Rapid Alignment Initiated Delivery®

A Blueprint for Enhancing Construction Project Delivery in New York State

Frank X. Dar Conte R.A. 1, F.H. (Bud) Griffis PhD. P.E. 2, Andrew Bates PhD. 3

1 Adjunct Professor, PhD. Candidate, Department of Civil and Urban Engineering, NYU Tandon School of Engineering, Six MetroTech Center, Brooklyn, NY 11201; email: fd508@nyu.edu

2 Professor, Department of Civil and Urban Engineering, NYU Tandon School of Engineering, Director of New York Resiliency Institute of Storm and Emergencies, Six MetroTech Center, Brooklyn, NY 11201; email: griffis@nyu.edu

3 Professor, Department of Civil and Urban Engineering, NYU Tandon School of Engineering, Six MetroTech Center, Brooklyn, NY 11201; email: andrew.bates@nyu.edu

ABSTRACT

The formulation of a consistently effective project delivery method remains as elusive for the New York State public sector owner today as it did 100 years ago. An appropriate stakeholder alignment process, if defined and adopted for the public sector owner, can result in (or lead to) significant improvements to construction project outcomes. Utilizing a mixed methods research design, this study investigated the theoretical underpinnings and interdependent relationships of high performance project delivery teams and enhanced project outcomes. The examination created an applied research platform that facilitated an understanding of stakeholder alignment strategies and behavioral constructs that are integral to highly successful project outcomes. Through the case study evaluation of a Mission Critical Cannot Fail (MCCF) project, six Stakeholder Alignment Proposition Elements (SAPEs) are identified as absolute process requirements for team alignment and project success.

The development of an assessment technique to understand the depth of the delivery team’s potential to function as a high performance project team is presented along with practical recommendations for improving team alignment. The resulting model is termed Rapid Alignment Initiated Delivery® (RAID), where the point of departure for its implementation is to treat each complex building program as if there is “no option for failure”. The key to the successful implementation of RAID is to keep the focus on delivering client value whenever deciding on risk management and strategic planning options. The project team is driven by Being True to the Work, the message that puts project interests ahead of individual interest.

Keywords: stakeholder alignment, mission critical cannot fail project, project delivery
INTRODUCTION

Several years have passed since the original research proposal was offered with a mindset that there had to be a more effective way to deliver the public sector capital construction program in New York State. At the onset, the research objective was to investigate how the adoption of alternative project delivery methods (ADMs) might benefit the public sector owner. Given the limitations of public policy, statutory requirements, and a political landscape muddied with uncertainty, a best value contract award mechanism for the public sector construction project has become increasingly unlikely. The resulting climate creates a critical need to focus on improving the existing paradigm with new tools and protocols to leverage change.

The investigation worked its way towards defining and structuring a project delivery process that supports a high performance team tasked with producing a better outcome, not only for the project owner, but for each of its primary stakeholders. The undertaken research suggested the need to develop a theoretical basis for construction project delivery, one in which the private and public sector owner can embrace as an essential understanding of how and why certain strategies build effective project delivery teams, and lead to successful project outcomes. This paper aims to provide a blueprint for any project owner, public or private, to build an effective project delivery team that can consistently produce successful project outcomes.

Modeling Rapid Alignment Initiated Delivery®

Supported by an array of social and behavioral constructs and theories, Rapid Alignment Initiated Delivery® (RAID) is introduced as a change management tool to improve process and the effectiveness of the project delivery team. RAID offers a systems thinking approach to the formation of a high performance project delivery team, where the Stakeholder Alignment Proposition Elements (SAPEs) are interdependent of one another and intrinsically linked to a defining feature of the delivery process, a Mission Critical Cannot Fail (MCCF) construction program. By applying a systems methodology to the building of a conceptual model of RAID, the multiple linkages of the SAPEs are represented as generically being in balance. RAID simply speaks to the pathways required to improve the effectiveness of the project delivery team through the recognition and alignment of each of the SAPEs under the pre-condition of a MCCF criteria. The alignment (or misalignment) of the primary stakeholders represents the principal social and behavioral mechanisms by which project level engagement does (or does not) occur and therefore, must be the central focus of the model’s behavioral and structural dimensions. Along the behavioral dimension, stakeholder alignment is a product of systems level: ethical behavior; integrated relationships founded on strong communications and information sharing; sustained visible leadership where trust and decision making is grounded in ethical behavior and accountability; equitable risk and conflict resolution; and capabilities and competencies. The structural dimension includes the interdependency of the SAPEs and the project team members where individual goals and expertise come together as a seamless organization and work flows serve as value added propositions resulting in highly successful project outcomes.

Treating each building program as a MCCF project is not a well-developed concept in AEC industry practice. This requires the delivery team to strip away unproductive tasks and focus on the critical stakeholder alignment factors (CSAFs) that facilitate achievement. Achievement is based on effort, but achievement is also based on a targeted, aligned focus where desired outcomes can only come about if the primary stakeholders are willing participants. The research findings and experience suggest that this is not readily accomplished. In doing so, the public sector owner
can move past the shortcomings of a traditional design-bid-build (DBB) methodology by adopting a comprehensive delivery approach that integrates all of the CSAFs, supporting a Best Value Alignment Process.

Model Description

The RAID model presents six dimensions, or ingredients, that impact project success, and serves as the blueprint for building a high performance project delivery team. The model diagram (Figure 1) is intended to convey the interconnectedness or interdependencies of the SAPEs, where changes to one element will prompt a change in the other elements. The framework serves as a guide and evaluation tool intended to convey the interconnectedness and interdependencies of the SAPEs. The model is based on the theory that for the project delivery team to perform well within a MCCF project environment, the six SAPEs need to be aligned and mutually reinforcing. The model asserts that transformational change to the delivery process is about the relationships between the six SAPEs. Analysis is conducted within a system thinking paradigm where the model proposes six interconnected dimensions by which the project delivery process is measured. The model can be used to help analyze the pre-construction phase team alignment and a proposed future team alignment, and identify gaps between them. It is then a matter of adjusting and fine tuning the elements of the RAID model to ensure that the project delivery team functions as a high performance team throughout the construction delivery process.

Figure 1  Rapid Alignment Initiated Delivery®  The RAID Model
Model Behavior

The RAID Model provides a framework for the public sector owner to think about the project delivery process, and the potential effectiveness of the delivery team as a system. The model is based around the theory that for the project team to perform well and achieve the project objectives, all six SAPEs must be in balance and contributing to the effectiveness of the delivery effort. This suggests that the model’s elements should be continuously evaluated and managed throughout the project management life cycle. The diagnostic evaluation forces practitioners to move beyond "hard systems” or traditional operational tasks such as procurement, time management and cost, and evaluate the “soft systems" – with a focus on human factors or social and behavioral constructs including team integration, organization culture, risk allocation, ethical leadership, and the alignment of stakeholder interest.

Operating at the system level doesn’t require strict alignment or equal weight for every aspect of the stakeholder alignment proposition elements, but does require the project team to be mindful of the whole. The project owner that ignores the aspects of the interconnectedness of the SAPEs can put project execution at risk. Subsequently, the shape of the model suggests there is no implied starting point or hierarchy for RAID, though the possibility of single variable dominance is plausible. While it isn’t obvious which of the SAPEs will have the most impact on team or process alignment for any one project, it is suggested that ethical behavior is a critical component that should be present throughout the delivery team and process.

To gain a better understanding of the conceptual framework that defines Rapid Alignment Initiated Delivery®, each of the elements are explored in – depth. The SAPE exploration begins with ethical behavior; ethical behavior is connected to the study’s initial propositions and underlying theoretical constructs. This interconnection of the study’s propositions, with their theoretical underpinnings, define the structural requirements of a Best Value Alignment Process.

I. Ethical Behavior

Ethical behavior is characterized by honesty, fairness, and equity in relationships. Two major categories of factors influence ethical behavior: organizational behaviors and individual characteristics. Organizations through its leadership can influence individuals' perceptions of ethical behavior by creating a culture that advocates and demonstrates ethical behavior. Leaders that display ethical behavior are likely to inspire trust. Ethical behavior demonstrates that team leadership is interested in putting forth attributes such as transparency, accountability, and fairness that subordinates are likely to replicate. Within the RAID model, each of the stakeholders are personally accountable for their actions and have a shared responsibility to support and operate as a cohesive, integrated team. Failure to act in an ethical manner undermines the integrity of the entire delivery process, whether a project is delivered privately or publicly.

II. Clearly Defined Goals & Objectives

Clearly Defined Goals and Objectives are statements that describe what the project team will accomplish, or the business value the project will achieve. Goal setting involves the project team’s conscious process of establishing levels of performance necessary to obtain outcomes. Goal Setting Theory serves as the theoretical underpinning for this study’s strategic vision, which incorporates the MCCF performance benchmark. A MCCF project requirement is conveyed amongst the project’s primary stakeholders to ensure a setting of the highest standards, a sense of urgency, and stakeholder accountability.
This SAPE requires a different mindset associated with most projects. The owner has a primary objective to procure the best project for the lowest possible price. The constructor’s objective might be seen to conflict with this objective in that the constructor aims to make as much money from the project as possible. To reconcile this conflict, the owner must balance its goals and objectives with that of the constructor. The study’s results suggest that the constructor will automatically embrace the owner’s objectives if they include a fair and reasonable profit for the constructors coupled with prompt payments, and ethically supported negotiations of change orders.

III. Sustained Visible Leadership
Project success depends in large part on Leadership. Sustained Visible Leadership includes several components. The visible leader sets a clear vision for the project, creates a tone for engagement, actively discusses the path to accomplish goals and objectives, aligns the team agendas, and balances stakeholder interests. Experience tells us that contractors respond to positive leadership. The visible leader recognizes and promotes an ethical framework for which the project delivery team conducts its business. Sustained visible leadership requires ethical leaders. If leaders are ethical, they can ensure that ethical practices are carried out throughout the organization. Leaders are naturally in a position of influence, so ethical leadership must focus on how this influence is leveraged in the decisions and actions they take. Leaders are responsible for how they influence their organizations to perform actions, complete tasks, and behave in certain manners. By demonstrating ethical leadership, a sense of trustworthiness encourages team members to accept and follow the vision to obtain the project goals and objectives.

IV. Demonstrated Competencies and Capabilities
Demonstrated Competencies and Capabilities lead to excellence in project team performance. A demonstrated competency is defined as the appropriate experience and capability; this is evidence of the project stakeholders’ ability to complete projects of similar size, scope, or complexity. The old expression that a workman is only as good as his tools resonates when constructing a MCCF program. Early identification of team competency and capability levels facilitates the risk management and strategic planning efforts.

V. Relationships and Integrated Teams
Integrated Teams include the primary stakeholders (Project Owner, Design Consultants and the Constructor) working together in the best interest of the project. No matter the project delivery method, the arrangement should support an interdependent, team-based approach to the work. The private sector has long recognized the significance of stakeholder relationships. Why? As people get to know and feel comfortable with each other, empathy for each other’s point of view can evolve (Griffis and Bates 2004).

VI. Equitable Risk Allocation
The allocation of risk in the construction industry is often a controversial process, with each party attempting to avoid as much risk as possible. The RAID model supports a “reasoned” risk allocation strategy that includes proper risk allocation amongst the stakeholders, prompt payment, and change management practices, all supported by ethical behavior and visible leadership. Underpinned by Stakeholder Management and Rational Choice theories, value should be created by the organization for all project team members, and stakeholder decisions and actions required to achieve project goals will be rationally based.
THE RAID MODEL IN PRACTICE

The key to the successful implementation of RAID is to keep the focus on delivering client value whenever deciding on risk management and strategic planning options. The project team is driven by Being True to the Work, the message that puts project interests ahead of individual interest. Applying the RAID Model as a diagnostic tool allows the project owner to evaluate the SAPEs and contributing factors that need to be considered prior to and during the execution of the delivery process. Strategic planning and risk management efforts create the need for a clear snapshot depicting the initial makeup of the project delivery team to prescribe the sequence of actions required to bring about a transformation. The model framework is presented as a diagnostic tool to understand where the gaps are in the project delivery team that create an imbalance and delay the evolution of a high performance team.

Utilizing the RAID Model

Applying the RAID model as a diagnostic tool, the public sector owner can assess the project team’s initial makeup and determine what is necessary to transform itself into a cohesive organization. A project team’s readiness assessment requires the primary stakeholders to be fully engaged so strategies can be rapidly identified and implemented early in the project delivery process. However, the model is only a tool to assist in bringing about a change in how the internal structure and dynamics of the project team is viewed. Changes that are desired still must take into account the limitations placed on the project delivery method due to the external environment created with state statutory requirements. This necessitates the all-in participation of an enlightened public agency leadership to ensure that the primary stakeholders understand what is important to the delivery effort.

The model can be used as a two-phase diagnostic tool. First to evaluate a current state with an intended future state, and second as a temporary static picture to measure how effectively the project team is implementing its alignment strategy. The project owner must initially determine the level and type of temperament, competencies, capabilities, and resources each team member brings to the table. Beyond the initial team formation and assessment, individual stakeholder values and interests must be continuously weighed and aligned with project goals and objectives throughout the project delivery life cycle. Unfortunately, while the private sector owner may have an unimpeded ability to assemble team members early on, based upon their qualifications and perceived value, the public-sector owner usually finds itself struggling with the integration and alignment of formerly unknown entities just prior to the commencement of the work.

Analysis and Diagnosis

The RAID framework is used as a vehicle for the project owner to initiate a discussion of the project delivery team/organizational design with primary stakeholders. Data is gathered for each of the six SAPE categories, based on the findings of the RAID Stakeholder Alignment Survey (SAS) and interviews with the key members of the project delivery team. The statements are designed to evaluate the current state of the team (temporary organization) through the perceptions of the primary stakeholders. The evaluation isolates the strategic distance between the six model elements. Risk management and strategic planning recommendations are then formulated for action. The RAID diagnostic tool assesses the impact of how the project delivery team comes together, prior to commencement of the work. Emphasis is placed on the strategic fit and the management of the interdependencies of the SAPEs. The initial evaluation looks at the
relationships and processes that define the connections between the SAPEs including the following:

- Evaluation of strengths and weakness in each of the SAPEs and the impact on project team effectiveness.
- How well the structure of the project delivery method allows the primary stakeholders to contribute to and influence work and outcomes.
- Moving beyond intuition by uncovering the actual properties of the project team network.
- Determination of optimal alignment and integration methods to build a high-performance team.
- Determination of adjustments that are required for process, behaviors, expectations, leadership, relationships, goals, and risk allocation.

To apply the RAID model, each of the SAPEs must be looked at individually and collectively to determine how the interdependencies impact one another. The project team’s performance rests upon the alignment of each of the SAPEs. To establish the alignment, a four step diagnostic process is recommended.

- Step One: Analyze each key element (SAPE) separately.
- Step Two: Analyze how these elements impact the interfacing of the project team members and delivery process.
- Step Three: Pinpoint the specific gaps, strengths, weaknesses and conflicts between the actual and desired performance and behaviors. Look for correlations between misalignment and the obstacles affecting team performance.
- Step Four: Develop strategic and risk management plans to create and maintain project team alignment.

Table 1 - Examples of Key Diagnostic Topics

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<tr>
<th>SAPE Diagnostic Category</th>
<th>Example of Team Readiness Assessment Areas</th>
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<tbody>
<tr>
<td>SAPE I – Ethical Behavior</td>
<td>Reputation of Project Owner, Design Consultant, and Constructor. Code of Conduct Holding Stakeholders Accountable, Good faith effort in Change Order Negotiation, Trade Contractor Identification, and Selection; Accountability Mechanisms for all Team Members; Accepted Behavioral Norms;</td>
</tr>
<tr>
<td>SAPE III – Sustained Visible Leadership</td>
<td>Purpose of the Leadership Team; Consistent Stakeholder Representation with the Authority to make Decisions;</td>
</tr>
<tr>
<td>SAPE IV – Demonstrated Competencies and Capabilities</td>
<td>Purpose of the Project Delivery Team, Value Engineering Workshops; Early Disclosure of Team Members and Experience Levels; Knowledge and Skills Team Members hold for Project Execution;</td>
</tr>
<tr>
<td>SAPE V – Relationships and Integrated Teams</td>
<td>Engagement of Team Members; Pre-Construction Partnering Events; Timely Conflict and Issue Resolution; Early Involvement of Team Members and Project End Users.</td>
</tr>
<tr>
<td>SAPE VI – Equitable Risk Allocation</td>
<td>Joint Representation for Strategic Planning and Risk Management; Assessment of Individual Stakeholder Interest; Determine whether Goals and Objectives of each Primary Stakeholder are consistent with those of the Collective Team.</td>
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SUMMARY AND CONCLUSION

A key takeaway from the research study is the realization that the development of high performing teams doesn’t simply happen by chance. For this research exploration, an MCCF construction program was defined as a high risk, complex project where the failure to meet the owner’s objectives and goals would cause a major disruption for its intended use, or disastrous failure in business operations. Given the customarily high level of complexity and challenges shared with this type of program, project delivery teams typically had to demonstrate extraordinary effort and cohesiveness to succeed.

Table 2 - Examples of Strategic Planning and Risk Management Tasks

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<tr>
<th>SAPE Diagnostic Category</th>
<th>Example of Strategic Planning and Risk Management Tasks</th>
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<tbody>
<tr>
<td>SAPE I – Ethical Behavior</td>
<td>Project Safety – Zero Accident Policy; Prompt Payment to Constructor and Trade Contractors; Eliminate Practice of Holding Float; Identify True Value of Change Order Work and Pay Accordingly; Communicate all Relevant Information - Transparency</td>
</tr>
<tr>
<td>SAPE II – Clearly Defined Goals/Objectives</td>
<td>Align Goals of Cost, Quality, and Schedule. Define from Day One. Target Value Design</td>
</tr>
<tr>
<td>SAPE III – Sustained Visible Leadership</td>
<td>Lead the Transformation of an Organizational Culture that Supports RAID Transparent Communication right down to the Trade Contractors if Necessary. Trades and Vendors need to know their Interests are Leadership’s Interest.</td>
</tr>
<tr>
<td>SAPE IV – Demonstrated Competencies and Capabilities</td>
<td>Early Disclosure of Team Members and Experience Levels; Knowledge and Skills; Best Value Selection of Trade Contractors and Vendors. Move Past Lowest Cost Objective; Identify Project Labor and Material Availability</td>
</tr>
<tr>
<td>SAPE V – Relationships and Integrated Teams</td>
<td>Co-Location of Team Members; Build Consensus Decisions; Strip Away Unproductive Tasks; No Blame Culture that Supports Accountability; Trust in Communications – Keep it Real. Eliminate Practice Silos.</td>
</tr>
</tbody>
</table>

Recognition that a building program had no option for failure created a sustained sense of urgency and enterprise that liberated the project team by placing project requirements and objectives ahead of self-interests. This allowed the delivery teams to look beyond contractual relationships and performance mechanisms to execute the work. Thus, strategies for the management of stakeholder interests and risk mitigation were freely implemented, becoming the critical drivers of project success. It was apparent with each MCCF construction project that the reliance on a transaction-based contract mechanism to bring about the desired outcome was an inadequate tool for the successful management of the program. Projects fail because of people, not science or technology. With each of the MCCF programs, the non-performance of any of the delivery team’s primary stakeholders would result in a failed project outcome. No matter the delivery method or the terms of the contract agreements, the ability for the team to recover would be significantly challenged. This is particularly problematic in the public sector where a capital construction project is typically constructed under a traditional DBB delivery system and the constructor is an unknown entity until after the bidding phase of the project. In either case, whether private or public, RAID represents an unconventional delivery approach for project owners, where the interdependencies of project tasks and attributes of the delivery team are recognized. High performance teams are not simply put into place, but quickly developed, aligned, and supported as an initial project execution strategy. Subsequently, the research findings suggest that construction project delivery, as a “people business,” brings about a best value project outcome through a relationship-driven, shared team purpose based on individual engagement, visible leadership, accountability, and satisfaction of stakeholder self-interest.
Frank X. DarConte, AIA, is a licensed architect in New York State and an experienced leader within all areas of facilities construction. He currently serves as Vice President for Planning and Development for the DeMatteis Organizations where he leads the development and implementation of best practices in acquisition, execution, and industry outreach. Working with project teams across the company’s real estate development and construction services network, he facilitates a deliberate, company-wide focus on value-based innovation and collaboration. Throughout his 35-year career, Mr. DarConte has progressed through a series of positions including project field superintendent, project manager, and project executive. In these various capacities, he has participated in over one billion dollars worth of construction projects. Holding degrees in Architecture and City and Regional Planning from NYIT and Pratt Institute, Mr. DarConte is nearing the completion of requirements for the Degree of Doctor of Philosophy in Civil Engineering at New York University’s Tandon School of Engineering where he is also a faculty member in the undergraduate civil engineering/construction management program. Mr. DarConte currently serves as the faculty advisor for the AGC NYS, Student Chapter at NYU and holds professional memberships in the American Institute of Architects and the Society of American Military Engineers.

Fletcher “Bud” Griffis is Professor of Construction Engineering and Management in the Department of Civil and Urban Engineering at NYU Tandon School of Engineering. Until July 2006, Dr. Griffis was Provost, Dean of Engineering and Applied Science and Vice President for Academic Affairs at Polytechnic University; he is a Professor Emeritus in the Department of Civil Engineering and Engineering Mechanics at Columbia University, having taught there from July 1986 to December 1999. In addition, Dr. Griffis was a Principal in the firm of Robbins, Pope and Griffis Engineers, P.C. of New York. Dr. Griffis retired as a Colonel from the U.S. Army Corps of Engineers in 1986, after serving as Commander and District Engineer of the New York District; prior to coming to New York, he was Area Engineer, Construction Manager, and Contracting Officer for the Ramon Airbase construction in Israel and for 20 years preceding his Israeli assignment, he commanded Corps of Engineers Construction and Combat Units in the U.S., Korea, Viet Nam, Israel, and Germany. Dr. Griffis, a registered Professional Engineer in the states of New York and Oklahoma, holds a B.S. degree from the U.S. Military Academy at West Point, two Master degrees (Construction Engineering and Operations Research) and a Ph.D. in Civil Engineering (Construction) from Oklahoma State University and is also a graduate of the U.S. Army War College. Dr. Griffis is the author of two textbooks: *New York City Infrastructure: A Policymakers’ Guide*, NICEST 1996 and *Construction Planning For Engineers*, McGraw-Hill, 2000 and numerous technical papers and reports.

Andrew J. Bates is the Director of Construction Technology at the Wm. Blanchard Co. in Springfield, NJ. He has established Wm. Blanchard Co. BIM protocols and a training program for all project management personnel; he oversees the application of company BIM procedures for all the Wm. Blanchard Co. hospital construction projects, and trains all company personnel on construction related technologies. He also trains entry level BIM technicians for on-site BIM coordination responsibilities. Andrew has 25 years of experience in the fields of Construction Management, Engineering, and Organizational Management. He has extensive knowledge and experience with Building Information Modeling and its relationship with construction operations and project control. He has worked on various construction projects to improve the performance of the project by implementing BIM, resulting in cost and time savings. He is an Adjunct Professor in the Department of Civil and Urban Engineering at NYU Tandon School of Engineering where he teaches Risk Analysis, Construction Management, Construction Modeling Techniques, and Project Controls using BIM. Andrew has also taught at the United States Air Force Academy. He is a retired US Air Force Major. He earned his Bachelor of Science in Civil Engineering from the US Air Force Academy in 1992, his Master of Science in Civil Engineering at the University of Colorado in Boulder, CO in 1998 and his PhD in Civil Engineering at the Polytechnic Institute in Brooklyn, NY in 2009.