How Adequate is Your Delivery Platform?^{1,2}

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Typical scenario: A list of projects to be delivered over the next three financial years has just landed on the desk of the newly appointed chief projects officer of a major corporation, courtesy of the last "strategic planning session".

Typical response: Well, let us hire a few project managers with great credentials, then procure a well-branded project management software—and go down the never-ending spiral of challenged projects.

What have we missed here? It takes an adequate delivery platform as a "system" to beget projects.

Need for a Project Delivery Platform

We have learned from nature that the ability to "deliver" largely depends on the capability of the womb. Most animals can only deliver according to the type, the capacity, and the cycle of their respective wombs. For instance, most birds can only lay eggs, whereas the pregnancy cycle and "batch size" for common animals are suggested as follows: rabbits, 31 days and up to 5 cubs; dogs, 64 days and up to 7 or even 12 puppies; elephants, 22 months and a single cub; doves, 2 weeks and two eggs; and mother-Kangaroo only keeps one Joey in her *pouch*. Different patterns and different outputs; hence, different "wombs" (delivery factories) are needed for different portfolios of projects.

We have also observed from the animal kingdom that a "defective" womb would impair delivery by negatively affecting its cycle (e.g., causing miscarriage or prolonged pregnancy) or even its output (e.g., resulting in stillborn or pseudo pregnancy). Any of the above predicaments may have serious consequences on the welfare and the state of mind of the mother animal, and can even last quite a long time after the unfortunate failed delivery.

The same womb-delivery dynamics apply to project management since the ability to deliver projects largely depends on the capabilities in place, just as ordinarily applies to manufacturing (i.e., factory). However, Project management mainly differs from manufacturing (viz. operations) as follows:

- Projects deliver a single, novel "outcome" as opposed to a high volume or line production
- Projects deliver highly varied "outcomes" as opposed to low variety, mass production

What then should constitute the Project Delivery Platform? In other words, what elements should be put together to create a "factory" or "womb" for projects? We should try and answer this question while keeping in mind the three aspects of delivery as discussed above, namely, the type, cycle, and

¹ How to cite this paper: Mabelo, P. B. (2023). How Adequate is Your Project Delivery Platform; featured paper, *PM World Journal*, Vol. XII, Issue XII, December.

² This paper is a modified version of an article by the author titled A well-documented strategy—The need for project management infrastructure published in *The Project Manager*, Issue 10, 2011, by PMSA in South Africa.

throughput. The various forms and setup of the Project Management Office ought to ensure that the right projects are delivered *effectively and efficiently*!

With regards to any factory, it is no secret that the makeup and configuration of the machinery, manpower, and processes largely determine the following:

- (i) Type of delivery (i.e., the kind of commodity or product to be produced);
- (ii) Delivery cycle (i.e., how long it takes to produce it); and,
- (iii) Delivery capacity or throughput (i.e., how big a batch can be produced at any point in time).

Incidentally, although a project is a novel initiative to produce a unique product, service, or result, there remains a need for a "womb" or Project Delivery Platform to allow for seamless (i.e., *effective and efficient*) delivery of the projects that are generated, prioritised, and governed via a portfolio management process.

If one would agree that the *shape and size* of the Project Delivery Platform (which here represents the womb for projects, i.e., the core of the Project Management Office) determines the type of projects, their delivery cycle, and throughput, then we might as well understand that a faulty or dysfunctional Project Delivery Platform will negatively affect the delivery cycle and throughput of projects. We often witness recurrent patterns of projects failing to materialise, being terminated, or simply taking too long to complete. Blaming it on the project managers will not help; they could be toiling within an environment that is not supportive of their efforts. We need to check the Project Delivery Platform of the organisation concerned, if we are to assume there is one such in place!

Components of the Project Delivery Platform

Learning from the manufacturing domain and to some extent from the service delivery domain, a working Project Delivery Platform (i.e., the project factory, realisation system) should generally consist of the following components:

#	Project Management Domain	Equivalent Manufacturing Domain
(1)	Dropping and Droppidures (Dropping Assots)	Process Flows and Operating Proceedures
(1)	Processes and Procedures (Process Assets)	Process Flows and Operating Procedures
(2)	Skill Sets and Mindset	Manpower with expertise and the right culture
(3)	Tools and PM Information Systems	Machinery and SCADA Systems
(4)	Structures and Interfaces	Layout and Configuration, as well as Setups

Table 1: Comparison of PM and Manufacturing Infrastructures

It is the overall composition and configuration of the Project Delivery Platform that determines the totality of Project Management capabilities (which in turn determines the type, lifecycle, and throughput of projects delivered) within an organisation. Such capabilities emerge from the maturity of its PM Processes, as enabled and supported by relevant components such as adequate human capabilities (i.e., PM skills and mindset), tools and systems (i.e., Precedence Diagramming Method and PMIS), and project-related structures and interfaces.

Although acquiring human capabilities might at times prove arduous, no single element may be construed as more important than others. They are all needed at different degrees based on the extent (and the balance) of maturity required to effectively constitute the Project Delivery Platform in a

particular organisation. This is because every entity is unique, with unique projects—on this topic, "*what is good for the goose is not always good for the gander*".

The essential components of the Project Delivery Platform could be briefly introduced as follows:

(1) *Processes and Procedures:* Processes are usually considered as repetitive sets of activities, carried out again and again (albeit with little variations) in the attempt to deliver a *product*, with a clear start and finish, a unique scope of work, etcetera. Besides, project management is increasingly being defined as a set of interdependent and centrally coordinated processes—a "system". Organisations with good, scalable project management processes (mostly when such are followed) are more likely to be *consistently* successful (or otherwise) on their projects.

A procedure, conversely, is a specified series of actions or operations which are executed in the same manner to always obtain the same result under the same circumstances. It consists of "process assets" ents (e.g., guidelines, checklists, and templates) that aid in the use of processes.

- (2) *Skills and Mindset:* Specific competencies (i.e., skills set and appropriate culture) are necessary to successfully carry out project activities. It is important to have the right expertise, in the right numbers, at the right time in the project lifecycle. Competencies may sometimes develop through learning during the very project delivery, provided the right mindset (which drives the appropriate and effective behaviour) is instilled and maintained. And conversely, it is now established, "*doing the right thing with the wrong attitude shall produce bad results*"!
- (3) *Tools and Systems:* Project-related processes such as planning, monitoring and control, and reporting are often supported (if not enabled) through appropriate utilisation of electronic and/or manual instruments for effective standardisation and automation purposes. Project Management relies on suitable tools and systems to collect, combine, and distribute information on various aspects (e.g., scope, budget and schedule, quality, etc) and the status of a particular project throughout its lifecycle.

In addition to some Project Management Information Systems (PMIS), an arsenal of tools and techniques such as Monte Carlo simulation, Earned Value Management, Gantt Chart, Cashflow, and Building Information Modelling (BIM) are usually available to support/enhance delivery.

(4) *Structures and Interfaces:* While structures (e.g., dedicated, functional versus matrix) refer to reporting lines and allocation of authority during project delivery, the onus is on the project manager to allocate, maintain, and enforce various "roles and responsibilities" throughout the project lifecycle. In that vein, interface management identifies subsystems to be managed (by the project manager, first and foremost), those interfaces requiring management attention, and how such interactions (i.e., including teamwork) should be *satisfactorily* managed on a project.

For instance, is the designated project sponsor *effectively* playing the necessary governance, quality assurance, and champion roles or is the project manager left with no executive support to operate in a leadership vacuum?

Ultimately, project management executives should seek organisational methods that facilitate teamwork and maximise efficiency, quality, and the use of limited resources in the way projects are being delivered—including how goals and objectives are being achieved in the process. Unsurprisingly, Mochal and Tom (2003) would even suggest that the organisation's culture has a

lot to do with project success rate. In particular, the balance of power between delivery and control lines is interesting to watch (e.g., which of the two shall keep a bigger contingent? Where should the solid reporting line lie? Who carries the onus of governance? And such issues).

Its Requirements and Workings

Since project management could be seen as a set of *interdependent* and centrally-coordinated processes, it is the level of maturity in terms of project management processes that generally informs the requirements of the other corresponding components, for project processes work best when supported by congruent structures, appropriate skill sets and culture, as well as effective tools and other supporting systems.

Maturity is often thought to *primarily* apply to processes, which are often translated into procedures, or process assets. Procedures facilitate the use of any processes, based on accumulated experience; this is beneficial in any project management setting. However, should any of these four components prove inadequate—worse still, not in alignment with others—project delivery will ultimately suffer, in some way or other. Indeed, the overall delivery capability emerges from both *interactions* within each and across these delivery components. Yet, examples abound of project managers lacking (sufficient) authority, of project personnel not being trained on the elaborate PMIS software, and of lifecycle methodologies demanding specific "Risk Management" deliverables whereas the structure provides no resource for producing such.

Consequently, no matter how hard those brave project managers out there may try, projects will probably abort (e.g., get terminated), or take too long to complete. At times, the whole delivery system will merely *jam and freeze* as project executives are growing impatient, and trying to push more initiatives through an already congested system. Many corporations are facing this "tight womb" situation where any attempts to *simultaneously* deliver more than a few projects often result in the clogging of the whole delivery system, causing a delivery outage.

The crucial point to emphasise is the fundamental importance of an adequate Delivery Platform or system. Thus, expanding PM capabilities will entail enhancing the elements of the Project Delivery Platform and improving their alignment. Without a robust and well-designed Delivery Platform in place, merely hiring skilled project managers and implementing software will not necessarily ensure successful project outcomes. It does not help to provide incompetent project managers with some state-of-the-art PM software; they will still fail!



Figure 1: Project Delivery Platform (Elements of)

The four elements of the Project Delivery Platform are, namely, (i) Processes and Procedures; (ii) Competencies and Culture; (iii) Techniques and Tools; and (iv) Organisational Structures and Interfaces. They work *together* but contribute *differently* to the project delivery system as follows:

- (i) Organisations with sound PM Processes will most of the time prove *consistent* in getting projects delivered;
- (ii) PM Techniques and Tools are needed to ensure projects' inputs and outputs, work instructions, performance ratios/trends, and progress status are *efficiently* collected, processed, stored, retrieved, and distributed;
- (iii) Specific PM Competencies and Skills are required to *satisfactorily* plan and/or carry out any project activities;
- (iv) Appropriate PM Organisational Structures and Interfaces are needed to enable and/or improve teamwork and other organisational capabilities (e.g., control), leading to *effective* coordination of project activities.

Thus, It must be noted that the Project Delivery Platform involves two interdependent dimensions:

- (a) Technical perspective or $[\alpha \alpha]$ axis (i.e., Processes and Procedures; Tools and Techniques) concerns itself with *processes, their translation into operating procedures, and enabling ICT instruments*. Dr Pankaj Jalote (2003) puts this perspective at the centre of any Knowledge Infrastructure for project management; it is the *spine* of delivery.
- (b) Human perspective or $[\beta-\beta]$ axis (i.e., Skill Sets and Mindset; Structures and Interfaces) concerns itself with *people operating the processes and how their expertise is brought into play*. In his

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practical wisdom, Charles Stengel argues: "It's easy to get good players. Getting 'em to play together, that's the hard part" (De Meuse, 2009). Casey, as he was *affectionately* known, was an American Major League Baseball right fielder and manager, best known as the manager of the championship New York Yankees of the 1950s; the man surely knew what he was talking about.

The two perspectives are expected to be in alignment and balance with each other for the overall project delivery to prove adequate and effective. Thus, we shall avoid any undue prevalence of the Technical $[\alpha - \alpha]$ Axis over the Human $[\beta - \beta]$ Axis. Contrary to common misconceptions, the $[\alpha - \alpha]$ axis components simply magnify what the $[\beta - \beta]$ axis does!

Indeed, Dr Terry Cooke-Davies (2002) argues that "It's People Who Get Things Done" and projects are delivered by people working *together in teams*—not just techniques, tools, methods or processes. "People need one another in order to get things done" (Msengana, 2012)—The people's side matters!

Organisations involved in managing projects, whether as a means to implementing their strategy or as a service offered to other entities, would therefore need to consider devising and installing an adequate Project Delivery Platform. Such shall include the four above-mentioned elements suitable for the portfolio of projects to be delivered in terms of type or category (e.g., large versus small, capital versus soft), required throughput, and anticipated cycle. For example, delivering large capital programs (e.g., rail and port projects) and "organisational change" initiatives do not require the same kind of Project Delivery Platform. Similarly, a major infrastructure (or ICT upgrade) project is not set up in the same way as a straightforward equipment purchase initiative, as major as it might be.

Furthermore, such elements are to be in balance, aligned and in sync with one another. For instance, higher skills (e.g., maturity) are needed when dealing with "flexible" procedures, even more so in an organic structure. Similarly, the type of expertise and mindset (e.g., investigator skills, collaborative style during feasibility but implementer skills, directive style during execution), structure type (e.g., somewhat decentralised during construction but centralised before it), and controlling tools and metrics (e.g., Earned Value Management System results are more tangible during construction than during front-end-loading or FELs) may all vary from phase to phase.

Thus, requirements of both $[\alpha - \alpha]$ and $[\beta - \beta]$ perspectives must be *concomitantly* satisfied to secure a working Project Delivery Platform. Yet many organisations do not appreciate the needs and demands of the Human Perspective—they just rush to buy tools. By so doing, they mostly miss out on leadership, knowledge and learning, relationships, governance, and executive sustainability. Implementing a PM Information System (PMIS) in a situation characterised by nebulous processes or low proficiency may easily turn disastrous. We have seen several corporations rushing to pull the plug on a newly installed PMIS ... *before it caused more trouble*!

However, if properly constituted and managed, the Project Delivery Platform (PDP), like any system in synergy, will perform and deliver in a manner that is "greater than the sum of its parts"; conversely, a dysfunctional one will generally lead to failure. Further, although setting up a proper Project Delivery Platform could prove an onerous and costly exercise, its benefits in terms of increased efficiency (as it is with any infrastructure) often far outweigh its initial outlay.

Exploring Real-World PDP Implementations

We have identified two *real-world* examples that validate the implementation and workings of the Project Delivery Platform in the industry. The case studies refer to PORTRAILS and INFRAWARE

corporations; they offer practical insights into the real-world implications of PDP implementation. The contrast between the two cases (one failed, one successful) stresses the criticality of considering both technical and human aspects when devising and effecting a Project Delivery Platform (PDP).

1. Failed PDP Implementation at PORTRAILS:

PORTRAILS, a logistics company, aimed to overhaul its project management by implementing a comprehensive PDP called the Rebirth Initiative. Despite heavy investments in cutting-edge project management software and training/certification for all project managers, PORTRAILS overlooked instilling the necessary mindset among their teams. This omission hindered the adoption of lifecycle methodologies, resulting in a disconnect between the software's potential and its actual use. Further, project managers resisted operational inputs during development, or any participation post-closeout.

The firm maintained a rigid organisational structure, causing misalignment among project managers and other departments. Ineffective communication channels, blurred lines of authority, and a focus primarily on technical aspects led to delays, conflicting priorities, and inadequate collaboration. Consequently, projects faced continual execution challenges, including delays and cost overruns (up to 70% of projects faced 25% overruns or more), and stakeholder dissatisfaction due to inefficiencies in decision-making and coordination. The lack of adaptability in structures and mindset exacerbated teamwork and performance issues, making it challenging to respond to unforeseen project changes.

In hindsight, PORTRAILS could have ensured success by *equally* emphasising the cultivation of the right mindset, adaptable structures, and fostering a collaborative culture, alongside technical enhancements. For instance, turf wars, it was rumoured, were rife among the Planning and Delivery entities. Neglecting the "Human Perspective" within the Project Delivery Platform notably impacted successful project execution, despite many significant investments in advanced tools and processes.

2. Successful PDP Implementation at INFRAWARE:

INFRAWARE (a firm specialising in warehousing infrastructure) successfully implemented its Project Delivery Platform, enhancing its strategy execution. The company aimed to improve project management aligned with strategic objectives, establishing a *thorough* policy framework governing project delivery. The firm invested in advanced project management software and tools, but more importantly, they emphasised nurturing a collaborative environment and adaptive structures—while aligning corporate culture with novel, Systems Engineering-based project lifecycle methodologies.

Thus, noteworthy efforts were made to revamp the organisational structure, enhance communication channels, and streamline decision-making processes across departments. INFRAWARE prioritised ongoing learning, skill development, and agility. They implemented feedback loops, adopted agile approaches (where appropriate), and incorporated governance regimens such as the gateway review process. This balanced approach ultimately led to improved project delivery timelines, reduced cost overruns, and increased stakeholder satisfaction—resulting in improved economics in their projects.

The successful implementation of INFRAWARE's well-balanced Project Delivery Platform (PDP) highlights the importance of integrating/aligning technical advancements with cultural adaptability. Addressing both human and technical aspects *simultaneously* led to improved project outcomes and overall success in project delivery, and to an increased probability to reach the firm's strategic goals.

3. Comparative Insights

In a nutshell, PORTRAILS' oversight of the human dimension significantly impacted their project success, whereas INFRAWARE's emphasis on culture and adaptability (i.e., "Human Perspective") alongside technical enhancements proved instrumental in achieving successful project outcomes. Indeed, the *proof* of a successful PDP implementation is in the improvements of project outcomes.

The PORTRAILS case study serves as a cautionary tale, showcasing the consequences of neglecting the human perspective within the PDP. It highlights issues such as overlooking mindset cultivation, organisational rigidity, communication problems, and the neglect of cultural adaptability. These lead to project execution challenges and frustrations among stakeholders—quite *undesirable* outcomes.

On the other hand, the INFRAWARE case study provides a positive example of successful PDP implementation. It emphasises the significance of integrating technical advancements with cultural adaptability, showcasing how a focus on nurturing collaboration (i.e., interactions and teamwork), adaptive structures, and learning culture led to better project outcomes and stakeholder satisfaction. The investment that was made in PDP implementation has yielded returns in the pursuit of strategy.

Survey of the Current Situation

A 2011 confined survey conducted in South Africa revealed that not every organisation involved in managing projects is enjoying an adequate Project Delivery Platform. This predicament, naturally, reflects on their respective overall project delivery performance (see Table 2 below). To put it in context, the surveyed entities were planning to deliver infrastructure and ICT projects worth R 53.7 billion over the next five years (from 2011 to 2015 or so), many of which might flounder and fail.

The survey firstly considered the PM Operating Model governing the Organisation (i.e., whether the entity surveyed is an *In-house Provider* of PM Capabilities, or merely a *Procurer* of such, or perhaps a *Supplier* of the same to other organisations, or even a *Contractor* managing suppliers of PM Capabilities on behalf of a client). Secondly, it sought to gauge the adequacy of the PM Infrastructure, by assessing each component at a time.

Moreover, by comparing the emergent capabilities with the prevailing project delivery performance of the surveyed Organisation, the extent to which the Project Delivery Platform (or lack thereof) affects project delivery was then established. It transpired from the survey analysis that project delivery outcome is *directly and significantly proportional* to the adequacy level (in alignment and extent) of the Project Delivery Platform within any organisation. The correlation cannot be denied.

The analysis has also confirmed that some organisations would score high on the scale of PM Technical Perspective (i.e., Processes and Procedures, Tools and Systems), but somewhat lag on the scale of PM Human Perspective (i.e., Skill Sets and Mindset, Structures and Interfaces). This resulted in such a skewed Delivery Platform that focused on the "Technical Axis", which makes it hard for those entities to ever ascend beyond Level 3 of the PM maturity scale. Yet, contrary to Levels 1 to 3 (*Ad Hoc, Repeatable, Defined*), both Level 4 (*Managed*) and Level 5 (*Optimising*) are more reliant on the "Human Perspective" of the delivery platform than on its Technical Perspective.

		PM del	Project Delivery Platform		ry		A-G)	
		۳Ş	Technical H		Human			
Organisation Surveyed		Organisatio Operating I	Processes & Procedures	Tools & Systems	Skills & Mindset	Structure & Interfaces	Project Delivery Performance	Rating (R-
01	Anonymous 01 (PM Consulting)	с	++	+	-	-	Advanced processes and procedures, supported by world-class tools and techniques. Good performance; yet, PM Human Perspective need improvement.	
02	Anonymous 02 (Infrastructure)	А, В	+	+	-	-	Facing challenges in finding the capacity or resources to start new projects, and to complete them all on time/budget; more "Human" maturity is required!	
03	Mogale City (Local Government)	в	+	+	+	+	Although a PD Platform seems in place, still challenged in terms of starting new projects and completing them "on time"; hence, not adequate	
04	Trans Caledon Tunnel Authority (Utility Company)	А, В	+	±	_	±	More focus is required on PM Skills and Mindset; more alignment is needed among PM Components; as a result, consistently meeting project delivery targets (e.g., time, cost) is generally a challenge	
05	Anonymous 03 (PM Consulting)	с, р	+	_	+	++	This Consultancy is rather focused on PM Human capabilities, not much on Tools and Systems; thus, performance is dependent on a Client's PM Maturity	
06	Anonymous 04 (ICT & Telecoms)	А, В	+	+	+	++	Well-structured in terms of PM functions, resulting in world-class performance; needs more functional integration (e.g., processes) to boost PM Delivery	
07	Anonymous 05 (Terminal Operator)	А, В	+	_	_	+	Better integration and investment in PM skills, Tools and systems are needed to improve overall PM Capabilities; or else PM Maturity to remain low	

PM Operating Model: (A) In-house Provider; (B) Procurer; (C) Supplier; or (D) Prime Contractor of PM Capabilities. Some organisations operate in a combined mode (A, B)

Table 2: Project Delivery Platform _ Survey Outcome (as of Feb 2011)

Conclusion

"As we look back over the past 23 years at IPA customers that have disappeared, all but one of them grossly overspent for their capital assets", Merrow (2011) laments—Poor project delivery can kill!

Adding to these concerns, GP Strategies reports alarming statistics: 64% of CapEx projects exceed their original budgets, with up to 30% of their expected value lost due to ineffective transition to operationalisation. Additionally, 73% of CapEx projects face delays beyond their initial schedules, and the CII found that only 5.4% of 975 industrial projects achieved "best in class" predictability in terms of cost and schedule (GP Strategies, 2016). The delivery of Large Infrastructure Projects remains in a precarious position.

However, no organisation aspires to mimic the salmon, or even the Australian social spider, which delivers only once and then dies. Considering the preceding discussions and the survey outcomes, it is safe to argue that organisations aiming for sustained success in project delivery must address the following points:

(a) *At the strategic level*: a clear strategy (that would be translated into project initiatives) and a documented policy or framework governing project delivery (Buttrick, 2000); and,

(b) At the operational level: an adequate Project Delivery Platform, which determines the delivery performance. Its four components (i.e., Processes and Procedures; Competencies and Culture; Techniques and Tools; and Organisational Structures and Interfaces) must be *aligned* with one another and with the organisation's PM portfolio.

While strategy formulation and implementation might fall in the province of senior executives, project personnel are generally at liberty to devise, recommend, and install the Project Delivery Platform of their choice. In particular, the Human Dimension of the platform must be sufficiently developed for "*it is people (in teams) who can get things done*". Any inappropriate, dysfunctional organisational structures will hamstring and frustrate even the greatest of expertise.

Organisations managing projects may only frown upon the notion of setting up an adequate Project Delivery Platform at their peril—for delivery will ultimately suffer, as most projects will tend to fail. Conversely, the adequacy of the emergent Project Delivery Platform will provide the right type, cycle, and throughput of project delivery; however, these good things cannot just happen!

Joe Meyer, EXXARO's former GM for the Grootegeluk Project (i.e., the R9 billion expansion of the Grootegeluk Mine to provide 15 million tons of coal to the 4,800-MegaWatt Medupi Power Station, South Africa) agrees as follows:

"From our experience, I fully agree with this view. We have found some lessons learned and adopted approaches that served us well. The first was to follow a gated process through all the phases of the project (e.g., we did not go to the next phase if the previous phase was not scope frozen and signed off). There were no shortcuts and no major changes in the next phase, just a clearer definition of what we wanted to achieve. Only implementing detailed approved construction drawings is serving us well in the manufacturing and construction phases. The disciplined approach of executing projects from the Project Management Execution Manual based on nine PMBOK knowledge areas is providing a lot of effective momentum in the execution."

Joe Meyer went on to argue that, "Selecting the right people cannot be overlooked. The HR team must not only look for the right competence but also ensure that the people you choose have the right personal profiles to enhance teamwork and to have the tenacity to drive for results and ensure a healthy high-performance culture". The latter assertion echoes the sentiments of Dr Cooke-Davies: *"It's People Who Get Things [i.e., Project Work] Done!"* (ditto)

Teamwork is important. As Patrick Lencioni maintains, "Not finance. Not strategy. Not technology. It is teamwork that remains the ultimate competitive advantage, both because it is so powerful and so rare [...] Trust is the foundation of real teamwork [...] It is an absolutely critical part of building a team. In fact, it's probably the most critical" (Lencioni, 2002). Should an organisation elect to outsource the management of its projects (be it in part or its entirety), the appointed Supplier or Contractor will need to provide them with a Project Delivery Platform that ties in and supplements the owner's "residual platform" by reflecting an extension of trust between the two entities. Any misalignment at that level would eventually affect the overall performance, as well as the outcome of projects.

Many organisations, sadly so, make the mistake of dismantling their Project Delivery Platform to depend solely and *sorely* on whatever is provided by the EPCM contractor—not only do they lose

leverage over the contractor in that case, but project delivery performance could indeed suffer, should the resulting Project Delivery Platform prove inadequate or simply misaligned to the client's organisational makeup, its PM Portfolio, or even its level of PM maturity.

Encouragingly, most surveyed organisations have established the foundational elements of a Project Delivery Platform. We anticipate their efforts to not only strengthen and advance each component but also to align them more effectively. Hence, we encourage the sceptics to follow in their footsteps.

However, the survey indicates that many organisations initially focus on implementing elements of the 'Technical Axis' $[\alpha - \alpha]$ before incorporating elements of the 'Human Axis' $[\beta - \beta]$. We recommend a concurrent development of both axes, with a priority on advancing the maturity of the 'Human Axis'. As the $[\beta]$ maturity increases, essential elements of the 'Technical Axis', such as standard processes, should then reinforce the delivery mechanisms. Reversing this sequence tends to limit organisations to Level 3 in their pursuit of higher maturity.

This article underscores the significance of a holistic (i.e., systemic) approach to project delivery. Successful project management does not rely solely on individual components (like managers or tools) but on the synergy and integration of these components within an efficient and effective Delivery Platform or system. Attention should be given to building a solid Delivery Platform or "system" that encompasses the necessary processes, structures, and methodologies to support and enhance project delivery across the organisation. An adequate "womb" or delivery infrastructure is imperative for improved project delivery; therefore, overlooking its significance jeopardises the organisation's success.

If the olden king of Scotland could dare say, "Nemo Me Impune Lacessit" [*No one attacks me with impunity*, Latin], then there are entities out there paying a heavy penalty for delaying or failing to establish an adequate Project Delivery Platform for their infrastructure projects. Such an *undesirable* situation could be remedied by implementing the recommendations put forward in this article. Thus, "*If you understand these things, how blessed you are if you put them into practice ...*" [John 13:17]

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About the Author



Pascal Bohulu Mabelo, *MBA, MSc (Industrial), BSc (Civil), Pr. Eng, Pr. CPM, Pr. PMSA, PMP*, has more than 25 years of professional experience and possesses a wide range of technical and managerial skills on large and complex infrastructure projects. He has worked in large infrastructure projects as a design engineer, project/programme manager, project consultant and project management executive. Pascal was honoured to serve as the national chairman of Project Management South Africa (PMSA), the leading Project Management professional association in Southern Africa.

Pascal has published the book: "Managing Engineering Processes in Large Infrastructure Projects" (Cambridge, 2021); he has also published, "How to Manage Project Stakeholders— Effective Strategies for Large Infrastructure Projects" (Routledge, 2020) and "Operational Readiness—How to Achieve Successful System Deployment" (Routledge, 2020). Through various other publications and journal articles, he assiduously promotes the application of Systems Thinking and/or Systems Engineering principles, concepts, and practices to unravel complexity in Large Infrastructure Projects (LIPs) to address their persistent risks of failure and their massive, even pernicious, cost and schedule overruns.

Pascal is currently a Director and Principal Consultant at E 6 Project Consulting or E6PC; for comments, further information, and clarifications he may be contacted at <u>Consult@e6pc.com</u>