

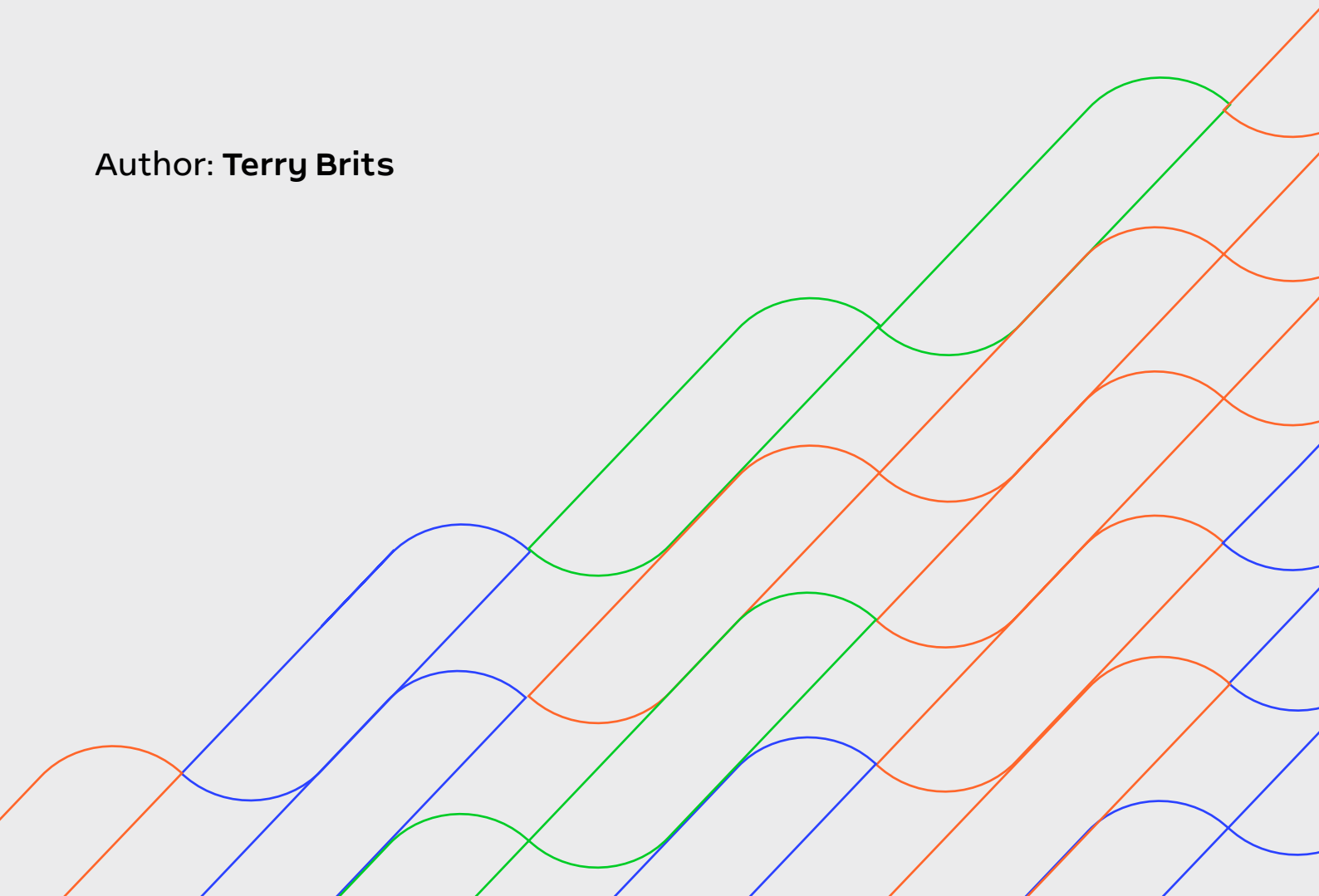


White paper

Unlocking the Path to Operational Excellence

**Strategies for Operational Readiness
and Project Success**

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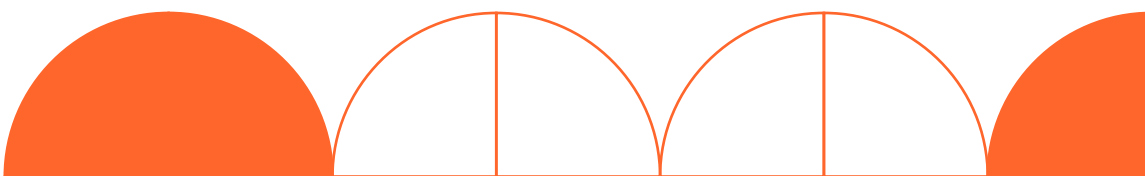
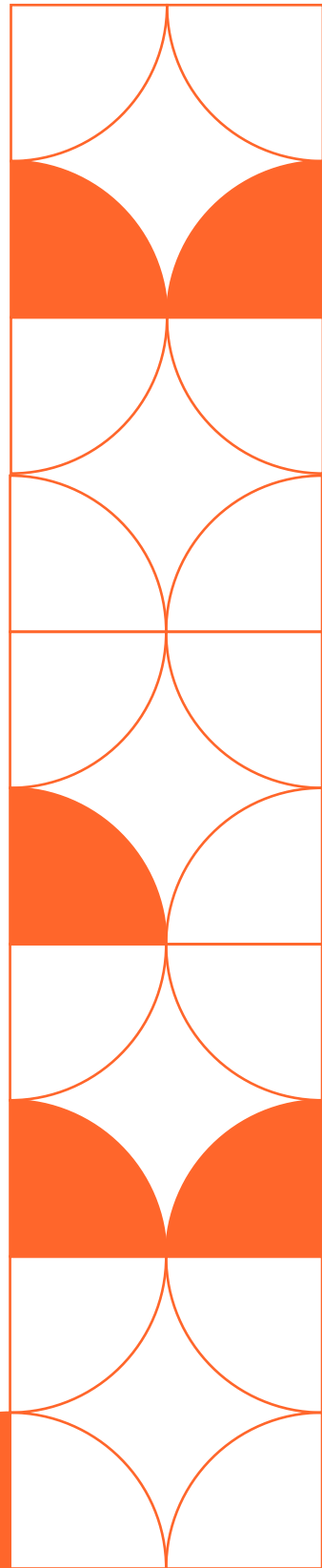
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Abstract

This white paper explores the concept of value leakage and the importance of operational readiness in maximising the value of a project. Value leakage occurs when the estimated net present value of a project is reduced over time due to actions or inactions by stakeholders. To unlock operational excellence, organisations must focus on three key parameters - people, processes and systems. Lessons from previous experiences highlight the importance of operational readiness planning, clear accountability and ownership, uniqueness factors, team integration, top-level structure, ramp-up plans as well as operational reporting and control. By prioritising operational readiness and implementing effective strategies, organisations can prevent value leakage, maximise project success and achieve operational excellence.



About the Author

Terry is a highly experienced professional with over 30 years of engineering and management experience in various industries. He has a proven track record of delivering successful resource projects in South Africa, East Africa and Australia. His expertise extends to a wide range of areas, including heavy industrial equipment development, project development, design management, plant construction, plant upgrade projects (including plant shutdowns), plant commissioning and maintenance.

Throughout his career, Terry has demonstrated his proficiency in system and process optimisation, plant design/upgrade management, project management, engineering management, new product development and operational readiness implementation.

Currently, Terry holds the position of Project Director - Delivery at Wave International. In this role, he oversees a portfolio of Implementation and EPCM projects for various ASX listed clients, leading a team of project managers and project engineers.

With his extensive experience in managing complex, multi-disciplinary, multinational projects, Terry brings valuable expertise to ensure the successful delivery of projects and the achievement of operational excellence for his clients.



Introduction

From feasibility assessments to operation, every stage of the project lifecycle plays a vital role in creating and preserving value. It has however been observed that the maximum value leakage on a project happens during the major transition point, from project execution to operation. This is commonly driven by two factors: Project execution efficacy and operational readiness (OR).

To expand further let us first understand value delivery. Value delivery refers to the process of maximising revenue whilst minimising costs in order to maximise returns on investment (ROI). NPV (Net present value) is a universal measure of project value and well understood in the industry. 'Value leakage' is the process of incrementally reducing the estimated NPV over time, due to a collection of actions or inactions by stakeholders and participants of a project, to ultimately deliver a project with a lower than anticipated NPV.

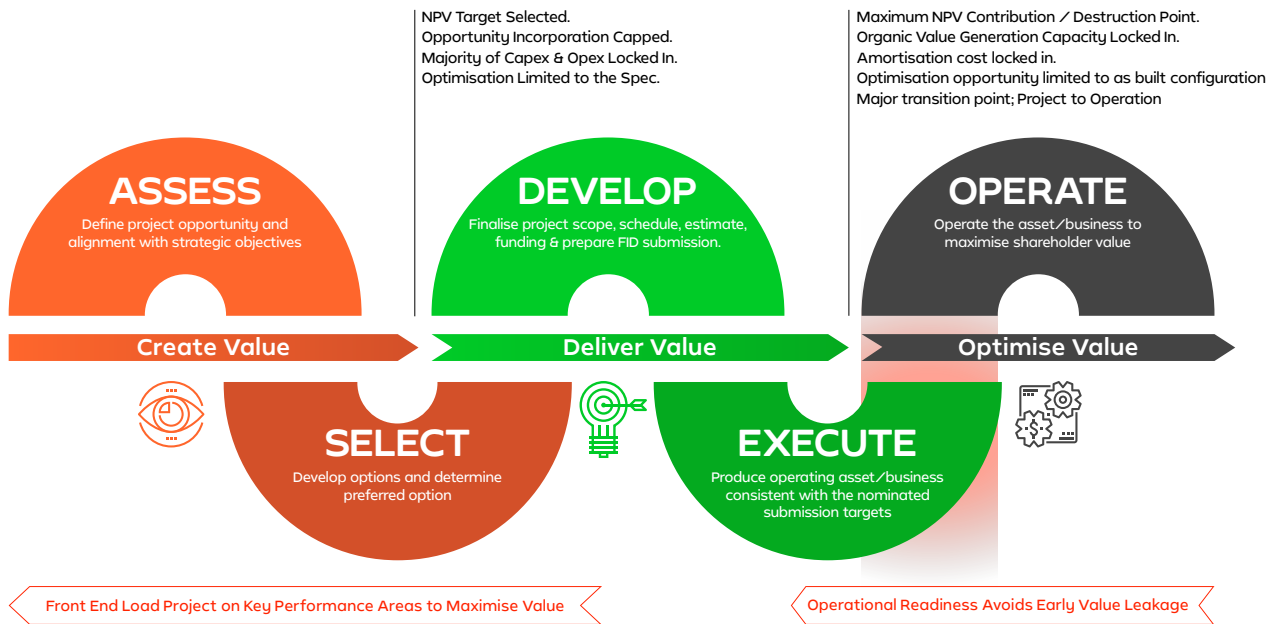


Diagram 1: Project Lifecycle – Value Maximisation

Time based cost is one of the biggest cost drivers and value leakage contributors. First year production start-up delays mean you're losing out on non-discounted profits which have the biggest NPV impact. Escalating project team cost due to slippage, accumulating interest on debt and paying for production capacity sitting idle during the delayed construction period all further leak value.

Similarly, if the production ramp-up is slower than planned, achieving only partial 'nameplate' at the set time, earnings reduces accordingly. This lost production will need to be made up either by investing in extra capacity (which comes with added costs) or by extending the ultimate production timeline, with associated cost, until the lost production is compensated. All without additional revenue from the same production output.

When value leakage occurs in the transition stage it could destroy up to 30 percent of the project value!

Therefore, it can be appreciated that the handover management phase is critical to retaining as much of the Net Present Value (NPV) of the project as planned, when considering the relatively short duration ramp up period compared to overall project lifecycle.

For the successful implementation of the project, it is vital to focus on analysing the project requirements, objectives and outcome expectations thoroughly. It is vital to firm up the scope and then crucially, stick to a well-defined project definition and plan. Incremental changes during the early design phases will result in a multitude of small impacts affecting the delivery and handover date. To avoid setting up the project for later stage value leakage, change control and operational involvement is key.

Protecting the scope and timeline of the project and preparing operations for handover are the key drivers to avoiding value leakage.

Value-Driven Project Optimisation

Building a strong Foundation for Project Health Upfront

Project execution efficacy is the symbiotic world where effective design meets efficient execution. It's no secret that poorly managed projects can be a massive drain on resources and cash. The saying that projects are "make or break upfront" rings true, as at the outset mistakes can lock in cost or exclude value that could perpetuate for many years, or even lead to a project's demise.

However, we believe it's not just about getting things right from the start but also building a strong foundation for project health. This starts with discipline and governance in ensuring that operational readiness processes are sufficiently covered throughout the early stages in order to minimise risk of value destruction later down the line. This includes moderated operational expectations and compliant design baselines.

Without a specific focus on involving operations in early design and operating philosophy definitions, can result to the remaining phases of construction, commissioning and ramp-up delivery having a higher chance of value leakage than the norm.

The high degree of uncertainty that accompanies operational readiness can often be mitigated, simply by identifying the challenges that the project faces and the impact that these challenges could have on the project. Understanding the challenges and their potential impact on capital projects provides an indication of the preventative measures required in order to ensure that the project retains the maximum NPV possible. It is often the case however, that these challenges and impacts are not accounted for or factored into the operational planning process or at handover in the development phases which negatively affects the return on investment.

These scenarios occur not because the operations team is unaware of the best practices for creating an operational readiness plan, but rather due to an under-appreciation of the operational readiness effort required prior to project handover.

Mastering the Three Key Parameters of Operational Readiness

By mastering the elements of project excellence, organisations can unlock the full potential of their projects. Organisations can leverage these areas to harness operational excellence and unlock the full potential of their projects by mastering the key operational readiness elements.

The first success parameter is People - As an organisation moves towards being more effective at managing its people through better understanding of what they want from their jobs and providing it in a way that helps them succeed, its chances for success increase dramatically. Retaining your 'first starters' and avoiding high staff turnover further has immense benefits in retaining project knowledge. A focus on people will be returned in multiples when your team builds cohesion and creates that 'can do' attitude.

The second success parameter is Processes - Processes are an important part of any organisation as they guide every action taken by employees across multiple departments. Streamlined processes prevent rework and augments efficiency. It also reduces the silo effect and training in these processes bridges the departmental divide required for process efficiency.

The third success parameter is Systems - Efficient systems will yield productivity and achieve high levels of adoption by staff. Eagerly accepted systems outperform enforced cumbersome systems every day of the week. Integrated, timely and accurate information breaks down silos and drives output efficiency. Having your systems ready, the process mapped across the systems and staff trained by the time of handover, will avoid early production leakage through efficiency and effectiveness.

The three key parameters of OR must always be in balance. Any imbalance between the three will usually be compensated for by effort from the people parameter, which is not a sustainable business model. Your best people will be the first to leave if their working environment does not support their efforts and your worst performers will hold the business performance at ransom (knowingly or unknowingly) with proprietary knowledge not embedded in systems and processes.

Maintaining continuity with ‘first starters’ and mitigating high staff turnover yields significant advantage in preserving project knowledge.

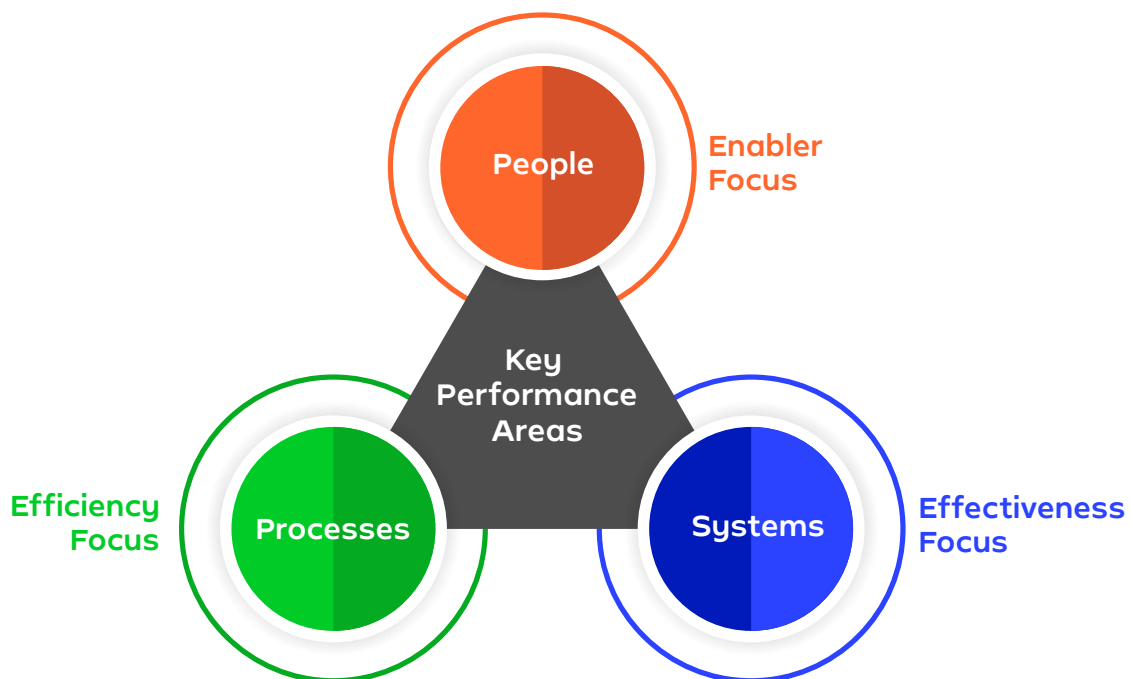


Diagram 2: All Key Performance Parameters are aimed at satisfying Project Objectives

Lessons Learnt: Transitioning from Execution to Operations

Moving from the Execute phase to Operate phase is a complex task, demanding meticulous planning and consideration. At Wave International, our proficient team has expertise in implementing effective systems that guarantee optimal results for our clients. In this section, let's delve into some valuable lessons we have learnt about the transition phase to operations.

1. Underestimating the Complexity of the Operational Readiness Planning

One of the common mistakes in the transitioning phase is underestimating the complexity of operational readiness planning. It is crucial to thoroughly assess and plan for all the operational requirements and ensure that the necessary resources, infrastructure, systems and processes are in place before transitioning to operations. Moderation of expectations between capital available and operational functionality is also strongly advised. Focused training will unleash the business potential of good processes and systems.

2. Defining Accountability and Ownership Within Projects

Define clear accountability and ownership within the projects. Assigning specific roles and responsibilities to team members ensures that everyone understands their roles and tasks during the transition and beyond, thus minimising confusion and enhancing efficiency.

3. Accounting for a Uniqueness Factor in Each Project

It is essential to recognise that each project is unique and may require tailored approaches during the transition. Considering the specific characteristics and requirements of each project assists in developing customised strategies, plans and processes that align with the project's objectives and ensures a smooth transition to operations.

4. Establishing Team Integration

Successful transition relies heavily on team integration. Bringing together individuals from various project teams and facilitating effective communication and collaboration is crucial. By fostering teamwork and breaking down silos, the transition process can be streamlined and knowledge transfer can take place more efficiently.

5. Structuring the Top Level Correctly

Structuring the top level of the operations team correctly is crucial for a successful transition. This involves identifying the key leadership roles and establishing clear reporting lines early on. Ensuring that the right individuals with the necessary skills and experience are in the right positions helps maintain a cohesive and well-functioning operations team.

6. Establishing Suitable Ramp-up Plans for the Project

A well-defined ramp-up plan is essential for a smooth transition from project to operations. This plan should outline the gradual deployment of resources, training programs and operational processes to ensure a seamless integration into the operational environment. This approach minimises disruptions and allows for smooth operations from the project start.

7. Timely Establishment of Operational Reporting and Control

Lastly, by implementing robust reporting and control systems early on, managers can effectively monitor performance, identify bottlenecks and ensure that operations are aligned with the project's objectives.

Based on the insights we have gained over the past few decades in the industry, we can simplify project scenarios and help optimise the three key parameters that determine success.

Conclusion

Operational Readiness Plans (ORP) cannot give new life to a “sick” project, but they can prevent a good project from becoming “sick”. Many organisations underestimate how long it will take to prepare an operational plan or underestimate how much effort defining accountability and ownership within their organisation requires, when setting up an ORP team structure. The majority of projects or businesses that lack an effective ORP, end up relying on good people to ‘get the job done’. This is a short term and unsustainable position as all knowledge transitions with those key individuals when they move on.

In conclusion, maximising and protecting value in a project requires a “front-end loaded” approach, with a focus on allocating key resources to key performance areas and high-risk areas. By prioritising these critical parameters, the project can ensure that resources are effectively utilised and potential risks are managed proactively.

Additionally, to prevent any value leakage during the handover process, it is essential to integrate the operational readiness effort with the project development effort. This ensures that the project is not only focused on delivering on time and budget, but also considers the long-term sustainability and operational effectiveness of the project.

By adopting this approach, organisations can optimise the value derived from their projects, while minimising risks and ensuring a smooth transition into operational phases. Ultimately, these practices contribute to the overall success of the project and help to deliver to expectation.



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