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## Insights From the Field: Project Execution Success and Failure

Tracey M. Richardson

*Embry-Riddle Aeronautical University*, richart2@erau.edu

James W. Marion Jr

*Embry-Riddle Aeronautical University*, marionj@erau.edu

Vittal S. Anantatmula

*Embry-Riddle Aeronautical University*

James R. Gibson

*Embry-Riddle Aeronautical University*

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# INSIGHTS FROM THE FIELD: PROJECT EXECUTION SUCCESS AND FAILURE

**Tracey M. Richardson**  
**James W. Marion**  
**Vittal S. Anantatmula**  
**James R. Gibson**

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

**Keywords:** Project execution, Project failure, Triple constraint, Project communication

**Abstract:** Project execution plays a decisive role in project success, but past research did not focus on the project manager's perspective of what needs to be accomplished to achieve success. In this study, the authors used qualitative techniques to look for reoccurring themes related to 44 project managers' responses to interview questions associated with successful project execution and failed project execution. The study found that despite the project management profession growth, professional associations' efforts, and their professional development endeavors, project management execution seems to be concerned with what has happened versus what is happening in a project. This study provides a conceptual framework for project execution success strategies that have implications for project management training and mentoring.

## 1 - BACKGROUND

Project management is an execution-oriented interdisciplinary field of management supported by a global body of knowledge consisting of guidelines and practices put forward by practitioners and researchers (Besner & Hobbs, 2006). However, despite the available project management professional organizations, certifications, and training available to those who manage projects, the success rate of projects has not improved over time. Furthermore, without the support from technological applications that play an essential role in learning from past projects, and the growth of project management as a profession, many projects fail (Anantatmula & Rad, 2018). Anantatmula and Rad (2018) report that only 29% of projects were successful, while 52% were challenged projects, and 19% were considered failed projects. Additionally, the rate of project success has declined from 34% in 2004 to 19% in 2015 (Anantatmula & Rad, 2018).

The importance of successful execution in project management is well established (Carrier, 1987; Koskela & Howell, 2002a; Wideman, 1989). The literature is replete with studies regarding factors associated with project success and why projects fail to deliver (McLeod, Doolin, & MacDonell, 2012; Müller & Turner, 2007; Rad, 2003). On the

other hand, the link between project execution and project success appears to be generally assumed. Much of the project management literature addresses project execution only indirectly and in terms of the inputs required for effective execution, the competencies needed to produce it, or the results of successful project execution (Andersen, Birchall, Jessen, & Money, 2006; Chipulu, Neoh, Ojiako, & Williams, 2012; Jugdev & Müller, 2005).

The purpose of this study is to define successful project execution and examples of project failure from multiple perspectives of practicing project managers using structured interviews. Qualitative analysis of the interview data identifies relevant topics and themes to develop a framework informing project execution.

In the next section, a literature review is presented to establish the critical role of project execution and the absence of any research efforts in understanding the role of project execution in project success and failure. Later, research methodology is discussed, followed by an analysis of the research results. Qualitative analysis using software tools is employed to develop a conceptual framework for project execution. Finally, practical implications of the research study are presented.

## 2 - LITERATURE REVIEW

For this research study, the term "project success" denotes success in creating the deliverable and meeting key stakeholders' expectations (Anantamula & Rad, 2018). As a result of the ongoing poor track record of project success, past research raised concerns that project management, as a body of knowledge and field of practice, is incomplete (Cicmil & Hodgson, 2006; Morris, Crawford, Hodgson, Shepherd, & Thomas, 2006). Researchers have approached the need to improve project management by focusing on the analysis of various domains of project management practice, including the use of quantitative tools and techniques, process management, and leadership and organizational behavior theory (Leybourne, 2007; Napier, Keil, & Tan, 2009; Papke-Shields, Beise, & Quan, 2010). Similar research to identify a conclusive set of recommendations that would consistently improve the project success rate has yet to be undertaken.

Koskela & Howell (2002a) argued for the apparent lack of an underlying theory of project management. Previous research has analyzed project management by exploring the role of particular knowledge areas, process groups, tools, and various subcomponents of each (Besner & Hobbs, 2012; Zwikael, 2009). However, little research has been undertaken to better understand the phenomena of project execution, particularly activities carried out within the Executing process group, as defined by the Project Management Institute (Project Management Institute, 2017). The limited emphasis on execution within a framework designed to support successful project execution would suggest the need for additional research associated with project management execution practices.

Although project management is considered to be a highly execution-oriented practice (Koskela & Howell, 2002a), the Project Management Body of Knowledge (Project Management Institute, 2017) framework offers scant coverage of the execution process group compared to the considerable detail associated with the planning and monitoring and controlling process groups. The absence of emphasis on execution is said to reveal the implicit assumptions upon which project management is based (Koskela & Howell, 2002b). Further, what exactly project managers do with the executing process group to achieve

project goals is not apparent (Blomquist, Hällgren, Nilsson, & Söderholm, 2010). Consequently, this research effort raises questions about the nature of project execution and the role of the project team to achieve project success.

Menke (1994) highlights that several tools and techniques borrowed from operations management enable the execution of research and development projects. Many researchers considered the employment of tools and practices to be implicitly associated with project execution (Jugdev & Müller, 2005; McLeod et al., 2012). This is consistent with PMBOK's (2017) process flows, including "Direct and Manage Project Work," in that project managers receive inputs, apply tools and techniques, and proceed to generate outputs. Besner and Hobbs (2006) surveyed numerous project managers to identify what project management tools were commonly used and which of these were viewed to be more effective. Further, it was proposed that poor execution may be avoided by incorporating various tools, practices, and guidelines within a project (Andia, 1999). Although tool and practice usage frequently appear within the literature, the tool itself is the primary focus rather than "tool usage as a phenomenon" (i.e., execution). The review leaves the researcher with two questions. What do practitioners describe as project execution? Further, what is the nature of project execution and the project team's role in achieving project success as the focus of the research study?

## 3 - METHODOLOGY

This study was based on the constructivist paradigm using a phenomenological strategy to explain the project manager's definition of successful project execution through a review of project failures. The primary purpose of this research was to understand project manager perceptions of successfully executed projects. Conversely, the research aimed to understand what the project managers considered as failed projects. The 44 participant's experiences and feedback provided key information and insight into the research questions.

The authors used a constructivist mindset to understand program manager perceptions and reconstruct their definition of success in the execution phase (Guba & Lincoln, 1994). Further, a phenomenological approach was utilized. The authors identified both researcher and participant presuppositions about successful project execution to set

them aside to understand the true phenomenon leading to project success (Osborne, 1994). In this study, in-depth interviews were conducted with 44 practicing project managers. The data gathered was analyzed to understand and create a unified definition of participant perceptions of successful project execution. The interviews with professional project managers solicited answers to questions regarding both successful and failed project execution, examples of project failure, and advice for those about to execute projects. For this paper, the results of the success and failure of execution are included. The methodology was based on the primary research questions:

- 1.1. What are the project manager's perceptions of the successful execution of projects?
- 2.2. What are the project manager's examples of a failed project and perception of lessons learned?

The research design expanded on project manager interviews conducted by program management graduate students using the key informant technique. The participants were individually recruited by graduate students based on their position in their organizations and their ability to provide expert insight into the roles of a project manager (Marshall, 1996). The series of one-to-one semi-structured interviews were conducted using an interplay of the study's theoretical and foundational knowledge and the observations of experience explored with the participant (Schmidt, 2004). The interviewers collected data in the form of recorded transcripts and field notes to minimize personal bias and unintentional errors of omission due to memory lapse (Hofisi, Hofisi, & Mago, 2014). The researchers acknowledge that professional experience as project and program managers could influence data interpretation (Mehra, 2002). The use of both peer debriefing and relevant quotes to substantiate findings minimized bias in the study (Seale, 1999).

The interviews were analyzed in three phases. First, the transcripts were reviewed, noting recurring themes, quotes, and examples significant to the research topic (Merriam & Tisdell, 2015). The researchers independently conducted multiple transcript reviews and jointly compared themes for distinction and consistency (Merriam & Tisdell, 2015). Second, the unstructured interview data was organized and analyzed using nVivo qualitative coding software (Ozkan, 2004). The proximity of emerging themes was identified

using frequency analysis. A conceptual framework was crafted from the themes, classifications, and relationships. Finally, an analysis of the interview data was conducted using the SAS Text Miner application. The analysis identified nine topics and their associated cluster of terms. The researchers analyzed the interview transcripts in relation to the topics to understand their context within the transcripts. The following limitations of this study were identified. First, the number of participants, 44, is small in comparison to the project manager population. Second, primary data collection occurred via project management graduate students and therefore lacked the rigor of using trained interviewers. Third, no validated instrument exists for gathering participant perceptions of successful project execution by project managers. The study yielded two delimitations. First, the number of participants who participated in the study. Second, the data collection techniques included field notes and semi-structured telephone/video call interviews.

## 4 - RESULTS

### 4.1 - Results of Expert Assessment

An inductive approach to developing theory begins with the interview data, seeks patterns in the thematic data, and then seeks to build up a larger conceptual framework of the phenomena under study (Creswell, 2013). The authors independently reviewed all interviews and took note of the emerging themes using a combination of inductive and abductive reasoning. The reasoning methods were balanced with the research question "What does successful project execution mean and what can we learn from failed projects?" The thematic coding was identified by reviewing the text relative to the emerging themes while constantly comparing it with other thoughts found in the interview summaries. The interview summaries were further segregated based on the primary research questions. In this research, the frequency of identified code occurrence and the relationship between the codes formed the basis of themes that build up a clearer picture of project execution.

### 4.2 - Results of Thematic Analysis

A classical content analysis was conducted using nVivo with the themes and codes identified in the first phase. The use of nVivo for this study is consistent with recommendations from Leech and Onwuegbuzie (2011) when conducting classical

content analysis with codes identified deductively, inductively, or abductively. The qualitative coding software, nVivo 11, aids with the organization and analysis of unstructured data. QSR International describes the coding process as seven steps: Memo, Import, Explore, Code, Query, Reflect, and Visualize. (QSR International, 2014). Each interview was imported independently, and the list of emergent themes is loaded as categories, or nodes, reflected as 'Import' and 'Explore'. The 'Code' process reviews each interview and links the interview comments to the themes and begins a cataloging process. Keyword queries allowed for further analysis to ensure all instances of a specific keyword or phrase were reviewed and coded 'Query'. Any emerging theme that was initially missed was included, and the coding was complete. Then, themes were collected, and the frequency that each theme appeared was documented. A word frequency analysis was performed against each segment of coded text to understand how closely each identified theme was related to others regarding common words and expressions, allowing the authors to 'Reflect' as to the implication. Finally, the conceptual framework was crafted from the themes, classifications, and the relationship. The 'Visualize' step allows this study's 44 interview results to be a relationship of successful project execution and failed project execution.

4.2.1 - Successful Execution

Forty-four resulting interviews were transcribed and analyzed for themes related to the research question "How do you describe the successful execution of projects?" The successful project execution themes identified in the first phase for further analysis are presented in **Table 1**. The two dominant themes, triple constraint and project requirements, appeared 51 and 33 times respectively in the 44 interview summaries. The planning and team management themes appeared 14 and 11 times, respectively, in the 44 interview summaries.

TABLE 1 - SUCCESSFUL EXECUTION THEMES

Theme	Sources (n = 44) <sup>1</sup>	References <sup>2</sup>	Rank <sup>3</sup>
Triple constraint	29	51	1479
Project requirements	23	33	759
Planning	10	14	140
Team management	10	11	110

The interview summaries describe the importance and influence of the triple constraint and project requirements in successful project execution with planning and team management filling important cross-functional roles. The following descriptions and interview summaries support the role and importance of the successful execution themes.

**Triple Constraint (29 sources [66% of respondents] / 51 references).**

Interview subjects most frequently defined successful project execution in terms of the triple constraint. If the triple constraint, Scope-Time-Cost, was achieved, then project execution was assumed to be successful. In the words of one interviewee:

*"...the successful execution of projects is by delivering the components on time, in full, on budget, and within clockable hours."*

Additionally, the focus on milestone achievements in the context of the triple constraint was also recognized as an indication of successful project execution.

*"To me, successful execution of a project involves hitting all of your key milestones and deliverables within the project scope, timeline, and budget."*

**Project Requirements (23 sources [52% of respondents] / 33 references).**

Execution is also frequently viewed as successful if execution efforts are focused on the right things—rather than "doing things right." The second most frequent theme appearing in the interview transcripts focused on the importance of project requirements as a measure of successful execution. In one example:

*"...successful execution of a project is delivering an end item that meets the user needs within upper management's tolerance limits for the budget and schedule. He emphasized that meeting the user requirements is of the utmost importance..."*

1. A source is an individual who participated in the interview process.  
 2. A reference(s) is the number of times a theme was discussed by all of the sources. Sources may identify the theme on multiple occasions.  
 3. The rank is a function of the number of times the theme appeared and the number of interviews in which it appeared.

It is further assumed that project execution is said to be successful if the requirements are met, and the customer is "happy."

*"...the successful execution of a project is a project that "met the customer's requirements." A "successful project is one [in which] the customer is happy."*

**Team Management (10 sources [23% of respondents] / 11 references).**

For many of the interview subjects, team management is an indicator of project execution success. The management of the team is further said to be an art, for example, in an excerpt of one interview response:

*"...successful execution comes down to a mix of these two with a ratio of about 40% science and 60% art. Project management is not only about hitting the milestones, but also maintaining a ubiquitous presence amongst the team and awareness of the project status (e.g., daily, meaningful interactions with individual team members)."*

Further, it was emphasized that the success of project execution depends on the team's capability. An example found in one interview excerpt states that:

*"...the successful execution of projects is almost entirely dependent upon the personnel working on her team."*

**Planning (10 sources [23% of respondents] / 14 references).**

Consistent with the emphasis on planning in the PMBOK, several respondents described successful execution focusing on project planning. One interview excerpt suggests that execution without planning leads to failure:

*"Real Estate uses the catchphrase 'Location, location, location.' PMs should use the catchphrase 'Planning, planning, planning.' Many projects are authorized before full planning is complete because of unrealistic goals and project sponsor expectations. The 'fire, ready, aim' approach will lead to failure every time."*

To emphasize this idea, another interviewee suggests that skipping over project planning creates more work to be executed in the end. For example:

*"...advice is not to skip over the planning process and not to dive right into the project. The time you save skipping the planning is used three times over in most projects that do not have a proper plan. Stay on schedule, on budget, and remain in scope; create a rock-solid project plan and make sure you have a great change request process that will allow for the changes that are inevitable in any project."*

4.2.2 - Failed Project

The forty-four interviews were also analyzed for themes related to the research question "What are examples of a failed project and the perception of lessons learned?" The perception of failed project themes identified in the first phase for further analysis is presented in Table 2. The two predominant themes, communication and scope, appeared 13 and 12 times respectively in the 44 interview summaries. The people skills and requesting help themes appeared 12 and 10 times, respectively, in the 44 interview summaries.

TABLE 2 - PERCEPTION OF FAILED PROJECT THEMES

Theme	Sources (n = 44)	References	Rank
Communication	12	13	156
Scope	11	12	132
People Skills	9	12	108
Requesting help	8	10	80

The interview summaries describe the influence of communication and scope on failed project execution with the contributing influence of people skills and requesting help. The following descriptions and interview summaries support their role and influence in failed project execution.

**Communication (12 sources [27% of respondents] / 13 references).**

Whereas project communication is said to be linked to project success, the inverse is also the case. Interviewees note that a failure to communicate led to project failure.

*"The main lesson learned is communication. We need to aggressively communicate, even over-communicate. The point here is to not get comfortable with your level of communication, as that is when important information will be missed, possibly negatively affecting cost or schedule."*

**Scope (11 sources [25% of respondents] / 12 references).**

There were two common aspects noted in project scope as it relates to project failure. One aspect of scope is the tendency to attempt to do too much within the project. Another typical issue that arose in the interviews is the tendency for a project to work on the wrong scope—a matter of scope validation.

“...the goal was to develop and implement a number of process improvements in order to improve efficiency and/or effectiveness by a factor of 10. The project failed because... We took too big of a bite.”

**People Skills (9 sources [20% of respondents] / 12 references).**

People skills, or the lack of them, were related to project failure in the interviews. Typically, people skills are thought of as “top down” management skills from the project manager to the project team member. However, it is also observed that a failure to connect with others regarding being approachable is an essential component of people skills. It also follows that a failure to work together and to inspire may lead to project failure.

“...was an important lesson and drove home the importance of knowing your people and being seen as approachable for help.”

**Requesting Help (8 sources [18% of respondents] / 10 references).**

The lesson from interviewees that emerged in this theme is that effective leaders should not be afraid of asking for help. Failure to do so is linked to project failure.

“Never assume anything and always ask if you do not know anything. Also, escalate any risk, issue, concern, etc., immediately so that it can be discussed and an action plan can be created from the project team.”

**4.3 - Results of Text-Miner Analysis**

The interview data were analyzed using SAS Text Miner's advanced mathematical techniques to extract underlying meaning from text. Nine major topics were identified based upon mathematical analysis of word clustering and strength of association, as seen in **Table 3**. Each topic is presented in

the text miner application as a cluster of terms that exhibit strong relationships and often appear together. The clustered words identified by the text miner algorithm vary the most from the remaining text in the documents, thereby comprising the essence of a distilled topic. The topics are ranked by the number of terms included in each topic and the number of interviews in which they appear.

TABLE 3 - SAS TEXT MINER TOPICS AND RANKING

Topic <sup>4</sup>	Number of Terms	Documents	Rank <sup>5</sup>
1 <u>personnel,+contract,equipment,+customer,+certify</u>	53	8	424
2 <u>+opportunity,+value,support,+lead,+overlook</u>	56	7	392
3 <u>clearly,+ensure,+project scope,base,+define</u>	49	7	343
4 <u>+system,+program,+capability,+cancel,+requirement</u>	54	6	324
5 <u>+team member,+member,+point,+technology,team</u>	45	7	315
6 <u>aircraft,+element,maintenance,+event,+communication</u>	52	6	312
7 <u>+milestone,+logistic,last,+track,+maintain</u>	59	4	236
8 <u>+outcome,+individual,+expect,software,key</u>	49	4	196
9 <u>+client,+help,immediately,team,+issue</u>	44	4	176

[4] The '+' symbol in the string terms indicates the presence of a collection of stem words. The related stem words may be spelled differently or appear in different combinations.

[5] The rank is determined by multiplying the number of terms and documents for a given topic.

The interview transcripts were reviewed using the topic keywords to understand the context of the topics computed by the text miner. Topic labels were determined based on the interview context for the corresponding topics. The following descriptions and interview summaries support the role and influence of each topic in project execution.

**Topic 1: Obtaining the right resources**

**Text miner terms:**  
**personnel,+contract,equipment,+customer,+certify**

“...when all stakeholders of the project are satisfied with the end product...providing quality instruction [ ] personnel is certified on specialized equipment and the company is making profit. Personnel is being recognized for outstanding service...”

**Topic 2: Trust but verify**

**Text miner terms:**  
**+opportunity,+value,support,+lead,+overlook**

“...it is really about empowering your people to achieve their goals while providing them the support and top-cover so that they feel comfortable enough to achieve it on their own. Assign tasks and check-in periodically--how often? That depends on the task and who it is assigned to. Following up shows that you have an interest in what they are doing and have not just passed the buck. While corrections should be made, just be careful not to over-control.”

**Topic 3: Execution as achieving scope and schedule requirements**

**Text miner terms:** **clearly,+ensure,+project scope, base,+define**

“The successful execution of a project is to ensure that one satisfies both the customer and management with the resources given and, in the time allotted.”

**Topic 4: Execution as requirements management**

**Text miner terms:**  
**+system,+program,+capability,+cancel,+requirement**

“The first crucial element is to help the customer define their requirement. I found that what the customer wants may not be what they need. A review of existing processes is necessary to determine if the customer is truly missing tools or does not have the capability.”

**Topic 5: Execution as leading teams**

**Text miner terms:** **+team member,+member,+point,+technology,team**

“Successful execution of a project is leading and managing the team through the necessary process to ultimately meet the requirements needed for customer acceptance. Specific areas of focus included in this are careful attention to cost and schedule, change control, risk management, communication strategy, and key stakeholder involvement throughout the project. Successful execution is also identifying and responding quickly to issues or unplanned events.”

**Topic 6: Execution as effective communications**

**Text miner terms:**  
**aircraft,+element,maintenance,+event,+communication**

“I find the correct channels of communications will produce the sources of correct information. Another element is listening to other people's concerns about the project. Give everyone their turn, don't monopolize conference calls.”

**Topic 7: Execution as meeting milestones**

**Text miner terms:**  
**+milestone,+logistic,last,+track,+maintain**

“To me, successful execution of a project involves hitting all of your key milestones and deliverables within the project scope, timeline, and budget.”

**Topic 8: Execution as meeting outcomes**

**Text miner terms:**  
**+outcome,+individual,+expect,software,key**

“A successfully executed project should have an outcome that was what the customer envisioned when it was initially



started; or if that is not strictly possible, the project outcome should be something that makes everyone involved feel like they came out of the project completion phase a winner.”

Topic 9: Execution as client engagement

Text miner terms: +client,+help,immediately,team,+issue

“Ask your client to assign a liaison to your team. Set up a web-based data collaboration to improve communication and data exchange with your team members. Hold regular meetings with your project team members to address all issues and concerns and to keep track of the progress of work and costs.... Always keep your management and clients apprised of project progress and major concerns.”

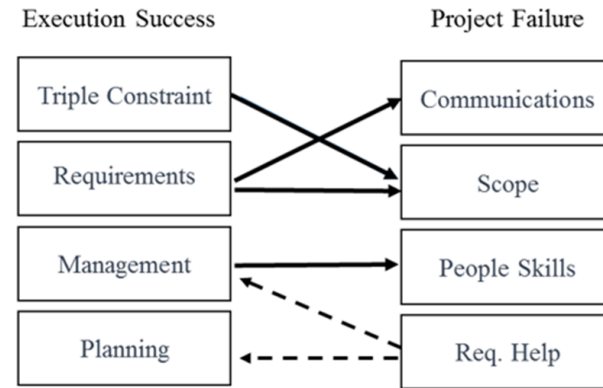
5 - DISCUSSION

Revisiting our research questions, we note that patterns form in the analysis of a project manager’s perceptions of successful project execution when examined with examples of failed projects and perceptions of lessons learned. Following a phenomenological, inductive research methodology of understanding a particular phenomenon by repeated measures leads to a conceptual framework or general theory (Stake, 2010).

Examining the ranking of the themes associated with successful project execution and project failure identified that the top four themes in each category appeared more frequently. Following the themes ranked one through four, the theme appearances in the interviews fell by approximately 50%. It is for this reason that the top four themes were used in this analysis. Figure 1 provides a comparison of the top four execution success versus project failure themes, illustrating clear relationships. The successful completion of the triple constraint is said to equate to successful project execution, whereas a failure to manage scope leads to project failure. Following the triple constraint theme in project execution success, successful determination and management of requirements must be essential for successful project execution. Conversely, a failure to communicate and a failure to manage scope—both elements of the requirements management process—leads to project failure. It is interesting to note that the management and people skills themes rank third in both execution success and project failure themes. Finally, a

failure to request help when needed is said to be a cause of project failure. It is observed that effective management and a robust planning process would aid in countering this failure to act.

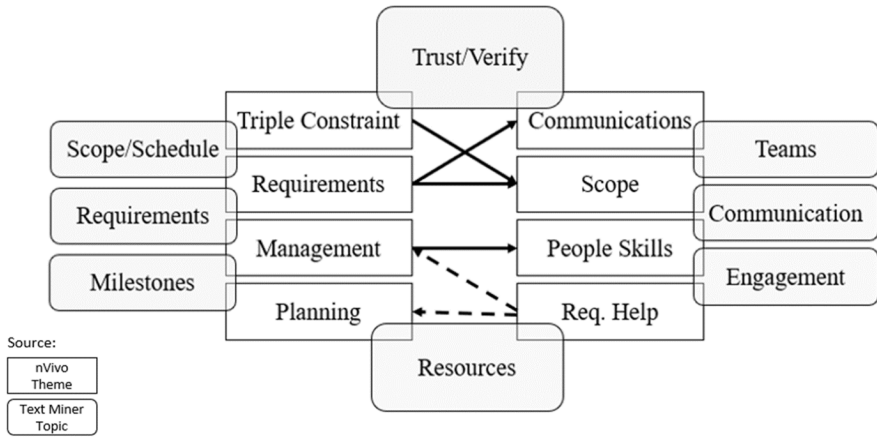
FIGURE 1 - COMPARISON OF THE TOP FOUR THEMES IN EXECUTION SUCCESS AND PROJECT FAILURE



An understanding of the relationships of these success and failure factors is enhanced when considered in conjunction with the topics identified via text mining. The text miner topics are observed to enhance and extend the thematic analysis while providing additional validation for the manual coding resulting from the informed judgment of the researcher. When the text miner topics are overlaid with the thematic topics as shown in Figure 2, a conceptual framework forms for successful project execution. The analyses support the emphasis on hard skills and soft skills associated with successful project execution. The text miner reveals the importance of delegation while following up to ensure that the details of the delegated work are not overlooked. Further, the text miner analysis appears to move beyond the soft skills of team management with the observation that successful execution is related to the acquisition of the appropriate resources.

Such a framework or theory may be later tested using hypothesis testing in deductive research (Strauss & Corbin, 1998). Such collected data may be used in concert with other qualitative data to build a more complete picture of the phenomenon and validate collected qualitative data (Bergman, 2008).

FIGURE 2 - TOPIC AND THEMATIC FRAMEWORK FOR SUCCESSFUL EXECUTION



6 - CONCLUSION

The findings contribute to the academic literature on the executing process group and its role and impact in a successful project. The research concludes that there are two distinguishing features of the project success framework that can contribute to expanding the Executing body of knowledge and help practitioners of project management achieve successful outcomes.

First, success in execution necessitates a focus on and development of the triple constraint within the Execution process group. The literature of project management practice is said to have had the “triple constraint” of schedule, budget, and performance as its historical focus (Zwikael, 2009). Given the apparent importance of the triple constraint and its focus in the project management literature, it is reasonable to expect some level of process guidance relating to the management of cost, time, and scope within the Executing process group in the PMBOK. The fact that the Scope, Time, and Cost knowledge areas are not included within the Executing process group raises questions.

The second distinguishing framework is that success in execution necessitates a focus on and development of the soft paradigm of team management. Practitioners observe the human aspect of managing and executing projects to be growing in significance. The organizational behavior or “soft paradigm” theoretical lens developed as researchers observed that the application of technical tools alone was not a sufficient basis to address the totality of project

management practice (Koskela & Ballard, 2012). Researchers increasingly began to view projects as social systems in which humans interacted. In this view, execution is accomplished not by employing technical tools but through communication, coordination, leadership, and human motivation (Cicmil & Hodgson, 2006). It has been said that 90% of project management is communications (Project Management Institute, 2017). Effective project communications are said to be associated with project success (Andersen, 2006). Project communications and risk management are the essential elements of project management (Turner & Müller, 2003). According to Koskela & Howell (2002), communications within the executing process group in the PMBOK take the role of dispatching. The interview findings indicate the role of communications within the executing process group extends beyond Koskela & Howell’s one-way dispatching to active exchange among stakeholders and team members. Topics within this line of research included the role of power, politics, and influence within the project (Bourne & Walker, 2004). This view sees project management not as a technical endeavor but rather as a “social trajectory” (O’Leary & Williams, 2012). Further, Koskela & Howell (2002) identify interaction and communication between those who assign and those who carry out work as an important missing element in the execution of a project as outlined in the PMBOK.

## 7 - FUTURE RESEARCH

This current study will benefit project management practitioners, mentors of project managers, and the collective project management profession, but it begs more questions than solutions. The following paragraphs suggest a series of questions about project execution, which, if answered, will continue to fortify the theoretical foundation of project management.

It could be argued that project execution is not a primary focus within the PMBOK for specific reasons. For example, the PMBOK is a highly structured process-oriented framework designed to organize and structure project activity. Perhaps the problem in project management is not that project managers cannot execute, but rather that they fail to plan and follow up properly. Winch (2014) observes that much like a project, a river can only be controlled by managing the structure and constraints. Likewise, the PMBOK framework may be setting up plans in such a way that execution becomes straightforward. Additionally, the emphasis in the Business Process Management literature on process discipline and the avoidance of ad hoc management would appear to have influenced the process approach of the PMBOK. Such an emphasis on process and process discipline may naturally lead to planning rather than execution. Regardless of the reason, project execution enjoys very little coverage in the PMBOK compared to the other process groups. This raises questions regarding what project managers do within the Executing process group, if this process group is incomplete, and finally, if this lack of completeness is related to the sustained lack of project management success.

It can be argued that practitioners who manage projects take little notice of underlying theoretical constructs (Jugdev, 2008). Further, it is conceivable that the tenants inform the process-oriented PMBOK framework of Business Process Management practice and, as a result, is weighted toward planning and control rather than execution (Pasian, Sankaran, & Boydell, 2012). The competing views of execution suggest the need for research to better understand what it is in practice and if there is an empirical basis to determine to what degree the PMBOK Executing process group may be incomplete. Additional questions for inquiry: Do project managers follow the Executing process

group as described within the PMBOK when they execute projects or do they take actions beyond it? If so, what is it that successful project managers do within the Executing process group given the limited scope of the Executing process group within the PMBOK? Research into these questions will provide insights into project execution successes and failures and bolster the project management community's understanding of the Executing Process Group.

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## ABOUT AUTHORS



**Tracey Richardson** is a tenured, Associate Professor of Project Management at Embry-Riddle Aeronautical University – Worldwide. She has a Doctorate of Organizational Leadership from Argosy University's School of Psychology and is a certified Project Management Professional and a Project Management Institute (PMI)-Risk Management Professional. Tracey is a retired USAF Aircraft Maintenance Officer.



**Dr. James W. Marion** is an Associate Professor with Embry-Riddle Aeronautical University Worldwide. He is currently the Chair of the department of decision sciences. His experience includes leading large organizations in multiple product launches in the U.S., Europe, and Asia, as well as significant experience with Japanese companies including NEC and Panasonic. Dr. Marion has a PhD in Organization and Management with a specialization in Information Technology Management (Capella University). He holds an MS in Engineering (University of Wisconsin-Platteville), and a MSc and an MBA in Strategic Planning as well as a Postgraduate Certificate in Business Research Methods (The Edinburgh Business School of Heriot-Watt University).



**Dr. Vittal Anantatmula** is a professor at Western Carolina University (WCU) and has been working at WCU since 2005. He is a recipient of Australia's Endeavour Executive Fellow and is a Global guest professor at Keio University, Japan since 2014. Dr. Anantatmula also taught at George Washington University for seven years. He is a director of the Project Management Institute's Global Accreditation Center (PMI-GAC). He was recognized with several awards at WCU including University Scholar award, Excellence in Research Award, and Graduate Faculty Teaching Award. Recently, he received 2019 ASEM Eschenbach Award for Best Engineering Management Journal (EMJ) paper. Dr. Anantatmula has authored about scholarly publications including 45 journal papers, 9 books, 9 book chapters and about 60 conference papers. He received MS (Engineering Management) in 1995, DSc (Engineering Management) in 2004 from George Washington University and BE (Electrical and Electronics Engineering) from Andhra University in 1977. He is a certified project management professional (PMP).



**Dr. Jim Gibson** is an Assistant Professor at Embry-Riddle Aeronautical University. He is a retired US Marine test pilot and squadron commander. His research focuses on energy economics and sustainability in urban air mobility. In addition, he works with organizations in East Africa and India to assist subsistence farmers in growing trees to generate carbon offsets.