Complexity Certification

Can project practitioners gain a competitive advantage through certification?

‘Without continual growth and progress, such words as improvement, achievement, and success have no meaning.’

Benjamin Franklin

Introduction

The International Centre for Complex Project Management (ICCPM) is testing the feasibility of establishing a Competency Based Certification Scheme for Complex Project Managers (CPM). Complex projects have been characterised as embodying uncertainty, ambiguity, volatility, dynamic interfaces and significant political or external influences. Delivering successful outcomes in the presence of these characteristics provide extensive challenges to many traditional project professionals who do not have the skills, experience, understanding or necessary education to navigate through this challenging terrain.

ICCPM was established in 2007 to address the recognised growing failure in the delivery of projects it is the internationally recognised body, building capability in organisations to deal with complex environments.

Projects are embedded in most organisations as a means to get things done effectively and meet organisational objectives. Approximately 25% of global economic activities taking place are related to projects. Specifically, capital project and infrastructure spending will total more than USD$9 trillion by 2025, up from USD$4 trillion in 2012. During 2014, the Project Management Institute (PMI) released the ‘PMI’s Pulse of the Profession: The High Cost of Low Performance’ journal, citing the differences between expected and observed performance has resulted in many project failures costing organisations $109 million for every $1 billion invested in projects and programs. This cost of low performance fuels demand for more project managers to be skilled and competent to deliver projects successfully. To support the development of project managers (PM’s), professional bodies have established standards and certification schemes for which research has concluded that higher-performing projects are significantly more likely to be staffed with certified project managers. In fact 80% of projects classified as high performing use a certified project manager. This said however, there remains a high level of project failure.

1 Global Systems Dynamic and Policy, cited in ‘Complex Project Management Global Perspectives and the Strategic Agenda to 2025 ICCPM 2011
2 Rusi Conspiracy of Optimism 2007
3 KPMG. Global IT Project Management Survey, 2008
4 World Bank 2012
5 Pwc - Capital project and infrastructure spending: Outlook to 2025
6 PMI’s Pulse of the Profession: The High Cost of Low Performance
It is widely recognised that competencies underpinned by the existing PM bodies of knowledge (PM BOKs) which emphasise planning and control are inadequate alone to manage complex projects. Some authors have even claimed that managing complex projects require new or radically different ways of thinking and conceptualising, as well as competencies in new areas of practice.  

The Complex Project Management Competency Standards (2012) were developed to build PM skills, knowledge and attributes to manage complexity. ICCPM maintains these Standards. The competencies for CPM are complementary and in addition to the traditional PM (TPM) competencies set out in existing Standards and BOKs.

With industry and government investing billions of dollars each year in programs and projects, the engagement of suitably skilled PMs to improve project delivery and benefit realisation has never before been more important. Defining a proficient project manager at the level of performance, which s/he is expected to operate, is a burning issue for many organisations. ICCPM invites engagement and feedback from stakeholders on this proposal.

Background

Over the past 10 years, various standards have emerged and have helped to increase the degree of professionalism of project management. The International Project Management Association (IPMA) that represents members of various national organisations primarily in Europe, Asia, and Africa developed its own standards and certification program, which is comprised of a central framework and quality assurance process plus national programs developed by association members. In 1996, the Australian Institute of Project Management (AIPM) published its National Competency Standard for Project Management, which was adopted by the Australian Government as part of that country’s national qualification system. The Association for Project Management (APM) in the UK also created competency standards around project control and project management. Other national project management organisations of significant size are actively involved in the development of the profession in South Africa, Japan, and China.

Many subject matter experts have argued that the PM competencies underpinned by the existing Standard or BOKs are inadequate to manage contemporary projects and levels of complexity. The softer and more intuitive approaches to human activities are still under-represented in the PMBOK Guide which focuses almost exclusively on linear, rational, analytic approaches to the world, omitting more flexible alternatives that include relational and improvisational perspectives. By contrast, this is the focus of CPM skills. They are premised on non-linearity, unpredictability and emergence.

8 Andrew Sense and Senevi Kiridena Chapter 9 Building Workforce Competencies through Complex Projects  
9 What is a good project manager? An Aristotelian perspective – Christophe Bredillet, Stephane Tywoniak, Ravikiran Dwivedula  
10 International Project Management Association  
12 AIPM. Australian Institute of Project Management  
14 Jaafari 2003; Pollack 2007; Saynisch 2010; Thomas and Mengel 2008; Winter et al. 2006  
15 Buckle P, Thomas J. Deconstructing project management: a gender analysis of project management guidelines
Benefits

Development of the CPM Certification scheme provides benefits to project management at an individual, organisation and professional level.

Individual

Skills development: Focuses on the skills, knowledge and attributes in order to gain, maintain and develop competency to work as a CPM. In many contemporary projects, the necessity for practitioners to have more advanced competencies to be able to deal with and positively influence a range of complex and diverse issues within a project is recognised\(^\text{16}\).

Competitive advantage: Distinguishes individuals who have demonstrated learning (and practice) in complexity knowledge and skills. This forms a status recognition and source of competitive advantage.

Transferrable between industries: CPM reflects best practice within the complex environment and is not industry specific. This allows better transferability between organisations and industries.

Value Creation: It makes the CPM more valuable to an organisation as they will have additional skills to operate in complex situations and environments. Hence, they add value and are more sought after in the market. A certified TPM can attract an additional 16% salary over a non-certified PM.\(^\text{18}\)

Maturity development: Develops maturity of their project management capability especially with regards to human behavioural, managing change, working strategically and dealing with unaligned stakeholders that arise in complex projects and operating environments.

\(^{16}\) Andrew Sense and Senevi Kiridena Chapter 9 Building Workforce Competencies through Complex Projects
\(^{17}\) Jack Welch – The Complete 101 Collection: What Every Leader Needs to Know
\(^{18}\) Rachel Burger – How Much do Project Managers Make - 2015
Organisation

**Risk reduction**: Adoption of the CPM knowledge and skills reduces the organisational risk profile from the failure of complex projects by developing people with complexity management skills and knowledge.\(^{19}\)

**Recruitment success**: Assists organisations in the recruitment of project professionals with commensurate skills and knowledge to match the project complexity that is known or anticipated.\(^{20}\)

**Higher likelihood of success for complex projects**: The encouragement of skills beyond those emphasised in TPM will increase the ability of organisations to identify emerging obstacles to success.\(^{21}\)

**Demonstrates organisational commitment to accomplishment**: The best way to build confidence in a given area is to invest energy in it and work hard at it.\(^{22}\) The investment in the development of the CPM skill sets build confidence in internal and external clients, demonstrating that the organisation is serious about addressing complexity in projects.

**Talent Management**: Assists the talent management of project professionals to address organisational needs in dealing with complexity. It cultivates individuals or groups of project professionals who are suited to manage at the level of complexity present or required in the future.

Profession

**Competency for the profession**: It addresses the need to grow the competency of project professionals beyond those currently required of a TPM.\(^{23}\)

**Specialist development**: The CPM certification will grow a pool of specialists to help manage project complexity.

**Success rate**: The application of CPM has the ability to assist organisations and individuals to deliver successful projects.\(^{24}\)

**Complementarity**: The CPM certification is complementary to and distinct from TPM certifications.

**Distinction**: The competency standards and approaches used in complexity management are based on modes of thinking and working to address complexity. Traditional approaches use a

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19 Adrienne Watt – Risk Management Planning
20 Navi Radjou, Jaideep Prabhu and Simone Ahuja – Six Job Skills to Recruit for in New Hires
21 Complex Project Management Global Perspectives and the Strategic Agenda 2025 – The Task Force Report
22 Tony Swartz - Be Excellent at Anything: The Four Keys to Transforming the Way We Work and Live with Jean Gomes and Catherine McCarthy, Ph.D.
23 Ghasem Omidvar, Sr Dr. Zulkiflee Bin Abdul Samad, Somaye Fattahi Zafarghandi Critical Evaluation of a Project Managers Competency Standards for Proposing a Comprehensive Model
24 Complex Project Management Global Perspectives and the Strategic Agenda 2025 – The Task Force Report
different mode of thinking and working.

**Non-discriminating and non-competitive to TPM:** The CPM certification that is proposed does not discriminate between various TPM standards. Additionally it does not compete with TPM standards. It is expected that a CPM would be certified as a TPM from another standard.

**Counter-arguments**

**Complexity is referenced in existing PM Standards**

**Response:** This highlights the interdependency and complementarity of TPM and CPM. The definition and use of language by TPM Standards defines that complexity varies depending on an individual’s perspective, experience and knowledge; moreover, complexity may be viewed as challenging characteristics of programs and projects.\(^{25}\) As discussed previously the practices applied and mode of thinking is distinct and different as outlined in the ‘Background’ section. ICCPM has focused for 10 years on the development of capability for project professionals to deal with complexity. The field of complexity is specialised and ICCPM has developed significant understanding and practices to operate within this type of environment. The development of a complementary and non-competing CPM Certification scheme will support each of the industry bodies to deliver to their specialisation and in doing so facilitate greater project success rates and outcomes.

**All project issues can be managed with TPM approaches - CPM is not necessary**

**Response:** The focus of TPM education and practice is biased towards problem solving and the application of prescribed techniques and tools. It confers project professionals with skills to know-what and know-how. This is appropriate in stable and predictable environments with clear scope and aligned stakeholders.\(^{26}\) Acknowledging that TPM is absolutely necessary however, its practices are insufficient to navigate the rapidly changing business environment.\(^{27}\)

The increasing unpredictability and complexity of unforeseen consequences of actions means that new methods of managing, planning and executing strategy are needed. As organisations adapt to these changes and to feedback they receive, they find that strategy or project execution can no longer be modelled as linear outcomes of planned actions.\(^{28}\) The tools and techniques used in TPM are no longer sufficient.

CPM skills and practices focus on understanding interdependencies and interactions of the system as a whole, facilitating change, dealing with issues of politics and uncertainty and creating buy in. In fact, we see more and more clearly that the traditional project management practices and project manager competencies associated with certification processes and standards are not necessarily the practices and competencies that are effective on complex projects.\(^{29}\) A PM with a complement of these skills will be more effective and help to reduce the risk of project failure.

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25 PMI Navigating Complexity A Practice Guide
26 Mengel T, Thomar J. From know-how to know-why – a three 111 dimensional model of project management knowledge. In: Presentation at the PMI global congress 2004 – North America; 2004
28 Janice Thomas and Thomas Mengel Preparing project managers to deal with complexity - Advanced project management education
Project Management Standards: comparison and positioning

To support the rising need for competent project professionals, the global project management profession has been represented by certification schemes introduced by the IPMA, PMI, GAPPS, AIPM, APM etc. These schemes are created in an attempt to ensure that consistent and harmonised standards are applied.

The GAPPS framework recognises that Global Level 1 and Global Level 2 are a subset of the full range of project manager performance: entry-level project managers generally function at a level of management complexity below that required for Global Level 1 while highly complex projects may require a level of performance beyond that of a Global Level 2 project manager.  

A project manager who is competent to manage an easier, less complex project may not be competent to manage a harder, more complex project.

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30 Global Alliance for the Performance of Project Standards (GAPPS) A Framework for Performance Based Competency Standards for Global Level 1 and 2 Project Managers

31 GAPPS - A Framework for Performance Based Competency Standards for Global Level 1 and 2 Project Managers
As discussed the complementarity of TPM and CPM is highlighted as depicted in Figure 2 below. This has the capacity to help build project success and reduce risk and costs.

**Figure 2:**

**TPM + CPM = Improved Performance**
Three internationally renowned project management organisations are compared below.

<table>
<thead>
<tr>
<th>IPMA</th>
<th>PMI</th>
<th>CPM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contextual Competence</strong></td>
<td><strong>Project Integration Management</strong></td>
<td><strong>Systems Thinking and Integration</strong></td>
</tr>
<tr>
<td>(10 Individual Competencies)</td>
<td>(6 Individual Competencies)</td>
<td>(7 Individual Competencies)</td>
</tr>
<tr>
<td><strong>Technical Competence</strong></td>
<td><strong>Project Scope Management</strong></td>
<td><strong>Strategy and Project Management</strong></td>
</tr>
<tr>
<td>(20 Individual Competencies)</td>
<td>(6 Individual Competencies)</td>
<td>(5 Individual Competencies)</td>
</tr>
<tr>
<td><strong>Behavioural Competence</strong></td>
<td><strong>Project Time Management</strong></td>
<td><strong>Business Planning, Lifecycle Management, Reporting and Performance Measurement</strong></td>
</tr>
<tr>
<td>(15 Individual Competencies)</td>
<td>(7 Individual Competencies)</td>
<td>(5 Individual Competencies)</td>
</tr>
<tr>
<td><strong>Project Cost Management</strong></td>
<td></td>
<td><strong>Change and Journey</strong></td>
</tr>
<tr>
<td>(4 Individual Competencies)</td>
<td></td>
<td>(10 Individual Competencies)</td>
</tr>
<tr>
<td><strong>Project Quality Management</strong></td>
<td><strong>Innovation, Creativity and Working Smarter</strong></td>
<td></td>
</tr>
<tr>
<td>(3 Individual Competencies)</td>
<td>(6 Individual Competencies)</td>
<td></td>
</tr>
<tr>
<td><strong>Project Human Resource Management</strong></td>
<td><strong>Organisational Architecture</strong></td>
<td></td>
</tr>
<tr>
<td>(4 Individual Competencies)</td>
<td>(4 Individual Competencies)</td>
<td></td>
</tr>
<tr>
<td><strong>Project Communications Management</strong></td>
<td><strong>Leadership and Communication</strong></td>
<td></td>
</tr>
<tr>
<td>(3 Individual Competencies)</td>
<td>(6 Individual Competencies)</td>
<td></td>
</tr>
<tr>
<td><strong>Project Risk Management</strong></td>
<td><strong>Culture and Being Human</strong></td>
<td></td>
</tr>
<tr>
<td>(6 Individual Competencies)</td>
<td>(5 Individual Competencies)</td>
<td></td>
</tr>
<tr>
<td><strong>Project Procurement Management</strong></td>
<td><strong>Probity and Governance</strong></td>
<td></td>
</tr>
<tr>
<td>(4 Individual Competencies)</td>
<td>(5 Individual Competencies)</td>
<td></td>
</tr>
<tr>
<td><strong>Project Stakeholder Management</strong></td>
<td><strong>Special Attributes</strong></td>
<td></td>
</tr>
<tr>
<td>(4 Individual Competencies)</td>
<td>(5 Individual Competencies)</td>
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ICCPM has a 10 year active history in building capability to deliver projects in complex environments. The development of a Certification scheme for CPM would support greater skills and knowledge development in the project management profession. The complementarity of the skills and knowledge to all of the existing Standards will strengthen the profession.

In the spirit of open consultation your feedback on this proposal is welcomed.

For more information or to register your interest in participating in the feasibility study please contact us

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