A Critical Assessment of P3M3 in Australian Federal Government Agencies

Project, Programme and Portfolio Maturity Levels

October, 2011
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Abstract:

Federal Agencies are using the P3M3 methodology to assess the maturity of their project, programme and portfolio management. The P3M3 methodology is relatively new and this is the first attempt to systematically review the P3M3 data at a federal level to assess the implications.

P3M3 assessments performed in Australian Agencies between March 2010 and July 2011 are presented and analysed in the context of the known weaknesses of maturity models, project, programme and portfolio management. The implications are discussed and the highest priority areas are identified.

Agencies are recommended to focus on programme management and selective areas of portfolio management in order to increase their capability to realise benefits from ICT investments. This recommendation is a departure from current advice which either emphasises project management and ignores portfolio management or indiscriminately recommends all areas be targeted for improvement.

Keywords: project management, programme management, portfolio management, maturity, P3M3, Australian public sector

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1. Introduction

The Australian Department of Finance and Deregulation has mandated that all Agencies subject to the Financial Management and Accountability Act 1997 (FMA Act Agencies) conduct a Portfolio, Programme and Project Management (P3M3) evaluation. The purpose is to apply a common methodology to evaluate Australian Government Agencies and 'assess their organisational capability to commission, manage and realise benefits from ICT-enabled investments' \(^1\).

The P3M3 initiative is undertaken in the context of more than fifty years of intensive but unsuccessful effort to resolve the issue of IT project failure \(^2\)–\(^4\). If the widely cited Standish statistics are to be believed, the failure rate has actually deteriorated in the last eight years \(^5\),\(^6\). In addition to this, many are starting to realise that the problem is not isolated to IT projects. Lovallo and Kahneman \(^7\) are cited by the Australian Institute of Company Directors to illustrate disappointing results with all types of large capital projects in areas as diverse as manufacturing, marketing, mergers and acquisitions \(^8\). The same issue is seen in the public sector through a review of a leader in new public management, the Victorian Public Sector \(^9\), where no evidence of strategic improvements could be found despite a decade of intensive project investment \(^10\).

The P3M3 evaluations provide an opportunity to consider the issue of project failure from a federal public sector perspective. The P3M3 evaluations have been conducted and reviewed at an Agency level. There has been no attempt until now to systematically review the data at a whole of federal government level. It is essential to review the data as a whole because the P3M3 initiative is meant to provide a common framework to assess current performance, put in place improvement plans and improve capability to manage and realise benefits from ICT-enabled investments. Overall patterns of strength and weakness need to be identified to share learning and avoid duplication of effort. It is also important to critically review improvement plans because the P3M3 methodology is relatively new and unproven. It would be foolish to repeat the mistake of the past and blindly adopt another “untested and ineffective” methodology that fails to engage top managers \(^11\)–\(^13\).

The next section of the paper will summarise the P3M3 methodology. The literature on maturity models and project, programme and portfolio management will then be briefly reviewed to identify the known weaknesses and provide a context to critically discuss the results. The data gathering methodology will then be described, followed by the results, analysis, discussion and conclusion. To maintain rigour detailed explanations and mathematical analysis have been kept but they have been moved to appendices to improve comprehensibility.
2. P3M3

The Portfolio, Programme & Project Management Maturity Model (P3M3) was developed by the UK’s Office of Government Commerce (OGC). The purpose of P3M3 is to provide a frame of reference that can be used to baseline an organisation’s capabilities in project, programme and portfolio management.

OGC describes P3M3 as “a key standard amongst maturity models, providing a framework with which organisations can assess their current performance and put in place improvement plans.” P3M3 was first developed in 2006 with the latest version released in 2010. It originated as an enhancement to OGC’s Project Management Maturity Model, with origins related to Software Engineering Institute’s Capability Maturity Model (CMM) \(^1\).

The benefits claimed for the use of P3M3 are:

- A higher rate of return on investment
- Greater production efficiency
- Lower production costs
- Better quality outcomes
- Improved customer satisfaction
- Enhanced employee morale.

P3M3 is an overarching model (Figure 1) containing three independent models: Portfolio Management Maturity Model, Programme Management Maturity Model, and Project Management Maturity Model. P3M3 focuses on seven process perspectives which exist in all three models (management control, benefits management, financial management, stakeholder management, risk management, organisational governance and resource management).

![P3M3 Structure](image)

**Figure 1: P3M3 Structure**

Under the P3M3 model, maturity is assessed by evaluating each process perspective to determine whether practice is at level 1 – awareness, level 2 – repeatable, level 3 – defined, level 4 – managed or level 5 – optimised. Table 1 describes the attributes expected at each level and Table 2 describes the seven process perspectives.
<table>
<thead>
<tr>
<th>Maturity</th>
<th>Project Management</th>
<th>Programme Management</th>
<th>Portfolio Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1 – awareness of process</strong></td>
<td>Does the organization recognize projects and run them differently from its ongoing business? (Projects may be run informally with no standard process or tracking system.)</td>
<td>Does the organization recognize programmes and run them differently from projects? (Programmes may be run informally with no standard process or tracking system.)</td>
<td>Does the organization’s Executive Board recognize programmes and projects, and maintain an informal list of its investments in programmes and projects? (There may be no formal tracking and documenting process.)</td>
</tr>
<tr>
<td><strong>Level 2 – repeatable process</strong></td>
<td>Does the organization ensure that each project is run with its own processes and procedures to a minimum specified standard? (There may be limited consistency or coordination between projects.)</td>
<td>Does the organization ensure that each programme is run with its own processes and procedures to a minimum specified standard? (There may be limited consistency or coordination between programmes.)</td>
<td>Does the organization ensure that each programme and/ or project in its portfolio is run with its own processes and procedures to a minimum specified standard? (There may be limited consistency or coordination.)</td>
</tr>
<tr>
<td><strong>Level 3 – defined process</strong></td>
<td>Does the organization have its own centrally controlled project processes and can individual projects flex within these processes to suit the particular project?</td>
<td>Does the organization have its own centrally controlled programme processes and can individual programmes flex within these processes to suit the particular programme?</td>
<td>Does the organization have its own centrally controlled programme and project processes and can individual programmes and projects flex within these processes to suit particular programmes and/or projects. Does the organization have its own portfolio management process?</td>
</tr>
<tr>
<td><strong>Level 4 – managed process</strong></td>
<td>Does the organization obtain and retain specific measurements on its project management performance and run a quality management organization to better predict future performance?</td>
<td>Does the organization obtain and retain specific measurements on its programme management performance and run a quality management organization to better predict future performance?</td>
<td>Does the organization obtain and retain specific management metrics on its whole portfolio of programmes and projects as a means of predicting future performance? Does the organization assess its capacity to manage programmes and projects and prioritize them accordingly?</td>
</tr>
<tr>
<td><strong>Level 5 – optimized process</strong></td>
<td>Does the organization undertake continuous process improvement with proactive problem and technology management for projects in order to improve its ability to depict performance over time and optimize processes?</td>
<td>Does the organization undertake continuous process improvement with proactive problem and technology management for programmes in order to improve its ability to depict performance over time and optimize processes?</td>
<td>Does the organization undertake continuous process improvement with proactive problem and technology management for the portfolio in order to improve its ability to depict performance over time and optimize processes?</td>
</tr>
</tbody>
</table>
Table 2: Process Perspectives

<table>
<thead>
<tr>
<th>Process</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Control</td>
<td>This covers the internal controls of the initiative and how direction is maintained throughout its life cycle, with appropriate break points to enable it to be stopped or redirected by controlling body if necessary. Best practice is characterised by clear evidence of leadership and direction, scope, stages, tranches and review processes during the course of the initiative.</td>
</tr>
<tr>
<td>Benefits Management</td>
<td>This ensures the desired business outcomes are clearly defined, measurable and ultimately delivered through a structured approach. Best practice recommends that benefits are assessed and approved by the organisational areas that will deliver them. Benefit dependencies and other requirements should be clearly defined, and understanding gained on how the initiative’s outputs will deliver the benefits.</td>
</tr>
<tr>
<td>Financial Management</td>
<td>This ensures that likely costs are captured and evaluated in a formal business case and are categorised and managed over the investment life cycle. There should be appropriate involvement from the organisation’s financial functions, with approvals being embedded in the broader organisational hierarchy. Best practice suggests that a business case should define the value of the initiative to the business and contain a financial appraisal of the possible options.</td>
</tr>
<tr>
<td>Stakeholder Management</td>
<td>Best practice suggests that both internal and external stakeholders are analysed and engaged in order to achieve the initiative’s objectives. Stakeholder Management includes communications planning, the effective identification and use of different communications channels, and techniques to enable objectives to be achieved.</td>
</tr>
<tr>
<td>Risk Management</td>
<td>This views the way in which the organisation manages threats to and opportunities presented by, the initiative. Risk Management maintains a balance of focus on threats and opportunities, with appropriate management actions to reduce or eliminate the likelihood/impact of any identified threat.</td>
</tr>
<tr>
<td>Organisational Governance</td>
<td>This looks at how the delivery of initiatives is aligned to the organisation’s strategic direction, including start-up, closure and during the initiative’s life cycle. This perspective looks at how the impact of external factors might be controlled/mitigated, as opposed to Management Control, which considers how internal control is maintained.</td>
</tr>
<tr>
<td>Resource Management</td>
<td>This covers management of all resources required for delivery, including human resources, buildings, equipment, supplies, information, tools, and supporting teams. A key element is the process for acquiring resources and how supply chains are utilised to maximise their effective use. In best practice there will be evidence of capacity planning and prioritisation to enable effective resource management.</td>
</tr>
</tbody>
</table>

P3M3 Assessment Methodology

Accredited consultants follow a common data collection template to ensure a consistent approach. Data is collected from documentation and interviews.

- Sponsors, programme and project managers are selected to cover a range of projects and programmes in terms of size and life cycle stage. Generally 20-40 people are interviewed over a 1-2 Week period.
- Documentary evidence mentioned during interviews is reviewed and assessed against maturity level criteria.

Analysis of the interviews and documentation provides a maturity score for each management perspective. The maturity level is the median score of the assessments for each management perspective. If the score is not a whole number the consultant rounds the number down to the next lowest whole number. In contrast, the overall project, programme or portfolio maturity is calculated by taking the lowest maturity level of any of the seven processes. By implication, this approach considers all seven processes to be equally important because an organisation’s maturity can only be as high as the lowest process.
3. Literature Review

Before we examine P3M3 assessments in Australian federal government agencies, the literature on maturity models will be reviewed to provide a critical context to interpret the results. P3M3 is relatively new and unproven so it is important to be aware of the known weaknesses of maturity models and project, programme and portfolio management.

Critical Assessment of Maturity Models

Maturity models have their origin in the field of total quality management, with many being based upon the CMMI model of the Software Engineering Institute. Maturity models focus on the ‘know-what’ of the organisation, codifying the explicit knowledge and formally documented processes in an organisation. Maturity models do not acknowledge tacit knowledge or the informal processes that commonly exist. Maturity is therefore synonymous with standardisation and business process improvement.

Project maturity models assume project success will increase through standardisation. Another underpinning assumption is that an improvement in process maturity will yield an improvement in overall organisational maturity. Neither of these assumptions has been empirically tested.

Organisational project maturity can be understood as a measure of the ability to initiate and execute projects for different and correct purposes. Projects are now seen as a tool for business improvement and implementing strategic change and the logic is that the capacity to do this improves as project processes are defined, understood and improved.

Maturity is commonly measured in discrete stages and across a number of dimensions, with measurement based on subjective assessments of what people are doing operationally. However some claim that there also needs to be an assessment of competence because it is the combination of maturity and competency that has improved levels of project success.

Target maturity

There are relatively few empirical studies of project, program and portfolio management maturity across multiple organisations or industries. The studies that exist use differing maturity models to show that lower levels of maturity are more common. PWC identified the average level of maturity for project management was 2.5, but the majority of government organisations (56%) were at level 1.

Table 3: Empirical studies of project maturity

<table>
<thead>
<tr>
<th>Study</th>
<th>Maturity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Project Management</td>
</tr>
<tr>
<td>Ibbs and Kwak, 2000</td>
<td>3.26</td>
</tr>
<tr>
<td>Anderson and Jessen, 2003</td>
<td>3.34</td>
</tr>
<tr>
<td>Pennypacker and Grant, 2003</td>
<td>2.4</td>
</tr>
<tr>
<td>PriceWaterhouseCoopers, 2004</td>
<td>2</td>
</tr>
<tr>
<td>Grant and Pennypacker, 2006</td>
<td>2.5</td>
</tr>
</tbody>
</table>

P3M3 and MSP contributor, Andy Murray suggested that a maturity level of 2 is statistically the ‘most expensive place to be’. He suggests that plans are based on past performance, but level 2 ad hoc or inconsistent processes still have a high probability of schedule and budget overruns and the efficiency gains from consistency are yet to be realised. OGC suggest the key target be set at a maturity level of 3, or ‘best practice’. This is consistent with the findings and recommendations of Grant and Pennypacker.

Crawford suggests that it is not necessary to measure maturity in all areas to find areas for improvement, nor should organisations target the highest level of maturity across all processes. Each organisation needs to decide their optimal maturity level depending on their business needs and prioritise process improvement effort accordingly.
Limitations of Maturity Models

**No empirical evidence of improvements in organisational performance**

Maturity models are now in widespread use but it seems maturity models do not in themselves result in performance improvements. There is little evidence suggesting that process capability improvement results in improved project success \(^{24,25}\) although a few studies are promising. Nieto-Rodriguez & Evrard \(^{26}\) found that higher levels of maturity will in most cases deliver superior performance in terms of project delivery. Studies of organisations using the CMMI model have reduced costs, improved productivity, reduced quality assurance issues \(^{27}\) and some organisations have realised a 400% return on investment \(^{28}\). No studies have been able to show that using maturity models or assessing project management maturity results in a sustained competitive advantage for an organisation \(^{16}\). The lead author of P3M3 has compared and analysed results of maturity assessments using P3M3 and concluded that “investment [in] training alone is not producing great value” \(^{16}\).

**Incomplete**

Many maturity models are incomplete and missing key attributes. Maturity models claim to represent all processes present for a project to be successful \(^{19,29}\). Unfortunately this assertion is not supported by evidence, with many models either lacking empirical evidence to support the use of particular measures \(^{20}\) or lacking a theoretical basis \(^{16}\). For example there is no strong evidence to suggest that the seven P3M3 processes are important and should be treated equally. Nor can we have any confidence that all key processes are being assessed. Many factors that impact performance are not specifically addressed by maturity models \(^{20,25}\). These factors include those commonly found in mature project-based organisations \(^{16}\) (Table 4):

<table>
<thead>
<tr>
<th>Organisational Factors</th>
<th>Team Factors</th>
<th>Individual Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior management support</td>
<td>Clear definition of success for the project team</td>
<td>Understanding of organisational politics and power structures</td>
</tr>
<tr>
<td>Clearly defined organisational strategy</td>
<td>Clear understanding of each member’s role in a project</td>
<td>Good project manager / functional manager relationship maintained</td>
</tr>
<tr>
<td>Project portfolio management and governance processes</td>
<td>Project team member loyalty to the project</td>
<td></td>
</tr>
<tr>
<td>Role of project manager clearly delineated from functional managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project teams aligned with organisational strategy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Limitations of P3M3 specifically

In addition to the limitations of maturity models in general, P3M3 has a number of additional weaknesses, each of which will be explored in turn.

**Single number representation of maturity**

P3M3 uses a single number to represent maturity at the project, programme and portfolio level, with this number being the lowest score in either generic attributes or the process perspectives across each sub-model. This approach incorrectly assumes the P3M3 processes are complete, equally important and inter-related (i.e. maturity cannot be better than the weakest process). The single number reported is therefore misleading and will generally report a lower level of maturity than what is present in an organisation, not only painting a poorer picture than what might exist, but also disregarding the relative closeness of the next higher level. Gareis and Hueman \(^{30}\) suggest that the spider-web presentation of data is more appropriate, allowing each sub-model and each dimension to be examined highlighting where specific effort should be expended.
Not differentiating between project management vs. project success

The P3M3 model is based mainly on the OGC Project Management Maturity Model. This is a significant weakness because project management focuses on project management success i.e. delivery on-time on-budget on-quality rather than project success i.e. the realisation of benefits. The persistently high failure rate shows project management methodologies are inadequate. A disturbing study by the Project Management Institute (PMI) could not demonstrate that project management actually adds value. The major deficiencies are not with methodologies (which are quite mature), but in areas such as project governance and top management support. Other themes for development are: complexity, projects as social process, value creation rather than product creation, broad rather than narrow conceptualisation and reflective practitioners rather than trained technicians.

The project management literature states that projects are undertaken to meet organisational and strategic goals but there is a naïve ‘magic bullet’ type of thinking where it is assumed benefits will flow automatically when projects are completed. There is only a weak relationship at best between project management success and the realisation of benefits. The implication is that increasing P3M3 maturity may not lead to an increased capacity to realise benefits. P3M3 does not differentiate between project management success and project success. Processes are not equally effective in increasing the chances of project success and processes have a different impact on efficiency (project management success). If the P3M3 process descriptions are assessed against the claimed benefits of P3M3 (p4), it becomes apparent that management control, organisational governance, benefits management and stakeholder management are more important processes because they have the most impact on project success. Risk management should influence both project success and project management success. Resource management and financial management mainly influence efficiency goals through the management control process and are therefore less important. This analysis is shown in Table 5.

Table 5: Analysis of importance of P3M3 processes

<table>
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<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcomes</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>ROI</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Employee Morale</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>production efficiency</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>production costs</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

A logical interrelationship between these processes is proposed in Figure 2 with the more important processes shaded in grey. These hypothesised relationships will be tested against the P3M3 data in the Results.
Immature understanding of program and portfolio management

The P3M3 model is designed to allow project, programme and portfolio maturity to be assessed independently. One of the reasons for this design is to accommodate the expertise of different assessors, some of whom will be strong in say project management but not in programme or portfolio management. However, an unfortunate consequence of this approach is that project, programme and portfolio management will tend to be analysed independently. This is not appropriate because programmes are composed of projects and portfolios are composed of both programmes and projects. Processes such as benefits management, risk management and organisational governance must interrelate between projects, programmes and portfolios in order for the expected benefits to be realised. Independence should therefore not be assumed, expected or encouraged.

In contrast, the ‘generic attributes’ and processes being assessed in P3M3 are assumed to be the same for project, programme and portfolio management. These generic attributes and processes are relevant for project management, but it is questionable whether the same attributes and processes are as appropriate for programme and portfolio management maturity. These higher level disciplines are quite different in nature. Maturity in these disciplines requires many different skills to project management. Decision-making and balancing for example, are skills not assessed by P3M3, yet they are key themes identified in project portfolio management discourse. Crawford & Pollack also suggest that organisational learning, strategic alignment and top management support are also important factors when examining organisational capability. None of these are strongly emphasised in P3M3 and the general weakness of incompleteness of maturity models seems to apply specifically to P3M3.

There are also a number of known deficiencies in programme and portfolio management that should be acknowledged before reviewing the P3M3 data.

Programme Management

Programme management is a relatively new and immature discipline and there is no real consensus on the attributes that describe programme management maturity. P3M3 follows MSP™ and understands programme management as a way to adapt to change and be a tool for strategy implementation. A small number of people emphasise the link between programs and strategy but the vast majority of people seem to be more product oriented and focus on managing the scheduling and resource conflicts to
developing complex new products\(^{58,60,61}\). Whatever the philosophy, mainstream programme management methodologies\(^ {60,62-65}\) have been strongly influenced by project management and practices are probably codified too rigidly\(^ {66}\). Pellegrinelli\(^ {67}\) finds the required level of documentation works against the need to adapt to changing strategic contexts to ensure strategic benefits are actually realised. His conclusion is that the current codification into a common set of transferable principles and processes are inadequate and he reports that practitioners find many of the guidelines either not useful or not make sense\(^ {68}\). This suggests the P3M3 assessment of programme maturity may also not be helpful or not provide appropriate guidance.

**Project Portfolio Management**

Project portfolio management (PPM) is also a relatively new and immature discipline without any real consensus on the attributes that describe maturity. PPM tends to focus on the selection of projects\(^ {58,69,70}\) by assessing and balancing risk and strategic fit\(^ {71}\). Some add the need to focus on a portfolio of organisational change to achieve what is needed\(^ {65,72}\) and put a lens of the question of what is strategically important to an organisation\(^ {58,73,74}\). Commercially PPM is marketed on the basis of being able to reduce risk and increase returns on a portfolio of project investments\(^ {75}\) but in practice most seem to focus on lower level concerns such as managing and controlling risks or managing a common and shared pool of scarce resources\(^ {76}\).

The justification for PPM is not convincing when applied to the implementation of strategies not related to new products and questions have been raised on whether PPM actually adds any value at all. One study reports that fewer than 33\% of organisations using PPM use it to diversify and reduce portfolio risk\(^ {77}\). Thiry and Deguire\(^ {78}\) find that PPM, because it is meant to deal with fairly stable environments, can only be effective if combined with programme management which is meant to deal with more turbulent environments and emergent strategies. They add that PPM practices are not complementary to top managers’ non-linear strategic decision-making processes. PPM practices follow discredited approaches to strategy and do not adapt well to emergent situations\(^ {79}\).

This literature suggests the P3M3 assessment of portfolio maturity may also not be helpful or not provide appropriate guidance. Table 6 summarises the known weaknesses of project, programme and portfolio management.

**Table 6 Summary of known weaknesses in project, programme and portfolio management**

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Known Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Management</strong></td>
<td>• emphasises on-time on-budget delivery ... assuming benefits</td>
</tr>
<tr>
<td>PMBOK PRINCE2</td>
<td>• needs to emphasise: complexity, social process, value creation, broad</td>
</tr>
<tr>
<td></td>
<td>conceptualisation, reflective practitioners</td>
</tr>
<tr>
<td></td>
<td>• fails to engage top managers</td>
</tr>
<tr>
<td><strong>Programme Management</strong></td>
<td>• Immature discipline</td>
</tr>
<tr>
<td>MSP</td>
<td>• Practices codified too rigidly</td>
</tr>
<tr>
<td></td>
<td>o excessive documentation</td>
</tr>
<tr>
<td></td>
<td>o difficult to adapt to changing strategic context</td>
</tr>
<tr>
<td></td>
<td>o not ensuring strategy realised</td>
</tr>
<tr>
<td></td>
<td>• Not consistently emphasising link between programs and strategy</td>
</tr>
<tr>
<td><strong>Portfolio Management</strong></td>
<td>• Focuses on selection of investments vs. risk reduction or adding value / returns</td>
</tr>
<tr>
<td></td>
<td>• Static vs. adapting to turbulent environments and emergent strategies</td>
</tr>
<tr>
<td></td>
<td>• Not complementary to top management decision-making processes.</td>
</tr>
</tbody>
</table>
4. Methodology

Data Collection

All data used in this analysis is secondary data collected from individual FMA Agencies. The data relates to P3M3 maturity assessments undertaken by external consulting firms accredited by OGC.

Access to Agency data was undertaken through the Freedom of Information Act 1982 (FOI 1982). Under this Act, members of the public may access information held by government agencies which is subsequently made publically available. Each agency uses a slightly modified approach but the general process is similar.

Requests were made to all agencies in March 2010, as detailed in Table 7 below.

<table>
<thead>
<tr>
<th></th>
<th>Small FMA Agencies</th>
<th>Large FMA Agencies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Agencies</td>
<td>14</td>
<td>25</td>
<td>39</td>
</tr>
<tr>
<td>FOI Requests</td>
<td>12</td>
<td>23</td>
<td>35</td>
</tr>
<tr>
<td>FOI Not Available</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>FOI Rejected</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>FOI in Process</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>FOI Granted</td>
<td>5</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Response rate</td>
<td>85%</td>
<td>86%</td>
<td>79%</td>
</tr>
</tbody>
</table>

Data Analysis

The data was transcribed into a spreadsheet for further analysis. A rigorous statistical analysis was performed to determine the level of maturity that best represents FMA Agencies as a whole (detailed in appendices). The analysis will be unproblematic for a normal reader because only 2 out of 22 scores are far from the median value (and the histograms in the appendices provide an easy visual explanation for why some maturity levels are shown as 1-2 or 2-3). In summary the analysis followed the following steps:

- Descriptive data summarisation:
  - Data preparation (issues/abnormal observations, cleaning, integration, transformation, and reduction)
  - Identification of data properties
  - Measure and visualisation of central tendencies (mean and median)
  - Measure and visualisation of data dispersion (variance, kurtosis and skewness)

- Correlational analysis to find the linear or non-linear correlation between the variables under study.

- Kolmogorov-Smirnov test to determine if the results followed normal statistical distributions.

- Cell plots to identify and remove outliers that would overly bias the results. (Two Agencies were found having maturity levels significantly different from the central tendency measurements and their data was excluded from the analysis).
5. Results

The P3M3 evaluation of maturity levels for a single Agency is reported as level 1, 2, 3, 4 or 5. The summary of FMA Agency data has followed this format and reported maturity as whole number rather than as an average with decimal points.

The initial results are shown in Figure 3.

![Figure 3 Typical P3M3 maturity levels within FMA Agencies]

No correlations (shown as arrows) were found between project, programme and portfolio processes. This is a surprising finding and possibly both an indictment and an explanation of why results have been so poor. This finding will be explored further in the Discussion.

Following the P3M3 methodology: the lowest maturity level for project management is level 1, programme management is level 1 and portfolio management is level 2. However, the lowest maturity level is not representative of the actual maturity of each discipline.

Project management

- Project Management processes were mainly at level 2 maturity (repeatable), although Benefits Management was at level 1 (awareness only) and Risk Management was at level 3 (defined).
- Project management found the expected correlations (Figure 2) between Management Control and Resource Management but not with Financial Management. This suggests that financial control of project budgets may be inadequate because Management Control should oversee Financial Management.
  - Management Control was found to be unexpectedly correlated with Stakeholder Management. This suggests management’s focus is on controlling stakeholders rather than engaging with them through the governance process.
  - Organisational Governance was found to be correlated with Financial Management but not with Benefits Management or Stakeholder Management. This suggests that governance at the project level is focussed on financial issues rather than business benefits.

Programme management

- Programme management processes were between level 1 and level 2. Benefit Management, Organisational Governance, and Stakeholder Management were at level 1. Risk Management and Management Control were at either level 1 or level 2. Financial Management and Resource Management were at level 2. This suggests there is only a low level of awareness of programme management and whatever programme management practices that exist focus mainly on costs and
staffing rather than benefits realisation or implementation of strategy.

- The assessed level of programme management maturity although low, may still be overstated. A review of some consultant reports suggests the reported maturity level should be zero rather than one. It is suggested that the data was distorted because zero was not an option used by some consultants in their assessments. This is partly explained by a change in the P3M3 methodology which excluded maturity level 0 as an option.

- None of the relationships found in Programme management were statistically significant and it is unwise to infer too much from these results.
  - Organisational Governance appeared to be correlated to Management Control and Benefits Management as expected.
  - Organisational Governance appeared to be correlated only indirectly to Stakeholder Management through Management Control rather than directly as expected. Like project management, this suggests a controlling rather than an engagement approach to stakeholders.
  - Management Control correlated directly with Resource Management as expected but only indirectly to Financial Management and Risk Management through Stakeholder Management.

Portfolio management

- Portfolio management processes were between level 2 and level 3, the highest of the three perspectives. Organisational Governance, Stakeholder Management, Management Control, Risk Management, Benefit Management and generic portfolio management were at level 2. Financial Management and Resource Management were at level 2-3. This suggests portfolio management focuses more on costs and staffing than benefits realisation or implementation of strategy.

- The analysis of portfolio management found correlations between Stakeholder Management, Organisational Governance and Management Control similar to the expectations in Figure 2. However there was no correlation with Benefits Management. This negative result suggests portfolio management in practice is not focussed on delivering benefits or implementing strategy.
A second set of analyses were performed to assess whether there was any significant difference between small and large Agencies (Detailed in the sections of Appendix 3 relating to Capabilities Distributions and Agencies Size Distribution Analysis). The results are shown in Figure 4.

Figure 4 Typical P3M3 maturity levels updated to compare small and large Agency maturity levels

- The results suggest that portfolio management may be performed better in small Agencies, project management may be performed better in large Agencies and programme management performed poorly whatever the size of the Agency. However, this may simply be reflecting the scale of the projects being undertaken by the different sized Agencies. Smaller Agencies will probably be undertaking fewer smaller projects that can be managed at an Agency level as one overall portfolio. Larger Agencies probably have more and larger projects requiring much more effort to manage at a portfolio level and they may have chosen instead to focus their effort to manage at the project level.

- A second disturbing finding is alluded to in Figure 4. The generic attribute was found to be a very sensitive variable against the overall capability score (refer Appendix for details of the degree of significance). The implication of this finding is that the P3M3 processes may not significant enough to differentiate themselves as being more important than the generic measures. If so, this reflects one weakness of maturity models identified in the literature review: incompleteness and the data raises the question of whether the P3M3 model is missing critical processes that might be more descriptive of maturity e.g. top management, strategy, project/programme selection.
A third set of analyses were performed to assess whether the relationships between the maturity levels were consistent between Agencies (Detailed in the section of the Appendix relating to Principal Component Analysis). The results are shown in Figure 5.

![Figure 5 Typical P3M3 maturity levels updated to compare performance between small and large Agency and consistency across FMA Agencies](image)

Project Management
- Organisational Governance and generic project management processes are practiced in a similar way across FMA Agencies.
- To a slightly lesser degree the relationships and emphasis on Management Control, Resource Management and Stakeholder Management are also consistent across FMA Agencies.
- Financial Management, Benefits Management and Risk Management processes are not consistent across FMA Agencies.

Programme Management
- Organisational Governance, Financial Management, Management Control, Stakeholder Management and Resource Management processes are practiced in a similar way across FMA Agencies.
- To a slightly lesser degree generic programme management is also consistent across FMA Agencies.
- Benefits Management and Risk Management processes are not consistent across FMA Agencies.

Portfolio Management
- Organisational Governance, Risk Management, Financial Management, and Resource Management and portfolio management processes are practiced in a similar way across FMA Agencies.
- Management Control, Benefits Management and Stakeholder Management processes are not consistent across FMA Agencies.
6. Discussion

The results did not show any statistical correlation between the project, programme and portfolio models. Incredibly, it seems these three disciplines are actually practiced completely independently of each other. Benefits management in particular, is practiced inconsistently between Agencies without any correlation between project, programme and portfolio management. The implication is that even if maturity were to improve independently within the project, programme, or portfolio management disciplines, if the benefits management process is not correlated (such that project benefits contribute to the benefits targeted through programme and portfolio management), it is inconceivable that the Federal government will meet their objective to increase capability to realise benefits from ICT investments.

The results suggest that project, programme and portfolio practice within Australian Federal Government Agencies has not overcome the known weaknesses (summarised in Table 5) and that P3M3 may be institutionalising rather than overcoming these weaknesses. If so, project managers may be assuming benefits will be realised if an output is delivered, programmes and portfolios are not linking to nor delivering strategy and portfolios are not adapting to turbulent environments. The Victorian public sector study \(^{10}\) (reported in the introduction) provides evidence that this conclusion may be credible.

Reinterpreting P3M3 for more effective guidance

It should not be surprising that FMA Agencies are likely to share the known weaknesses of project, programme and portfolio management nor that there would be weaknesses in the P3M3 methodology. The real issue is how to best to respond. The goal of increasing capability to realise benefits from ICT investments remains valid and may be even more important in the current economic climate.

The following discussion suggests a way forward. It is suggested each Agency might be able to follow a similar process with their specific data rather than the average FMA data used in this analysis.

Each agency will have to determine the most appropriate goals for their particular context. The analysis that follows assumes the most important goals are to realise business outcomes, deliver benefits and implement strategy.

Tables 8-14 show each process in order of likely importance. Current maturity levels are shown (shading indicates inconsistent practices between FMA Agencies). A target maturity level has been selected as the most appropriate for the desired goals. The target level has been selected in the context of the critical review of P3M3 and project, programme and portfolio management. The recommended targets are summarised at the end of this section and shown graphically in Figure 6 and Figure 7.

Table 8: Benefits Management - current and recommended maturity levels

<table>
<thead>
<tr>
<th>Benefits Management</th>
<th>Project</th>
<th>Programme</th>
<th>Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current maturity level</strong></td>
<td><strong>Level 1:</strong> There may be recognition that the concept of benefits can be differentiated from project outputs</td>
<td><strong>Level 1:</strong> There is recognition of the concepts of benefits that can be differentiated from project outputs. Benefits are being developed at a project level with minimal programme control</td>
<td><strong>Level 2:</strong> Development of the investment cycle with increasing awareness of the importance of identifying benefits and subsequently tracking whether they have been achieved. However, the realization of benefits is still likely to be patchy, inconsistent and unmonitored</td>
</tr>
<tr>
<td><strong>Target maturity level</strong></td>
<td><strong>&gt;Level 1:</strong> recognition that the concept of benefits can be differentiated from project outputs</td>
<td><strong>Level 3-4:</strong> There is a centrally managed and consistent framework used for defining and tracking the delivery of benefits arising from programme outcomes... underpins the justification for, and management implementation of, each programme</td>
<td><strong>Level 3:</strong> There is a centrally managed framework used for defining and tracking the delivery of portfolio-level benefits across the business operations.</td>
</tr>
</tbody>
</table>
### Table 9: Organisational Governance - current and recommended maturity levels

<table>
<thead>
<tr>
<th>Organisational Governance</th>
<th>Project</th>
<th>Programme</th>
<th>Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current maturity level</strong></td>
<td>Level 2: Project management from an organizational perspective is beginning to take shape but with ad hoc controls and no clear strategic control.</td>
<td>Level 2: Programme management from an organizational perspective is beginning to take shape but with ad hoc controls and no clear strategic control.</td>
<td>Level 2: There are some attempts to recognize the portfolio of initiatives, but there is still little overall leadership and direction for the process. Initiatives may be initiated and run without full regard to the organizational goals, priorities and targets.</td>
</tr>
<tr>
<td><strong>Target maturity level</strong></td>
<td>&gt; Level 2: clear strategic control</td>
<td>Level 4-5: Programme management responsibilities are embedded within broader role descriptions ... at Executive Board level, with clear ownership and control responsibilities</td>
<td>Level 4-5: All initiatives are integrated into an achievable and governed portfolio, which is aligned to strategic objectives and priorities... portfolio management process is optimized to ensure that it is sufficiently dynamic and agile to cater for changes in business direction and priorities</td>
</tr>
</tbody>
</table>

### Table 10: Management Control - current and recommended maturity levels

<table>
<thead>
<tr>
<th>Management Control</th>
<th>Project</th>
<th>Programme</th>
<th>Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current maturity level</strong></td>
<td>Level 2: The concepts of project management will have been grasped by some within the organization, and there may be local experts ... working on key projects</td>
<td>Level 1-2: The general approach is focused on projects rather than at the programme level ...Some general understanding of programme management exists ... but adoption is localized.</td>
<td>Level 2: some pockets of portfolio discipline within individual departments, but based on key individuals rather than as part of a comprehensive and consistent organization-wide approach.</td>
</tr>
<tr>
<td><strong>Target maturity level</strong></td>
<td>Level 3: The project life cycle not only focuses on initiation and development activities, but equally on delivery, review, verification, implementation and handover.</td>
<td>Level 4-5: Programme management is seen as a key tool for the delivery of strategic objectives ... Management controls ensure that the programme approach delivers the strategic aims and objectives of the organization</td>
<td>[Elements of] Level 4: Portfolio management processes exist and are proven. Portfolio management has established metrics against which success can be measured.</td>
</tr>
</tbody>
</table>

### Table 11: Stakeholder Management - current and recommended maturity levels

<table>
<thead>
<tr>
<th>Stakeholder management</th>
<th>Project</th>
<th>Programme</th>
<th>Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current maturity level</strong></td>
<td>Level 2: Some projects will be communicating effectively, but this is linked more to personal initiative of programme and/or project managers than a structured approach being deployed by the organization.</td>
<td>Level 1-2: either rarely used OR some programmes communicating effectively, but this is linked more to personal initiative of programme managers than a structured approach being deployed by the organization</td>
<td>Level 2: Some portfolios will be communicating effectively, but this is linked more to personal initiative of portfolio managers than a structured approach deployed by the organization.</td>
</tr>
<tr>
<td><strong>Target maturity level</strong></td>
<td>no change needed at project level</td>
<td>Level 5: Communications is being optimized from extensive knowledge of the stakeholder environment, to enable the programmes to achieve their objectives</td>
<td>no change needed at portfolio level</td>
</tr>
</tbody>
</table>
## Table 12: Risk Management - current and recommended maturity levels

<table>
<thead>
<tr>
<th>Risk Management</th>
<th>Project</th>
<th>Programme</th>
<th>Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current maturity level</strong></td>
<td><strong>Level 2-3:</strong> inconsistencies in approach, commitment and deployment... Project risk management is based on a centrally defined process that is cognizant of the organization's policy for the management of risks.</td>
<td><strong>Level 1-2:</strong> minimal evidence of risk management being used to any beneficial effect ... little evidence of active management ... used on some programmes, but inconsistent ... resulting in different levels of commitment and effectiveness.</td>
<td>Level 2: There is generally a top-down approach to risk identification, focusing on major organizational initiatives, but some initiatives are increasingly carrying out bottom-up risk identification. However, approaches are inconsistent, not particularly interrelated and often do not address the actual management of risks.</td>
</tr>
<tr>
<td><strong>Target maturity level</strong></td>
<td><strong>Level 3:</strong> Project risk management is based on a centrally defined process that is cognizant of the organization's policy for the management of risks.</td>
<td>[Elements of] <strong>Level 4-5:</strong> active management and mitigation of risks ... integration with strategic direction</td>
<td>[Elements of] <strong>Level 4:</strong> balance of risk and benefit across the portfolio, are continually reviewed and managed.</td>
</tr>
</tbody>
</table>

## Table 13: Financial Management - current and recommended maturity levels

<table>
<thead>
<tr>
<th>Financial Management</th>
<th>Project</th>
<th>Programme</th>
<th>Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current maturity level</strong></td>
<td><strong>Level 2:</strong> Business cases are produced in various forms and the better and more formal cases will present the rationale on which to obtain organizational commitment to the project.</td>
<td><strong>Level 2:</strong> Financial approvals and cost projections for programmes may not be in evidence. There may be a focus on project finance but the overall cost of the programme is not fully accounted for.</td>
<td>Level 2-3: some good business cases being produced and some... structures to oversee investment decisions. However, business cases are often appraised independently of each other and real organizational priorities have not been established ... There are established standards for the investment management process and the preparation of business cases</td>
</tr>
<tr>
<td><strong>Target maturity level</strong></td>
<td><strong>Level 3:</strong> Project managers monitor costs and expenditure</td>
<td><strong>Level 4:</strong> Programme life cycles are being flexed effectively to manage availability of funds. There is effective decision making, with consideration of financial evidence.</td>
<td><strong>Level 3-4:</strong> proactive, evidence based management of the portfolio</td>
</tr>
</tbody>
</table>
Table 14: Resource Management - current and recommended maturity levels

<table>
<thead>
<tr>
<th>Resource Management</th>
<th>Project</th>
<th>Programme</th>
<th>Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current maturity level</strong></td>
<td><strong>Level 2</strong>: Resources are being deployed across the organization but there is little evidence of a consistent approach to resource acquisition, planning or management in support of projects</td>
<td><strong>Level 2</strong>: Resources are being deployed across the organization but there is little evidence of a consistent approach to resource acquisition, planning or management in support of programmes.</td>
<td><strong>Level 2</strong>: The organization has started to develop portfolio resource management processes and improve the identification and allocation of resources to specific initiatives. However, this is likely to be reliant on key individuals and does not assess the impact of resource allocation against the strategic objectives and priorities.</td>
</tr>
<tr>
<td><strong>Target maturity level</strong></td>
<td>Elements of level 4 but more effectively delivered at portfolio than project level: <em>Resource management for projects is considered at a strategic level within the organization.</em></td>
<td><strong>Level 3</strong>: Centrally managed and consistent resource management processes are in place across all programmes</td>
<td>[Elements of] Level 3 &amp; 5: centrally defined within the organization... organization targets and develops resources to meet strategic objectives and priorities... Portfolio management drives the planning, development and allocation of initiatives to optimize the effective use of resources in achieving the strategic objectives and priorities</td>
</tr>
</tbody>
</table>

Summary of Detailed Recommendations

To aid comprehension, the implications of the recommended targets are shown graphically in Figure 6 and Figure 7 and summarised below.

1. To improve the Benefits Management process significantly in programme management and to a lesser degree in portfolio management.

2. To improve the Organisation Governance process significantly in programme and portfolio management and to a lesser degree in project management to focus on realising business outcomes and implementing strategy.

3. To improve the Management Control process significantly in programme and portfolio management to focus on realising business outcomes and implementing strategy.

4. To improve programme management significantly overall to reach level 4 maturity as soon as possible. In addition to recommendations 1-3, it is recommended that a significant improvement is needed in the Stakeholder Management process to focus on the realisation of benefits.

5. To make only modest effort in improving project management, mainly in the Financial Management process. Any remaining capacity for change is recommended to be directed at improving the Resource Management and Financial Management processes in portfolio management. NB. The recommendations to improve the Financial Management and Resource Management processes in project, programme or portfolio management are focussed on efficiency goals and are therefore less important than recommendations 1-4 which are focussed on reaching acceptable levels of effectiveness i.e. there is no value in delivering on-time and on-budget if no benefits are realised.
Current and Recommended Maturity Levels
Project, Programme & Portfolio Processes
Australian Government FMA Agencies 2011

Figure 6: P3M3 Maturity in FMA Agencies & Recommended targets

Changes recommended in Project, Programme, Portfolio Mgt
Australian Government FMA Agencies (2011 level vs target)

Figure 7: Size of recommended maturity improvements in project, programme and portfolio management
Implementing recommendations as two key changes

The changes recommended above are framed in P3M3 terms and at first glance may appear unachievable within reasonable timeframes. However, this is unlikely to be the case when it is understood that the key processes and disciplines are inter-related and not independent. When the recommendations are re-presented in Table 14 and Figure 8, it shows that the recommendations could be implemented through two initiatives: (1) implementing programme management to focus on delivery of strategic benefits and (2) selectively adapting portfolio management processes to measure realisation of strategic benefits. It must be borne in mind that Table 14 provides an indicator of the effort required across the FMA Agencies as a whole rather than within any one specific Agency.

The data in Table 14 was calculated by the following steps:

- Mean scores are used to summarise the current maturity levels in all FMA Agencies.
  - This is a reasonable approach because the current maturity level within the FMA Agencies is better represented as a mean. The reason why data was reduced to a whole number in Tables 5-11 was to utilise the P3M3 descriptions and identify the most appropriate text to describe current maturity levels. Having found the most appropriate text, there is no reason to remain bound to the single digit representation of maturity.
- The recommendations from Tables 5-11 were then compared to the current level [average] to identify the size of the change required overall. When the recommended change is equal to or bigger than one maturity level, the change is highlighted in bold font.
- The first four processes have been targeted because they have the most impact on the desired goal of “increasing capability … to realise benefits”.

### Table 15: Size of recommended maturity improvements by process and discipline

<table>
<thead>
<tr>
<th>Recommended Change in Maturity</th>
<th>Control</th>
<th>Governance</th>
<th>Benefits</th>
<th>Stakeholder</th>
<th>Risk</th>
<th>Financial</th>
<th>Resource</th>
<th>Generic</th>
<th>AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project mgt</td>
<td>0.4</td>
<td>0.6</td>
<td>0.1</td>
<td>0.0</td>
<td>1.0</td>
<td>1.0</td>
<td>0.8</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Program mgt</td>
<td>3.1</td>
<td>2.8</td>
<td>1.8</td>
<td>3.2</td>
<td>0.8</td>
<td>2.2</td>
<td>1.6</td>
<td>1.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Portfolio mgt</td>
<td>0.5</td>
<td>2.7</td>
<td>0.7</td>
<td>0.0</td>
<td>0.4</td>
<td>1.0</td>
<td>2.7</td>
<td></td>
<td>1.2</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>1.3</td>
<td>2.0</td>
<td>0.9</td>
<td>1.1</td>
<td>0.7</td>
<td>1.4</td>
<td>1.7</td>
<td></td>
<td>1.3</td>
</tr>
</tbody>
</table>

### Future role for P3M3

Figure 8 tries to present the recommendations in this report in the same format as the earlier results. The current and targeted maturity of the seven P3M3 processes are shown for each sub-model: project, programme and portfolio management. The most significant changes are shaded, boxed and shown in bold. The targeted correlations are also shown (from Figure 2). It is expected these correlations will need to be present for benefits to be consistently realised.

Four processes are shown to be strongly inter-related across project, programme and portfolio management and not independent as implied in the P3M3 model. These processes are Benefits Management, Organisational Governance, Stakeholder Management and Management Control. Organisations should target not only strong inter-relationships between these processes but a complete integration of these processes. Note also that the benefits management process for portfolio management has been described as benefits/strategy. This change has been suggested because at a portfolio level it is not specific benefits that are being targeted as much as the overall strategy(s) of an organisation. The
requirement for integration and specific correlations may require the P3M3 methodology be revised to assess additional/alternative attributes.

The implication of Figure 8 is that even though the P3M3 methodology may have some weaknesses, it could still be used to assess progress in building capability.

7. Conclusion

This report has summarised P3M3 assessments from individual FMA Agencies to determine the Project, Programme and Portfolio management maturity levels within Australian Government Agencies as a whole. The P3M3 methodology was critically reviewed against the known weaknesses of maturity models, project, programme and portfolio management. Significant deficiencies were found including a lack of evidence that using P3M3 leads to the claimed benefits, a foundation based on project management concepts – concepts proven to be inadequate for delivering the desired results and a misleading impression of independence of project, programme and portfolio processes.

Despite these weaknesses, it was possible to combine the P3M3 data and use insights from the academic literature to make recommendations on the maturity levels required to realise the desired goal of improving organisational capability to realise benefits.

Recommendations were developed and presented in a systematic way firstly using the P3M3 framework and then reframing the recommendations to more closely correspond to how they might be implemented in practice through programme and portfolio management. Significant improvements are recommended for four P3M3 processes but because these processes are inter-related rather than independent, only two new initiatives are likely to be required: (1) implementing programme management to focus on delivery of strategic benefits and (2) adapting portfolio management processes to measure realisation of strategic benefits.

The overall recommendation is to selectively improve programme management two maturity levels, and portfolio management one maturity level. Minor changes of a much lower priority are recommended in project management related to increasing Financial Management of projects. In contrast current recommendations typically recommend level 3 maturity for project management, level 2 for programme management and for portfolio management maturity to be left unchanged. The recommendations in this report are critically aware of the limitations of both P3M3 and project, programme and portfolio management and they are targeted much more closely to achieving the desired outcomes of the Federal
government. Early research suggests these recommendations should lead to 1-3% increase in GDP\textsuperscript{80}. In contrast, there is no evidence current recommendations will lead to any benefits at all.

**Limitations**

In order to preserve anonymity, the data and recommendations in this report are made at a federal rather than at an Agency level. If Agency goals have been correctly identified, the recommendations for target maturity are unlikely to change significantly. However, the optimal implementation may vary significantly depending on the actual levels of maturity of each Agency. Agency data is confidential and cannot be published but this report can be customised on request for Agency specific recommendations.

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2. [http://aspireeurope.wordpress.com/2010/05/15/why-haven%E2%80%99t-we-seen-improvements-in-programme-and-project%C2%A0management/#_ftn1](http://aspireeurope.wordpress.com/2010/05/15/why-haven%E2%80%99t-we-seen-improvements-in-programme-and-project%C2%A0management/#_ftn1)