Pracademic Project Management: The Triage of Essential Project Skills for Stopping the Performance Bleeding By Dr. Dale S. Deardorff

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Abstract

Project success is based on finding the correct skill mix for project and program managers and leaders. These project representatives can run the gambit from baby PM's to senior level and experienced project managers. Additionally, there is a special breed of project manager that is moved from "fire" to "fire" to help provide stability and stop the proverbial performance bleeding on projects. These firefighting project managers have a set of 5 triage skills that they bring to a project which helps to immediately get things on track and headed in the right direction.

The 5 triage skills are: Situational Gap Analysis, Micro Planning, Conditional Decision Making, Evaluate Success and Information Flow. Used correctly, they can be very useful to put projects back on track. If ignored or used incorrectly, it can lead to both internal and external stakeholder melt down and revolt. The firefighting project manager is versed at using each of the skills identified with a level of expertise that makes them an invaluable asset to any organization. The best description of this would be someone referred to as a Project Triage Manager (PTM).

Keywords: Project Triage Manager (PTM), Project Triage Template (PTT), Project Summary Template (PST), Pracademic Project Management, Conditional Decision Making, Micro-Planning, Situational Gap Analysis, Evaluate Success and Information Flow.

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Introduction

The purpose of this paper is to provide an exploration of the professional skills demonstrated by the experienced "firefighter" project managers and the opportunity to create a triage process to increase project management effectiveness. The role of a project firefighter is very different from that of a traditional project manager. They can be referred to as a Triage Project Manager (TPM). Additionally, they specialize in situations that contain the following:

- Extreme level of urgency
- Major problem, issue or event that has happened which needs to be fixed or resolved
- Need for someone to step in and establish control of the situation thru movement,

displacement or adding people resources to "right the ship"

Thru the years, I have heard this situation described as a management opportunity or challenge. Usually this means that the original baseline, when the project started, is now obsolete. The planning and thinking that was originally used is not valid and the proposed cost estimates are "sunk costs" which will probably require the need to create a new project starting and project closing end date. You will need to get new money, and it will need to be authorized by your project sponsor and internal and external stakeholders.

The bottom line is there is a need for immediate change. This change falls into the following five steps from a triage perspective: *Situational Gap Analysis*, *Micro Planning*, *Conditional Decision Making*, *Evaluate Success* and *Information Flow* as seen in the diagram on the following page.

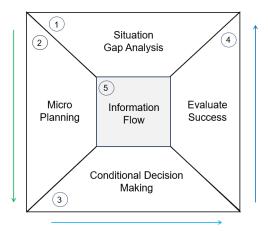


Figure 1.0: Project Triage Success Model (PTSM)

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Unfortunately, all five of these elements are needed on day one. The first step is usually to understand the situation and the performance gap. This diagnostic step requires the participation of team members, stakeholders and others who may or may not be open to sharing. As you can see, communication and information flow become essential from start to finish. If you have done a gap analysis, you understand your current state and your desired state. The way to move towards a positive direction will require complex decision making and planning the next steps.

Lastly, you will need to evaluate success and present that summary status to relevant internal and external project people. The triage flow we have just described requires multiple skills, thinking modes, perceptual mindsets and the formulation of socio-technical mindset (Larson, 2024) understanding the project connections and interconnections.

Project Management Triage

Every Project often encounters circumstances that necessitate the assignment of a new project manager (PM). This can occur when a project is in distress, when the current PM is reassigned to another initiative, or when they depart the organization. Seasoned project managers bring critical expertise, having typically navigated similar challenges in prior engagements. Difficulties can emerge from the outset, particularly if the initial project proposal, scope definition, or requirements analysis were insufficient or neglected. In such cases, the project may be fundamentally flawed from its inception, commonly referred to as a situation where "the cake is already baked", leading to execution constraints that make timely project closure almost impossible.

Compounding these issues, resource allocation may be inadequate or misaligned, with team members lacking the appropriate skills to complete assigned tasks and sub-tasks effectively. Budgetary limitations often emerge, especially when contractual obligations with the customer fail to reflect the actual cost of completion. Furthermore, unanticipated risks—so-called "unknown unknowns"—may manifest without the benefit of contingency planning, and project schedules may be developed using unrealistic or inaccurate time constraints. Under such adverse conditions, project management triage becomes a necessary intervention.

Project management triage is a systematic process that prioritizes tasks and issues based on their urgency and impact, similar to medical triage protocols (Kerzner, 2022). The objective is to identify and address the most critical risks and impediments first, ensuring efficient allocation of limited resources and maintaining focus on project viability. These scenarios often exceed the capacity of inexperienced personnel, necessitating the involvement of a Triage Project Manager (TPM), an experienced professional capable of stabilizing the project environment and initiating recovery efforts.

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Situational Gap Analysis

A situational gap analysis is a strategic diagnostic tool used to assess the disparity between an organization's current operational state and its desired future state (Bryson, 2018). The process involves three essential components: the Current State, the Desired State, and the Gap between them. This method provides a structured framework for understanding where the organization is, where it aims to be, and what must be addressed to bridge the divide.

- *Current State*: This element involves a comprehensive reflection on existing conditions, practices, and outcomes. A SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is frequently employed to identify critical internal and external factors affecting performance. Thorough documentation of the current state allows for a granular understanding of the causes behind project or organizational deficiencies.
- **Desired State:** Sometimes referred to as the future state, this phase requires envisioning the optimal conditions or performance outcomes the organization seeks to attain. It involves articulating clear, achievable objectives based on an informed projection of success factors and solutions to existing problems.
- *Gap*: The gap represents the measurable difference between the current and desired states. It encapsulates the deficiencies in knowledge, processes, resources, or strategic alignment that must be addressed. Identifying this gap enables the development of targeted plans, interventions, and improvements necessary to achieve the envisioned future state.

A situational gap analysis provides a foundational tool for strategic planning, particularly in complex or failing projects, by enabling the formulation of actionable, evidence-based recovery strategies.

Micro Planning

Triage project management is characterized by urgent, complex, and often distressed project environments which necessitates a high degree of agility, responsiveness, and control. Within such contexts, micro-planning, the practice of developing highly granular, short-term task plans emerges as a critical tool for stabilizing project activities enabling precise execution under pressure.

Micro Planning is the detailed, short-term planning of activities, resources, and tasks within a project, program, or organization. This allows a Triage Project Manager (TPM) to break down broad strategic or macro-level plans into highly specific, actionable components. Micro planning

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is essential for operational control, ensuring that daily and weekly tasks align with larger objectives and are executed effectively.

Micro-planning focuses on decomposing deliverables into daily or even hourly tasks, allowing for short feedback loops, rapid course corrections, and incremental value delivery (Turner & Müller, 2005). For triage project managers tasked with regaining control of failing or delayed projects, this level of granularity offers a tactical advantage. It enables managers to identify bottlenecks early, allocate resources with precision, and respond to emerging risks in near real-time.

According to the *Project Management Institute (PMI)*, micro planning is a subset of project planning that includes the development of task-level schedules, resource assignments, and performance baselines for immediate execution and monitoring (PMI, 2021). Key characteristics include:

- Task-Level Detail: Specifies "who does what, when, and how."
- Short Time Horizon: Often focuses on daily, weekly, or bi-weekly intervals.
- **Resource Allocation**: Assigns labor, equipment, and materials to tasks.
- **Dependency Tracking**: Maps task dependencies to prevent bottlenecks.
- **Measurable Milestones**: Defines precise deliverables and success criteria.

The advantages of micro-planning are that you can create an easy to understand visual representation of what needs to be right now. One of the primary benefits of micro-planning is its capacity to restore project cadence. In distressed projects, momentum is often lost due to missed milestones, unclear roles, or systemic confusion. Micro-planning re-establishes discipline through well-defined micro-tasks and measurable outputs, creating a sense of progress and psychological ownership among project team members (Anantatmula, Shrivastav, 2012). This may mean that you're in a position where you need to nudge others along at a pace they are not accustomed to. You must create a sense of urgency and demonstrate it for others with your actions and behaviors.

Additionally, micro-planning enhances decision-making clarity by isolating variables within tightly scoped timeframes. This aligns well with conditional decision-making techniques previously discussed. When paired, these methods allow triage project managers to reduce cognitive overload and focus attention on immediate, actionable issues. In effect, micro-planning acts as a buffer against strategic ambiguity by foregrounding short-term execution while still supporting long-term recovery objectives.

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Another critical advantage is the ability to rebuild trust with stakeholders. In failing projects, stakeholder confidence is often eroded due to missed deadlines or communication breakdowns. By using micro-planning to deliver consistent, observable outcomes, even at a small scale, project leaders can demonstrate evidence of control and progress, thereby re-establishing credibility (Pinto, Slevin, 1988).

Finally, micro-planning supports adaptive learning within the team. Because tasks are small and feedback is immediate, teams can experiment, learn, and improve continuously. This iterative process is aligned with agile principles and supports a culture of responsiveness essential in triage scenarios (Highsmith, 2010).

Conditional Decision Making

In high-pressure project environments, particularly within the domain of triage project management, the ability to make rapid, clear, and accurate decisions is paramount. Ineffective or delayed decision-making can result in cascading failures, where one poor decision begets another, and critical momentum is lost. In some cases, project degradation occurs not because of erroneous decisions but due to the complete absence of decisive action. Often, this is rooted in a lack of systemic understanding, specifically, the operational or organizational frameworks within which the project is executed (Kerzner, 2022).

In dynamic contexts, an initial decision may prompt a series of subsequent, interdependent decisions, creating a phenomenon commonly referred to as *decision paralysis*. This state often results in incremental, hesitant progress, colloquially described as taking "baby steps" to complete tasks. To enhance efficiency and mitigate cognitive overload, project managers can employ conditional decision-making techniques grounded in structured logic.

Incorporating conditional logic such as "if-then," "and," and "but-if" formulations allows project managers to recognize relationships between options, constraints, and contingencies. By applying six foundational conditional structures, decision clarity and response agility can be significantly improved.

These are:

- *No* A definitive and non-negotiable denial. This response signals that the decision is resolved with finality.
- *No and* A firm rejection that introduces subsequent consequences or decisions.
- *No but-if* A conditional denial that may be reversed if specific criteria are met, indicating a potential shift to a "yes" under modified circumstances.
- *Yes* A definitive and unambiguous approval.

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- Yes and An affirmative decision that includes endorsement of additional related actions or elements.
- Yes but-if A qualified approval contingent on the fulfillment of specific conditions; absent these, the answer may revert to "no" or require renegotiation.

These statements serve not as binary logic expressions but as tools to navigate complexity, uncertainty, and organizational risk (Hillson, Simon, 2020). Unlike simple propositional logic or binary "if-then" scenarios, these conditional statements represent a form of cognitive scaffolding. They support not only choice evaluation but also decision clarification and assimilation of new data into pre-existing knowledge structures. According to Piaget (1977), assimilation involves integrating new experiences into established schemas, thereby enhancing comprehension and enabling adaptive responses.

Moreover, traditional complex decision-making models often rely on quantitative ranking or scoring systems to evaluate multiple options based on weighted criteria. While useful for analytical rigor, such models may neglect the interpretive and contextual dimensions of decision-making, especially when time is constrained or the system is fluid. Conditional decision-making, in contrast, provides a structured yet flexible approach that emphasizes contextual adaptation, collaborative negotiation, and cognitive coherence.

In summary, conditional decision-making equips triage project managers with a responsive, adaptive toolkit that acknowledges both the complexity of modern project environments and the cognitive frameworks that shape managerial judgment.

Evaluate Success

When a Triage Project Manager (TPM) is required to provide status, realistically they need to be able to present the following 6 key information areas. These are easily identified in the Project Triage Success Model (PTSM).

Schedule Status – The realistic Project close date, major milestones and any critical tasks or subtasks should be identified and best guess firm dates provided. The traditional SPI (Schedule Performance Index) data is inaccurate and only indicates that you're behind a schedule baseline. You need to focus on the future, not the past.

Cost Status – The cost estimate for the entire project needs to be identified. This may have been created previously in the proposal phase of the project and the project initiating phase. However, you now need a clear accurate view of the final estimated project costs so that you can request a project reserve or management reserve to cover the cost of overrun tasks required to move forward.

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Technical Obstructions – All projects have some level of technical challenges. These can sometimes not appear until you are executing a project and may have never been identified or considered previously. You also need to review the technical challenges you have ahead of you and provide an estimate of High, Medium or Low in a ranking for them. This is different from the Red, Yellow and Green (R,Y,G) dashboard color for each of the six summary template areas. You can have "High" technical challenges and be "Green" in the dashboard because the technical obstruction is fully understood, staffed appropriately and have the time and funding in the project plan and schedule to complete it.

People Resources – Most projects are based on a matrix structure and require the ability to move critical people resources into the correct positions to optimize their use. The problem occurs when the same person is required in multiple places or projects at the same time. Many times, a project requires a person the organization does not have or needs to hire. In this situation, the project could be on a day-for-day hold until that specific people resource is located and available. You should identify these people as identified in the Project Success Template (PST) section for People Resources.

Quality Constraints – The original quality constraints on a project are required for verification and validation. They also determine what must and shall be delivered per contract versus what would be nice to have. These quality constraints may need to be changed, modified or tailored depending on the changes required. The template allows you to identify the quality areas and constraints that need to be updated.

Overall Project Risk – The overall project risk should be a summary identification of the major project risks, the owner(s) and a high, medium or low indication for each one.

Additionally, there is a red, yellow or green indicator for the project risks. If there are show

Additionally, there is a red, yellow or green indicator for the project risks. If there are show stoppers, this section of the chart should be red. If there are no show stoppers, it should be green and if there are certain risks with concerns, it should be yellow.

Each of these areas can have additional sheets of information and details available. The easiest way to provide a visual dashboard or summary snapshot is to use the Project Triage Summary Chart seen below:

Project Owner: P	Project Name:		Date:	
Schedule Status	(R,Y G)	People Resources	(R,Y G)	
Project Close Date:		People Constraints:		
Critical Milestones Dates:		Critical SME Needed:		
Critical Tasks Dates:		External Supplier Challenges:		
Critical Sub-Tasks Dates:		Additional People Needed:		
Cost Status	(R,Y G)	Quality Constraints	(R,Y G)	
Estimated Project Cost:		Quality Challenges:		
Estimated Project Overrun:		Reliability Challenges:		
Estimated Project Reserve:		Verification Challenges: Requirements Challenges:		
Technical Obstructions	(R,Y G)	Overall Project Risk	(R,Y G)	
Technical Issues Name: Technical Issues Status (High, Med, Low): Critical Issue Owner:		Project Risk Name: Project Risk Status (High, Med, Low): Critical Risk Owner:		

Figure 2.0: Project Triage Summary Chart

The chart example above has been provided to create an example of the elements required. You tailor it to your organization's needs and should have an additional follow on page for each of the main headers to provide elaborated details and status. You need to be able to be positive but realistic creating and optimistic environment.

Information Flow

Information flow is critical to the success of any project. When a project encounters issues or begins to deviate from its planned trajectory, the importance of accurate, timely, and structured information flow becomes even more paramount. Within the *Project Management Triage Model* (PMTM), information flow is positioned at the center, surrounded by four interrelated elements. Each of the other four elements of the model, which are communication, collaboration, decision-making, and execution interacts through the conduit of information flow.

In the context of project management, information flow refers to the systematic and structured exchange of necessary data among project team members, internal and external stakeholders, and other involved parties. This exchange includes the processes of collecting, sharing, storing, and applying critical project information. The ultimate goal is to support effective communication, foster collaboration, and enable informed decision-making throughout a project's life cycle. There

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are a few observations I have made over the years which I think are valid. The term "Go Ugly Early" (Sefton, 2025) is one where if there is bad news don't hide it. Be transparent and honest rather than waiting until the last minute to share with others. You need to find your voice and speak up.

The following components highlight key aspects of effective information flow:

- *Effective Communication*: This entails clearly identifying communication objectives, understanding the audience, crafting concise and relevant messages, selecting appropriate communication channels, actively listening, and incorporating feedback mechanisms (Project Management Institute [PMI], 2021).
- *Effective Collaboration*: Successful collaboration relies on open communication, well-defined roles, and a culture of mutual trust. It emphasizes respectful engagement with diverse perspectives and continuous feedback. Tools such as collaborative platforms and structured feedback loops enhance shared understanding (Kerzner, 2022).
- *Effective Decision-Making*: Decision-making is a structured process that begins with identifying the issue, gathering pertinent information, evaluating alternatives, selecting the optimal solution, implementing the decision, and reviewing potential outcomes. A data-informed approach ensures robust choices and reduces uncertainty (Schwalbe, 2022).

Information in project environments is often conveyed through verbal (spoken or auditory), non-verbal (written, digital, or printed), and cognitive (conceptual or interpretative) means. Given the high volume of emails, phone calls, messages, and meetings encountered daily, a project manager must establish and adhere to efficient communication systems. Each day demands the accurate dissemination of planning instructions, schedules, and updates—based on inputs received from various contributors.

A well-functioning project depends on aligning people, resources, and activities: getting the right people, in the right place, at the right time, doing the right task. Any breakdown in communication or misunderstanding can lead to substantial project setbacks. Consider the following illustrative examples:

1. A project team is scheduled to conduct a test at 6:00 a.m. at a remote location. Due to ambiguous communication, some team members mistakenly arrive at 6:00 p.m. This delay not only disrupts the schedule but could also incur significant cost and logistical consequences.

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2. A concrete mixture specification is miscommunicated: a required ratio of 2 parts sand to 4 parts aggregate with a 20% water content is incorrectly relayed. As a result, the concrete is mixed, poured, and allowed to cure, only to discover it lacks structural integrity. This error, originating from a small breakdown in information flow, results in wasted resources and potential reputational damage.

Such scenarios underscore the essential role of information flow in mitigating risks and ensuring project integrity. Inaccurate or incomplete information, no matter how minor, can escalate into project failures if not properly managed.

Conclusion

The concept of triage project management represents a paradigm shift in how failing or critically challenged projects are managed. Unlike conventional project management practices that focus on planned execution within predictable boundaries, triage project management (TPM) confronts unforeseen complexity, urgency, and systemic disruption with a targeted, adaptive, and diagnostic framework. The Triage Project Manager, often referred to as a project "firefighter," is equipped with a distinct set of skills and competencies that enable rapid stabilization, informed prioritization, and strategic recovery efforts when traditional project structures have broken down.

The Project Triage Success Model (PTSM) outlined in this paper articulates a five-part approach consisting of: (1) Situational Gap Analysis, (2) Micro-Planning, (3) Conditional Decision Making, (4) Evaluation of Success, and (5) Information Flow. Each of these components interconnects to form a coherent, responsive methodology essential for navigating high-risk, time-sensitive project crises. Unlike the linear, plan-driven frameworks typically endorsed by project management standards (PMI, 2021), the PTSM supports dynamic, real-time decision making within ambiguous and volatile environments.

A situational gap analysis forms the diagnostic foundation for any triage intervention. By identifying the difference between the current and desired states, project leaders gain actionable insights that can be used to refocus objectives, reallocate resources, and reformulate deliverables. This step is critical in understanding the scope and scale of the crisis and is supported by well-established strategic planning methodologies (Bryson, 2018). The importance of this diagnostic stage cannot be overstated.

Micro-planning is the tactical countermeasure to project disorder. As a methodology, it breaks apart macro-level strategies into manageable, short-term objectives that allow for immediate execution, and rapid feedback. Micro-planning has particular utility in re-establishing the project cadence, ensuring resource precision, and restoring stakeholder confidence. As emphasized by Turner and Müller (2005) and Highsmith (2010), micro-planning aligns closely with agile principles, promoting adaptability and operational clarity.

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Closely aligned to micro-planning is conditional decision making, a cognitive and procedural mechanism that helps TPMs manage complexity and uncertainty. Unlike traditional binary or ranking-based decision frameworks, conditional logic, embodied in the six "Yes/No/And/But-If" structures that support nuanced negotiation, contextual understanding, and clarity in the face of dynamic variables. Drawing on decision theory and cognitive development research (Hillson, Simon, 2020; Piaget, 1977), conditional decision-making enables triage project managers to avoid decision paralysis, mitigate cascading failure, and make progress through structured flexibility.

The evaluation of success in triage scenarios requires rethinking conventional metrics. Standard tools such as the Schedule Performance Index (SPI) or Earned Value Management (EVM) may lose relevance when project baselines are no longer valid. The PTSM encourages Triage Project Managers to adopt a forward-looking approach that accounts for evolving schedules, recalibrated cost estimates, resolving technical obstructions, and resource constraints. The inclusion of a Project Triage Summary Chart facilitates real-time visualization of progress, risk, and resource deployment, offering a practical communication tool for engaging stakeholders and sponsors.

At the core of all these triage mechanisms is information flow. Positioned centrally within the PTSM diagram, information flow acts as the operational conduit through which communication, collaboration, decision-making, and execution are enabled. Accurate, timely, and structured information which supports both vertical and horizontal coordination across project teams, contractors, and stakeholders. As demonstrated by real-world examples, even minor failures in communication, such as mistimed schedules or misunderstood technical specifications which can blow up into costly errors and missed deliverables.

Finally, triage project management offers a rigorously structured yet flexible response to project crises. By integrating situational analysis, granular planning, structured decision logic, real-time evaluation, and robust communication, Triage Project Managers are able to reclaim control of failing initiatives and lead them to recovery. This model not only addresses the technical aspects of project recovery but also emphasizes the socio-technical systems that underpin effective organizational behavior, decision-making, and learning. For practitioners operating in complex, high-stakes environments, the triage approach provides a scalable, adaptive framework that enhances both resilience and effectiveness in project delivery.

References

Project Management: A Socio-Technical Approach, A. E. Larson, C. Gray, P. Sirisomboonsuk, (2024) McGraw-Hill, New York, NY.

Pracademic Project Management: The Triage of Essential Project Skills for Stopping the Performance Bleeding By Dr. Dale S. Deardorff

- Bryson, J. M. (2018). Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement (5th ed.). John Wiley & Sons.
- Kerzner, H. (2022). Project management: A systems approach to planning, scheduling, and controlling (13th ed.). Wiley.
- Project Management Institute (PMI). (2021). A guide to the project management body of knowledge (PMBOK® Guide) (7th ed.). Newtown Square, PA: Project Management Institute.
- Schwalbe, K. (2022). *Information technology project management* (9th ed.). Cengage Learning.
- United Nations Development Programme (UNDP). (2009). Planning for results: Practical tools for planners and implementers of development programs. Retrieved from https://www.undp.org
- Hillson, D., & Simon, P. (2020). Practical project risk management: The ATOM methodology (3rd ed.). Berrett-Koehler Publishers.
- Piaget, J. (1977). The development of thought: Equilibration of cognitive structures. Viking Press.
- Turner, J. R., & Müller, R. (2005). The project manager's leadership style as a success factor on projects: A literature review. *Project Management Journal*, 36(1), 49–61. https://doi.org/10.1177/875697280503600106
- Anantatmula, V., & Shrivastav, B. (2012). Evolution of project teams for Generation Y workforce. *International Journal of Managing Projects in Business*, 5(1), 9–26. https://doi.org/10.1108/17538371211192874
- Highsmith, J. (2010). Agile project management: Creating innovative products (2nd ed.). Addison-Wesley.
- Pinto, J. K., & Slevin, D. P. (1988). Critical success factors in effective project implementation. Project Management Journal, 19(3), 67–75.