



PROGRAMME AND PROJECT MATURITY

ADVISOR

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Programme & Project Maturity

PROJECT, PROGRAMME AND PORTFOLIO MATURITY



Conclusion

This chapter will focus on an introduction to key concepts in project, programme and portfolio maturity.

The ability to provide consistency in the management of projects and programmes is a reflection of the organisation's maturity. Whether your organisation runs waterfall, agile or a mix of both, the need for effective project and programme management processes and effective governance is essential for success.

Organisations that are not mature in their approach to projects often find themselves in difficulty resulting from inconsistency in application of management practices, reliance on individuals that represent single points of failure, and ineffective governance that is unable to meet its responsibilities.

Observations

Inconsistency and confusion are the major risks in capability development projects. The Office of Government Commerce (OGC) UK is now defunct, however their work on portfolio, programme and project planning¹ and maturity is still valid. The application of the OGC maturity models for programme and project management will enable organisations to not only meet their intended outcomes, but will ensure lessons learnt are continuously applied to improve maturity. Improvements in process maturity increases productivity through familiarity of expectations, clarity of function, and resolves risks associated with silos of knowledge and single points of failure.

1 - 'Managing Successful Programs', Office of Government Commerce, 2011.

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Project versus programme management is something that often causes conflict in the project management universe. The danger is that the project manager can become overloaded and become ineffective if your organisation gets it wrong.

PRINCE2 defines a project as a temporary organisation that is created for the purpose of delivering one or more business products according to a specified business case. The project manager ensures the project delivers the intended goal, within a defined timeframe and budget. A programme is defined as a group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually. Programmes are usually long term, sometimes spanning years, and don't have a fixed deadline. A programme is a framework of related projects aligned in a specific sequence. They have predictable and repeatable elements to minimise or even eliminate risks.

The boundary between programme and project management is often a nuance that results in complexity where complexity can be avoided. If your organisation has a project managing a number of parallel activities that are different in nature but are all essential to deliver a capability, then possibly it may be worth considering a restructure to be a programme.

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The generic capability maturity model integration (CMMI) maturity assessment definitions² represent a staged path for an organisation's performance and process improvement efforts based on predefined sets of practice areas. Each maturity level builds on the previous level by adding new functionality or rigor.

- **Maturity Level 0: Incomplete.** Ad hoc and unknown. Work may or may not get completed.
- **Maturity Level 1: Initial.** Unpredictable and reactive. Work gets completed but is often delayed and over budget.
- **Maturity Level 2: Managed.** Managed on the project level. Projects are planned, performed, measured, and controlled.
- **Maturity Level 3: Defined.** Proactive, rather than reactive. Organisation-wide standards provide guidance across projects, programmes, and portfolios.
- **Maturity Level 4: Quantitatively Managed.** Measured and controlled. Organisation is data-driven, with quantitative performance improvement objectives that are predictable and align to meet the needs of internal and external stakeholders.
- **Maturity Level 5: Optimising.** Stable and flexible. Organisation is focused on continuous improvement and is built to pivot and respond to opportunity and change. The organisation's stability provides a platform for agility and innovation.

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In many maturity models levels 0 and 1 are combined. IBRS recommends the following model of programme/project maturity as follows:

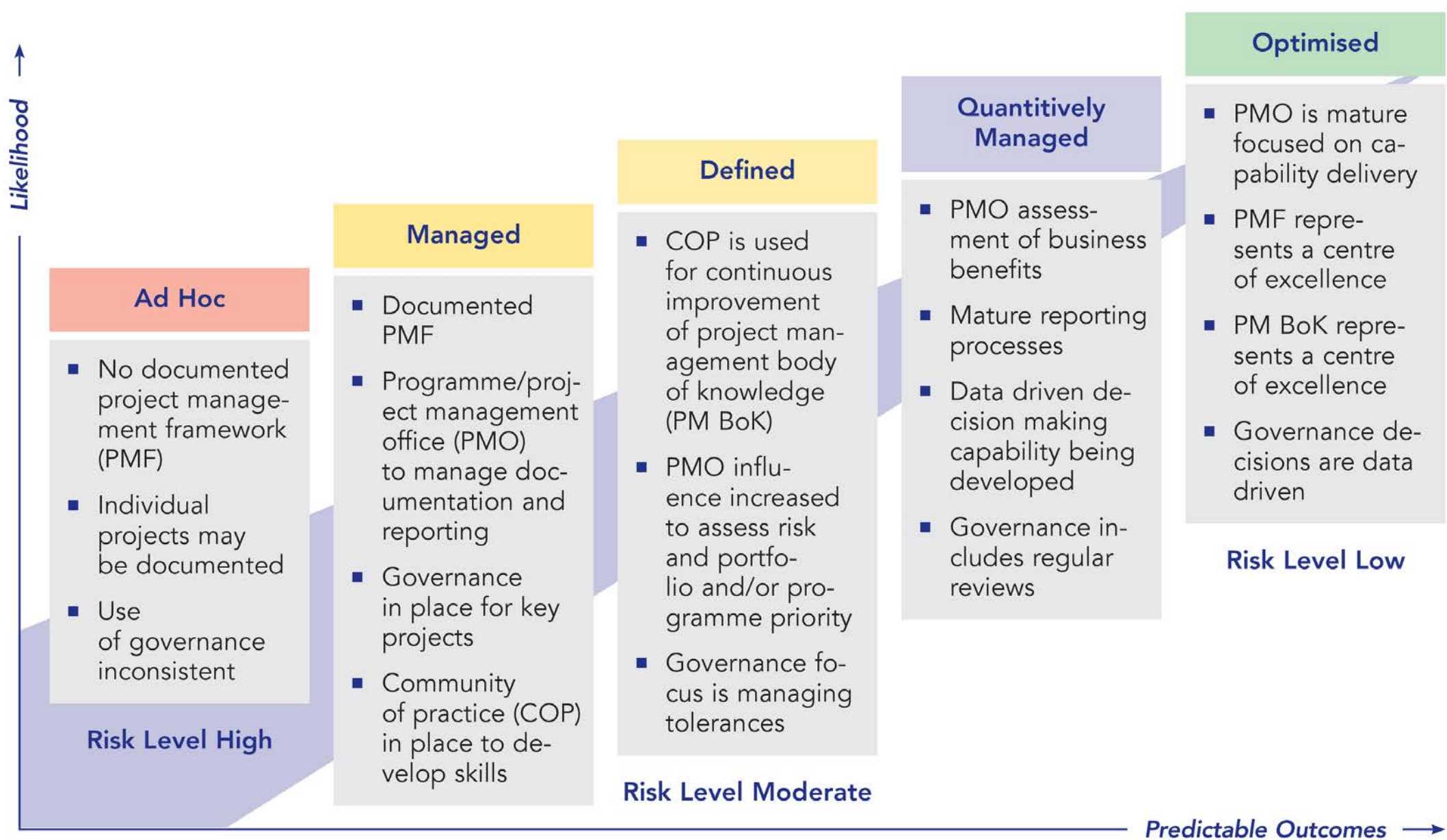


Diagram 1 - IBRS Programme/Project Maturity Model

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The IBRS programme and project capability maturity model (CMM) takes a pragmatic view of maturity, where organisations are able to realise the limitations preventing improvement in maturity and to acknowledge where organisations can easily build on existing functions to grow maturity organically.

- **Level 1 – Ad hoc:** this combination of the CMMI Level 0 and Level 1 which essentially means while projects exist, there is little or no attempt to standardise processes between projects. The roles and responsibilities within the project, and governance that oversees the project, are not effective and may not be documented.
- **Level 2 – Managed:** level 2 acknowledges that the organisation has started to define its PMF, the COP is established focused on skills development, the PMO focus is on reporting and coordination of the PMF project/programme products, and governance is in place for key projects but responsibilities are not well documented and may be inconsistent.
- **Level 3 – Defined:** level 3 sees the development of the COP from skills development to one of continuous improvement of the PMF. The PMO development now sees the body provide the governance bodies and the executive with programme/portfolio risks associated with the projects/programmes under management. The governance bodies will have a clear understanding of the tolerances to be managed by the projects related to scope, time, and cost.
- **Level 4 – Measured:** level 4 sees the organisation obtain and retain specific management metrics on its whole portfolio of programmes and projects. The decisions within the projects, programmes and their governance is data driven and the framework includes the regular reviews of projects at key gates to instill a quality based culture.

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- **Level 5 - Optimised:** level 5 sees the organisation 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 optimise processes. At this level, the PMO structures are used to identify risks across the portfolio, identify impact of delays, or change on business benefits. Governance decisions are data driven, the COP represents a centre of excellence, and the processes within the PMF are well understood and routinely practiced at all levels.

The IBRS position is that once an organisation achieves maturity level 3, with consistent application of the processes and principles used to achieve that level, over time the organisation will organically grow in maturity to level 4, and will then have potential to strive for level 5 – depending on the value proposition for each organisation.

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FOUNDATION STONES OF GOOD PROJECT MANAGEMENT



Conclusion

This chapter will address the necessary inclusions in your PMF and the value of developing a COP to ensure continuous improvement. In addition to these foundation stones of good project management, IBRS takes a pragmatic view of how the choice of methodology used for each project impacts the organisation's approach to its PMF and the value proposition of the COP.

The key to predictable outcomes is to make sure the processes and products of your PMF are of value to both those executing the project and those overseeing the development of each capability. Too often, poor take up of an organisation's PMF, and the subsequent increased risk of failure of a project is a result of a bureaucratic and overly complex framework. The *keep it simple* principle is essential so that compliance with the PMF can become routine.

Likewise, the COP is key to learning, improvement, and ownership by those involved in your organisation's capability development and project management. An effective COP will look to improve skills, apply lessons learned, and improve the PMF processes, outputs, and tools.

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FOUNDATION STONES OF GOOD PROJECT MANAGEMENT



Observations

A PMF consists of the processes, tasks, and tools used to take a project from start to finish. It encompasses all the key components required for planning, managing, and governing projects.

The first pragmatic application of a PMF is to understand that governance is about capability development, not managing projects. This may appear a simple statement of fact to some, but many projects are put at risk unnecessarily due to governance bodies getting too close to the day-to-day management of the project. Simply put, a PMF must provide:

- for the governance of projects through effective communications, reporting, and record keeping, to guide the successful development of the capability to be delivered
- the tools necessary for the project team to effectively manage the project, and
- the processes within each project methodology in use by the organisation to facilitate the delivery of the project outcomes.

There are many project methodologies to choose from, the use of each will be dependent on both the culture of your organisation and the approach needed to achieve the desired outcome.³ Regardless of the methodology used, the IBRS pragmatic view is that the PMF should be designed to support a mix of methodologies. The three primary elements of any PMF are the five life cycle processes, project outputs, and tools.

These elements are the building blocks that help your organisation create reliable, repeatable systems for controlling projects and improving the predictability of successful outcomes. IBRS recommends organisations adopt five phases of project management in their PMF. These are initiation, planning, execution, performance/monitoring, and project close.

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Observations

Within the PMF, project outputs refers to activities and templates for project artefacts within each phase and the reporting schema to track and monitor progress against scope, time, and cost. The tools are likewise needed to address the full lifecycle of the project. That means a standard selection of tools for records management, business analysis, risk management, scheduling, and testing, as well as the standard office suite.

IBRS has developed a simple maturity model for organisations to assist their development of their PMF. The model (below) allows organisations to assess their current maturity and to target the requirements to improve to at least level 3 – defined.

(see diagram on next page)

The PMF maturity model (diagram 2) depicts the low maturity of ad hoc, where little is formally documented, through what IBRS would recommend as a minimum of level 3 (*defined*), to level 5, that being *optimised*. If used to first assess maturity, and then develop an action plan for improvement of maturity, this model will allow your organisation's maturity to grow organically once level 3 is achieved.

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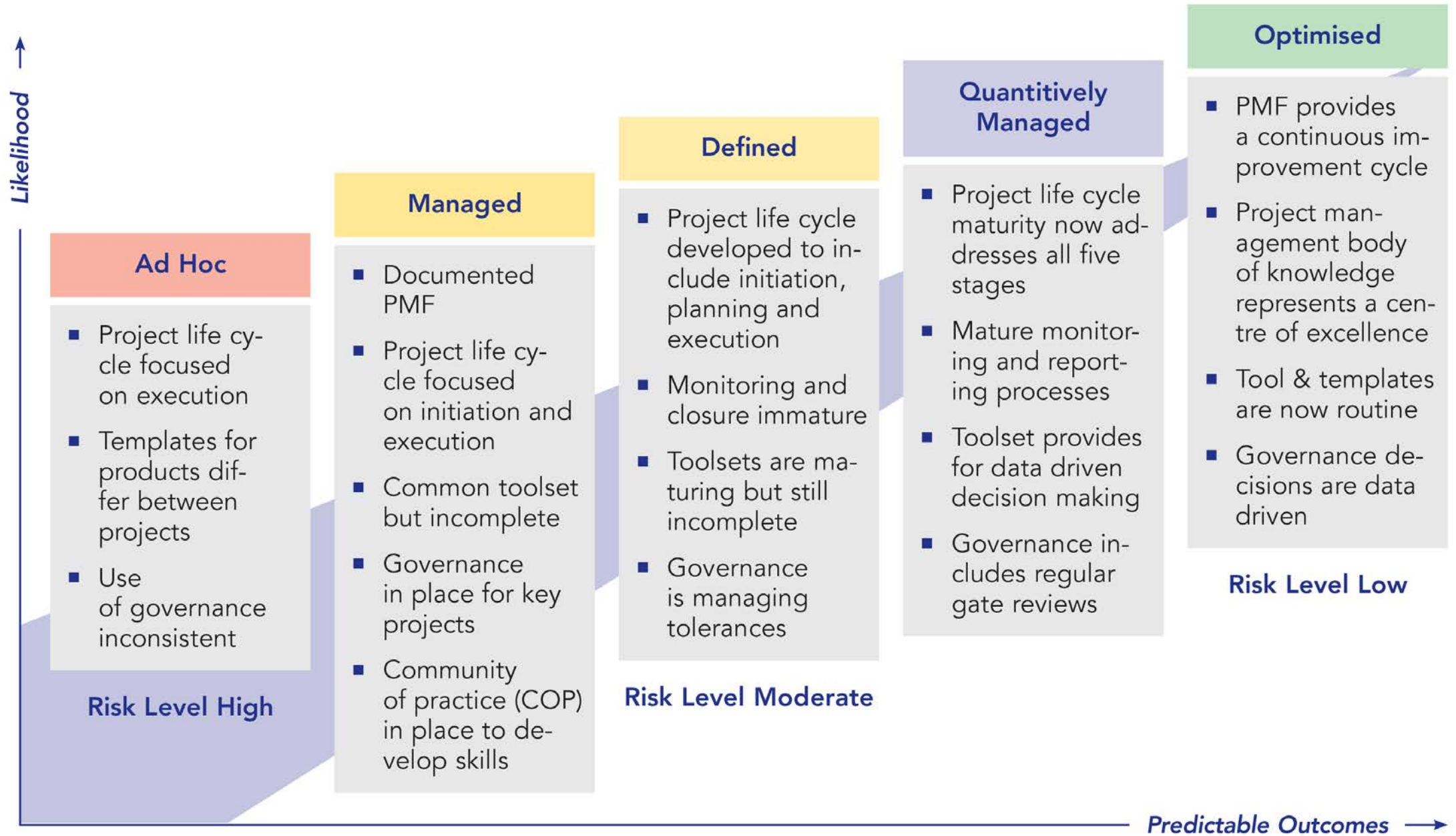


Diagram 2 - Project Management Framework Maturity Model

The most popular methodologies used today are variants of waterfall and agile. The waterfall model has six stages: requirements, analysis, design, coding, testing, and deployment. Agile project management model follows an iterative approach to delivering a project throughout its life cycle. Both methodologies still require controls to be in place and each follows a set of processes that can be templated. The need for a mature COP will enable organisations to dovetail these processes into the PMF, and as the COP matures, so too will the PMF.

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The term COP assumes a shared move towards a new business model (client or participant-driven support), and an approach that goes beyond information sharing into practice development and shared development of practice knowledge. To be effective, a COP must:

- create a support network for members
- accelerate professional development across the organisation
- break down organisational silos
- share knowledge, build better practice, and
- provide continuous improvement of the PMF for the standardisation and acceptance of project outputs and tools.

IBRS has developed a maturity model (see diagram 3) for the development of COPs within organisations, which again is designed to assist organisations to grow maturity over time, and dovetail the COP functions with the overall PMF maturity.

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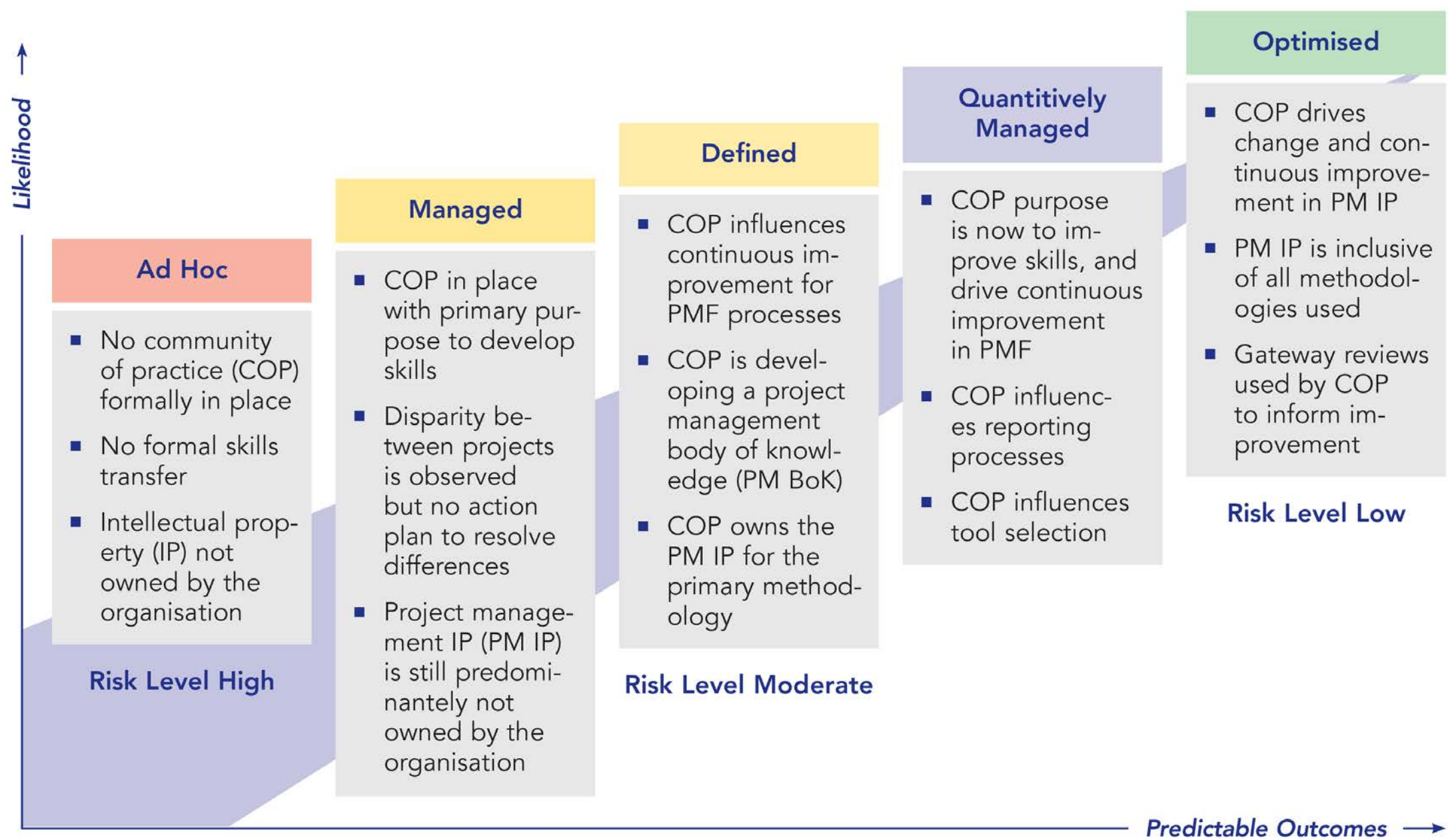


Diagram 3 - Community of Practice Maturity Model

The COP maturity model sees the development of the COP from a support mechanism for key skill sets through to first an influencer for the need to standardise processes and tools, and finally to become the owner of the continuous improvement of the intellectual property for project management within your organisation. Once optimised, the maturity of the COP will become a significant asset in driving both predictable outcomes for projects and reducing the risks associated with achieving them.

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NEXT STEPS



CONDUCT

Conduct a roundtable to identify the importance of a mature PMF and COP for your organisation.



COMPLETE

Complete an assessment of your organisation's maturity against the IBRS model for both the PMF and COP.



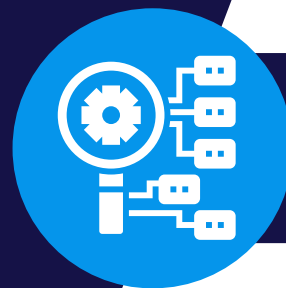
DEVELOP

Develop an action plan for development of your PMF and COP maturity to a minimum of level 3 (*defined*).

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FOUNDATION STONES OF GOOD PROJECT MANAGEMENT

NEXT STEPS



IDENTIFY

Identify a baseline of current risks and issues for your application of projects to deliver new or enhanced capability.



MONITOR

Monitor and measure the impact of your action plans to improve maturity against the baseline risks and issues identified.



REPORT

Report the progress of your action plans to improve maturity.



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THE PMO VALUE PROPOSITION



Conclusion

This chapter will discuss the value proposition for the project and/or PMO. In the first and second chapters, we discussed the need for maturity in project management and the need for a mature PMF to support success in the completion of projects.

Effective project management requires an effective PMO to achieve the controls necessary to manage the processes within the PMF, and to ensure the delivery of each business outcome is prioritised to meet the desired business objectives.

Without an effective PMO, your organisation's ability to track business performance against delivery of new or enhanced capabilities being delivered by projects will be limited or potentially catastrophic.

Observations

The first and most important question to answer in maturing your PMO is to *understand what the problem is that you are trying to solve?* The problem is not to manage the delivery of a specific capability, or a specific project. The problem to be solved is how to put processes and controls in place to manage the whole portfolio – that is, what the business needs to do to improve performance in a controlled and cost-effective way to ensure overall success.

Lack of effective controls leads to inconsistency and results in confusion for all stakeholders. By definition, confusion is a lack of knowledge – both the unknown and that which should be known but is ignored or overlooked. Confusion is the major risk that prevents predictability in delivery of capability development projects. Inability to effectively manage risk will in turn result in a lack of control to deliver the scope of the required quality, on time, and at the expected cost.

Programme & Project Maturity

THE PMO VALUE PROPOSITION



A mature PMF is designed to provide the processes and controls. A mature PMO oversees these controls to ensure the portfolios, programmes, and projects are successful as a whole. Where the agreed capability or capabilities is/are delivered on time, on budget, and at an acceptable quality to allow the business benefits to be realised. Where risks are effectively managed, the total cost of ownership is tracked, and return on investment is achieved.

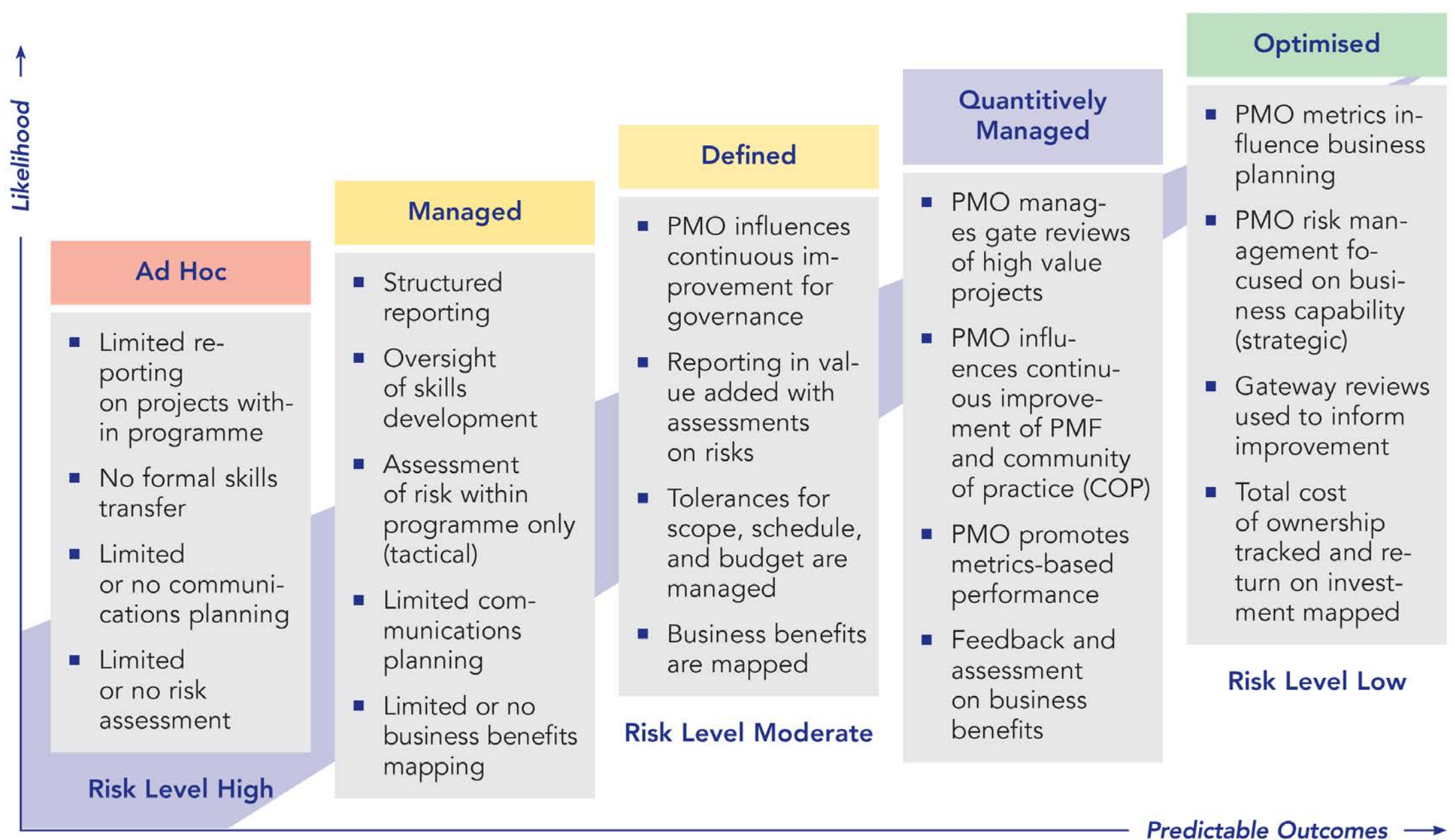
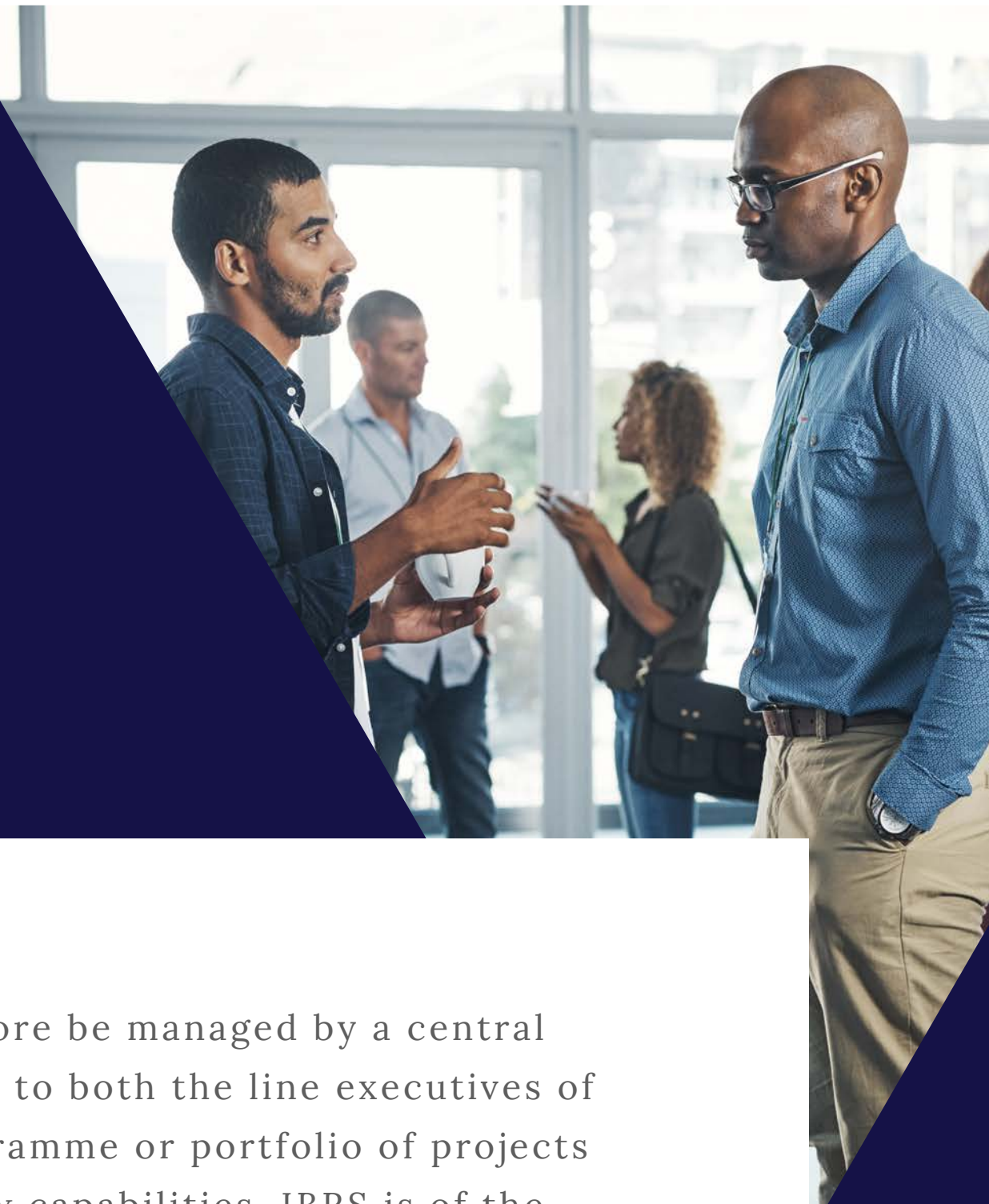


Diagram 4 - PMO Maturity Model

Programme & Project Maturity

THE PMO VALUE PROPOSITION



In the view of IBRS, these controls must therefore be managed by a central body – a PMO. That body must be tightly linked to both the line executives of the business and the governance over the programme or portfolio of projects used by the business to enhance or develop new capabilities. IBRS is of the opinion that the more mature a business is, the better its ability to empower its PMO to drive value in both quality and time to market will be.

The diagram above shows PMO maturity levels that IBRS has observed across organisations. The diagram uses the CMMI model of maturity to depict the return on investment as the PMO maturity grows.

Level 1 – Ad hoc: at the ad hoc level, the PMO is primarily the central point for management of documented policies and frameworks for the conduct of projects in the organisation. It is primarily a reporting point and secretariat for governance. At this level of maturity, the PMO is of limited value and is often viewed as a cost overhead.

Level 2 – Managed: at the managed level, the PMO has started to add value. Value is added through structured reports that now provide a dashboard of sorts for the executive. The PMO aligns risks with impacts on business between projects in the programme. It coordinates the development of skills, improves communications between business units and the projects, and starts to map business benefits. At this level, the PMO is still seen as an overhead.

Level 3 – Defined: at the defined level, the PMO is starting to control the project landscape. The PMO is applying analysis to the reported information, giving governance an analysis on risks across the programme relative to each project. It can provide predictive intelligence on the impacts of slippage in time or cost overruns to the executive. At this level, the PMO is starting to become entrenched, but its value is still intangible.

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THE PMO VALUE PROPOSITION



Level 4 - Quantitatively Managed: At the quantitative managed level, the PMO has developed an investigative capability where the analysis of project/programme progress is supported by independent assessments through traditional gate reviews, assurance reviews, and metrics based assessments. The ability to complete fact-based assessments allows the PMO to influence improvements that can reduce risk, reduce costs, better manage time, and improve quality. At this level, the PMO has the ability to present a proposition which has intangible and limited tangible value to the business.

Level 5 - Optimised: At the optimised level, the PMO is now a trusted and reliable element in achieving business outcomes. Gate reviews and assurance reviews are used to further improve processes and controls to meet business objectives. The PMO risk assessment aligns projects to business outcomes at the organisational level. The impact of a change in business strategy can be assessed to identify priorities within the programme and the cost and impact of total cost of ownership (TCO) and potential return on investment (ROI).

IBRS recommends organisations strive for a PMO maturity level of *quantitatively managed* in a planned way. Once level 4 is achieved, the organisation will grow organically to the *optimised* level (level 5) of maturity with experience over time.

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THE PMO VALUE PROPOSITION



ASSESS

Assess your PMO maturity level against the IBRS PMO maturity model.



DEVELOP

Develop an action plan to improve the PMO value proposition to business.



GAIN

Gain executive support for implementation of the action plan.

NEXT STEPS

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THE PMO VALUE PROPOSITION



COMMUNICATE

Communicate the need to grow the organisations PMO maturity level.

NEXT STEPS



ESTABLISH

Establish the PMO to complete the functions identified across each maturity level up to level 4.

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EFFECTIVE USE OF PROJECT ASSURANCE



Conclusion

This chapter discusses the value proposition for conduct of project assurance through gate reviews for high-value projects, health checks of projects in trouble, key processes, and control mechanisms. Included in the first three chapters was a discussion on the need for maturity in project management, the need for a mature project management framework, and a mature project management office (PMO) to support success in completion of projects.

Without effective project assurance, through external review of high-value projects at key gateways in the life of each project, and health checks of processes and controls, organisations run the risk of not fully understanding the impact of the project's progress on their business objectives.

Observations

IBRS considers that the use of project assurance activities such as gate reviews, assurance reviews, and health checks, are essential to ensuring continuous improvement, improving the likelihood of success, and maturing project management in your organisation.

A health check is a targeted review of the organisation's processes and controls, such as assessing the suitability of the project management framework, the operation and value of communities of practice, and the controls and value proposition of the PMO. A health check can also be employed to assess progress and issues impacting a *red* project.

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EFFECTIVE USE OF PROJECT ASSURANCE



Observations

Traditional gate reviews and assurance reviews should be undertaken at key points in the project lifecycle, and designed to provide actionable advice on the current state and readiness for the next stage. IBRS has defined each review gate as follows:

(see diagram on next page)

Without the use of independent reviews such as those suggested below, your organisation's PMO will be restricted to internal or ad hoc assessments of each project's ability to deliver as planned.

*Programme & Project Maturity***EFFECTIVE USE
OF PROJECT
ASSURANCE**

Gate	Focus of Review
Gate 0	<p>Business Need Assures that the scope and purpose has been adequately assessed, communicated, fits within the agency's over-all business strategy and/or whole-of-government strategies and policies, and that the expected benefits have been identified and measures have been considered.</p>
Gate 1	<p>Business Case Focuses on the robustness of a project's proposed approach to meeting the business requirements, and can be delivered within the timeframe and with the resources provided. This assures that a benefits' management approach has been applied, improvements are clearly defined, and can be quantified.</p>
Gate 2	<p>Delivery Strategy Provides assurance that the procurement strategy: establishes a clear definition of the project and a plan for its implementation; has made an assessment of the project's potential for success, benefits agreed upon in previous stages have been aligned to the delivery effort, and if the project is ready to invite proposals or tenders.</p>
Gate 3	<p>Investment Decision Providing assurance on the supplier selection: that the business needs are likely to be met through the project and contract management controls; that the processes are in place for contract delivery; assures that the benefits' management strategies and plans have been incorporated.</p>
Gate 4	<p>Readiness for Service Provides assurance on the organisational readiness for delivery and ongoing management of the solution prior to production release.</p>
Gate 5	<p>Benefits Realisation Provides assurance on the project's success in achieving its objectives and potential remedial actions.</p>

Table 1 - Review Stage Gates

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EFFECTIVE USE OF PROJECT ASSURANCE



These reviews must be conducted independently of the people involved in the delivery of the project. The old adage that a frog in water that is progressively getting warmer will not see the danger, is very real when it comes to managing projects. It is human nature to be positive and to develop a we-can-do-it mentality. The independence of these reviews will give both the PMO a degree of comfort that the progress of the project is or is not as reported, and the executive an independent view on the probability of a successful delivery of the new or enhanced capability.

Each gate should be conducted at least once for each high-value project. High-value is not to say high cost. High-value in this context is related to cost, risk level, and priority. A relatively low cost project may be critical to the successful delivery of the programme overall, or a high priority to delivering a business objective. In these cases, the PMO and the governance bodies overseeing the project should consider the use of a gate review process to ensure the controls are in place and risks are effectively managed.

Gate 1 and gate 4 may be required multiple times, particularly if the procurement strategy is for the capability to be delivered in a phased approach. The independence of the gate review process will allow the organisation to empower the PMO and its governance bodies to ensure the intended business benefits, total cost of ownership, and return on investment are achieved as expected.

The use of health checks and gate reviews are essential to build the organisation's project management maturity level beyond level 3. The gate reviews will potentially reduce the risks to the organisation and avoid potential slippage in time, and increased costs for delivery of the capability. Gate reviews will also enable business expectations to be effectively managed and ensure the quality of the product delivered.

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EFFECTIVE USE OF PROJECT ASSURANCE



NEXT STEPS



IDENTIFY

PMO to identify the high-value projects that would benefit from gate reviews and seek governance endorsement of the requirement.



IDENTIFY

Programme or ICT governance to identify the processes, controls, and projects of concern that would benefit from a health check.

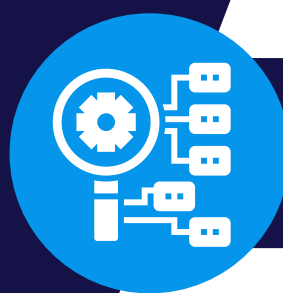


DEVELOP

PMO to develop a program of work for the conduct of the reviews.

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EFFECTIVE USE OF PROJECT ASSURANCE



IDENTIFY

Identify and engage an independent body to conduct the review.



IMPLEMENT

Implement agreed-upon recommendations from each review to improve the ability of reviewed project(s) to deliver the desired business outcomes and objectives.

NEXT STEPS

About

IBRS

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schedule a
whiteboard
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