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**IDENTIFYING KEY META-NARRATIVE THEMES
ACROSS PUBLIC-SECTOR ENTERPRISE RISK
MANAGEMENT LITERATURE IN SUPPORT OF
THE MARINE CORPS' FUTURE IMPLEMENTATION**

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Monterey, CA; Naval Postgraduate School

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**NAVAL
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MONTEREY, CALIFORNIA

THESIS

**IDENTIFYING KEY META-NARRATIVE THEMES ACROSS
PUBLIC-SECTOR ENTERPRISE RISK MANAGEMENT
LITERATURE IN SUPPORT OF THE MARINE CORPS'
FUTURE IMPLEMENTATION**

by

Patrick A. McElroy Jr.

December 2019

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SUPPORT OF THE MARINE CORPS' FUTURE IMPLEMENTATION**

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requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

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**NAVAL POSTGRADUATE SCHOOL
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ABSTRACT

This research seeks to identify the key meta-narrative themes across public-sector enterprise risk management (ERM) literature that may inform the Marine Corps' future implementation of value-added ERM. This research is grounded in current, regulation-compliant, public-sector ERM best practices, and the purpose is to make recommendations in support of the Marine Corps' future implementation of ERM. The research was conducted using a systematic meta-narrative review methodology and approached in a multi-disciplinary fashion. This research is important because of regulations that mandate that federal agencies adopt ERM; the Marine Corps does not currently have an ERM process in place.

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LIST OF ACRONYMS AND ABBREVIATIONS

AFERM	Association for Enterprise Risk Management
AS/NZS	Australian—New Zealand Standard
CAPE	Cost Assessment and Program Evaluation
CBO	Congressional Budget Office
CD&I	Combat Development and Integration
CIP	Capability Investment Plan
CMC	Commandant of the Marine Corps
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CPG	Commandant's Planning Guidance
CPIB	Capability Portfolio Integration Board
CPRB	Capability Portfolio Review Board
CSA	Canadian Standards Association
DoD	Department of Defense
DOE	Department of Energy
DON	Department of the Navy
DPG	Defense Planning Guidance
DRRS	Defense Readiness Reporting System
EOS	Executive Off-Site
ERM	Enterprise Risk Management
FMFIA	Federal Managers' Financial Integrity Act
FY	Fiscal Year
GAO	U.S. Government Accountability Office
GPRAMA	Government Performance and Results Act
HQMC	Headquarters Marine Corps
IRM	Institute for Risk Management
ISO	International Organization for Standardization
JROC	Joint Requirements Oversight Council
MCCA	Marine Corps Capability Area
MCCL	Marine Corps Capability List

MCDA	Multi-Criteria Decision Analysis
MCPC	Marine Corps Program Code
MICP	Managers' Internal Control Program
MRB	MROC Review Board
MRI	Major Resource Indicator
MROC	Marine Requirements Oversight Council
NDD	National Defense Directive
NDS	National Defense Strategy
NERAM	Network for Environmental Risk Assessment and Management
NPS	Naval Postgraduate Group
NRC	National Research Council
OCMO	Office of the Chief Management Officer
OMB	The Office of Management and Budget
OMTES	Organize, Man, Train, Equip, and Sustain
PA&E	Program Analysis and Evaluation
P&R	Programs and Resources
PEB	Program Evaluation Board
POM	Program Objective Memorandum
POTUS	President of the United States
PPBE	Planning, Programming, Budgeting, and Execution
PRB	Program Review Board
RIMS	Risk Management Society
SECDEF	Secretary of Defense
SECNAV	Secretary of the Navy
SIG	Strategic Initiatives Group
SLR	Systematic Literature Review
SME	Subject Matter Expert
T/POM	Tentative-POM
TSA	Transportation Security Administration
USMC	United States Marine Corps

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I. INTRODUCTION

According to estimates from the Congressional Budget Office (CBO), the national budget deficit is projected to grow from \$896 billion in 2019 to a conservative \$1.3 trillion by 2029, which does not account for outlays (CBO, 2019). Also, according to CBO, in relation to the size of the United States' economy, "other than the period immediately after World War II," the deficit has only been so large one other time in the past 50 years. The CBO (2019) projects that the gross federal debt (national debt) will increase from \$21.475 trillion to \$33.591 trillion during that period (p. 7). In an era characterized by a geopolitical environment with increased cyber-attacks, near-peer state actor threats, and non-state sponsored terrorism, an inability to meet its national security needs, caused by poor fiscal health, is a serious concern. While serving as the chairman of the Joint Chiefs of Staff, Navy Admiral Mike Mullen said in an interview with CNN on 25 August 2010 that "the single, biggest threat to our national security is our debt" ("Mullen," 2010).

The FY 2020 Department of Defense (DoD) budget represents the largest portion of discretionary spending in the FY 2020 budget request (OMB, 2019). The fiscal year (FY) 2020 budget request called for \$718.3 billion to fund the Department of Defense (DoD), which amounts to a 4.9 percent increase from 2019 (OMB, 2019, p. 135). The total outlay for the FY 2020 budget amounts to approximately \$4.746 trillion and will contribute an approximate \$1.101 trillion to the national debt (OMB, 2019, p. 107). If the national debt is the greatest threat to national security, then the DoD has the greatest potential to impact our national security negatively. The DoD and its subordinate organizations must remain fiscally conscious and good stewards of the taxpayers' investment. DoD's efforts to protect our national security are expensive and have the potential to be counter-productive.

The DoD is conscious of this dilemma and, as such has entered an era of fiscal awareness and constraint. Former Secretary of Defense (SECDEF) James Mattis called upon the DoD in the 2018 National Defense Strategy (NDS) to "Drive budget discipline and affordability to achieve solvency" (p. 10). This specific phrase implies that the DoD needs to show it provides greater National Defense value than the cost of the people's

investment. Secretary Mattis explicitly stated that it was the DoD's responsibility to squeeze full value out of every dollar in the department's budget, account for how it spent those dollars, and that the Department needed to minimize risk and harness opportunities if it wanted to maintain the trust of the American people and Congress (2018). The subtle undercurrent in this section of the NDS is that an insolvent and fiscally inefficient DoD that cannot demonstrate it is worth the investment will eventually receive a smaller budget and lead to eroding our military and competitive advantage. If the DoD is to "compete, deter, and win...prevail in conflict and preserve peace through strength," it needs a substantial budget (Department of the Navy [DoN], 2019, p. 1-2).

The Marine Corps' mission is to fight and win the nation's battles. As stated in the 38th Commandant's Planning Guidance (CPG), the Marine Corps must undergo significant change to ensure it can achieve its mission and is "aligned with the 2018 National Defense Strategy (NDS) and Defense Planning Guidance (DPG)" (Berger, 2019a). To accomplish the proposed changes in the CPG so that it can achieve its mission in the future operating environment, the Marine Corps must continue to be good stewards of its allocated budget. In this paper, good stewardship means minimizing the risk of having to request more resources than allocated while maximizing the probability of accomplishing the mission with the resources allocated (Doerr & Kang, 2014). Enterprise risk management (ERM) can enable the Marine Corps to manage its risk tradeoffs as it makes resource allocation decisions during this period of change. This research seeks to identify what key meta-narrative themes across public-sector enterprise risk management (ERM) literature may inform the Marine Corps' future implementation of value-added ERM. The following questions guided this research: What are the defining characteristics of successful public-sector ERM, i.e., definitions, historical roots, regulations, key concepts and assumptions, challenges, and implications? How can ERM add value to the Marine Corps? How can ERM support senior leaders' management of the Marine Corps' strategic mission risk, adherence to regulations, and good stewardship?

A. BACKGROUND

The United States Marine Corps' (USMC) budget for FY2020 is approximately \$45.87 billion (DoN, 2019, p. 1-11) and accounts for roughly 6.9 percent of the DoD's budget. In comparison to the DoD Budget writ large, this may not appear to be a very large figure; however, that is more than the projected FY 2020 budgets for the Departments of Agriculture (\$20.8 billion), Commerce (\$12.2 billion), Energy (\$31.7 billion), Housing and Urban Development (\$44.1 billion), Interior (\$12.5 billion), Justice (\$29.2 billion), Labor (\$10.9 billion), State and USAID (\$12.3 billion), Transportation (\$21.4 billion), Treasury (\$33 billion), and the National Aeronautics and Space Administration (\$21 billion) (OMB, 2019). Put into the larger context of the Federal Budget and compared to other Departments, the USMC budget is quite large, making it critical that the USMC contributes to minimizing the national security risk associated with an out-of-control mishandled budget and maximize the opportunities and gains associated with a well-funded Marine Corps.

In April of 2019, Secretary of the Navy (SECNAV) Richard V. Spencer told the Senate Armed Services Committee (SASC) during a hearing that starting FY 2020 the Department of the Navy (DoN) will move to a "Zero-Based Budget" approach (Eckstein, 2019, para. 1). The DoN's approach means that the budget will start from scratch each year, and owners of each spending line will have to "come in and sing for their dinner as to their requirements" (Eckstein, 2019, para. 2). SECNAV's new policy aims to strengthen the linkages between our national security and how the DoN spends the taxpayers' dollars. General Robert B. Neller, the Commandant of the Marine Corps (CMC), stated during the same testimony that the "Marine Corps' business reforms enable us to make strategic choices in the divestiture of certain programs to reinvest our limited resources toward building a more modern, lethal, expeditionary force" (Eckstein, 2019, para. 13). General Neller also acknowledged that there exists risk in making these strategic choices, but it was deemed necessary to pay for more important core programs tied to the Marine Corps' mission (Eckstein, 2019). One of the most telling statements made by General Neller that appears to acknowledge Admiral Mullen's assertion is that "as generous as the Congress

has been, we have to be prepared to be able to [make] do with whatever [budget] we receive in the future” (Eckstein, 2019, para. 10).

The Marine Corps is entering a period of organizational change because, as Commandant Neller diagnosed, it “is not organized, trained, equipped, or postured to meet the demands of the rapidly evolving future operating environment” (Berger, 2019a). The 38th Commandant, General Berger, has made effecting organizational change his top priority so the Marine Corps can continue to accomplish its strategic mission in the future (Berger, 2019a). Title 10, Section 5063 of the United States Code (U.S.C.), *United States Marine Corps: Composition; Functions*; the National Security Act of 1947; and Department of Defense Directive 5100.01, *Functions of the Department of Defense and its Major Components*, define the strategic roles and missions of the USMC as:

- The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components. (Armed Forces, 1956)

- Provide close air support for ground forces.
- Conduct land and air operations essential to the prosecution of a naval campaign or as directed.
- Conduct amphibious operations, including engagement, crisis response, and power projection operations, to assure access. The Marine Corps has primary responsibility for the development of amphibious doctrine, tactics, techniques, and equipment.
- Conduct security and stability operations and assist with the initial establishment of a military government pending transfer of this responsibility to other authority.
- Provide security detachments and units for service on armed vessels of the Navy, provide protection of naval property at naval stations and bases, provide security at designated U.S. embassies and consulates, and perform other such duties as the President or the Secretary of Defense may direct.
- Seize and defend advanced naval bases or lodgment to facilitate subsequent joint operations. (Department of Defense [DoD], 2010, p. 32)

General Neller succinctly states that the Marine Corps' strategic mission "is to provide maritime expeditionary combined task forces that are 'most ready, when the Nation is least ready'" (HQMC P&R, 2018, p. 5). The uncertainty associated with the accomplishment of the Marine Corps' strategic roles and missions is the USMC's Strategic Mission Risk. Good stewardship will be essential to mitigate this uncertainty.

During the period of change referenced by General Berger in the CPG, the Marine Corps is going to have to make resource allocation decisions based on an uncertain future operating environment (Berger, 2019a). These decisions are going to involve resource allocation choices that equate to risk tradeoffs. The Marine Corps makes these tradeoff decisions during the programming and budgeting portion of the Marine Corps' planning, programming, budgeting and execution (PPBE) process, which feeds the Department of the Navy's (DoN) Program Objective Memorandum (POM) submission to the DoD. Programming, which is conducted by HQMC P&R with inputs from HQMC Combat Development & Integration (CD&I) "finds the best match between warfighting requirements that have become programming objectives (mission requirements) and the means [resources] (financial, human, materiel) to fulfill them" (Headquarters Marine Corps Combat Development & Integration [HQMC CD&I], 2018). Programming objectives are informed from the "top-down" by laws (e.g., U.S. Code Title 10, National Defense Authorization Act, and DoD Appropriation Act), national strategies (e.g., National Security Strategy, National Defense Strategy, and National Military Strategy), Department policies (e.g., Defense Planning Guidance), Combatant Commander (CCDR) Integrated Priority Lists (IPLs), Service guidance (e.g., CPG), and concepts (HQMC CD&I, 2018). Also, urgent and deliberate needs inform the process from the bottom-up (HQMC CD&I, 2018). HQMC P&R "evaluates the investment of capabilities and assigns programs and funding within the current budget topline," which translates planning into achievable programs (HQMC CD&I, 2018). Advocates for programming objectives work with HQMC P&R through the Program Evaluation Boards (PEBs), which represent different areas across the Marine Corps while defending and promoting their respective programs and capabilities for POM funding (HQMC CD&I, 2018).

There are seven program evaluation boards (PEBs) chaired by six different advocates: Warfighting Investment (Deputy Commandant [DC] CD&I), Manning (DC Manpower & Reserve Affairs [M&RA]), Headquarters and Support (DC P&R), Training (Commanding General [CG] Marine Corps Combat Development Command [MCCDC]), Installations (DC Installations and Logistics [I&L]), OPFOR (DC Plans, Policies, & Operations [PP&O]), and Sustainment (DC I&L). Each PEB consist of numerous Marine Corps Program Codes; there are currently over 360, all of which are competing for resources. HQMC P&R, HQMC CD&I, and PEBs collaborate during the POM Working Group (PWG) to recommend programming changes and discuss associated impacts, and to recommend resource adjustments for Tentative-POM (T/POM) approval. The T/POM is then routed to the DoN to become the Marine Corps' budgeting request as part of the DoN's POM submission to the DoD. The resource allocation decisions taking place as part of the Marine Corps' Programming process are multi-criteria decisions involving risk tradeoffs. Multi-criteria decision-making (MCDM) presumes that decision-makers choose amongst several alternatives evaluated based on two or more criteria (Dyer, Fishburn, Steuer, Wallenius, & Zionts, 1992). "The alternatives can involve risks and uncertainties; they may require sequential actions at different times; and the set of alternatives might be either finite or infinite" (Dyer et al., 1992). Ultimately the decision-maker is attempting to maximize utility while minimizing risk. In the Marine Corps' case, the decision ultimately rests with General Berger, the 38th Commandant. The constraint is the Marine Corps' budget. The alternatives involve all of the programming objectives previously outlined. Figure 1 depicts the Marine Corps Programming and Budgeting process.

In 2016, the Office of Management and Budget (OMB) issued an update to OMB Circular No. A-123, *Management's Responsibility for Risk Management and Internal Control*, to ensure Federal Agency leadership is effectively managing their strategic mission risks that arise from its activities and operations (Donovan, 2016). This update reinforces the purposes of the Federal Managers' Financial Integrity Act (FMFIA) and the Government Performance and Results Act (GPRAMA) to improve accountability, transparency, and stewardship of Federal resources, programs, and operations. No later than Fiscal Year (FY) 2016, Agencies were directed to implement a maturity model approach and adopt ERM. By FY 2017, Agencies were directed to "continuously build risk identification capabilities into" their ERM "to identify new or emerging risks, and changes in existing risks" (Donovan, 2016, p. 4). According to the United States Marine Corps FY 2018 Agency Financial Report, the Marine Corps Enterprise does not currently have ERM, a maturity model approach to ERM, or a methodology with associated metrics to forecast and evaluate risks to its strategic mission (Headquarters, Marine Corps, Programs and Resources Department [HQMC P&R], 2018, p. 86).

B. TERMS AND DEFINITIONS

While this paper will address taxonomy in Chapter IV, it is essential to establish the assumed definitions upfront. The International Organization for Standardization (ISO) 31000:2018 defines the term *risk* as the "effect of uncertainty on objectives" (2018, p. 1). In the context of USMC ERM, this is a broad definition of risk, with neither purely positive nor negative connotations. Considering former SECDEF Mattis's guidance in the NDS (Mattis, 2019, p. 10), the USMC needs to account for both risk and opportunities, the negative and positive effects of uncertainty on objectives, while providing a public-value good.

Systems Theory defines an *enterprise* as a "complex, socio-technical system that comprises interdependent resources of people, information, and technology that must interact with each other and their environment in support of a common mission" (Giachetti, 2010). In the context of USMC ERM, this definition is important because it encompasses the Marine Corps in its entirety in support of its strategic mission.

The ISO 31000:2018 broadly defines the term *risk management* as “coordinated activities to direct and control an organization with regard to risk” (ISO, 2018). For this paper, *risk management* is the coordinated activities to direct and control the Marine Corps enterprise in support of its strategic mission with regard to risk.

OMB Circular No. A-11 defines *enterprise risk management (ERM)* as an “agency-wide approach to addressing the full spectrum of the organization’s significant risks by understanding the combined impact of risks as an interrelated portfolio” (OMB, 2018, p. 9). “Agency-wide” and “organization” can be used synonymously with the term *enterprise*. For this paper, *ERM* is a Marine Corps enterprise-wide approach to addressing the full spectrum of risks to its strategic mission by understanding the combined and interrelated impact of uncertainty.

For this paper, *Marine Corps senior decision-makers* include the Commandant of the Marine Corps, the Assistant Commandant of the Marine Corps, and Advocates. These General Officers have the most influence on the Marine Corps’ resource Programming.

For this paper, *strategic mission risk* is defined as the uncertainty associated with the accomplishment of the Marine Corps’ strategic roles and missions. This research argues that resource allocation decisions directly impact strategic mission risk.

C. OBJECTIVE OF THIS STUDY

The objective of this study is to identify the key meta-narrative themes across public-sector enterprise risk management (ERM) literature and draw implications from those themes that may inform the Marine Corps’ future implementation of value-added ERM. This study reviews and evaluates public-sector ERM scholarly literature for comprehensive themes that are common to the literature. This study will also identify factors that influenced the performance of documented, successful cases of public-sector ERM. This research aims to enable the Marine Corps to achieve compliance with OMB Circular No. A-11 and OMB Circular No. A-123 in support of audit readiness and good stewardship.

D. SCOPE

This research will not address risk metrics or various approaches to multi-criteria decision-making.

E. ORGANIZATION OF STUDY

This study contains five chapters, organized as follows:

- Chapter I has introduced the research, its background, and why it is interesting, important, and innovative.
- Chapter II covers the systematic meta-narrative review methodology used to analyze the literature concerning this topic.
- Chapter III contains the comparison and descriptive analysis of the literature on public-sector enterprise risk management.
- Chapter IV encompasses the synthesis of public-sector enterprise risk management literature's meta-narrative themes into findings and addresses the implications of the research.
- Chapter V concludes this study by answering the research questions, deliberating the limitations of the study, providing recommendations for the Marine Corps, and recommending future research opportunities.

II. METHODOLOGY AND RESEARCH APPROACH

This chapter introduces the methodology used in support of this research: the systematic meta-narrative literature review. Its primary purpose is to answer the following questions:

- Why is systematic meta-narrative analysis the right way to compare and evaluate public-sector enterprise risk management (ERM) literature?
- What are the strengths and weaknesses of using a systematic meta-narrative analysis method to analyze public-sector ERM literature?

Producing a comprehensive literature review composed of complex evidence in support of policymaking is a challenging endeavor. A systematic meta-narrative review is a way to thoroughly analyze and synthesize a body of literature where different groups of authors and researchers have, as Greenhalgh et al. (2005) describe, “asked different questions and used different research designs to address a common problem..., and where there is no self-evident or universally agreed process for pulling the different bodies of literature together.” They go on to explain that a systematic meta-narrative review is composed of six phases: planning, search, mapping, appraisal, synthesis, and recommendations. The planning phase of the systematic meta-narrative literature review serves to outline the primary and secondary research questions, which focus the research, and to assess the suitability of using this methodology in support of this research (Clark & Henderson, 2018). According to Greenhalgh et al., the purpose of the searching phase is to discover diverse perspectives on and approaches towards ERM; this phase acts as a focusing device for refining and rejecting areas of inquiry. The purpose of the mapping phase, they explain, is to identify the key elements, actors, events, prevailing language, and imagery contained within the literature. The purpose of the appraisal phase is to evaluate each source for its relevance to the research questions and extract and collate the key results, while the purpose of the synthesis phase is to identify the key dimensions that have been researched on ERM, give a narrative account of the contributions of each literature source to those key dimensions, and address conflicting findings. The final phase of this

methodology, recommendations, involves reflecting on the results of the previous five phases and summarizing both the “overall messages from the research literature” and “distilling and discussing recommendations for practice, policy, and further research” (Greenhalgh et al., 2005, p. 420). This chapter addresses how the research approached the first five phases. While this research presented the phases separately and sequentially, in reality, each phase overlaps with and feeds into the next (Greenhalgh et al., 2005).

Given the sheer volume and diversity of research on this topic, the various interpretations and definitions of the processes and terminology that policymakers have drawn upon, and the multitude of options available to choose from a systematic meta-narrative review is an appropriate synthesis approach for this study (Greenhalgh et al., 2005). The motivation for using a systematic meta-narrative review for this research is to describe the available knowledge, to identify effective techniques for implementation, to identify experts within the field, and to identify both regulatory and academic sources (Fink, 2005). This research used a methodical, rigorous standard, aimed at summarizing existing research on ERM and providing analytical criticism (Okoli & Schabram, 2010). This research’s purpose is to inform policy and enable the Marine Corps’ implementation and execution.

This research adapted Barbara Kitchenham’s 2007 *Guidelines for performing Systematic Literature Reviews in Software Engineering* to ERM. One of the key strengths Kitchenham describes of the systematic meta-narrative review methodology is that it is less likely to be biased due to the well-defined methodology. Another strength is that if the analysis gives consistent results, the methodology “provides evidence that the phenomenon is robust and transferable” (p. 4). If the analysis gives inconsistent results, an additional strength of the methodology is that “sources of variation can be studied” further (p. 4). This methodology necessitates more time and effort than a traditional literature review when performed by a single researcher or small research team (Kitchenham, 2007).

This research analyzes scholarly literature, legislation, government reports, policy documents, and case-studies written on public sector ERM to provide an overview of key themes and potential implementation challenges. In particular, it is necessary to understand the defining characteristics of successful public-sector ERM, the challenges associated

with implementing ERM, which regulations necessitate its implementation, and how ERM will add value to the Marine Corps. The intended result is to provide the Marine Corps with recommendations regarding which definitions it should adopt, which ERM practices it should employ, and to enable the Marine Corps' future implementation of value-added ERM.

A. PLANNING PHASE

Headquarters Marine Corps (HQMC) Programs and Resources (P&R) initiated a study, via the Naval Postgraduate School (NPS) Naval Research Program (NRP), to determine how a military organization can develop and implement ERM for a military enterprise. HQMC P&R's initial request for research led to this research. Based on HQMC P&R's topic submission, the researcher conducted a preliminary literature search using the term: *enterprise risk management*. The preliminary literature search for "enterprise risk management" resulted in 38,015 results. The researcher further refined by restricting the documents to those journal articles, books, book chapters, government documents, conference proceedings, technical reports, and dissertations written in English, which resulted in 15,171 results. The researcher next included the term *public-sector* because the Marine Corps is a public-sector enterprise. The inclusion of *public-sector* refined the results to 1,788 documents. The volume of literature results further reinforced that the systematic meta-narrative review methodology was the right way to address this research.

After reviewing document titles and abstracts for relevance to HQMC P&R's request, the researcher selected three peer-reviewed journal articles and a book to assist in framing the primary research question and additional questions to guide the research further. The journal articles initially reviewed were: "A Value Measure for Public-Sector Enterprise Risk Management: A TSA Case Study" by Kenneth C. Fletcher and Ali E. Abbas (2018), and "Enterprise Risk Management: History and a Design Science Proposal" by Michael Mcshane (2018), and "ERM for the Public Sector: A Case Study" by John E. Homan (2013). The researcher selected peer-reviewed journal articles because of the quality control attributed to the peer-review process. The book initially reviewed was *Enterprise Risk Management: A Guide for Government Professionals* by Karen Hardy

(2014). These references led the researcher to review The Office of Management and Budget (OMB) Circular A-11: *Preparation, Submission, and Execution of the Budget*, OMB Circular A-123: *Management's Responsibility for Enterprise Risk Management and Internal Control* (Donovan, 2016), The Committee of Sponsoring Organizations of the Treadway Commission's *Enterprise Risk Management-Integrating with Strategy and Performance* (2017), and *Public Sector Enterprise Risk Management: Advancing Beyond the Basics* edited by Kenneth C. Fletcher and Thomas H. Stanton (2019).

The initial survey of the literature and review of the above sources, combined with HQMC P&R's request, led the researcher to the primary research task of identifying what key meta-narrative themes across public-sector ERM literature may inform the Marine Corps' future implementation of value-added ERM. Also, the following questions were developed during the initial literature survey and review and guided this research further: What are the defining characteristics of successful public-sector ERM, i.e., definitions, historical roots, regulations, key concepts and assumptions, challenges, and implications? How can ERM add value to the Marine Corps? How can ERM support senior leaders' management of the Marine Corps' strategic mission risk, adherence to regulations, and good stewardship?

B. SEARCHING PHASE

As part of the searching phase, the researcher performed a new advanced search using four online academic research databases; ABI/INFORM Collection, EBSCO, Wiley Online, and Web of Science for literature with the exact phrases enterprise risk management and public-sector. According to ProQuest, using an advanced search enables the creation of a "more structured query," searching across different targeted fields and leveraging Boolean operators (ProQuest, 2019). To increase the robustness and reliability of the search results, the researcher leveraged a variety of databases and search engines because otherwise, according to Malinen (2015), this research would have run an increased risk of omitting relevant literature. These specific databases/research tools were leveraged because they cover several important journals across a multitude of scholarly fields. The researcher searched the ABI/INFORM Collection, Wiley Online, and EBSCO because they

contain management, public administration, and business journals. The researcher searched NTRL because of its access to government papers that might otherwise not be found using academic or commercial databases. The researcher also queried the GAO's database for additional ERM reports. NTRL and GAO were only queried using the exact phrase enterprise risk management. Web of Science was searched to increase the overall reliability of the advanced search and to make sure the researcher did not overlook journal articles and conference proceedings the keywords. These initial sets of searches resulted in 343 literature sources. The researcher next refined all results down to peer-reviewed journal articles, government reports, full conference papers, and published books written in English. After eliminating duplicates, the researcher scanned the remaining titles, abstracts, and descriptions/summaries (if a book), and selected those resources that were directly related to the overall topic of this research, public-sector ERM. The combination of exact phrase usage, specific databases, specific publication types, and the elimination of duplicates resulted in 64 documents.

C. MAPPING PHASE

The researcher performed the mapping phase using Clarivate Analytics' EndNote X9 software. The researcher binned each of the 64 literature sources into digital folders based on their prevailing subject, e.g., whether the document was evaluative or guidance. The researcher sorted the literature based on the claims made in the sources' abstracts or summaries. Sources were not binned into multiple folders, even though some sources covered more than one over-arching topic. Table 1 shows the 11 initial meta-narratives categories identified across the literature sources.

Table 1. Initial Meta-Narratives Categories Identified

<u>Initial Meta-Narrative Categories</u>	<u>Number of Sources</u>
Private-Sector ERM Differs from Public-Sector ERM	7
ERM is Value-Added	19
Guidance for Implementing ERM	20
Strategic Risk Management	3
Role of Internal Auditing/Control and ERM	2
Leveraging ERM in Support of Resource Allocation	2
Risk Communication	1
Risk Governance	3
Risk Analysis Informs Decision-Making	2
ERM in Military Organizations	3
Evaluating Approaches to ERM	2

D. APPRAISAL PHASE

The appraisal phase of the systematic meta-narrative methodology for this research, captured in Chapter III, is the first phase of this research's descriptive analysis. For this research, appraisal involved evaluating each literature source's suitability for inclusion in the review. The literature appraisal began by populating a Microsoft excel table containing the literature's assigned number, its initial meta-narrative category, title, author(s), publication type, journal/publisher, literature's research question/purpose, abstract, method, sources, research question(s) related to this research, and findings as shown in Tables 2, 3, and 4 (Supplemental). Once the table was populated, the researcher identified which parts of the research questions each literature source addressed. If a source answered multiple questions or only partially addressed a question, the researcher captured that phenomenon in the table.

Table 2. Literature Appraisal Part A

No.	Initial Meta-Narrative Category	Title	Author(s)	Date	Publication Type	Journal/Publisher
1	ERM is Value-Added	Managing Risk and Performance: A Guide for Government Decision Makers	Stanton, Thomas H. Webster, Douglas W.	2014	Book: "Authoritative"	John Wiley & Sons, Inc

Note: The above table is a representation of the table found in its entirety in Supplemental Literature Appraisal & Quality Tab.

Table 3. Literature Appraisal Part B

Literature's Research Question/Purpose	Abstract	Research Approach
<p>"The book shares experiences of federal government officials and others about how to set up a sound risk management program, how to manage it, and how to use it to support agency missions and programs."</p>	<p>The core lesson of this book is that effective risk management is an essential part of increasing the performance of a government agency or program. In other words, like brakes on a car that permit drivers to drive at a good speed, risk management allows managers to propel their agencies forward in ways that would be unwise or even disastrous if no one knew where the potential obstacles lay. The question then becomes how to build risk management into agency decision making so that it enhances rather than retards performance. Here lessons of the financial crisis are directly relevant. A study of a dozen large financial firms found eight that failed and four that successfully navigated the crisis. There was a critical management difference between these firms: Successful firms built a process of constructive dialogue between their risk officers and parts of the company that wanted to do deals. This helped inform decision makers about when to stop buying subprime mortgages or making other loans in an overheated market. The failed firms, by contrast, either lacked or disregarded information about the risks of plunging ahead as the better-managed firms pulled back. Managing risk in government allows managers to navigate the shoals of Washington (or wherever they may be headquartered) with a better sense of when to move forward and when to pull back. This book seeks to help managers (1) to appreciate the need for sound risk management, (2) to think through the major types of risk that could prevent their agency from achieving its mission, and (3) to build a risk management approach and processes to help understand the nature of risk/reward trade-offs in major decisions (or failures to act on major issues). The book also makes the argument, backed by evidence from a range of organizations, that risk management can and should be cost-effective; the risk management office facilitates identification and prioritization of major risks for the organization, but management of those risks belongs to heads of the units most affected. This allows the risk office to remain lean and agile rather than large and expensive. Support from the top of the organization is much more</p>	<p>Case Study</p>

Note: The above table is a representation of the table found in its entirety in Supplemental Literature Appraisal & Quality Tab.

Table 4. Literature Appraisal Part C

Research Question(s) Related to this Research	Findings	Citation
<p>Key characteristics? How can ERM add value? How can ERM support decision-making?</p>	<p>This survey of promising practices in risk management at agencies in the United States and United Kingdom shows both the potential of risk management for government agencies and programs and the long way that effective risk management has to go in living up to that potential.</p> <p>By applying the principles of ERM at all appropriate levels of the organization, that organization can better understand its overall risk picture and use those new insights to truly maximize stakeholder value through the appropriate balancing of performance, cost, and risk.</p> <p>ERM implementation is not just a compliance function and is dependent upon the tone at the top.</p> <p>Whether the risks you face are political, competitive, acts of God, or acts of war, the key to effective decision making, especially in large and complex organizations and businesses, is to ensure robust constructive dialogue across functional and organizational boundaries. ERM—and the information it yields when well executed—provides an excellent means to improve, enhance, and align existing management practices to drive more completely informed and effective enterprise decisions.</p> <p>Enterprise Risk Management, with its simple, focused approach, gives every organization, from small not-for-profits to the largest organizations, even countries, a method to come back to the basics of good management.</p> <p>For government as for the private sector, effective risk management is an integral part of good management.</p> <p>Government organizations are beginning to awaken to the need to proactively manage reputational risk and increasingly recognize that management of that risk starts with leadership.</p> <p>Adopting the approaches proposed here can help agencies to improve their decision making not merely to help avoid black swan events, but also as a way to improve agency and program performance more</p>	<p>Stanton, T. H., & Webster, D. W. (Eds.) (2014). <i>Managing risk and performance : a guide for government leaders</i>. Hoboken, New Jersey: John Wiley and Sons, Inc.</p>

Note: The above table is a representation of the table found in its entirety in Supplemental Literature Appraisal & Quality Tab.

The researcher next eliminated any pieces of literature that were not relevant to the research questions. The result was 43 sources remaining. The researcher further assessed the literature for quality using the checklist shown in Table 5 (Supplemental).

Table 5. Literature Quality Checklist

Literature Quality												
No.	Question 1: How well does the source address the research question(s) of this thesis?			Question 2: What is the strength the source's evidence?			Question 3: What is the intended purpose of the source?			Question 4: Is the source cited by other sources?		
	Poor or Unknown (0 pts)	Fair (1 pt)	Good (2 pts)	Unsupported Opinion (0 pts)	Supported Opinion (1 pt)	Empirical (2 pts)	Promotional (0 pts)	Guidance (1 pt)	Critical Evaluation (2 pts)	Poor or Unknown (0 pts)	Fair (1 pt)	Good (2 pts)
1			2		<p>1</p> <p>"Firstly, while persuasive by way of examples, the book does not provide strong empirical evidence for the benefits of applying ERM over other approaches to managing risk. Secondly, the book does not provide specific guidance on how to choose a particular conceptual framework that is best suited to the unique circumstances of an organization" (Wilkins, 2014).</p>			1			1	<p>Cited 4 times according to Google Scholar</p>

Note: The above table is a representation of the table found in its entirety in Supplemental Literature Appraisal & Quality Tab.

The researcher evaluated all sources, and the researcher's advisors independently evaluated a sampling of sources (fifteen sources) to assess inter-rater reliability. The researcher assessed inter-rater reliability at 79 percent. The variance in the rating is the result of where the raters did not concur on what constituted evidentiary strength. For example, the raters did not agree on whether the credentials of the author constituted support. The researcher categorized those literature sources published in peer-reviewed journals as being most significant to this research's literature review, followed by government technical reports, and finally published books. To select the highest quality sources, lend credibility to this research, and because they are part of the larger scholarly conversation, peer-reviewed journal articles and government technical reports held primacy.

E. SYNTHESIS PHASE

The researcher performed the synthesis phases according to Noblit and Hare's guidelines for line-of-argument synthesis (Noblit & Hare, 1988). Kitchenham recommends using line-of-argument synthesis when synthesizing qualitative studies. According to Noblit and Hare (1988), "line-of-argument synthesis involves two steps: first, translate the studies into one another, then develop a grounded theory that puts the similarities and differences between studies into an interpretive order" (p. 3). While conducting a close reading of all the literature sources identified in the appraisal phase, the researcher identified key factors/dimensions present in the data related to the research questions. This portion of the synthesis phase resulted in Tables 6, 7, and 8, and is step one of Noblit and Hare's line-of-argument synthesis process. Tables 6, 7, and 8 illustrate which key factors are associated with which research questions.

Table 6. Literature Synthesis for Research Question 1

Q1: What are the defining characteristics of successful public-sector ERM?	Number of Sources
Visible and Active Support from Top Leadership	20
Common Risk Language/Taxonomy	19
ERM Integrated with Processes and Decisions	18
Instill Risk (Awareness) Culture	17
Constructive and Continuous Communication	16
Continuous Education and Training	16
Effective Governance Structure	14
Leverage Existing Processes	14
Tailor to Organization	13
Align ERM Process to Goals and Objectives	12
Clearly Define Risk Appetite	11
Risk is Positive and Negative	11
Continuous Engagement with Stakeholders	10
More than Compliance	9
Bottom-Up and Top-Down Process	8
Consistent Approach	8
Dedicated Resources	8
Everyone's Responsibility	8
Focal Point for Coordination	8
Implementation Plan	8
It's an Iterative Process	8
Communicate Achievements/Results	7
Continuous Assessment and Improvement	7
Leverage Third-Parties - GAO, IG, Communities of Practice	7
Portfolio View of Risk	7
Risk Management/Change Champions	7
Documentation	6
Accountability	5
Be Flexible	4
Set Clear Time Frames	4
Start Simple and Realistic	4
Value Added	4
Data-Driven	3
Feedback Loop Critical	3
Must Not Be a Burden	3
Tie to Performance Management/Evaluation	3
Communicate Value	2

Q1: What are the defining characteristics of successful public-sector ERM?	Number of Sources
Create Risk Community of Practice	2
Incorporate Scenarios (Wargaming)	2
Phased Approach to Implementation	2
Prioritize Change Management	2
Proactive	2
Reward Risk Identification	2
Track and Document Evolution of ERM	2
Change Management Plan	1
Commitment to Remediation	1
Communication Plan	1
Deliberate and Systematic	1
Effectiveness Mentality	1
Establish ERM Liaisons	1
Establish Short- and Long-Term Plans	1
Feed-forward Loop Critical	1
Focal Point as Driver - Audit	1
Focus on Top Risks Initially	1
Implementation Requires Expertise	1
Integrated-not Silos	1
Internal Audit Function Separate	1
Invest in Relationships	1
Needs Continuity	1
Research Best Practices	1
Review all Legislative Requirements	1
Sense of Urgency	1
Timely Remediation	1
Training and Education Plan	1

Note: Table 5 can be found in its entirety in Supplemental Research Question 1 Tab

Table 7. Literature Synthesis for Research Question 2

Q2: What are the challenges associated with implementing ERM in public-sector enterprises?	Number of Sources
Takes Time	15
Culture Change Difficult	12
Compliance Mentality	8
Risk Averse	5
Defensive Management and Blame Avoidance	5
Persisting Silo Mentality	4
Focusing Too Much on Internal Controls	4
Multiplicity - Resource Pressures	3
Size of Organization	2
Organizational Change	2
Not Integrating ERM Into Management and Culture	2
Lack of Continuity-Leadership Changes	2
Circumvented by Leadership	2
Value is Difficult to Quantify	1
Too Much Too Quickly	1
Takes Trust Amongst All Risk Stakeholders	1
Reliance on Limited Data	1
Reduced Autonomy	1
Overconfidence in Measurements	1
Not Maintaining Strategic Focus	1
Lack of Senior Management Support	1
Getting Started	1
Fitting Ambiguous Evidence into Predispositions	1
Federal Budget Cycle	1
Fear of Reporting	1
Exogenous Requirements	1
Conflicting Statutory Obligations	1
Competitive Pressures	1
Bureaucratic Inertia	1
Behavioral Consequences	1
Lack of Accountability	1

Note: Table 6 can be found in its entirety in Supplemental Research Question 2 Tab

Table 8. Literature Synthesis for Research Question 3

Q3: How can ERM add value to the Marine Corps?	Number of Sources
Decision-Making Support	25
Good Stewardship	15
Enables Resource Allocation	14
Compliance with OMB Circular A-123	13
Compliance with OMB Circular A-11	6
Compliance with GPRAMA	6
Compliance with FMFIA	5
Support Strategic Review	5
Enables Focus	4
Identify Strategic Mission Risks	3
Disciplined Approach	2
Accountability Tool	2
Compliance with GPRA	2
Align Risks with Strategic Objectives	1
Supports Change Management	1
Supports Audit Readiness	1
Strategic Planning	1
Restore Public Trust	1
Planning and Management Control	1
Internal and External Value	1
Evaluate Alternatives	1
Enhance Transparency	1
Early Identification of Problems	1
Achieve Strategic Objectives	1

Note: Table 8 can be found in its entirety in Supplemental Research Question 3 Tab

Once organized by the related research question(s), the researcher identified the linkages between the factors/dimensions, which resulted in thirteen themes that constitute the key meta-narratives associated with ERM (Tables 9, 10, and 11).

Table 9. Meta-Narratives and Supporting Factors for Research Question 1

Q1 Meta-Narratives	Factors/Themes	Number of Sources
Creating and Sustaining a Risk Culture	Visible and Active Support from Top Leadership	20
	Common Risk Language/Taxonomy	19
	ERM Integrated with Processes and Decisions	18
	Instill Risk (Awareness) Culture	17
	Continuous Education and Training	16
	Risk is Positive and Negative	11
	More than Compliance	9
	Everyone's Responsibility	8
	Risk Management/Change Champions	7
	Portfolio View of Risk	7
	Value Added	4
	Tie to Performance Management/Evaluation	3
	Must Not Be a Burden	3
	Create Risk Community of Practice	2
	Reward Risk Identification	2
	Prioritize Change Management	2
	Proactive	2
	Effectiveness Mentality	1
	Integrated-not Silos	1
	Sense of Urgency	1
Needs Continuity	1	
Governance and Infrastructure	Effective Governance Structure	14
	Leverage Existing Processes	14
	Tailor to Organization	13
	Align ERM Process to Goals and Objectives	12
	Clearly Define Risk Appetite	11
	Focal Point for Coordination	8
	Establish ERM Liaisons	1
	Internal Audit Function Separate	1
Have a Plan	Implementation Plan	8
	It's an Iterative Process	8
	Dedicated Resources	8
	Consistent Approach	8

Q1 Meta-Narratives	Factors/Themes	Number of Sources
	Continuous Assessment and Improvement	7
	Leverage Third-Parties - GAO, IG, Communities of Practice	7
	Start Simple and Realistic	4
	Be Flexible	4
	Set Clear Time Frames	4
	Phased Approach to Implementation	2
	Track and Document Evolution of ERM	2
	Change Management Plan	1
	Communication Plan	1
	Deliberate and Systematic	1
	Establish Short- and Long-Term Plans	1
	Research Best Practices	1
	Training and Education Plan	1
	Review all Legislative Requirements	1
	Focus on Top Risks Initially	1
	Focal Point as Driver - Audit	1
	Implementation Requires Expertise	1
	Invest in Relationships	1
Communication	Constructive and Continuous Communication	16
	Continuous Engagement with Stakeholders	10
	Communicate Achievements/Results	9
	Bottom-Up and Top-Down Process	8
	Feedback Loop Critical	3
	Feed-forward Loop Critical	1
Other	Documentation	6
	Accountability of Management	5
	Data-Driven	3
	Incorporate Scenarios (Wargaming)	2
	Timely Remediation of Risks	1
	Commitment to Remediation	1

Table 10. Meta-Narratives and Supporting Factors for Research Question 2

Q2 Meta-Narratives	Factors/Themes	Number of Sources
Organizational Culture Change	Takes Time	15
	Culture Change Difficult	12
	Compliance Mentality	8
	Risk Averse	5
	Defensive Management and Blame Avoidance	5
	Persisting Silo Mentality	4
	Size of Organization	2
	Lack of Continuity-Leadership Changes	2
	Organizational Change	2
	Not Integrating ERM Into Management and Culture	2
	Behavioral Consequences	1
	Lack of Senior Management Support	1
	Too Much Too Quickly	1
	Takes Trust Amongst All Risk Stakeholders	1
	Fear of Reporting	1
	Getting Started	1
	Bureaucratic Inertia	1
Reduced Autonomy	1	
Endogenous and Exogenous Pressures	Focusing Too Much on Internal Controls	4
	Multiplicity - Resource Pressures	3
	Circumvented by Leadership	2
	Federal Budget Cycle	1
	Competitive Pressures	1
	Conflicting Statutory Obligations	1
	Exogenous Requirements	1
Other	Risk is Difficult to Quantify	1
	Risk Owners not Held Accountable	1
	Not Maintaining Strategic Focus	1
	Fitting Ambiguous Evidence into Predispositions	1
	Overconfidence in Measurements	1
	Reliance on Limited Data	1

Table 11. Meta-Narratives and Supporting Factors for Research Question 3

Q3 Meta-Narratives	Factors/Themes	Number of Sources
Support to Strategic Decision-Making	Decision-Making Support	25
	Good Stewardship	15
	Enables Resource Allocation	14
	Enables Focus	4
	Identify Strategic Mission Risks	3
	Accountability Tool	2
	Disciplined Approach	2
	Supports Audit Readiness	1
	Internal and External Value	1
	Enhance Transparency	1
	Supports Change Management	1
	Achieve Strategic Objectives	1
	Align Risks with Strategic Objectives	1
	Restore Public Trust	1
	Evaluate Alternatives	1
	Strategic Planning	1
	Early Identification of Problems	1
Planning and Management Control	1	
Compliance with Regulations	Compliance with OMB Circular A-123	13
	Compliance with OMB Circular A-11	6
	Compliance with GPRAMA	6
	Compliance with FMFIA	5
	Support Strategic Review	5
	Compliance with GPRA	2

Chapter IV, Findings and Implications, presents the results of the synthesis phase and summarizes the meta-narratives and the implications for the Marine Corps. Chapter V, Recommendations, completes the meta-narrative review process by providing the Marine Corps with recommendations on how to apply the findings.

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III. DESCRIPTIVE ANALYSIS OF THE LITERATURE

This research is a systematic review of public-sector enterprise risk management (ERM) literature. The researcher leveraged a systematic meta-narrative approach to search, map, appraise, and synthesize existing literature related to public-sector ERM. This chapter describes the characteristics of the literature dataset and is divided into two sections: the dataset that resulted from the appraisal, and from the quality assessment.

A. APPRAISAL DATASET—ARTICLE ANALYSIS DESCRIPTION

The appraisal dataset, the result of the mapping phase, yielded 64 literature sources. The publication year of these sources ranged from 1998 to 2019. As shown in Table 12, the greatest number of articles per year occurred in 2019, 2018, 2017, and 2011. Only one source was published in 2008, 2006, and 2004.

Table 12. Literature Sources by Publication Year—Appraisal Dataset

Publication Year	# of Sources
2019	7
2018	7
2017	6
2016	5
2015	4
2014	5
2013	3
2012	3
2011	6
2010	3
2009	3
2008	1
2007	3
2006	1
2005	4
2004	1
2003	0
2002	0
2001	0
2000	0
1999	0
1998	2

Based on this dataset, the public-sector ERM area of study experienced growth from 2004 to 2019, as can be seen in Figure 2. This is not particularly surprising because the Casualty Actuarial Society (CAS) did not officially coin the term ERM until May 2003, in their document “Overview of Enterprise Risk Management.” It also makes the two articles published in 1998 a potential anomaly worth further scrutiny.

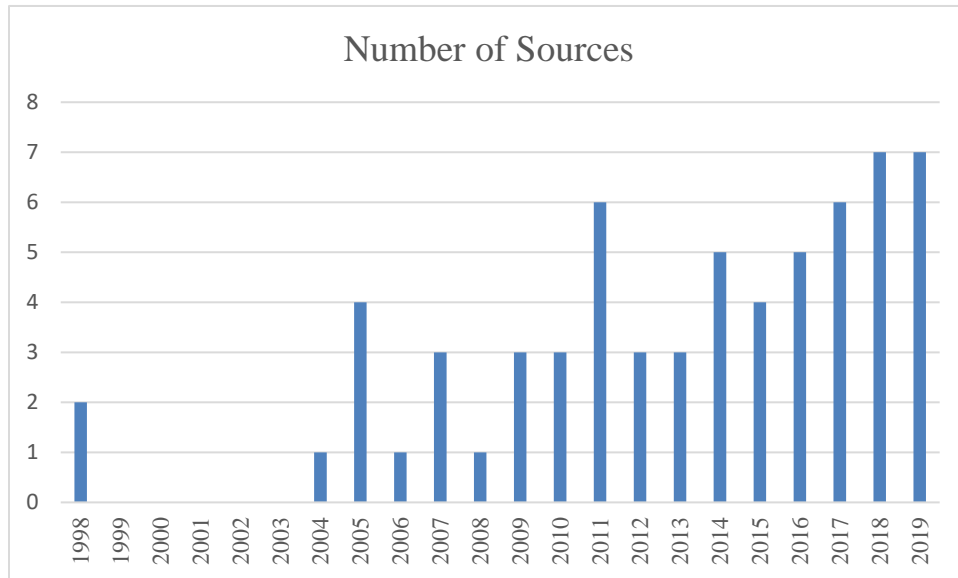


Figure 2. Number of Sources per Year—Appraisal Dataset

Of the 64 literature sources in the appraisal dataset, 73 percent were published in peer-reviewed journals, and 19 percent were government reports.

Table 13. Publication Type—Appraisal Dataset

Publication Type	Number of Sources
Book	3
Doctrine	1
Report	12
Letter	1
Peer-Reviewed Journal Article	47

Of the peer-reviewed journal articles in the appraisal dataset, *The Journal of Government Financial Management* had the most articles at 17 percent. This might indicate leadership within the scholarly community on public-sector ERM. According to Lowensohn and Samuelson’s paper (2006), which “identified top-quality research publication outlets in five specialized areas of accounting research...as perceived by members of five AAA sections regarding journal quality,” *The Journal of Government Financial Management* is in the “top” three academic research journals for government and nonprofit (p. 219). Of the government reports, the Government Accountability Office wrote 50 percent of the reports captured in the appraisal dataset. Table 14 provides a full list of journals and publishers in the appraisal dataset and shows there is a wide range of journals and publishers participating in the scholarly conversation about public-sector ERM.

Table 14. Number of Articles by Journal/Publisher—Appraisal Dataset

Journal/Publisher	Number of Sources
Defense Acquisition Research Journal	1
Financial Accountability and Management	2
Journal for Quality & Participation	1
Ovidius University Annals, Series Economic Sciences	2
Public Administration Review	1
Public Money & Management	2
The Journal of Government Financial Management	11
Abacus	1
Academy of Strategic Management Journal	1
Annals of the University of Oradea, Economic Science Series	1
Armed Forces Comptroller	1
Australian Journal of Public Administration	1
CFOC/PIC	1
Defence R&D Canada - Centre for Operational Research and Analysis	1
Defence Science and Technology Organization Systems Science Laboratory	2
Department of Defense	1

Journal/Publisher	Number of Sources
Department of Homeland Security	1
European Journal of Risk Regulation	1
Government Accountability Office	6
Internal Auditor	1
International Journal of Disclosure and Governance	1
International Journal of Project Management	1
International Journal of Public Sector Management	3
John Wiley & Sons, Inc.	2
Journal of Accountancy	1
Journal of Business Continuity & Emergency Planning	1
Journal of Enterprising Communities	1
Journal of Public Budgeting, Accounting & Financial Management	1
Journal of Risk Research	1
Local Government Studies	1
Management Accounting Research	1
Management and Business Administration Central Europe	1
Public Finance Quarterly (0031-496X)	2
Public Organization Review	1
Public Performance & Management Review	1
R&D Management	1
Risk Analysis	1
Routledge	1
The National Academies Press	1
Transportation Research Board	2

Note: The two sources published by John Wiley & Sons, Inc., and one source published by Routledge are books.

The initial appraisal resulted in the elimination of 23 literature sources because they were not relevant to this research’s questions. One example of an article that the researcher excluded was Newman, Charity, Faith, and Ongayi’s (2018) “Literature Review on the Effectiveness of Risk Management Systems on Financial Performance in a Public Setting,” which “evaluated the effectiveness of Risk Management Systems (RMS) on the performance of public sector setting by reviewing literature of other scholars from various countries” (p. 1). On initial review, the researcher expected the article to address public-sector ERM implementation guidance and challenges. Instead, the article focused on

financial risk management. Another example was Jacob, Welch, and Simms’ (2009) peer-reviewed journal article entitled “Emergent Management Strategies in a Public Agency: A Case Study of Alternative Fuel Vehicles,” which studied “how one public agency implements a program of replacing its transportation fleet with alternative fuel vehicles” (p. 213). On initial review, the researcher expected the article to evaluate approaches to ERM and illuminate the discussion around how ERM might support resource allocation. Upon further review, this article did not address these themes. The researcher next performed a quality assessment of the remaining 41 sources.

B. QUALITY ASSESSMENT DATASET—ARTICLE ANALYSIS DESCRIPTION

The publication year of the quality assessment dataset sources ranged from 2005 to 2019. As shown in Table 15, the greatest number of articles per year were 2019 and 2018, six sources each. One source was published in 2008 and one source in 2007.

Table 15. Literature Sources by Publication Year—Quality Assessment Dataset

Publication Year	Number of Sources
2019	6
2018	6
2017	3
2016	4
2015	3
2014	3
2013	2
2012	2
2011	4
2010	2
2009	2
2008	1
2007	1
2006	0
2005	2

Based on this dataset, the public-sector ERM area of study experienced growth from 2007 to 2019, as can be seen in Figure 3.

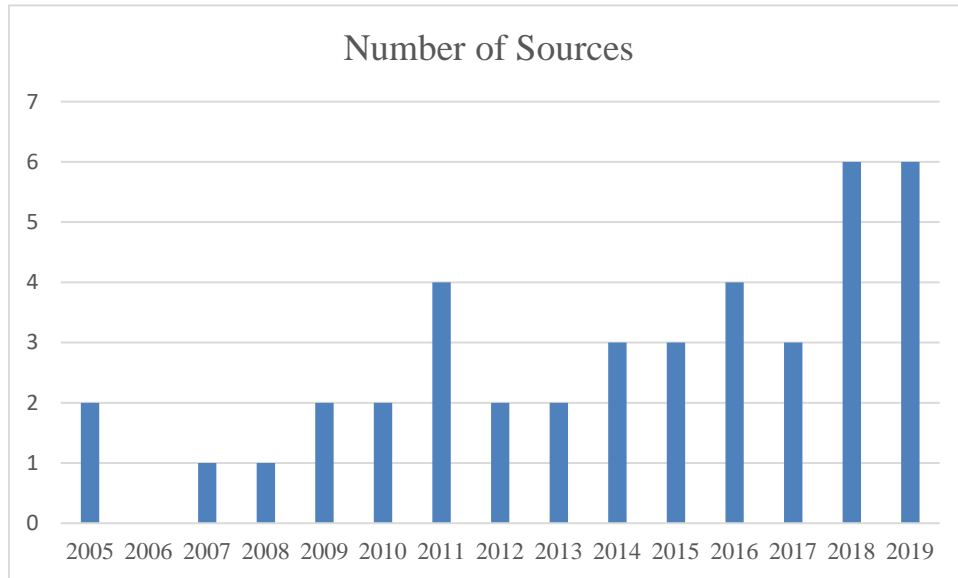


Figure 3. Number of Source per Year—Quality Assessment Dataset

Of the 41 sources in the quality assessment dataset, 66 percent were published in peer-reviewed journals, and 24 percent were government reports.

Table 16. Publication Type—Quality Assessment Dataset

Publication Type	Number of Sources
Book	3
Doctrine	1
Report	10
Letter	0
Peer-Reviewed Journal Article	27

Of the peer-reviewed journal articles in the quality assessment data set, *The Journal of Government Financial Management* had the most articles at 24 percent. This might further indicate leadership within the scholarly community on public-sector ERM. Of the

government reports, the Government Accountability Office wrote 50 percent of the reports captured in the appraisal dataset. Table 17 provides a full list of journals and publishers in the quality assessment dataset and shows there is a wide range of journals and publishers participating in the scholarly conversation about public-sector ERM. Fourteen of the initial 40 journals and publishers were eliminated from the appraisal dataset because the article published therein was not relevant to this research.

Table 17. Number of Articles by Journal/Publisher—Quality Assessment Dataset

Journal/Publisher	Number of Sources
Defense Acquisition Research Journal	-
Financial Accountability and Management	1
Journal for Quality & Participation	1
Ovidius University Annals, Series Economic Sciences	-
Public Administration Review	1
Public Money & Management	1
The Journal of Government Financial Management	10
Abacus	1
Academy of Strategic Management Journal	-
Annals of the University of Oradea, Economic Science Series	-
Armed Forces Comptroller	-
Australian Journal of Public Administration	1
CFOC/PIC	1
Defence R&D Canada - Centre for Operational Research and Analysis	1
Defence Science and Technology Organization Systems Science Laboratory	1
Department of Defense	-
Department of Homeland Security	1
European Journal of Risk Regulation	-
Government Accountability Office	5
Internal Auditor	1
International Journal of Disclosure and Governance	1

Journal/Publisher	Number of Sources
International Journal of Project Management	-
International Journal of Public Sector Management	-
John Wiley & Sons, Inc.	2
Journal of Accountancy	1
Journal of Business Continuity & Emergency Planning	-
Journal of Enterprising Communities	-
Journal of Public Budgeting, Accounting & Financial Management	-
Journal of Risk Research	-
Local Government Studies	1
Management Accounting Research	1
Management and Business Administration Central Europe	1
Public Finance Quarterly (0031-496X)	2
Public Organization Review	-
Public Performance & Management Review	-
R&D Management	1
Risk Analysis	1
Routledge	1
The National Academies Press	1
Transportation Research Board	2

The researcher assessed 21 of the sources in the quality assessment dataset as “good” at addressing the research questions of this research. Twelve of the 21 “good” sources based their findings on empirical research. Approximately 49 percent of the sources in the quality assessment dataset were guidance documents. Table 18, Assessment Rating-Quality Assessment Dataset, captures this information.

Table 18. Assessment Rating—Quality Assessment Dataset

Quality Assessment Question	Assessment Rating	Number of Articles
Question 1: How well does the source address the research question(s) of this thesis?		
	Poor or Unknown (0)	0
	Fair (1)	20
	Good (2)	21
Question 2: What is the strength of the source’s evidence?		
	Unsupported Opinion (0)	3
	Supported Opinion (1)	19
	Empirical (2)	19
Question 3: What is the intended purpose of the source?		
	Promotional (0)	6
	Guidance (1)	14
	Critical Evaluation (2)	21
Question 4: Is the source cited by other sources?		
	Poor or Unknown (0)	23
	Fair (1)	14
	Good (2)	4

Before the evaluation of the sources in the quality assessment dataset, the researcher eliminated those sources that were not relevant to this research’s purpose. No additional sources received a poor or unknown rating. However, if all 64 sources included in the appraisal dataset had undergone quality assessment, 23 sources would have received an assessment rating of “poor or unknown.” An example of a literature source that received a “fair” rating for question one is Oulasvirta and Antiroiko’s 2017 “Adoption of Comprehensive Risk Management in Local Government,” which “described and explained the diffusion and adoption of risk management innovation in local government in Finland” (p. 451). While this source addresses the challenges associated with implementing ERM across a large public-sector organization, it is very specific to the Finland experience and

may not transcend organizational cultures. If this article had addressed the U.S. public-sector experience, it would have received a higher rating. An example of a literature source that received an assessment rating of “good” is Mader, Vitters, and Kingery’s 2019 “Enterprise Risk Management in Government: Building a Successful Program in a Complex Environment,” which identifies “five recurring challenges” that organizations should anticipate and address as part of ERM implementation (p. 42).

The researcher assessed three sources as unsupported opinion because either the author did not reference verifiable evidence within the source, or the author(s) did not have significant and verifiable standing within the public-sector ERM scholarly community. However, the researcher kept these sources because they addressed aspects of this research’s questions. The researcher assessed nineteen as supported opinion, meaning the source had verifiable evidence referenced within the source, or the author(s) had verifiable significant standing within the public-sector ERM scholarly community. Within that dataset, seven sources had no verifiable evidence reference within the source; however, the author(s) had verifiable credentials and standing within the public-sector ERM scholarly community. One example of such an article is Mader, Vitters, and Obbagy’s (2018) “Restoring Trust in Government Through Transparency by Using Accounting and Enforcing Accountability.” The researcher assessed the article as opinion; however, Mader served as U.S. Controller for the Office of Management and Budget and served at the Internal Revenue Service (IRS) for more than 30 years. An example of a source that the researcher assessed as “empirical” is Gaidow and Boey’s 2005 “Australian Defence Risk Management Framework: A Comparative Study,” which “provides a review of the DRMF and analytically compare it with other established national and international defence and non-defence risk management standards, policies, and practices” (p. 1).

The “promotional” category identifies literature sources that use only positive language to describe ERM and its ability to add value; in other words, the source is promoting ERM. The researcher assessed six of the sources in the quality assessment dataset as “promotional.” An example of a peer-reviewed journal article that the researcher assessed as “promotional” is Steinhoff and Weber’s “Don’t Delay—The Time Has Come to Use the Full Potential of Enterprise Risk Management to Reduce Costs and Enhance

Program Delivery” (2011). The researcher assessed 14 documents as “guidance” in the quality assessment dataset. An example of a government report that the researcher assessed as a “guidance” source is the Government Accountability Office’s *Enterprise Risk Management: Selected Agencies’ Experiences Illustrate Good Practices in Managing Risk*, which “identified good practices that selected agencies have taken that illustrate those essential elements” of ERM (2016). An example of a source that the researcher assessed as “critical evaluation” is Rana, Wickramasinghe, and Bracci’s “Integrating Risk Management in Management Control Systems—Lessons for Public Sector Managers,” which “points to some enterprise risk management (ERM) issues and argues that ERM-enabled management control systems [have the] potential to improve performance measurement systems and strategic decision-making, leading to a more proactive risk management framework and a culture that promotes performance-driven accountability” (2019, p. 148).

The researcher used Google Scholar, Wiley Online, and Web of Science to verify how many times a literature source in the quality assessment dataset was cited. Fifty-six percent of the quality assessment dataset sources had either not been cited by other sources or authors, or the researcher could not verify the number of times that others cited the source. Five of these sources were published in 2019. Ten of these sources are government reports. The researcher categorized fourteen sources as “fair,” which meant the source was cited at least once by another source or author. An example of a source that received an assessment of “fair” is Leung and Isaacs’ “Risk Management in Public Research: Approach and Lessons Learned at a National Research Organization,” which according to Google Scholar was cited 29 times but per Web of Science and Wiley Online was cited less than ten times. Only four sources received an assessment of “good” in this category, one of which, Lapsley’s (2009) “New Public Management: The Cruellest Invention of the Human Spirit?” was cited 547 times according to Google Scholar and 191 times according to Wiley Online. This might indicate that this literature source was particularly impactful. Because the majority of the sources in the quality assessment dataset had no evidence of being cited by others, those sources that were assessed as “fair” are also considered impactful.

The focus of the research in the quality assessment dataset covered a wide range of topics within the field of public-sector ERM. The three books and one doctrine literature source focused on defining characteristics of public-sector ERM, implementation challenges, and how ERM adds value. Two of the books and the doctrine were published in 2014 and 2011, respectively; years before OMB Circular No. A-123, “Management’s Responsibility for Enterprise Risk Management and Internal Control,” (Donovan, 2016) was published in July of 2016 and mandated that Federal Agencies implement ERM. The increase in published literature sources in 2018 and 2019 might be due to the challenges public-sector enterprises are facing implementing ERM. The increase in published literature sources might also indicate a growth industry for consultancy firms offering services to support public-sector ERM implementation and evaluation.

Of the eleven initial meta-narrative categories identified during the Mapping phase of this research, seven remained after the Appraisal phase (Table 19).

Table 19. Initial Meta-Narrative Categories—Quality Assessment Dataset

<u>Initial Meta-Narrative Categories</u>	<u>Number of Sources</u>
Private-sector ERM differs from public-sector ERM.	4
ERM is value-added.	16
Guidance for Implementing ERM	15
Strategic Risk Management	-
Role of Internal Auditing/Control and ERM	-
Leveraging ERM in support of Resource Allocation	2
Risk Communication	-
Risk Governance	1
Risk Analysis Informs Decision-Making	1
ERM in Military Organizations	2
Evaluating Approaches to ERM	-

Thirty-nine percent of the literature sources in the quality assessment dataset argued that ERM could be value-added for public-sector enterprises as their dominant theme. However, the researcher assessed only five of these literature sources as critical evaluations. Of those five, the researcher assessed three empirical. Within the initial meta-narrative category of “ERM is value-added,” less than 20 percent of the literature sources are empirically driven critical evaluations. Figure 4 is a radar graph that depicts how the sources compared to the median across the four vectors.

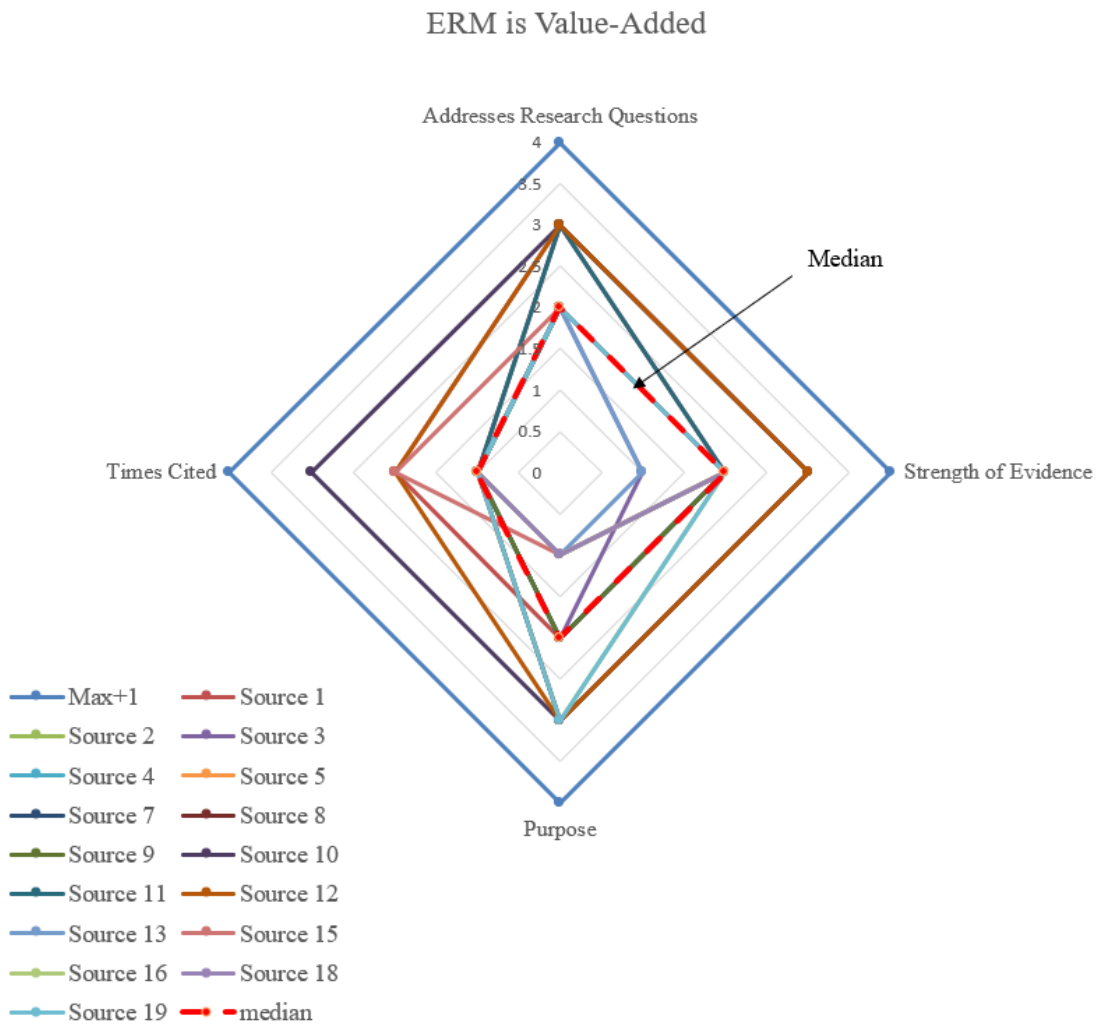


Figure 4. ERM Is Value-Added—Quality Assessment Dataset

Thirty-seven percent of the literature sources in the quality assessment dataset provided guidance for implementing ERM in the public-sector as their dominant theme. The researcher assessed seven of the literature sources as critical evaluations. Of those seven, the researcher assessed five as “empirical.” Within the initial meta-narrative category of “Guidance for Implementing ERM,” 33 percent of the literature sources are empirically driven critical evaluations. Figure 5 is a radar graph that depicts how the sources compared to the median across the four vectors.

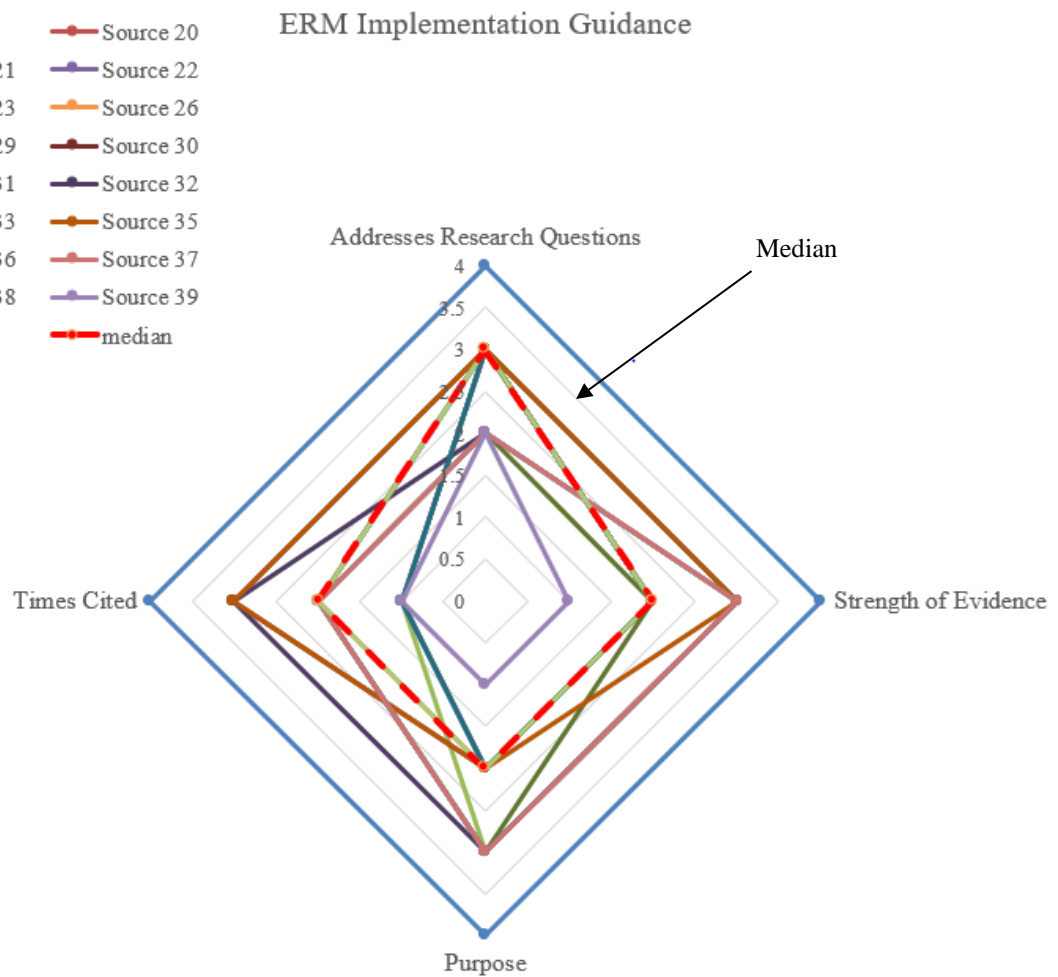


Figure 5. ERM Implementation Guidance—Quality Assessment Dataset

The descriptive analysis of the quality assessment datasets shows the inclusion of an increasing number of studies the researcher characterized as “unsupported opinion” and “supported opinion” over the last 14 years (Figure 6). Also, the descriptive analysis shows that over the last nine years, there has been an increase in the number of studies the researcher characterized as “promotional” and “guidance” (Figure 7). This analysis might be indicative that public-sector ERM is what Abrahamson termed as “Management Fashion” in his article “Management Fashion” (1996). “Fashion setters—consulting firms, management gurus, business mass-media publications, and business schools” might be attempting to sustain their image as “fashion-setters” by describing and disseminating public-sector ERM techniques as “the forefront of management progress” (Abrahamson, 1996).

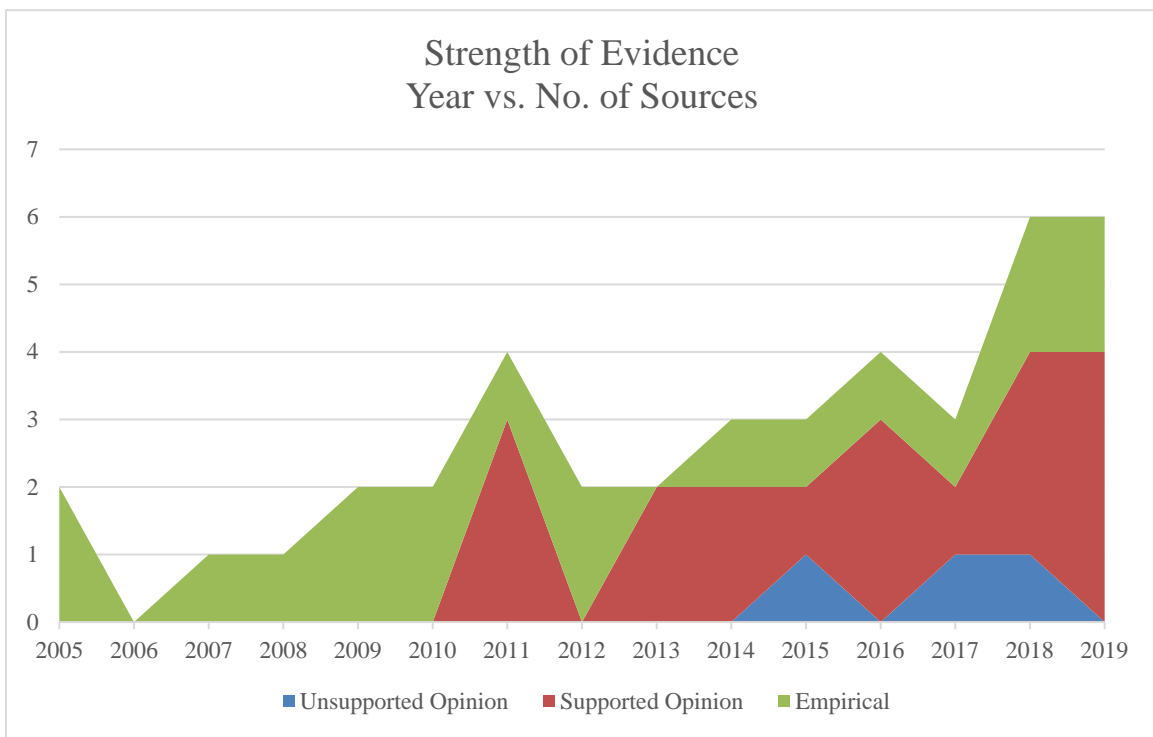


Figure 6. Strength of Evidence over Time—Quality Assessment Dataset

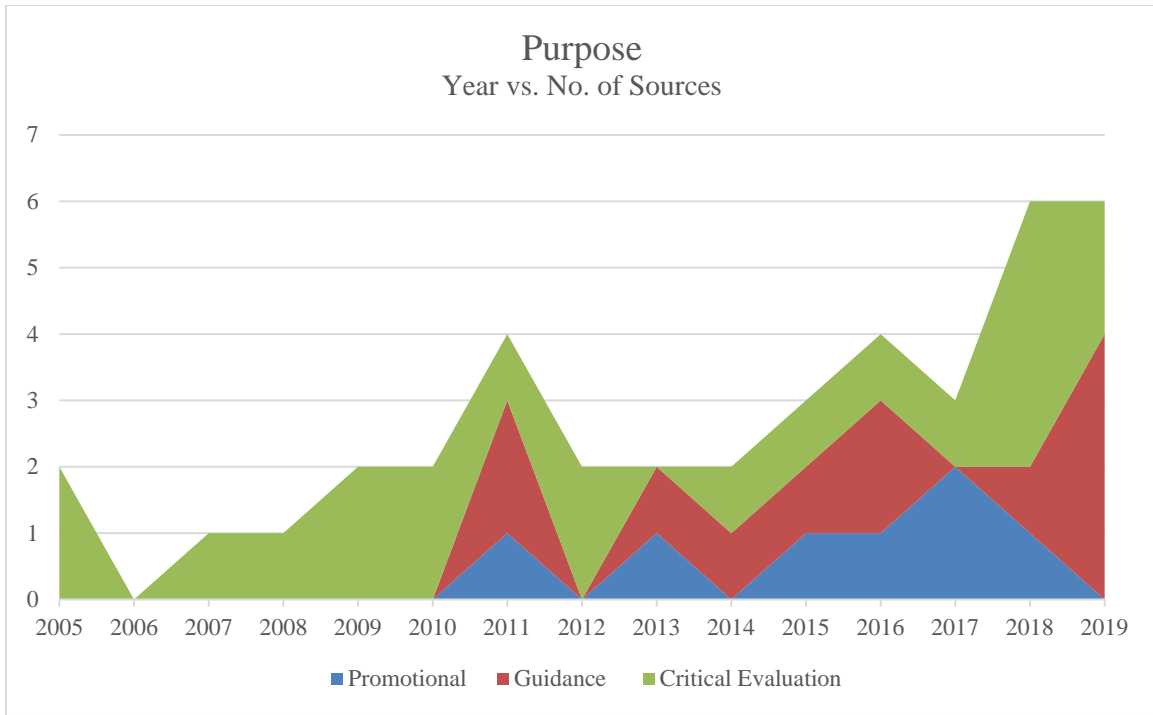


Figure 7. Purpose—Quality Assessment Dataset

Although the scholarly field on public-sector ERM appears to be still developing, the researcher was able to gather sufficient data from the existing body of knowledge to identify key meta-narrative themes. In Chapter IV, the researcher presents these meta-narrative themes.

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IV. FINDINGS AND IMPLICATIONS

The researcher's analysis of the literature sources identified five meta-narratives that characterize successful public-sector ERM programs, five meta-narratives that characterize the challenges associated with implementing an ERM program in public-sector enterprises, and three meta-narratives that characterize how ERM can add value to the Marine Corps enterprise. The findings indicate that the factors that make-up these meta-narratives can be used as levers by the Marine Corps to support its future successful implementation of ERM. This chapter provides a detailed discussion of the meta-narratives, the top recurring factors they are composed of, and their relationship to one another. This chapter also discusses the implications for the Marine Corps based on the findings.

A. CHARACTERISTICS OF SUCCESSFUL PUBLIC-SECTOR ERM

This research's synthesis of the literature shows that the characteristics of successful public-sector ERM can be categorized into four meta-narratives: (1) Create and Sustain a Risk Culture, (2) Governance and Infrastructure, (3) Have a Plan, and (4) Constructive and Continuous Communication. The Creating and Sustaining a Risk Culture component consists of those activities that will enable an organization to transform its culture and maintain that change. The Governance and Infrastructure component consists of those policies, processes, and personnel that provide the foundation for ERM in an organization. The Have a Plan component consists of those activities necessary to implement and sustain ERM in an organization. Finally, the Constructive and Continuous communication component consists of those conversations and interactions for ERM to be effective in an organization. There is a category labeled other that consists of those activities that were identified as best practices but did not fit into a thematic category. While there were 64 factors identified, only those factors that appeared across numerous sources and have the most support are discussed.

1. Create and Sustain a Risk Culture

Creating and Sustaining a Risk Culture was identified in 17 of 43 sources as a critical characteristic of successful public-sector ERM. Thomas Brandt, the Internal Revenue Service's (IRS) Chief Risk Officer (CRO) and a past President of the Association for Federal Enterprise Risk Management (AFERM) wrote in his 2018 article; *Lessons Learned the Hard Way: Enterprise Risk Management, Public Trust and the IRS*, that "Implementing ERM by putting in place processes and structures is not enough... Organizational culture must change as well to one where everyone has a heightened awareness of the different types of risks that can occur; where all employees at all levels of the organization feel comfortable pointing out risks; and where the leadership team fully embraces the need to openly address risk" (p. 30). In the Government Accountability Office's (GAO) 2016 report, *Enterprise Risk Management: Selected Agencies' Experiences Illustrate Good Practices in Managing Risk*, it identified, that "Developing an organizational culture to encourage employees to identify and discuss risks openly is critical to ERM success" (p. 13). Dickinson and Taylor wrote in their 2010 report; *Enterprise Risk Management: The Way Ahead for the DRDC within the DND Enterprise*, that "the most crucial element of implementing ERM" (p. 2) is the organizational culture, and that "A risk management culture is the essential ingredient for success. Risk management cannot be seen as a means to cover one's backside from audit. It is about making decisions with a broad awareness of the positive and negatives impacts of various factors and their likelihood. This leads to more robust and proactive decision making" (p. 26). Because Creating and Sustaining a Risk Culture is so important to the success of ERM, it is important to understand the factors that make it possible. The Airport Cooperative Research Program's 2012 report, *Application of Enterprise Risk Management at Airports (ACRP 74)*, stated, "leadership from the top, a network of risk champions, good communication, and effective training and education are all factors that may positively influence ERM culture" (p. 43). This research identified 19 factors that enable the creation and sustainment of a risk culture; however, the following discussion will only focus on the top seven factors that appeared in at least 19 percent of the systematically reviewed literature. Those factors include visible and active support from top leadership, common

risk language/taxonomy, ERM integrated with processes and decisions, continuous education and training, risk is positive and negative, more than compliance, and everyone's responsibility.

a. *Visible and Active Support from Top Leadership*

Visible and Active Support from Top Leadership is said to be a key factor in the success of both creating and sustaining risk culture, and in the success of ERM. This factor appeared in 20 of the 43 literature sources reviewed. According to the Chief Financial Officers Council's (CFOC) and the Performance Improvement Council's (PIC) *Playbook: Enterprise Risk Management for the U.S. Federal Government*, "A strong culture of risk awareness is needed throughout the agency. This culture can only occur if top agency leaders champion ERM and the flow of information needed for effective decision making" (2016, p. 22). Leung and Isaacs echo this assertion in their 2008 article, *Risk Management in Public Sector Research: Approach and Lessons Learned at a National Research Organization*, when they wrote it is necessary "to gain senior management support to champion the initiative and get them involved in the process – this will help ensure that risk management is on the agenda, and there is follow-through on key actions" (p. 517). The implication for the Marine Corps is that any ERM initiative must be championed publicly by the Commandant, General Berger, and his Deputy Commandants.

b. *Common Risk Language/Taxonomy*

Leung and Isaacs wrote in their article *Risk Management in Public Sector Research: Approach and Lessons Learned at a National Research Organization* that "a major challenge was to achieve agreement on a common risk management language" (2008, p. 514). Common Risk Language/Taxonomy refers to a common understanding of what is meant by risk, risk management, enterprise, ERM, and all of the other definitions and language used. This factor appeared in 19 of 43 sources. According to Hardy in *Enterprise Risk Management: A Guide for Government Professionals*, a risk taxonomy can help craft the kind of risk culture necessary for ERM to be successful (Hardy, 2014). It is an important part of risk culture, and according to Fraser in his chapter on "Building Enterprise Risk Management into Agency Processes and Culture," is an important part of

“ensuring clarity of usage” (2014, p. 179). Fraser wrote that it was important to build “a shared understanding of key risks through structured ‘conversations’”; however, for these conversations to take place, those involved have to be speaking about the same thing (p. 175). It was also apparent how much value authors placed on a common risk language, by their choice to define what they meant by risk, risk management, and ERM in the majority of the literature. The implication for the Marine Corps is that it may need to clearly define common risk language/taxonomy using simple, understandable language. A common understanding of ERM terms, definitions, policies, and processes will further enable risk culture creation and sustainment.

c. ERM Integrated with Processes and Decisions

Domokos et al. wrote in their 2015 article that ERM’s “greatest value lies in its incorporation into a process and its regular and repeated execution” (p. 13). Furthermore, GAO identified in its 2016 report on ERM that one of the six good practices identified across nine agencies is to “incorporate ERM into strategic processes and use ERM to improve information for agency decisions” (p. 25). Integrating ERM with Processes and Decisions is another important component of Creating and Sustaining a Risk Culture and appeared in 18 of the 43 literature sources synthesized. The implication for the Marine Corps is that integrating ERM with processes and decisions may be necessary to gain the most value out of ERM and ensure it is more than a compliance activity.

d. Continuous Education and Training

Continuous Education and Training on risk and ERM appears to be an important component of Creating and Sustaining a Risk Culture. This component enables the diffusion of definitions, policies, and processes across an organization. An enterprise will find it exceedingly difficult to execute a process if its members lack the appropriate knowledge. The GAO’s report, *Enterprise Risk Management: Selected Agencies’ Experiences Illustrate Good Practices in Managing Risk*, identified training employees on ERM as essential to developing a risk-informed culture (2016). Education and training are necessary to foster an environment that supports the reporting of risk. Gaidow and Boey wrote in their 2005 report that “a risk management culture needs to be established by top-

level commitment, developing formal documentation and involving all staff in training, education or awareness of risk management" (p. 2) and that "adequate resources and trained personnel have to be provided for the risk management activities" (p. 8). Palermo, in his 2014 article, recommends leveraging training activities as an opportunity to "cascade key learning points" back across the organization (p. 335). The implication for the Marine Corps is that the implementation of ERM needs to include a training and education plan to enable diffusion of risk culture across the enterprise.

e. Risk Is Both Positive and Negative

Understanding that Risk is Both Positive and Negative appears to be an important component of the risk culture necessary to implement successful public-sector ERM. Both a common risk language and continuous education and training will enable this understanding. GAO wrote in their 2015 report, *Managing for Results: Practices for Effective Agency Strategic Reviews*, that an ERM "approach can help ensure that opportunities and challenges are routinely identified, analyzed, and addressed, as appropriate, enhancing the agency's capacity to more efficiently and effectively determine priorities and allocate resources" (p. 19). The ability to recognize both opportunities and challenges helps prevent the creation of a risk culture that is only about compliance. According to Ivanyos and Sándor-Kriszt in their 2016 article, "Risk Management Measurement and Evaluation Methods Based on Performance Indicators," compliance risk management only addresses the negative aspects of risk, not the positive opportunities. They go on to write, that "compliant risk management may become an exercise in mostly ex-post documentation completely separated from actual decision-making and governance functions that follow the audit cycles rather than the time horizon of organizational goals or any changes in circumstances" (p. 268). An enterprise with a risk culture that can recognize both the positive and negative aspects of risk is better able to proactively manage "the uncertainty that their organization faces and improves the long-term outcomes of the organization's activities and decision-making" (ACRP, 2012, p. 8). The implication for the Marine Corps is that the common risk language adopted and then promulgated through continuous education and training should incorporate both the negative and positive aspects of risk. Otherwise, the Marine Corps might inculcate a risk-averse risk culture.

f. More Than Compliance

The More than Compliance component of risk culture is coupled closely with an understanding of risk that is both positive and negative. It is both an important aspect of risk culture and a sustainment function. This component appeared in nine of the literature sources reviewed. In Rana, Wickramasingh, and Bracci's 2019 article, "New Development: Integrating Risk Management in Management Control Systems—Lessons for Public Sector Managers," they put forth Kaplan and Mikes's "idea of 'dual risk management,' which explains how the ERM and relevant managers can take a compliance approach to risk management" that is "decoupled from the rest of the organizational processes" and is "to the detriment of other control functions" (p. 149). A compliance mentality becomes a documentation drill with no incentive to integrate risk management into management processes and decisions. The ACRP wrote in their report that a "compliance-driven approach has been effective at managing risk from a bottom-up perspective" (2012, p. 1). However, ERM assesses "risk exposures from a top-down holistic perspective" (2012, p. 1). This assertion is in line with what Dorminey and Mohn wrote in their article, that "ERM is a strategic activity, not a compliance activity" (2007, p. 55). Finally, Domokos, Nyéki, Jakovác, Németh, and Hatvani wrote in their 2015 article that "risk management will only achieve its goal if it does not only appear in the organization's operation as a required element of the internal control system that must be implemented as a rule, but as an organic part and an active tool of management" (p. 17). The implication for the Marine Corps is that ERM needs to be integrated into strategic decisions and management processes, and a risk culture where ERM is more than a compliance activity needs to be created and sustained.

g. Everyone's Responsibility

The last component addressed as part of the Creating and Sustaining a Risk Culture meta-narrative is risk management is Everyone's Responsibility. Fraser writes in Chapter 9: Building Enterprise Risk Management into Agency Processes and Culture of *Managing Risk and Performance: A Guide for Government Decision Makers*, that "risk management is everyone's responsibility.... Employees are expected to understand the risks that fall

within the limits of their accountabilities and are expected to manage these risks within approved risk tolerances” (2014, p. 179). The CFOC and PIC wrote in their *Playbook: Enterprise Risk Management for the U.S. Federal Government*, that “effective risk management, and especially effective ERM, is everyone’s responsibility” (2016, p. 6). Gaidow and Boey’s 2005 report further states that “an effective risk management framework must be based on a comprehensive, systematic and coordinated approach and on a culture recognizing risk management as everyone's responsibility as a characteristic of the way of doing things” (p. 46). The implication for the Marine Corps is that as it implements ERM, the risk culture created across the enterprise must be all-inclusive, and the education and training initiatives must make it clear why risk management is everyone’s responsibility.

2. ERM Governance and Infrastructure

The second meta-narrative identified as a defining characteristic of successful public-sector ERM is Governance and Infrastructure. ERM governance and infrastructure, combined with a strong risk culture, are the foundation on which to build and develop ERM across an enterprise. ACRP defined governance in its 2012 report as “the system by which organizations are directed and controlled. Governance includes the system and structure for defining policies, providing leadership, and managing and coordinating processes and resources to meet an organization’s strategic goals” (p. 53). An effective governance structure was identified in 14 sources as a critical characteristic of successful public-sector ERM. Although the literature synthesis identified nine components that contribute to ERM governance and infrastructure, this section only focuses on six of them: leverage existing risk processes, tailor ERM to the organization, align ERM processes to strategic goals and objectives, clearly define risk appetite, establish a focal point for coordination, and dedicate resources.

a. Leverage Existing Risk Processes

An important component of ERM Governance and Infrastructure identified during this systematic review is to Leverage Existing Risk Processes. This research’s literature review and synthesis identified this factor in 14 of the 43 sources. Many organizations have

existing risk processes that exist in independent silos, e.g., operational risk or risk assessment as part of acquisitions. The CFOC and PIC wrote in their 2016 playbook that ERM should “build upon and unite existing risk management processes, systems, and activities” (p. 9). One of the first things an organization should do is identify and take inventory of its existing risk processes. Otherwise, it would be very difficult for an organization to integrate risk holistically across the enterprise, and it could even find itself reinventing the wheel in some cases.

Furthermore, an enterprise that has identified the risk processes in place can take advantage of them and not impose additional or redundant administrative burdens on the organization and its functions. In Ahearne et al.’s *Review of the Department of Homeland Security’s Approach to Risk Analysis*, the authors identified that an advantage of leveraging existing processes is that “ERM programs need not be large and their resource requirements can be minimal” (Ahearne et al., 2010, pp. 80–81). The implication for the Marine Corps is that it needs to identify, document, and diagram its existing risk management processes and practices before or during the early stages of implementing an ERM program.

b. Tailor ERM Governance and Infrastructure to the Organization

The next most often identified component of ERM Governance and Infrastructure is to Tailor ERM Governance and Infrastructure to the Organization. This factor appeared in 13 of the literature sources, as well. Oulasvirta and Anttiroiko, in their 2017 article, make the argument that an organization’s institutional characteristics, environment, and size impact how it should apply ERM. Leung and Isaacs caution in their 2008 article, when discussing ERM implementation, that an enterprise should “develop the approach and process to fit the organization—a best practice might not be ‘the’ best practice for your organization” (p. 517). Mader, Vitters, and Kingery warn that “there is no ‘one size fits all’ for aspects of implementation. Agencies possess unique strengths and weaknesses which will mold the foundation for ERM implementation” (2019, p. 42). GAO identified in their 2016 report that good practices are to “establish a customized ERM program integrated into agency processes” (p. 13) and that ERM tools should be customized “for organizational mission and culture” (p. 19). The implication for the Marine Corps is that

as it begins ERM implementation, it should establish an ERM program that fits its strategic mission set, “culture, operating environment, and business processes” (p. 30).

c. Align ERM Policies and Process to Strategic Goals and Objectives

Aligning ERM Policies and Processes to Strategic Goals and Objectives was identified in 12 of the literature sources reviewed. Dickinson and Taylor wrote in their 2010 report on ERM within Canada’s Defence Research and Development (DRDC) enterprise, that “the first step in risk management is to understand the objective and context of the problem” (p. 10). GAO’s 2016 study on ERM further identifies that “aligning ERM processes to goals and objectives” is an essential element of ERM (p. 9). Gaidow and Boey, in their 2005 report on the Australian Defence Risk Management Framework, indicate that an organization’s risk management policy needs to be “aligned with the organization’s goals, the operational environment, nature of activities, and interests of stakeholders” (p. 8). The point of ERM is to enable an organization to achieve its strategic goals and objectives. If ERM operates in a vacuum and is not aligned with the strategic goals and objectives of the organization it supports, it cannot identify the challenges and opportunities its organization faces. The implication for the Marine Corps is that it needs to identify and articulate its strategic goals and objectives.

d. Clearly Define Risk Appetite

Risk Appetite is defined as “the articulation of the amount of risk (on a broad/macro level) an organization is willing to accept in pursuit of strategic objectives and value to the enterprise” (CFOC & PIC, 2016, p. 107). A Clearly Defined Risk Appetite as a component of ERM Governance and Infrastructure appeared in 11 of the literature sources synthesized. GAO recommended in its 2016 report on ERM that an “organization should develop a risk appetite statement and embed it in policies, procedures, decision limits, training, and communication so that it is widely understood and used by the agency. Further, the risk appetite may vary for different activities depending on the expected value to the organization and its stakeholders” (p. 17). Also, GAO cautioned that organizations “could be taking risks well beyond management’s comfort level, or passing up strategic opportunities by assuming its leaders were risk-averse” if they do not have a clearly defined

risk appetite (p. 17). The value of a clearly defined risk appetite, published in a governance document and promulgated through continuous education and training, is that all stakeholders are aware of and able to understand their organization's levels and limits of risk. Ivanyos and Sándor-Kriszt, in their 2016 article, recommend that management "consider the costs entailed by the reduction of [a] risk's potential negative effect" when defining risk appetite (p. 274). They also recommend that management consider the "actual and expected costs of the applicable governance practices" when defining risk appetite (p. 274).

The implication for the Marine Corps is that when developing its ERM governance and infrastructure, it should carefully consider its risk appetite in relation to its mission and objectives and ensure it is easily understandable by all stakeholders. Another implication for the Marine Corps is that by clearly defining its risk appetite, it will be better able to meet the requirements of the Federal Managers Financial Integrity Act and OMB Circular A-123. Established risk appetite is essential to "management's responsibility to develop and maintain effective internal control" (Donovan, 2016, p. 22).

e. Establish a Focal Point for ERM Coordination

Establishing a Focal Point for ERM Coordination is an essential component to governance and infrastructure, and appeared in eight of the 43 literature sources reviewed and synthesized. This factor refers to the person or body responsible for ERM governance, e.g., Chief Risk Officer (CRO), Risk Management Council (RMC), etc. Oulasvirta and Antirroiko proposed that a positive correlation exists between the "existence of a CRO" and the "extent of comprehensive risk management" in an organization in their 2017 article (p. 456). The CFOC and PIC wrote in their ERM playbook that a common pitfall of ERM programs is the "lack of a core team," like an RMC (2016, p. 23). They go on to recommend that each organization needs to "assess the level of support necessary to implement and manage ERM effectively" (p. 23). According to Brandt, the Internal Revenue Service (IRS) hired a CRO in 2013 and later instituted a network of ERM liaisons and an Executive Risk Committee to implement and manage their ERM program (2018). Pankaj and Hare argued in their journal article that "the creation of a risk management council (RMC) or inclusion

of enterprise risk managers, such as the chief risk officer, to promote ERM and related concepts across the agency, is a good first step to get everyone talking to one another and focusing on how best to create an integrated approach that promotes readiness to address the most pressing risks” (2016, p. 31).

The implication for the Marine Corps is that as it approaches the implementation of ERM, it should assess the level of support necessary to manage and implement ERM across the organization and establish a focal point for ERM coordination (CFOC & PIC, 2016). The Marine Corps has already taken the first step towards this component. General Berger, in a recent white letter, placed the Deputy Commandant for Programs and Resources (DC P&R) in charge of the “implementation of an ERM framework” (Berger, 2019b, p. 2).

f. Dedicate Resources

Dedicating Resources in support of ERM is an important component of implementing ERM Governance and Infrastructure, and was referenced as often as establishing a focal point for coordination. Resources include the necessary people, time, and money to implement and manage ERM. When implementing ERM, it is just as important to change the organization’s culture as it is to put in place people, policies, and processes (Brandt, 2018). “According to Prosci’s 2009 Best Practices in Change Management benchmarking reports,” as cited by Webster, one of the “most important factors distinguishing between success and failure” when an organization changes, is dedicated resources (2014, p. 32). Kenneth Fletcher, a former CRO of the Transportation Security Administration, also identified “dedicated resources to facilitate change and develop organizational capacity” as a critical component to success (Fletcher, 2019, p. 30). In the ACRP’s report on ERM, the Columbus Regional Airport Authority identified “getting the right resources committed” as one of “the most challenging elements to implementing ERM” (2012, p. 14). The implication for the Marine Corps is that there are resource costs associated with ERM and that any implementation plan should consider and account for those costs.

3. Have a Plan

The third meta-narrative identified as a defining characteristic of successful public-sector ERM is to Have a Plan. The literature synthesis identified 21 factors that contribute to this meta-narrative; however, the following discussion will only address the four that appeared in more than 16 percent of the literature sources. Those factors include an implementation plan, it's an iterative process, requires a consistent approach, and continuous assessment and improvement.

a. Implementation Plan

Eight of the literature sources reviewed and synthesized recommended that organizations draft an ERM implementation plan before beginning. The CFOC and PIC's playbook recommends that organizations should "develop plans for implementing ERM into management practices" (2016, p. 22). They go on to recommend that an organization's ERM implementation plan "should include a planned risk governance structure, processes for considering risk appetite and tolerance levels, methodology for developing a risk profile, and general implementation timeline and plan for maturing the comprehensiveness and quality of the risk profile over time" (p. 22). Gaidow and Boey wrote in their report on the ADRMF that one of the steps necessary to establish ERM is an implementation program (2005). "An implementation program has to identify the steps to be undertaken in order to introduce a risk management framework within an organization" (Gaidow & Boey, 2005, p. 8). The implication for the Marine Corps is that it should design an initial implementation plan before implementing ERM.

b. It's an Iterative Process

The CFOC and PIC's playbook identifies a common mistake that organizations make when implementing ERM is doing "too much too quickly" (2016, p. 15). Implementing and maturing ERM in an organization takes time, and incrementally builds on itself. The iterative process of implementing ERM happens hand-in-hand with the organizational culture change that has to take place for ERM to be effective. The CFOC and PIC warn that, "trying to change the fabric of an agency too much or too quickly could result in defensive mechanisms" that will stall or prevent ERM implementation (2016,

p. 15). The implication for the Marine Corps is that ERM is a process that takes time to implement. It is critical to managing the organization's expectations in the early stages of ERM's implementation.

c. Requires a Consistent Approach

According to Webster (2014), "implementation of ERM requires a centralized process that is applied consistently across the organization" (p. 280). This factor appeared in eight of the literature sources, as well. The U.S. Department of Homeland Security's Risk Management doctrine states that "managing risk requires a consistent approach across the organization" (2011, p. 14). It goes on to caution that processes need not be identical, but "should facilitate the ability to compare risks" and provide management with reasonable assurance that "risk management can be conducted coherently" (p. 14). Leung and Isaacs warn that it's necessary to maintain a balance between flexibility and the consistency that a standardized framework provides (2008). GAO recommends in its 2016 report on ERM that organizations develop "a consistent, routinized ERM program" (p. 30). The report references TSA's use of a risk taxonomy to enable "a consistent process for risk review that systematically categorizes risk" (p. 32). The implication for the Marine Corps is that as it designs its ERM processes, it should consider how it can make the identification of risks and opportunities systematic so that stakeholders can consistently apply them.

d. Continuous Assessment and Improvement

Like any other process, ERM necessitates continuous assessment and improvement as it develops and matures. This factor appeared in seven of the literature sources reviewed and synthesized and is an important aspect of sustainability. Internal and external audits are important for continuous assessment and should evaluate both compliance and effectiveness. The literature also recommended leveraging third parties, like the GAO, the Inspector General's (IG) office, and communities of practice in support of implementing and maturing ERM. GAO and the IG's office both have experience with ERM in public-sector organizations and can perform external audits to evaluate compliance with regulations. However, Lapsley cautions in his 2009 article on New Public Management (NPM) that "the outcome of giving primacy to audit in the process of transforming public

services may be the encouragement of a compliance culture, which is demonstrated by a ‘tick box’ mentality” (p. 17). As Ivanyos and Sándor-Kriszt argue, this negative aspect of compliance is why it is important to evaluate the effectiveness of ERM as well (2016). ACRP’s 2012 report on ERM states that evaluation and improvement are essential “to ensure that ERM continues to be relevant” (p. 50). It goes on to recommend the use of key performance indicators (KPIs) to facilitate assessment. These KPIs will have to become more challenging as an organization’s ERM matures. KPIs can be developed from ERM maturity models or other organizations and best practices (Ivanyos & Sándor-Kriszt, 2016). A good source of KPIs are communities of practice like AFERM, the Risk Management Society (RIMS), and the Public Risk Management Association (PRIMA). The implication for the Marine Corps is that any implemented ERM program will need to be continuously assessed and improved to ensure it continues to add value. Those assessments should be transparent to all stakeholders and used to mature ERM. Also, GAO and the IG can be leveraged as ERM enablers.

4. Constructive and Continuous Communication

This research identified Constructive and Continuous Communication as a key characteristic of successful public-sector ERM programs in 16 of the literature sources, and as one of the meta-narratives of public-sector ERM literature. Stanton, in his 2013 article on risk management during government downsizing, argued that “the core of effective ERM is a series of conversations among managers, supported by information from across the organization” (p. 219). Pankaj and Hare recommended the “creation of a risk management council (RMC) or the inclusion of enterprise risk managers” as a good way to begin this conversation (2016, p. 31). GAO identified in its 2016 report on ERM that constructive communication good practices include “incorporating feedback on risks from internal and external stakeholders to better manage risks, and sharing risk information across the enterprise” (p. 39). The implication for the Marine Corps is that constructive and continuous communication is essential to the success of an ERM program. Towards that end, Hardy recommends in her book on ERM for government professionals that organizations “establish a communications plan and stick with it” (2014, p. 224). The components of Constructive and Continuous Communication identified most often during

the literature review and synthesis include Continuous Engagement with All Stakeholders, Communication Must Flow from the Bottom-Up and the Top-Down, and it's important to Communicate Achievements and Results.

This last factor, Communicating Achievements and Results, is essential to implementing and sustaining ERM in an organization and is tied into continuous engagement with all stakeholders. ACRP's report on ERM cautions that "the greatest obstacles will arise if employees perceive no value in the process" (2012, p. 51). By communicating a vision for ERM and its value, organizations can prevent these obstacles from arising. Mader, Vitters, and Kingery recommend highlighting "program-level ERM success stories to provide recognition and communicate the value of risk management" (2019, p. 43). By publicly recognizing risk and opportunity identification, an organization furthers the development of a risk culture that all stakeholders want to participate in; it creates buy-in. The implication for the Marine Corps is that communicating the value and results of ERM can have significant impacts on buy-in and enable the implementation and sustainment of ERM.

B. CHALLENGES ASSOCIATED WITH IMPLEMENTING AND SUSTAINING ERM IN PUBLIC-SECTOR ENTERPRISES

This research's synthesis of the literature categorizes the challenges associated with implementing ERM in public-sector enterprises into two meta-narratives: (1) Organizational Culture Change, and (2) Endogenous and Exogenous Pressures. The Organizational Culture Change component consists of those factors associated with change management that make implementing ERM difficult. The Endogenous and Exogenous Pressures component consists of those internal and external pressures placed upon and enterprise that impede ERM implementation. There is a category labeled other that consists of those activities that this research identified as best practices, or practices that organizations should avoid, but did not fit into a thematic category. While there were 31 factors identified, only those factors that appeared across numerous sources and have the most support are discussed. An important consideration is that the inverse of the factors and meta-narratives associated with successful public-sector ERM can be considered challenges as well, but are not discussed further.

1. Organizational Culture Change

This research identified organizational culture change as a significant impediment to implementing and sustaining ERM across a public-sector enterprise. The literature review and synthesis uncovered 18 factors related to organizational change. The top two factors that appeared the most across the literature sources are (1) Organizational Change Takes Time, and (2) Organizational Culture Change is Difficult. They both appeared in more than 28 percent of the literature sources. There is a significant body of literature, outside the ERM literature, devoted to change management; therefore, this research will not go into great detail on the topic (Green & Cameron, 2015). The implication for the Marine Corps is that managing the organizational culture change associated with implementing and sustaining ERM is a critical necessity.

Another important factor associated with Organizational Culture Change identified in the literature is preventing the development, and if necessary, overcoming a compliance mentality. This factor appeared in roughly twelve of the literature sources reviewed. While compliance with regulations can be a key driver when implementing ERM across public-sector organizations, Rana et al., in their 2019 article, suggest that a compliance-focused model can be detrimental. Vineyard and Kaizer in their chapter of *Public Sector Enterprise Risk Management: Advancing Beyond the Basics* warn against allowing ERM to turn “into a simple check-the-box exercise in which executive conversations revolve around ‘What does it tell us to do?’ and ‘Did we do what they asked?’” (2019, p. 89). The problem with a compliance mentality, as Lapsley points out in his 2009 article on New Public Management, is that managers “may find that their workers become more preoccupied with procedures than with delivering quality” (p. 17).

An additional factor identified that is closely related to Organizational Culture Change is the unintentional behavioral consequence of focusing on the negative aspects of risk, Risk Aversion. Dickinson and Taylor wrote in their 2010 report on ERM that the challenge within the public-sector is “to view risk management in its broadest terms where risk can have positive as well as negative results,” which is an essential element “of the culture of risk management” (p. 6). A risk-averse enterprise is suboptimal and will miss out on potentially beneficial opportunities. The implication for the Marine Corps is that as

it implements ERM and fosters the necessary organizational culture change, it must be cognizant of the kind of risk culture it creates.

2. Endogenous and Exogenous Pressures

This research identified Endogenous and Exogenous Pressures as a meta-narrative challenge to implementing and sustaining ERM across a public-sector enterprise. The literature review and synthesis uncovered seven factors related to this meta-narrative. None of the associated factors were present in more than 10 percent of the literature. The top two factors contributing to this meta-narrative are Focusing Too Much on Internal Controls (CFOC & PIC, 2016, p. 10), and Multiplicity—Resource Pressures. Internal controls are an endogenous pressure that can foster a compliance-focused risk culture. According to CFOC and PIC’s playbook, “ERM includes internal controls” (p. 10), not the other way around. Per Domokos et al., “risk management will only achieve its goal if it does not only appear in the organization’s operation as a required element of the internal control system that must be implemented as a rule” (2015, p. 17). The implication for the Marine Corps is that ERM and internal controls are complementary and that ERM is more than compliance.

The challenge of multiplicity, according to Seago in her 2015 article, is that “efforts to implement ERM wrestle with the need to juggle a broad range of not-always-compatible priorities” (p. 48). ERM requires dedicated resources, however, in an ever-increasing fiscally austere environment, public-sector organizations may find themselves having to choose between resourcing ERM or another priority. Fletcher and Stanton caution that “this is ‘penny wise and pound foolish’ [and] may become apparent only after risks have materialized to harm the agency, its leaders and stakeholders and its reputation” (2019, p. 10). The implication for the Marine Corps is that the pressures associated with multiplicity have the potential to sabotage ERM implementation in its early stages before it has had the opportunity to demonstrate value.

C. VALUE OF ERM

This research’s synthesis of the literature categorizes the value of ERM for a public-sector enterprise can into two meta-narratives: (1) Supports Strategic Decision-Making, and (2) Enables Regulatory Compliance to Promote the Goals of the Regulation. The

Supports Strategic Decision-Making component is concerned with how ERM can be used by an enterprise to make better informed strategic decisions. The Enables Regulatory Compliance to Promote the Goals of the Regulation identifies those regulations and statutes that public-sector enterprises must comply with by law. While there were 24 factors identified, only those factors that appeared across numerous sources and have the most support are discussed.

1. Supports Strategic Decision-Making

This research identified support to strategic decision-making as the primary benefit of ERM. This factor and meta-narrative theme appeared in almost 25 of the 43 literature sources reviewed. According to the ACRP report on ERM, the value of implementing ERM lies in “integrating risk processes into routine processes and decision-making” which allows “management to effectively identify and manages” uncertainty and then make informed decisions (2012, p. 9). According to Gaidow and Boey’s report on the ADRMF, the benefits of ERM include “advanced decision-making at the strategic and operational level” and “a greater openness and transparency in decision-making” (2005, p. 29). Transparency is only possible if risk data and its analysis are effectively documented and shared. According to Mader, Vitters, and Obbagy in their 2018 article, this transparency across the enterprise can enable organizations to “develop strategic plans that are more resilient in the face of risks” (p. 46). However, Ahearne et al. cautioned in their report that decision-makers must have a good understanding of the capabilities and limitations of risk analysis” (2010, p. 17), and Mader et al. warned that ERM is “only effective if the information is used” (2018, p. 46). Although this research identified 17 factors that make up this theme, only support to good stewardship and enables resource allocation decisions are discussed further due to the preponderance of literature they appeared in.

Support to Good Stewardship appeared in 15 of the literature sources reviewed and is intrinsically tied to Enabling Resource Allocation Decisions. Good stewardship is the act of minimizing the risk of having to request more resources than allocated while maximizing the probability of accomplishing the mission with the resources allocated (Doerr & Kang, 2014). Good resource allocation decisions lead to good stewardship,

ceteris paribus. Part of the value of ERM is that it can be leveraged to inform resource allocation decisions, which are multi-criteria in nature, and thereby enable good stewardship. The argument made across the literature sources is that via risk analysis and risk identification, an enterprise can prioritize resource allocation towards those risks and opportunities that have the highest probability of occurrence and impact. Miller, Puri, and Dorries wrote in their 2019 article on integrating ERM with fraud risk management that ERM's portfolio view of risk "provides better insight for resource allocations to ensure successful mission delivery" (p. 19). Steinhoff and Weber, in their 2011 article on ERM, argue that ERM allows organizations to "take an enterprise look at what is important and what isn't, what works and what doesn't, and where time, resources and dollars can be put to better use" (p. 13).

According to the literature, to be effective, these processes need to be grounded in systematic quantitative and qualitative analysis. Furthermore, the process needs to be documented, and decisions need to be analyzed and evaluated to determine where ERM got it correct and where the process needs to be improved. An implication for the Marine Corps is that the value of ERM is apparent when its processes and outputs are used to inform enterprise-level decisions that support resource allocation and good stewardship.

2. Regulatory Compliance to Promote the Goals of the Regulation

This research identified that a compliance culture and mentality is counterproductive; however, enabling compliance with regulations to achieve the goals of the regulation is a value-added aspect of implementing ERM for public-sector organizations. Domokos et al. wrote in their 2015 article that, "being mandatory is the foremost feature of risk management as applied in the public sector" (p. 25). The regulations that mandate ERM for public-sector organizations are Office of Management and Budget (OMB) Circular A-123 and OMB Circular A-11. These were identified across the literature review in 13 and six sources, respectively. The GAO wrote in its report on the 2020 Census, that "OMB Circulars No. A-11 and A-123 require federal agencies to implement ERM to ensure their managers are effectively managing risks that could affect the achievement of agency strategic objectives" (2019, p. 4). The primary purpose of the

CFOC and PIC's playbook is "to help government departments and agencies meet the requirements of the revised Office of Management and Budget Circular A-123" (2016, p. 2).

ERM also enables compliance with the Government Performance and Results Modernization Act of 2010 (GPRAMA). These were identified across the literature review in six and five sources, respectively. GPRAMA requires government agencies to conduct strategic reviews and "identify major management challenges and plans to address such challenges" (2010, p. 5). GAO's 2015 report on strategic review practices "encourages agencies to institute an Enterprise Risk Management (ERM) approach and leverage such efforts when conducting strategic reviews" (p. 19). ERM can enable organizations to achieve the requirements of GPRAMA. The implications for the Marine Corps are is that implementing and sustaining ERM can enable compliance with OMB Circulars A-11 and A-123, and GPRAMA.

In Chapter V, the researcher summarizes the findings presented, discusses the limitations of this research, and makes recommendations for the Marine Corps based on the implications of the findings.

V. SUMMARY, LIMITATIONS, AND RECOMMENDATIONS

A. SUMMARY

General Berger, the Commandant of the Marine Corps, recently wrote in War on the Rocks, that “the Marine Corps is not optimized to meet the bold demands of the National Defense Strategy” (2019c, para. 1). He stated that his number-one priority is to “design a force suited to the reality of the pacing threat as prescribed by the National Defense Strategy” (2019c, para 1). He also states that the Marine Corps is under-invested in capabilities and capacities necessary to meet the demands of the National Defense Strategy, and “over-invested in capabilities and capacities purpose-built for traditional sustained operations ashore” (2019c, paras. 9–10). The policies and processes associated with the future implementation of ERM in the Marine Corps have the potential to support senior decision-makers as they undergo the resource allocation decisions the Commandant states are necessary.

The objective of this study was to identify the key meta-narrative themes across public-sector enterprise risk management (ERM) literature and draw implications from those themes that may inform the Marine Corps’ future implementation of value-added ERM. This study reviewed, evaluated, analyzed, and synthesized public-sector ERM scholarly literature to achieve this objective. This study identified meta-narrative themes and factors that characterized successful ERM in public-sector institutions. This paper also discovered meta-narrative themes and factors that the public-sector ERM literature identified as challenges associated with implementing and sustaining ERM. Additionally, this research identified what the scholarly literature argues is the value of ERM.

This research synthesized those factors from the literature that characterized successful ERM in public-sector institutions into four meta-narrative themes: (1) Create and Sustain a Risk Culture, (2) Governance and Infrastructure, (3) Have a Plan, and (4) Constructive and Continuous Communication. Also, this research synthesized those factors from the literature that characterized challenges with implementing and sustaining ERM into two meta-narrative themes: (1) Organizational Culture Change, and (2) Endogenous

and Exogenous Pressures. Finally, this research synthesized those factors from the literature that characterized the value of ERM into two meta-narratives: (1) Support to Strategic Decision-Making, and (2) Enables Compliance with Regulations.

B. MCPP AND ERM

Parallels can be drawn between the Marine Corps Planning Process (MCPP) and the greater planning-execution-assessment continuum, and ERM. There exist similarities between the characteristics that make ERM successful in public-sector organizations and MCPP successful in the Marine Corps. For example, both processes require visible and active support from leadership, which includes their participation, to be successful. Both processes require a common language understood by all to be successful. Furthermore, both processes require a focal point for coordination and must be aligned with the organization's goals and objectives.

MCPP supports “the commander’s decision-making—especially in a time competitive and evolving situation” (U.S. Marine Corps [USMC], 2016, p. 1-2). ERM can support the senior leaders of the Marine Corps’ decision-making—especially in a resource competitive and uncertain environment. MCPP consists of six steps, that are not always sequential: Problem Framing, Course of Action (COA) Development, COA Wargaming, COA Comparison and Decision, Orders Development, and Transition (Figure 8). Communication between stakeholders is continuous and integrated throughout MCPP to prevent silos from forming. This is also a key characteristic of successful ERM.

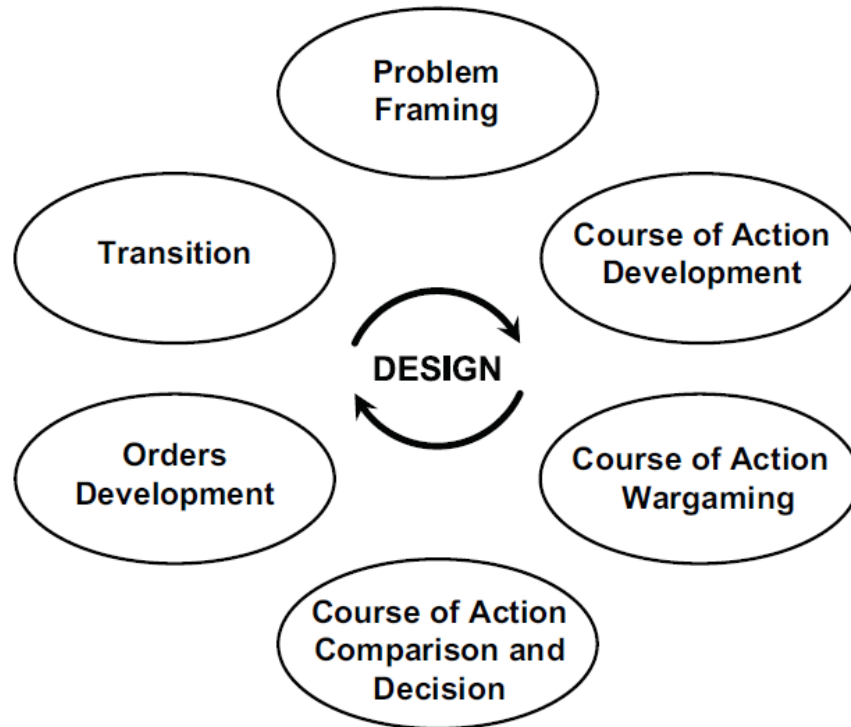


Figure 8. Overview of the Marine Corps Planning Process. Source: USMC (2016).

While there are numerous ERM frameworks, this research leveraged the framework found in OMB Circular A-123, presented in Figure 9, to draw parallels between the steps in ERM and steps in MCPP.

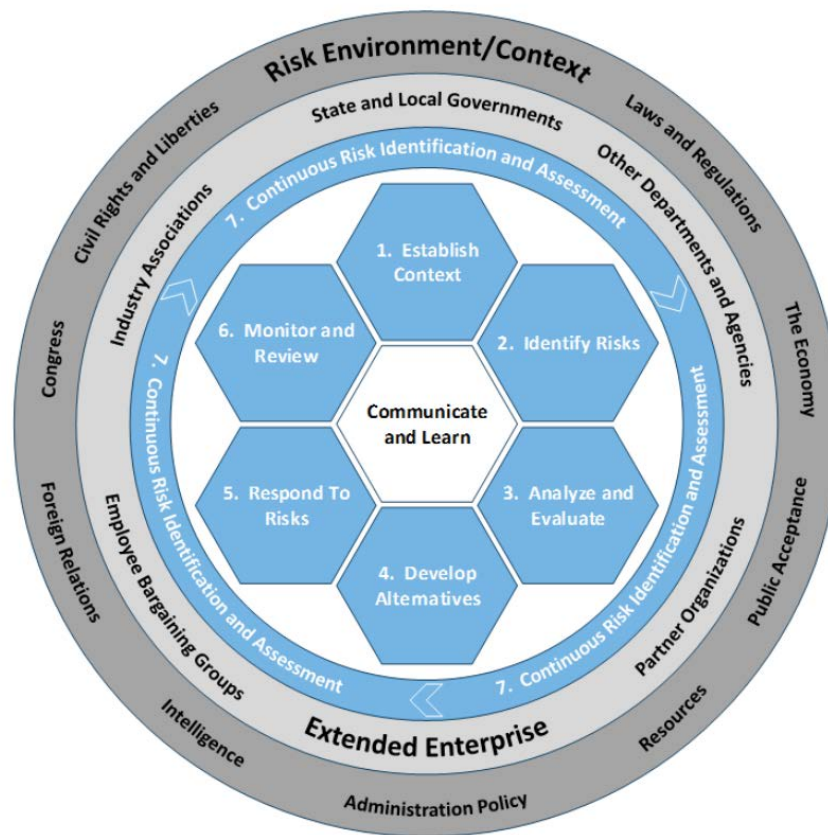


Figure 9. OMB Circular A-123 ERM Example. Source: Donovan (2016, p. 11).

Problem Framing in MCPP “identifies what the command must accomplish, when and where it must be done and, most importantly, why—the purpose of the operation” (USMC, 2016, p. 1-5). In OMB Circular A-123’s model, for example, Problem Framing is analogous to the first three steps: Establish Context, Identify Risks, and Analyze and Evaluate. Step Four in OMB Circular A-123’s model, Develop Alternatives, encompasses MCPP’s COA Development, COA Wargaming, and COA Comparison and Decision steps. Step Five in OMB Circular A-123’s model, Respond to Risks, encompasses Orders Development and Transition in MCPP, and Execution “as a part of the planning-execution-assessment continuum” (USMC, 2016, p. 1-2). Assessment, in the greater continuum, is analogous to step six in OMB’s model, Monitor and Review. This research presents a comparison between ERM and MCPP in Figure 10.

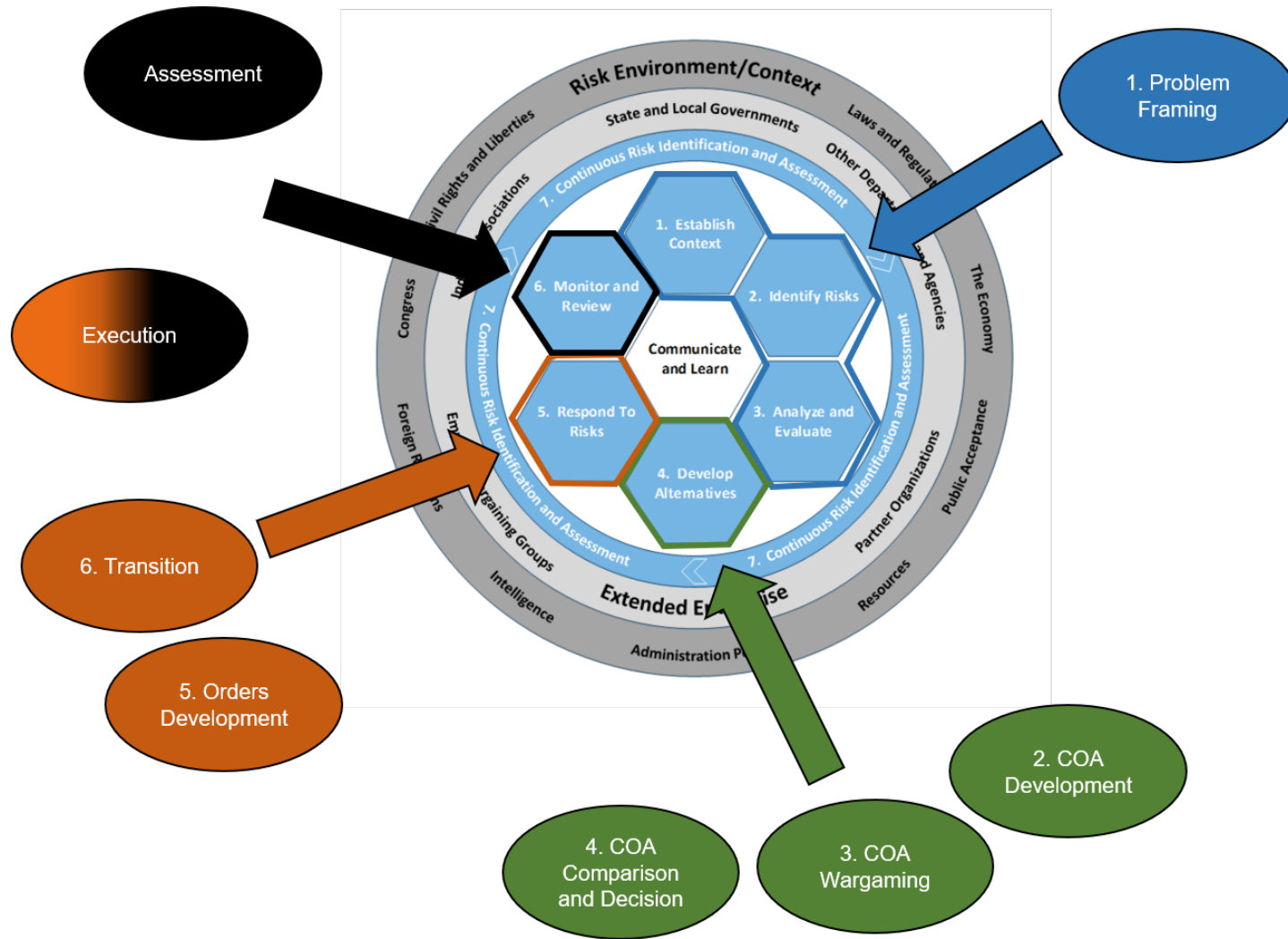


Figure 10. ERM vs. MCPP

The implication for the Marine Corps is that as it implements ERM, if it leverages concepts and processes the enterprise is familiar with, like MCPP, inculcation, and diffusion could be easier.

C. RECOMMENDATIONS

As the Marine Corps looks to implement ERM successfully across the organization, based on this research, it should focus on designing an implementation plan that accounts for creating and sustaining a risk culture in the Marine Corps. As part of this plan, the Marine Corps should also consider designing governance and infrastructure that supports creating and sustaining a risk culture while leveraging existing risk processes or applicable artifacts.

The literature suggests that ERM must be aligned with the Marine Corps' strategic goals and objectives, and integrated into management processes and the decision-making process. ERM has its best opportunity to be of value if it is allowed and enabled to support the Marine Corps' existing decision-making processes.

Finally, expectation management will be critical to the success of implementing ERM. Culture change and the implementation of ERM will take time. What's more, is the accumulated value of ERM may take time to be apparent.

D. LIMITATIONS

There were multiple limitations associated with this research. This systematic meta-narrative review was a qualitative study that focused on public-sector ERM literature. A weakness of this study is that the design did not allow for quantitative analysis and analysis of the possible relationships between the different factors and their correlation with successful public-sector ERM. An additional limitation of this study is that due to the sheer volume and diversity of literature on ERM, exclusion criteria and scoping are necessary to achieve quality results within the associated time and labor constraints, which makes it possible to overlook sources. Another weakness, as Kitchenham points out, is that it cannot intrinsically "protect against publication bias in primary studies" (2007, p. 4) or the biases of the researcher, i.e., recency or convenience biases.

E. FUTURE RESEARCH

Future research can build on this study by assessing the costs and benefits of implementing ERM in the Marine Corps. In addition, future research might seek to explore and analyze the existing risk assessment tool(s) the Marine Corps might employ as part of their future ERM process. Researchers could seek to identify ways these tools might pull from the various Marine Corps databases to inform assessments. Future research can also build on this study by exploring change management and evidence-based management literature, and identifying ways those bodies of literature can enable implementation and sustainment of ERM in the Marine Corps. Finally, to the extent that the USMC objectives are not unary, future research could explore multi-criteria decision-making tool(s) that the Marine Corps could employ to enable effective trade-offs among objectives, in the resource allocation decisions necessary to foster and maintain good stewardship.

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SUPPLEMENTAL

This thesis includes one supplemental file, which can be obtained by contacting the Naval Postgraduate School Dudley Knox Library. The Microsoft Excel file consists of 18 tabs and contains the literature appraisal and quality assessment dataset, the final dataset, the literature synthesis table, and the factor and meta-narrative dataset. This supplemental is provided for other researchers' use.

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