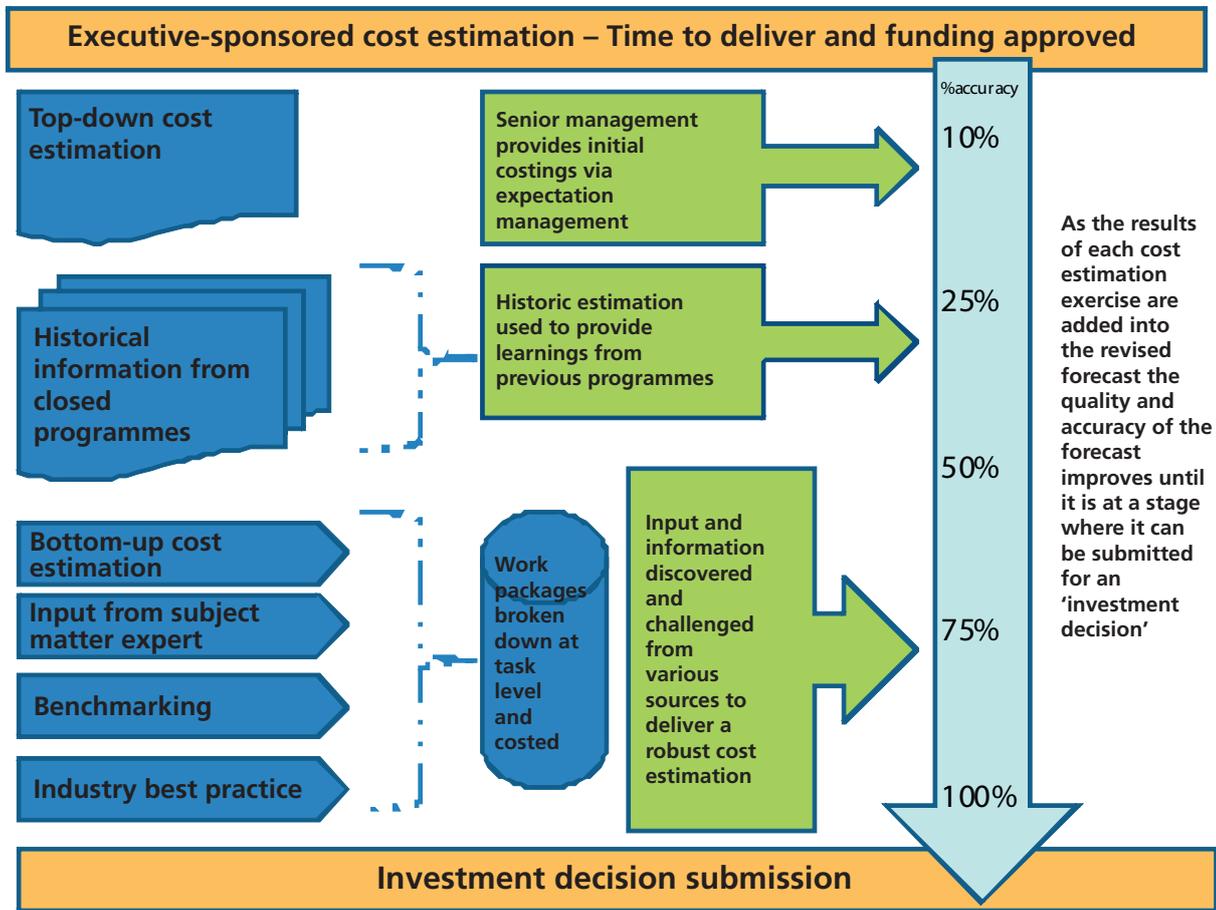
It is highly likely that a central portfolio planning team will manage the process on behalf of the executive committee. They will act as the hub to manage all financial standards, provide the governance and collate all the related data. They will also be the returns point for all reporting. A central aspect of their role will be the management of the following investment approval method:

Create – Score – Approval 1 – Challenge – Build – Approval 2

Create

Accessibility to portfolio funding should be managed by each programme, creating a programme brief to present at a portfolio executive review board, containing a statement of what organizational need is being fulfilled:

Figure 2 An example cost estimation process



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- A required solution
- Key area of change
- A description of financial and non-financial benefits
- A detailed (down to lowest level practicable, including resource forecasts) phased cost estimation including a view of TCO
- A capital and revenue spend profile.

Score

The portfolio board will score each brief based on:

- Programme category* driver:
 - **Continuing** Approved and continuing from previous years. Programmes are only accepted into the next year after stage gate reviews and a reconfirming of the business case validity
 - **Compliance-led** Due to new regulation or critical immediate need
 - **Enabling** A programme must happen this year to allow another programme to start the following year

- **Emergent-led** The remaining balance is then available for new programmes. These could be to capture emerging technology or the vision of making a step-change in infrastructure or scientific approach.

* It is appreciated that there are other ways to categorize – however, these were chosen as the most structured yet simplistic approaches available.

- Probability of meeting objectives using a basic scoring method for each objective:
 - **High, medium or low** Scoring against the probability of that objective being delivered within the planned timeline, budget and scope
 - **Percentage** 0 to 100% to show accuracy of the budget placed against it
- Expected benefit delivery against plan
- Resource utilization: availability, skill set, location, etc.
- Capital expenditure and revenue requirements and availability
- Fiscal phasing.

Due to the current lack of funds, programmes that are limited in benefit and high in cost must be dropped immediately. The decision criteria include:

- Financial affordability
- Tangible benefits after 18 and 36 months
- Availability of, and source of funds
- Opportunity cost
- Likelihood of the programme delivering on cost and on benefit.

Approval 1

This releases 'seed' funding to the programme team to progress to invest, develop and create a detailed business case.

Challenge and Build

This is a mechanism where a board keeps constructively challenging the programme's ways of working: financials, benefits, structure, plans, timelines, etc. Each challenge should deliver further improvements to be 'built' into the business case.

Approval 2

This process should be repeated until the programme is approved to move forward. Then the final approval (or cessation) will be given.

Step 4 Peer responsibility implemented

When peer responsibility is implemented, success is only achieved when *all* programmes within a portfolio come in on time, on budget and on benefit. The portfolio, its programmes and its projects must be seen as a single financial unit.

This is a 'portfolio first' mentality, whereby improved working relationships, open discussion and cooperation play a role in delivering benefits and the strategic aims of the portfolio. If one needs funds, another may need to find out ways to reduce their budget to accommodate.

Peer responsibility requires introducing the concept that underspend is as bad as overspend, and programme directors must have a greater understanding of the future forecast financial position of their programme. The portfolio is managed through the 'ceiling' and therefore the funds available must be used to ensure the best return on investment.

Removing the impact of annuality

Current practice requires budget allocations to be spent by the end of the financial year or surrendered to the centre. This practice provides an incentive to spend and, as the end of the financial year approaches, the consequent pressure intensifies leading to the possibility of ill-considered, wasteful and unnecessary spending. Statistics reporting the quarterly pattern of public sector spending show a very clear surge in capital spending in the final quarter of the year, which supports an annuality effect (CIMA, 2005).¹¹

If a programme within a portfolio has reviewed its forecast and is planning to come in 'under' its current allocated portfolio funding, then it will formally inform the portfolio of the position. The portfolio can then reduce the allocation to that programme and consider reallocation of those newly available funds, utilizing the same process as noted in Step 2.

This is *not* the same as allowing 'carry forward.' It is about managing to the same portfolio ceiling but, within that ceiling, allowing peers to manage the funds available within their portfolio. The programme should be able to deliver a more convincing overall case for funding during the portfolio approval process, thanks to the maturity of such peer responsibility and the efficiency of spending that follows. The possibility of reallocation rather than surrender of funds provides an incentive for improving forecasting and also for managing and smoothing spends over the year.

By giving improved financial control, peer responsibility enables programme directors to work with each other to manage the overall portfolio ceiling. However, sanctions for non-compliance must be agreed and delivered through the performance appraisal system of the organization.

This paper recommends that financial management must form a greater part of an individual's performance measurement than it currently does, by ensuring that non-adherence to agreed financial management targets or non-participation in the peer responsibility process is discouraged through reduced performance scores and lower financial rewards.

Rewards should largely be allocated not for success of an individual, but rather on the successful performance of the wider portfolio of which each individual is a part. The actual implementation of such mechanisms is not for a financial White Paper to discuss, and would need to be further reviewed and considered within the appropriate circles.

The likelihood of the portfolio delivering greater financial success is much increased when managing the annuality effect through connected compliance and peer responsibility.

Step 5 Improved reporting, governance and control

The portfolio sets the format, structure and type of information reporting requirements for all programmes and projects within its scope. The financial governance and control mechanism will be delivered through improved reporting.

A 2007 survey (EIU, 2007)¹² found that:

- 10% of executives admit to making important decisions on the basis of inadequate information
- 46% assert that wading through huge volumes of data impedes decision-making
- 56% are often concerned about making poor choices because of faulty, inaccurate or incomplete data.

Lord Bilimoria (CEO, Cobra Beer) stated: 'You cannot make proper decisions without proper information.' (EIU, 2007)¹²

As a result, especially in periods of financial constraint, portfolio financial management requires a higher quality of reporting. The following steps will deliver part of a strategic toolset:

- Conducting an information needs analysis to identify what information is needed and why
- Initially investing sufficient time to create a reporting structure
- Reviewing the cost and feasibility of providing information
- Adopting a formally agreed method and set of reports
- Agreeing a timeframe that is relevant and structured to reflect financial results against the strategic objectives
- Introducing proactive rather than reactive reporting
- Introduce key performance indicators (KPIs)
- Creating a financial governance structure to monitor and control reporting
- Embedding a formal financial review process with programme directors and project managers. This will include targeting variations in the budget versus the actual figures, and carrying out key financial reconciliations
- Implementing structured consistent reporting mechanisms from the project board upwards to the portfolio board.

The reporting will then be created by:

- The inclusion of a rolling (actual and budget for a specific future timeframe) financial forecast to show the budget versus revised forecast to complete
- Liaising with the portfolio office to ensure key financial performance indicators are within the dashboard as part of the P3O model (P3M3 version 2.1, OGC, 2010)²:
 - Programme monthly dashboard prior to executive review
 - Portfolio executive consolidated dashboard
 - Monthly executive review implemented.

If the reporting does not reflect the strategic aims of the portfolio, then the reporting is not meeting a key objective of its existence.

The reporting should also be reusable and be a balanced set of objectives with core aspects including:

- Standard format: from project to portfolio
- 'Traffic light' reporting (see box), covering:
 - Timeline
 - Stages
 - Targets
 - Financials
 - Resources
- KPIs: agreed, formulated and included
- Consolidated portfolio risks and opportunities.

Traffic light reporting

Red	Issue requiring executive intervention
Amber	Risk about to turn into an issue; however, currently managed internally by the programme management team
Green	No problems

This improved level of reporting will provide information to the decision-makers, allow portfolios to see where programmes are not running to plan and highlight those that are likely to underspend or overspend, enabling proactive corrective action to take place in a managed process.

Step 6 Changing what you report, how you report, and understanding why you report

This cumulates in delivering a 'leaner' financial management structure by reducing the cost of supporting your portfolio.

Recent research (EIU 2008)¹³ demonstrates that over 70% of a finance department's time is spent processing transactions, and less than 30% on financial management, business intelligence or decision support.

We suggest the 70% must be refocused to embrace a lean financial reporting structure.

Lean has developed in recent years alongside Lean Six Sigma, which is essentially a methodology aimed at reducing variation in manufacturing processes to achieve improvements in quality. Lean Six Sigma is not, however, just about cutting costs. It is about providing customers with what they really want (*The Independent*, 2010).¹⁴ This focus must be embraced within the financial requirements of portfolios.

There are four key values of implementing lean financial reporting (CJM, 2010)⁵:

- Compliance with all globally accepted accounting regulations
- Information provided in an accurate and timely fashion
- Reporting and decision-making information provided must be what the 'customer' *needs*, not *wants*
- Continuous improvement of the financial management requirements – what is good now may not be good in six months.

The core components of lean financial reporting (CJM, 2010)⁵ are as follows.

Delivering improved reporting

To deliver improved reporting, the following questions need to be considered, reviewed, answered and incorporated into the reporting suite:

- What is its aim?
- What does it influence?
- Who reads it?

- What is it used for?
- Time to create?
- Lead time to deliver?
- The reporting timelines?
- Who is responsible?
- Customer KPIs and variances requirements?
- Desired outcome?
- The length?
- Influence of external factors?
- Relationship to strategy?
- What will make a difference?
- Is it flexible?
- Does it drive decision-making?

How reporting is delivered

Understand how reporting is delivered and review the information management systems that are in use:

- How mature are they?
- Who uses them?
- How are they used?
- How reliable are they?
- What is their function?
- What reports do they produce currently?
- What are the systems capable of producing?
- What is the perceived and real accuracy of that reporting?

It is paramount that we question what an information management system can provide. A mature system *should* deliver the correct results; however, just because it has been used historically does not necessarily mean it still provides the information needed to financially manage the programme.

Reducing reporting complexity

Reduce reporting complexity by understanding and considering:

- **The reporting purpose** It must be clear and address those issues that will support the decision
- **Report manipulation** Agree reporting requirements at the start to reduce future manual changes
- **Back-up administration** At all times use system-generated reports
- **Overproduction of data** Reduce the volume of data provided and increase amount of information which will influence management decision-making
- **Overproduction of reports** Deliver a reporting pack to the stakeholder that is efficient and highly effective
- **Obsolescence** If the report is not used and not needed then stop creating it

- **Overskilling** Have the correct financial staff for the role they are performing and only bring in senior accounting experts when they will add value.

Mapping, recording and reporting financial information to strategic work streams/parcels

The financial structure and reporting must be built to meet the programme work stream's end-deliverable. The manual effort involved must be offset against the system capability and the strategic need. The reporting must map clearly owned strategic and financial value streams with clear cost reports.

As a minimum, the reporting must include a set of strategic stream indicators:

- Effort completed versus cost to date
- Budgeted versus actual cost
- Resource utilization
- Risks and opportunities
- Rolling forecast.

Accounting with a single point of contact

Although it is understood that many individuals will have input into the financial management of a portfolio to deliver improved portfolio reporting, lean financial management should be established through the formal identification of a single financial point of contact, as shown in Figure 3 (adapted from CJM, 2010).⁵

A single point of contact ensures that the correct information flows between individuals within the portfolio and finance functions. This same process would then be replicated across all programmes and projects within the portfolio.

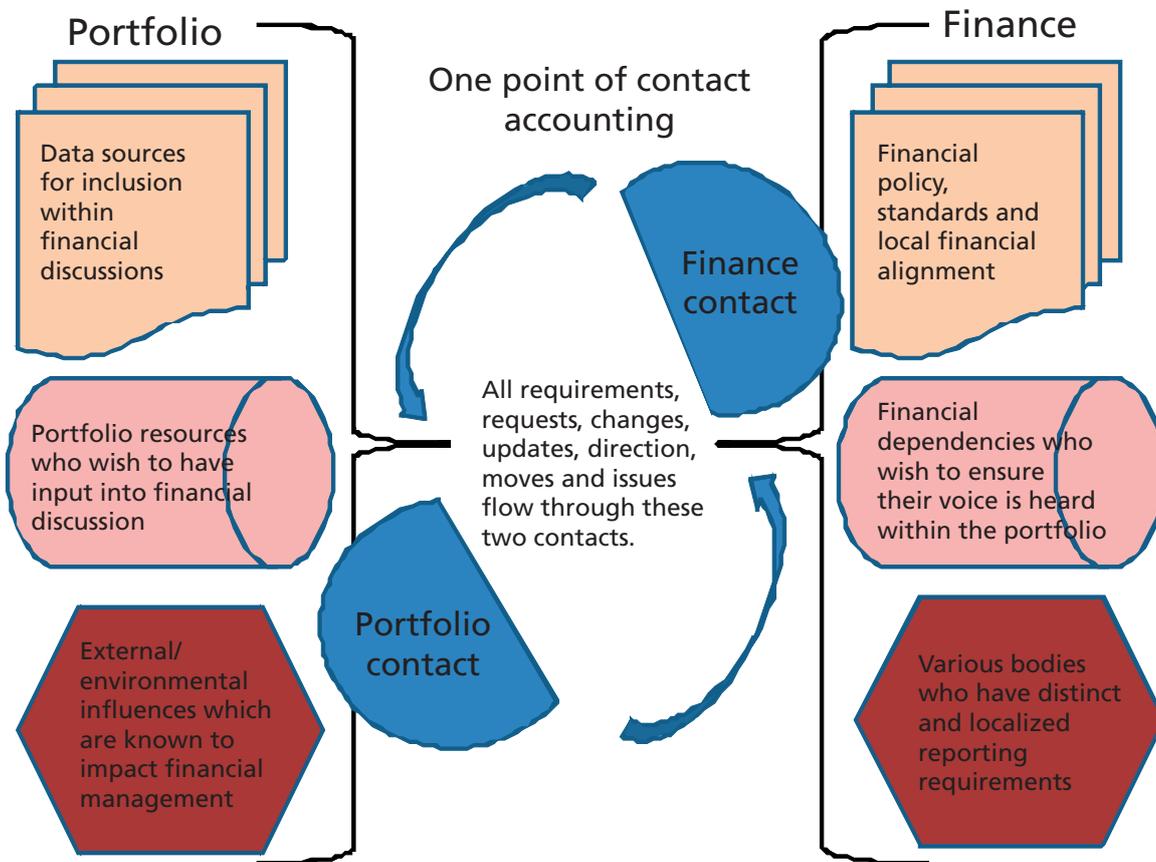
The introduction of lean reporting and leaner financial management will only improve financial management if the concept is partnered with adequate financial risk management.

Step 7 Financial management of risk, issue and opportunity

The management of risk, issue and opportunity (RIO) is pivotal to maintaining strong financial management. Many programmes put considerable effort into identifying and understanding the risks and issues which affect them, but don't attach a financial cost or benefit reduction to them, reducing their capability to identify and manage the budget challenges announced recently in the public spending review.

Charles Tilley (CEO, CIMA) recently stated that some financial companies had a weak understanding of the business models and risks they were supposed to be overseeing, and that 'they were not receiving the right information to take good decisions about risk allocation and management' (CIMA, Oct 2010).¹⁵ Whilst the impact may be different in the public sector, many large portfolios of programmes face similar problems.

Figure 3 Single financial point of contact



The cumulative overview of risk is at portfolio level; however, the portfolio’s risk management is only as good as the risk and issue management process implemented in the smallest project within the portfolio. This continual flow of lower risks upwards to the portfolio ensures the continued connection between the day-to-day operations and the strategic aims of the portfolio.

There are four key aspects of RIO (CJM, 2010)⁵: Output rather than input, tolerance, impact and business as usual.

Output rather than input

Cost management is seen in many techniques and guides as an input into risk management. This is wrong and risk management must be seen as an input into cost. There should be a two-way flow as follows:

- The cost and financial awareness of a risk *must* be included in the risk register when a risk, issue or opportunity is identified
- A consistent approach to reviewing and monitoring all financial risk must be adopted to ensure continued protection of the strategic direction.

Tolerance

PRINCE2 introduces the concept of ‘management by exception’, removing the unnecessary burden of day-to-day involvement. Tolerance is used to establish degrees of freedom.

With a greater emphasis on ‘cost out’ programmes, tolerance in its current form is not an ideal approach to managing financial risk. Tolerance sanctions and allows for movement and change without due governance and control. It is possible that tolerance is given only to scope and not to financials; however, culturally it sets a poor example. Allowable tolerance should be replaced by portfolio executive-owned tolerance, whereby a degree of freedom is only sanctioned when it goes through the required portfolio controls in Step 3, and the portfolio has a request for further budget allocation.

Impact

Programme and project structures should be well governed in their own right to manage localized risk through local policies. Risk which impacts the wider portfolio financial objectives should require escalation to the portfolio executive.

Building upon Management of Risk (M_o_R) principles, an ‘early warning system’ must be embedded into portfolio management to allow the control of financial risk through implementing a RIO management process. There are a number of factors that facilitate a good early warning system:

- Clear sponsorship and continued leadership of effective risk management

- Documentation: see M_o_R section 7 of the risk management model for further detail (HM Treasury, *The Orange Book*, 2004)¹⁶
- A RIO-managed process for every budget change
- Financial probability of the accuracy of the values placed against each RIO
- High, medium or low rating of the likelihood of the risk materializing
- RIO and project management office weekly reviews set up, with focus on all high probability RIO
- Formal portfolio change request (PCR) document created and approved by a change control board to access 'tolerance' funds for each RIO. This is driven by 'no spend' impacting the portfolio budget without approval – no 'post-spends' approval is tolerated
- Mitigation implemented or portfolio altered to reflect results by redistributing available funds.

Business as usual

The inclusion of financial management in operational 'business as usual' (BAU) risk profiling must be improved upon.

To understand the risk and opportunities which are inherent in an organization we need to understand the organization, the drivers for its costs and its inherent culture.

Organizations should regularly monitor how change impacts their baseline costs. In understanding what drives the cost of the organization, the dependencies between each of those cost drivers and then monitoring the potential risk and opportunity against each item, the organization develops the ability to continually manage their day-to-day financial costs and effectively manage and reduce inherent business risks.

Across a variety of asset bases, the use of such tools as configuration management databases and information repositories are the key to understanding where the dependencies are and what the potential areas of risk are. To deliver successful BAU risk management the organization must invest upfront to develop an understanding of their landscape and associated costs. When an organization has this information about its BAU cost base it then has the capacity and capability to produce robust decision support information to analyse the current position, improve reactions to immediate risk and have better risk management plans in place for the future.

2 Programme-level financial control

In Managing Successful Programmes (MSP), it is increasingly clear that poor management of cost can have considerable consequences. The ultimate success of a programme is judged by its ability to realize strategically important benefits. However, this concept must be enhanced by ensuring that they are

delivered within the initial business case budget. A programme cannot be seen as successful if scope and benefit are delivered at double the original cost.

The importance of the role of the programme accountant must be enhanced in future programme methodologies.

Current thinking is that 'the role of the programme accountant is to support and ensure compliance in corporate accounting, and also provide 'useful support' in business case development (*The Independent*, 2010).¹⁴

As a first step, there must be a genuine change in ethos. The finance role must not be seen just as support. Expert accountants, trained in programme financial management, should be appointed to take responsibility for financial management on behalf of the programme leadership, and be integral to delivering added value across the three key aspects of MSP.

Business case creation

If programme maturity is at the heart of the new direction for financial management, then the business case cannot be considered just a one-off document to secure approval. It is the baseline to which all future reporting links back, and the measure of progress through to the programme end.

The rapid change within the economic cycle and environment also means that the business case created previously may now need to be reviewed, and therefore the review to keep the business case deliverables central to ongoing discussions must be part of the financial management initiative. Central to this aspect of control is the need for executive officers to conduct financial challenge reviews, either at agreed points throughout the programme lifecycle or at formalized stage gates.

Whether the business case is new or revised, what is to be financially included must be enhanced. A key aspect of enhancement is the cost of the programme; what is the true cost of delivery?

Stringent forecasting will allow for increased accuracy, with improved tolerance used as a safeguard against task and scope 'creep'. This should be carried out by:

- Bottom-up cost modelling (see Section 1, Step 2); a true forecast cost of the programme should be delivered.
- Breaking the budget down into cost streams so an individual has accountability and responsibility for the costs that they control.
- Direct and indirect component costing. A true reflection of the total programme cost must be identified, not just the direct costs. For example, the programme may be utilizing components which may not be directly charged, but are part of the overall cost base.
- Resource mapping to a programme organization chart. A fundamental failing happens when resources or 'time allocated to the programme', as illustrated in the organization chart, is not reflected in the cost base.

- Activity duration should be used to forecast payment phasing (especially for vendors). By this we mean that outcome-based charges should be given much more consideration.

The core aspects outlined above are just the start of the process. There should be further review of the financial cost within the business case by:

- A joint review and 'deep dive' by the programme management office and finance function to carry out a critical analysis of the costs in the business case
- A review of lessons learned from previous programmes and, where appropriate, taking on board those revised ideas
- Working with procurement to consider different commercial and vendor strategies; for example, changing the way you buy, introducing service credits, or having a greater focus on challenging suppliers for non-delivery of services
- Dependencies – consideration of the post-implementation wider financial implications on day-to-day running costs.

Financial management up-skilling and training

Changing ways of working in financial control and targeting P3M3 maturity will require the adoption of an executive-sponsored financial development programme for all portfolio, programme and project staff.

Improving financial skills must be the key area that needs to be addressed within programme management today, as every member of the organization must now be seen as being responsible for the financial control of the programme; it is not just the responsibility of the programme director.

To deliver this financial responsibility, staff must be provided with the right financial skills and competencies. In current programme methodology 'cost' sections, there is often the belief that 'finance for non-financial managers' or 'budgeting and money' courses are adequate to deliver the required competency. The lack of financial skill and awareness amongst non-finance staff remains a barrier to improving financial management (OGC, 2007).¹⁷ Those departments which regularly assess the financial resource management skills of their senior managers are found to be more able to nurture a culture in which the management of financial resources is of central importance (NAO/OGC).¹⁸

As part of its paper, the NAO stated that managing financial resources effectively is crucial to meeting the challenge of providing value for money for service users. One key deliverable in the summary is 'improving the finance skills of staff outside of the finance department.' One route NAO suggests for the delivery of this is the use of 'advanced techniques and practices to manage their resources effectively' (NAO, 2008).¹⁹

In-depth knowledge of true financial pain points will tackle the fundamental issue of financial overspend and poor control. Prior understanding, development, coaching and learning will reduce the financial risks by fostering proactive rather than reactive strategies in programmes.

Development will shift in thinking to provide staff with an enriched and dedicated financial management skill set. Financial management must form part of a member of staff's annual appraisal, backed by financial management being part of their continuous personal development programme and part of their personal performance targets.

The following provides direction as to what a financial management development and up-skilling programme (CJM, 2010)⁵ should provide, to ensure staff have the fundamental knowledge to understand the financial implications of their actions:

- **Financial fundamentals** Basic accounting knowledge*, capital and revenue, financial ownership, cultural impact, project closedown accounting
- **Financial structure** Mapping, vendor financial management, funding, benefits gap analysis
- **Budgeting** Creation, supplier accounting, business case financial modelling, operational accounting, change requests
- **Financial governance** Control and governance models, approvals, dependency, and end of stage audits, risk and lessons learned
- **Financial reporting** KPIs, financial information, communication, variance
- **Implementing successful financial management.**

* This one section, basic accounting knowledge, captures the current 'finance for non-financial managers' training which is usually offered, providing a lower than foundation level of capability.

Cultural development

Up-skilling will provide the backbone of what is required to be achieved in improving financial management. The new techniques, the increased capability, the individual and team culture change to financial management will embed it. An individual's understanding, however, cannot change quickly from a lack of any financial awareness to a full awareness, and therefore turning the learning into reality must be incorporated within the overall up-skilling approach. This should be done by:

- Gradually introducing financial themes. Each individual is different; however, few one-off courses will deliver the increase in learning necessary. Gradual introduction of financial management through foundation level training, moving on to more advanced level training over a relatively short period, is likely to have a greater impact.
- Coaching focused to ensure the accuracy of budgets. This may be at a high level to begin with, taking it down to a lower level at each subsequent session.
- Managed process to deliver a low-level detailed budget. The ultimate target is a fully costed, line-level budget.

- Making financial awareness and understanding a consideration for every action taken. This process is not just a paper exercise, but fundamentally changes the way individuals think about spending.

There are a number of further themes that are part of the development of financial culture (CJM, 2010).⁵ Each of the following themes helps to embed financial management more rigorously into a programme:

- **Early financial utilization** To ensure early financial involvement, intervention and inclusion, the programme financial resources should be introduced during discussions on the initial feasibility paper
- **Financial ‘freedom’** The ability, through a safe channel initially, to allow open discussions on the potential for overspend occurring, should be seen as constructive, not negative
- **Financial relationships** Finance should not be seen as an outside interest and therefore the programme finance resource must become part of the programme they are working on. They must not be seen as the financial ‘stick’, but be ambassadors for the programme
- **Internal and external pressure** The biggest factor to influence cost and financial management will be demands from ‘non-contracted’ requests and therefore a culture of how those requests are responded to through the project management office must be embraced and managed carefully
- **Reliability of financial information** Developing reporting that the programme needs and delivering information to provide decision support
- **Robust change control** Embedding change control and having financial management as a part of it. This is a level of maturity where finance really is part of the programme and is knowledgeable of development and the financial implications
- **Financial learning** Cross-programme, post-programme learning must be shared to ensure mistakes made are not repeated. A financial awareness community must be built across functions, departments and organizations.

The result of implementing the actions above will be delivery of more of the MSP measurement and analysis requirements (OGC, *Managing Successful Programmes*, 2007).¹⁷ A cultural financial shift and greater emphasis on understanding financial risk will also develop.

3 Project-level financial control

The delivery of the portfolio and the benefits that go with it are only as good as its component parts and therefore the financial management of projects must be improved.

Operational accounting needs to be put in place to deliver a quantitative and qualitative examination of the project’s financial records, to determine the reliability of the financial data.

Firstly, we must understand the roles and responsibilities of the operational accountant. This is done by implementing, completing and approving a financial RACI table, identifying the roles that have responsibility and accountability as well as those who need to be consulted and informed. This should ensure that everyone is aware of who does what.

Secondly, a set of operational accounting checks should be introduced. These are best practice and introduce ways of working that encourage focus on potential financial problems, monitoring the financial structure and assurances of continued alignment with the organizational and project structure.

This can be achieved by targeting areas with potential financial problems and a high probability of overspend; for example:

- Areas of complexity
- Areas where tolerance is high and by default there will be limited budget accuracy
- Areas where poor project management expertise is visible
- Where there are new project managers; provide as much support to these individuals as possible
- Areas of commercial sensitivity
- Areas where contractually the commercial details have not been fully closed.

Financial management root cause analysis

Financial pain points usually occur at the project level. To address this, Financial Management Root Cause Analysis[©] (CJM, 2010)⁵ should be introduced.

The key steps are:

- 1 Understand key financial points of failure
- 2 Rank these in importance
- 3 Focus on the root cause of each: similar to an activity-based costing approach
- 4 Target the cause: multiple causes can be targeted and may run in parallel
- 5 Recognize barriers to the achievement of goals. On paper, financial root cause analysis is simple, but in reality many barriers will arise:
 - People: who do not wish you to highlight the issue
 - Cost: the size of the pain point is revealed
 - Acceptance: project manager denying that there is a problem
 - Cultural: UK ways of working may not be compatible with those of an overseas division

- Sensitivity: if the change will have repercussions in a specific department, or specific stakeholder areas, there may be resistance to highlighting it.

Fund (cash) flow management

Funding is the lifeblood of any project and must be managed. It may be the release of funds, the ability to spend funds or the access to funds set aside.

Most papers on project management ignore fund flow management completely; however, this crucially important topic must be introduced as part of improving financial control within the project environment.

The following four components are standard aspects of fund flow management for any organization. The project accountant's and project manager's awareness of them has to increase to ensure the management of funds into the project is continuous:

- **Transactional** Through accurate budget preparation, they have the availability of funds to meet day-to-day operational requirements
- **Precautionary** Funding should be set aside which matches the agreed centralized portfolio executive managed tolerance fund. The key point is that the funding set aside must be accessible (within the given formal approval process) to allow continuous progression of the programme activity
- **Speculative** As projects work their way through the lifecycle, opportunities arise which may be considered of worthwhile benefit. Although all portfolio funding should be allocated, projects which are more aggressive, meeting timelines and on track for benefits, should have the opportunity to access those funds if they have a business case available to deliver a new scope item connected to their original project
- **Financial** If a project is not delivering against its planned timeline, forecasting should show this. This funding is 'opportunity lost'. It must be reallocated to another portfolio-approved project to deliver a more immediate benefit and add value.

Fund management undertaken in this way is crucial to ensure that no funding risk materializes and that every opportunity is taken. The benefits of this approach are:

- The budget will produce the first funding requirement flow
- Rolling the latest estimates will provide outlooks through continual variance analysis, review, challenge and build
- We should achieve 'just in time' funding, meaning we reduce the amount of funds tied up in projects that are not being spent.

Project financial management is the building block that will deliver a financially successful portfolio. The portfolio sets the governance and control mechanisms to which the project works.

It is, however, most likely to be the project that delivers the financial impact into BAU.

Estimating what a project will cost is only half the workload. Controlling those costs during the project and after delivery is equally critical. Total cost of ownership (TCO) takes the purchase cost of an item into account, but also considers related costs such as ordering, delivery, subsequent usage and maintenance, supplier costs, after delivery costs and disposal costs. Originally developed by Gartner Research in 1987, TCO analysis is a tool which aims to calculate the overall costs involved in buying, running and developing a system or asset over its full lifecycle.

The secret of managing TCO is business alignment. This means developing a full understanding of the complete lifecycle and business impact of each project implemented, by utilizing decision support information to ensure that all potential future costs are considered.

The problem is that even the most thorough cost analysis process is not guaranteed to take account of every conceivable cost that could ever arise; therefore in this White Paper we will provide some key direction to improving accuracy in TCO modelling:

- Create a TCO model for your organization
- Use TCO in conjunction with other management aids, such as cost/benefit analysis
- Establish a TCO consciousness across the organization – develop the correct staff skills to understand what TCO is and what they can do to help in reducing it
- Ensure new projects are automatically included within the wider organization's TCO model
- Identify TCO drivers and have initiatives in place to reduce and control them
- Develop a TCO reduction strategy – i.e. keep simplifying the landscape
- Establish meaningful reporting to monitor and measure your TCO baselines versus estimated figures
- Regularly review all previous portfolio investments and ensure that they are still delivering maximum value by reviewing them against original benefit cases. This drives optimization of the relationship between the investment and the business outcome
- Introduce charge-back within your organization to ensure that the business unit appreciates the cost investment which they benefit from
- Use contract and vendor associates to identify ideas which may reduce TCO and allow them to share the benefits
- Keep the TCO model as simple as possible.

In summary, reducing TCO is a continuous process, and such reductions and associated stretch targets should be included in individual and departmental performance plans. Methods can be used throughout a system's life to simultaneously optimize system functionality and reduce cost.

To achieve complete portfolio investment management and minimize BAU costs, it is crucial to have appropriate operational accounting in place. Having an operational accountant focus on monitoring, and acting upon, financial pain points as well as ensuring the portfolio's cash is managed well, will have the desired effect of successful financial management.

4 Conclusion

Given today's economic situation, we have to recognize a need to develop current methods, and implement improvements in the status of financial management and control within the portfolio, programme and project sphere.

P3M3 has already set the bar for financial management maturity (OGC, *Managing Successful Programmes*, 2007).¹⁷ We now need to provide the capability to reach this bar.

The key target must be set at Level 3. However, many portfolios will have the ability to stretch their ambitions to deliver aspects of Level 4; for example:

- Financial appraisals should be conducted routinely. Continuous financial 'challenge and build' should be built into the portfolio structure
- Auditing of project expenditure should be undertaken routinely – lessons learned from gateway reviews should be documented and utilized
- Lessons on cost estimation should be shared across projects. Up-skilling alone would go a long way towards meeting this specific target.

The current focus on 'benefits' should and will remain. The delivery of that benefit must not, however, come without consideration of the cost. In accounting terms, benefit must be matched against cost.

To assist this, organizations must further focus on tightening relationships between procurement, project management office and finance and by increasing enthusiasm for effective financial control.

The change will be seen by many as an additional burden; bureaucratic, adding additional cost, and adding another layer. However, the benefits already outlined should greatly outweigh any such concerns.

Financial management must form part of the core function of the organizational portfolio office, and from there a focus on the cost element of making appropriate changes. The role of the financial management resource cannot be seen as simply collaboration *with* the project, they must be seen as integral *to* the project (CJM, 2010).⁵ Financial managers must be true business partners.

At the core of this thinking is the understanding that the greater the complexities of the project, the more important it is that the leaders of the portfolio, programme or project improve their financial management knowledge, and realize how

their direction impacts financial management and achieves a higher level of maturity within P3M3. Those who work within portfolios must receive the correct training, development and up-skilling and be given every tool available to allow them to succeed in delivering effective project financial management.

P3M3 research by SEI (2006)²⁰ has shown that adopting a maturity model can deliver a 75% reduction in cost. Enhancing the financial management remit within MSP is critical to delivering that level of future success.

Financial management is not just about cutting cost; it is about doing more for less. It is about engaging and developing the skills of your workforce in a new way of thinking and working. This shift in thinking to a more structured financial control approach will also deliver further added benefits to a programme team:

- By having standard processes available, portfolio adaptability is achievable
- The utilization of a pre-tested formula should also mean that new systems or products could be up and running faster than before, as you reduce the effort required for delivering a robust business case.

Adopting sound financial management is realized through the accumulation of a number of actions. Implementing just one action at one level will not deliver the desired effect.

There must be a drive to increase maturity across all aspects. There must be greater transparency of the financial status of the project and an understanding of where costs can be saved and where future cost avoidance can be identified. Financial management is aligned to the 'long term process development of the benefits of using P3M3' (OGC, P3M3 version 2.1, OGC, 2010).²

Innovative portfolios need innovative financial management solutions.

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Acknowledgements

Sourced by TSO and published on
www.best-management-practice.com

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