

**Organizational Ambidexterity through Intellectual Capital Configurations:
A U.S. Strategic Military Headquarters Perspective**

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Abstract

Organizations consistently face a significant tension between long-term planning and the need to address immediate demands. The need to both exploit the current situation and explore the broader landscape is well known, yet organizations often struggle to find the right balance between the two. By merging the concept of ambidexterity (the ability to simultaneously both explore and exploit) and the concept of intellectual capital (how knowledge is formed, stored, and utilized in social groups), this study aims to better understand how human, social, and organizational capital can be configured within top management teams to support more effective collective decision-making. Through a qualitative exploration of a set of U.S. military strategic headquarters, this study identified which elements within these organizations supported organizational ambidexterity and which impeded it. By mapping them via a new model and process, an organizational intellectual capital profile was developed that provides a deeper understanding of these top management teams and their capabilities. This study finds that U.S. Combatant Commands' Organizational Ambidexterity is hindered by a highly mechanistic organizational construct but enabled by a "Joint" social structure that behaviorally integrates top management teams well for both exploration and exploitation. Within their context, human capital is the key that enables these purportedly strategically minded teams to shift focus when necessary and attempt to achieve an optimal fit within their environment. Through this analysis, the study developed a new construct, the Harmonization Spectrum Model of Intellectual Capital. This nuanced model, by enabling deeper analysis of intellectual capital and the visualization of how different configurations can affect the optimization of organizational ambidexterity, will hopefully significantly advance discussions in the field of Strategic Management.

KEY WORDS

Organizational Ambidexterity, Intellectual Capital, Human Capital, Social Capital, Organizational Capital, Organizational Design, Strategic Management, Top Management Teams

Biography of Researcher

Stephen “Steve” Van Riper is a retired Marine, planner, leader, and educator. He served for 27 years in the U.S. Marine Corps as an infantry officer and Marine Air-Ground Task Force planner. Steve commanded platoon through battalion level, taught at all levels, including senior officer education, and planned at the Regimental, Marine Expeditionary Force (MEF), and Combatant Command (CCMD) levels. He was the Chief of Strategy at U.S. Central Command (responsible for the Middle East) during the ISIS era and the Chief of Plans for U.S. European Command immediately prior to the 2022 Ukraine Crisis. He was the Chief Instructor and then the Operations Officer for a Marine Corps School that trained Operations Officers and Operations Chiefs in planning and designing effective training & education. Steve also taught Strategy, Planning and Operations at the U.S. Army War College and was voted Teacher of the Year by both students and faculty. He thoroughly updated the class on Theater Strategy and rebuilt the course module on integrating military services into a combined team at the operational and strategic levels. While there, he earned the rank of Assistant Professor. After leaving the Marine Corps in 2020, he contracted as U.S. European Command’s (EUCOM) Academic Facilitator for two years. During those two years, he also served as the Program Manager for Valiant Integrated Service’s support to the EUCOM J7: Training and Exercises. In 2022, Steve left EUCOM to pursue a PhD in the School of Business and Society at the University of York, UK. His research aims to better understand how Intellectual Capital configurations can assist organizations to balance exploration and exploitation endeavors. He hopes this will help the Department of Defense integrate the military services more effectively within Combatant Commands and other Joint HQs. His research passions are Individual & Organizational Decision Making, Education, and Organizational Design.

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Author's Declaration

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for a degree or other qualification at this University or elsewhere. All sources are acknowledged as references.

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Chapter 1 – Introduction

1.0 Opening

Organizations consistently face a significant tension between long-term planning and the need to address immediate demands. The need to both exploit the current situation while also exploring the broader landscape is well known, but nonetheless, organizations often struggle to strike the right balance between the two (March, 1991). The “Tyranny of the Now” and the allure of “the next big thing” pull organizations in different directions, making it challenging to tailor organizations and their leadership teams to excel at both (Kassotaki, Paroutis and Morrell, 2019; Luger, Raisch and Schimmer, 2018; Jørgensen and Becker, 2017). Merging the concept of organizational ambidexterity (the ability to simultaneously both explore and exploit) (March, 1991), and the concept of intellectual capital (how knowledge is formed, stored, and utilized in social groups) (Nahapiet and Ghoshal, 1998) holds significant promise in tackling this dilemma.

James March, in a seminal work within the ambidexterity field, highlighted that ‘maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity’ (1991, p. 71). For most organizations, the group responsible for finding and holding that balance is the Top Management Team (TMT). Despite decades of research in both ambidexterity and TMTs, the decision-making processes of these entities remain an underexplored realm (Tarba et al., 2020; Mom et al., 2019; Birkinshaw and Gupta, 2013; Raisch et al., 2009).

1.1 Theoretical Context

This research engages with the Strategic Management field by examining how Top Management Teams (TMTs) are organized and how they collaborate to exploit current opportunities, while also exploring the future landscape. Specifically, it speaks to those interested in organizational ambidexterity studies and top management team studies. Through the lens of intellectual capital, this study examines issues related to structuring an effectively ambidextrous TMT. By examining a U.S. public institution, it will delve into various types of human capital, the impacts of organizational culture on social capital, and the bureaucracy within organizational capital. Ultimately, it endeavors

to extend current theory within Strategic Management on how Organizational Ambidexterity can be perceived and achieved.

It has been over 50 years since the concept of “ambidexterity” was coined, and over 30 years since James March spurred a drive to explore this phenomenon seriously. The pressures, challenges, traps, factors, and micro foundations have all been extensively studied, yet public and private organizations still falter because they become unbalanced. Top Management Teams struggle to deal with the paradoxes involved and the tensions encountered. The call to examine how TMTs address these issues remains quite loud (Dean, 2021; Tarba et al., 2020; Fourné et al., 2019; Kassotaki, Paroutis and Morrell, 2019; Wilden et al., 2018; Jørgensen and Becker, 2017).

One interesting lens through which researchers have been exploring TMTs and organizational ambidexterity is ‘intellectual capital.’ Comprised of human, social, and organizational capital, the theories related to this idea seek to understand the connections, obstacles, and processes that communities use to generate new ideas for both short- and long-term competitive advantage. (Swart, 2006)

After reviewing the relevant literature, this study finds that we still lack a comprehensive understanding of how to leverage intellectual capital to achieve organizational ambidexterity. Therefore, the key purpose of this study is to address the theoretical call to better understand how various intellectual capital configurations within Top Management Teams impact organizational ambidexterity (Youndt and Snell, 2020; Turner et al., 2014; Wilden et al., 2018; Turner and Lee-Kelley, 2012; Kang and Snell, 2009; Subramaniam and Youndt, 2005).

1.2. Practical Context

The U.S. military has succeeded spectacularly over the last several decades at the tactical and operational levels. It has exploited its technical, human and procedural competitive advantages to decisively win battle after battle and campaign after campaign. And yet it has repeatedly been shocked by strategic-level environmental changes and has struggled to win the wars it has engaged in. Despite having apparatus designed to explore the future and the wider environment, it has failed to capitalize on

them and is often accused of focusing on past wars instead of winning current conflicts, while also failing to effectively prepare for future ones (Cozad et al., 2023).

At the center of this issue are U.S. Combatant Commands. Strategic-level headquarters focused on various regions of the world, they are tasked with winning current fights and preparing for future ones. They must exploit the current strengths of the military services (U.S. Army, U.S. Navy, U.S. Air Force, U.S. Marine Corps) while exploring the environment for ways to maintain a competitive advantage at the operational and strategic levels in a dynamic world. The author of this study and the interviewees who participated in it have experienced the tensions dual roles place on these headquarters and have struggled with the paradoxes involved in trying to accomplish two very different tasks: exploitation and exploration. They have watched the top management teams within these headquarters overly focus on the current tactical situation to the detriment of a wider strategic view and future-focused work. They have also observed Combatant Command TMTs' strategic visions falter for an inability to turn ideas into practical actions. They seek a balanced headquarters that can effectively address the tensions and paradoxes that simultaneous exploration and exploitation bring – in the hope of preventing future U.S. strategic loss.

1.3 Research Design Overview

To advance the discussion in hopes of moving toward potential solutions, this study focuses on three questions: 1) How do TMTs currently employ intellectual capital to attempt to achieve ambidexterity? 2) What elements of intellectual capital do TMTs believe are helping or hindering the ability to achieve effective ambidexterity? 3) How do TMTs think they can adjust the intellectual capital components and deal with the resulting tensions to improve organizational ambidexterity? This study aims to gather new qualitative data that addresses those three questions and to move toward a workable model that future theorists can use to accurately explain organizational efforts to achieve and maintain organizational ambidexterity.

To answer these questions, this study conducts a qualitative inquiry into organizations within the U.S. Department of Defense focused on strategic matters. Through significant reflection, enabled by stepping as far away from his insider position

as possible, the author analyzes interviews from twenty senior executives from the Top Management Teams of nine U.S. strategic Combatant Command headquarters. The author and this study aim to address the need for a more comprehensive understanding of how human, social, and organizational capital impact an organization's ability to be organizationally ambidextrous.

1.4 Rationale and Significance of this Study

Taken together, decades of research have demonstrated that organizational ambidexterity is valuable for organizations, yet the accumulated literature still tells us little about how individuals and teams work to understand their environment and balance exploration and exploitation activities in dynamic settings (Tarba et al., 2020; Mom et al., 2019; Wilden et al., 2018). The Strategic Management field's concept of intellectual capital offers a lens that can shed considerable light on the issues and opportunities present in ambidexterity (Youndt and Snell, 2020; Turner, Maylor and Swart, 2015; Youndt, Subramaniam and Snell, 2004; Nahapiet and Ghoshal, 1998). By examining how individual members of TMTs interact with one another and with the organization around them, additional research could better illuminate how TMTs acquire, store, and use the knowledge necessary to make balancing decisions. Greater fidelity in how processes and policies are implemented could alter TMT interactions, enabling more robust concepts to aid practitioners in making organizational decisions.

This study contributes to Strategic Management theory through further exploration of intellectual capital and organizational ambidexterity within TMTs. It aims to continue the debate on the tensions inherent in organizing intellectual capital for effective organizational ambidexterity and establish a revised conceptual framework for use by Strategic Management professionals to understand how organizations might adjust intellectual capital to realize effective contextual ambidexterity within TMTs. This framework extends prior theoretical work on organizational culture, intellectual capital, and ambidexterity studies to provide a new foundation for understanding how organizations might achieve the optimal explore/exploit balance.

Empirically, this study demonstrates how intellectual capital manifests in a new context. Examining a public institution provides new evidence on how tensions unfold within TMTs as they navigate the conflicts involved in seeking organizational ambidexterity.

This research also provides valuable insights for practitioners. By providing a model that management professionals can use to examine and adjust organizational practices, this study may enhance their ability to help their organizations effectively exploit and explore opportunities. By using this new model to build a detailed analysis of Combatant Command TMTs, this study provides an “Intellectual Capital Profile” that U.S. military leaders can use to better see themselves and to think through actions that can improve the organizational ambidexterity of U.S. Combatant Commands. And while this study focuses on a specific public enterprise, its findings may also be helpful to other public organizations seeking to better understand their own balance.

1.5 Findings

By examining nine strategic-level headquarters within the U.S. Department of Defense through an intellectual capital lens, with an eye to how different configurations affected organizational ambidexterity, this study identified multiple elements within these organizations that supported and impeded organizational balancing. By mapping these elements via a new model and process, an organizational intellectual capital profile was developed that provides a deeper understanding of these Top Management Teams and their capabilities. This study found that within these headquarters, organizational ambidexterity is hindered by a highly mechanistic organizational construct but enabled by a “Joint” social structure that behaviorally integrates the TMT well for both exploration and exploitation. Within the context of U.S. Combatant Commands, human capital is the key that enables these ostensibly strategically minded teams to shift their equilibrium when necessary and attempt to adjust their fit within their environment. Through this analysis, this study developed a new construct, the Harmonization Spectrum Model of intellectual capital. This nuanced model, by enabling deeper analysis of intellectual capital and visualizing how different configurations can affect

organizational ambidexterity, shows promise for advancing discussions in Strategic Management.

1.6 Conclusion

This thesis endeavours to build on theories of ambidexterity and intellectual capital, while also providing qualitative empirical data that future researchers can use to continue the academic dialogue. In the following two chapters, the study will review the relevant literature. In Chapter 4, the study's research design, methods, and execution will be explained. It will then engage with the data in Chapters 5, 6, and 7 to examine how the elements of intellectual capital within the strategic U.S. military community interact. In Chapter 8, this study will examine who within these TMTs can manipulate each of the intellectual capital components to tune the exploit/explore balance, and how they do so. It will step back in Chapter 9 to identify macro-level findings, then address study limitations and future research prospects in the concluding chapter.

Chapter 2 – Literature Review – Theory

2.0 Introduction

Much has been written about the challenges of exploiting an organization's current situation while also trying to explore its surroundings to identify emerging challenges and potential opportunities. Overcoming these challenges has been proven to have positive effects for organizations and, in many cases, provides a competitive advantage (Junni et al., 2013; He and Wong, 2004). This chapter will review key literature from three academic streams that have intertwined over the last fifty years as they examine this problem. Research on organizational ambidexterity, intellectual capital, and Top Management Team (TMT) composition has all produced exciting theories worthy of further inquiry. The purpose of this review is to establish a baseline for addressing the theoretical call to better understand how various intellectual capital configurations within Top Management Teams impact organizational ambidexterity. This review will begin with an examination of the evolution of organizational ambidexterity theory, followed by an analysis of the growth of intellectual capital theory, culminating in the development of two frameworks for ambidextrous learning. Next, it will examine theories on how TMTs influence ambidexterity and the conflicts and paradoxes they face in doing so. In the next chapter, to situate these frameworks and theories for analysis, this study will examine the culture and structure of the dataset used.

2.1 Organizational Ambidexterity

The term “organizational ambidexterity,” organizations being able to both exploit their current position and explore potential future innovations, was coined by Robert B. Duncan in 1976. However, it did not gain widespread attention until an article by James March 15 years later (Raisch and Birkinshaw, 2008). March (1991) examined the opportunities, risks, and challenges of both exploration and exploitation. As a widely cited article within ambidexterity research, he established some of the most commonly used definitions and identified some of the most frequently examined challenges (Wilden et al., 2018). He defined exploitation as “the refinement and extension of existing competences, technologies, and paradigms. Its returns are positive, proximate, and predictable...[it] includes such things as refinement, choice, production, efficiency,

selection, implementation, execution.” (p. 71, 85) Exploration “is experimentation with new alternatives. Its returns are uncertain, distant, and often negative... [it] includes things captured by terms such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation.” (p. 71, 85)

March understood that while it is obvious to organizations that they should do both, finding the right balance can be challenging. Exploitation and its results are easier to quantify and are often more concrete. Because of this, specialists, those primarily responsible for exploitation, are rewarded more often and can quickly crowd out generalists. Exploration has no guarantees. And while the rewards can be great, so can the risks. The solution involves understanding the surroundings an organization finds itself in and then arranging its organizational construct, personnel structure and social environment to get the most out of the knowledge within that setting (March, 1991).

2.2 Traps of Success and Failure

As organizations attempt to find the right cultures, strategies, structures, capabilities, processes, and activities (Burns and Stalker, 1961) to be ambidextrous, there are two traps to be wary of. Entrepreneurs and explorers face the “trap of failure,” where they never settle into a successful venture. Failure follows failure as they explore until they run out of energy and die (Levinthal and March, 1993). U.S. Combatant Commands often see this in the form of policy and strategy changes. Each new political administration, each new senior military leader, and each new Combatant Command leader changes the organization's strategy, or its implementation tools. New strategies come out before the previous ones have had a chance to take hold and bear fruit.

More common, however, is the “trap of success,” in which organizations allow exploitation to displace exploration. Since exploitation yields faster, more visible results, organizations tend to lean increasingly toward it. As they lean further and further, they rob exploration efforts of resources until they starve them. Eventually, when the environment changes, they are unable to adapt, and they perish (Smith and Tushman, 2005; Levinthal and March, 1993; March, 1991). Kodak and Blockbuster's failures are two classic management examples of this phenomenon. Within Combatant Commands, years of historical education and day-to-day experiences, coupled with strict SOPs and

policies designed to reduce risk, focus TMT members toward thinking about conflict in narrow ways. A prime example is the 2003 Iraq war. When the conflict transitioned from a conventional fight into a counterinsurgency fight., TMT members remained mired in thinking in terms of set-piece battles for too long, and they struggled to adapt despite an obvious environmental shift.

The theoretical answer to avoiding these traps is to find the right form and balance of organizational ambidexterity (Birkinshaw and Gibson, 2004; O'Reilly III and Tushman, 2004; Tushman, M.L. and O'Reilly, C.A, 1996; Duncan, 1976). But as history shows, that is easier said than done.

2.3 Forms of Ambidexterity

Since March's 1991 article, three significant forms of ambidexterity have been identified (Birkinshaw, Zimmermann and Raisch, 2016; O'Reilly and Tushman, 2013; Raisch et al., 2009). Sequential, also known as "punctuated equilibrium" or "temporal" ambidexterity (Gupta, Smith and Shalley, 2006; Siggelkow and Levinthal, 2003; Tushman, M.L. and O'Reilly, C.A, 1996), involves switching back and forth between exploration and exploitation. Organizations dynamically rearrange their strategies, structures, capabilities, processes, and activities when they sense a need to shift between the two.

'Structural' ambidexterity (O'Reilly III and Tushman, 2004) prevents the potentially chaotic back-and-forth of sequential ambidexterity measures by separating exploration from exploitation within the organization, rather than over time. Sub-units are created to focus on each element. This allows simultaneous exploration and exploitation, which is more in line with what scholars traditionally mean when they use the term ambidexterity (Martin, Keller and Fortwengel, 2019). Organizations with R&D departments are utilizing this approach.

'Contextual' ambidexterity (Birkinshaw and Gibson, 2004) involves asking individuals, or teams, to engage in both exploitation and exploration simultaneously. Instead of wholesale organizational shifts or centralizing and separating functions, this form decentralizes ambidexterity work. It focuses on creating an organizational context that enables individuals to decide how to explore and exploit in their day-to-day work.

Soon after Birkinshaw and Gibson introduced the idea of contextual ambidexterity in 2004, the volume of research in ambidexterity skyrocketed and began to connect with a host of other research streams (Birkinshaw and Gupta, 2013).

A meta-analysis of ambidexterity studies (Fourné et al., 2019) concluded that while structural separation can be instrumental in manufacturing and high-tech industries, contextual ambidexterity is more appropriate in service industries, given higher levels of tacit knowledge within the workforce. This study will focus on contextual ambidexterity. The rationale for focusing on the contextual version of ambidexterity is explained in Section 2.7 (Top Management Teams) below, but first, this review will delve into intellectual capital theory.

2.4 Intellectual Capital

One of the research streams that soon intersected with ambidexterity work was ‘intellectual capital’ theory. The term ‘intellectual capital’ was first coined in 1969 by John Galbraith, and gained academic and practitioner popularity in 1991 due to the work of Thomas Stewart (Ding, 2010). Since Stewart’s initial attempt to define the term, the research community has consolidated largely around Janine Nahapiet and Sumantra Ghoshal’s definition that it “refer[s] to the knowledge and knowing capability of a social collectivity, such as an organization, intellectual community, or professional practice... intellectual capital thus represents a valuable resource and a capability for action based in knowledge and knowing” (1998, p.245).

What makes up intellectual capital (or “IC”) has, of course, been a topic of significant research. Researchers have reliably viewed it as three interconnected components and have also consistently agreed on two of the three: Human capital (HC) and organizational capital (OC) (Youndt and Snell, 2020). The third component began as “customer capital” when Stewart wrote about it in 1997, was transitioned to “relational” by several researchers in the late 1990s (to include more than just customers), and then settled into “social capital (SC)” in the mid-2000s when researchers realized that sociology and other fields already used that term for what the management field was describing (Youndt and Snell, 2020; Kang, Morris and Snell, 2007).

Human capital (HC) was popularized by Gary Becker in 1964 as he investigated individual decision making in reference to work matters (training, tenure, wages, etc.) (Swart, 2006). Today, it commonly refers to the knowledge, skills, and attributes (KSAs) of individuals within an organization. What does a person know, what can they do, and how do they think? A central issue in organizations is whether those KSAs should be deep or broad. Specialists tend to focus on depth within a knowledge domain (e.g., IT), while generalists typically focus on breadth (Köhler et al., 2025; Anderson, 2012; Kang and Snell, 2009). Specialists focus their learning within a domain to achieve expertise, but can develop blind spots to areas outside their area of interest (Köhler et al., 2025; Takahashi, 2025; Anderson, 2012). Generalists are usually more versatile, since their curiosity leads them into many areas and domains, but may fail to understand the implications of specific actions (Takahashi, 2025; Anderson, 2012; Cesare and Thornton, 1993).

Categorizing a person as a specialist or a generalist can be challenging. A person can be both a specialist and a generalist, depending on where the researcher stands and how the domain is constructed (Köhler et al., 2025). Looking from the outside, an employee might be seen as a salesman, a specialist in sales. Stepping closer, he may become a “generalist” salesman, who can sell everything the company makes, or a “specialist” salesman, who only sells one of the company’s many products. The CEO of a paper napkin manufacturing company is regarded by his employees as a generalist because he understands all aspects of the company. A paper industry reporter might view him as a specialist, however, since he only understands napkins. Within Combatant Commands the commander is considered a generalist by her/his staff and subordinate organizations. But senior military and political leaders see her/him as a specialist in her/his region or function. This study will position itself within the Top Management Team at the top. If the study looks down and identifies someone who focuses on a single area, it will view them as a specialist. If a person spreads themselves across multiple areas, it will view them as a generalist. It does so to capture their “focus.” As Anderson lays out, “Each of us has a limited capacity for learning new things – by focusing on a narrow field of study, specialists are able to concentrate their efforts and maximize the use of that limited capacity, while generalists are forced to

spread themselves more thinly in the pursuit of a wider range of knowledge” (2012, p.464). The decision to focus narrowly or widely affects curiosity, risk tolerance, decision-making, and more.

Organizational capital is the capital that the organization actually owns. As Youndt, Subramanian, and Snell put it, “human capital can only be borrowed... In essence, organizational capital is the knowledge, skills, and information that stays behind when an organization’s people go home at night” (2004, p.338). It comprises memory, systems, structures, and processes that codify and store knowledge and support its dissemination to relevant parties (Morris and Snell, 2011; Kang and Snell, 2009; Subramaniam and Youndt, 2005). These four elements have been written about extensively. Early work emphasized mechanizing knowledge work to drive speed, precision, and efficiency; later work denigrated mechanization and sought more creative, humane, and organic ways of organizing. Since then, scholars have swung the pendulum back and forth seeking to find systems, structures and processes that are both efficient and innovative (Adler, 2012; Du Gay, 2000; Morgan, 1998; Simon, 1997; Adler and Borys, 1996; Lipsky, 1980; Crozier, 1964; Blau, 1963; Burns and Stalker, 1961; Merton, 1940).

Discussions of the elements of organizational capital are common, but this study found no consensus on how to break down these elements or on their interrelationships. This study will thus establish the following definitions for its use. Consistent with prior research, organizational memory consists of the databases, standard operating procedures, and manuals the organization uses. Structures refer to the vertical and horizontal teams established within the command. Systems encompass the tools, personnel, and cultures that govern the headquarters, while processes refer to the sequences and routines used to reach decisions within the Top Management Team (Youndt and Snell, 2020; Turner, Maylor and Swart, 2015; Kang and Snell, 2009; Swart, 2006; Youndt, Subramaniam and Snell, 2004).

Social capital (SC) is the bond that connects and enables the flow of knowledge from person to person and from person to organization. Multiple studies have determined that strong social capital positively improves an organization's performance and weak social capital harms it (Youndt and Snell, 2020; Li, 2013; Subramaniam and

Youndt, 2005; Nahapiet and Ghoshal, 1998). Some researchers propose it is the foundation of intellectual capital, and that organizations are ineffective without adequate formation (Youndt and Snell, 2020; Jansen et al., 2008; Nahapiet and Ghoshal, 1998).

In essence, Social capital is the knowledge within networks, groups, communities of practice, etc (Kang and Snell, 2009; Youndt, Subramaniam and Snell, 2004; Nahapiet and Ghoshal, 1998). It consists of three elements: structure, affect/relational, and cognition (Claridge, 2018; Kang and Snell, 2009; Youndt, Subramaniam and Snell, 2004; Nahapiet and Ghoshal, 1998). These elements can form tightly coupled homogeneous groups, loosely coupled heterogeneous groups, or a range of intermediate configurations.

The structural element of social capital encompasses the structure, density, connectivity, strength of ties, and types of ties within social groups. Dense networks with strong ties have traditionally been associated with exploitation, whereas nonredundant networks with weaker ties are typically associated with exploration (Kang, Morris and Snell, 2007; Subramaniam and Youndt, 2005; Nahapiet and Ghoshal, 1998).

The affect element involves motives, expectations, norms, and most importantly, trust. Trust built on aligned motives, robust norms, and strong social expectations typically builds 'cooperative' groups focused on exploitation. Trust built on aligned motives but weak norms and weak social expectations engenders more 'entrepreneurial' groups with looser ties (Claridge, 2018; Kang, Morris and Snell, 2007; Subramaniam and Youndt, 2005; Nahapiet and Ghoshal, 1998).

The cognitive element revolves around shared mental models, shared codes, and shared language. Cooperative groups tend to have one robust model that is common to all. A shared narrative leads to substantial amounts of shared language and shared codes. They speak the same language and understand the same signs. Entrepreneurial groups often have overlapping mental models but must invest time and energy in understanding one another because their languages and codes are often dissimilar (Claridge, 2018; Kang, Morris and Snell, 2007; Subramaniam and Youndt, 2005; Nahapiet and Ghoshal, 1998).

The weak structural, affective, and cognitive ties common among entrepreneurs can accelerate the identification of challenges and opportunities (exploration) but often

slows the transfer of knowledge needed to exploit success and avoid failure. Strong ties normal for 'cooperative' clans can enable quick exploitation of present conditions but can also lead to groupthink about what the future holds and how the organization should respond (Nahapiet and Ghoshal, 1998).

Shaping each type of capital (HC, OC and SC) requires different forms of investment and maintenance. The question of how best to configure these elements and capitals began to fascinate researchers in the early 2000s. By 2007, researchers were examining which combinations of elements produced the best results and what HRM practices facilitated developing the intellectual capital best tailored to an industry, environment and/or problem type (Kang, Morris and Snell, 2007; Mom, Van Den Bosch and Volberda, 2007; Subramaniam and Youndt, 2005).

They began with the premise that each component of intellectual capital held knowledge stocks of value to the organization. Entrepreneurial social groups held one type of stock, while a mechanistic organization held another. Flowing that knowledge from one place to another to enable new combinations, facilitate decision-making, and execute those decisions was vital to an organization's efficacy. Available stocks and their flow determined the effectiveness of organizational learning and the overall decision-making process (Kang, Morris and Snell, 2007; Mom, Van Den Bosch and Volberda, 2007).

2.5 Intellectual Capital Architectures as the way forward?

In 2007, Kang and Snell, merging the concepts of knowledge flows and intellectual capital, developed two relational archetypes within the framework of social capital and utilized them to explore how researchers and practitioners could enhance the ability to explore or exploit opportunities. At one end of the social capital spectrum, they envisioned a 'cooperative' group with a dense network of tight couplings. This group would excel at exploitation but potentially struggle with exploration. On the other side of the spectrum, they envisioned an 'entrepreneurial' archetype. Given a shallow but broad network, they believed this group would perform well in exploration but could struggle with exploitation. Using these two extreme archetypes, they investigated which HRM practices could accentuate or mitigate the tendencies of those archetypes.

Two years later, they went beyond examining social capital alone and merged ambidexterity theory with intellectual capital theory into a testable framework for researchers and managers (Kang and Snell, 2009; Kang, Morris and Snell, 2007). Their goal was to provide future researchers and practitioners with architectures for balancing exploration and exploitation.

They began by again examining the extremes of each component within intellectual capital and identifying archetypes that optimized either exploration or exploitation (See Figure A). They then explored ways to leverage organizational capital to temper an organization's exploratory tendencies or to break free from overly exploitative ones. In doing so, they built two intellectual capital architectures: Refined Interpolation and Disciplined Extrapolation. Lastly, they compared their new models to standard HRM practices and identified areas (See Figure B below) where researchers and practitioners could tune the organization as necessary.

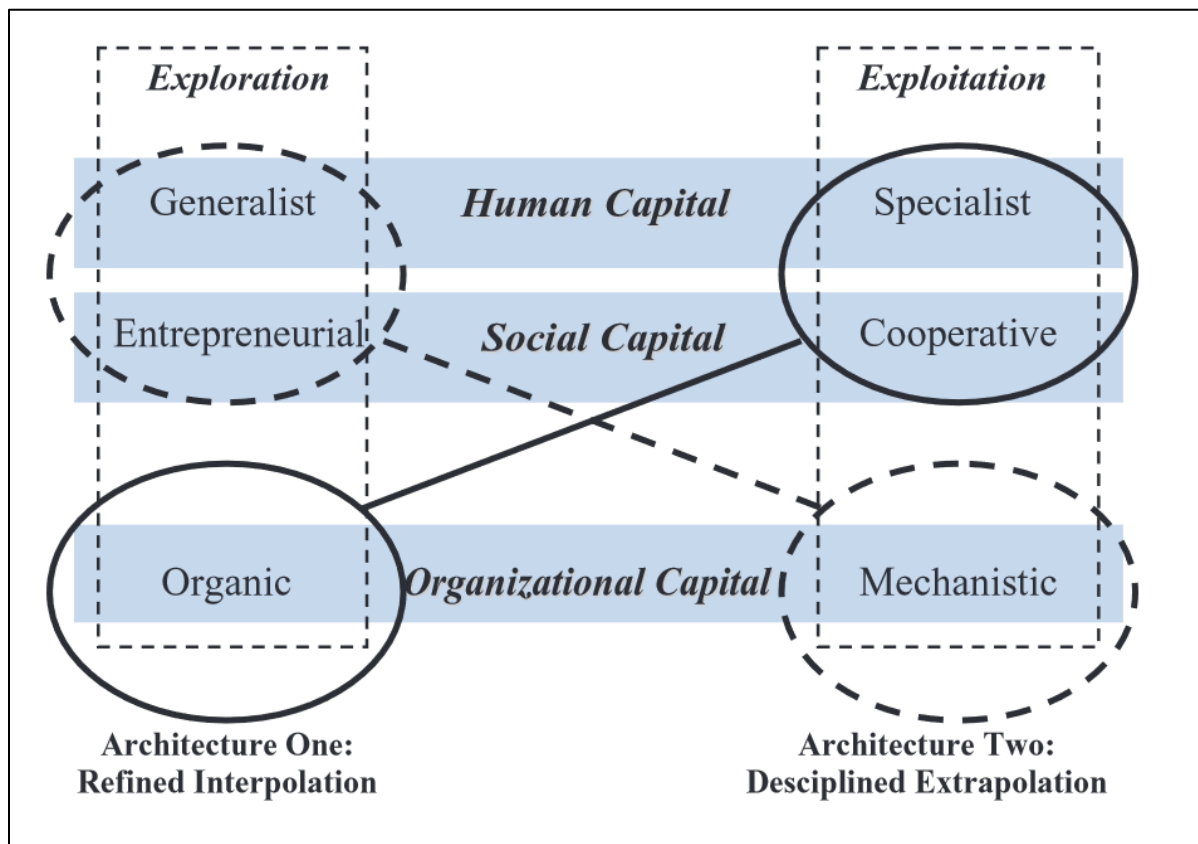


Figure A – Intellectual Capital Architectures (Kang and Snell, 2009, p.74)

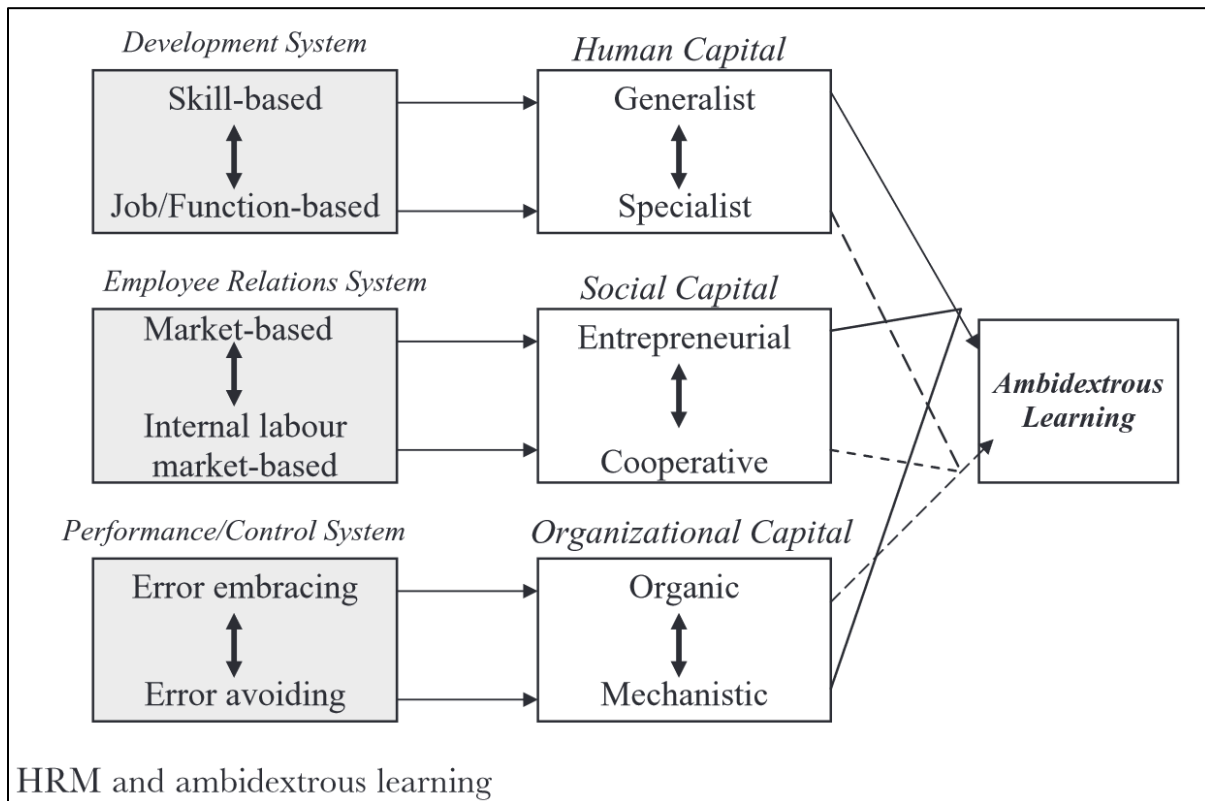


Figure B – HRM tools to support ambidexterity (Kang and Snell, 2009, p.82)

In the area of human capital, Kang & Snell argued that the archetype for exploitation was a specialist, and for exploration, a generalist. The tendency of specialists to focus on one area makes them less likely to explore others, whereas generalists' tendency to explore new areas steers them away from exploiting opportunities in any one area. Organizations develop specialists through job- or function-based practices that focus on specific functional areas and promote effectiveness and efficiency within those areas. Generalists are developed through 'skills-based' systems that involve frequent rotations, broad job descriptions, and promotions based on potential and the ability to connect the dots across domains.

For social capital, they began with their 2007 study and then refined their ideas slightly in the 2009 framework. Entrepreneurial social configurations best support exploration, and cooperative social configurations best support exploitation. The 'cooperative' archetype is "clannish" in that it has dense networks with tight couplings

and strong ties. The clan stays together and often shuns outsiders and external knowledge. 'Entrepreneurial' archetypal groups have wider networks, but the bonds are weaker. Connections are built by direct personal contact and shared experiences or knowledge. These networks promote flexibility, creativity, and exploration, but may not have strong enough bonds to effectively exploit what's found. Cooperative social capital is developed through 'internal labor markets,' in which employees advance within the organization and remain close to home. Relationships are given time to grow strong and deep, and the clan develops robust norms and expectations that foster deep trust. Entrepreneurial social capital is created by a more open market-based system where employees often move, cross-training is expected, and performance matters more than seniority.

Building on Burns & Stalker's (1961) views of organizations, for organizational capital Kang & Snell placed organic structures at the pole of exploration and mechanistic organizations at the pole of exploitation. Mechanistic organizations emphasize structure, rules, processes, and conformity. They employ standard operating procedures, detailed routines, and strict hierarchies to ensure efficiency. It is biased toward proven solutions and strives to reduce errors wherever possible. Organic capital, by contrast, establishes expectations, loose guidelines, and minimal structure to promote autonomy for experimentation and exploration. It promotes the search for new information and novel solutions, and it embraces errors as a means of learning. The lack of a standardized frame of reference, however, can make the organic organization less effective at translating ideas into executable solutions. Developing organic structures involves putting more trust in employees, reducing 'structure' and seeing each situation as unique. Errors are to be embraced as a way toward growth, and employees are evaluated and guided by their results. Mechanical organizations are developed by designing structures and processes to reduce errors in pursuit of effectiveness and efficiency. Employees are assessed on their behavior and how well they follow the rules, rather than on their results.

Using these archetypes, Kang and Snell then developed two architectures (See the connecting circles in Figure A). In the first, Disciplined Extrapolation tempered the exploration tendencies of generalists within an entrepreneurial social structure and

mitigated the risk of failure traps. Kang and Snell moderated the organization with a mechanistic organizational capital structure that would force ideas to be fleshed out. In the second, Refined Interpolation, to assist specialists in increasing their exploration, the model provides an organic organizational capital structure to increase the size of their networks and allocates time, space, and energy to move beyond exploitation.

Having produced a framework, the authors then call for research at three levels: individual, group/team, and organization. Their aim was for future research to test and improve their framework. Four research teams have taken on this call. The first, Kelly, et.al (2011), studied knowledge workers in pharmaceutical companies. Focusing on the human capital aspect of the framework, the research team determined that the model was inflexible and that there should be four human capital archetypes, rather than two.

Turner and Lee-Kelly (2012) conducted a qualitative study of a project management office in an IT/IS multinational firm. They concluded that two architectures were inadequate because they found significant interplay between all six components. They determined the archetypes were not either-or but instead orthogonal. They coexisted and were interdependent. This critique warrants attention; therefore, this study will examine whether these intellectual capital components are dualisms (competing), dualities (interdependent), or orthogonals (independent).

Turner, Maylor, and Swart (2015) also chose to survey a global IT company but went beyond the project management office to look at multiple 'projects based organizations (PBOs)' – temporary organizations built within the company. They also concluded that the archetypes were orthogonal and that all archetypes were consistently present. This team discarded the original two architectures and instead focused on multiple combinations. They concluded that organizations can use any component (HC, SC or OC) of intellectual capital to adjust the overall explore/exploit balance and developed a triangular structure to show the seven possible combinations. (See Figure C). An objective of this study is to determine what instruments organizations can use to adjust their explore/exploit balance; therefore, later chapters will compare Kang & Snell's lever (organizational capital) with the multiple mechanisms Turner et al. observed.

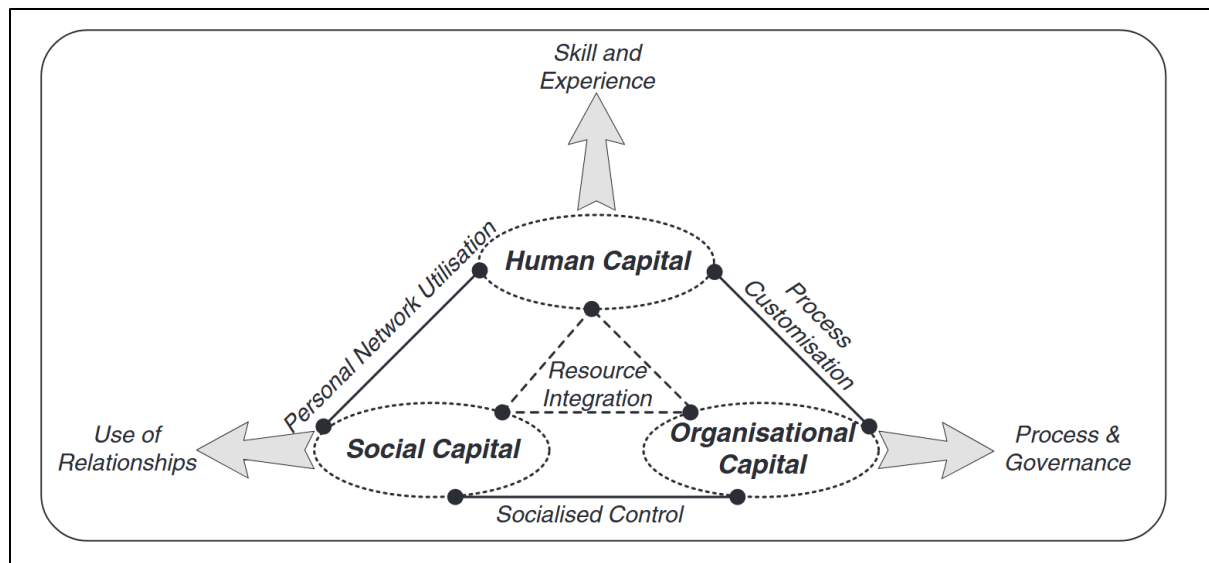


Figure C - Mechanisms which enable ambidexterity.
(Turner, Maylor and Swart, 2015, p.184)

Kang and Snell, in conjunction with Juaini Swart (2012), revisited their model three years later with a study on law firm's practice groups. Stressing various archetypes, they endeavored to see if: 1) generalists human capital could be made in internal labor markets (counter to the 2009 framework), 2) cooperative social capital could support exploration (versus just exploitation), and 3) mechanical organizational capital could also support exploration (versus just exploitation). Their quantitative study was inconclusive regarding #1 and #3, but it did positively conclude that "cooperative" social capital could support both sides of the ambidexterity equation.

Incorporating insights from previous research, this study will be the fifth examination of Kang & Snell's 2009 framework. Unlike the previous four reviews, this study will examine the public sector versus the private sector. It will also shift focus from sub-units within organizations (e.g., project-based organizations, law groups), which are usually considered part of the 'line', and instead focus on the Top Management Team of the organization.

2.6 The Importance of Top Management Teams

In 1984, Donald Hambrick and Phyllis Mason introduced "Upper Echelon" theory, the idea that one can predict how an organization will behave by understanding its top

management team and how they will act. They assumed that the top management team has a significant impact on an organization; therefore, studying the traits, biases, filters, idiosyncrasies, strengths, and weaknesses of TMT members would yield a better understanding of the organization than trying to examine the entire organization. Multiple studies have supported their theory and have found noteworthy associations between the demographic composition of the top management team and organizational features (Hambrick, 2007; Hambrick, Cho and Chen, 1996). Their theory has spurred substantial research on CEOs and top management teams, and a significant portion of that research has influenced ambidexterity research. In particular, it has aided in understanding who decides, and how they decide, on which ambidexterity form to use and what mix of exploitation/exploration to pursue.

Top management teams decide whether to pursue ambidexterity sequentially, structurally, or contextually. They also make many of the required follow-on decisions. Examples include: How quickly will we transition? What structures will we establish, and how many resources will we allocate to each? What culture must we cultivate to support individuals seeking to practice contextual ambidexterity? (Birkinshaw, Zimmermann and Raisch, 2016; O'Reilly and Tushman, 2011; Jansen, Vera and Crossan, 2009; Jansen et al., 2008; Mom, Van Den Bosch and Volberda, 2007; Smith and Tushman, 2005; O'Reilly III and Tushman, 2004). And if a shift in form is required, the TMT is likely the organizational element that must sense the need and plan its execution (Luger, Raisch and Schimmer, 2018). Therefore, this study will focus on this part of organizations, primarily through the lens of intellectual capital, while also incorporating ideas developed across several subfields within Strategic Management.

Ironically, because TMTs must decide which form of ambidexterity to implement, when to introduce it, and how to resource it, neither sequential nor structural ambidexterity is an option for this team. Contextual ambidexterity is the only viable option for top management teams, as they must see the whole picture to make decisions. For that reason, this study will focus on contextual ambidexterity.

2.7 Top Management Team (TMT) – Tensions & Paradox.

Multiple scholars have suggested that the top management team is the cornerstone of ambidexterity (Martin, Keller and Fortwengel, 2019; O'Reilly and Tushman, 2011; Smith and Tushman, 2005). It must labor through the challenges associated with ambidexterity and use the instruments at its disposal to find the right mix for the organization and the environment. A key part of these challenges is navigating the considerable tension between exploration and exploitation, as well as the associated tensions between the components of intellectual capital (HC, SC, OC) and the poles within each component (e.g., specialists vs. generalists). For those who believe this is a problem of dualism, the tensions give rise to “either-or” discussions. For those who view it as a duality or an orthogonal problem, the tensions become more complex. They become paradoxical “both-and” discussions for dualism and a web of “interrelatedness” discussions for orthogonal advocates.

Because the contextual form of ambidexterity emphasizes simultaneous exploration and exploitation, previous researchers have rejected the dualism approach. Most have focused on the tensions, conflicts, and paradoxes of either a duality approach or an orthogonal one (Christofi, Vrontis and Cadogan, 2021; Dean, 2021; Pertusa-Ortega et al., 2021). And while Zang, et.al (2022) quantitatively proved that good paradoxical leaders improve ambidexterity, Gupta et.al (2006) and Birkinshaw and Gibson (2004) concluded that it is challenging and stressful for an individual to attempt to excel at both exploration and exploitation. Teams (Dean, 2022) perform better than individuals at sensing, examining, and addressing the tensions and paradoxes that connect the two activities. How well teams perform largely depends on,

“Behavioral Integration,” an all-inclusive TMT process construct that Hambrick (1994) considered a major refinement to upper echelon theory. Intended to capture the level of the senior team’s wholeness and unity of effort, a behaviorally integrated TMT is better able to synchronize the team’s social and task processes (Lubatkin et al., 2006, p.647).

2.8 Top Management Team (TMT) - Behavioural Integration & Team Heterogeneity

An element of behavioral integration is diversity. A TMT should be cognitively diverse enough to bring in new ideas and see opportunities and challenges, but not so diverse that it can’t achieve unity of effort (Mehrabi, Coviello and Ranaweera, 2021;

Lubatkin et al., 2006). The ideas of team heterogeneity and team behavioural integration are deeply intertwined (Mehrabi, Coviello and Ranaweera, 2021; Oehmichen et al., 2017), as is the concept of social capital within the TMT and broader organization (Li, 2013). If the TMT leans too far toward the entrepreneurial archetype, conflicts and communication challenges may prevent the organization from effectively exploiting opportunities. If it's overly cooperative, groupthink may set in, and the TMT will be unable to push the organization to explore (Li, 2013).

TMT diversity, or its lack thereof, is likely to stem from practices focused on human capital; however, behavioral integration can be affected by all components of intellectual capital. Organizational processes (part of OC) may bring the TMT together and mitigate conflict among members, or drive them apart due to inadequate structures. Social norms (an element of SC) can foster silence and groupthink, or build high levels of trust that enable diverse and contentious conversations to unfold effectively.

Oehmichen et.al. (2017) discovered that low and medium degrees of heterogeneity were detrimental, negatively impacting behavioral integration, as TMT members believed they were similar; however, their underlying assumptions led to conflict and social friction. The research team determined that TMTs with high heterogeneity, by contrast, were aware of their differences. Hence, conversations were more open, assumptions were laid bare, and more options were explored. The high-heterogeneity TMTs were slower to make decisions, but their greater behavioral integration ensured that their decisions were more effective in complex environments. This study will follow this stream of research to examine the connections between intellectual capital, TMT heterogeneity, behavioral integration, and ambidexterity.

This study will also explore an interesting phenomenon discovered by Perretti and Negro (2006). They found that, in multi-layered organizations, the layer and the TMT member's status affected the risk-taking associated with exploration. In a three-level management system, the top and bottom layers tended to explore. The middle layer, however, became risk-averse and focused on exploitation. The same is true of member "status." High- and low-status members were willing to take risks and explore. However, middle-status members were risk-averse and, again, focused on exploitation rather than exploration.

2.9 Context/Culture matters

Just as layer and status matter in the explore/exploit decisions of TMT members, so does the environment in which they exist. Unfortunately, “ambidexterity literature is often context-free in that it does not explicitly consider the nature of the national business system or culture in which the empirical work is conducted” (Raisch and Birkinshaw, 2008, p.402). In two of the rare articles that do, first, Fourné et al. (2019) determined that different forms of ambidexterity work more effectively in specific environments and cultures, and second, Birkenshaw et al. (2016) determined that organizations need the ability to see and shift forms as their environments change, which they inevitably will. O’Reilly and Tushman (2013) in a review of ambidexterity studies identified that ambidexterity’s value increases in competitive and uncertain environments. Few studies have investigated the context or culture of public institutions that attempt ambidexterity. To the best of this study’s knowledge, no one has examined it in the competitive, chaotic, uncertain, and ever-changing environment of international security affairs. This study will do so by investigating how U.S. military’s Combatant Commands address the explore/exploit challenge in global affairs.

2.10 Gaps and what needs to be done

While previous research has produced high-quality intellectual capital models that support organizational ambidexterity, subsequent research has identified weaknesses in those models. This study seeks to address those weaknesses by examining a new dataset through multiple lenses. In doing so, it answers Kang & Snell’s call to utilize their framework to “explor[e] a broader approach to HR alignment and strategy” (2009, p.88). It also heeds the calls of other scholars (Knight and Cuganesan, 2020) who have called on the research community to explore how ambidexterity theories fare in the reality of day-to-day operations, and to understand better how various leadership and management actions align with the internal and external conditions surrounding TMTs and their organizations (Tarba et al., 2020; Martin, Keller and Fortwengel, 2019; Birkinshaw and Gupta, 2013).

By bringing the combination of intellectual capital, organizational ambidexterity and top management team theory research up-to-date, and then providing novel contributions to field of Strategic Management, this study aims to provide researchers, management practitioners, and military leaders a fresh jumping off point from which to continue the quest to improve organizational ambidexterity in organizations. It seeks to examine current models in a new context, to explore how the components of intellectual capital interrelate, to review intellectual capital models in light of research conducted since their creation, and to provide an updated model suitable for future testing.

2.11 Conclusion

After reviewing the relevant literature, this study observes that there remains a lack of a comprehensive understanding of how to leverage intellectual capital to achieve organizational ambidexterity. Therefore, the key purpose of this study is to address the theoretical and practical call to better understand how various intellectual capital configurations within top management teams impact organizational ambidexterity. This chapter has laid the theoretical groundwork for this study by reviewing research done in the areas of organizational ambidexterity, intellectual capital, and top management teams. In the next chapter, it will lay the contextual foundation for this study by examining the dataset and relevant literature on its structures, cultures, and people.

Chapter 3 – Research Context – Data Set (U.S. Military Culture and Behavioral Integration)

3.0. Introduction

The dataset for this study is part of the strategic infrastructure of the U.S. military's Department of Defense. U.S. Combatant Commands are strategic headquarters assigned to either regions (e.g., Europe) or functions (e.g., Cyber) that support day-to-day activities while also preparing for potential future conflicts (Joint Chiefs of Staff, 2018). Central Command, probably the most well-known Combatant Command, oversaw the wars in Iraq and Afghanistan while also dealing with more minor conflicts in Yemen and Syria, conducting day-to-day training exercises with countries throughout the Middle East, coordinating with the Department of State on military sales to Egypt, Israel and others, and planning with other nations for potential conflicts with Iran. European Command is currently supporting the fight in Ukraine, coordinating with NATO on a host of issues, and planning for other conflicts with Russia. Combatant Commands must fight today's fights while also exploring the future for opportunities and challenges. Near the leading edge of US security matters, they must be organizationally ambidextrous to address security matters today and in the future. This study will investigate the top management teams within these organizations.

To address the theoretical and practical call to better understand how various intellectual capital configurations within top management teams affect organizational ambidexterity, this chapter will explain and contextualize the dataset. This chapter will begin with a review of military infrastructure to show where Combatant Commands fit in comparison to the military services and the Secretary of Defense. It will then examine the structure and personnel of Combatant Commands. It will focus on the element (top management teams) under study within the Combatant Command and on how the team is combined. Lastly, it will look at the various cultures involved and how they affect Combatant Command decision-making. The previous chapter laid the groundwork for the management theory in this study. This chapter describes the dataset upon which this study will apply that theory.

3.1 Context – Military structure

The U.S. Department of Defense divides itself between Military Services (e.g., the U.S. Army) and Combatant Commands (e.g., U.S. Africa Command). Military Services build forces by manning, training, and equipping personnel and fighting formations. Combatant Commands use those forces for day-to-day security cooperation activities (e.g., training with the Egyptian Armed Forces), smaller conflicts (e.g., rescuing hostages in Libya), and larger conflicts (e.g., the war in Afghanistan).

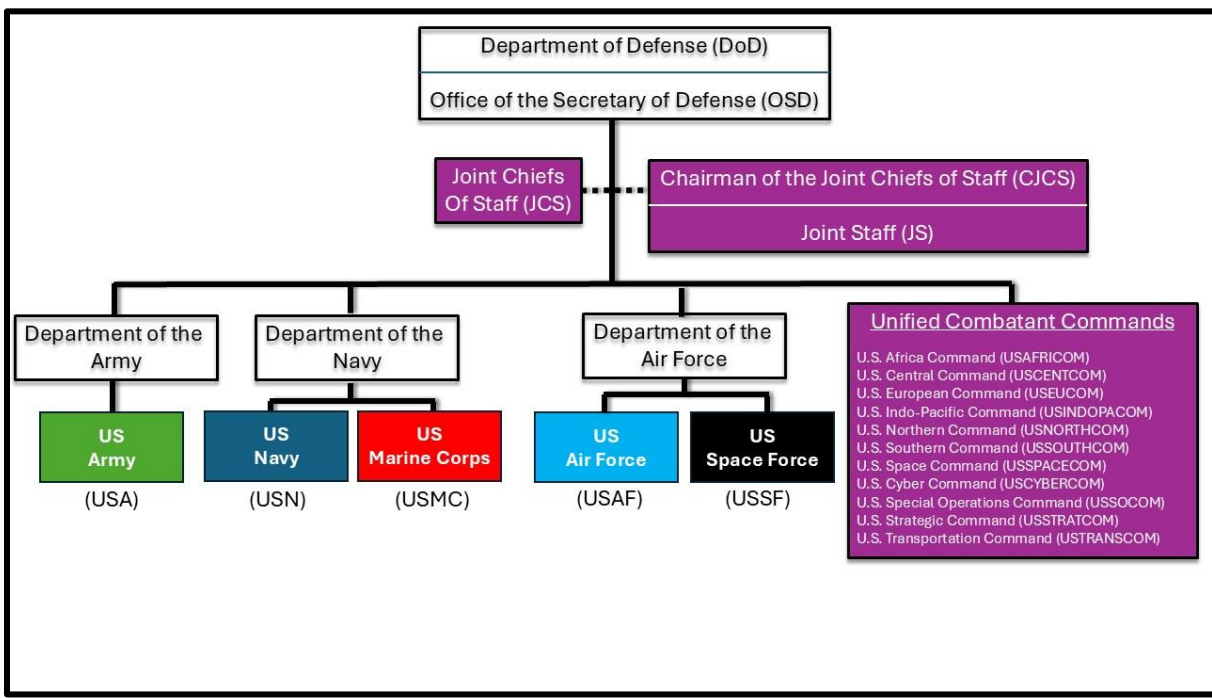


Figure D – DoD organizational Structure. Diagram built by the Author.
(Sapolsky, Gholz and Talmadge, 2021)

The U.S. military has six services: the U.S. Army (USA), the U.S. Marine Corps (USMC), the U.S. Navy (USN), the U.S. Air Force (USAF), the U.S. Space Force (USSF), and a hybrid military and safety service – the U.S. Coast Guard (USCG). (U.S. Department of Defense, No Date)

This study will focus on the first four. The USCG is excluded because it primarily supports the U.S. Department of Homeland Security, is not a significant part of DoD's strategic decision-making, and shares a culture with the U.S. Navy in many respects. The USSF, established in 2019, is excluded due to its relatively recent establishment. As a service still separating itself from the USAF, the USSF's structures, educational

models and culture are still too fuzzy to stand out enough for the purposes of this study. As of 2025, it still retained a very USAF feel.

The U.S. Army is the largest service and focuses on the land domain. It has three components: the active-duty force (full-time employees), the reserve force (part-time employees), and the National Guard (part-time employees under dual state and federal control). The U.S. Navy is the second-largest service and focuses on the sea domain: the surface of the world's oceans, the depths of the seas (subsurface), and the skies above the seas. It has an active and reserve component, but no National Guard element. The U.S. Air Force focuses on the air domain. Responsible for air supremacy, long-range strike, and the U.S.'s strategic airlift transport, it has an active component, a reserve component, and a National Guard Component. The smallest service in this study, the U.S. Marine Corps straddles all of the domains. Calling itself a middle-weight, rapid-response force, the Marine Corps works with the U.S. Navy to be forward-deployed and ready to respond to a range of contingencies. The Marine Corps has active-duty and reserve components but no National Guard element. (U.S. Department of Defense, No Date; Van Riper et al., 2018)

The four U.S. military services can come together in various "Joint" organizations at the tactical, operational, and strategic levels. Tactical and operational joint organizations are usually ad hoc (built for a mission and then disbanded after that mission), whereas U.S. strategic-level joint HQs are effectively permanent. This study focuses on U.S. Combatant Command HQs – eleven standing organizations that report directly to the Secretary of Defense and manage day-to-day military operations around the world, as well as any crises that arise within their assigned regions/functions.

A Combatant Command, often abbreviated as "CCMD", is "a [strategic] military command with broad continuing missions under a single commander and composed of significant assigned components of two or more military [services]. There are currently eleven Combatant Commands. The [CCMDs] have responsibility for the military's operations in their respective areas." (McInnis, 2024; Joint Chiefs of Staff, 2021)

There are seven "geographic" regionally focused Combatant Commands, which operate in clearly delineated areas of the world, and there are also four "functional" Combatant Commands, which operate worldwide across geographic boundaries and

provide unique capabilities to geographic combatant commands and the services. (See Figure D and list on page 36. U.S. law, specifically Title 10 U.S.C. §162, specifies that the chain of command for military operations extends from the President to the Secretary of Defense to the Commanders of Combatant Commands. The Military Service Chiefs are not in the operational or strategic chain of command. The Chairman of the Joint Chiefs of Staff serves as an intermediary, transmitting orders from the Secretary of Defense to the Commanders of Combatant Commands. Each Combatant Commander is a four-star Admiral or General.

While initially small organizations focused on potential wars, Combatant Commands have evolved to assume a multitude of roles (e.g., building partner capacity). They are now often seen as semiautonomous centers of U.S. foreign policy (Cozad et al., 2023). Their staffs have increased from hundreds in the 1990s to thousands today.

Combatant Command Headquarters are built from members of the military services. Services provide personnel to man these “Joint” headquarters. They serve in Combatant Commands for two to four years and then return to their services. Some return later, but many do not. In Chapter 5 (Human Capital) and Chapter 8 (Who Conducts the Orchestra), this study examines how this manning process operates and its impact on the effectiveness of Combatant Command Headquarters and its ambidexterity.

Combatant Commands are tailored to the region and/or mission to which they are assigned, so each has a slightly different size, shape, and culture. The Combatant Commands are:

- U.S. Africa Command (USAFRICOM)
- U.S. Central Command (USCENTCOM)
- U.S. European Command (USEUCOM)
- U.S. Indo-Pacific Command (USINDOPACOM)
- U.S. Northern Command (USNORTHCOM)
- U.S. Southern Command (USSOUTHCOM)
- U.S. Space Command (USSPACECOM)
- U.S. Cyber Command (USCYBERCOM) - FUNCTIONAL
- U.S. Special Operations Command (USSOCOM) - FUNCTIONAL
- U.S. Strategic Command (USSTRATCOM) - FUNCTIONAL
- U.S. Transportation Command (USTRANSCOM) - FUNCTIONAL

(U.S. Department of Defense, No Date)

3.2 Department of Defense (DOD) and Combatant Command Structures

The eleven Combatant Commands differ in structure, manning, and culture due to their missions, geographic locations, and histories. For example, European Command's structure has historical roots in World War II and includes elements to ensure it remains aligned with NATO, a requirement that no other Combatant Command must include in its organization. All, however, evolve from the same basic structure. Figure E shows the “Napoleonic” structure, with nine vertical teams performing specialized functions. Most military organizations are built on this “Napoleonic model,” a Weberian bureaucratic scheme that groups staff into subunits, each focused on a specific function. Overlaid on the Figure is a box indicating which portion of the Combatant Command constitutes its Top Management Team (TMT). Chapter 7 (Organizational Capital) will provide more detail on these vertical components and several horizontal components designed to reduce stovepipes.

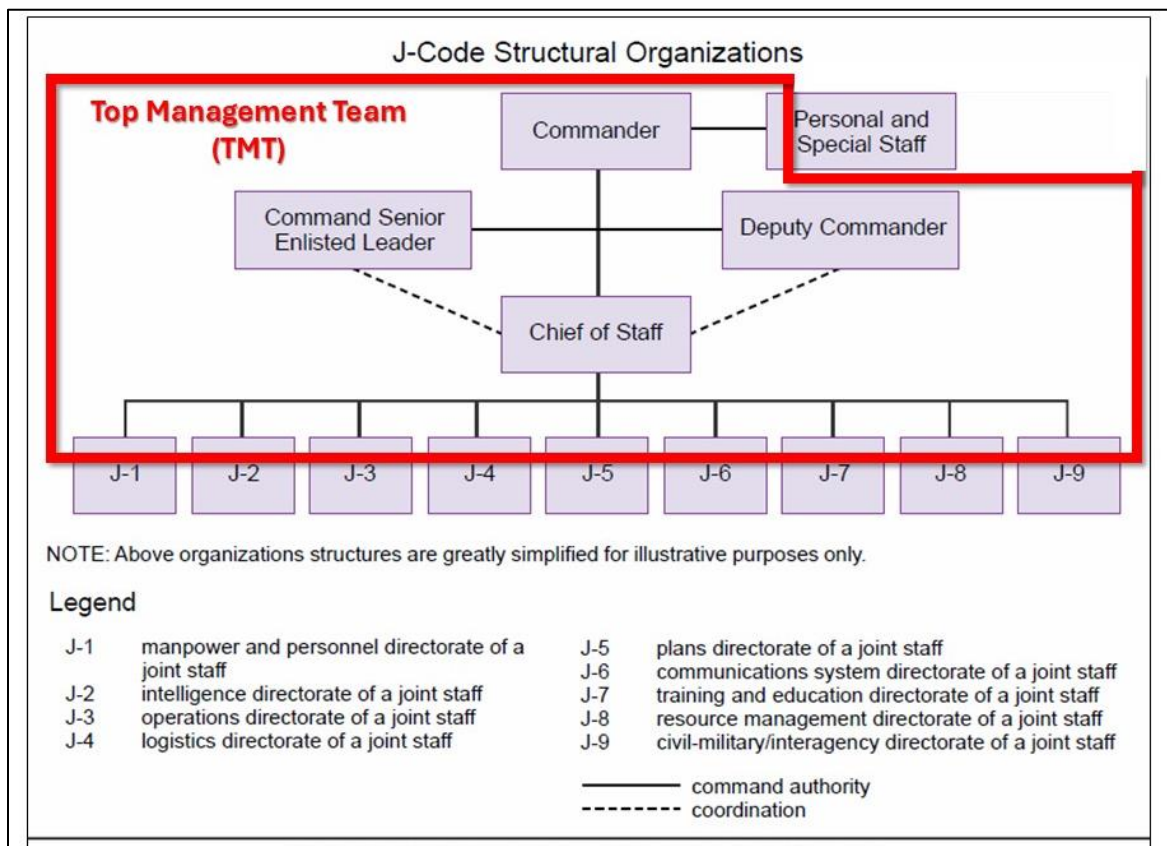


Figure E – Combatant Command HQ Structure (from JP 3-33 Joint Force Headquarters) (Joint Chiefs of Staff, 2024)

U.S. Military top management teams come in three main varieties: Service, Joint and Office of the Secretary of Defense (OSD). Service TMTs are somewhat homogeneous, as all members are, by definition, from the same service (e.g., the U.S. Army) and are responsible for training, manning, and equipping within their area of expertise (e.g., land warfare). Joint TMTs, such as those that lead Combatant Commands, are composed of members from all six military services. They are brought together to enable a more holistic use of the U.S. military by integrating the services into one fighting force. Joint TMTs are responsible for warfighting, Military Operations Other Than War (MOOTW), and interactions with other nations (e.g., NATO). OSD's TMTs is a fusion of the service members assigned to, and the civilian employees of, the Office of the Secretary of Defense. As the U.S. military is civilian-controlled by constitutional mandate, civilians lead the OSD TMT and exercise control over the entire US military (along with a host of support enterprises) (U.S. Department of Defense, No Date).

This study focuses on Service- and strategic-level Joint headquarters TMTs (specifically, U.S. Combatant Commands) and therefore excludes OSD TMTs to avoid policy and political issues within the study's context. Chapter 4 (Methodology) will explain this focus and exclusion.

The cultures, structures, and processes of the TMTs in this study evolved and are, in essence, outputs of the significant historical events that shaped them. For our examination of "joint" culture, the story begins in 1986, when the Goldwater-Nichols Act was signed. This act, a result of service rivalries that adversely affected U.S. military operations, was a watershed moment in the "jointness" of the U.S. military. As will be explained in more detail in Section 3.4 and Chapter 6 (Social Capital), this act altered the power dynamics within the DoD and compelled the services to become more "joint."

3.3 Military Occupational Specialties, Ranks, and "National Security Professionals."

Military service members are classified in various ways, but three of the most prominent are service, specialty, and rank. The four services relevant to this study have been briefly discussed above and will be discussed in greater detail in Chapter 5 (Human Capital). The civilian equivalent to military "specialties" is functional area or job

title. In the Army and Marine Corps, jobs are categorized by “Military Occupational Specialty”, or MOS codes. A communications specialist would be labelled a “25x” in the Army and a “06xx” in the Marine Corps. A communicator specializing in satellite communications would be a “25S” or a “0627.” The Air Force uses “Air Force Specialty Codes”, or AFSCs, and the Navy uses “ratings.” A satellite communicator would be a “3D1X3” in the Air Force, and would have an “IT rating” in the Navy. This study will use the terms “job title” and “Occupational Specialty” interchangeably to describe the jobs that service members perform.

The military services are comprised of enlisted members (sometimes described as the “blue collar” part of the service) and officers (“white collar”) (U.S. Department of Defense, 2023). Enlisted ranks begin with E-1 (Private, Seaman, or Airman, depending on Service) and progress through E-9. Officer ranks use a similar system, ranging from O-1 (Lieutenant or Ensign, depending on the service) to O-10 (4-star Generals and Admirals)(Encyclopaedia Britannica, 2025). See Figure F below for Officer ranks. Combatant Command headquarters are predominantly staffed by O-5 through O-8. There will be very few O-4s, one or two O-9s (3-star), and one O-10 (4-star).

Officer rank insignias of the United States military										
Army, Marines, Air Force, or Space Force	second lieutenant	first lieutenant	captain	major	lieutenant colonel	colonel	brigadier general	major general	lieutenant general	general
	O-1	O-2	O-3	O-4	O-5	O-6	O-7	O-8	O-9	O-10
Navy or Coast Guard	ensign	lieutenant junior grade	lieutenant	lieutenant commander	commander	captain	rear admiral lower half	rear admiral upper half	vice admiral	admiral

Figure F – Management levels overlayed on Military Officer Ranks.
(Overlays created by author)
 (Encyclopaedia Britannica, 2025)

This study will focus on O-8s, O-7s, and O-6s. At the rank of O-6, officers are told that they are entering the realm of “National Security Professionals” and becoming “Strategic Decision Makers” (Bartholomees (Ed), 2012; Marine Corps University (U.S.), no date). They no longer remain within the occupational specialty in which they grew up. At O-6, they expand their thinking to broader (joint, interagency, national) and deeper (military strategy, National Defense Strategy, and National Security Strategy) concerns. In the lexicon of management, they are tasked with being more strategic, more innovative, more exploratory, and thinking across the entire enterprise. “Generals” are so titled because they leave their Military Occupational Specialty (MOS) to become generalists (Barno et al., 2013). The ease with which they make that shift is part of this study.

This study divides Combatant Commands into three parts: upper top management team, lower top management team, and action officers/line. Action Officers (AOs) are part of the “line.” They perform most of the detailed, day-to-day work and plan future events in detail. Their ranks consist of the O-4s, O-5s, and most of the O-6s within the Combatant Command. They are a vital part of the headquarters, but since this study utilizes theory related to top management teams, they are not the focus. The upper part of the top management team consists of the 3-star and 4-star generals & admirals in Combatant Commands. This study also excludes this group. These officers devote a significant portion of their time to interagency and political coordination. While it is hoped that this study will be followed by research that includes this group, the current study focuses on how the military operates. Including the upper part of the top management team would add unneeded variables.

The lower part of the Combatant Command top management teams consists of the O-8s (Major Generals and Rear Admirals (Upper Half)), O-7s (Brigadier Generals and Rear Admirals (Lower Half)), and the senior O-6s (Colonels and Captains) within the Command. The O-6 rank straddles the action officers and the lower part of the top management team. Most O-6s in Combatant Commands are part of the line, and not part of the top management team. However, some senior O-6s hold positions within the staff that place them on the top management team. They are included in correspondence and participate in meetings with the top management team. Examples

of this include the senior personnel officer, the senior lawyer, and the assistant chief of staff.

The concept of “National Security Professionals” is widely recognized within the U.S. military infrastructure, but it is not an official title, designation, or group (Bartholomees (Ed), 2012). More in line with Etienne Wenger’s concept of Communities of Practice, this group shares a common concern with strategic national events, a passion for strategic security matters, and regularly interacts to enhance their capacity to support national defense at the strategic level (Lacquement and Galvin, 2022; Wenger, 1998). National Security Professionals grow to put Department of Defense and national interests above their military service’s interests and norms. Combatant Command top management teams are filled with National Security Professionals.

3.4 Jointness - Homogeneity, Heterogeneity & Behavioral Integration

While the concept of National Security Professionals is informal, a formal DoD concept for transcending military services toward a greater purpose is “jointness.” When two or more services work together under a single joint leader, they are expected to integrate as a team, maximizing each service's strengths while mitigating its weaknesses. “The resultant synergy creates military advantage and maximizes combat capability” (Joint Chiefs of Staff, 2023, p.1–5). While there is no approved definition of “jointness,” it has been described as:

“a psychological state characterized by the willingness of members of each branch of Service to trust, collaborate, and operate interdependently with each other to accomplish a shared mission. In this way, joint force commanders can employ the forces and capabilities of the different Services in an integrated and optimal manner, unhindered by Service parochialism (Davis and Smith, p. 69).

The U.S. Department of Defense began prioritizing “jointness” in 1986 when Congress passed the Goldwater-Nichols Defense Reform Act. Until 1986, the military services reigned supreme. There were very few mechanisms to force integration or to encourage officers to think broader than their service. “Jointness” happened by accident, rather than by design. However, following a spectacular failure during the 1980 rescue attempt of American hostages in Iran (Operation Eagle Claw) where a lack of interoperability among the participating services caused the loss of eight lives and

significant national prestige, and then several suboptimal operations (Grenada & Beirut), where again service rivalries caused substantial issues, Congress decided that the Department of Defense was decidedly too service-dominated, and excessively siloed (Kamarck, 2016; McInnis, 2016). The Goldwater-Nichols Act of 1986 tasked the services with becoming more “joint”—reducing service stovepipes and working in a more integrated fashion. It mandated organizational and educational/experiential changes, aiming to break down service parochialism and build “joint” officers who would work more closely together (Jackson et al., 2020; Zimmerman et al., 2019; Kamarck, 2016; McInnis, 2016).

In essence, Congress, with this legislation, sought to reduce service members' specialization and increase their ability to generalize across the DoD to better understand and integrate services. Parts of the legislation implemented organizational and policy changes to make the DoD more jointly focused and to incentivize service members to strive to be more “joint” (Kamarck, 2016; McInnis, 2016). For example, Congress transferred responsibility for fighting wars from the services to the Combatant Commanders. The aim was to streamline the chain of command (one commander rather than four service chiefs) and incentivize officers to serve in these joint headquarters.

Desert Storm in 1991 was the first real test of this new push towards “jointness,” and the operation's spectacular success cemented jointness as a mainstay of American warfare. Since then, jointness has become a keystone of the U.S. military and “so fundamental to the way DOD does business today that it is difficult to recall that it once conducted its operations quite differently” (McInnis, 2016, p. 2). The significant operational and tactical successes in Iraq and Afghanistan have continued to justify the DoD's emphasis on this key concept. Its questionable outcomes in the strategic realm, however, have concerned Congress, Presidential Administrations, and National Security Professionals for several decades (Cozad et al., 2023; Tangredi, 2022; McInnis, 2016; Snider, 2003). No one questions the idea of “jointness,” but the costs, strategic benefits, methods, and trade-offs are regularly examined (Cozad et al., 2023; Tangredi, 2022; McInnis, 2016).

Each service is associated with a color on most DoD charts. The Army is green, the Navy is dark blue, the Air Force is light blue, and the Marine Corps is red (see Figure D above). Joint organizations have been assigned purple (a blend of the other colors), so the first question service members often ask when beginning “jointness” education is “How purple do I need to be?” Some believe service members should become a deep purple as they advance in rank, leaving behind their services to become truly joint (Cozad et al., 2023; Davis and Smith, 2020; Kamarck, 2016; Snider, 2003). Others believe officers should focus on their primary duties and services, and only adopt a light purple hue (Cozad et al., 2023; Tangredi, 2022; Kamarck, 2016). Congresses and Presidents have flowed and ebbed. Soon after the Goldwater-Nichols Act, the Skelton Commission advocated for significant additions to joint-focused education in military educational programs. Officers were required to attend a Joint Professional Military Education (JPME) I program and a JPME II program to be considered “Joint Qualified.” They were required to be “Joint Qualified” before they moved into a joint-designated billet (e.g., a planner on a Combatant Command staff). After successfully completing a three-year joint assignment, officers were deemed “Joint Specialty Officers (JSOs).” No O-6 could screen for promotion to general or admiral unless they were a JSO. This was the high-water mark. During the Iraq and Afghanistan wars, the services pushed back on these requirements as too restrictive. In 2018, Congress relented, and three-year assignments were reduced to two, officers could complete assignments before attending JPME II, and multiple paths to achieving JSO (changed to JQO for “Joint Qualified Officer”) were created (Cozad et al., 2023; Kamarck, 2016). Some interviewees believe these changes incentivized officers to meet the minimum required joint time and to remain focused on their respective services. Chapter Five will explore the views of officers on both sides of the argument.

A key driver of the joint versus service discussion is the tension between the needs of the services and those of the joint community. Officers have many requirements to gain and maintain proficiency in their Military Occupational Specialties. Goldwater-Nichols mandated “joint” requirements but did not alleviate service and MOS requirements. Instead, they added to the list of overall requirements. Something must

give. Chapters 5 (Human Capital) and 8 (Who Conducts the Orchestra) examine how services and their officers typically decide where to focus and where not to.

One of the first requirements officers encounter is the need for Joint Professional Military Education (JPME). At various points along an officer's career path they undergo schooling in multiple topics. O-4s attend school to learn to transition from tactical to operational matters. O-5s and O-6s go to school to transition from operational to strategic matters. O-7s go to a "Capstone" course to learn how to be generals and admirals. Goldwater-Nichols, the Skelton Commission, and other initiatives have infused those courses with joint topics. Officers are required to understand the various services and the joint community's perspectives. To support this endeavor, all service schools are required to have 40% of their instructors and students from other services. (e.g., The U.S. Army War College staff is 60% Army officers, and 40% from the other services). The aim is:

"joint acculturation...defined as "the process of understanding and appreciating the separate service cultures resulting in joint attitudes and perspectives, common beliefs, and trust, which occurs when diverse groups come into continuous direct contact" (Davis and Smith, p. 70).

The goal is to reduce heterogeneity, or at least to enable service members to work together effectively. In management terminology, they seek "behavioural integration." But as several researchers, including the person who introduced the term, have identified, behavioural integration can cut two ways. Done well, it can improve decision-making through diversity, robust communication, and the drawing out of hidden assumptions. But done poorly, it can hinder performance through conflict, groupthink, and overly slow decision-making (Mehrabi, Coviello and Ranaweera, 2021; Oehmichen et al., 2017; Carmeli and Halevi, 2009).

Groupthink, as deeply studied by Irving Janis in his analysis of multiple U.S. strategic failures, is the idea that excessive homogeneity of thought can lead to poor decisions. By engaging in concurrence-seeking common to tight-knit groups seeking amiability (i.e., keeping the clan together), overly homogeneous TMTs can focus too internally and make irrational decisions poorly suited to the environment.

Similarly, "the ideology of jointness," as one author described it, can lead to either a "tyranny of consensus" (where nothing is approved until all stakeholders agree)

or a “lowest common-denominator approach to advice and decision making” (everything is watered down until nothing contentious is in the decision). These are common complaints about joint strategic organizations (Tangredi, 2022).

These are the risks of jointness that the military services and civilian policymakers are concerned about today. At the other end of the spectrum are the strategic challenges that the DoD faced before Goldwater-Nichols: parochialism, disjointed operations, and confused decision-making. DoD’s goal is a middle ground. A culture of behavioral integration that enables effective operations without hindering innovation. Chapters 5 (Human Capital) and 6 (Social Capital) will explore how well officers become “joint” and how well they integrate. Chapters 6 (Social Capital) and 7 (Organizational Capital) will investigate the social and organizational constructs that enable “jointness.” Chapter 8 (Who Conducts the Orchestra) examines how those constructs are adapted to an ever-changing environment.

3.5 Culture

Combatant Commands each develop their own culture, much like each orchestra develops its own “sound.” But that culture is constrained by the cultures that feed into it and revolve around it. The United States has an “American” culture, and within that culture is a military culture that is both “American” but also distinct from the rest of society. Each Service has a sub-culture based on its history, who is drawn to join it, and how it trains and educates its members (Murray, 1999). Chapter 6 (Human Capital) will focus on the cultures of each service and that of “National Security Professionals.” Chapter 7 (Social Capital) will discuss “joint” culture in more detail, and Chapter 8 (Who Conducts the Orchestra) will discuss how that “joint” culture can be adjusted and who establishes Combatant Command culture.

Edgar Shein defined culture as:

the accumulated shared learning of [a] group as it solves its problems of external adaptation and internal integration; which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, feel and behave in relation to those problems. This accumulated learning is a pattern or system of **beliefs, values, and behavioral norms** that come to be **taken for granted as basic assumptions** and eventually drop out of awareness. (Schein, 2004, p.6) (Bolding added by author)

US Air Force officers are taught from their first day in service that “Airpower” is a vital, and often the decisive, element in American military victory (Zimmerman et al., 2019; Van Riper et al., 2018; Builder, 1989). It is ingrained in them and becomes their most basic value and assumption. It is not a value shared by officers from the other services whose cultures are not built on that assumption. The U.S. Army worships “Landpower” and routinely believes the other services, and the nation, are fooled into seeing technology as a viable replacement for ground warfare (Builder, 1989). The other services, regardless of their views on technology, do not place “Landpower” on the same high pedestal as the U.S. Army. These and many other fundamental disagreements lead to significant cultural differences among the military services, as each refuses to acquiesce to the other’s most basic beliefs. Overcoming these differences to build an integrated force is the purpose of “jointness” initiatives.

The officers this study focuses on have been inculcated with their service culture for approximately twenty to twenty-five years before they join the Combatant Command top management teams (Jackson et al., 2020; Zimmerman et al., 2019). That service culture has been leavened by one to three years of joint education (schools in which all military services come together) and possibly by one previous tour in a joint organization (Jackson et al., 2020). It is further leavened by the call from senior leaders to transition beyond their service, and even beyond the military, into “National Security Professionals” (Van Riper et al., 2018; Bartholomees (Ed), 2012). How much they transition, how much their basic service assumptions soften, and how well they adapt to the joint world are key questions for the chapters to come. The ability of officers to become Joint and to develop into National Security Professionals speaks to the human capital that Combatant Commands receive and the social capital they can foster.

One challenge to the softening of basic assumptions among military officers is that they deem themselves “professionals.” Having been screened repeatedly, having passed multiple assessments, and having ever more senior officers discuss professionalism with them for decades, Colonels, Generals, and Admirals live and breathe their service (Lacquement and Galvin, 2022; Van Riper et al., 2018; Matthews (Ed), 2002). As Joseph Soeters described it, the military is a “greedy” institution (Soeters, 2018). It demands much of its members, and in return, they are heavily

invested in its success. Add the belief that officers' choices involve life and death, and the assumptions underlying those decisions become deeply personal.

3.6. Conclusion

Returning to management theory, James March argued that top management teams make decisions through the “garbage can” model. Team members bring the capabilities they have gained from previous experiences to each problem. In his view, solutions (known capabilities) appear at meetings, seeking problems to attach themselves to (Murray, 2011). Air Force officers look to use airpower, and Army officers seek to use landpower. In the following chapters, this study will examine the assumptions, knowledge, skills, attributes, and “solutions” that service members bring to Combatant Command TMTs; how well they combine this knowledge into exploitable answers and exploratory avenues; and how the organizational structure supports or inhibits ambidexterity. But before it does, it will explain how it collected, viewed, and analyzed the data.

Chapter 4 – Research Methodology

4.0 Intro

Having determined the current state of academic discussions on ambidexterity, intellectual capital, and military “National Security Professional” culture in earlier chapters, this chapter outlines how this study engages with those dialogues. To do so, it explains what information was believed to be necessary to begin the study, where it obtained it, how it gathered the data, and how it was analysed. It then steps back to review how it ensured appropriate rigor and ethical conduct. Lastly, it examines the researcher's positionality (including advantages and potential biases) and the study's limitations. The researcher began this research journey highly experienced in military culture but with limited knowledge of intellectual capital and ambidexterity-related topics. The sections below will lay out how he sought to step back from his military experiences to adopt a critical perspective and how he followed a systematic, analytical process to engage proactively in academic discussions of exploration/exploitation challenges.

4.1 Information required

Contextually, this study aimed to understand the backgrounds and factors shaping relevant communities of practice (e.g., National Security Professionals, “joint” officers, Military Service communities within Combatant Commands), thereby gaining insight into how these communities influence Combatant Commands' ability to balance exploration and exploitation. It delved into service cultures, service sub-tribe cultures, job-related cultures (e.g., logistics specialists), Combatant Command cultures, and the cultures of elements within Combatant Commands (e.g., Cross-functional teams, Joint Directorates, etc.) to better understand how various intellectual capital configurations within TMTs impacts organizational ambidexterity.

While its stepping off point was several existing theories and concepts, it agreed with Weick (1989) and Whetten (1989) that the goal was not to validate a model but to identify new relationships and previously unexplored connections that improve the theory and concepts of ambidexterity through examining a new context and organization.

Demographically, this study aimed to understand the breadth and depth of TMT members within Combatant Commands. It sought to understand their relevant knowledge, skills, and attributes and how they were acquired. It examined similarities and differences between military occupational specialties (job roles), military services, military ranks, and management levels within Combatant Command TMTs.

Perceptually, this study delved into how various members of Combatant Command TMTs viewed exploration and exploitation, and the abilities of their organizations to achieve necessary levels of ambidexterity. It explored whether certain services or ranks were associated with archetypes (e.g., whether one military service is more entrepreneurial), the strength of identified tendencies, and the extent TMT members were tied to those tendencies. This prompted the study to investigate the homogeneity of TMTs and its impact on ambidexterity.

To understand the various intellectual capital conceptual models developed to advance ambidexterity, the study needed to examine the concepts of human, social, and organizational capital. It used the archetypes set up by Kang, Snell, Swart, Turner, and Maylor (Turner, Maylor and Swart, 2015; Kang and Snell, 2009) as strawmen to step off from. It first used their archetypes to examine discussions of dualisms, dualities, and orthogonalisms. It then used these archetypes and their interactions to identify which component(s) were best suited to adjust the explore/exploit balance within the community under study.

The overall research questions it focused on were: 1) How do TMTs currently employ intellectual capital to attempt to achieve ambidexterity? 2) What elements of intellectual capital do TMTs believe are helping or hindering the ability to achieve effective ambidexterity? 3) How do TMTs think they can adjust the intellectual capital components and deal with the resulting tensions to improve organizational ambidexterity?

4.2 Research Sample

As described in Chapter 3, this study focused on the lower half of Combatant Command top management teams. This group consisted of the 2-star generals and admirals, 1-star generals and admirals, and a small subset of colonels and captains

who served in Combatant Command TMTs. Three and four-star Generals and Admirals were excluded to ensure the study remained within the military community. Three- and four-star officers devote significant time and energy to interagency coordination and to working with politically appointed leaders (e.g., the U.S. Congress and the White House National Security Council). Including them would have incorporated variables that this study was not prepared to engage. It excluded a majority of the O-6s (Colonels and Captains) within the Combatant Command because they are not included in many significant meetings. Therefore, the study believed they were not part of the top management team. O-6s included in this study held billets that senior TMT members believed were vital enough to warrant their inclusion in significant meetings and other important communication channels (e.g., email distribution lists). “Significant” meetings were defined as those involving sensitive topics, with limited seating, and where seating lists were screened by two and three-star Generals. Command-level decisions were made during these meetings, which were held in rooms designated for “senior staff.”

This study centered on Combatant Commands rather than examining all strategic-level joint headquarters. The majority of Joint HQs were excluded due to their temporary nature. Combatant Commands are enduring headquarters, but most Joint HQs exist for a limited period (e.g., the fight against ISIS). The Joint Staff at the Pentagon was excluded for the same reasons that excluded 3- and 4-star officers. The members of that headquarters spend significant time and energy engaging with non-military organizations, and this study was not prepared to include the additional variables that would bring.

This study intended to examine military service headquarters (e.g., Headquarters, Marine Corps) and compare them with Combatant Command headquarters, but service headquarters were de-scoped during the data collection phase. Sample selection prioritized factors related to Combatant Commands (see below). After half of the sample had been selected, the researcher determined that there would be insufficient data to accurately represent military service headquarters.

This study aimed to include a mix of military officers that spanned the breadth and depth of the national security professional cadre. The goal was to cover a variety of ranks, officers from each service, and a sufficient number of military occupational

specialties (MOSs) to ensure that the research spoke for a majority of the military and was representative of all of the military services. It also sought to be diverse and inclusive. Lastly, it sought to speak for as many Combatant Commands as possible.

The National Security Professional cadre comprises senior military officers with 25-40 years of tenure. Although this community of practice has evolved over the past few decades, it remains predominantly male and white. Since senior officers typically rise through the ranks (rather than coming from outside organizations), the services have not yet achieved an ethnic and gender mix similar to the U.S. population (U.S. Department of Defense, 2023). The officers interviewed were similar, but not identical, to the gender and racial composition of currently serving U.S. military officers.

This study aimed to include both active-duty and retired officers in the sample. Retired officers can theoretically speak more freely, have had more time to consider issues, and are easier to recruit (due to fewer administrative difficulties). The risk with retirees is that they can be out of date. The study mitigated this risk by recruiting only retired officers who had left service within the past 5 years. After recruitment was completed, the average 'time since retirement' for interviewed officers was 1.75 years, with only two officers having been out longer than 24 months. Many of the officers recruited were also still affiliated with the military in a civilian or contracting role. Active-duty officers are more familiar with current DoD policy and procedures. Still, they can also be more myopic due to their busy schedules, more guarded in what they say, and require additional administrative steps to recruit (e.g., a DoD ethics review and scheduling challenges).

University of York Ethical approval was required before recruiting for either group began (See section 4.6 below). Recruiting active-duty officers also required ethical approval from the Department of Defense. This approval is sought through one of the military services, which coordinates with the other services during the recruitment and approval process. The DoD ethics package is reviewed only after initial recruitment, as the DoD approves each officer individually. There are two levels of DoD review: each military organization reviews the study and the recruited officers' role in it (e.g., the 2nd Marine Division), and then the sponsoring military service (e.g., the U.S. Army) conducts an overall review. This process can take between six to eighteen months.

During this study's data-gathering period, the active-duty group and the researcher faced two significant challenges to the DoD process: U.S. Senator Tuberville's hold on military promotions and moves, and the U.S. government's 2023/2024 budget crisis.

The Tuberville Hold. All U.S. military officers are nominated for promotion by the U.S. President, but the U.S. Senate confirms those promotions. No officer may be promoted until confirmed. They may also not move to a new location or billet that is contingent on a pending promotion. For example, an officer serving on the East Coast of the United States may be nominated for promotion to command an organization on the West Coast. They may not legally move to the West Coast or join the new organization until the Senate confirms their promotion. In 2023, Senator Tuberville enacted a procedure that effectively halted all confirmation processes for senior officers in response to a policy established by the Office of the Secretary of Defense. That "hold" lasted nine months (with the U.S. Senate working around it only once to move several four-star generals into positions required by law). During those months, no one knew when the hold would be lifted. Many colonels and captains, and all generals and admirals, lived day-to-day. Families failed to move when they expected to, kids were on notice to move schools quickly (if the hold was lifted), retirements were postponed, etc. Service "HR" departments were scrambling to fill the gaps left by retiring personnel, work with Congress to lift the hold, and ensure organizations had the necessary leadership to conduct their affairs legally. This turmoil significantly impacted the ability to get DoD ethical approval for interviews. Generals required to approve process steps were either absent (having retired with no authorized backfill) or took longer than usual to advance the process. There was also a risk that potential recruits would move before final approval was granted. If an organization (e.g., 2nd Marine Division) approved an officer for the study but that officer moved before DoD finalized approval, then either the officer was dropped at the DoD level, or the review was held up until the officer's new organization (e.g., 1st Marine Division) approved the officer. Given the uncertainty about when the Tuberville hold would be lifted, the risk that one or more recruited officers would be required to relocate, thereby significantly slowing the overall review process, was deemed high by both the researcher and the DoD ethics coordinator. At one point, the DoD ethics coordinator believed approval might take 18-24 months.

The 2023/2024 U.S. Budget crisis. During Senator Tuberville's hold, the U.S. government also faced a pending shutdown on two occasions. These pending shutdowns not only slowed efforts to resolve Senator Tuberville's hold but also introduced uncertainty into the work status of individuals involved in the ethical approval process. On several occasions, when the researcher spoke with personnel within that chain, they expressed uncertainty about furloughs that would cease work on the ethics package routing and described how economic uncertainty was diverting approval authorities for significant periods. Multiple ethics packages were languishing as the DoD focused on these crises rather than routine day-to-day activities.

Due, in part, to these two situations, as this project entered the data collection phase, the researcher decided to recruit two retired U.K. officers (more on them below) as part of a pilot program, 16 retired U.S. officers (Four from each U.S. military service) and attempt to recruit four active-duty officers (25% of the U.S. officers). Four retired U.S. officers were selected as replacements for the four active-duty officers. A deadline of 15 Feb 2024 was set to determine where the final four interview requests would be directed (active-duty or retirees).

The researcher compiled an initial list of 78 potential candidates from his network of national security professionals and then contacted several trusted sources (e.g., an instructor at the U.S. Army War College) to identify additional candidates. After compiling a candidate list of 98 officers, the researcher constructed a matrix of Combatant Commands, Services, job specialties, and ranks. From this matrix, the researcher built an early list of candidates that could enable an investigation across Combatant Commands, Military Service cultures, and other potential factors (e.g., rank, Joint Directorates served in). To address possible gaps in the matrix, the researcher again contacted trusted sources for additional candidates. The list grew to 119 officers. The researcher then excluded individuals who were not members of Combatant Command top management teams, had retired more than 5 years ago, or were unavailable (e.g., deployed or otherwise too busy to participate). This stratified purposive sampling was intended to ensure impartiality, maximize variation across Combatant Commands and job specialties, maintain typical-case sampling of military services, and ensure that all participants met the study criteria.

After securing University of York Ethics Approval in May 2023, the researcher contacted 22 retired officers (2 UK and 20 U.S.) and 10 active-duty officers via email and LinkedIn during the summer of 2023. All but one initially agreed to be interviewed. In June of 2023, the researcher informed the active-duty officers that DoD ethics approval was not assured. All agreed that they remained interested in participating if approval was granted.

The study recruited two U.K. General Officers (both one-stars) for a pilot study. These officers were chosen for four reasons. First, they had served on U.S. Combatant Command Headquarters staffs and were familiar with the challenges and opportunities addressed by the study. Second, they all resided within the U.K., so interactions could be conducted in person. Third, they would provide the researcher with perspectives other than those expected from U.S. officers. Fourth, the researcher was confident that they would provide him with relevant feedback on the interview questions and interview process.

In the fall of 2023-24 the study recruited 20 retired U.S. officers and had positive contact with four active-duty U.S. officers. Because the resolution of the Tuberville hold and the budget crisis remained unclear in February 2024, the researcher abandoned efforts to obtain DoD ethics approval for active-duty officers and notified them that they would not be included in this study.

Recruitment Sample Statistics are:

Service Breakdown – Table 1

	Col / CAPT	1 Star	2 Star	3 Star	Total by Service
U.S Army	4			1	5
U.S. Navy	4		1		5
U.S. Air Force	3	1		1	5
U.S. Marine Corps	4+1			1	5+1
U.S. Space Force	-	-	-	-	-
U.S. Coast Guard	-	-	-	-	-
U.K Army (Pilot)		0+2			
Total by Rank	15+1	1+2	1	3	20+2+1

+1 = UK Officers

+1 = Researcher (see Researcher Positionality in Section 4.7 below)

* The study did not focus on 3-star officers but recruited three to provide a top-down look at the lower TMT's actions, abilities, and issues.

Service / Combatant Command Breakdown – Table 2

	US Army	US Navy	US Air Force	US Marine Corps	UK Army (Pilot)	TTL
U.S. Africa Command (USAFRICOM)	2			1		3
U.S. Central Command (USCENTCOM)	1	1	2	2+1	1	6+1+1
U.S. European Command (USEUCOM)	3	2	3	2+1	1	9+1+1
U.S. Indo-Pacific Command (USINDOPACOM)	1	3	1	1		6
U.S. Northern Command (USNORTHCOM)	1	2		1		4
U.S. Southern Command (USSOUTHCOM)		1				1
U.S. Space Command (USSPACECOM)	-	-	-	-	-	-
U.S. Cyber Command (USCYBERCOM)			1			1
U.S. Special Operations Command (USSOCOM)	2		1			3
U.S. Strategic Command (USSTRATCOM)		1	1			2
U.S. Transportation Command (USTRANSCOM)						0
Joint Staff (JS)				2		2
Office of the Secretary of Defense (OSD)	1					1
National Security Council (NSC) Staff		1				1
Total by Service	11	11	9	7+2	2	

* Several officers served in multiple Combatant Commands, so the tally is not 20+2+1.

* This study failed to recruit an officer with TRANSCOM experience and did not seek to recruit an officer from SPACECOM (too new of an organization to provide relevant data).

* European Command is over-represented on purpose. As data collection was underway, the Ukraine Crisis was unfolding, so the researcher sought additional recruits from this HQ, believing that the dynamic context would yield a richer dataset.

* Central Command (responsible for the Middle East) and Indo-Pacific Command are highly represented on purpose. Both were “priority” Combatant Commands within U.S. strategic policy priorities and thus the researcher desired to understand if and how that status affected their ability to be ambidextrous.

Rank / Combatant Command Breakdown – Table 3

	Col / CAPT	1 Star	2 Star	3 Star	Total by CCMD
U.S. Africa Command (USAFRICOM)	3				3
U.S. Central Command (USCENTCOM)	3+1	1+1		2	6+1+1
U.S. European Command (USEUCOM)	7+1	0+1	1	2	9+1+1
U.S. Indo-Pacific Command (USINDOPACOM)	4		1	1	6
U.S. Northern Command (USNORTHCOM)	2			2	4
U.S. Southern Command (USSOUTHCOM)	1				1
U.S. Space Command (USSPACECOM)	-	-	-	-	-
U.S. Cyber Command (USCYBERCOM)	1				1
U.S. Special Operations Command (USSOCOM)	2	1			3
U.S. Strategic Command (USSTRATCOM)	2				2
U.S. Transportation Command (USTRANSCOM)					0
Joint Staff (JS)	1			1	2
Office of the Secretary of Defense (OSD)	1				1
National Security Council (NSC) Staff			1		1
Total by Rank	27+2	2+2	3	8	

* Several officers served in multiple Combatant Commands, so the tally is not 20+2+1.

Service / Military Occupational Specialty (Job) Breakdown – Table 4

	US Army	US Navy	US Air Force	US Marine Corps	UK Army (Pilot)	TTL
Infantry	4			3+1	1	7+1+1
Pilot / Aviator	1	1	2			4
Surface Warfare Officer (Navy)		2				2
Special Operations Officer	1		2			3
Engineer					1	1
Intelligence			1	1		2
Communications				1		1
Logistics		1				1
Judge Advocate (Lawyer / Judge)		1	1			2
Planner / Strategist	2	1	1	1+1		5+1
Total by Service	8	6	7	6+2	2	

* Several officers held multiple MOSs (e.g., the researcher is both an Infantry Officer and a Planning Officer), so the tally is not 20+2+1.

Gender / Ethnic / Service Breakdown – Table 5

	Male	Female		White	Non-White
U.S. Army	5			5	
U.S. Navy	4	1		5	
U.S. Air Force	5			4	1
U.S. Marine Corps	5+1			4+1	1
U.S. Space Force	-	-		-	-
U.S. Coast Guard	-	-		-	-
U.K Army (Pilot)	2			2	
Total by Gender and Race	19+2+1	1		18+2+1	2

This study was initially designed to recruit 2 UK officers for the pilot study and then 20 U.S. officers for the main study. The aim was to recruit five from each military service with a mix of job specialties, ranks, and Combatant Command assignments. Coverage was prioritized over saturation, knowing this posed a significant risk to the trustworthiness of the findings. As discussed in Section 4.5 below, the researcher believes that saturation was achieved; therefore, the study is trustworthy and may yield transferable findings.

4.3 Study Structure and Data Gathering Method

This study investigated four service cultures, and the various sub-cultures within those services, attempting to coalesce into an effective top management team that could both explore and exploit its environment. It involved exploring ideas that are both context and content-specific, which can be interpreted differently from various perspectives. For example, the Chairman of the Joint Chiefs of Staff is the senior military officer in the U.S. military and is regarded by his subordinates as the ultimate military generalist, requiring an understanding of all services and their capabilities. However, when he enters the office of the President of the United States, he is regarded as a specialist in military affairs within the wide-ranging executive branch. The social context determines how players and organizations fit together and operate. As such, this study adopted a social constructionist perspective and employed a qualitative method to examine the phenomenon of ambidexterity within a public enterprise.

It employed an approach that oscillated between deductive and inductive to investigate how U.S. Combatant Commands sought to be ambidextrous, to assess their achievement of ambidexterity, and to identify potential mechanisms for adjusting the explore/exploit balance as needed. No Combatant Command is the same, and Combatant Commands change as they shift from peace, to crisis, to war, and back. This study, therefore, sought tendencies, trends, and highlights that illuminated possibilities. It sought possibilities that could increase the likelihood of future conceptual models aiding managers to support ambidexterity within their organizations.

To capture the breadth of organizations and cultures, while also enabling the study to gain depth on issues of relevance, the interview method of data collection was selected. This method enabled the collection of in-depth, context-rich accounts and perspectives. It facilitated the discovery of nuances and the exploration of complex interactions and processes (Bloomberg, 2023). Various interview techniques were reviewed, and the “elite” interview method was selected (a highly open-ended approach that uses a list of questions to guide the conversation when needed, but not strictly adhered to) (Dexter, 1970). This method was chosen for two reasons: 1) the interviewees were all senior-level officers with decades of experience. The interviewer did not want to miss an opportunity to explore unforeseen paths. 2) The interviewer has thirty years of experience, over eight of them working in the area being discussed (Strategic level military TMTs) and felt capable of adjusting on-the-fly to follow interesting threads, to delve deeper into relevant issues, and to engage in conversation, rather than just a one-sided interview.

An initial list of questions was developed deductively to cover Combatant Command decision-making processes, military service cultures, organizational structure, organizational learning, and the components of intellectual capital (Human, Social, and Organizational). The list was cross-referenced with Kang and Snell’s 2009 conceptual model, other ambidexterity theories, and later with Turner, Maylor, and Swart’s 2015 conceptual model. The list was then adjusted to ensure wording was understandable by military officers versed in culture, but not in management lexicon. The idea of organizational ambidexterity, and the need for organizations to both explore and exploit, was described during the researcher’s opening remarks in each interview,

but questions focused on understanding the underpinnings of culture of the TMT and the details of each element of intellectual capital (Human, Social, Organizational). It was expected that interview discussions would explore the balance between exploration and exploitation, but the discussion starting points were set as questions that specifically examined the components of intellectual capital within Combatant Command top management teams.

Interviewing was done in two iterations. A pilot study with two retired UK officers was conducted in October 2023. Interviews for the main study with a U.S. retired officer began in November 2023 and ended in July 2024. The researcher adjusted the interview question list twice, once after the pilot study and again after conducting five of the main study interviews. The first set of adjustments was primarily to clarify questions that the pilot interviewees had struggled to understand and to improve the elicitation of information on elements related to Kang & Snell's model. The second adjustment consisted of adding a question (A broad question to evoke new elements. "What have you wanted to change about how we organize Combatant Commands?"), combining several questions and re-ordering one question (See Appendix B).

The original plan was to schedule U.S. officer interviews within a two-week window in early 2024, so that the researcher could fly back to the U.S. to conduct them in person. Scheduling challenges and a wide variety of interviewee locations (Virginia, California, Hawaii, etc.) quickly made in-person interviews unfeasible. Therefore, all main study interviews were conducted via video call. Each lasted between 50 minutes and 1.5 hours. One lasted for 2 hours and 15 minutes. Two interviews were split into two sessions due to last-minute scheduling issues, and in two interviews communications failures caused a short break (less than 1 minute each time).

Each interview began with the researcher reviewing information about the research project (aims, parameters, the definition of organizational ambidexterity, etc.) and the consent requirements. In 90% of cases, the consent form had been signed before the interview session began. In the 10% cases in which it had not, the interviewer ensured that they had read it and obtained verbal consent before proceeding. The written consent forms were sent within 48 hours of the interview in those few cases. The interviewer began by asking the officers for their initial thoughts,

then followed the interview question list in broad strokes. No significant issues were encountered.

The researcher transcribed interviews to ensure the proper transcription of military jargon. During transcription, the researcher anonymized interviewees and the places, people, and events described in the interviews. Interviewees took on a letter + number code. “M1” was the first Marine interviewed. People described took on a letter-letter + number code. An Army officer discussed in the interview might be “AA3.” Places were designated as “P” + a number, for example, “P31.” Organizations took on either a C+ number for Combatant Commands and other Joint Organizations (e.g., “C3”), or an S + number for Service organizations. Headquarters, Space Force (not discussed in any interview) could have been “S78”. Tasks, crises, and billets that identified individuals were also anonymously coded. In two incidents, sections of the interview transcript could not be sufficiently anonymized to protect the individuals involved. The incidents and people were too unique to ensure their identities could be protected. In both cases, the researcher paraphrased the transcript to capture the interviewee's points, while preserving anonymity. The researcher reached out to both interviewees with the revised text to ensure that their thoughts were still accurately captured. In both cases, the interviewee agreed that their ideas were intact within the transcript.

All transcripts were emailed to the interviewed officers for review. They were reminded that they had until January 2025 to respond with any edits and/or withdraw from the study. As of the date of publication, fourteen have reviewed their transcripts, and eight have not. No one withdrew from the study.

4.4 Analysis and Synthesis Methods

This study utilized Reflexive Thematic Analysis, as described by Braun and Clarke (2022), as its guide. It looked at the data through a social constructionist lens. Since the researcher sought to step away from an “insider” view, substantial reflection was required to ensure that the interviewees’ responses received due consideration. Thematic analysis met the need to inductively find new connections within the data and to discern where the research conversation should go next. Braun and Clarke's system

enabled the study to be reflective, rigorous, and systematic (without being dogmatic), and to engage deeply with the data.

Analysis began when the researcher conducted his initial review of the interview transcripts during transcription. To increase familiarity, the researcher then conducted a second read-through of all transcripts while journaling on potential themes, codes, and topics of interest. Fifty-eight items of interest were identified. To further immerse himself, the researcher then skimmed the transcripts and reread elements that stood out or appeared to connect with other interview transcripts.

Feeling that he had a good initial “feel” for the data, the researcher loaded all transcripts into NVivo 14 (later it was updated to version 15) to conduct a more systematic review of the data. Twenty-one codes were initially established deductively from current theories and concepts. Intellectual capital components were assigned code labels, as were service culture elements and indicators of ambidexterity (e.g., adaptation to environmental change). Nine codes were inductively added during the coding process. Seven of the codes were subcategories (each military service under “Service Cultures”, and three under organizational design). See Appendix B for the final list of codes. Coding Units (elements of transcripts) were often assigned to multiple codes. During this process, the researcher continued to take notes on interesting ideas, connections among interviewees, and concepts requiring further research.

The researcher had decided to use human, social, and organizational capital as initial theme categories. To these, he added 5-6 more themes. The number of themes fluctuated daily as the researcher reflected on the various topics of interest. He compared code labels on multiple occasions to refine and flesh out the themes.

Unsatisfied that the refined themes and codes fully reflected the data, the researcher reread each transcript and mind-mapped each one on A3 paper. He then began mind-mapping ideas and potential themes from the twenty-two mind maps created from the interview transcripts. It was during this phase of inductive analysis that larger themes emerged, connecting interviewees’ focused answers about elements within each component of intellectual capital to the broader concepts of intellectual capital and organizational ambidexterity. This enabled the researcher to settle on four

main themes, along with several potential sub-themes and possible “findings” within these themes. These themes became:

Human Capital – Career Paths Comparison – Curiosity, Breadth, Depth, and Risk

Social Capital – Vegetables on the Plate, Salad or Soup

Organizational Capital – Trust, Efficiency, mavericks, and Obstacles

Controlling Ambidexterity – Who Runs the Machine (later changed to Who Conducts the Orchestra)

The researcher then grouped the code labels into these themes (some labels appeared in multiple themes) and exported all coding units (i.e., transcript segments) from NVivo into text documents. He reread the transcript segments for each theme to familiarize himself with the reorganized data. The researcher then outlined the analysis chapters and began writing.

After an initial draft of each themed chapter was constructed, the researcher went back to the literature as recommended by Goia, Corley and Hamilton (2013). He reread articles related to items of interest that he had identified along the way. He also sought out unread literature on items of interest. He then mapped out the relevant literature and its relationship to the data.

Having immersed himself in theory and concepts, the researcher then reviewed all previously developed mind maps and re-read all transcripts to adjust the mind maps, codes, and themes. No codes were added. At this point in the analytical journey, the researcher was focused on themes, sub-themes, and new analytical discoveries. The researcher then returned to the themed chapters and refined them.

Notably, the researcher originally intended to analyse Crossan et al.’s 4I organizational learning model. During the interview process, it became apparent that the interview questions were not generating data relevant to the 4I model. The researcher scoped the 4I model out of this study before entering the analysis phase.

4.5 Trustworthiness

Three things drove this study: the desire to answer the research questions and advance the conversation on ambidexterity, the desire to ensure the study was rigorous

enough to be accepted by the Strategic Management, and military culture communities, and the desire to uphold the ethics of the academic profession. While the whole of this thesis will determine how well this study achieves its aims, the following section will look at what steps the study took to ensure the research undertaken was ethical. This section examines the actions taken to ensure that proper rigor was applied and that the study meets the expected standards. Recognizing that what defines “rigor” in qualitative research is a complex and ongoing discussion, this study uses Bloomberg’s 2023 frameworks as its guide. Utilizing the concepts of credibility, confirmability, dependability, and transferability as the four main yardsticks for quality quantitative research, the following paragraphs lay out what actions the researcher took to ensure this study meets the mark of value-adding research.

The credibility of this study (that participants' perceptions match how the researcher portrayed them) was of the utmost importance to the researcher throughout this study (Bloomberg, 2023). As a member of the military profession, the researcher endeavored to ensure he accurately represented all of the other professionals who voluntarily contributed their time to this study. He constantly reflected on his views of narrative text to minimize his biases. Whenever possible, he sought to present multiple sides of an issue, especially when the data showed different perspectives. In a few cases, this contradicted the study's main thematic arcs, making for a more complex reading of the study, but the author left them in to ensure he did not silence any relevant voice. He attempted to provide thick descriptions to prevent the text from being taken out of context. In this environment, the researcher believes that his “insider” status was beneficial for accurately translating military jargon and nuance.

Confirmability (that the findings and interpretations come reliably from the data and not the researcher’s biases) was the researchers' second major concern. Knowing that he had spent 27 years in one service and had only served in two of the eleven Combatant Commands, the researcher was especially keen to ensure the data spoke for itself. Findings were included only if they came from more than one Combatant Command, more than one service, and more than one occupational specialty. When the researcher observed trends, he asked interviewees to help identify flaws with his observations as a way of confirming that they weren’t his own biased opinions. For

example, the literature and early observations led to the idea that two services focused on building specialists and two on building generalists. At the end of each interview, the researcher presented this observation and asked the interviewees to identify what they disagreed with and why. The researcher employed similar techniques to ensure that subsequent observations were not one-sided or biased by the researcher. The researcher looks forward to further peer scrutiny to uncover other undiscovered biases.

Dependability (directly responding to the research questions via a logical and clearly documented process) involved a back-and-forth process where the researcher compared his steps with recommendations from various qualitative research publications (Bloomberg, 2023; Braun and Clarke, 2022; Gioia, Corley and Hamilton, 2013; Corley and Gioia, 2011; Coffey and Atkinson, 1996; Whetten, 1989; Weick, 1989), and where he journaled about where he was and where the work was going. He submitted his initial processes and ideas for peer review at several management conferences and made significant adjustments in response to feedback. He submitted refined findings to several interviewees to ensure the accuracy of data interpretation and to obtain feedback on how well the findings followed a logical sequence to their conclusions. Minor adjustments were made based on their responses.

Transferability (how well a phenomenon can be transferred to another context without losing its own context-specific richness) is determined by the reader, not the researcher (Bloomberg, 2023). However, to aid the reader, this study sought to ensure that observations included sufficient contextual detail to enable future researchers to accurately compare their contexts with that in this study. It aimed for thick, vicarious descriptions of situations, observations, and insights to help readers put themselves “in that place,” and fully understand the contextual elements involved.

While parts of the qualitative research community move away from the idea of “saturation” towards “information power” (Bloomberg, 2023), this study considered both. The data is rich and speaks for itself in many areas. It provided the study with numerous insights into ambidexterity and intellectual capital. It appears to have “information power.” “Saturation” was originally a concern during the study's initial development. However, new ideas and fresh insights dropped off significantly in the last four interviews. There was no cessation of insights, but each of the last four interviews

produced substantially less new information. While saturation cannot be fully assured, this study believes it has achieved a level sufficient to identify trends, concepts, and probabilities.

The researcher is well aware that this study will fail to engage with the strategic management, organizational design and military culture fields if it is not accurate, believable and plausible. While the researcher took several unexpected turns during the research process and retraced his steps multiple times, this study meets all the criteria for a trustworthy and ethical report.

4.6 Ethics

This study received ethics approval from the University of York's Economics, Law, Management, Politics and Sociology (ELMPS) Ethics Board on 25 May 2023. This approval allowed the study to contact, recruit (send an information package and a consent form), and interview retired military officers. Ethics approval was sought from the U.S. Department of Defense throughout 2023, but as described in Section 4.2 above, the process was halted in early 2024. As such, no active-duty officers went beyond initial contact. None were recruited nor interviewed. Those who had been contacted during the DoD process were notified in February 2024 that they would not be interviewed.

All officers recruited were sent a Participant Information Sheet and a Consent Form (See Appendix D). In 90% of cases, the consent form had been signed and returned to the researcher before the interview session began. In 10% of cases in which it had not been signed and returned previously, the interviewer ensured that the participant had read it, reviewed it in detail, and obtained verbal consent before proceeding. The written consent forms were sent within 48 hours of the interview in those few cases.

Sampling & Recruitment has been described in Section 4.2 above. To ensure confidentiality, although the researcher contacted trusted agents to identify potential candidates, only the researcher knew which officers were contacted and recruited. All contact was via direct email or LinkedIn messaging. Since only 22 of 119 (18%)

potential candidates were chosen, no one other than the researcher can identify the final recruits.

Once retired officers identified an interest in participating in the study, they were sent ELMPS Ethics Board approved Participant Information Sheets and Consent Forms via email. That email also reminded them that there would be no payment or reimbursement for taking part in the study. Active-duty officers were not sent Participation Information Sheets or Consent forms, as none extended beyond initial contact.

At the beginning of each interview, the researcher discussed key parts of the Information Sheet and Consent Form. All interviewees acknowledged understanding and consent before any questions were asked. At the end of each interview, participants were reminded that they could withdraw from the study until January 2025, that they would have the ability to review and amend the transcript, and that all transcripts would be anonymized to protect interviewees and anyone discussed. Two participants amended their transcripts for clarity and grammatical errors, and two participants requested that portions of their transcripts be deleted. These deletions were completed within 24 hours.

All interviews were recorded using a standalone speech-to-text app (the recording was stored only on the phone). Recordings and initial transcripts were immediately transferred to a University of York computer and saved on the University of York Google Drive in a password-protected folder. The initial copy was then deleted from the phone. Initial transcripts were further transcribed and anonymized by the researcher to preserve confidentiality. As described in Section 4.3 above, codes were assigned to people, places, events, and tasks that could be used to identify people or places. Only the researcher maintains a list of the codes. Once transcripts were completed, recordings and non-coded transcripts were marked for deletion. Coded transcripts were sent to participants for their review. Upon approval of this thesis, recordings and non-coded transcripts will be deleted. In seven years, coded transcripts will be deleted.

Seven risks to participants were identified and mitigated.

1. Identification through re-contact – very low risk since all emails are one-to-one.

2. Emotional Distress – low risk. All participants are seasoned, mature military officers. No emotionally distressing topics were anticipated to be discussed. Additionally, all participants are provided with coping resources through the U.S. military in the event of a triggering event. Participants are well informed about a variety of resources through U.S. military information-sharing tools (flyers, posters, briefings, websites, etc.).

3. Financial Disclosure – no risk

4. Physical Harm – no risk. All interviews were in an office or home environment.

5. Transfer of personal data – low risk. Participants were pseudonymised, and all data collected is protected via the University of York's Data Management Policies.

6. Sensitive organizational information – low risk. The researcher and participants have all undergone annual training (for 20-30 years) in protecting sensitive information and routinely handle such matters as part of their regular duties. The risk that sensitive information would be divulged during interviews was thus low. To further reduce the risk, participants were given the opportunity to review their responses and ensure that no sensitive information was included. Two participants amended their transcripts to delete potentially sensitive information.

7. Data Spillage Risk – low risk. All data protection policies are being adhered to. Data is stored on a university-provided laptop (password-protected), and on the University's Google Drive (with no shared folders or files).

Only one risk to the researcher was identified: emotional distress. The researcher is a seasoned and mature retired military officer. No emotionally distressing topics were anticipated to be discussed. Additionally, as a retired officer, the researcher has access to coping resources through the US military in the event of any triggering events. The researcher is well informed on a variety of resources through U.S. military information-

sharing tools (flyers, posters, briefings, websites, etc.). No distressing issues were discussed in any interview, and no harm was done to the researcher in this study.

4.7 Researcher Positionality

The researcher approaches this study as an insider, striving to adopt a more outsider stance. He served 27 years as an active-duty U.S. Marine Corps officer, retiring at the rank of O-6, and then an additional three years as a civilian contractor supporting a joint military headquarters. He spent the last seven years of his career in the “joint” world. He spent two years at Joint Professional Military Educational Institutions, six years on senior-level Joint Headquarters staffs, and two years teaching other senior officers about them at the U.S. Army War College. He left both communities (the joint arena and the larger military community) in 2022 to gain a different perspective. He came to the University of York to ensure that he: 1) could gain a decidedly non-military perspective that would force him to “see” from a more “outside” view, and a greater systematic academic approach; and 2) could attempt to gain a non-US view of management, organizations, learning, and culture, again with the aim to pull him further “outside” where he could attempt a more objective view.

Power Dynamics – the people the researcher interviewed were all peers or near-peers. They were all senior military officers who had left the ranks of operators and joined the ranks of ‘national security professionals’ and ‘strategic advisors.’ Since neither the researcher nor the interviewees continues to serve in the U.S. military, the senior-subordinate dynamic was greatly diminished (if it existed at all). When the researcher interviewed people who were ‘above him’ (entered the military earlier or held a higher rank) or ‘below him’ (entered after him and were junior in seniority), he observed no hesitation in answering questions or in delving into challenging subjects.

Authentically expressing the researched – While the researcher believes he can get closer than many potential researchers, he is cognizant of his limitations. The researcher grew up in a Marine Corps culture; therefore, attempting to understand and articulate the cultures of the other three services will never be perfect. It can’t be. He also understands that where a person served and when impact their worldview...as they do his. He has endeavored to ensure he accurately understood and expressed all

interviewees' thoughts and beliefs. He believes he succeeded in organizational design and intellectual capital, but may have fallen slightly short in conveying service cultures other than the U.S. Marine Corps.

Emotions – The researcher cares deeply about the success of the U.S. military. He cares about national security, the professionalism of the force, the drive to be highly effective, and the welfare of the people who “serve.” Having studied the components of civil-military relations, he believes he has also developed the capacity to be dispassionate in decision-making. As someone who ‘serves’, the researcher knows that the civilian authorities and officers appointed over him were the ultimate decision-makers. During interviews and analysis, he attempted to use the dispassionate part of himself to provide fair, balanced, and objective views of what was said and the results derived from the data. Readers will be the judge of how well he did.

Connection to the subjects and the topic – As mentioned, the researcher is passionate about many parts of the U.S. defense enterprise. He is invested in their success—fortunately, part of the culture in which he was raised valued honest, critical appraisals. Speaking truth-to-power was honored...usually. He believes that the value of effectiveness outweighs that of blind loyalty. He is loyal to a better force, not to the interviewees, his service, or any particular organization. And he believes that those he interviewed would also prefer it that way. Both the researcher and the officers interviewed consider themselves professionals who are duty-bound to think critically and speak out when necessary. Therefore, the researcher believes he has been as impartial in his findings as possible in a qualitative study. He also recognizes that his desire to be practically useful, rather than merely theoretical, has influenced his research. He has struggled to “get above” practical matters to see more theoretically and conceptually. He believes he has done so, but again, the reader is the final judge.

Criticality of the Interviewed and the Interviewees – Ensuring a critical perspective was taken during this study was a constant topic of reflection. The researcher remained vigilant to prevent confirmation bias, the false consensus effect, and groupthink. The interviewer/researcher sought to ensure his own criticality through three methods. One, putting himself in positions that would challenge his basic assumptions. He consistently asked interviewees to critique potential findings; he

moved away from all military personnel by coming to the University of York; and he discussed the topic with non-military academics to obtain a different perspective. Second, he sought literature that would provide alternative lenses and was critical of the areas under investigation. And third, he routinely tried to step back and reflect on his objectivity. As Dwyer and Buckle explained when discussing the qualitative research debate over insider-outsider:

“We may be closer to the insider position or closer to the outsider position, but because our perspective is shaped by our position as a researcher (which includes having read much literature on the research topic), we cannot fully occupy one or the other of those positions.” (2009, p.61)

The researcher has worked to ensure that he is in the “space between,” close enough to provide authenticity to the data and sufficiently removed from the “complete member” position to provide an accurate and relatively objective view of the data (Dwyer and Buckle, 2009). As for the interviewees, all were willing to be interviewed, and at no point during the interviews did the interviewer observe hesitation or vocal intonations that could be interpreted as hedging, withholding, or softening potentially critical comments. While this would have been a greater concern among active-duty officers, who must still consider the “party line” before speaking, the fact that all interviewees were retired appeared to elicit more candid appraisals of critical organizational issues. The researcher is confident that he did not fall victim to confirmation bias, the false consensus effect, or groupthink, but will leave it up to the reader to determine the extent to which he has been truly critical.

4.8 Limits of Study

Obvious limitations of this study are that the sample comprised a tiny subset of the members within Strategic Headquarters top management teams and that not all Combatant Commands or job specialties were represented. Additionally, since no active-duty officers were interviewed, the data lags current affairs. The researcher believes the small sample accurately represents the target population, but additional studies should be conducted to confirm this belief.

The study focused on the lower half of Combatant Command top management teams. It thus excluded the organization's "CEO," except when participants discussed him/her. It also did not delve into managers below the TMT. Both individuals above and below the studied group affect an organization's ability to be ambidextrous. Future studies should delve into these groups.

The researcher attempted to be critical, but as an insider for 30 years, his ability to do so is problematic. While he reflected continuously on his biases and assumptions, an external study might reveal findings that this researcher missed.

This study focused on Combatant Command structures in the near past (2010s and 2020s). A more historical look might uncover changing trends not identified in this study.

Lastly, this study looked at Combatant Commands, not all Joint Strategic Military Headquarters. While the researcher believes, based on field experience, that the conclusions of this study would apply to those organizations, studies of those organizations would be needed to confirm the generalizability of this study's findings.

4.9 Conclusion

Having followed a rigorous, logical, and, hopefully, clear path from current theory to relevant research questions and then on to a plan to answer those questions, this chapter lays the groundwork for the following four chapters. As a qualitative study following several theoretical, quantitative, and qualitative studies on how to employ intellectual capital to achieve ambidexterity, this study enters a new context and seeks to integrate several concepts. This chapter has explained the information needed to ensure a smooth transition from the private to the public sector context, how rich and relevant data were obtained, the analytical approaches employed, and how the analysis was conducted both ethically and rigorously. While there are clear limits, there is much rich data to engage. The subsequent chapters do just that.

Chapter 5 – Human Capital: Career Paths Comparison

– Curiosity, Breadth, Depth, and Risk

5.0 Introduction

As we explore ambidexterity in the US Military, we must start with the human capital that enables, and sometimes impedes, both exploitation and exploration. This chapter supports the aim to better understand how various intellectual capital configurations within top management teams impact organizational ambidexterity by focusing on the first element of intellectual capital, Human Capital, within the military context used in this study. It will begin by reviewing the theory related to specialists and generalists (the archetypes found in the ambidexterity models under examination), and then look at the overall strategic military culture. Next, it will delve into each military service to show that two services (U.S. Army, U.S. Navy) tend to develop specialists, while two services (U.S. Marine Corps, U.S. Air Force) tend to send generalists to serve in Combatant Commands. It will conclude by explaining how those trends affect Combatant Commands' ability to be ambidextrous.

As discussed in Chapter Three, human capital commonly refers to the knowledge, skills, and attributes (KSAs) of individuals within an organization. What does a person know, what can they do, and how do they think? A key issue in discussions of KSAs is whether they should be narrowly or broadly focused. Specialists tend to concentrate narrowly, on depth within a knowledge domain (e.g., satellite communications), while generalists typically focus more broadly across breadth (Köhler et al., 2025; Anderson, 2012; Kang and Snell, 2009). Specialists focus on a domain to achieve expertise, but can develop blind spots in areas outside their area of interest (Köhler et al., 2025; Takahashi, 2025; Anderson, 2012). Generalists are usually more flexible, since their curiosity leads them into many areas and domains, but they can fail to understand the implications of specific actions (Takahashi, 2025; Anderson, 2012; Cesare and Thornton, 1993).

Specialists are recognized for excelling in functional knowledge within a specific area. They center their learning on local searches and on transferring existing knowledge in well-understood ways. Their goal is to refine and leverage their knowledge

to increase certainty and efficiency. Generalists, on the other hand, seek breadth. They extend themselves across multiple areas to develop a broad awareness and apply that knowledge to seek new alternatives to problems (Anderson, 2012; Kelly et al., 2011; Kang and Snell, 2009). They are also more comfortable with ambiguity and paradox (Zhang, Zhang and Law, 2022; Jarzabkowski *et al.*, 2017; Smith and Tushman, 2005; Tushman and Euchner, 2015). Wide-ranging curiosity and greater risk acceptance are commonly associated with generalists as explorers, but this association is not clear-cut (Wilden et al., 2018; March, 1991). Specialists are curious within their functional areas and not above taking risks. The difference lies in that specialists seek clarity when they are curious, whereas generalists often explore ambiguity without needing closure (Kang and Snell, 2009; Cesare and Thornton, 1993). Specialists are frequently linear, or categorical, in their curiosity. They seek to find an answer that improves efficiency. They rarely see multiple sides of an issue, whereas generalists do (Kang and Snell, 2009; Smith and Tushman, 2005). Generalists often engage in paradoxical thinking as they explore, whereas this is rare among specialists (Smith and Tushman, 2005). Generalists are comfortable with tensions and ambiguity. Risk for a specialist arises when known variables cannot be precisely determined, but certainty is always the ultimate goal. Generalists, on the other hand, are often comfortable with uncertainty, and are frequently “playful” in their learning, accepting risk as a part of the game (Bledow, Frese and Mueller, 2011; Levinthal and March, 1993). However, as we will see below, curiosity and risk acceptance are not clearly aligned to specific services. For these traits, the sub-tribes within each service are clearly important. There is much greater nuance.

Categorizing a person as a specialist or generalist depends on context. A person can be both a specialist and a generalist, depending on the researcher's position (Köhler et al., 2025). Looking from the outside, a military member might be seen as a logistician, a specialist in logistics. Stepping closer, he may become a “generalist” logistician who understands a little bit about everything the military uses to support itself. Or he may become a “specialist” logistician who understands only how to move fuel around the globe. The Chairman of the Joint Chiefs of Staff (the senior military officer in the U.S. military) is considered a generalist by military service members

because he understands, to some degree, all aspects of the U.S. military. However, to the President of the United States, he is a specialist in military affairs, standing alongside experts in the economy, diplomacy, and other fields.

This study will position itself within the U.S. military's top management teams at the top. If the study looks down and identifies someone who focuses on a single area, it will view them as a specialist. If a person spreads themselves across multiple areas, it will view them as a generalist. It does so to capture their focus. As Anderson lays out, "Each of us has a limited capacity for learning new things – by focusing on a narrow field of study, specialists are able to concentrate their efforts and maximize the use of that limited capacity, while generalists are forced to spread themselves more thinly in the pursuit of a wider range of knowledge" (2012, p.464). The decision to focus narrowly or widely affects curiosity, risk tolerance, paradoxical thinking, decision-making, and other cognitive processes.

But the decision to focus narrowly or widely is not a single decision. It is a series of decisions made over a career. As such, this study, as will be evident below, finds that some "specialists" are more specialized than others. And some "generalists" spread themselves more broadly than others. This study observes that officers fall along a spectrum from specialists to generalists. While it will categorize as necessary, this study will also work to show the tensions that drive people to different places on a spectrum, and where on that spectrum they hover.

Studies of military culture abound, and while they come from a wide variety of angles, three streams seem to dominate the literature (Jackson et al., 2020; Zimmerman et al., 2019). First, looking from above, there is substantial literature on how national strategic cultures affect how military officers conduct wars and campaigns. Second, studies that take a more bottom-up approach aim to understand how wars actually unfold by delving into the "warrior" cultures of groups (e.g., the 10th Special Forces Group in Afghanistan), services (e.g., the U.S. Army), or national militaries (e.g., the U.S. Armed Forces). And third, studies seeking to understand wins and losses often focus on "military innovation" and how that did, or did not ensue (Zimmerman et al., 2019).

As this study focuses on strategic-level top management teams, all three streams are important, albeit to varying degrees. To remove the political-military factor and enable this study to focus on how the military attempts to achieve organizational ambidexterity, this study excluded three- and four-star generals (as discussed in Chapter 4). This does not diminish the overall importance of national strategic culture. Still, this study mutes it to a degree to focus on the military TMT rather than the broader national security strategic leadership enterprise. Officers within TMTs grow up within the warrior cultures of their services and are products of those cultures, but, as officers, they experience them differently from enlisted service members. This study focuses on the cultural and HR factors that shape their growth as managers from the tactical to the strategic levels. Cultural studies of military innovation can be complex, involving national political culture, warrior culture, and more. This study delves into several relevant studies (e.g., (Murray, 2001, 1999; Murray (Ed), 1998)), seeking to understand the “exploration” side of organizational ambidexterity at the military strategic level.

Three studies provide highly relevant insights into the cultures and tendencies of U.S. military service members serving at the U.S. strategic level. Carl Builder is credited with providing the first functional analysis of modern U.S. service culture at the strategic level (Zimmerman et al., 2019; Builder, 1989). In his 1989 book on the topic, he described how senior leaders evolved, how they behaved on the strategic stage, and why the services acted the way they did. His book is highly cited both within and outside of the military (Jackson et al., 2020; Zimmerman et al., 2019). His book was published soon after the Goldwater-Nichols Act, so much has changed since it was first published. Looking to update Builder’s analysis, RAND published two reports. In 2019, it published a report on senior leader culture and the various drives for strategic influence among the services’ leaders. A year later, in 2020, it published a follow-up report detailing how generals and admirals are developed and the implications for their decision-making at the strategic level. In sections 5.1 through 5.5 of this chapter, the study will summarize RAND’s findings and then analyze the data collected to evaluate: 1) if RAND’s analysis rings true in strategic joint top management teams, and 2) what that means for the balance of specialists and generalists within U.S. military’s strategic leadership.

This study continues with Jackson, et al. 's assumption that “the way an officer is trained, educated, and gains experience through a service’s personnel management system at more junior grades will likely be reflected in the ways the individual leads, manages, and advises as a senior officer” (2020, p.46). In the short term, the Combatant Command TMTs receive what the services provide. Over the long term, as some study participants will discuss below, Goldwater-Nichols inspired policies have, and will, change the KSAs and cultures of those who join Combatant Command Headquarters. However, as will be discussed in Chapter 8 (Who Conducts the Orchestra), the extent to which the Combatant Commands can influence that trajectory is limited.

As this study analyzes who the services provide to Combatant Command TMTs, it is essential to consider that for management professionals, the development of specialists or generalists is determined through hiring practices and personnel development systems. To build specialists, organizations focus on function-based systems. Educational systems are focused on specific, narrow functions; employees remain within a particular field for long periods, with fewer job rotations; and efficiency is the stated goal (Kang and Snell, 2009). Generalists are built through broadening. They rotate jobs often, they focus on the overall effectiveness of the organization, and their education emphasizes broad skills and connecting abilities (Takahashi, 2025; Kang and Snell, 2009). As this study will discuss below, two services keep their officers within their functional fields for most of their careers and only broaden late. Their schooling is functionally oriented, and efficiency is rewarded with promotions. For one service, education is mostly broad, officers are rotated fairly frequently, and understanding the whole service is key to recognition. The last service goes down two roads. The majority of its officers remain narrow in both their jobs and education, but a select few are quickly rotated through multiple “broadening” tours and sent to schools designed to broaden their perspectives on the world.

5.1 Overall

The average Combatant Command TMT member has served in the military for approximately 23 to 32 years as they enter the TMT. The military is a “greedy”

Institution, so they will be deeply immersed in the overall U.S. military culture and their service cultures (Soeters, 2018; Segal, 1986). For a few, this will be their first assignment to a joint organization. For most, it will be their second assignment. Only on very rare occasions will they be entering a third tour. Since tours on Combatant Commands last between 2-3 years, those returning will have “joint” tenure of between 2-5 years. All will have attended Joint Professional Military Education I (JPME I), where they began joint acculturation, but not all will have attended JPME II, where they continued it. 40% of Combatant Command staffs arrive non-JPME II complete. The actual percentage for TMTs will be far less, but the actual number is unknown (Mayberry et al., 2021). The extent to which this has impacted their outlook on life varies by service and age. As a senior Army Officer pointed out, Jointness has improved since Goldwater-Nichols, but not uniformly:

So, 20 years ago [jointness] was terrible. Now...when I got to C3 [Combatant Command] I had to put pressure on the service leads to do things to maintain the service culture. It was not a norm. I was surprised. 20 years ago, [service culture] was more important than integrating as a Joint staff. ... Now. That is not even a thought, it really isn't. But you still have service cultures [and they are important.] And I was just shocked at how much energy I had to put into getting the service leads [to maintain their service cultures] ...the Army was the worst. Army was zero energy on maintaining the Army culture. Marines of course were the first, and that coalesced around the Marine Corps birthday. Which is fun. Air Force and Navy maybe a little better than the Army, but not much. ... if your time horizon ... is 20 years ago versus today. What does it look like? [Jointness is] a lot better. It really is. (Army 1)

Despite this improvement, repeated studies have found that officers entering the O-6 through O-8 ranks remain very service-focused and have limited drive to become more joint (Mayberry et al., 2021; Jackson et al., 2020; Zimmerman et al., 2019; Van Riper et al., 2018). There are many implications of this trend. This study will focus on how this affects their drive to think broadly or narrowly about strategic matters. Are they inclined to exploit what they know or to explore their surroundings?

5.2 U.S. Army

The U.S. Army's officer culture is exceptionally operational in its focus. It values leaders who retain “muddy boots” (i.e., remain near the front line of the organization)

and are functional experts in their military occupational specialty (MOS, i.e., their functional job). Officers strive to remain in operational roles within the Army for as long as possible, avoiding institutional assignments (e.g., schools, recruiting) and broadening tours. Many never see an assignment outside of the Army until they are senior Colonels (Jackson et al., 2020; Zimmerman et al., 2019; Van Riper et al., 2018; Scales, Robert H., 2016; Kane, 2012; Builder, 1989). An Army officer describing his service's senior officers stated:

The problem I have with Army Generals is they generally follow a very, very, very tactical set of progression until they're a General and then they're expected to become general. So, an Army brigade commander [O-6 level leader/manager role] very likely has never done anything other than tactical stuff in order to become a brigade commander...he or she may have detoured briefly to a broadening assignment but I would guess not. And all they've ever done is very, very tactical work. And then they become a Brigade Commander, which in itself is very tactical. And then they leave Brigade Command... and if they're one of the anointed ones and get to General, suddenly they have to go work in an environment where they're expected to be premier generalists. And that's where I think the most difficulty comes. They show up with a set of skills of organizing and running very precise operations well. And they have to adapt that to less control, and very much more generalist kind of management if you will. And not all of them make that change well. That's where I think the Army struggles most. (Army 5)

And an Air Force Officer with extensive experience working with all of the services stated:

With the Army, fully agree. I've seen that dozens and dozens of times. They come in with very little strategic thinking and they want to dive into the operational level of war. Not be thinking at the strategic level. ... Very meticulous. Very... despite often trying, especially at the two-star level, difficult to pull them out of the tactical and operational weeds. I found it always very hard to get them to think strategically... in all my jobs. I've got this one-star who works up at C12 constantly thinking about tactical organization and tactical elements. And we told him, "Dude that's not your job. That's not your role. You need to be up here. Get out of the weeds. Nobody wants to talk about that [tactical stuff]. (Air Force 5)

To organize itself to address the multitude of tasks it undertakes, the Army comprises three sub-tribes, each with multiple sub-tribes within them. The Combat Arms tribe consists of infantry, tankers, cavalry, pilots, etc. The Combat Support tribe consists of engineers, air defense, etc. The Combat Service Support tribe contains logisticians, cooks, medical personnel, etc. The Combat Arms tribe dominates the Army, and most

of its senior leaders hail from that tribe. Second in the pecking order is Combat Support, and last in the line is Combat Service Support. Although the U.S. Army has officially distanced itself from these subdivisions, they remain an integral part of the culture in 2025. One Army officer described the divide as between predators and “others.” He stated:

[The] Army can be be very parochial. In the Army there's a pecking order. Like most services...So, the combat arms, the meat eaters [Combat Arms Officers], they kind of hang out together in the Army, and then they laugh at the leaf eaters [Combat Service Support Officers] over here. And they let the herbivores go over there. The carnivores [Combat Arms Officers] stay over here. So, we got our own thing. Even our promotion boards are bifurcated that way. Our boards go, “We're gonna have this many carnivores and this many herbivores to do what we got to do.” (Army 2)

As the lead tribe, Army Combat Arms officers work to understand the whole operational army, but not beyond that, well enough to make plans and execute operations. Army Combat Support and Combat Service Support officers, however, have few drivers to look outside their functional areas, and most soldiers in these tribes remain supreme specialists throughout their careers. As one Army Combat Arms officer described it:

So, you take Combat Arms generalists, who are your tankers, your infantry guys, even the aviation guys, to some extent the artillery guys. Those are the ones that lead organizations and they can make substantial changes. Whereas the other specialists – they should be just a player to add into that. So, you take [an] Information Operations guy. That's all he knows. It's all he can do and you can't put him on a bigger topic because he won't...he'll flounder. So, if you know that up front... the Army does a very good job of getting specialists. (Army 2)

And as another Army Officer stated, when discussing the need for generalists at Combatant Commands:

I agree that the Army has an issue creating generalists. But I am struck by the thought that, generally speaking, people who maneuver on the ground [Combat Arms officers] make better [Combatant Command] leaders than people who maneuver in other domains. (Army 5)

On a spectrum, Combat Service Support officers (e.g., communications, supply management) are most likely to fall at the far end of the specialist archetype. Combat Support officers (e.g., Artillery) will fall farther toward the center, and Combat Arms

officers the farthest toward the center. Given that the Army has more occupational specialties than any other service, and that the majority of them are non-combat arms officers, functional depth is the expected norm and is rewarded across all MOSs. Army officers study doctrine, standard operating procedures, and manuals with passion. The Army is the most likely of the services to cite a functional publication or manual when discussing any topic and the most likely to remain within its functional stovepipes. As an Army Combat Arms Officer explained:

We like Napoleonic structure. ... It's usually very mechanistic. That's how we write our [execution instructions]. That's how we kind of brief. That's how we do things ... we love to shove [everything] into the mechanical staff of old Napoleon, the G1 through G6, and just kind of make it happen... So, the Army can be very MOS branch specific. There's like our own subordinate cultures within the Army (Army 4)

And as a Navy Officer with experience with all of the services articulated:

Army. People tend to be very stove-piped. It's just what I saw. I had Missile Defense guys working for me; they're very stove-piped. (Navy 5)

And broadening beyond your MOS, sub-tribe, or tribe, is not rewarded. As an Army officer who had worked in the Army's HRM infrastructure noted:

Go look at General Officer Management Office bios. And you can see the number of three and four-stars where that's their first joint experience...is when they take those positions at that time. And then you break it down as the one and two-stars. It's even... it's less. Because it's almost like the Navy. If you're not on the ship, you're not at sea...you're not really [relevant.]

[And] as an organization for talent management, we'd rather put good Army people in Army organizations than put good Army people in the Joint organizations. So, I've seen that become a quality issue.... (Army 4)

Finding # 1 – The U.S. Army typically sends officers to Combatant Commands who focus on specialization and have few, if any, broadening experiences before joining Combatant Command TMTs.

The drive for defined structure and the strong drive for functional depth mean that even within the Combat Arms tribe, breadth is limited to an understanding of the other Army MOSs...and often just those within your component (Active Duty, National Guard,

Reserve). Understanding the other services is not expected until you become a senior Colonel, as the Army, being the largest service, believes the other services should align with its views. There is even an oft-repeated joke that “joint” is spelled “A.R.M.Y.” This often hampers their ability to see a broader view or a different side of a problem.

This belief, that it should lead and that the other services should follow, limits curiosity within its officer corps. Although the Army is the most serious about professional military education (PME), Army officers are traditionally not very curious about things outside their service:

Army does good with being a learning organization. They put a lot of effort into PME and constantly [conducting informal learning groups]... and you're reading books and doing different things. Marine Corps does, but I haven't seen the Generals lead. The Army generals I saw were leading this...and some of the Colonels and such. (Marine 4)

One reason Army officers study so much is that they consider land operations complex, dynamic, and constantly evolving. As one officer put it:

There is an argument to say that air power and naval power is, is more straightforward because there are fewer working parts than in land operations. There are so many working parts on land. It becomes exponentially more complex, but also exponentially more likely to go wrong. ... [the] land component is probably the one that...I wouldn't say understands planning...but plans in the greatest detail and with the longest view because that's kind of the nature of the environment. (UK Officer 1)

This complexity means that Army Officers are relatively comfortable with the idea of risk. As specialists, however, they will work to reduce risk by focusing on the tactical aspects they can control, often prioritizing the mitigation of challenges over the exploitation of opportunities.

Ultimately, Army officers entering Joint Commands are comfortable working with other services but are the most likely to focus on tactical details over strategic design and the most likely to be parochial in how tasks are performed. It needs to be done “the Army Way.”

5.3 U.S. Navy

The U.S. Navy regards itself as an institution rather than merely a military organization. Honoring the days when ship captains were alone for months on the open

sea, it prioritizes autonomy and expects its officers to be decisive in all matters. It views the Joint world with caution, believing others may tread on the Navy's sovereignty over the sea domain. Focused mainly on the technology required to keep it effective at sea, its officers spend most of their careers mastering 'ship life.' As with the Army, officers will spend much of their career narrowly focused on learning their specific trade. While this is required for safe and effective use of the nation's limited maritime platforms, the unfortunate side effect is that it inhibits gaining a broader view of the world's security environment (Mayberry et al., 2021; Jackson et al., 2020; Zimmerman et al., 2019; Van Riper et al., 2018; Builder, 1989).

The Navy is focused on 'ship.' Whether focused on being a [Surface Warfare Officer], or an aviator...and not the big picture. Of the services they're probably the most parochial [in believing they are right.] And the most unable to actually integrate bigger problem pictures, because they haven't seen it. (Army 2)

The Navy is the most pragmatic of the services and will almost always default to math over social science (Jackson et al., 2020; Zimmerman et al., 2019). It appreciates training focused on functional competence, but there is a notable institutional skepticism toward formal academic qualifications in favor of operational experience. (Mayberry et al., 2021; Jackson et al., 2020; Zimmerman et al., 2019). As an Army Officer described it:

Navy. If you're not on the ship, you're not at sea...you're not really... Because they don't take education, Professional Military Education (PME), very serious. Because that's just their service culture. (Army 4)

Functional depth is not only expected in the Navy; there are multiple tests along a Naval Officer's career path to ensure it. Qualification in a Military Occupational Specialty (MOS) and the wear of its badge require schooling followed by on-the-job training that is observed, measured, and graded. After qualifying, there are still multiple tests along the way as an officer progresses (e.g., Department Head School, Executive Officer's school, Nuclear Power).

A Marine Colonel observed that they have:

...evolved to be successful within a very specific niche. And it was a very stressful niche and if you're not well attuned, well adapted to that niche, you're not going to survive. But it doesn't necessarily lend itself to getting out and doing

broader stuff. I think the younger the officer, the less that's true. I think the more senior the officer, the more that's true. (Marine 3)

However, similar to the Army, it's not universal across the Navy's officer corps. Like the Army, the Navy has three big tribes – Surface Warfare Officers (who work on surface ships), Aviators, and Submariners. Unlike the Army, the Navy has no pecking order, and the tribes are constantly competing for dominance. As a Marine senior officer with multiple tours working with the Navy put it:

“the Navy's probably the best example, there's a big difference between a Surface Warfare guy and an Aviation guy, So, although they're specialists at heart.... Though they're both Navy, they don't think the same. They just don't think the same. It's probably harder for Surface Warfare guy to make it to the top. Simply because they have to spend so much time going to school and mastering their specialty basically, which is at 'ship at sea.' Without crashing into something, or sinking it, or having a tragedy or something like that.” (Marine 1)

A Naval Aviator added nuance to two of the tribes by stating:

“And if you're a SWO [Surface Warfare Officer]...you've spent so much time learning how a ship operates... and you can't, when you get up to that level, you can't broaden yourself. So, you're still kind of stuck in this. But your aviators, I think they're very much like the Air Force, [broader], in how they decide and how they operate.” (Navy 4)

As in the U.S. Army, “broad” means that an officer understands more than just his tribe, but looking outside the service remains rare. As an Army planner put it, “Navy officers are very, very competent, but they lack the ability to synchronize outside of naval operations.” (Army 5) They understand the sea, and the air above it, but not the land, or the wider skies.

The Navy conducts operations across the globe's oceans, and its historical ethos of sending ship captains around the world to do great things with vague guidance gives the appearance of a love for worldly renaissance men. That is not the reality (Jackson et al., 2020). Only one of twenty-two interviewees claimed any desire for breadth among Navy Officers. Few indicated any curiosity among Naval Officers of topics outside of the U.S. Navy. A Naval senior officer when told no one believed they were generalists, pushed back with:

I actually think that the Navy [senior officers] are generalists in a much worse way. Which is, they [believe they are] generalists who [actually only] understand

a third of their service. There's a specialization about their service but their skill sets are generalists. (Navy 3)

One of the key drivers of their depth-over-breadth views is that, as noted earlier, naval culture emphasizes training but underplays education (Zimmerman et al., 2019). The Naval HR system tracks and monitors functional training. Education is poorly tracked and not encouraged. As a Navy Officer with extensive experience in HR explained,

We really didn't try to understand, "what does it take to be successful in a Joint environment?" And then, how do we create the right mix of people to do that. We have the process to track the people. We just never bothered to assign them that way. We have [Additional Qualification Designators], and we have proficiency codes in our service records, that tell us "Here's my experience. Here's what I've done for training. This is the kind of officer I am on paper." Now how do I take that and materialize it into something useful on a Combatant Command, Joint or other staff. We never bothered to really lash that up...still don't. It's one of the areas we really miss in. (Navy 5)

Of the four services, the Navy routinely has the lowest graduation rates for JPME (Mayberry et al., 2021). This means they receive the least amount of Joint education and acculturation that JPME I and JPME II can provide. As one Naval Officer put it,

Navy still kind of pays lip service to education in those 'in-person' opportunities. If you can study online at sea at three in the morning, "Good on you warrior." But having the opportunity to kind of decompress for a year, every so often in an academic environment... [while good, is not pushed.] (Navy 4)

And in some cases, they send the wrong people to help acculturate the other services to the Navy. As a Navy officer put it,

The other thing, and quite honestly, in my community the guys that we send to MAWS [Maritime Advanced Warfare School] and JAWS [Joint Advanced Warfare School] [both are educational schools focused on planning across the military and the interagency] and some of these [other] planner courses...they're usually guys that are gonna kind of fall out at the [middle management] level. They're not the chosen ones in our community. (Navy 1)

Finding # 2 – The U.S. Navy typically sends officers to Combatant Commands who have focused almost exclusively on specialization before joining a Combatant Command, and very rarely have had any broadening experiences before joining Combatant Command TMTs.

What the Navy may lack in broader education, it does not lack in boldness. Naval officers are taught early to make decisions and to act decisively (Jackson et al., 2020). However, how that translates into the risk acceptance that supports exploration is an unanswered question. Marines and Army leaders often find them bold but severely constrained in what risks they'll take. Air Force Officers, however, see them as they see themselves – unconstrained and bold. On one side:

“...those guys were so specialized...but a Captain of the Boat...he knows every aspect of that boat. He's gone through everything. So that's why they're used to being Captain Kirk. He's sitting in the chair; everything goes through the Captain. Nobody makes the decision, unless the Captain makes it. And that's the way they grow them.” (Marine 5)

Again, I find them very, very precise. And very, very, very rules focused. Very, very the OPTASK says I drive my boat from here to here, to here, to here and that's what I'm doing. Come hell or high water, I'm driving to those locations. (Army 5)

And on the other:

I see the Navy is even more free to think... free to maneuver [than some of the other services.] They're not bound by, I'll just say regulations and instructions, as much as the Air Force. So, the Air Force is kind of right here [Puts his hand in the middle]. The Navy is way over here. [Moves his hand to the far left.] They're extremely, I won't say lax, but willing to take much more risk. Because the environment they grew up in requires them to make decisions on their own... in a much different way than Air Force officers. (Air Force 5)

[The Combatant Commander] would ask me [a Navy officer] a question...” Can we? Can we not? Should we? Should we not? Wherever the cases is. And I would give him an answer. “Sir, Here's the answer...” and I would go back down and I tell my [joint] team what I talked to him about. And invariably, the Army guys...would all say, “Whoa, wait a second. You gave him a direct answer? Who did you talk to before you gave an answer? “Why didn't you come talk to us to make sure that we all understood the question before you answered it?” I'm like, “That's not the way [I as a Navy Officer] was trained.” As a ship's CO, I was trained to make the best decision I can, on the available information I have at the time ... Navy training is ‘we vest tremendous authority in Commanding Officers’ and we expect you, to the point of being fired, to go execute that at the 70 or 80 percent level. None of them are right or wrong. They just are. (Navy 5)

In the end, the Navy dislikes Joint and goes only because it must. As one Navy senior officer put it, “If you do two Joint tours before [Captain], the name for you is ‘unpromotable.’” (Navy 3)

The Navy desires to ‘smell’ joint, but not to fully acculturate and ‘be’ joint. As a Navy Officer who worked in Navy HR put it:

The Navy had never bothered to really create Joint officers. We only cared about Navy officers. Air Force had launched out smartly in creating Joint officers. ... we didn't say, let's create a Joint officer. We said, “Oh crap. We need to get joint stink.” That's what we called it... “joint stink” on our officers. Because if we don't, we're not going to be able to compete for Flag officer ... It wasn't “Let's create a Joint Officer.” It was, “Let's put stink on these people. If we've got a joint billet, I don't care what it is. I don't care where it is, let's get into it.” We tried to stratify that to save our very best and brightest. We wanted to get on the Joint Staff. ... Everyone else [including Combatant Commands], lower-tier officers – good, but probably not our strongest contenders for flag officer. ... We want JPME I and II people... not necessarily Joint professionals. We just want them to have educational stink. To be able to call them Joint officers and then we can get the Joint Additional Qualification Designator (AQD). So that's the approach we took and I think that's where we missed the mark. (Navy 5)

But the Navy does highly value relationships (Jackson et al., 2020). Navy Officers interviewed for this study discussed relationship-building and networking significantly more than officers from any other service. Navy Officers, when placed in Joint organizations, join in, participate, and develop stronger, broader social networks that support the Command.

5.4 U.S. Marine Corps

Although they serve together on ships, the Marine Corps and the Navy think very differently. The Marine Corps shares the Army's love for operational matters, but its small size leaves it paranoid and constantly in the search for knowledge to justify its usefulness. It also doesn't associate itself with a specific domain. While the Army focuses on land, the Navy on water, and the Air Force on the sky, the Marine Corps sees itself straddling all three. As such, the Marine Corps focuses on its flexibility, agility, breadth, and connectedness (Mayberry et al., 2021; Zimmerman et al., 2019; Van Riper et al., 2018; Terriff, 2006). As an Army officer with extensive experience with Marine Corps officers described it:

So, the Army can be very MOS branch specific. There's like our own subordinate cultures within the Army. Where the Marines are "Hey, Marines are Marines." And we kind of beat that into your head from the first day [of Boot Camp or Officer Initial Training]. You might hear we're a different MOS, we're all Marines. ... So, [they] all can speak the same language, within reason. So, I think the Marine Corps does a good job bringing that emotional intelligence, maybe a little bit of emotional maturity. And then, same thing intellectually. You got to think "combined arms" [the ability to integrate all aspects of the enterprise] regardless of if it's fighting in Fallujah or putting together [a local community event]. You're thinking about -- how do we kind of make things work and gel. And I think it's by the nature of the Marine Corps. You got to have that flexibility. (Army 4)

While the Army is the most tribe-conscious and the Navy is the most class-conscious, the Marine Corps is the most egalitarian within its officer corps. While supporting enlisted infantry Marines is always the focus, no MOS or group dominates Marine Corps decision-making (Jackson et al., 2020; Zimmerman et al., 2019; Van Riper et al., 2018; Terriff, 2006). This promotes connectedness across the officer corps and enables officers to learn about other MOSs without peer pressure to stay within a tribe. Debate is normal and expected.

This debate is useful because torn between its two historical missions – high-end amphibious assaults and low-end counterinsurgencies – Marine Corps leaders see themselves as a '911' force that must be ready for anything. This has produced a force that thinks broader than one function, or one mission. Exemplified by the term "Marine Air Ground Task Force (MAGTF) officer," a Marine leader is expected to understand multiple domains (air, land, sea, etc.). As one Marine officer put it:

The Marines...our [Service] parochialism is different. We can still be generalists, but violently defend the Corps. That's just the way it is. We have to think a little more broadly because of the way we were organized. Because of the way we're brought up is MAGTF... to think like a MAGTF. So, you have to understand other people's business, if you will. Which is certainly a benefit to us. (Marine 2)

This does not mean Marine Corps officers always think strategically or long-term. Focused on 'Building Marines and Winning Battles' (versus wars) it often focuses on tactical and operational matters, leaving strategic issues to the other services. As a UK Officer who had worked with Marines explained:

I might contend that...the U.S. Marine Corps...they're very good planners. But do they campaign? Given that their role is not actually to conduct multi-year operations. Theirs is to make that initial impact...and so the way in which they

view a task and the way they plan; it would revolve around that initial impact. Always mindful, I am sure, that they then have to hand it on to somebody else. But you know, it's human nature...that you worry more about your task at hand... rather than whatever comes after. (UK Officer 1)

Wrestling with a desire for depth in operational matters while maintaining breadth across domains and the continuum of conflict (insurgency to high-end offensive assaults), the Marine Corps values generalists. It envies the depth that Army officers gain in their functional areas, but also highly values the broad experience that enables it to adapt quickly. Marine Corps HR practices divide talent early and distribute it across MOSs. It then rotates officers every 2-3 years and moves them outside their MOS multiple times throughout their careers.

Initially, it divides its talent early to prevent any one MOS from dominating another and to ensure that officers think broadly from the outset.

One of the things that I've always liked about the Marine Corps model was the thirds. When you come out of [The Basic School – Marine Corps Officer Basic Training/Education], you're divided into thirds and the Marine Corps does I think a pretty good job of understanding that the highest GPA person, they may not end up being the best leader. It might be that lowest GPA person that really understands. They hate classwork, but, man they know how to motivate people. So, I appreciate that. So, I think the Marine Corps model of, we're going to spread ourselves out that way tends to lend itself to people who can work better in other organizations once they can get past that very defined rank structural organization... and so you tend to get all different kinds of people across all the MOSs... that works really well. (Navy 5)

To reinforce the adaptability of its officers and to provide them with a broader view of the institution, HR then rotates them between operational (e.g., infantry battalion) and institutional (e.g., recruiting support) roles. As a Marine Officer explained:

Marine Corps got it right by this. Channeling "the specialized" in our MOS [initially], but through the [HR] process they throw us "fish out of water." As a Captain, as a Major, as a Lieutenant Colonel, it's "fish out of water." [going to a job outside your MOS training] Come back, get re-greened...specific in your specialty. Okay, go back out. And then once you get through all that, now you're a Colonel. Take those blinders off completely and you really are a generalist in that regard. (Marine 5)

As an additional measure to further encourage breadth, Marine Officers lose their job specialty (MOS) at the rank of O-6/Colonel. An officer who grew up as an

Intelligence Officer will become either a “Ground Colonel” or an “Aviation Colonel.” This occurs one rank earlier than the other services, which become ‘generalists’ as they are promoted to the rank of General and Admiral. This means that Marines joining Combatant Commands consider the wider enterprise in their decision-making. As one senior Marine Colonel stated:

I’m coming [into the Combatant Command] now as a Marine Colonel. So, I don’t have an MOS attached to me. And I’m in the J6 [Communications Directorate], but I don’t consider myself a [Communications Officer]. That’s how I came into the job – I’m coming as a Marine Colonel. Yet, all the other services channelized their Colonels. So, an Army Colonel is a [Communications Officer]. That’s what he is. And so, it was very challenging to try to get the blinders off, because they were trying to solve the tactical problem. (Marine 5)

Three officers from other services, all with extensive time in Combatant Commands, stated:

The Marines definitely were more generalists on the C4 [Combatant Command] staff. (Navy 2)

Because [Marine Officers] are taught to think. Not technical expertise, but big and broad and adapt. And I think [Marines] do it better than the other services...even my own. (Air Force 3)

Marine Corps, you were getting a top quality. Because the Marine Corps is very, in my opinion, they’re very cognizant of who they’re sending out to the joint force because they don’t want to look bad. So, they send quality guys out to the joint force, and they’ll probably keep dead weight closer to home. (Army 2)

Finding # 3 – The U.S. Marine Corps characteristically sends officers to Combatant Commands who are generalists but may not think strategically yet. They will have all had broadening tours within the Marine Corps, with some having experiences outside of it.

In an interesting paradox, Marine Officers are the most interested in learning new things, but the least likely to seek a Masters or PhD. They are curious about the world, but not eager to leave the Marine Corps. An Air Force Officer describing a Marine Corps school stated:

I experienced probably the preeminent education in the Marine Corps..[it] was a career altering, mind-changing experience. And what I learned was – the Marine Corps isn't what I thought it was. The quintessential stereotype of the Marine Corps was not what it was. In point of fact, the Marine Corps does more deep thinking, and critical and creative thinking...with the officers that they put on their staffs, than I think most of the other services. (Air Force 3)

While discussing Marine Officers' desire to stay in the Marine Corps, and their parochial view that their service is the most well-rounded and mature, a Marine Colonel with multiple years working with the other services said:

We're probably some of the most parochial people in the world. But I think we understand that it takes a little bit of everybody to solve the problem. And if we only pursue a parochial view, you'll never get to the proper solution. I'd say Marines do, in my experiences, they do very well at Combatant Commands or service. (Marine 1)

The Marines' curiosity, comfort with adaptation, and love of flexibility make them among the most risk-accepting of the services.

Marine Corps planners were willing to analyze. Marine Corps is also very doctrinal, but great planners and more risk-taking. (Navy 2)

In the end, Marine officers joining joint top management teams, are used to thinking broadly, are comfortable with the risks associated with exploration, and are aware that there is much they don't know yet. Marines typically perform well in joint assignments, despite their desire to return to the Marine Corps.

5.5 U.S. Air Force

One of the newest of the services, the Air Force shares a dual love of no-limits “big blue sky” and the latest-and-greatest technology. It has an unwavering belief that Air Power is the key to all victory today and in the future. While much of the service is focused on how to make technology enable them to rule the air, their senior leaders are often a fascinating subculture that thinks broadly and strategically (Jackson et al., 2020; Zimmerman et al., 2019; Van Riper et al., 2018).

The Air Force builds this subculture by selecting its stars early in their career. While “Below-the-Zone (BZ)” promotions (where officers were selected well ahead of peers) are a thing of the past, it still fast-tracks officers up the ranks, sends them to

multiple educational experiences, and appoints them to quick broadening assignments to ensure they see the 'big picture.' As one Air Force officer described it:

... we do pick our winners early. I would argue that we need to, especially on the aviator side. You need to pick them early, because the way our system is designed you have to hit these checkpoints. Because there's so many checkpoints along the way. (Air Force 5)

Two Army officers who had worked with multiple Air Force officers stated:

The Air Force. I think they were developing their folks to be prepared to plug into a Combatant Command very well. [The] Air Force, in my opinion, does a better job developing their one and two-stars through their career path. ... it's very unusual to have a Colonel that's not done a tour in the Pentagon either on the Joint Staff or the Air [Force Service Headquarters] staff.... So, they get exposure typically right there at that Major, Lieutenant Colonel level. And then they kind of need to do that if they want to move up their ranks. (Army 4)

At the strategic level they do a very good job. If you look at how they see the bigger picture because of their ability to reach, and their ability to integrate assets and resources across the gamut of whatever all those fields are. So, I think the way they operate is conducive to having them [being] a generalist at the higher level. (Army 2)

And as one Marine officer pointed out, Air Force broadening tours span operations, logistics, finance, and other parts of the enterprise that many service members never see:

...interesting thing about the Air Force...is those guys also seem to be raised so much more like they're in a business than they're in a military service. And I think that makes them broader also. Think about money, and think about the right way of doing things, and optimizing. (Marine 1)

This early selection and fast-tracking is both a boon and a curse. It ensures that selected individuals have the necessary number of experiences and education to succeed, but it also prevents late bloomers from joining the club. As a Navy officer stated:

Air Force people... their biggest issue is that they're highly stratified. Air Force identifies their very best at a very junior stage and promotes them accordingly. And if you're not identified early on as the very best, you're never going to break into that mold. (Navy 4)

Additionally, their breadth, achieved through multiple rapid assignments across the enterprise, may prevent them from developing sufficient depth to fully understand the challenges and opportunities they encounter. Comments from a Navy, Marine, and Army officer raise these concerns:

The Air Force does [their broadening tours] so fast that their guys actually aren't ready for [Joint Operations] and, in a lot of cases... now, weirdly their mobility guys are. Because their mobility guys get promoted slower. So, I've always found their mobility guys to be... My best. (Navy 3)

They can have broadening tours but they're still missing gaps. Because years matter. And they're challenges there, that they didn't have to face. And so, I saw some immaturity in some of those senior Air Force Generals. I think because of that...and more so Air Force Colonels. (Marine 5)

The challenge is with the Air Force guy... he thinks big picture, but he doesn't think about the fact that you got to move all that stuff. You got this great plan. But you need fuel, you need bombs, you need maintainers. You've got to move all those people around...they don't think like that. Yeah, that's right. That's why they have logisticians (chuckles). (Army 2)

Finding # 4 – The U.S. Air Force routinely sends officers to Combatant Commands who are generalists but may still lack sufficient tenured experience. They will have all had broadening tours across both the Air Force and DoD enterprises.

Most of this fast-tracked subculture comes from the dominant tribe in the US Air Force – Pilots. While infantry Marines are what the Marine Corps revolves around, in the Air Force it's all about the pilots. That leads to two basic tribes, operators/pilots and everyone else. Among the pilots, the more advanced your aircraft, the higher within the tribe you sit. As one "everyone else" tribe member described it:

I think the world really was divided into operators and non-operators. And in the Air Force, some of us operated...Then you've got maintainers, and all their kind, on that periphery too. But you got a lot of people that aren't...just on the other side, on the support side. So, operators are going to be generalists because we're trying to build them into leaders. So, they see the whole mission set and they're looking around. Yeah, we do want to expose them to different things.

Being an Air Force guy...one of the issues I always have with the Air Force...we have what we call the 'universal management badge.' ... That's pilot's

wings. So, if you're a...especially since the 90s...if you're a fighter pilot, you can do everything. So, who's the chief of personnel in the Air Force? Fighter pilot. Who's the chief of contracting? Probably a fighter pilot. So, we kind of take that you're a specialist in one area, but because you're a really good [pilot], you must be good at leadership. Which, it does not translate all the time. ... And so, I think the Air Force probably does the poorest job of the services at consciously growing leaders to be leaders. As opposed to growing people to take leadership positions because they've had [the right] positions in their career. (Air Force 2)

This sometimes results in Air Force TMT members not being well aligned with their positions. As an Army officer explained, the need for Air Force pilots to check career boxes means at times they are not qualified for the joint billets they are assigned.

Air Force...like you said. It'll say "plans billet" and I never really had a plans guys show up. It was always an aviator. He was quality. He needs to go out and get a broadening assignment. He's going to be promoted, he's gonna take command, whatever it is. He gonna come for two years [instead of the traditional three year assignment] and go up and do command. (Army 2)

Fast-tracking also means that Air Force officers are often the youngest people in joint TMTs. They have the most "broadening" tickets punched, but they are not always the most experienced. A Navy officer describing two Air Force leaders stated:

Air Force two-star worked in the [J-5 Plans and Policy Directorate].... I liked him, but I always wondered...because he was a pilot... I always wondered if he was the right guy for that gig. I don't know. He's a pilot, he's going places, but I don't think he was ...a planner by background. I think he was just a pilot. He was an ass kicking fly guy. So, I'll go back to the days...my first tour at C3 [Combatant Command] when the J4 [Logistics Director] was a pilot. No disrespect. These guys are sharp and brilliant. But were they the right guys? For the right job? Hmm...I don't know. (Navy 1)

Interestingly, the majority of the Air Force values depth of knowledge and experience over breadth. The number of flight hours matters, as does how much you know about your functional area. But for the subculture destined for general officer ranks, deep depth is prevented by an HR system that sends them to multiple, short, broadening tours. Functional knowledge in their speciality remains an essential measure for this subculture, but it is tempered by a drive to excel in each wicket they must hit to ensure they remain on the fast promotion track. This creates joint officers who are striving for both depth and breadth, but are finding their career path forces them into more breadth than depth.

The Air Force HR systems also present another paradox: hard skills are rewarded, yet soft skills are essential. Describing the first side of this paradox, an Air Force senior officer said:

One of the personalities, I think the Air Force has is...the Air Force is run by pilots. And pilots are like systems operators. And most of them are engineers. So, they've got this closed looped, system engineering approach to everything. It's all a math problem. ... you got some Air Force folks that are very engineering focused. ...flying world kind of promotes that. If you're an engineer in school and you go to fly an airplane, it's all system stuff and it's all math and science. Math and science will give you all the answers you need. But when you actually deal with other...when you're fighting other humans and not just other systems...I think folks who haven't dealt with that struggle a bit...the Air Force, I think, is very system and process-centric. (Air Force 1)

On the other side of the paradox, a Marine and Navy officer described Air Force leaders this way:

Air Force survives on a different culture, they... relax the standard, I would say, to be more people-centric. (Navy 4)

Air Force is very culturally aware...and making sure they do right by all. ... "We got to do that person right. We had to do that person right."... Air Force guy comes in and he's wanting to make sure the whole staff is working together. Very "Kumbayaish." [i.e. very focused on bringing people together.] (Marine 5)

This two-sided coin manifests as Air Force officers who are very willing to speak up in discussions but often the least risk-tolerant when it's time to make a decision. In a discussion about risk tolerance, an Air Force Officer laid out where he believed his service lies in comparison to the other services:

Air Force are much more relaxed. Willing to speak their mind. Willing to take risk. And again, it probably depends a bit on your... MOS. Your pilots, your aviators in the Air Force, are probably more willing to take risk than some of your other MOSs. So, I would put the put the Air Force right here [Hand in the middle.] ... Air Force squadrons, the element we grow up in, although free in some respects, are still constrained by the rules of flying, the rules of formation... all the instructions we have to follow. So, we may be arrogant, and loud, and obnoxious, but we're still inside the box. ...Air Force says, "Well, the regulations say I can't do this, so I won't do it." (Air Force 5)

A Marine and Navy Officer evaluating risk tolerance of Air Force generals stated:

As I look back at my four and a half years...on the staff there...as far as the Air Force Generals...there's none of them that stick out in my mind... as people who

were “Go, put the hammer on the nail, and just try things.” They seemed very much... shy to pull the trigger on certain events. (Marine 5)

The Air Force, and these are all general statements... Very low from a risk-taking standpoint. Every course of action they developed, or their input for the courses of action we developed... much more risk-averse than what the Navy, Marine Corps planners were willing to analyze. (Navy 2)

Air Force officers are known for being less comfortable with out-of-the-box actions but being the most inclusive and open-minded during discussions. This open-mindedness is partially because the Air Force greatly values education. It has the highest percentage of graduates, at all levels, of Joint Professional Military Education out of any service, and is the only one that considers academic status as part of its promotion system (Mayberry et al., 2021). The service is passionate about training and education, with officers who are curious to either leverage their existing technology or explore other domains and their interconnections. The subculture of Air Force generalists is often sent outside the service to a wide variety of schools in an effort to continue broadening their knowledge.

Ultimately, Air Force Officers are the most prepared to enter the joint world and are the most comfortable doing so. They bring a mindset that is eager to learn and ready to participate. They are the most generalist members of Joint TMTs, which is both good (for new perspectives) and bad (sometimes disconnected from practical considerations).

5.6 Findings

Combatant Command top management teams receive their personnel from the military services and have limited discretion over whom they receive. As discussed in Chapter 3, the services “build” the Combatant Command TMT members, and the Combatant Command then “borrows” them. This extends the work on the “build or buy” choices explored by management researchers by introducing a third option (Kang, Snell and Swart, 2012; Becker, 2009; Kang and Snell, 2009; Subramaniam and Youndt, 2005). Since Human Capital might be the most critical ingredient in organizations (Youndt and Snell, 2020), this “borrow” option needs further exploration.

As this chapter has demonstrated, the trends indicate that the U.S. Army and U.S. Navy send specialists, whereas the U.S. Marine Corps and U.S. Air Force send generalists to Joint TMTs. While these officers don't fit perfect archetypes, these traits could be utilized by the Department of Defense's HR systems to adjust the explore/exploit balance if desired. Playing to cultural strengths and weaknesses would follow Bledow et al.'s (2011) recommendation that ambidextrous leaders tailor their organizations' personnel rosters to balance ambidexterity.

Finding #5 – There are clear trends indicating which services officers lean toward specialism and which toward generalism, but the distinction is not entirely clear-cut. Tribes within each service, Military Occupational Specialities (MOSs) within each service, and personality all play a role.

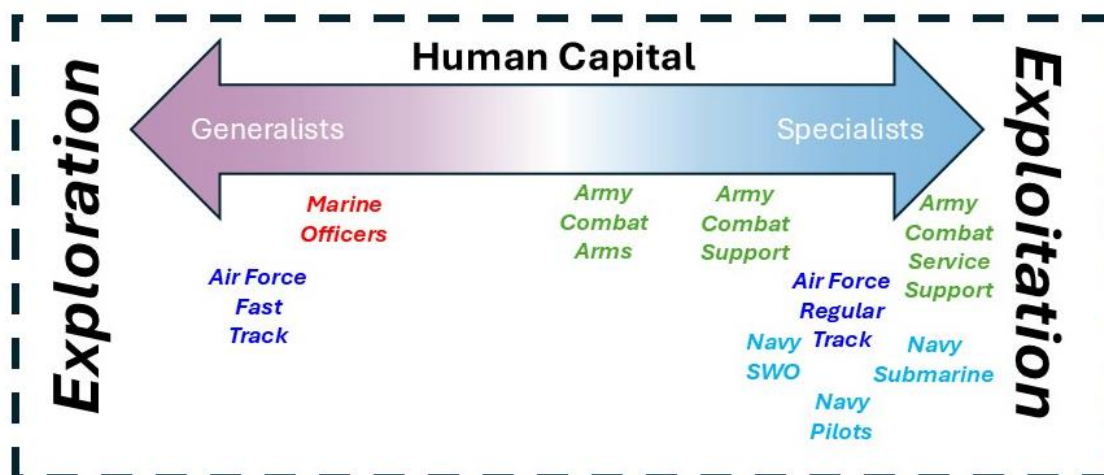


Figure G – Military Service members along a spectrum of Generalists and Specialists

Finding # 6 – Human Capital is not a dualism. Officers find themselves spread across a Generalist-Specialist spectrum.

Most research on intellectual capital assumes a homogeneity of specialists or generalists within the studied group. This finding supports several researchers who have challenged that assumption and begun to look at the spectrum between the two archetypes (Turner, Maylor and Swart, 2015; Turner and Lee-Kelley, 2012; Kelly et al.,

2011). Since Kang and Snell's two intellectual capital architectures both rely on the homogeneity assumption, this finding suggests that their models may not be applicable in many contexts. This is consistent with Turner et al. (2015) who believed that there might be more than two approaches to configuring intellectual capital. This study will continue to compare Kang and Snell's models with Turner et. al.'s model in future chapters.

5.7 Conclusion

These officers are the building blocks that join Combatant Command top management teams. Army officers remain deeply anchored in their tactical roots, valuing depth over breadth, eager to follow processes and remain within comfortable organizational hierarchies, yet comfortable with ambiguity and willing to take risks. Navy officers are deeply anchored to life on a ship, with an even greater emphasis on depth over breadth, yet are bold actors who recognize their role as global players. Marine officers, who value breadth but still crave depth, are curious, flexible, and accept risk easily, but are potentially short-sighted. And a subculture of Air Force officers who think globally are very curious and love innovation, but are somewhat risk-averse and may spread themselves too thin as they seek to be broad. The tendencies of these four services provide context for the rest of this study. The Army, Navy and Marine Corps tendencies are in line with Köhler et al., (2025) who determined that specialists typically focus on one domain (e.g., Army on the land domain and the Navy on the sea domain) and generalists gain medium levels of knowledge in several domains (e.g., Marine Corps on Air, Land, and Sea). The Air Force is an outlier that warrants further study. The services also appear to collaborate Anderson's (2012) analysis on the cost-benefits of becoming specialists and generalist in a complex world. Finally, these findings enable this study to further Takahashi's (2025) examination into ways managers can optimize the mix of specialists and generalists in adaptive organizations in Chapters 8 (Who Conducts the Orchestra) and 9 (Analysis). But before it does so, it will examine the other two components of intellectual capital: social and organizational Capital.

Chapter 6 – Social Capital: “Vegetables on the Plate, Salad, or Soup?”

6.0 Introduction

In the late 1980s, the U.S. Government decided the intellectual capital structure of the Department of Defense was a problem. It promoted excessive infighting, wasted resources, and failed to carry out assigned operations effectively. The Presidential "Blue Ribbon Commission on the Department of Defense" (also known as the Packard Commission), the 1986 Goldwater-Nichols Defense Reform Act, and the Skelton Commission all endeavored to restructure the department's intellectual capital to address these problems. A key part of these efforts was making the U.S. military more "joint;" aiming to improve its organizational and behavioral integration through organizational and cultural changes that brought the military services closer together (Kamarck, 2016; McInnis, 2016). This chapter will explore "jointness" through the lens of social capital, continuing this study's effort to better understand how various intellectual capital configurations within top management teams affect organizational ambidexterity. It will review the social capital of joint TMTs to explore how well the services meld, what networks develop, and how optimal these new social structures are for ambidexterity of thought and decision making.

First, it will review the elements of social capital and the idea of jointness. It will then take a step back to understand the bonds that people enter Combatant Commands with: Service bonds, Service sub-tribe bonds, and military occupational specialty (i.e., job) bonds. Next, it will examine the tools designed to build "jointness," namely, joint doctrine and Joint Professional Military Education (JPME). Lastly, it will explore some of the arrangements within Combatant Commands that affect the social capital among the Command's members. In the end, it will show that, among a host of variables that pull TMT members toward both exploration and exploitation, the joint environment within Combatant Commands is a balanced mix of social capital elements that allows for organizational ambidexterity.

6.1. Social Capital

The idea of 'social capital' has developed in a variety of disciplines, and there are hundreds of definitions (Claridge, 2018). Within the management field, two key articles attempt to codify a refined theory and definition that researchers can coalesce around. The latter of these, written by Adler and Kwon, was able to integrate across disciplines, but could not build a theory that would "incorporate the strengths of the existing, competing theories and transcend their respective limitation" (2002, p.34). The former, written by Nahapiet and Ghoshal in 1998, is cited in much of the subsequent work on intellectual capital and in all work associated with intellectual capital structures that support ambidexterity. Therefore, this study will continue using Nahapiet and Ghoshal's to define and understand the foundations of social capital. They describe social capital (SC) as the knowledge within networks, groups, and communities of practice (Kang and Snell, 2009; Youndt, Subramaniam and Snell, 2004; Nahapiet and Ghoshal, 1998). It consists of three elements: network structure, affect/relational, and cognition (Claridge, 2018; Kang and Snell, 2009; Youndt, Subramaniam and Snell, 2004; Nahapiet and Ghoshal, 1998). Social capital is the bond that connects and enables the flow of knowledge from human to human and from human to organization. Nahapiet and Ghoshal believe it is the foundation of intellectual capital.

The structural element incorporates the structure, density, connectivity, strength of ties, and types of ties within social groups. Structures can have many forms, from highly hierarchical patterns in some cultures (e.g., castes in India) to extremely web-shaped patterns found in many communities of practice. Networks can be dense, having strong ties between members, and this has traditionally been associated with exploitation-focused groups. At the other end of the spectrum, nonredundant networks with weaker ties are typically associated with exploration (Kang, Morris and Snell, 2007; Subramaniam and Youndt, 2005; Nahapiet and Ghoshal, 1998). Social ties come in many forms: familial bonds, social class ties, common interest bonds, work-related ties, and so on.

The affect element concerns motives, expectations, norms and trust. Trust built on aligned motives, robust norms and strong social expectations typically builds close-knit groups. Trust built on aligned motives but weak norms and low social expectations

engenders loosely-knit teams (Claridge, 2018; Kang, Morris and Snell, 2007; Subramaniam and Youndt, 2005; Nahapiet and Ghoshal, 1998).

The cognitive element involves communal codes and standardized language that lead to shared mental models. Groups with well-developed shared mental models are commonly associated with exploitation since their shared model enables rapid communication and easy alignment of efforts. They speak the same language and understand the same signs. Explorers' mental maps overlap with other explorers' maps, but how much they correspond varies widely. They must invest energy in understanding each other, since language and codes are often dissimilar. These groups spend more time communicating to ensure clarity, but are more likely to combine information in new ways and discover creative answers (Kang, Morris and Snell, 2007; Nahapiet and Ghoshal, 1998).

Using these features, Kang, Snell, and Morris (2007) developed two archetypes to explore, and then updated them slightly in 2009. The 'cooperative' archetype is described as 'clannish' because of its dense networks, tight couplings, and strong ties. The clan remains cohesive and often distrusts outsiders and external knowledge. Trust is built around the social unit, and they share common codes and language. This archetype is associated with exploitation, as the coin of this realm is internal knowledge. The 'entrepreneurial' archetype, linked to exploration, has a more expansive network, but the bonds are weaker. Connections are built by direct personal contact and shared experiences or knowledge. Trust is built on experiences and skills, not tribes. These networks engender flexibility, creativity, and discovery, but may not be sufficiently robust to effectively exploit these discoveries. Entrepreneurs are quicker to sense, but slower to execute. Cooperative 'clans' exploit present conditions well, but are at risk of developing groupthink about what the future holds and how the organization should respond (Nahapiet and Ghoshal, 1998).

In 2011, Kang, Snell, and Swart tested a variation of one of these archetypes and found that the cooperative archetype might also support exploration. This finding was inconsistent with their 2009 theory, which assumed that the traits of a cooperative group would prevent the expansion of social networks and the questioning of group mental models. They called for further study. This study heeds that call, examining social

capital along a spectrum rather than just two ends/archetypes, aiming to clarify how social capital supports organizations. As it does so, it adds a third archetype to explore, a middle ground “fusion” configuration where the metacognition of social networks by the people joining TMTs enables them to form balanced couplings; to initially trust based on education but to build greater trust through experiences; and to shape networks that are considered, temperate, and moderate. This “fusion” archetype mirrors what the Department of Defense desires in jointness, a social configuration that supports effective behavioral integration capable of both exploitation and exploration.

Cooperative social capital is often built through internal labor markets. Employees grow within the organization and remain close to the flagpole. Relationships have time to grow robust and deep, and the clan develops strong norms and expectations that foster deep trust. Entrepreneurial social capital is often produced in a more open market-based system, where employees frequently move, cross-training is expected, and performance is valued more than seniority. In management literature, this is often referred to as the “build or buy” discussion (Jørgensen and Becker, 2017). Entrepreneurial systems are more likely to look outside the organization (open market) to find the KSAs they need and then to buy or hire them, while Cooperative systems build their managers from within.

Joint TMTs neither buy nor build. They instead “borrow” officers from the military services for a tour of duty of between one to three years. The military services, not the Combatant Commands, decide who is “borrowed.” Those officers then leave their service’s community of practice and enter a “joint” community of practice. As they do so, their social bonds change. The ways in which their collective knowledge is prioritized, utilized, maintained, and expanded all transform.

The military describes itself as a profession (Joint Chiefs of Staff, 2023). Within that profession are constellations of communities of practice. Service members often belong to multiple communities simultaneously. Etienne Wenger (1998), who coined the term “Community of Practice,” identified three crucial characteristics of one: its identity is defined by a domain of interest; it is a community that interacts and learns from one another; and its members are practitioners. Service members associate with various communities and negotiate their own identity by reconciling their membership in the

communities around them (which ones they're in, how 'in' they are, etc.) and their learning trajectory (who we were, who we are now, where we are going).

6.2 Joint Bonds – the Aim

As discussed in Chapter Three, the study group is asked to join two communities that encourage service members to operate beyond their own military service. The joint community asks them to integrate with other services and begin synchronizing the Department of Defense as a whole (Joint Chiefs of Staff, 2023). Beyond that, the national security professional community asks them to think less tactically and more strategically while also looking beyond DoD to consider the other departments of the U.S. government (Bartholomees (Ed), 2012). The goal is for senior U.S. military officers to think more broadly and more strategically as they integrate behaviorally with officers from other services in joint organizations. The expectation is that their social networks will shift and become more expansive. That their motives, expectations, and norms change so that they trust the other services enough to synchronize. And that they begin to acquire a more common language, so that they can effectively and efficiently make group decisions that optimize the use of DoD resources. In management terminology, they seek “behavioural integration” (Hambrick, 2007; Lubatkin et al., 2006).

But what is the metric? How much is too little, and how much is too much? As several researchers have identified, behavioural integration can cut two ways (Heavey and Simsek, 2017; Carmeli and Halevi, 2009; Hambrick, 2007; Lubatkin et al., 2006). Done well, it can improve decision-making through diversity, robust communication, and the drawing out of hidden assumptions. But done poorly, it can encumber performance through conflict, groupthink, ‘lowest common denominator’ thinking, or lethargic decision-making (Tangredi, 2022; Mehrabi, Coviello and Ranaweera, 2021; Oehmichen et al., 2017; Carmeli and Halevi, 2009). One Marine Officer, who viewed “joint” as substantial integration, argued that DoD has not met the mark. He stated:

I don't think there was ever anything that you would describe as well, “This is really joint.” I think it was like mixed vegetables rather than a soup. It was never boiled into something commonly joint. You can look at it -- it'd be: Oh, that's all different stuff, but you would definitely be able to go, “That's an Army guy.” If you took people and put them all in a tan uniform, you could definitely still say ‘That guy's a soldier,’ ‘That guy's a sailor,’ ‘That guy's an airman.’ (Marine 1)

Upon reflection by the researcher, and then discussions with other interviewees, the question became “Is the appropriate amount of jointness that supports both exploitation and exploration ‘soup’ (full integration), ‘salad’ (mixed integration), or ‘Vegetables sharing the same plate’ (less integration)?” The Marine interviewed sought ‘soup’ while a Naval officer warning about the dangers of a “jointness mindset” on innovation (Tangredi, 2022) appears to seek ‘Vegetables on a plate.’

In the following sections, this study will examine the factors that push and pull Combatant Command toward the two social capital archetypes to better determine the actual level of social integration within this community.

6.3 Service Bonds

The starting point for any integration is the military services. This is where the TMT members in this study spend most of their careers. TMT members often don’t join a strategic joint command until 20-25 years after entering the military. As such, “Service Bonds,” those social connections that exist between service members of the same branch (e.g., Marine Officer to Marine Officer) are strong. As one Marine Colonel put it when discussing his service:

... everybody’s part of the borg. Everybody’s very brainwashed. Everybody’s coming from singing on the same sheet of music. Everyone went to the same boot camp or the same OCS. ... [in the] joint world’s defense, a Marine-only command has a much simpler worldview. They’ve got much narrower sets of tasks, much smaller sets of problems. A more homogeneous type of individual in the command. (Marine 1)

TMT members leave their “borgs” to join Combatant Commands. They may have had one or two years of education on the other services (discussed in section 6.6 below), but for most of their careers, their networks, relations, and mental maps have been shaped by their service. And when they join Combatant Commands, they find two networks that continue to connect them to their service, one formal and one informal.

The formal network is thin, but it can exert significant influence over the rest of their careers. While the hierarchy within Combatant Commands is filled with officers from every service, the senior officer from each service within a Combatant Command is responsible for the development, administration, and legal matters affecting service

members spread throughout the organization. For example, the senior Marine in European Command serves in the J-3 Operations Directorate and reviews annual performance evaluations of Marines across all directorates (e.g., J-2 Intelligence, J-5 Plans, J-4 Logistics). If there is a legal issue, he will be responsible for resolving it. So, while the Marines in the J-2 Intelligence Directorate receive their tasks and evaluations from different services' officers within that team, the senior Marine reviews those evaluations and interacts with the Marine Corps on Marines' future assignments after the Combatant Command. The senior Marine is not responsible for their daily activities, priorities, or tasks, but they do ensure that they fulfil Marine Corps requirements (e.g., fitness tests) and help determine how the rest of their career progresses.

Informally, officers often reach out to other members of their service when formal channels are ponderous, poorly understood, or for various other reasons. For example, it is not uncommon for Army officers to consult with other Army officers to better understand tasks assigned by officers from other services. For example, an Air Force officer in J-3 Operations might task the J-2 Intelligence Directorate to gather information. An Army officer in the J-2 Intelligence directorate might then call an Army officer in the J-3 Operations team to "put it in Army-speak."

During a TMT member's time in a Combatant Command, while he/she is growing new connections and developing new bonds, he/she is still firmly attached to his/her service through a formal connection that shapes his/her future, and an informal network that keeps him/him connected to the service's ethos and culture.

6.4 Service Sub-Tribal Bonds

As with any large organization, each service has an overall culture and multiple subcultures that reside within it. As described by the interviewees in Chapter 5 (Human Capital), the Army divides itself into Combat Arms (including infantry, tanks, artillery, etc.), Combat Support (engineers, etc.), and Combat Service Support (HR personnel, etc.). The Navy into Surface Warfare Officers, Submariners, and Pilots. And the Air Force into pilots and 'everyone else.'

These tribes matter to the joint community because they sometimes cause confusion (e.g., Marines don't always understand the tribal stratification within the Air

Force and Army, and Navy Officers expect conflict between tribes). But for the Joint Community, they can also serve as a bridge from service bonds to joint bonds. These “weak ties” (Granovetter, 1973) may be significant toward building joint teams, as they allow service members to cross boundaries from their service teams to form new communities. For example, lawyers across services can easily intermingle because they share common experiences, rules, and other cultural aspects. They can cross over from their service groupings through the weak ties their MOS provides. One Army officer described his views on those within his “sub-tribe” from all of the services:

...inside of the services at the unified command you have what I would consider your most competent officers ... your **combat arms** type people. ... They are the ones that are able to grab all the different disparate industries, or disparate groups of people and integrate them into the function you're trying to get accomplished. ... So, once the command finds who the problem solvers are... The problem solvers are the guys with the **combat arms** background. They're the one that have been to school, studied organizational structure, understand how functions work, can problem solve, gather people together and come up with a solution even though they're not an expert in that region. So, those are the things I think that are important – is finding those kind of people. (Army 2)
Bolding by research author.

This officer described what many other interviewees also expressed, a trust in “your” tribe to be competent and trustworthy. For example, Navy Surface Warfare Officers preferred other “Line Officers” (those authorized to command potentially), such as Marine Infantry Officers, over those in specialty roles. Similarly, Air Force aviators preferred aviators from other services over other MOSs. This “ducks like ducks” starts at the tribal level but becomes more evident at the job-role level.

6.5 Military Occupational Specialties Bonds

Military Occupational Specialties (MOSs) are the functional jobs assigned to personnel for their careers. While Submarine Officers are unique to the Navy, many Military Occupational Specialties are common across two or more services. There are pilots, intelligence officers, logistics officers, engineering officers, communications officers, and personnel officers in all four services. Two of the services have infantry and artillery officers. The list goes on. Personnel officers across the services often have more in common with one another than with the warfighting MOSs (infantry, pilots) of

their own services, as do communications officers, intelligence officers, and others. artillery officers are all taught by the U.S. Army, so both Marine and Army cannon-cockers share a common bond from very early in their careers.

These MOS bonds often soften service bonds and can enable joint bonds to grow quickly. Pilots joining a Combatant Command may bond with other services' pilots before they bond with engineers from their own service, for example. The shared cognitive elements of their training and experiences will facilitate the formation of structural bonds and enable affective bonds (e.g., trust, expectations) to develop more quickly. As one Navy officer was discussing jet pilots, he stated: "I found the aviators [from all services] were the strongest in the Command Center at adapting to whatever the world throws at 'em". (Navy 4)

For the remainder of the interview, he repeatedly returned to his connections with other pilots and the positive attributes they brought to Combatant Commands. He repeatedly implied that the number of structural bonds he maintained were weighted heavily towards aviators and clearly indicated an affection for the cognitive attributes they shared. Several infantry officers shared similar stories, demonstrating a preference for officers of similar backgrounds.

These structural, affective, and cognitive bonds can be particularly strong for MOSs in which interaction between services is the norm. Intelligence Officers routinely share information among all six services. Air Force logisticians rely on Army logisticians for much of the transportation required to move their supplies. Navy logisticians and Marine logisticians work closely together for much of their careers. A Navy logistician, discussing a group of logisticians from across the services having conversations in a make-shift bar, remarked that:

... we would sit in there and we'd have a lot of pretty open and frank conversations about the state of the world and what we're trying to do. I found that to be a pretty good vehicle to use. There was a lot of...no pressure. Just thinking crazy stuff. And then we'd all role play it to a degree, and shoot holes in the concept and say, "No man. That dog won't hunt here. That in order to do this, you would need to have so many other things line up for you. That may be a bridge too far." "Hey, I got an idea. What about the S15? How can we leverage their port opening capability, and then re-vector these other capabilities to somewhere else where we might be interested in doing things." So, I thought that was beneficial. (Navy 1)

And an Air Force intelligence officer, comparing how his MOS understood the other services with how combat arms officers understood the rest of the joint community, stated:

I think that the Intel community...across the Joint side... has a lot more, maybe not Joint assignments, but Joint Interaction throughout their career. So, we have many bases where you've got multiple Intel organizations from the different Services all working together.... [However,] on the [Operations] and the [Plans] side [of the organization] ... I think you grow up in the war fighting structure of your service. And so, you're probably a little bit different once you get to that level because you're not familiar with the other services. (Air Force 4)

Finding # 1 – While strong service cultures slow the formation of joint social capital, job similarities facilitate cross-pollination that, in turn, supports the development of joint social structures, affect, and cognitive frameworks. Service cultures support “differences” within Combatant Commands, while jobs and functional areas (e.g., communications) promote “sameness.”

This finding supports work on transactive memory and behavioral integration, in that it echoes work done by Heavey and Simsek (2017) on the ways that TMT's experiences and beliefs support diversity of thought while also reducing conflict and miscommunication. It also advances research on how behavioral integration supports organizational ambidexterity by deepening the understanding of behavioral complexity and the various ways human capital can be combined (Venugopal et al., 2020; Carmeli and Halevi, 2009; Lubatkin et al., 2006). These informal combinations warrant further investigation. Next, this study will look at formal ways DoD has attempted to bring about behavioral integration.

6.6 Joint Doctrine

When Congress enacted the Goldwater-Nichols Act to shift the services toward a greater “joint” approach, one of the tasks they gave the Department of Defense was to create joint doctrine and joint training guidance (Cozad et al., 2023). Since then, the Department has published hundreds of publications on how the Joint Force is

structured, thinks, and decides. DoD believes:

The purpose of joint doctrine is to enhance the operational effectiveness of US forces. Joint doctrine presents fundamental principles that guide the employment of military forces ... It does this by **promoting a common perspective and establishing a common set of [Joint] terminology, from which to plan, train, and conduct** joint campaigns and operations that **fundamentally shape the way the Armed Forces of the United States think** about campaigns, operations, and activities. However, **joint doctrine is not an intellectual straitjacket**. Its procedures are not a binding constraint or standing limitation. [Joint Force Commanders] need to understand doctrine so that they also recognize when they should depart from it.... Joint **doctrine facilitates development of a common joint culture and understanding**. The [Joint Force Commander] **should also encourage the development of new and innovative capabilities...that improve the effectiveness of the joint force**. (Joint Chiefs of Staff, 2023, p.I–2) Bolding by research author.

The Department of Defense aims to bring service members from the various services closer together through common perspectives and terminology, thereby shifting TMT members toward the cooperative side of the social capital spectrum. At the same time, it does not want this common perspective to hinder necessary divergence and seeks to encourage innovation, thereby pushing TMT members toward the entrepreneurial archetype of social capital. It appears to desire a fusion of both cooperative and entrepreneurial characteristics within its service members.

Combatant Command TMTs utilize joint doctrine as their initial guiding documents, but not all of the services' officers view it the same way. Army and Navy officers are more likely to view it as prescriptive and to follow it closely. Marines find the doctrine interesting but not authoritarian, while Air Force officers appreciate some elements and reject others. As one Air Force officer described it:

And I think at the Combatant Command level, because you've got all these different service cultures coming together, they go more with a Doctrine piece... to try and unify. And I guess I can understand that. It's just, coming from a loosey goosy [service]... what I think is the most loosey goosy service ... [we look at it as] Great, we're being bound by Doctrine again. Stop it. Go away." (Air Force 4)

A significant factor in the extent to which joint doctrine helps bond TMT members is their level of acculturation to it. That often depends on how much they have read, how much it conflicts with their service culture, and how much they have experienced its

strengths and weaknesses in comparison to their own service doctrine. In other words, how educated and experience they are.

6.7 Joint Professional Military Education

As described in Chapter 3, the joint community has established educational milestones along an officer's career path intended to aid them in becoming a "Joint Qualified Officer." According to the Chairman of the Joint Chiefs of Staff (the senior most member of the U.S. military), the goals of Professional Military Education (PME) are three-fold: 1) to increase shared cognition by exposing service members to the other services and to the joint doctrine that guides joint teams, 2) to enable the start of informal networks by linking up officers who they may see again later in their careers, and 3) to provide time for relationships to grow that impact affect (Chairman of the Joint Chiefs of Staff, 2020a, 2020b).

The three significant milestones are Joint Professional Military Education I (JPME I), Joint Professional Military Education II (JPME II), and Joint Experience. JPME I is integrated into service schools for mid-grade officers as they transition from tactical to operational roles. It includes introductions to the capabilities of other services, joint doctrine, joint terminology, and related topics. The goal is familiarization. Not all officers attend JPME I, and the percentages vary across the services. JPME II is mandatory for all officers preparing to serve in a joint position and any officer the military service hopes to promote to General or Admiral. Again, not all officers attend, and as described in Chapter 3, not all attend before stepping into a Joint billet. Multiple studies have identified this mismatch between law and actual practice (Cozad et al., 2023; Mayberry et al., 2021; Grass, 2020; Jackson et al., 2020; Kamarck, 2016).

These studies examined Combatant Commands overall, however, and did not focus on TMT member compliance. The number of TMT members deficient in the required education is unknown, but this study indicates that the trend appears to hold. One Naval Officer describing his entry into a Combatant Command stated:

It was a learning gig for me in the Joint environment because I had to learn how the other services did their stuff. That wasn't part of my curriculum through

Department Head school [a mid-career school] or anything. Navy did not put an emphasis on Joint...for sure. (Navy 1)

Another officer who had seen multiple Combatant Commands described the problem as:

On the whole, I think the services have done a pretty good job of sending good people [to Combatant Commands]. It's not the people that I question. It's the training and education that they got before the Air Force, or the Navy, or the Army, or even the Corps...puts them in that position. It puts the officers in a position that's not as advantageous as it could have been...based on the selection parameters of the service. So, it's not necessarily the officer's fault. I just feel like the service could do better. And it's a process early on at the O-5 [Lieutenant Colonel], O-6 [Colonel] level. Before they make [General Officer], to send them there. It puts them at a disadvantage. And they have to make up...like I said, you lose six months, a year, two years. And in one case, I thought the guy never got it...the whole two years he was there. (Air Force 4)

The last milestone, Joint Experience, is both an end and a means. The goal of JPME is to provide Combatant Commands with officers qualified to serve in the command. The Joint Experience is that end. At the same time, to be fully joint qualified, an officer must successfully serve a two-year tour in a joint billet within a joint command (Kamarck, 2016). The joint billet experience is also a means of producing better joint officers ready to serve at higher echelons. While discussing the topic of what the joint experience brings to the Combatant Command, one Army Officer opined:

Because of your daily interaction with the other services, you can be as prickly as you want to be, but at the end of the day you're learning something by just working with these other services. Things and topics that you never thought of before. How many guys work with nuclear guys? [As an example,] Nuclear is a very specialized group. And when they get here and the boss turns to you and goes, "Hey, by the way, these guys are incompetent planners, so you need to go help them plan." So, you bring planners in, you bring your nuclear knuckle heads together and you get this group together and you start talking about things. "Okay, this is how this works." You learn those things. So, I think the learning dynamic at a [Combatant] command is extremely important. And I think it's probably the best place to do that too. (Army 2)

Reinforcing this view, a Marine Colonel with multiple joint tours, stated:

The value of doing joint tours is invaluable. It's important to get people through that are also willing to step outside their comfort zone and take on new challenges, but at the same time to also be willing to recognize that they

don't...to be willing to...you're building a team inherently and you need to balance that team with a variety of knowledge and expertise. (Marine 3)

In the end, based on the requirement to be Joint Qualified before you can be selected for General or Admiral, a majority of the TMT members in Combatant Commands will have attended JPME II and previously held a joint billet. But not all.

The overall goal is a professional joint team. The capstone document within joint doctrine explains:

The Profession of Arms ... [Joint Force Commanders] and other leaders integrate forces into smoothly functioning joint teams...The military professional applies critical and creative thinking to counter these challenges and continually grows through education, broadening experiences, and other professional development to account for greater responsibility at higher ranks and the constantly evolving character of warfare. (Joint Chiefs of Staff, 2023)

Finding # 2 – The Department of Defense uses education and planned experiences to shift the cognitive mental models of TMT members, thereby engendering affective changes in the social capital of senior military officers. By fostering better understanding and increasing trust, these experiences encourage officers to broaden their social network structures, creating a more “joint” social capital system.

This finding is in line with previous works on how social capital can be developed and the interaction between education, trust, connectedness and cooperation (Li, 2013; Nahapiet and Ghoshal, 1998). It continues to strengthen the contentions researchers have made on the value of behavioral integration within TMTs (Venugopal et al., 2020; Carmeli and Halevi, 2009; Lubatkin et al., 2006). In the next section, this study will focus on a group with high behavioral integration and examine its strengths and weaknesses.

6.8. Generals and Admirals

Less than 10% of Colonels/Captains are promoted to General/Admiral. As part of the selection process, three things occur. First, officers are screened to ensure they meet all requirements. Since being “Joint Qualified” is a requirement, all Generals/Admirals will have served on a joint staff at some point in their careers.

Second, the selection board reviews service preferences. If the Air Force determines it needs more Generals with operational experience in a given year, the promotion board is instructed to prefer Colonels with that experience. Third, officers are selected on merit. The General Officer/Flag Officer (GOFO) community is seen as small and elite. They are also viewed as very “collegiate” and “cooperative.” An Air Force officer stated:

I do think there's a distinct difference between the Colonel level and the GOs [General Officers]. Broadly speaking, your GOs were much more welcoming... and able to integrate than I think your Colonels were. You have to be able, if you're selected as a [General] officer. (Air Force 5)

While discussing this difference with an Army Colonel who had spent considerable time in sessions with General Officers, the researcher and the Colonel examined a possible “why?”

Interviewer - looking at [two Combatant Commands], the thing I noticed was Colonels were prepared to basically go toe-to-toe with each other. We drink beer in the evenings, but we went toe-toe with each other during the day. And there was a lot more entrepreneurial spirit in the room. When you put the Generals in the room, what I noticed was they were much more collegial. Much more cooperative with each other much, much less willing to tip the boat. What do you think?

I agree with your assessment. I think there are times when GOs [General Officers] call each other and agree to disagree. I think that's... I don't really know why. I guess it's a willingness to decide, “Am I going to fall on my sword about this one or not. And very, very, very rarely have I found a GO who was so concerned about something that they were going to jump on a sword about it. ... Most of the time it was like you said. It was an O-6 that was stamping their feet and demanding something be changed. And then really... once you get out of your cocoon of specificity and look up... look around... [the Generals say] it's probably not worth fighting over. (Army 5)

Interviewer - I had someone tell me years ago that he thought it was because for Colonels you can find a 60/40 discussion. But for General officers, everything is a 51/49 percent discussion. Everything has both.... there's always a lot of variables at that level. And so, they're no longer willing to really go toe-to-toe because they realize the other guy's in the same boat. It's a 49/51 discussion.

Yeah, I completely agree with that. (Army 5)

Another potential “why” was identified by an Army senior officer:

There is Joint PME for General officers. There's Capstone, there's Pinnacle. Those are all Joint courses ... but none of them talk about serving...They don't talk about.... developing a culture of flexibility, of innovation. That's not in there. (Army 1)

And a Navy senior officer, admired by multiple interviewees, explained why the trend was important in his opinion:

And here's why [cooperation] matters. I gotta tell you, I was greater at C4...I was good at C4... effective at C4 because I knew 50 or 60 Army and Air Force General officers as General officers from C3... maybe 100. So that I could reach out when they're now at the Joint Staff, or the other [Combatant Commands]. "Hey, remember I didn't screw you for three years when I was at C3. I'm not going to screw you while I'm here at C4. We can make this deal. (Navy 3)

Finding # 3 – One & two-star Generals and Admirals bias towards the cooperative archetype of social capital.

This finding contradicts Swart, et.al's (2019) assertion that senior leaders participate in more exploratory activities than less senior managers and that they become more ambidextrous as they rise in the organization. But at the macro level, this discovery is largely consistent with Perretti and Negro's (2006) findings that middle-layer actors (in this case, those between the 3-4 stars and the Action Officers) are less exploratory and more exploitative. This study will examine these conflicting findings in greater depth in Chapter 7 (Organizational Capital).

Many of the TMT members in this study identified this cooperative trend and the associated risks to organizational ambidexterity. As one General Officer put it:

I think one of the problems is that [TMTs] do clan. And we do tend to become a bit clone-like. Not necessarily clones of each other. But there's a nature, there's a style. Does that, therefore, lead to some degree of unconscious groupthink? Yes, it absolutely does and the consequence of that is – Where's the challenge function? Where's the disruptive thinker? How late in the day can you introduce the disruptive thinker? ... And I think, it does require...You've either got to be very uncaring as to what your personal profile is. "I'm just a disruptive thinker, I don't care if it means everybody hates me and I don't progress my career"...or you've got to be incredibly competent as a disruptive thinker. (UK Officer 2)

This exchange led to an interesting conversation, and then several more, about the idea of a “disruptor” to introduce new ideas and foster new connections. It appears that “disruptors,” also known as “mavericks,” are a regular part of Combatant Command informal structures. Multiple interviewees discussed their roles, their performance, and where within the structure they best fit.

6.9 Mavericks

Movies and books often depict the maverick as the guy/gal within a rigid military bureaucracy that gets things done because the rest of the unit is too slow or too short-sighted. In reality, military leaders see both the good and the bad in them. Figures such as General Douglas MacArthur and General George Patton are revered as mavericks, but the fact that they had to be reined in (i.e., relieved of command) on occasion is not forgotten. “Initiative” is a military leadership principle, but so is “Discipline.” In Combatant Commands, mavericks are often seen as a way to ensure the soup is occasionally stirred, or the salad is occasionally tossed, depending on how joint the leader believes the command to be. As one Army senior officer put it:

So, there's this peril amongst senior people. It's the danger of the like-minded inner circle. So, if you surround yourself by like-minded people, you'll get a lot done. But the question will always be, are you getting the right stuff done. ... So, a leader's drive is important. It's very important to get to getting something done in a large organization. Because he has...there's resistance in large organizations. They're people that inhibit progress. ...been there forever and they are very comfortable in their own space. And there's others...inhibitors to change. So, drive is important in the leader. But you've got to balance your drive, with surrounding yourself with diversity of thought. ... If you're a powerfully driven leader and you don't have diversity of thought around you, you're going to solve a problem. The chances you're solving the wrong problem is pretty high. ...

My style was to take briefs. Sure, we all take briefs. But to really get into an issue, I preferred to sit around the small table with five people and arm wrestle over it. And it often wasn't the one or two-star a lot of times. It was a Major or Lieutenant Colonel—but they were the right person. Some of those young people in J5 [Plans Directorate] would come in and tell you...if your underwear stunk, they would tell you. Sometimes that immediate inner circle [of general officers], they're not as willing to do that. ... I went to people that were smart, and I could trust to tell me what was straight up. (Army 1)

This officer went on to describe how he worked to pull in mavericks who would help him see multiple sides of an issue and help him explore and innovate. Another Army officer described how senior leaders in a Combatant Command protected a maverick so that they could bring up new ideas:

So, that one ...Colonel over there in the J5. Some people say he's a maverick and shit. He had a SASS [Air Force Planning School] background, he's pretty well connected. He was almost one of those guys, within reason, one of those guys in the Air Force who is a jet pilot who might be wearing an ascot. Like he's kind of like out there. But in the good way. Because he would bring in these thoughts and these ideas. You're like, "Wow, that guy really thinks about it." But I think with the [Deputy Commander], ... and then the J5 [Plans Director] ...I don't say they encouraged it, but they kind of ... they provided top cover for him. Because the mavericks can get crushed in a heartbeat. The content is good, the presentation is the thing. There were other people that were a little eccentric that did well. But for him, he was encouraged. Others, it wasn't punished either. (Army 4)

The balance needed by mavericks, between initiative and discipline, was best described by a self-proclaimed Air Force maverick:

[The TMT overall] would like the cooperative approach. ... With all that's going on, they're very, and rightly so, they're very nervous about what is the command's people telling [outsiders.] So, entrepreneurs... have informal networks. I mean, this is how I live my daily life. It's an informal network thing. ... if you're going to be an entrepreneur... if you're going to be a maverick and that kind of person, you better have the bigger picture knowledge when you're doing it. To know what I can and can't share. How do I need to phrase what I'm giving you? Etcetera. Or you're going to get a whole lot of people in trouble. ...But your O-6s, and your one-stars, they absolutely need to be comfortable working in the entrepreneurial space. For the betterment of the command mission. (Air Force 3)

Although he doesn't use the term "maverick", their value to organizations is well explained by Burt (2004) when he examines the people who connect ideas across organizational structural holes.

"People connected across groups are more familiar with alternative ways of thinking and behaving, which gives them more options to select from and synthesize. New ideas emerge from selection and synthesis across the structural holes between groups." (Burt, 2004, p. 349)

He further explains how these "brokers" can create value for the organization at four levels. At the lowest level, they can raise awareness across parts of the

organization. Next, they can transfer best practices. Third, they can make connections between ideas that neither group could see on its own. And lastly, they can combine elements from each group to synthesize new ideas that go beyond either group. Mavericks/brokers can increase an organization's overall social capital by building bonds, increasing affect across group gaps, and improving the organization's overall cognition (Burt, 2004, p.355).

Of course, not everyone likes mavericks. As an Air Force officer described them, I kind of feel that C2 was very resistant to new ideas. And I would attribute that to a very close-knit team that worked a lot of hours together and then some new guy walks in and goes, "Hey, why don't we try this?" It's, "No, I don't think so. We're not going to do that. Thank you very much for that. Go sit in the corner until you figure out what's actually going on." So, that was my perception. I don't know that that actually happened, but that's the way I felt at C2. (Air Force 2)

C2's dislike of mavericks also appeared in several other interviews. However, each interviewee also recognized the need for connections across the organization and the innovation they enable. They also did not see C2 as non-innovative. Further digging revealed that C2 relied more heavily on another tool often used in Combatant Commands to make connections and foster innovation: cross-functional teams. C2 used them to generate new ideas and view things from new perspectives. Mavericks created excessive turmoil, but cross-functional teams were a means of bringing a group together to play similar roles. These cross-functional teams have both social capital implications and organizational capital implications. As such, they will be discussed in both this chapter and Chapter 7 (Organizational Capital).

6.10 Cross-Functional Teams

Cross-Functional Teams (CFTs) within the military are a standard practice. They are discussed in joint doctrinal manuals and taught in JPME schools. They have a formal organizational component and a significant social capital component. Realizing the social capital aspects of them, military doctrinal publications discuss the structure, affect, and cognitive aspects of these teams (Joint Chiefs of Staff, 2020). Cross-functional teams broaden the network when necessary and help form new mental maps within the organization. As one senior Army Officer stated:

We had very rigid, Napoleonic [vertically stove piped] staff structures. Very rigid. Very permanent. And the flexibility came with [Cross Functional Teams] and things like that. The flexibility came from...the Combatant Commands I'm familiar with were C5, C3 and C2. (Army 1)

Cross-functional teams are brought together to look at a specific risk, problem, or opportunity. Their structure is governed by: 1) what they are tasked to think about, and 2) how significant the issue is deemed...and by whom. Some CFT leaders cast a wide net to gather as much input as possible, while others bring in only those who can help them reach a solution quickly. This decision is based on time available, complexity of the issues, and the generalists/specialist characteristics of the CFT leader. They are seen as a significant way to better understand a problem (Joint Chiefs of Staff, 2020).

The significance of the issue also determines the team. Cross-functional teams within Combatant Commands have various names. Those names indicate the degree of formality, who must join, and who may join. "Working Groups" are largely informal. There is little compulsion for anyone to attend. Members attend either out of a shared belief that the issue is significant or a desire to be team players. Social capital (e.g., trust, shared cognition) plays a greater role than organizational capital, as the command does not require directorates to provide personnel. "Tiger Teams" are more formal, but since they usually focus on a narrow issue within a Directorate, cross-directorate members are rare. The requirement to attend is low, so competing priorities can easily divert people. "Operational Planning Teams (OPTs) and "Joint Planning Teams" (JPTs), on the other hand, are formal, and attendance is mandatory. They typically have mandates from senior leaders and regular touchpoints with those leaders to ensure they remain on track (e.g., securing necessary resources and making progress). OPTs are typically more short-term and operationally focused, whereas JPTs are traditionally more strategic and long-term focused.

In most cases, the CFT's role is to look both broadly and deeply to find solutions to problems in which the vertical, hierarchical structure fails. As a senior planner explained:

[The] great thing about [Operational Planning Teams] OPTs is you can have one on anything. I can grab whatever I gotta grab. Find who you want to find. Pick a topic. So, I think they were very opportunistic, if you will. "So, hey we're gonna have an OPT on topic x." And nobody knows jack about topic x. So, you got to

bring all these people to find the right expertise and talk about topic x. And some of these topics we talked about at OPTs were, I mean, off the wall. Some were like, "What was that?" (Army 2)

And the thing about that is that it's 'matrix management.' None of those people in the OPT work for you, but they're all working for the same end state. And then you brief this topic back at the leadership and all of the sudden it gains legs, and starts going. So, I think this very opportunistic on the OPTs to get after problem sets. I think that's the best thing going - is the OPT...and JPT. (Army 2)

And their value to ambidexterity was addressed by a Marine Colonel responsible for long-range planning:

I think that Ad hoc planning groups were the best location at which we took specialist knowledge and turned it into general advice to senior leaders to make decisions. And I think that's what's supposed to happen. I don't think we were inventing new shit, new stuff. I think that's kind of the way it's supposed to work. I would prefer if that happened all the time, day-to-day. Not just OPTs and JPGs. But I don't think it did. I think you kept very, very specialized in the day-to-day and we only did the synthesis when you were doing: either at actual crisis or a planned "Let's look at this problem for an OPLAN [Operational War Plan] ... I think that [OPTs] was the only place that we actually synthesized specialization into generalization. And other than that it didn't really...I don't think it really mixed. (Marine 1)

Finding #4 – Combatant Commands' social capital encompasses both informal and formal methods of encouraging TMTs to be more innovative and entrepreneurial.

6.11 Turnover

Cross-Functional Teams assist Combatant Commands in continually reconfiguring social structures to build broader networks with increased trust among members of the organization's staff. They also force service members to re-examine their mental maps and examine new ideas. Another way Combatant Commands bring in new ideas is through staff turnover. Combatant Command TMT's turnover approximately one-third of their personnel every year. As James March noted, personnel turnover can both enhance and hinder group learning (1991). As new members enter the command's social networks, they bring new ideas that can invigorate change, but they can also inhibit the ability of older ideas to solidify. This

study will revisit the impacts of this turnover in Chapter 7 (Organizational Capital), which examines the personnel systems within the Department of Defense.

6.12 Findings

The social compositions within Combatant Command top management teams do not fit either the entrepreneurial or the cooperative archetypes that Kang and Snell originally envisioned (2007). While turnover and cross-functional teams keep the social networks somewhat loosely tied, joint doctrine and education bring TMT members' cognitive maps closer together. A shared mission and time spent together in schools foster common values and norms, thereby building significant trust among TMT members. However, the strength of service bonds and the cognitive assumptions that accompany them still inhibit a truly "clannish" social makeup in this community of practice. While generals and admirals within the TMTs have become more cooperative as their tenure has increased, protected mavericks keep an entrepreneurial streak alive within the TMT.

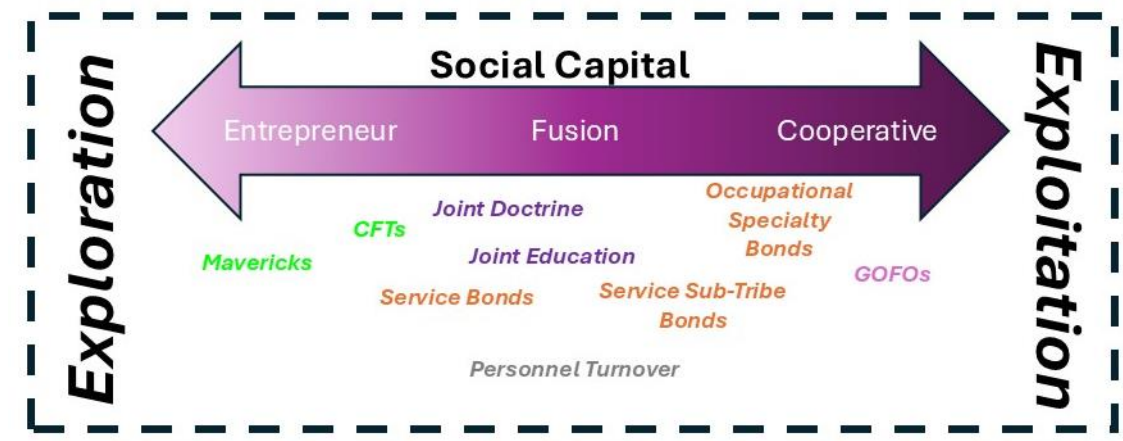


Figure H – Influences on Combatant Command Social Capital along a spectrum

Finding #5: Combatant Commands' social capital appears to be a "Fusion" ecosystem that may enable this community of practice to be both exploratory and exploitative simultaneously. Combatant Command social capital does not impede the organization's ability to achieve organizational ambidexterity.

As shown in Figure H, the drivers that push groups toward more exploratory or exploitative behavior are evenly distributed across the spectrum. Kang, Snell, and Swart proposed that a cooperative social composition might support both exploration and exploitation (2012). This study does not contradict that possibility; rather, it finds that this community has struck a middle ground between the two archetypes, occupying a balanced position along the spectrum of social capital. This “Fusion” archetype involves a level of trust among members that enables them to build broad, semi-tight bonds around a common language and symbols that all use, but that not all fully endorse. The bonds of “brotherhood/sisterhood” that militaries are known for engender close relations and implied trust that joint doctrine and education reinforce. But service bonds and personnel turnover still cause disagreements that prevent the TMT from becoming truly homogeneous.

Oehmichen, et.al. (2017) warned that too much homogeneity in TMTs is harmful. Low and medium heterogeneity within TMTs negatively impacts behavioral integration and organizational ambidexterity because TMT members believe they share mental models even when, in reality, they do not. This prevents TMT members from discussing potential issues, which can lead to misunderstandings and conflicts. High-heterogeneity groups converse more frequently and identify differences before they escalate into misunderstandings, thereby increasing their level of behavioral integration. This is important because Lubatki, et.al. (2006) discovered that when behavioral integration is low, TMT members retreat to their fiefdoms and focus on exploitation within them. High heterogeneity, combined with “connectedness” (Heavey and Simsek, 2017; Li, 2013; Carmeli and Halevi, 2009) enable TMTs to see the full picture and increases their propensity to explore. This study’s findings support those insights. Joint education and doctrine appear to increase trust and connectedness but do not yet reduce heterogeneity to the point of discouraging exploration. Future research should conduct a longitudinal study of the development of “jointness” to determine whether behavioral integration in a diverse group is at risk of becoming groupthink within a homogeneous group. This would be a useful study, as the current “Fusion” ecosystem is more the result of chance than of design.

Finding # 6 – The level of social integration (aka jointness) desired in a Combatant Command for organizational ambidexterity is not clearly defined within the community of practice, and the majority of Combatant Commands do not track how behaviorally integrated their TMTs are.

6.13 Conclusion

While the question of how “purple” (i.e., joint) the people within Combatant Commands need to be remains intensely debated, the work over the last several decades by the joint community of practice has created a social environment that allows for organizational ambidexterity. The TMT is neither a fully homogenized “soup,” nor a completely heterogeneous set of “vegetables on a plate.” As a well-mixed “salad” the components of each military service are still visible and alive, but they have been configured in ways that promote exploiting current capabilities and opportunities while also enabling exploration of new possibilities. The social capital of Combatant Command TMT is a “fusion” that allows for organizational ambidexterity. This “fusion” configuration does not discredit Kang and Snell’s theories on how to adjust organizational models to increase ambidexterity. Still, it may extend the number of models capable of altering the organization’s ambidexterity configurations. With that in mind, in the next chapter we will see how this social capital is boosted, or restrained, by the organizational capital within which it resides in Combatant Commands.

Chapter 7 – Organizational Capital – Trust, Efficiency, Mavericks, and Obstacles

7.0 Introduction

Combatant Commands experience significant personnel turnover, resulting in a constant flux of human and social capital. Since military human capital is only borrowed in Combatant Commands, and social capital serves as an intermediary, organizational capital is the knowledge, skills, and information that the Combatant Command can rely on consistently. It is what remains behind when the command's officers go home at night or return to their service (Youndt, Subramaniam and Snell, 2004). Organizational capital consists of the databases, manuals, and doctrine that serve as the organization's "memory storage," and the structures, systems, and processes that enable structured, recurrent practices which tap into that memory to accomplish tasks (Youndt and Snell, 2020; Morris and Snell, 2011; Kang and Snell, 2009; Subramaniam and Youndt, 2005; Youndt, Subramaniam and Snell, 2004). Having discussed doctrine in a previous chapter and finding that the databases and manuals of Combatant Commands are too varied to be helpful to this study, this chapter will focus on how Combatant Commands use their organizational "memory" to exploit or explore the situations they face. It will delve into the structures, systems, and processes of organizational capital to better understand how various intellectual capital configurations within top management teams impact organizational ambidexterity.

The military, through the work of Fredrick the Great in the 1700s, began the quest to mechanize organizations in order to make them more predictable and efficient (Morgan, 1998). This quest was articulated in a set of comprehensive theories in the early twentieth century by Max Weber and others, and their views shaped much of organizational and management thinking until the second half of the twentieth century. Around that time, issues with mechanization (Crozier, 1964; Burns and Stalker, 1961; Merton, 1940) led theorists to view biology and organisms as another means of understanding organizations. Organic groups may adapt more quickly, fit their environment more effectively, and use their human capital more creatively (Morgan,

1998). Since then, theorists and researchers have debated and studied the advantages and disadvantages of both systems.

This study will begin by drawing on Burns and Stalker's 1961 theory, also used in Kang and Snell's ambidexterity framework, which posits that these are two archetypal organizational models. Mechanistic structures focus on efficiency through hierarchy, standardisation, and centralization. They often struggle with innovation because risks are avoided. Organic structures promote flexibility and innovation through decentralization, autonomy, and guidelines versus rules. Organic structures embrace risk more easily. Risk acceptance will be a key theme in this chapter, as it serves as a prime indicator of which of these two archetypes an organization tends toward.

In describing the components of organizational capital, various authors use different terminology. 'Structures,' 'Systems,' and 'Processes' appear repeatedly, but this study found no consensus on a breakdown of these components or how they interconnect. This study will therefore establish the following subcomponents for its use. Organizational capital structures refer to the vertical and horizontal teams established within the command. Systems encompass the tools, personnel, and cultures that exist to control the headquarters, while processes refer to the sequences and routines used to arrive at decisions within the top management team.

This chapter will explore two structures, vertical "Joint Directorates" and horizontal cross-functional teams. It will then examine a planning process embedded within a larger information management process known as "the battle rhythm." Lastly, it will investigate two key tools and one important personnel category that impact the command's control systems. Ultimately, it will explain why Combatant Commands trend heavily toward the "Mechanistic" archetype identified by Burns and Stalker, and how this trend significantly inhibits exploration and innovation. The apparatus that enhance exploitation and efficiency in Combatant Commands overshadow, overload, or block their exploration instruments. This meaningfully affects Combatant Commands' abilities to be ambidextrous.

7.1 Structure – Joint Directorates

As mentioned in Chapter 3, most military organizations are built on the “Napoleonic model,” a Weberian bureaucratic scheme that groups staff into subunits, each focused on a specific function. This “Napoleonic” vertical structure is evident in the purple vertical columns below in Figure I, which is drawn from the joint doctrine on Joint Headquarters. The “one” is always ‘Personnel,’ the “two” is always “Intelligence,” and so forth. Letters precede the number to designate the type of organization: N-1 for the Navy, A-1 for the Air Force. Joint organizations, including Combatant Commands, use “J.” Within all Combatant Commands, there is a Commander at the top, a Deputy Commander (or two), and a Chief of Staff above the staff sections. Below the Chief of Staff lie between 7-10 functions. Each function is designated a “Directorate.” The J-3 Operations Directorate runs operations. Logistics is under the purview of the J-4 Logistics Directorate. Most of the directorates are led by a two-star general or admiral. Below them are various “Deputy” one-star generals/admirals who oversee parts of the Directorates’ portfolio. Below them are “Divisions” led by Colonels.

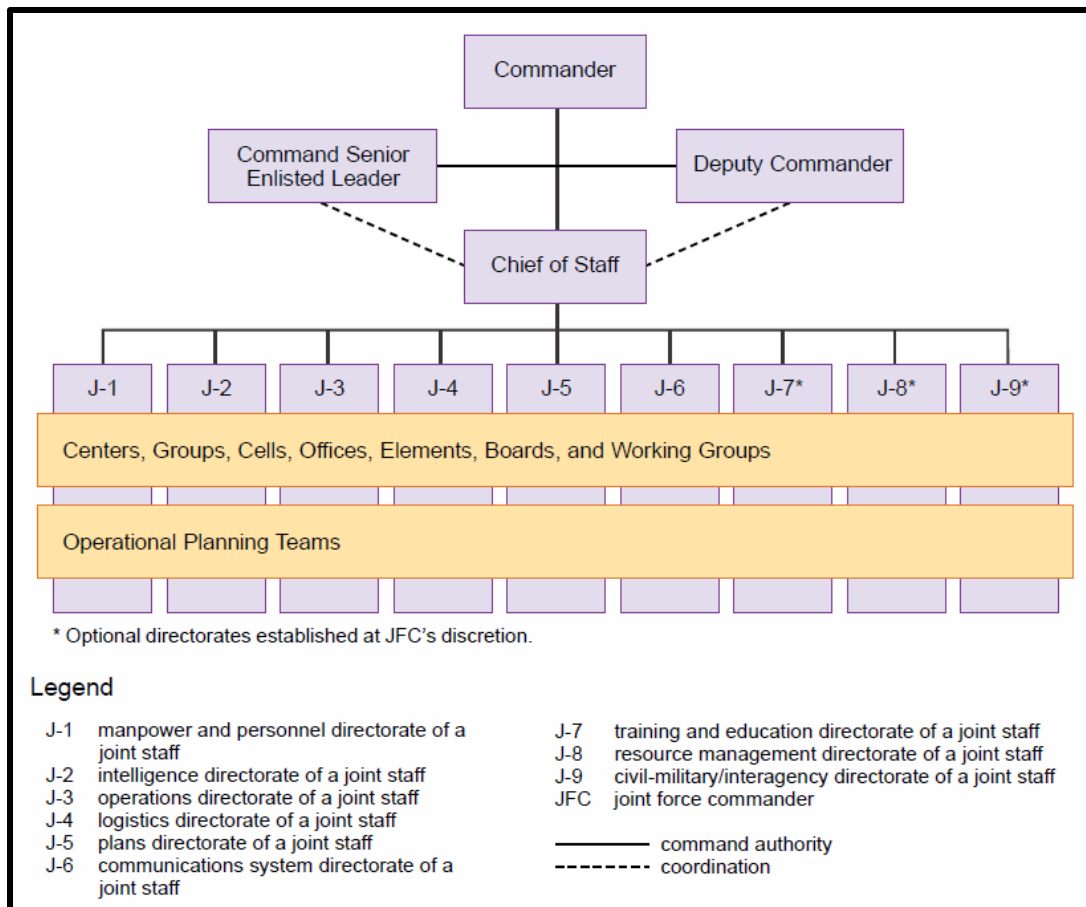


Figure I – Combatant Command organizational Structure
(Joint Chiefs of Staff, 2024, p.II–19)

This graphic is explained with the following joint doctrine (i.e., the manual for how the organization is structured):

(1) **J-Code Organization.** The traditional J-code organization continues to be the preferred basic staff structure for a [Joint Force Headquarters] ... These primary staff directorates provide staff supervision of related processes, activities, and capabilities associated with the joint functions. All directorates have responsibilities that ensure the integration of the joint force's capabilities and operations across the functions. ... The vertical J-code structure promotes unity of command, speeds hierarchical information flow, and ensures the directorate principals remain accountable through the [Chief of Staff] to the commander for the major functions of the HQ. ... The structure provides recognizable locations within the staff where functional information exchanges occur across the [Combattant Command] staff and with components, supporting commands, and interorganizational participants. The J-code structure allows different HQs, to include multinational HQs, to speak a common language, facilitate the rapid integration of staff augmentees, and enhance communication with outside mission partners. As a basic organizing model, the J-code structure provides a common reference point for

broad, functional expertise; staff oversight; and accountability (e.g., logistics and intelligence). **The drawback of a pure J-code structure is the tendency for information to get stove-piped within the directorates.** This challenge is mitigated by ... cross-functional working groups (WGs), operational planning teams (OPTs), and cross-staff organizations.

A managed battle rhythm reflects the [Headquarters] cross-functional coordination and supports the commander's decision making. (Joint Chiefs of Staff, 2024, p.II–13) Bolding by study author.

Napoleon, who is credited with overseeing this model, was not known for being meek (Keegan, 1994). Bold and decisive, he repeatedly innovated to defeat military organizations bigger, better, and faster than his own. His staff enabled him. This staff structuring model is not inherently biased toward the slow, bureaucratic monster that the media routinely portrays the DoD to be. It has the potential to be used either organically or mechanistically. None of the interviewees saw “organic” in the Joint Directorates, however. Many saw hardened stovepipes. One Marine exasperatingly stated:

How do you put all the pieces together in C3? I would tell you, we don't. I think a lot of people join our Five [Plans Directorate], or our Three [Operations Directorate] and never talk to anybody in the Four [Logistics Directorate] or the One [Personnel Directorate]. The Colonels do, I guess. But I think there's a lot of...the whole “Hey, is the command a team?” That's an interesting question and I think in C3 the answer is ‘No.’... But the stove pipes...the J-Dir [Joint Directorate] stove pipes is an interesting thing. I don't know if that's unique to us, but I found that very interesting. ... [And] there were times when you weren't entirely sure that everyone in every directorate even knew that there was a crisis. I'd ask, “Are you tracking that there's this thing going on.” And you'd hear “Oh, you know, I'm not. I'm doing my TPS reports or I'm doing my freaking whatever.” And you'd be “Dude, we're all over here working till nine o'clock every night.” And he'd say “I'm not. I've nothing to do with that.” There were people that just didn't really get it. They were very isolated from the critical functions...and they didn't care. (Marine 1)

Since the directorates are often located in different physical areas and operate differently (in terms of functions, time horizons, etc.), informal interaction among TMT members is not typically fostered on a day-to-day basis. This mentality of focusing on the local hierarchical group versus the larger command-wide group was echoed by a Navy Captain who had served in two of the priority Combatant Commands:

I would say across the J-Dirs [Joint Directorates] there was less a sense of just getting together and working through things. Internal to my directorate – Yeah [there was entrepreneurial spirit] ... I didn't see that necessarily [across the

command], and then that might have been a fault of my own. But it wasn't like I was going over to the Three [Operations Directorate] and just snuggling up with those guys and trying to say, "Hey how can I do things better for you?" Shame on me, I probably should now that I hear my own words coming out of my mouth, but I didn't. I was kind of locked into my own little world trying to make sure I understood what I was doing to make things better in the Four [Logistics Directorate]. (Navy 1)

Personnel in each Joint Directorate can easily remain busy within their respective functions and find themselves locked into their own worlds. As both Merton (1940) and Selznick (1943) discuss, these vertical subgroups can lead to tunnel vision (i.e., efficient specialization), inflexibility, resistance to change, and risk avoidance.

Part of the reason Directorates remain in their silos is the number of layers information must pass through before a final decision is reached. A planner at a Combatant Command must brief 16 levels (1-2 before reaching the TMT, 6-7 within the TMT, and 9-10 above the Combatant Command TMT), at a minimum, before a plan is considered approved for use by DoD.

To add to the challenge, each layer has its own distinct agendas, concerns, and risk tolerances. Perretti and Negro (2006) discovered that within three-level organizations, the first level and the third level are more explorative, more risk accepting, and more flexible/organic in their thinking. The middle layer is more risk-averse and becomes focused on exploitation rather than exploration. They attributed this to the social status and the social risks present at each layer. Combatant Commands have three mezzo layers and three micro layers within the middle mezzo layer. At the mezzo level, Combatant Commands have Action Officers, lower-level TMT members (Col, 1-star, 2-star), and Upper-level TMT members (3- and 4-star). Within the middle level, which is the focus of this study, there are Colonels/Captains at the bottom, 1-stars in the middle, and 2-stars at the top.

At the mezzo level, Action Officers are often exploratory and risk-accepting. The middle layer (the lower half of the TMT), consistent with Perretti and Negro's findings, is more risk-averse, according to the data in this study. Senior leaders received mixed reviews: some perceived them as risk-averse, whereas others viewed them as more risk-tolerant.

At the middle micro-level, Colonels/Captains are usually more risk-tolerant within the lower half of the TMT. They have either reached their terminal rank or have already checked all the necessary boxes to be looked at for promotion. There is low social risk at this level to exploring. However, one-stars are new to the General/Flag Officer ranks and are figuring out the ins/outs of this new level of military structure. Their social risk is higher than that of Colonels, as they are being evaluated for their worth to the General Officer community. They tend to focus on exploiting rather than exploring. Two-star officers have mostly completed this vetting process and are more comfortable in the General Officer/Flag Officer ranks. They are more comfortable with their social status and are willing to take some new risks. A UK Brigadier observing this trend observed:

[The] one-star level in C2 was interesting. It seemed to me that the bird Colonels did the work with their teams, and the two-stars made the recommendations. The one-stars they kind of checked the homework. But...they're baby generals, they're learning a new trade. So that might be fair enough. But it's an interesting idea that at one-star you're actually not that empowered...unless I missed something. I felt, you know, it was the bird Colonels and the two stars that ran that show, and one stars were kind of along for a ride....AA2 for sure looked to the Colonels...with the weather eye to see if the relevant two-star was twitching or not...or on the assumption that the two-star had endorsed what the bird Colonels had done. (UK 1)

It was also observed that each higher level within the TMT appears busier than the previous level. Less time is spent thinking about problems, and more time is spent looking for holes in potential solutions. Less seeking opportunities and more following rules, reducing risks, and seeking efficiencies (Merton, 1940). As one Army senior planner put it:

I don't think that general officers these days give as much guidance as they do 'correcting papers.' So, if you don't have a brief, there's no decision. You know, I have to have a piece of paper, a PowerPoint slide, to get you to make a decision. I got to bring it to you and I gotta throw it up there. You know how many General officers close the door? Have time on the calendar for an hour to think through the problems they're facing, so they come up with their own ideas. When was the last time you had a senior officer pull out a piece of paper and scribble something down, and do a diagram and say, "Hey, here's what I'm thinking, I'm thinking this kind of thing...with concept." I've not seen that sort of thing in years. (Army 2)

Finding # 1 – The considerably stove-piped vertical structures of Joint Directorates discernibly trend the Commands' TMTs toward the mechanical archetype. Their hierarchical structure aims to reduce risk as ideas flow upward

and, in most cases, efficiency takes precedence over exploration at the senior Joint Directorate level.

This finding echoes previous studies of highly hierarchical organizations (Yang, Secchi and Homberg, 2022; Youndt and Snell, 2020; Kang and Snell, 2009; March, 1991). Interestingly, though, these vertical structures may not completely crowd out exploration. Several studies have indicated that other factors may outweigh the impact of vertical structures to increase explorative tendencies within the organization (Yang, Secchi and Homberg, 2022; Turner, Maylor and Swart, 2015; Kang, Snell and Swart, 2012; Youndt, Subramaniam and Snell, 2004).

Speaking about this idea with a Marine Colonel responsible for coordinating across the Joint Directorates to build Combatant Command level decisions, the Colonel stated:

...there are a lot of lanes.... Here's the J3. here's the J5, here's the J4, here's the J6, here's J2. This is my lane. And I thought that it was hard...it was just hard to break down some of the walls...and close some of the seams and some of the gaps. I think there are some very bright, competent, experienced individuals. General officer, Flag Officer. I mean, I can't think of one General or Admiral that I would look at and go, "Why was that person here?" (Marine 4)

In an attempt to break down walls, these "competent, experienced individuals" build horizontal structures intended to mitigate the natural drive for efficiency and to introduce greater flexibility, interaction, and exploration into the Command.

7.2 Structure – Cross-Functional Teams

Recognizing the potential for stovepipes within the Napoleonic staff structure, the military regularly incorporates cross-functional teams to examine problems, identify opportunities, and develop solutions. As discussed in Chapter 6 (Social Capital), these teams take on different names based on the task, who's leading them, and how official the staff views them. But in all their forms, it is a regular part of Combatant Command life. Leaders see the need to get outside of the vertical structure imposed by Directorates, and as one Army senior officer put it:

[Combatant Commands are] very rigid, Napoleonic staff structures. Very rigid. Very permanent. And the flexibility came with OPTs [Operational Planning

Teams]. [In my first Combatant Command,] C2. Very flexible, very rapid OPTs every day. C3 was too in some places, depends on who was running the OPT. If it was a J5 [Plans Directorate] OPT, or a J35 [Short Term Plans Division within the Operations Directorate] OPT, typically very well run. (Army 1)

An Air Force officer explained how one Combatant Command Commander used them to ensure his priorities weren't watered down in the Joint Directorates stated:

[The Commander said,] "I got six priorities. [The Joint Directorates] will take care of the budget and whatever else. But there's six things I really want to get done and that's what I'm going to focus on." And so, he pulled these O-6s and they did these OPTs [Operational Planning Teams]. And that's how he made progress on his priorities. So, I think that's probably a good model. If there's something like super important, and the bureaucracy's not super responsive...you've got to be able to read the organization, you have to be able to do something different. And I thought that the OPT approach, for C9, seemed to work well. (Air Force 1)

But they are also viewed with concern. As another officer put it,

I think [Combatant Commands] try and maintain probably the right degree of flexibility. But I also think there's a need...I won't say to lock things in, but there's a need for some standardization of how you're going to do business. Especially if it's...a crisis. It's impacted...and everybody from the President on down wants solutions...you need to have some standard way to integrate...with the interagency. You can't relearn that every time. (Marine 2)

Joint doctrine views cross-functional teams as spanning all vertical Joint Directorates, as indicated by the orange rows that overlap the Joint Directorates in Figure I above. As the Joint Doctrine on Joint Headquarters states, "cross-functional organizations overlaid on the vertical J-code structure provide a powerful method of staff integration" (Joint Chiefs of Staff, 2024, p.II-18).

Provided with varying levels of autonomy, based on the official status of the cross-functional team within the Command, these teams can be quite entrepreneurial. Tasked with solving a problem, they are often given broad latitude in how to interpret and address it. Almost all interviewees who discussed these teams noted their ability to provide the Combatant Command with novel ideas that introduced an exploratory element into the Commands' TMTs.

However, Combatant Command cross-functional teams face four challenges: 1) the global nature of most problems significantly increases the stakeholders that must be satisfied, 2) CFT members remain heavily tied to their Joint Directorate, 3) novel ideas

still run into a bureaucratic ship that is hard to turn, and 4) daily crises often crowd out wider thinking.

Rarely does one Combatant Command completely own any problem, and therefore, achieving synchronized decisions can be extremely difficult. As an example, if Venezuela decides to hack into US voting machines via an IP address in France and crash the machines on election day, then the problem involves SOUTHCOM (Venezuela is its responsibility), CYBERCOM (cyber is its responsibility), NORTHCOM (protecting the homeland is its responsibility), EUCOM (coordination with France is its responsibility) and a host of other US organizations (e.g. Department of Homeland Security, NSA, etc.) The need to balance stakeholders' interests to reach decisions is considerable. It involves hundreds of Colonels/Captains, one-stars and two-stars, not to mention Action Officers and three- and four-stars. Combatant Commands CFTs can face the same challenges as the entrepreneurial social groups discussed in Chapter 6 (Social Capital), the organizational ties are too weak to exploit ideas that percolate within the group.

Additionally, CFT members report having two masters: the CFT leader and their Joint Director. The CFT leader is a temporary master, whereas the Joint Director is a more permanent master who ultimately provides their evaluations. As one UK Brigadier put it:

I guess what I'm saying is: I don't fundamentally have a problem with the way individuals or branches within a joint staff headquarters work or a joint headquarters work. And I think that the pillars themselves are generally pretty good. I think the weakness is across the pillars. Sometimes, as hard as you might try to get a planning group together, or a group together to wargame something, or to discuss something, or just to kick an idea around...and we saw this at C3 endlessly. If the guy from the [J]6 [Communications Directorate] isn't available, do you not do the meeting? Or do you just do without the six [Communications Directorate]? And it's, "Well, okay, so we build a plan now, but we haven't really got this tested with the six guys. Okay, so we don't even know if you can communicate?" "No." Okay then we don't really have a plan then and that's true for all the staff branches. So I think what this is actually leading me to observe is: staff pillars are built reasonably well, with the right sort of people generally. The problem comes... the cross pollination between the pillars can be flawed, just because you haven't got the right people in the orchestra. (UK 2)

Even when the group reaches a recommended solution, they often find an organizational ship that is hard to turn. As predicted by Crozier (1964), multiple interviewees discussed CFT decisions that were ignored, stalled out, or killed by the bureaucratic rigidity of Joint Directorates or senior leaders. In a not uncommon scenario described by a senior CFT leader:

I was put in charge of a Warfighting Command Headquarters OPT. For six months, we looked at the entire...here's what we need to do to make it a functional command. And the Commander said, "Let's do it. Let's do it, Let's do it." And the institutional inertia was...there's too many impediments. And so, it never happened and so we stayed the way we were. So that goes back to being Mechanistic. We're not moving. We're staying where we are. We're stagnant. (Army 2)

Lastly, as James March (1991) identified, the immediate can crowd out the important. As one officer explained:

... one of the problems...So there's a saying in school, in the UK about under-10 soccer. The ball can be moved from player to player, but actually, what you find in junior soccer is that all the players run to the ball. Actually, the trick in grown-up soccer is the ball moves to the player, not the player moves to the ball. One of the problems that military headquarters tend to have, at time of crisis, is everyone goes to the problem. And that can be really good, because it gives you the capacity to deal with the problem. But also it means you can often have too many cooks...fingers in the pie, or whatever, getting in the way, [or you can ignore other problems.] (UK 2)

Finding # 2 – TMT members believe cross-functional teams inject the flexibility and innovation into Combatant Commands that Joint Directorates struggle with. They are often risk-embracing, and effectiveness overrides efficiency in most cross-functional teams. However, their ability to make a significant difference is seriously questioned due to the organizational rigidity and inertia they encounter outside of the cross-functional team.

This is not a surprising finding, as previous studies have also found that organizations often prefer and reinforce existing knowledge over new knowledge (Yang, Secchi and Homberg, 2022; Subramaniam and Youndt, 2005; March, 1991; Crozier, 1964; Selznick, 1943; Merton, 1940). If a practice or rule has succeeded in the

past, it is given more weight in deliberations, even if it doesn't fit the current situation well. As March points out, "Compared to returns from exploitation, returns from exploration are systematically less certain, more remote in time, and organizationally more distant from the locus of action It is quite possible for competence in an inferior activity to become great enough to exclude superior activities with which an organization has little experience" (March, 1991, p.73). A good idea can get washed away in long-established habitual processes.

7.3 Process - Knowledge Flows - Joint Planning Process / Operational Design

Cross-functional teams and Joint Directorates primarily use three processes to flow information toward decisions. Operational Design and the Joint Planning Process drive the creation of potential solutions, and the "Battle Rhythm" determines how those solutions are communicated to decision-makers within the Command.

Each service has its own design and planning processes, but the ones used at Combatant Commands are "Operational Design per the JP-5" and the Joint Planning Process (called JPP). These processes are inextricably linked and considered part of the Joint Planning Cycle. Described and explained in JP-5 (Joint Publication 5-0: Joint Planning), this 358-page manual lays out two by-the-numbers processes. They can be adapted as needed (although they often aren't), and they serve as a guide for how Combatant Commands think through problems and create solutions.

Operational Design (seen as a precursor to the JPP) was created to help planners move beyond a step-by-step planning process that was often seen as efficient but not consistently effective at solving new problems. For example, the standard planning process applied a conventional mindset to insurgencies in Iraq and Afghanistan until someone broke out of the "Iron Cage" and thought innovatively. Jensen (2016) and Nagle (2010) detail how a few leaders, including Colonel H.R. McMaster, Lieutenant Colonel Nagle, General Mattis, and General Petraeus, reframed the Iraq problem and helped the U.S. military transition from efficient, but ineffective tactics to a more organic set of tactics that turned the tactical and operational (but maybe not the strategic) tide. Operational Design is intended to free the team to think more creatively, be more innovative, and be more entrepreneurial (Joint Chiefs of Staff,

2020). Sometimes it does so, but often the step-by-step mentality that team members grew up with takes over, and Operational Design is subverted to be more exploitative than exploratory.

The Joint Planning Process is designed to generate feasible solutions that can be implemented effectively and efficiently. It turns problems into potential “Courses of Action” that are vetted, coordinated, and tested. Ultimately, the Joint Planning Process produces orders for the headquarters to issue to its subordinate organizations.

As designed, both the Operational Design and the Joint Planning Processes are intended to adapt to the problem and the time available to planners and leaders. As a senior Army planner described both processes and the larger bureaucratic process wrapped around it:

I'm a fan of the [Joint Planning] process. I think it works. You can do it fast, you can do it quickly. You can do it adjunct. You can do it the long-drawn-out process, but it gets to the end state we're trying to achieve. Operational design – I'm a fan of operational design also. A formal process to get to the end state where I can give you some [potential Courses of Action] to think about. And you can compress that as much as you need to. So, **the [planning/design] process itself I think works...the decision making on the other hand... providing the command with the... it gets watered down over time.** So, the more people you brief the more it gets watered down. If you go in and brief the deputy, he says something and you change that. You go to the principal and he says something, so you change that. Then it goes to the Chief of Staff. He says something. To [the Deputy Commander]. By the time you get to the Commander...it's not flat. It's not a flat organization. I'll bet you Elon Musk's organization, the people go straight to the boss and say, “Hey Musk, here's what we're thinking.” I don't think you need to have this formal dialogue, where you have to brief five people before you get in to the boss. Bring it in. Throw it on the table. I think we worry too much about being a finalized solution before we just get it out there. Hey, let's get some guidance. (Army 2) Bolding by the study author.

In this officer's opinion, which is similar to that of many other interviewees, the planning and design processes bring a cross-functional team together to foster potentially innovative thinking. The problem arises when work done within the team transitions to the broader organization. In line with Crozier's 1943 study, Combatant Commands' larger processes “water down” the idea, morph it into a more bureaucratically acceptable form, and then potentially lose it within the organization's machinery.

7.4 Process - Knowledge Flows - Battle Rhythm

The US Military has given considerable thought to how information & knowledge flow within its organizations and across the entire enterprise. As one Marine Colonel responsible for information flow within two top management teams put it:

We've got to value 'information'...because we're a headquarters. ... We're not an infantry battalion anymore.... We're not digging the fighting positions, we're not calling aviation ... a headquarters manages information. ... So, the question that we need to ask ourselves is "How do we do that? How do we manage information to make sure that it's relevant? And timely? ... C26 and C3...in general...I think both the headquarters are challenged in Information Management / Knowledge Management. And I think it's something... I mean, there's doctrine on it. There's literature. We send folks to school on it. **But we haven't figured it out yet.** (Marine 4) Bolding by the study author.

A large part of Knowledge Flow Management within a Combatant Command is "The Battle Rhythm." As Joint Doctrine describes it:

A battle rhythm is a cycle of command and staff activities intended to synchronize current and future operations. The battle rhythm provides structure and sequencing of actions and events within the HQs regulated by the flow and sharing of information supporting all decision cycles. The logical arrangement of OPTs and other cross-functional organizations and factors within the HQ, such as the commanders' decision making, training, manpower, and experience, contribute to an effective and efficient organization. As a practical matter, the [Joint Force Headquarters] battle rhythm consists of a series of meetings, report requirements, and other activities. These activities may be daily, weekly, monthly, or quarterly requirements. Typically, the [Chief of Staff] manages the [headquarter's] battle rhythm. (Joint Chiefs of Staff, 2024, p.IV–17)

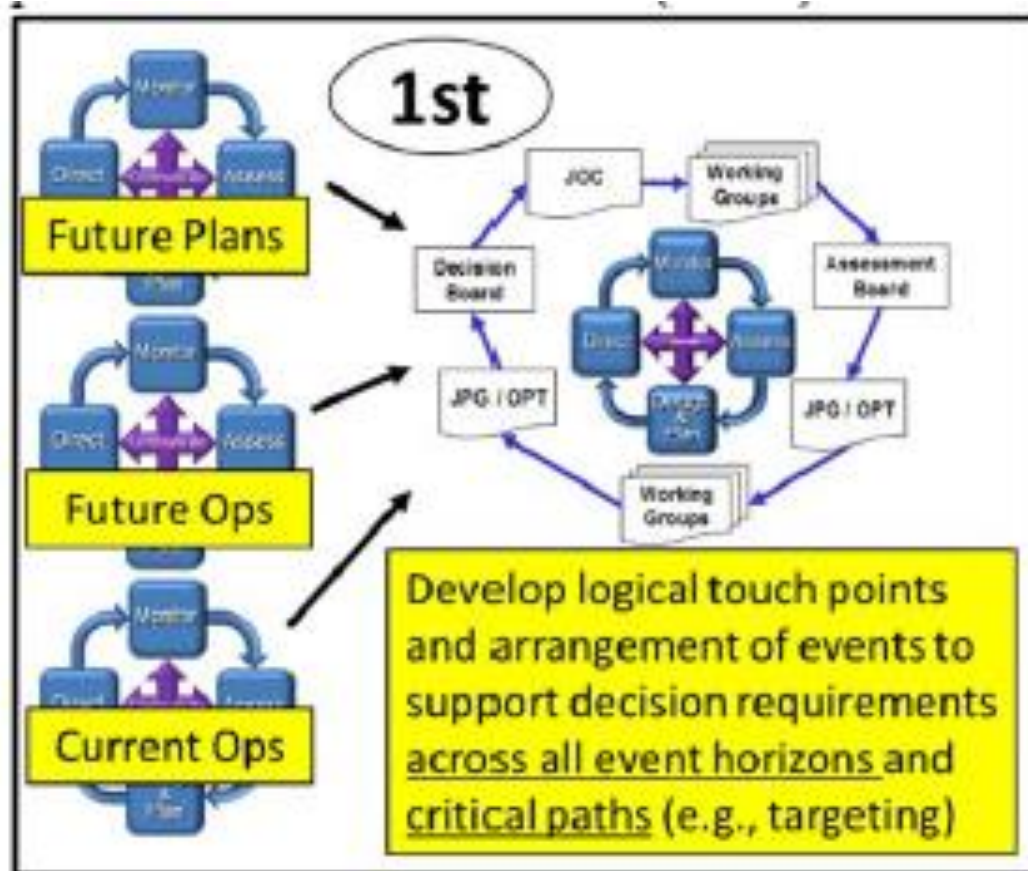


Figure J - Conceptual arrangement of Key events within a Headquarters
(Joint Chiefs of Staff (Deployable Training Team, J7), 2019)

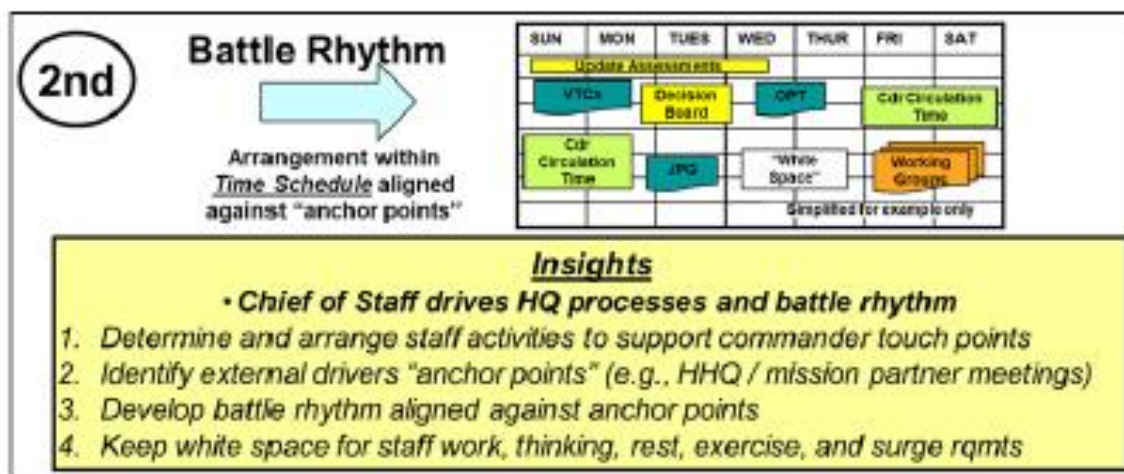


Figure K – Logical arrangement of Key events within a Headquarters' Staff Calendar.
(Joint Chiefs of Staff (Deployable Training Team, J7), 2019)

The Battle Rhythm is one of the most complex things a Combatant Command utilizes. The need to synchronize globally has driven the DoD to develop an elaborate, interwoven set of battle rhythms, along with multiple checks to ensure that nothing is missed and poor decisions are prevented (Joint Chiefs of Staff (Deployable Training Team, J7), 2019; Joint Chiefs of Staff, 2024). Battle Rhythms vary based on the commander's preferences, peacetime versus crisis, and other battle rhythms around them (e.g., those in Washington, DC). Everyone pays attention to them, and their adjustment is a constant topic of conversation. In one Combatant Command that saw several transitions (peace to conflict, large size to medium size, etc.) a long-time member of the staff described the importance of a "good" battle rhythm:

I think when I first got there, we couldn't have handled [the crises we face today]. We could have handled about half of one of those and it would have sort of shut down the command. And now we're juggling two or three things. Part of it is people just working harder, but I think part of it is also: more capable people, better systems, better processes, better battle rhythm, better strategic documents. I think part of it is just we got better.... I think it's mostly because we built a better Battle Rhythm. I think we built better processes. (Marine 1)

Given the number of decisions and actions that Combatant Commands coordinate, as discussed below, the organization seeks efficiency and risk reduction in the Battle Rhythm. Potential decisions undergo multiple steps before being presented for final decision-making, with the aim of refining solutions and eliminating errors. As one Marine put it:

C3 makes decisions through endless meetings. Endless [Task Management Tool] responses. Pre-briefs. Depending on the era one was there...the Stand Ups or the MUBs (Morning Update Briefs), or the... I don't even remember all the names of the different meetings, but various. From a Council of Colonels, up to the COS (Chief of Staff) meetings and then up to the Commander's meetings. Although Commander's meetings...decisions aren't made, because we pre-bake all that shit. So, the decisions are made via collaborative set pieces. (Marine 1)

The desire is to get everything "perfectly coordinated." To ensure everyone has vetted decisions and that no mistakes have been made. This drive to avoid errors can sometimes cause the system to operate slowly. One officer, who was charged with managing the flow of information, described a common challenge:

I'm looking at stuff 30 days late to C26. People just look at me. [The Chief of Staff] would say, "Well, that's normal. Because of all the gates it has to go through before it can actually go...because it's going to [Higher Headquarters]." ... If it's late, then in my opinion that information isn't timely and it's no longer needed, it becomes OBE [Overcome by Events]. (Marine 4)

"Fully coordinated" displaces the goal of effectiveness and induces rigidity into the bureaucracy. Similarly, Crozier discusses the "vicious cycle" that causes bureaucracies to tighten and increase the overall process to become more rigid, less flexible, and slower in responses (Crozier, 1964, pp.187–194).

At each "gate" described above, Combatant Command officers "brief" managers at successive levels of the hierarchy. As they progress up the chain of command, briefers are required to prepare more detailed presentations with longer, more formal scripts. They find they have less authority to deviate from the script as they climb the chain. They also find that they must rehearse more often, obtain feedback from multiple sources on "minutia" (how something is phrased), and produce more bureaucratic products to reinforce the brief. In the following quotation, a Marine officer explains the differences between briefings in his military service and at a Combatant Command. Both involve the same rank/level of officers, but the Combatant Command process is much more formal and controlled.

I think C26 and C3...both rigid compared to the Marine Corps. I'll give an example. I briefed the [Marine Requirements Oversight Council] a couple times...you find yourself standing up in front of ...a three-stars briefing. No script. Just a dialogue. Just a discussion. And everywhere that I went in Headquarters Marine Corps...it was true [decentralized] command at the joint level....

[But] C3 and C26 [are] script readers. Choreographed meetings. React mode almost on everything through the process. Folks telling me who I needed to have in the office...in the working group. Being told specifically what to have on slide one by.... Critiques...being told what to do down to the gnat's ass. ...because of the culture differences, you end up having folks that are fact checking everything...very concerned about.... Here's what I think. My impression on C26 is that you were briefing for your boss. But I think when I went to the [Marine meetings], my boss was letting me brief my beliefs...my thought on the subject that I was briefing.

So, the script and the rigidity of C26...and the thing they try to hide up behind is, "Well, the stuff you're putting together is going "across the river" [to the White House or Congress]." "Oh, you mean the same things that I put together that went across the river when I was at [Headquarters Marine Corps]? By the way, we answered to "Across the river" too.

I think it's because at that level, even though they think it's a different level than a service headquarters ... they're like, "Hey, I just saw on the paper that M6 is going to brief. Is somebody taking a look at what he's put together?" (Marine 4)

Finding #3 – While Combatant Commands have processes that can be adaptable and flexible, TMTs employ them in a highly structured manner, deepening the organization's mechanistic nature.

This finding reinforces Kang and Snells's (2009) assertion that error avoidance and mechanistically oriented organizations go hand in hand. It also supports Yang et al.'s (2022) finding that formalizing routines and processes reduces exploratory learning and organizational ambidexterity.

Adler and Borys (1996) dug deeper into formalization than Yang et.al (2022), however, and determined that formalization of workflows (e.g., Battle Rhythms) can also promote an organization becoming more organic. The traditional, formalized approach people think of is mechanical and "coercive," designed to keep employees in line and reduce risk. They pointed out, however, that a more organic "enabling" form of formalization could be created to support employees as they mastered their crafts. This "enabling" version could facilitate innovation. They expanded Burns and Stalker's model by examining the type and degree of formalization. This produced four categories. The enabling type of formalization could create an "organic" structure at a low degree of formalization and an "Enabling Bureaucracy" at a high degree. The coercive type could generate an "autocratic" structure with low formalization and a "mechanistic" structure under high formalization. This study's evidence suggests that organic and autocratic forms of bureaucracy are improbable within Combatant Commands. Its control systems, the subject of the next sections, will help determine which of the other two categories are most likely to be present in today's Combatant Commands.

7.5 Systems - Tools

Interconnected with the Battle Rhythm process, Combatant Commands use a system to manage tasks. Because tasks flow through a Combatant Command Headquarters via multiple channels, Combatant Command leaders seek to capture this

in a system that enables them to track, vet, and approve their outputs. The “Task Management Tool” (aka TMT) is used internally in most Combatant Commands alongside the externally focused “JSAP” (‘Joint Staff Action Process’ system). These systems ensure that the right people review various tasks, verify that the appropriate officers in the chain of command have approved the results of assigned tasks, and flag incomplete or late tasks. Their goal is to avoid oversights, and the administrators who run the program are famous for returning products that don’t check every box, relevant or not. The Battle Rhythm process guides knowledge flow, but the Task Management Tool system is what most often drives when knowledge is considered “complete” and ready for use. Comparing his informal social network to this task management system, an Air Force officer stated:

[The top management team] wants everything to come centralized -- in through the [Chief of Staff]. The [Chief of Staff] looks at it, gives it to the right people. Okay, there's goodness in that, but that's not going to work every time. So, they're going more on the mechanical side. The trick is going to be how quickly can they make that... to be so that it's responsive, to the speed of relevance. Because tasks are always going to come in. And they get frustrated when I call, or send them a tipper, from [Higher HQ] saying, “Hey dude, I just heard this in a meeting. They really want this information. It is coming, so you guys could get ready for it.” My whole point in doing that is to give them as much time to prepare for it, so that they can quick-turn it. Because I know it's going to be quick. And when I do that, most often, I think they're very appreciative of it. They're tracking it. But it doesn't seem to speed up the process. Because they still want the formal TMT [Task Management Tool] or JSAP [Joint Staff Action Process], which is going to take a week. And I'm, “Dude, I told you on Friday that this was probably coming in. And it came in on Monday. And they want it on Thursday. I at least gave you a heads up. Why aren't you acting on that? Instead of bitching at me?” [And they respond with] ‘Why don't they put it in [the Task Management Tool]?’ (Air Force 3)

The Task Management Tool appears to be a system Crozier (1964) would not be surprised to find in the “vicious” cycle of most bureaucracies. This tool also seems to point away from Adler and Bory’s (1996) “Enabling Bureaucracy” and more towards a “mechanistic” orientation

7.6 Systems - Personnel

Behind, and often beside, military officers within TMTs are Government Service (GS) Civilians who serve as the backbone of the Command. While active-duty officers will serve for one to three years within a Combatant Command, GS civilians remain much longer and bring the command both institutional memory and in-depth knowledge of their areas (both geographic and functional). As one senior Army officer put it:

[Talking about Civilian Staff] I think that longevity and that historical perspective are important. Knowing what's going on. What's worked and what didn't work. That's important. Having that bone structure of the body in place for a long time is very important, but having the circulation is very important too...and that's your active-duty military...active-duty rotating in is very important – people who rotate to the Pentagon and rotate back. They rotate to other Combatant Commands. They rotate back. They rotate to fighting units. They rotate back. I think this circulation is vital. (Army 1)

GS civilians keep the place running during the churn of active-duty personnel changeover. While they are clearly part of the Command's human capital, the way the DoD utilizes them in Combatant Commands and their distinct culture relative to military officers also make them part of the Command's social capital and organizational capital. This study examines them here within organizational capital because they have a better grasp of the organizational memory stored in databases, manuals, and standard operating procedures than do the transitory officers who circulate in and out of the Combatant Command. This deeper understanding enables them to function as a system within the Command, translating that memory and guiding the recurrent practices that sustain the Command's operations. As one officer put it:

the civilian core...I don't know if that's the right word I'm looking for. But...it's not the heart, but ... the baseline. That's what I guess would be it -- the civilian baseline upon which you stack all these Colonels ... I think [they are one of] the two most critical things for building a Combatant Command. (Marine 1)

This officer went on to describe two types of GS civilians, “Hard-Charging” and “Drones,” and the need to protect the former while dealing with the latter. Discussing this latter group, an Army officer laments below that it is hard to get them to change course. As a pretext for his comments, this officer had successfully accomplished the task described below in a previous command:

There is a subculture of civilian, who have had a long time in the organization, who have constantly been doing the same thing for years and years and year... come a new leader, go a new leader... and really are somewhat resistant to change. I struggled with this personally recently about managing the ...current operations picture (COP). The COP is a combination of things that I do on the Joint Operations Center floor to maintain the [overall] picture [of what's going on], and it's a combination of things that the [Communications Directorate] does to provide the digital connectivity, that allows me to display the COP. And I was in a working group, and the COP lady from [Communications] says "Well, you want me to put all the feeds on the COP?" And I said "Yes, put all the feeds on the COP." She's like, "But you do you mean all of them?" I'm like, "Yes. I mean all of them. Seriously, am I not speaking English? Why are we still having this discussion?" And I went back to check a couple weeks later, and they still hadn't done it. And she just had never been asked to do that before. And she didn't understand why. And she was unwilling to assume that I was correct about what I was saying [despite having done it before previously in a different command]... nor was she able to tell me why what I was saying was not a good idea. It was just she couldn't overcome that mental barrier. (Army 5)

A challenge that Combatant Commands face is that these competent, but long-tenured people often tend towards risk avoidance. They can steer conversations and decisions away from risk-bearing concepts and toward "safer" and "proven" ideas. This tendency can be amplified by their knowledge of how to use the task management system to implement additional checks and balances that slow decision-making and reduce risk.

Finding # 4 – The systems within Combatant Commands that TMTs rely on trend towards standardization, formalization of processes, and risk avoidance. They are rarely enabling and instead highly mechanistic in their nature.

7.7 Findings

A recent report, "Rethinking Jointness? The Strategic Value of Jointness in Major Power Competition and Conflict" (Cozad et al., 2023) identified that Combatant Commands have grown considerably in size since the Goldwater-Nichols Act was passed. The report lamented that this growth has reduced the headquarters' adaptability, slowed decision-making, incentivized risk avoidance, decreased efficiency and effectiveness, and negatively affected its ability to develop appropriate plans and

strategies. These are the classic critiques of bureaucracy (Simon, 1997; Adler and Borys, 1996; Lipsky, 1980; Crozier, 1964; Gouldner, 1964; Blau, 1963; Merton, 1940). Over 30 years, as joint human capital has improved and joint social capital has grown, joint organizational capital has become more mechanized, more rigid, and less adaptable. While trust among TMT members has increased due to changes in human and social capital, the joint organizational scheme inherently distrusts its employees, and its processes and systems reflect this. While Combatant Commands have built-in structures that can be entrepreneurial when needed, these structures are not sufficient to swing the pendulum significantly. At best, some Combatant Commands achieve Adler and Bory's (2012) "Enabling Bureaucracy" and become balanced explore/exploit organizations. But in general, most sit heavily in the mechanistic corner of the organizational equation.



Figure L – Influences on Combatant Command Organizational Capital along a spectrum

Finding # 5 – Combatant Commands structures, processes and systems focus on efficiency over flexibility, risk avoidance rather than risk acceptance, and exploitation of known solutions over exploration of new ones. As such, the organizational Capital of Combatant Commands trends heavily towards the mechanical archetype.

Since organizational capital is enduring, while human capital is transitory and social capital is ever-changing, this finding raises questions about how truly exploratory

and ambidextrous Combatant Commands can be. As Koryaka et. al point out, “The search for knowledge is underpinned by what the managers focus their attention on and how they ensure this attention is embedded in the organization” (2018, p.415). Where the body goes, the head must eventually follow.

7.8 Conclusion

Many scholars believe human capital is the key to organizational ambidexterity (Kang, Snell and Swart, 2012; Bledow, Frese and Mueller, 2011; Becker, 2009; Hambrick, 2007; Youndt, Subramaniam and Snell, 2004), while some believe social capital is the vital component (Subramaniam and Youndt, 2005; Nahapiet and Ghoshal, 1998). Kang and Snell proposed that organizational capital could be the instrument that enables an organization to shift its overall intellectual capital as it seeks the right balance between exploration and exploitation. Given that Combatant Commands’ organizational capital is trending strongly toward the mechanistic side of the spectrum, the viability of this capital as a shifting instrument is a significant question. Can Combatant Command TMTs become more organic? To address this question, the next chapter will examine who governs the ability to shift things within each type of capital (human, social, organizational) and how adjustable each is.

Chapter 8 – Who Conducts the Orchestra

8.0 Introduction

Organizations face three key challenges when seeking to balance exploration and exploitation: seeing the (in)balance the organization currently maintains, identifying the appropriate mix to achieve organizational ambidexterity, and maintaining the right balance in an ever-shifting environment (Koryak et al., 2018; Luger, Raisch and Schimmer, 2018). Luger et al. (2018) note that most studies on organizational ambidexterity take a relatively static view, theorizing about a single point in time. But Combatant Commands, like most organizations, face constant change in their conditions as the world evolves. As part of this study's quest to better understand how various intellectual capital configurations within top management teams impact organizational ambidexterity, this chapter will explore who is responsible for achieving and maintaining the necessary balances within Combatant Commands and what they can adjust to do so. In line with March (1991) and Luger et al. (2018)'s admonitions that organizations need to consider both the present and the future when making balancing decisions, this study will examine instruments that provide short-term effects and those more oriented towards the long term.

Kang and Snell (2009) were the first to examine how to utilize one component of intellectual capital to offset the tendencies of the other two. They recommended that changes to organizational capital could help harmonize organizations, thereby assisting them toward becoming organizationally ambidextrous. Turner et al. (2015) determined that this model was too limited, as it only used one component, organizational capital, in the effort to achieve harmony. This study agrees, and this chapter examines the extent to which each component (human, social, and organizational capital) can be adjusted along a spectrum and how these changes can be used to harmonize the organization's overall intellectual capital profile. It will begin where Kang and Snell started, with organizational capital, and then proceed to social and human capital.

Within each component, it will review the HRM systems that Kang and Snell proposed drive organizations toward each archetype, then extend beyond these systems to explore what else impacts each intellectual capital component's balance. In the end, it will be evident that within the military context, organizational capital will likely

remain static for the foreseeable future, social capital is currently well balanced, and human capital is the most readily available instrument for those seeking to tune, or more accurately attune, the intellectual capital profiles of Combatant Commands.

8.1 Organizational Capital

As discussed in Chapter 7 (Organizational Capital), organizations that avoid risk implement control systems that reduce uncertainty and enhance predictability. Formalization of procedures, strict rules, and behavior-related metrics enables this and puts an organization in Burns and Stalker's (1961) "Mechanistic" category. On the other hand, as Adler and Borys (1996) discuss, organizations that embrace risk as part of the learning process use devices that empower employees to encourage imagination and initiative. These "Enabled Bureaucracies" or "Organic" organizations exercise much looser control over their employees. Employees set their own goals and schedules, with the key metric being results, not behavior (Kang and Snell, 2009). Joint doctrine espouses initiative, creativity, and placing trust in employees, but as shown in Chapter 7 (Organizational Capital), Combatant Command structures, systems, and processes are highly mechanistic.

While the Commander is ultimately accountable for how the organization operates, the Chief of Staff is responsible for running it, as mandated by both joint doctrine and long-standing tradition. As Joint doctrine lays it out:

As the key [Combatant Command Headquarters] staff integrator and synchronizer, the [Chief of Staff] establishes a framework of trust, shared understanding, and intent within the staff. This is accomplished through the establishment and management of staff processes and procedures, understanding and management of staff capacity, setting priorities, and effective [Information Management] and [Knowledge Management]. The [Chief of Staff] duties include, but are not limited to:

- (1) Coordinate and direct the staff directorates' work.
- (2) Supervise the preparation of staff estimates, plans, and orders.
- (3) Manage [Combatant Command Headquarters] processes and procedures, ... This includes the following:
 - (a) Establish, coordinate, and manage the [Combatant Command Headquarters] battle rhythm.
- (6) Formulate and disseminate staff policies.
- (10) Supervise the development and implementation of the [Joint Manning Document]. Work with superior HQ and Service components to provide

required personnel and identify and requisition critical shortfalls. (Joint Chiefs of Staff, 2024, pp.11–12)

Note: The study author has removed tasks unrelated to this study for readability but has retained the correct numbering from the source for reference.

In Combatant Commands, this role and its responsibilities are shared among a set of Chief of Staff teams. The Combatant Command level Chief of Staff usually employs 1-2 “Assistant Chiefs of Staff” and has a staff of 3-10. Each Joint Directorate employs a Chief of Staff and a few assistants to manage the Task Management Tool, the Generals’/Admirals’ calendars, and related functions.

These teams, to aid the TMTs in achieving a desired level of ambidexterity, need the ability to tune the structures, systems, and processes to attune organizational capital. As things currently stand, they require the ability to moderate the organization's mechanistic tendencies, thereby increasing flexibility through greater decentralization and autonomy. But as an Air Force officer who served in two Combatant Commands, including time as the Chief of Staff in one, observed:

[No matter what was tried, in the] C3 J3 (Operations Directorate) ... everything was blinders and if it didn't fit the process then they wouldn't even talk to you. If it wasn't the right time for J35 (Plans Division in the Operations Directorate) to take it from [the J5 Plans & Policy Directorate], they wouldn't touch it. They wouldn't look at it. Because they were stuck in their mechanistic processes. (Air Force 5)

Increasing flexibility is challenging within Combatant Commands. The organizations appear quite comfortable with the lengthy processes that reduce uncertainty and risk. Seeking to avoid political or international missteps, Combatant Command staffs put every potential decision through its paces. While senior leaders can short-circuit or alter systems and processes, they rarely do so. While none of the interview provide a possible rationale, the study author has observed that senior leaders within Combatant Commands spend a majority of their time focused up (toward U.S. political leadership), out (toward other nation’s leaders) or below (for example “visiting the troops.”) Their time and energy to tune the instruments within the Combatant Command Headquarters are extremely limited. The result, as one officer noted, is that the staff often drives the organization rather than the Commander.

I would argue that the U.S. tend to be more staff-supported than commander-led ... [my] sense was that in the American system the staff sort of intuit what the commander's intent is...and present something. "Is this what you're after?" So, the starting point is slightly different ... **in the US system, because I think it's more staff supported, they are less prepared to take the risk of getting it wrong.** Or they have not got the same sort of experience and intuition that somebody more senior would have to say, "Yeah, guys, you know, that's fine."

When you have those staff-to-commander touch points, they were really valuable. But again, in a busy headquarters...how often do you get those and do you get them necessarily exactly the right time. (United Kingdom 1) Bolding by study author

The staff has developed bureaucratic inertia that is difficult to overcome. Vertical stovepipes mean that:

mostly the Combatant Commands stick people in pigeonholes, and they get into a routine, and they don't either have the time, the inclination, or they're not given the push if you will from leadership. To poke your head up and look around...(Air Force 3)

From those pigeonholes, well-intentioned officers produce immense numbers of briefs for various decisions. They overwhelm the TMT. As one Army Officer described it:

... any issue first went through [multiple levels of staff.] And they all have input and feedback. By the time that tiger team, or that group that's trying to solve a problem, gets to the [Commanding General] the decision's kind of already been shaped. He's just stamping it. Not giving guidance and helping to think through the problem. Because he's got so much shit to do...these leads, these [Colonels] will be there briefing [the TMT leader] on... they're stacked outside like cordwood and they're just coming in for 15 minutes. Here's the overview. Here's a decision. Yes, or No. Next.... (Army 3)

When TMT leaders decide, for example, during a crisis, to move faster, accept more risk, and seek more creative solutions, the staff inertia that Crozier (1964) describes is significant. As one officer explained:

Almost 85 percent of how C3 handles a crisis, is just work longer hours. And that's been a major source of frustration for me. It's not, "Hey, let's do this better." It's not, "Let's come together as a team." It's not. It's just a certain handful of people are just going to get beat into the ground. Working harder. Working longer hours. Coming in after-hours, coming in early. Just getting crushed. That's how we handle a crisis to this day. It would be good to see our command at some point be able to have a sort of rheostat where we're able to re-task individuals and shift people around the command and have people have 'peacetime duties,' 'crisis duties,' 'contingency duty.' But we haven't gotten there. (Marine 1)

Combatant Commands develop alternative processes and a revised battle rhythm for emergencies, but these are rarely exercised due to the demands of current operations. As March (1991) noted, day-to-day activities and outcomes are readily apparent and easily focused on. The future is hazy and easy to ignore until “tomorrow.”

Finding #1 – Combatant Command TMTs have managers assigned to tune organizational Capital, but they are currently unable to shift towards a more organic chord due to a focus on the present, staff inertia to avoid risk, and the lack of rehearsed alternative processes.

This finding is not surprising and aligns with March’s observation that “safer” exploitation routinely crowds out more “risky” exploration (1991), Yang et al.’s (2022) observation that process formalization often drives down exploratory organizational learning, and Crozier’s (1964) observation that bureaucracies resist change. This finding also indicates that Combatant Commands are highly unlikely to be able to utilize Kang and Snell’s (2009) Refined Interpolation Architecture in the near term. That architecture includes an organically oriented organizational capital. If the Department of Defense makes significant adjustments to its structures, systems, and processes, which most interviewees considered unlikely, this model could become available in the long term.

Turner et.al (2014), finding Kang and Snell’s approach too limited, proposed seven mechanisms that TMTs could use to attune intellectual capital profiles. Three focused on one component (human, social, or organizational capital), three used combinations of two components (OC+HC, OC+SC, SC+HC), and one balanced all three. This study concludes that four of these mechanisms are infeasible for assisting Combatant Commands in achieving balance. The five mechanisms that rely on organizational capital to achieve ambidexterity will struggle within the current system, which is so heavily tuned for exploitation and wary of the risks required for exploration. This study will examine Turner et al.’s last three mechanisms in the following sections as it delves into the other two forms of intellectual capital.

Over the long term, it would require Congress or the President to significantly adjust the Combatant Command's organizational capital tendencies. Several Combatant Commands have attempted to amend their structures, systems, and processes, but have been forced to revert to the status quo due to difficulties working with surrounding organizations that retain the Napoleonic structure. Describing one such attempt, a Marine Officer stated:

I think there were some inclinations [at C3] to do General Mattis type things, [like he did at Joint Forces Command]. Now I don't know if they would have done full-on Mattis, like get rid of the Napoleonic J-Dirs, which even he backed off of after thinking about it and experimenting with it. His comment was, "Yeah, I changed my internal command, but no one knew who to call when they were calling my command because I freaking changed everything. So that was a bad idea. You've got to think externally and internally [when you make adjustments]. (Marine 1)

Combatant Commands' organizational capital is static, and this study's data shows no indication that it will move in the future. In line with classic management literature, this large bureaucracy will resist change (March, 1991; Kaufman, 1976; Crozier, 1964; Merton, 1940). As such, a "mechanically" oriented organizational capital will likely anchor any harmony built from a configuration of the three intellectual capital components.

8.2 Social Capital

The fact that Combatant Command TMTs "borrow" personnel from the services and retain them for only two to three years creates a context not typically considered in current intellectual capital theory. Current theory commonly describes entrepreneurial groups as utilizing a market-based or network-based employee relations system, while cooperative groups grow within an internal labor market system (Youndt and Snell, 2020; Kang and Snell, 2009; Kang, Morris and Snell, 2007; Subramaniam and Youndt, 2005; Nahapiet and Ghoshal, 1998). The military services fundamentally employ internal labor markets through internal staffing, egalitarian pay and promotion structures, and strong socialization mechanisms. The personnel selection processes for Joint Commands, which will be described in the next section, provide the Combatant Commands only a small taste of its opposite, the market-based system. Combatant

Command TMTs have an extremely limited vote in who they externally “borrow” from the Military Service. So, while they technically enjoy the ‘extensive external staffing’ characteristic of the market-based system, the Combatant Command’s ability to staff for what it needs is relatively constrained. The Combatant Commands also lack the performance-based compensation programs and general development experiences common to market-based systems (Kang, Morris and Snell, 2007). However, as discussed in Chapters 5 (Human Capital) and 6 (Social Capital), some TMT members gain ‘general development experiences’ as part of their service tenure, and all receive some cross-training development via Joint Professional Military Education (JPME). Ultimately, Combatant Commands are heavily influenced by internal labor markets but also experience some minor effects of a market-based system. This has created a middle-ground “fusion” feel to Combatant Commands' social networks, as described in Chapter 6 (Social Capital).

Unlike organizational capital, there is no person or team assigned to manage Social Capital. All senior officers participate in managing it within the command and across the Department of Defense. In the long term, the DoD enterprises' focus, or lack thereof, on “jointness” will determine how behaviorally integrated TMTs feel and act. But in the short term, the Combatant Command Commander, Deputy Commander, and Joint Directors determine how cooperative versus entrepreneurial the TMT feels and performs. While this study found that most Combatant Commands were similar in their organizational capital profiles, it identified significant variance in their social capital profiles.

Five examples stand out. On one end were C2, C3, and C10, whose staff were more “cooperative” than creative. At the other end, C1 and C4 were considered innovative and entrepreneurial.

Officers in C4, and those who observed C4, believed that C4 was on top of its game. They attributed it to two things: 1) a diverse, open, frank group within the TMT that spurred innovation in a variety of areas, and 2) a pick-of-the-litter team (which will be discussed below).

Officers in C2 and C3 also believed they had high-draft-picked teams but perceived their social structures as more closed, controlled, and cooperative. One officer, serving in C3, described three of these Combatant Commands:

In my view the most innovative combatant command is, by far, C4. They've built it into the structure. Their core ... is the same core ... that everybody else has got. But you know GG6 has reached out to all the innovation centers in the U.S. government and pulled in teams. And everybody wants to be on that team. And they come with their own people and their own money. ... But [C3 is] miles behind. Miles behind C4. C2 is miles behind. (Army 1)

A Navy officer who observed multiple leaders pass through C4, described C4's TMTs as effective, inclusive and frank:

I would say to a person... they all respected those staff members the most that would speak truth to power and not back down. So, the people that knew their stuff and would tell them what they really thought... and that was consistent against all services, all flavors. Some liked their input very direct. Others liked it a little softer, but they did respect people that came with their own ideas and background ... the [leaders] all invited that diversity of thought. And if everybody at the J-Dir level could agree on something, that was great. But they welcomed opinions across the J-Dirs. And those were definitely aired to the commander. And all three [teams] that I [saw] wanted to hear what that diversity of opinion was. (Navy 2)

Displaying both behavioral integration (i.e., unity of effort within a heterogeneous group) and behavioral complexity (the ability to deal with the paradoxes inherent in ambidexterity) (Carmeli and Halevi, 2009), C4 was the balanced standard that several interviewees believed other Combatant Commands should model. On the other end of the spectrum, an Air Force officer observed:

AA5 at C2 was the exact opposite of that. He made no decision before its time. And told only those people who needed to be told. It's how he worked. It worked for him. I mean, it didn't help us on the staff. But it worked for him...and that's really what we exist for, to make him effective. Combatant Commands will adapt to the personality of their [TMT members]. (Air Force 1)

Lubatkin et al. (2006) noted that when behavioral integration breaks down TMT members retreat to their own corners, interact less, become more formal, and become decreasingly ambidextrous. Although this was not universal across C2 and C3, several interviewees described instances in the TMT where behavioral integration and/or complexity broke down.

As described in Chapter 5 (Human Capital), Joint education and prior joint experiences facilitate behavioral integration. In the long term, the services that oversee JPME, and their overseers, the Office of the Secretary of Defense, can continue to improve jointness. Those improvements can continue to enable the Combatant Commands to shape the social capital they desire. In the short term, this study identified two key factors that Combatant Commands can leverage that enhance behavioral integration and behavioral complexity, and one factor that hampered them. The capacity to build the team and the ability to reduce vertical barriers were identified as key to enhancing behavioral integration and organizational ambidexterity, whereas allowing diversity to become parochialism was the primary barrier.

The following section describes how personnel are assigned to Combatant Commands, but in essence, most Combatant Commands have little input. Some, those that address the U.S. government's priority threats, have a little more input. Today, there are two to three Combatant Commands that have more say than the other Combatant Commands. The "priority #1" Combatant Command in early 2025 was described by one of the officers who closely monitored personnel:

NN10 was very, very careful about who he selected from each of the services, and very careful about getting the right mix within a particular Directorate. So, he handpicked every [Joint Director] and every Deputy... with, obviously, some input from his Chief of Staff and his Deputy. He was very careful that the Commander, the Deputy, and the Chief of Staff all had to be from different services. And he was very careful that there was a joint feeling across the J-Dirs... so it didn't look like all one service culture. (Navy 2)

All officers who discussed this command praised its ability to both explore and exploit. It was considered attuned for organizational ambidexterity.

C1, another Combatant Command considered effectively operationally ambidextrous, is not a high-priority staffing area. But it is well known for its robust horizontal structures. While it maintains the same vertical Joint Directorate structure as the other Combatant Commands, C1 extensively utilizes cross-functional teams and mavericks. As one Army officer described it,

...because I did bring up the term "Napoleonic Staff"...what I would say about that Combatant Command... we were very good at OPTs [Operational Planning Teams]. That's something they kind of built into the C1 [Standard Operating Procedures]... Operational Planning Teams construct where there was

almost...there were basically battle rosters is what I call it... And we found through at least my time there was the fact that the people on the OPTs did very well...So, for times...I would say we had a Napoleonic staff, but we were almost always leaning on the OPTs for the day-to-day operations...C1 was very OPT-centric in nature for execution...and I give credit to the Deputy Commander FF17... [who also provided top cover for the mavericks.] So, I think that level-headed leadership and the maturity...the “bring the team together” mentality [was important.] (Army 4)

Hindering organizational ambidexterity is parochialism. Despite Joint Professional Military Education’s efforts to foster a joint mindset, some TMT members overly retain their service’s ways. Multiple studies have shown the value of heterogeneity in TMTs, (Youndt and Snell, 2020; Heavey and Simsek, 2017; Oehmichen et al., 2017; Carmeli and Halevi, 2009; Simsek, 2009; Lubatkin et al., 2006; Subramaniam and Youndt, 2005; O’Reilly III and Tushman, 2004; Hambrick, Cho and Chen, 1996; March, 1991) but studies on behavioral integration (Mehrabi, Coviello and Ranaweera, 2021; Martin, Keller and Fortwengel, 2019; Heavey and Simsek, 2017; Oehmichen et al., 2017; Carmeli and Halevi, 2009; Lubatkin et al., 2006) have identified that TMTs need to be diverse enough to explore new ideas, but not so diverse as to engage in constant conflict. Within some Combatant Commands, the proper balance between diversity and integration is missed. As one Marine put it about C3:

We are a product of our experiences. I think there was some tension between him and AA7, the three...at times. I ... I sensed that there was tension amongst some of them. Horizontally. ... We weren’t yelling and screaming, but our boss and the times – Tension ... you could sense the tension of people sitting across the table trying to work a problem. Then they’d go leave. I witnessed, you probably witnessed some things too, the J5 - he walked out of [an] office, and he's like, “This *** place is so *** up...” (Marine 4)

This tension can lead to an entrepreneurial mindset across the command, or it can lead to Joint Directorates clanning together and divisions hardening between elements of the staff. During interviews, this study identified an entrepreneurial mindset in three Combatant Commands (C1, C4, C9), the hardening of stovepipes within two others (C2, C3), and a mix in two (C5, C8).

Finding # 2 – “Jointness” is improving over the long term and will continue to increase the number and strength of bonds between Combatant Command TMT

members over time. It is a slow process, however, and today there are still barriers that impact the behavioral integration required to achieve organizational ambidexterity.

Finding # 3 – No single individual controls social capital within TMTs, but senior TMT members can influence it through personnel selection, climate, and reduction of vertical barriers.

How far Combatant Commands can alter their social capital within the current system is still an unanswered question. Each Combatant Command has different contexts. As examples, Strategic Command (STRATCOM), responsible for nuclear weapons, has a higher Air Force and Navy ratio, very few Marines, and a mission that requires stringent standard operating procedures. Indo-Pacific Command (INDOPACOM) has a heavy Navy footprint, while European Command (EUCOM) has a high Army and Air Force ratio within its TMT. The Combatant Commands also operate in different environments, with distinct explore/exploit parameters. EUCOM must coordinate with the North Atlantic Treaty Organization (NATO) and its European partners as it plans and operates. STRATCOM interacts with the North American Aerospace Defense Command (NORAD), and NORTHCOM must interact with the 50 U.S. states.

8.3 Human Capital

The most dynamic component of intellectual capital within a Combatant Command is human capital. As discussed, organizational capital has inertia and is slow to change. Social capital ebbs and flows in the short term, but stays within certain parameters. Over the long term, social capital is changing, but gradually. The human capital configuration of a Combatant Command transforms yearly. With over a third of all TMT members changing every summer, talent management is complex. As a senior officer who managed personnel within several joint organizations put it:

Human capital is the most challenging thing to do. It's harder than fighting the wars. Finding the right people to put in the right billet and at the right time is incredibly difficult. And the right J3 today may not be the same person that you

would pick tomorrow. Because if environments change... so when you factor all this in, you also got to factor in the personalities of the individuals and how they operate. What experiences they've had, and this is what makes your job incredibly difficult to do. Because there are so many variables in this. And then you get the challenge of who is the Commander? And how does that Commander operate? (Air Force 5)

In much of the business world, the human capital development system “buys” or “builds” employees based on its needs. If it requires specialists, it emphasizes narrow job designs, function-based development, and well-defined career paths in which employees are evaluated on performance. For generalists, it focuses on broad job designs, aptitude over knowledge, skills that span multiple dimensions, and an evaluation system that assesses future potential for growth (Kang and Snell, 2009; Subramaniam and Youndt, 2005; March, 1991). Combatant Commands “borrow” TMT members through a method that tries to do both.

The process revolves around a “Joint Manning Document (JMD).” The Department of Defense has built one for each Combatant Command, and they are adjusted as necessary. These JMDs describe the rank, skills, and, in some cases, the military service needed for each position within the organization. The Joint Staff compiles these JMDs and then tasks the military services with filling assigned positions within them.

The military services decide who they will assign, more accurately, who they will “nominate,” for each position. The Combatant Commands may decline a nominated candidate, but doing so risks the service's inability to find a replacement. That could mean “gapping” the position for months or even years. Describing the process:

It comes down to Services man the Combatant Commands...not in a bad way... but as a second tier at the [Colonel] level. I need to make sure my Air Force [Colonels] are all in the right spots...now what do I do with my Air Force [Colonels] going to Combatant Commands. And so what we send doesn't always necessarily match up with the skills that are needed. And I think that's probably the same on that side too....[So on the] Air Force side, I think that your [Colonel] level... you're getting specialists from their tribe. I think at the [one-star] level you get more well-rounded generalists. Because they're on their second assignment. (Air Force 4)

So in the joint world, unfortunately, it doesn't matter what the job title says. The services are going to send whoever they want to send. And they don't have to

have the background requirement for that position So, if you're in charge of the billet and an officer shows up without any of the qualifications required of that billet, you have two choices. It's actually one choice - you take him or you don't take him. But if you don't take him, you're going to leave that billet vacant. So, you gotta take him. So, you get multiple officers that have no background in that, because the service decided they want to fill that billet with whoever they want to fill it with, regardless of the qualifications. ... So, I think the services have requirement to fill the needs of their service first. And so, they got to fill all those billets. First their service, whatever's left over gets to go to the unified commands. Obviously, you want to fill the billet so you gotta take whatever shows up regardless of capability. (Army 2)

If the services' primary concern isn't to maximize the effectiveness of the Combatant Command Staff, then what is the motivation for whom they send? Three things stand out in the literature and this study's data: meeting their quota, ensuring their officers are promotable, and having a say where the service deems it's important. Interviewees universally agreed that the services cared about themselves first, and Combatant Commands second or third. As one Army Officer explained:

Most services...they take the best and brightest they have, what they think are their top performers, and they keep them in the service. If you look at the current Chief of Staff of the Army and the Vice Chief of Staff of the Army, those guys did straight service. They never went joint. ... I mean, they did some time as a Colonel or as one-star, because you have to, but for the most part, it was a touch and go... And then they go back to the Army...And so, we promote from within more so than we promote from without. (Army 2)

Each year the military services are required to submit a report to the Secretary of Defense on how well they filled their JMD quotas and how well those officers did on promotion boards. The numbers continue to improve, but several interviewees said their service missed its quotas because service requirements were more important to them than their joint requirements. At times, this is a legitimate issue. The Navy must have enough officers to keep its ships at sea and will always prioritize this over a headquarters billet. However, as one Army Officer described, the service often didn't focus on Joint Operations at all:

I was that guy at Colonel's management that would just...really not even dig ankle deep through what the requirements are. I was looking to solve it with bodies. I need an O6 to go to C2 and I've got four guys coming out of school and I'm like, you know what, they're at [the National War College, so] they have to go to Combatant Command. So... M6 you're going to C2. "Yeah, but I want to go to

C3 because I think..." "I don't give a shit. I want you to go C2." So, I think if they open up a little bit more of a dialogue...of an understanding of where the officers' skill set matches... But I'm telling you, they don't. I think the Combatant Command should have more opportunity to go out and select folks that are eligible as opposed to HR pushing 'This is who we think you guys should get.' (Army 3)

At the same time that they are meeting quotas, the services' HR departments also seek to ensure that their top performers remain eligible for promotion. Cynically, multiple interviews echoed the sentiment of this Air Force officer:

When the services send people to the [Combatant Commands], they do it for one reason, and one reason only. To check a block... because Goldwater-Nichols says you can't be promoted to Flag officer unless you have joint credit. So, I think 90% of the time when we look at our folks, that's why we send them to [Combatant Commands]. We don't send them because they have special skills, we send them because it's checking a block to ensure that they can get promoted. So, we can bring them back to the service and give them their command. (Air Force 5)

Multiple Interviewees also reiterated the idea below – that the need to fulfil the job requirements of the Combatant Commands' assigned billets is secondary to an officer's potential when they return to the military service. Describing a typical example:

The Air Force...It'll say "plans billet" and I never really had a plans guys show up. It was always an aviator. He was quality. He was gonna be promoted. He's a select. He needs to go out and get a broadening assignment. (Army 3)

Who do the services send to combatant commands? They send people to combatant commands that are successful [in their service]. ... So, the fundamental question is: Is that short-sided? Is that the best criteria to use? FF1 was a fighter pilot. Well, how is his strategic thinking? (Army 1)

Lastly, services recognize that Combatant Commands make decisions about where in the world their services are employed and how they are used. So, services work to ensure they have a say:

To give an example, MM2 was a CH-46 pilot. He was the Chief of Plans at CX and I [an Air Force Officer] was the Chief of Strategy. He was going to leave and FF5...decided to move me in to be the Chief of Plans. And MM2 told him, "Sir, that's not going to work. Because if you do that the Commandant of the Marine Corps is going to land at the airfield and come over and visit you. Because this is a Marine position, it's all part of the global plan. You cannot put F1 in here. You have to put a Marine in." So, FF5 asked "What's the thing?" ... MM2 was great. He says, "Our job is to make sure the Marine Corps is written into every war plan

that comes out of here because that's how we survive." That's pretty brilliant. So, of course I didn't go be the Chief of Plans. (Air Force 1)

On occasion, to make matters worse, the military services make short-sighted decisions that fail to capitalize on skills and experience they know would support Combatant Commands. Three officers described examples of being trained to work in a particular region of the world and then being sent elsewhere for no apparent reason. For example:

I was sent to C12 Defense College. We had six Americans in the class I was in. When we finished, my next assignment was at C12 headquarters. The other five, they went [elsewhere, not within the C12 region of the world.] The services, including the Air Force, did not deliberately develop their people - no deliberate career path development... they were focused on checking the boxes and filling seats not thinking about HOW to deliberately develop this officer so he/she can fill this type of role in their next/next assignment. (Air Force 5)

However, this study should be careful not to overstate the issue. Most officers at Combatant Commands were considered highly qualified by the interviewees. A Naval officer and British General summarized this view:

And our selection process is pretty good. I never met a [Colonel] where I said, "It was a crime he made [Colonel]." I met a couple [Lieutenant Colonels] like that maybe, but never met a [Colonel] like that. Look, they're not perfect. But I always felt like there's some redeeming qualities in there that make the person a useful [Colonel]. Same with [one-stars] and [two-stars]. (Navy 3)

But the reality is that by virtue of that training and education and selection, and what have you, is that 99 times out of 100 the people that are put into those roles are more than capable of fulfilment. Not necessarily though, they're the best selection. There might be somebody else who can do a better job. But generally speaking, I am not sure that I saw that many, that would screw it up. (United Kingdom 1)

Additionally, the more senior the TMT member, the more careful the selection process. For more senior officers, there is a slightly more open selection/nominative process. First, more than one service nominates potential candidates for the position, and the Combatant Command selects who it will take. The Combatant Command has more choice. Second, in some instances, the Combatant Command can request nominations "by name." This allows the Combatant Command to recruit individuals it already knows will work well with the established team. The service may decline, but

some Combatant Commands have greater leverage. For example, during the height of the wars in Iraq and Afghanistan, CENTCOM was in a strong position to pull in the best officers across DoD. The service knew that what CENTCOM was doing was important to the nation, so it offered up its best and brightest across all ranks. When CENTCOM leaders requested something, the onus was on the services to explain why they couldn't support it. Whereas for the other Combatant Commands, the onus is often on the Combatant Command to prove why it needs what it asks for. As one Air Force officer explained it:

At the Combatant Command there're certain positions there that you can pick...that are "nominative." Relatively "nominative." You really need to get key [Colonel] positions, not all [Colonel] positions are key positions, and [General/Admiral] positions.... are usually nominative. And so, the three or the four-star get to pick them. They don't have an endless slate. But if they know people they want in there, they can pull them in... or they can say no, if they don't want them. But you're stuck a lot of times with what the service offers you. Because 'This is an Air Force position. This is a Marine position here. Here are your three Marines. Which one do you want?' (Air Force 1)

And while discussing the military services' ability to say no, one Navy Officer who watched the process closely from within a "priority" Combatant Command stated:

I mean there were a couple times I can remember that the services would push back. But, for the most part they were deferential...services were somewhat differential. In terms of getting [the Combatant Command], the right mix of people... both generalists and specialists. (Navy 2)

However, deliberation and greater choice do not always yield perfect matches. Services still focus on their service. Some positions are "developmental" jobs intended to expand the officer's experience at the expense of the Combatant Command. In C3, the Navy fills a senior planning and strategy billet with Surface Warfare Officers who rarely have experience in either planning or strategy. In C2, the senior strategist is a foreign officer with limited access to US policy information. His assistant is a Marine, even though the US Army has a Military Occupational Specialty focused on strategy, whereas the Marine Corps does not traditionally emphasize strategic education. A senior planner at C3 is filled by a Marine, even though that region of the world is Army and Air Force-centric. There are many examples of these mismatches. And as one strategist described the impacts of some of these personnel choices:

I have, on several occasions, briefed Naval one-stars, Army... I'll save the Army two-stars for later... but Naval two-stars, Air Force two-stars, etc. About strategy or "Hey, this is complex and here's how we define it, and this is what we ought to do." And they look at you like you've got a third eyeball. So, "Hey, that sounds great. But what are you talking about?" And I have to explain this stuff to them. "You guys ought to get this." And to their credit, eventually they do. But it takes a lot of work because it's not something they know. (Air Force 3)

And a Marine Colonel discussing the Chief of Staff Position in a largely land-focused Combatant Command:

...being right means, 'Do you have the capabilities...the experiences in the...you don't send the Admiral that I worked for during the first half of my time at C3. He just doesn't have that experience. It's not his fault. Navy assigned him to do something that was clearly beyond...or if you are, you acknowledge that you're accepting risk. And you say, here's how we're mitigating that risk (Marine 4)

Service dominance also affects the Combatant Command's ability to move personnel internally and to plan their utilization. As discussed above, the services care about having some officers in certain positions. They dissent if the Combatant Command tries to shift them to other positions. Additionally, while the services are expected to loan an officer to Combatant Commands for three years, they may recall him to the Service after 22 months of joint service. With the accelerated timeline of "chosen" Air Force Officers (discussed in Chapter 5 (Human Capital)), it is common to see them depart very close to that 22-month mark. Other services also cut short joint assignments to get officers important service positions.

Notably, the "22-month" requirement is intended to protect the Combatant Command from the services. Before this rule was instituted, services would routinely pull officers much earlier. Similarly, the service-coded positions in the Joint Manning Document are designed to support the Combatant Commands in maintaining some continuity during personnel turnover. As an Air Force officer with a good amount of experience in personnel matters described it:

I think the assignment systems is kind of designed to keep you from hurting yourself. Because what might be great on this assignment, three assignment cycles later is a really bad trend. For example - some Army guy comes in and says I only want Army officers here. I am not going to put up with any of this Marine Corps stuff, so get those dudes out of here. Then the Marine comes in and says, "I only want Marines." So, I think the system...it's got a long view. And

that's not a bad thing. That's why I kind of speak to balance. ... You've got to find a middle ground. There's probably too much service specific right now. Especially [Colonel to 2-star]. But the [General/Admiral] assignments are also very service specific. ... 'How do you optimize this?' What changes would you make to optimize it? I think the service specific billets...it's not necessary a bad thing. If you look at it they sometimes mix things up a little between the different combat and commands, but it keeps you from having the 'box of chocolates.' (I don't know what I'm going to get every two years.) And least it's like a key....There's some consistency for the civilians and the staff...we kind of know how this works. Versus if you bounce it around there might be some inbred turmoil there. Just because of the inconsistencies. ...But you need a little bit of flexibility. ...you're like "Hey as the two-star I can't move my Colonels around? That makes no sense." At that level it doesn't make a lot of sense, but at the bigger level it does make sense. So which one is best? I don't know. ... Structure with flexibility is probably the right answer. (Air Force 1)

Finding #4: In Talent Management, the Military Services prioritize their own interests over Joint Commands. As a result, they influence the personnel assignment process to the detriment of the Combatant Commands.

As one Army officer stated:

Nobody will change it. Because again, it's service protected. I've got these billets...we're providing a service to these [Combatant Commands] from our branch, our service branch. And I can't lose a spot at C2. How would I be relevant? (Army 3)

Finding #5 – The Military Services' robust control over the personnel management system results in limited external and internal personnel movement options for Combatant Command TMTs. This negatively impacts their ability to balance their human capital while attuning for organizational ambidexterity.

Helping matters, however, is that at the one-star rank, the services decide to focus some officers on Joint matters for the remainder of their careers. These officers become experts on Joint TMTs and can help to build and shift the behavioral integration and behavioral complexity required for organizational ambidexterity (Carmeli and Halevi, 2009; Jackson et al., 2020; Cozad et al., 2023). One officer, explaining that decision, stated:

[I had a] conversation with FF15 when he was the C2 Deputy Commander. Went into his office, I was within a month of leaving [the C2 J3] to go to C3 as the J5, and he said, "Well, you've been tagged as a Joint guy." "I don't know what that means." "In the services, we either design ...our General Officer Corps to be primarily 'Joint' or primarily 'Service.' If you're primarily 'service' you go off and do the minimum joint requirements and come back. Primarily 'Joint,' you do the opposite." He said, "You are primarily 'Joint'" "O.K. who made that decision?" "We did that for you." "Okay, Great." So, I think that's fine. (Air Force 5)

Throughout this study, however, no one believed that the services considered specialists versus generalists when assigning personnel to TMTs. Services considered MOS (aka job title), some experiences (e.g., having served in the region before), future potential of the officer for promotion, and how the joint billet would aid the officer (e.g., setting him up for a future assignment). On occasion, they considered how the officer's personality would fit the TMT. But the tendency to prefer exploitation or exploration was never a criterion. None believed this was an intentional decision. It just wasn't considered. And as one Naval officer, thinking about adding it to a promotion board's deliberations, stated:

Like promotion board to General, you can imagine ... and Admiral ... is like one zillion requirements, none of which can be said out loud. Like we need one of these and two of these and three... we need two guys that have acquisition, but one of them has to have acquisition in small programs. Like holy shit. And then you have... in the Navy there's 200 Captains up for 10 picks in unrestricted line, or 20 picks. Let's say 200 people had O-6 command... and then like 180 are fully qualified. You can't even get rid of... And now you're trying to work these 180 and meet all these requirements... and there's also probably... there's a nuke requirement in mind... You do all this shit and then someone like me goes, "By the way, it'd be good if four of them... [were generalists.] (Navy 3)

Ultimately, the military services have the strongest voice when the Department of Defense positions the human capital for Combatant Commands. They face significant operational, legal, and procedural requirements and prioritize their own needs over those of the Combatant Commands. When they do look to the Combatant Commands, their focus is not on the exploration and exploitation capability needs of those organizations. Combatant Commands have a small voice due to limited capacity to change the Joint Manning Document, limited authority to conduct internal moves, and

only partial ability to cherry-pick personnel from the Services via the nominative process.

Of the three components of intellectual capital, however, human capital remains the most dynamic. If the Department of Defense desires to attune the overall intellectual capital profiles of Combatant Commands, this is the quickest way to do so.

8.4 Conclusion

As intellectual capital theory continues to advance, understanding how the components of human, social and organizational capital interrelate is an agenda well worth pursuing (Takahashi, 2025; Youndt and Snell, 2020; Jørgensen and Becker, 2017; Turner, Maylor and Swart, 2015, p.2017; Kang and Snell, 2009; Kang, Morris and Snell, 2007; Birkinshaw and Gibson, 2004). This study has evolved understanding from Kang and Snell's original look in 2009, past Turner, Mayor and Swart's in 2014, and Youndt and Snell's in 2020. This chapter, however, like the previous two, looked at components in isolation. Youndt et al. warned that, although "probably unavoidable," focusing on parts risks losing sight of the whole (2004, p.336). Heeding that warning, the next chapter will attempt to bring the whole harmony together within the military context.

Chapter 9 – Analysis & Recommendations –

Organizational Ambidexterity at Combatant

Commands

9.0 Introduction

While there is significant literature on intellectual capital and how it can support organizational ambidexterity, only two major models lend themselves to empirical examination: Kang and Snell's 2009 Intellectual Capital Architectures and Turner et al.'s (2015) "Mechanisms which enable ambidexterity." This study had both in mind when it applied the lenses of intellectual capital and organizational ambidexterity to examine the ability of U.S. Combatant Commands' top management teams (TMTs) to make collective decisions. Although there have been four reviews of Kang and Snell's framework (including Turner et al., 2015), and considerable new literature since its proposal, we still lack a comprehensive understanding of how to leverage intellectual capital to achieve organizational ambidexterity. Therefore, the key purpose of this study is to address the theoretical call to better understand how various intellectual capital configurations within top management teams impact organizational ambidexterity (Youndt and Snell, 2020; Wilden et al., 2018; Turner et al., 2014; Turner and Lee-Kelley, 2012; Kang and Snell, 2009; Subramaniam and Youndt, 2005).

This chapter will review the implications of the previous chapters' findings for the theories of intellectual capital, organizational ambidexterity, and the two current frameworks that aim to combine them. It will begin with an examination of a key assumption about the components of intellectual capital: whether they are dualisms, dualities, or orthogonal. From there, it will evaluate both frameworks against the military dataset used in this study. It will then propose a new model informed by work on behavioral integration, behavioral complexity, and organizational ambidexterity, with a focus on capability building and shifting. It will evaluate the new model against the study's dataset before making recommendations to practitioners and theorists on how to use it to improve the organizational ambidexterity of Combatant Commands and other public organizations. In the end, it will provide academics a new model to evaluate, and will recommend to management practitioners that they study their organizations to

determine which components of intellectual capital are flexible and which can realistically attune their TMTs for ambidexterity.

9.1 Dualism, Duality or Orthogonal

A key factor in how various academics view organizational ambidexterity and intellectual capital is whether they see dualism, duality, or orthogonality. When James March wrote about exploration and exploitation in 1991, he described various tensions between the two and discussed explicit resource trade-offs that organizations must make. He did not use the terms, but clearly saw them as opposing yet interconnected. Multiple researchers have since considered his views and debated the interaction between these two endeavors (Turner, Maylor and Swart, 2015; Morris and Snell, 2011; Youndt, Subramaniam and Snell, 2004; Gupta, Smith and Shalley, 2006; Swart, 2006; Nahapiet and Ghoshal, 1998). Arguing that a company can be good at both simultaneously, Gupta et al. (2006) believe they can be orthogonal or dualities, depending on the level of study you undertake.

The military officers interviewed for this study saw a structurally orthogonal aspect at the Combatant Command organizational level. While the J-3 Operations Directorate exploits the current capabilities the command has been provided, the J-5 Plans Directorate explores future possibilities. In this study, participants were not asked to consider the resource trade-offs between the two Joint Directorates; therefore, it is unknown whether they would have maintained that answer if pressed. At the TMT level, however, none believed they were orthogonal. A few described a dualistic aspect of the search for balance, believing that the pursuit of one directly opposed the pursuit of the other. The majority, however, saw a duality. Exploration and exploitation were interconnected, but there was a definite tension between the two. Several described exploitation crowding out exploration as their commands dealt with each new crisis. All, in essence, agreed with March that 'maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity' and that it is difficult to do so (1991, p. 71).

This study takes the view that, while structural ambidexterity can make exploration and exploitation appear orthogonal (i.e., independent and separate), as

March noted, pressures on resourcing keep them interconnected, especially at the TMT level. And while those uncomfortable with paradoxes can see exploration and exploitation as being in constant conflict (i.e., dualism), a more nuanced look reveals that they can benefit each other even while tension persists (Gupta, Smith and Shalley, 2006). As such, in line with Gupta, et.al. (2006) this study views exploration and exploitation as existing on a spectrum. Somewhere in the middle is organizational ambidexterity. And just as some people are more ambidextrous than others, so are organizations. While a few will have achieved a perfect balance, most will find themselves leaning one way or the other. If they can effectively do both simultaneously, if maybe not efficiently, then they are “organizationally ambidextrous.” (See Figure M below.) The challenge each organization faces is trying to achieve the “sweet spot” that fits its environment and situation, while avoiding being pulled out of that spot by the “trap of success” or the “trap of failure” (Raisch et al., 2009; Levinthal and March, 1993).

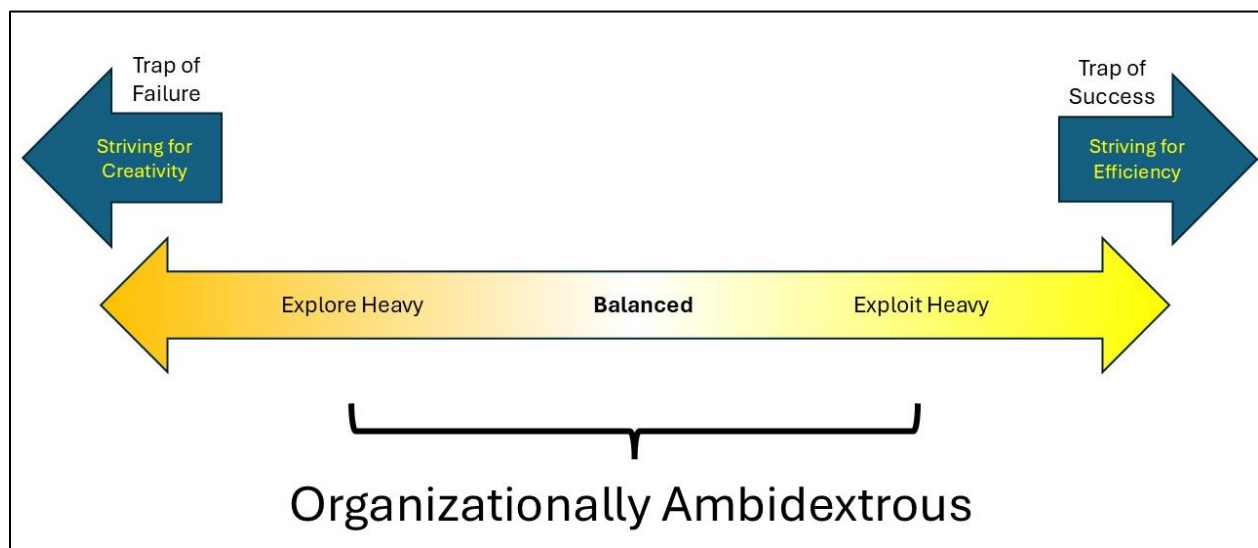


Figure M – The Organizationally Ambidextrous Spectrum

As this study found in Chapters 5, 6, and 7, the military dataset does not neatly fit the archetypes that mark the ends of human, social, and organizational capital in the Kang and Snell (2009) intellectual capital framework. These findings align with the first review of the Kang and Snell Framework, conducted by Kelly et al. (2011), which found that two categories of human capital were insufficient to explain knowledge workers in six pharmaceutical firms in the United Kingdom and Ireland. This study extends those findings by examining all three components of intellectual capital, rather than focusing

on human capital, as did Kelly et al. It similarly found that two archetypes, or categories, are insufficient in all three components. This observation does not invalidate Kang and Snell's Framework. They chose archetypes as an initial foray into organizing intellectual capital components to mitigate each other's weaknesses. As shown in Figure N, they believed organizations could leverage organizational capital to encourage exploiters toward greater innovation or rein in explorers to ensure ideas reached fruition. Their study inferred a "lever" that a company could use to change direction. If human and social capital steered the organization too heavily toward exploration, the organization could use the Disciplined Extrapolation architecture as a lever to rebalance. The Refined Interpolation architecture could leverage an organic organizational structure if a company's human and social capital were too exploitative.

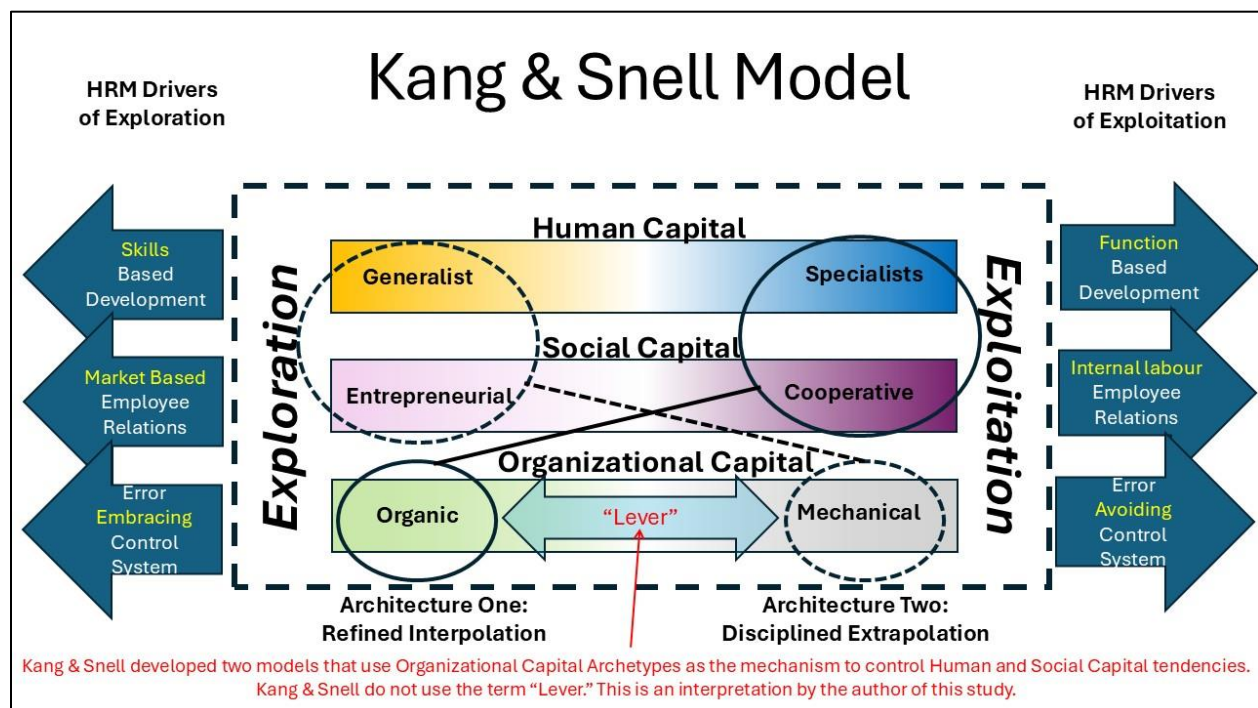


Figure N – Intellectual Capital Architectures overlaid with HRM tools to support ambidexterity (Kang and Snell, 2009, pp.74, 82)
[Figure built by study author. It combines two figures from the original article.]

Kang and Snell did not claim there were only two options and concluded that future research was needed to collaborate and expand their model. As this study

advances along this theoretical avenue, it finds that the answer is not a fixed number of categories, mechanisms, or levers, but rather a set of harmonized spectra. Categories and mechanisms ultimately lead to discussions of orthogonality, which this study finds unhelpful.

9.2 A New Model

While Kang and Snell's Intellectual Capital Architectures Framework for ambidexterity holds promise for many organizations, its premise rests on the ability to adjust organizational capital to regulate ambidexterity. As discussed earlier, that premise faces challenges in U.S. Combatant Command TMTs, where organizational capital is currently trapped within a highly mechanistic set of structures, systems, and processes. Organizational capital cannot reliably serve as a tool for harmonizing overall intellectual capital in Combatant Commands. However, this study finds that human capital within Combatant Commands is adjustable when purpose is applied, and that social capital is slightly adjustable across a current "sweet spot" that neither hinders exploration nor exploitation. So, this study, therefore, proposes an alternative to Kang and Snell's framework – one focused on "harmonizing" intellectual capital through the "tuning" of the three intellectual capital components. In Figure O (below), Kang and Snell's archetypes become the ends of the intellectual capital components' spectra.

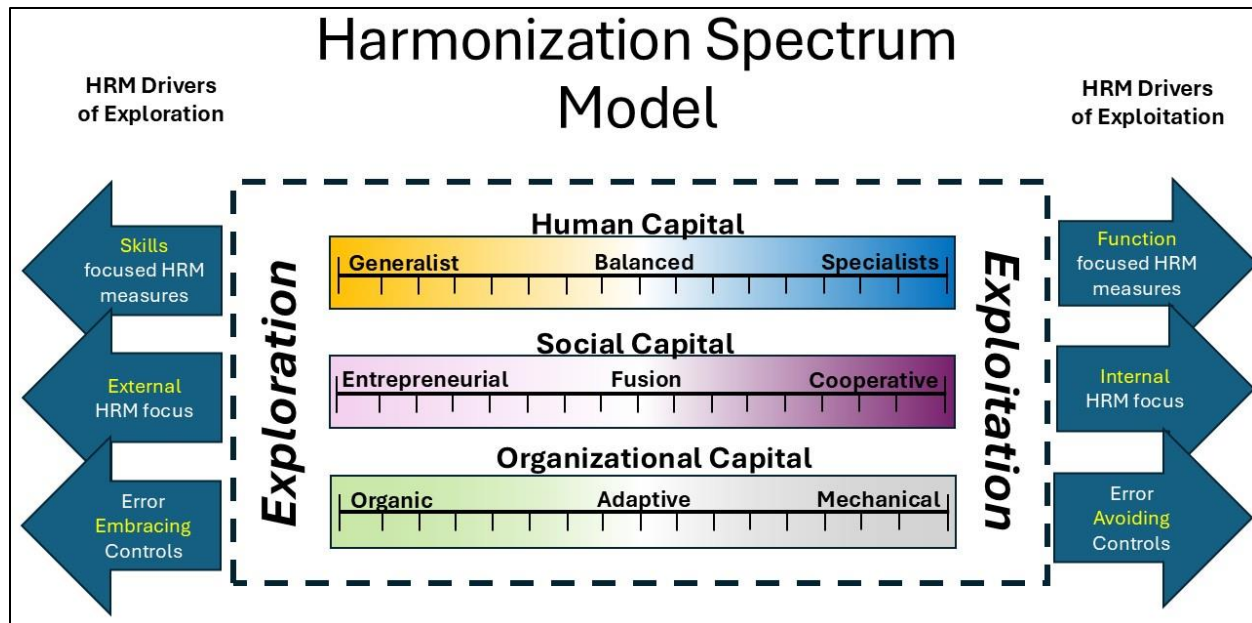


Figure O – Intellectual Capital Harmonization Spectrum Model

A spectrum-focused model takes the next step by adding tone, or nuance. The figure above shows a middle ground across each spectrum; however, this study does not therefore imply that it constitutes a category. Instead, it is the graduated spectra that are the key to this model. These spectra suggest that each component can be tuned along its own spectrum, and that tuning the three can harmonize an overall Intellectual Capital Profile (ICP). Some organizations may find that a highly cooperative social capital structure harmonizes the other two components of organizational ambidexterity. Others may use, as Kang and Snell propose, organizational capital. And still others may find that no component dominates and that they find a balanced tone among all the components which brings harmony to their exploration and exploitation drives. Where Kang and Snell provided two options for achieving balance, and Turner et al. (2015) identified seven mechanisms, this model offers numerous possibilities.

Building on Kang and Snell's ideas, this model adjusts the management drivers used to tune each component. Since Combatant Commands, and some other public institutions (e.g., Law Enforcement Task Forces), use a personnel "borrowing" scheme, this model has moved away from personnel development systems (e.g., training) to tune human capital towards broader HRM measures. Organizations may find that,

instead of building or buying specialists, they can requisition them from lending organizations or move them within the organization to tune the overall mix of TMT members. Within the Combatant Command context, this might involve a more dynamic, Combatant Command-oriented Joint Manning Document process rather than a military service-oriented one.

When seeking to tune social capital, various measures can focus on increasing the internal aspects of the organization (e.g., experiences that build trust and strengthen bonds) or on building wider networks, either across disparate parts of the organization or with external organizations. Combatant Commands seeking a more entrepreneurial atmosphere might connect officers with industry, other public-service institutions, or even other Combatant Commands. Those seeking stronger behavioral integration within the TMT might move offices closer together.

Organizations pursuing adjustments to organizational capital should look beyond the control systems Kang and Snell focused on and take a broader view of how to either increase or decrease risk tolerance. Driving the organization to embrace more risk could involve deciding how to lead specific meetings, which parts of the organizational structure take priority in decision-making (e.g., elevating the role of cross-functional teams), or which parts of the process are appropriate for the current environment.

9.3 Intellectual Capital Spectrums overlayed on the Combatant Command TMT Context

Contextual ambidexterity is largely a matter of chance rather than design within Combatant Command top management teams. When discussing human capital, only one interviewee mentioned a TMT seeking a good balance of member personality characteristics. That officer discussed “fit,” but not their tendency to explore or exploit. Within social capital, jointness was instituted to reduce inter-service rivalries, not to support balancing in support of organizational ambidexterity. The fact that it has created a fusion of cultures, which notably enables organizational ambidexterity, is a fortunate byproduct. In organizational capital, ever-increasing bureaucratization has left a construct that leans heavily toward “mechanism” and strongly favors exploitation over exploration.

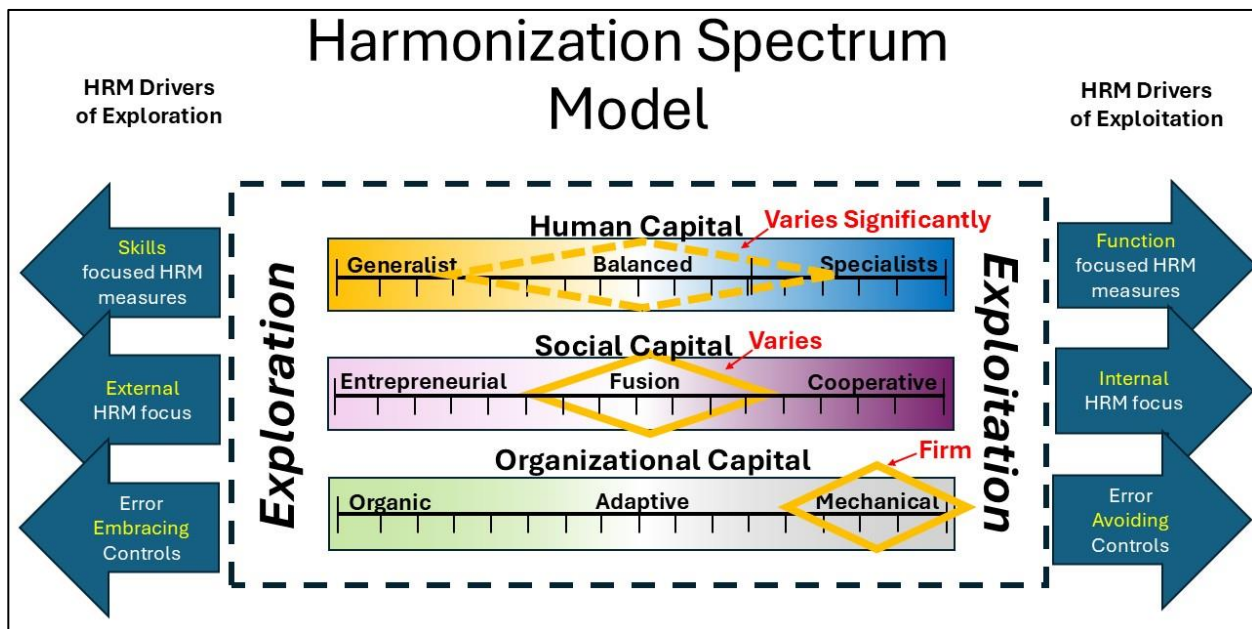


Figure P – Intellectual Capital Harmonization Spectrum Model overlayed on Combatant Commands.

As depicted in Figure P above, this study concludes that U.S. Combatant Command top management teams exhibit muddled human capital, spanning the Generalist/Specialist spectrum. They enjoy a balanced “fusion” of social capital that supports both exploration and exploitation. A few Combatant Commands have social networks that lean slightly towards entrepreneurialism, while others lean slightly towards cooperation. The tendency of Generals and Admirals to be “collegiate” pulls them toward cooperativism, but their use of mavericks and cross-functional teams pulls the overall TMT back toward balance. The most significant impediment to optimizing organizational ambidexterity within Combatant Command TMTs is their organizational capital. A robust set of structures, processes, and systems exerts a strong pull, driving the team away from exploration. Overall, contextually, Combatant Command TMTs are likely nominally organizationally ambidextrous, though some may not be. Several interviewees mentioned that the military services provide the Department of Defense with innovation, not the Combatant Commands. While this study finds that this is likely hyperbole, it does have an element of truth.

Taking a step back and looking at the entire Combatant Command headquarters, observers would note elements of structural ambidexterity. Most Combatant Commands have J-8 Directorates responsible for experimentation and innovation. J-5 Directorates develop future plans and strategies that explore the future, and the J-3 Operations Directorate has a J-35 Division that investigates and plans for the near future. Most of the cross-functional teams discussed earlier in this study originate from and are controlled by the J-35 and J-5. As an officer who worked in both an innovative and a non-innovative Combatant Command explained:

...the institutional inability to focus on the future fight is hard. The only reason C4 could do it, or C3 could do it, or C2 could do it is that they have a War Plans shop [from the J-35 and J-5], writing that plan. So, you have quality people working that future thing... the actual thing. And therefore, the commander is getting briefed on it, the J3, the J5... they're being burdened with it on a weekly basis. So, then it's a personal flaw if you don't recognize that you weren't doing your strategic work. (Navy 3)

However, just as many private companies struggle to capture and utilize the benefits of their R&D divisions due to senior leadership issues (Birkinshaw and Gibson, 2004), so too do Combatant Commands struggle to leverage the insights generated by those Joint Directorates tasked with conducting exploration. A RAND study reviewing the value of jointness and how Goldwater-Nichols Act adaptations have impacted U.S. operations found that, while they have had tremendous positive effects at the tactical and operational levels, their value at the strategic level remains very much in question (Cozad et al., 2023). Overwhelming tactical and operational success in Iraq and Afghanistan failed to achieve strategic success. The military services often complain that Combatant Commands and other joint headquarters routinely fail to be innovative or to adequately resource exploration. Combatant Command top management teams have been repeatedly criticized for being short-sighted, overly reactive, and failing to devise creative strategies to address the nation's challenges (Cozad et al., 2023; Tangredi, 2022). As one Air Force officer explained:

By and large ... in the [Service]...I had a lot of say over how things were done. You had much more control. You set the agenda. You set the priorities. It was relatively straightforward. Whereas at the Combatant Command you're just responding to whatever happens that day... it's very reactive versus proactive.

It's proactive leadership as a commander [in a Military Service]. It's reactive leadership as a [Combatant Command] leader. (Air Force 1)

The potential that Combatant Commands are short-sighted, reactive rather than proactive, and unable to succeed strategically has led politicians and scholars to question the value of Combatant Commands, and particularly jointness (Cozad et al., 2023). This study argues that the question either throws out the baby with the bathwater (by treating Combatant Commands as the problem) or focuses too narrowly on only one or two aspects of strategic TMTs (either jointness within social capital or the bureaucracy within organizational capital).

Blaming Combatant Commands, or jointness, ignores much of the environment surrounding U.S. strategic decisions. There are numerous studies and books on the civil-military complexities and the interagency shortcomings that affected the Iraq War, the Afghanistan conflict, and other U.S. military endeavors. Combatant Commands are a part of the picture, but far from the whole picture. While this study deliberately ignored the broader context by excluding three- and four-star admirals and generals, it agrees that while Combatant Commands may not be the whole problem, they are a part of it. Therefore, this study argues that a better understanding of how Combatant Commands make decisions may help elucidate a broader picture in future research.

Similarly, while the current bureaucratic makeup of Combatant Commands, or a social “cult of jointness” (Tangredi, 2022), could hinder Combatant Commands' ability to offer sound, balanced strategies, it is only part of the intellectual capital story. This study presents a comprehensive and accurate picture of each component (HC, SC, OC) within the intellectual capital profiles of the lower half of Combatant Command TMTs, a useful first step toward understanding the overall strengths and weaknesses of these strategic decision-making entities. The next logical step is to identify ways to tune these components to harmonize the overall intellectual capital profile of Combatant Commands for organizational ambidexterity. The following section will use this study's proposed Harmonization Spectrum model to review the idea of “tuning” methods.

9.4. Harmonizing Combatant Command TMTs through tuning its Intellectual Capital Components.

Beginning with a careful review of the assessment shown in Figure P (above) and its description in the previous section, the tuning possibilities and limitations begin to emerge. Many interviewees believed that jointness, or the behavioral integration of Combatant Command TMTs, was tuned well. Some believed in greater jointness, and others in less jointness, but the overall data indicate a social capital configuration that supports both exploration and exploitation. Several interviewees suggested that jointness could be fine-tuned by paying closer attention to the social networks built each summer during personnel turnover. Others, including those who believed in greater jointness, believed that stricter adherence to 'Joint Qualified Officer' requirements (e.g., ensuring JPME II is completed before being assigned to Combatant Commands), or more joint education could more attune the cognitive aspect of social capital toward organizational ambidexterity's needs. All interviewees were comfortable with the affective element of Combatant Command social capital, and trust among TMT members was considered high. Protecting the current configuration of social capital was a recurring theme.

While multiple interviewees believed that solving the Battle Rhythm was the key to "fixing" Combatant Commands, none believed major shifts were possible in the current bureaucratic environment. Formalization is currently high within the U.S. Executive branch, and unless the entire Department of Defense enterprise conducts a reorganization, formalization will remain high. With that limitation, this study concludes there is the potential for Combatant Commands to enter the realm of Adler and Borys' (1996) "Enabling Bureaucracy," but a shift to "Organic" is highly improbable. Given the high levels of trust interviewees observed within the organization, a shift from the current coercive processes and systems to a more enabling set is possible within the current bureaucratic configuration.

While interviewees expressed the most dissatisfaction with Combatant Commands organizational capital, they identified human capital as having the most significant potential. As one officer expressed:

...C3 is a very interesting study in the inability to fundamentally make change. And the balance between 'Just working harder' and 'working smarter.' And the impact of just getting good people and how those three things interchange. **We have gotten way better people. Way more capable individuals**, that later went on to do great things in their services, since 20XX. **But we've seen very little change institutionally in terms of the structures**...and you can even argue that it's gotten worse in terms of some things like Org A, like breaking exercises into their own Directorate, and stuff like that. So, **we've done some things that are worse over the last 11 years. But gotten better people, and so it's kind of worked.** (Marine 1) Bolding by study author.

While frustrated with how the services inadequately educate and match officers for joint billets, interviewees were unanimous in praising the overall high quality of today's military officer corps. Independent studies corroborate these opinions (U.S. Department of Defense, 2023; Mayberry et al., 2021; Grass, 2020; Jackson et al., 2020; Zimmerman et al., 2019; Kamarck, 2016; Barno et al., 2013; Kane, 2012). Interviewees also believed human capital was the most dynamic of the three components of intellectual capital. Changing organizational or social capital can take years. Replacing or reconfiguring Combatant Command TMT members could be accomplished within months. This study concludes that if the DoD identified its specialists and generalists and invested effort in configuring them as needed, human capital could be tuned using much of the available spectrum. Kang and Snell utilized organizational capital to harmonize intellectual capital. Within this context, human capital, as shown in Figure Q below, is the key to harmonizing Combatant Command intellectual capital to achieve an optimal profile for organizational ambidexterity.

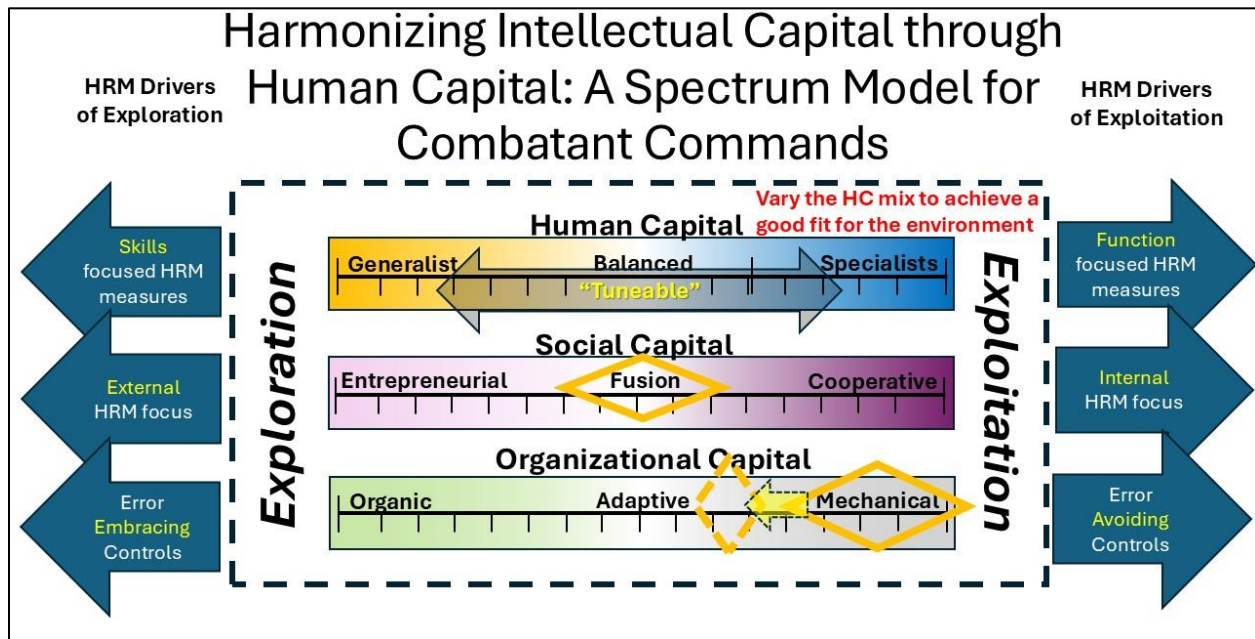


Figure Q – Intellectual Capital Human Capital Oriented Spectrum Model for Combatant Commands

With constant exploitation pressure on Combatant Command TMTs via a highly formalized, error-avoiding mechanical organizational capital and a social capital prepared to play in either direction (or both), this intellectual capital configuration can adjust the mix of specialists and generalists to harmonize the Combatant Command with its environment. More generalists might increase innovation, while bureaucracy ensures that those innovations are exploited. More specialists could increase the organization's speed, precision, and efficiency to exploit opportunities. Future research should examine how far changes in human capital can push Combat Command's exploratory endeavors before organizational capital limits set in.

9.5 Generalizability

This study focuses on the top management team of a public institution operating at the strategic level within the U.S. executive branch of government. The group interviewed were senior executives with decades of tenure in their services, but some with limited tenure in the joint organizations this study focused on. All had retired within the last two years (with one exception, who had retired five years before being

interviewed). With this context in mind, the researcher believes this study could have an impact on other U.S. strategic military headquarters, other national strategic military headquarters, other public “uniformed” (e.g. police, EMS) institutions, and potentially on private institutions. The updated theoretical model can be applied to any organization. The idea of tuning the three components to harmonize an organization with its environment is similarly widely applicable. The HRM drivers discussed were adapted to the study context; however, because they were expanded beyond the original model proposed by Kang and Snell, they may also be widely applicable. The specific challenges, opportunities, and potential solution elements examined within this study are highly contextual and will have much narrower applicability to other organizations. Public “uniformed” institutions will likely find more in common with this context (e.g., bureaucracies over which they have limited control due to political considerations) than private organizations. While the narratives provided by interviewees should resonate with many readers interested in Strategic Management, it is acknowledged that the explanations, limited contextual background, and jargon may inhibit some transfer of insights.

9.6 Conclusion

In essence, this study has concluded that a new model for viewing intellectual capital within organizations will aid both theorists and practitioners in better understanding and achieving organizational ambidexterity. By cognitively mapping out one type of organization, Combatant Command top management teams, this study explicitly laid out some of the factors that should be considered when examining intellectual capital. With those factors in mind, a set of spectra was envisioned to explicitly outline an organization's intellectual capital profile. Finally, the concept of tuning and harmonizing offers a way of thinking about adjusting elements of a company's human, social, and organizational capital to achieve the optimal organizational ambidexterity mix for both current and future environments. This model can aid theorists in seeking greater nuance and depth in future research and help practitioners better sense and plan their use of intellectual capital in their pursuit of ambidexterity.

Chapter 10 – Conclusion

10.0 Introduction

The purpose of this study has been to address a theoretical call to better understand how various intellectual capital configurations within top management teams impact organizational ambidexterity. Although considerable research has examined intellectual capital and organizational ambidexterity, the relationship between the two has received limited attention. There was a surge of research from 2005 to 2014, followed by a blip in 2020. That research initially explored what intellectual capital could bring to exploratory and exploitative efforts and then examined configurations that could help balance the two. Kang and Snell, in 2009, developed two intellectual capital architectures as a testbed and revisited them in 2011. Three other researchers, prior to this study, have used Kang and Snell's architectures to examine how intellectual capital can enable organizational ambidexterity. They scratched the surface of an intriguing connection between two areas that should have immense interest for business: how to optimally configure its human, social, and organizational capital to gain an advantage, and how to harmonize the organization in a way that best exploits its current situation while also exploring opportunities in preparation for the future. This study rekindles this important research stream by examining a fresh context and providing an updated model for future work. The Strategic Management field still lacks a comprehensive understanding of how to leverage intellectual capital to achieve organizational ambidexterity. This study re-engages with the topic and seeks to expand our knowledge.

To advance the discussion, this study focused on three questions: 1) How do TMTs currently employ intellectual capital to attempt to achieve ambidexterity? 2) What elements of intellectual capital do TMTs believe are helping or hindering the ability to achieve effective ambidexterity? 3) How do TMTs think they can adjust the intellectual capital components and deal with the resulting tensions to improve organizational ambidexterity?

This chapter will conclude this study by reviewing the significant findings, discussing limitations and implications, providing recommendations, and outlining

potential future research areas that can continue the enjoyable journey this study has undertaken.

10.1 Review of Major Findings

Applying Kang and Snells's (2009) Intellectual Capital Architectures, in a military top management team context, both demonstrated the tremendous potential of using intellectual capital as a lens to examine organizations and the shortcomings of current models. While neither of the architectures that Kang and Snell developed would aid U.S. Combatant Command top management teams to achieve organizational ambidexterity, their concept of leveraging one intellectual capital component (organizational capital) to offset the tendencies of the other components (human and social capital) was a worthy idea that led to a revised intellectual capital model.

This study examined the top management teams of nine of the eleven U.S. Combatant Commands. The four U.S. military services (Army, Navy, Air Force, Marines) man these strategic headquarters governed by rules set down to promote behavioral integration (titled "Jointness" by the U.S. Department of Defense). Officers join Combatant Command TMTs for two to three years, entering a new social ecosystem and encountering a "joint" organizational construct. Qualitative interviews enabled this study to examine these TMTs, applying the three lenses of human, social and organizational capital that make up the larger lens of intellectual capital. Those lenses were used to better understand how TMTs balance exploration and exploitation within themselves and the larger organization. While larger organizations can achieve ambidexterity in various ways (e.g., through structural separation), TMTs must balance the two through contextual ambidexterity (Birkinshaw and Gibson, 2004; O'Reilly III and Tushman, 2004), meaning that each TMT member must navigate the paradox of simultaneously thinking through the distinct processes of exploration and exploitation (Zhang, Zhang and Law, 2022; Tushman and Euchner, 2015; Smith and Tushman, 2005; Birkinshaw and Gibson, 2004).

The observation that the human capital of the officer corps of two U.S. military services trends towards specialists, while the other two trend towards being generalists, may not be applicable outside of this specific Combatant Command context. However,

the idea of mapping a group's human capital along a spectrum from pure Specialists to pure Generalists may assist in better understanding both public and private organizations.

Within the field of social capital, the concept of jointness is a fascinating phenomenon for both researchers and practitioners. Today's Combatant Command TMTs are the product of legislation and policies set about in the 1980s and 90s. To reduce interservice rivalries, the U.S. government mandated more frequent and deeper military integration (McInnis, 2016). The idea of "jointness" runs parallel to the management theory of behavioral integration (Kamarck, 2016; McInnis, 2016; Carmeli and Halevi, 2009; Lubatkin et al., 2006). While these initiatives were found to have very positive effects, jointness is not complete, nor is it universally beloved by all involved (Tangredi, 2022; Jackson et al., 2020; Zimmerman et al., 2019; McInnis, 2016). This study identified formal and informal factors that pull social capital in two directions. Strong connections to their military services, the steady infusion of fresh blood from frequent turnover, and the frequent use of cross-functional teams provide an entrepreneurial social feel. In contrast, job-related bonds, education on jointness, and a collegial atmosphere among senior officers foster a cooperative team spirit. These opposing pulls lead to a "fusion" among TMT members, allowing them to be both exploratory and exploitative.

Organizational capital in Combatant Commands skews decidedly toward Kang and Snell's mechanical archetype. Initially envisioned by Burns and Stalker (1961), this archetype is characterized as risk-averse, prioritizing efficiency over creativity. While the study identified elements that could be more innovative within Combatant Commands, none were deemed sufficient to overcome the strong mechanical systems and processes that drive the Combatant Commands' bureaucracies. This is in line with multiple studies of public institutions (Morgan, 1998; Kaufman, 1976; Crozier, 1964; Blau, 1963; Merton, 1940).

When these three lenses are aligned to view the overall picture, an intellectual capital profile emerges. Kang and Snell discussed two potential profiles, which they titled "Refined Interpolation Architecture" and "Disciplined Extrapolation Architecture." This study found these two to be too limiting. It therefore developed a Harmonized

Spectrum Model that enables researchers and practitioners to identify their position on the three continuums of human, social, and organizational capital and to extrapolate from this to better understand their overall strengths and weaknesses when seeking organizational ambidexterity. An extrapolation of U.S. Combatant Command TMTs indicates that the human and social capital within them is ready to optimize organizational ambidexterity but is constrained by organizational capital highly focused on exploitation. This new method of dissecting and synthesizing intellectual capital within an organization could be applied in many contexts, both public and private, to better understand how configurations of intellectual capital affect organizational ambidexterity.

Understanding an organization's intellectual capital profile is crucial before an organization attempts to adjust it. Equally important is understanding the instruments in place that enable and impede change. Within Combatant Command TMTs this study found teams within the commands responsible for organizational capital that cannot change much, a historical trajectory of policies that placed Combatant Command social capital in a middle ground that senior executives can sway slightly towards either cooperative or entrepreneurial environments, and a potentially balanced human capital that the military services control but whose impact is felt by the Combatant Commands. This context may be unique to Combatant Commands. Still, it may also apply to other public institutions where human and organizational capital are controlled by the larger government and in which these institutions have limited abilities to adjust their positions on one or two spectra of the intellectual capital components.

Having enabled the mapping and discussion of an organization's current intellectual capital, this model also allows management theorists and practitioners to evaluate which systems or processes can best tune the balance to fit their future environment or to optimize organizational ambidexterity. Within the military context studied, human capital was viewed as the primary tuning device for changes, with limited modifications to organizational capital and talent management processes deemed necessary to unleash the power of the talented officers the Combatant Commands receive from the services.

This process of evaluating and discussing potential harmonization methods is a natural extension of applying the intellectual capital lens to understand organizational ambidexterity. While the results of this study are highly contextualized for U.S. military's strategic headquarters' executive teams, the Harmonized Spectrum Model and the investigative process employed to use it, are both readily transferable to other contexts. This model will enable the field of Strategic Management to better understand TMTs and their impact on their environments, and will aid the management professionals in more nuanced discussions about which theories, processes, and tools effectively support organizational ambidexterity.

10.2 Positionality

As a qualitative study, context is everything. This study's focus on a limited number of military strategic headquarters, undertaken by a retired military officer, results in a deep evaluation at one level and a shallow one at another. The researcher's positionality, in the space between insider and outsider, enabled a greater understanding of the data, slang, and context of interviewees' comments, and a deeper interrogation of ideas. The danger is that depth impeded open-eyed criticality. The researcher approached this study as an insider, seeking to move toward an outsider's perspective. He served 27 years as an active-duty U.S. Marine Corps officer, followed by an additional three years as a civilian contractor supporting a joint military headquarters. He spent the last seven years of his career in the "joint" strategic world, including two years teaching other senior officers about it while on the faculty at the U.S. Army War College. He spent time both immersed in the community and engaged in researching and reflecting on it. He left both communities (the joint arena and the larger military community) at the beginning of this study to develop a different perspective. He came to the University of York to seek a non-military perspective, a more systematic academic approach, and to gain a non-U.S. view of management, organizations, learning, and culture. As described in Chapter 4 (Methodology), position, reflection, and debate were utilized to find "the space between" (Dwyer and Buckle, 2009) – enough insider to dwell in the complexities, and enough outsider to see them with a critical eye. Ultimately, the researcher is familiar with, appreciates, and holds deep affection for the

U.S. military's joint strategic community of practice. This provided the passion that drove this study. This also drove a desire to ensure the results of this study were honest, authentic, and trustworthy. There was a strong commitment and strenuous effort to ensure readers would not view this study as “military groupthink.”

10.3 Limitations of this Study

Given the attempt to “step outside,” the researcher’s positionality is both a strength and a limitation of this study. The researcher attempted to be critical, but as an insider for 30 years, his ability to do so could be disputed. While he continuously reflected on his biases and assumptions, an outside study might reveal findings that this researcher missed.

Another obvious limitation of this study is that the sample comprised only a subset of the members of these strategic headquarters' top management teams, and not all Combatant Commands or job specialties were represented. Additionally, no active-duty officers were interviewed, so the data lags current affairs. The researcher believes that the small sample accurately represents the target population, but further studies are needed to confirm this belief.

In an effort to exclude some variables (e.g. political-military relations) and focus on other variables (e.g. jointness), the study focused on the lower half of Combatant Command top management teams. It thus excluded the organization's “CEO,” except when participants discussed him/her. It also did not delve into managers below the TMT. Both individuals above and below the studied group affect an organization’s intellectual capital and its ability to be ambidextrous. Future studies should delve into these groups.

This study focused on Combatant Command structures in the near past (2010s and 2020s). A historical perspective might uncover trends not identified in this study.

This study attempted to remain at the level of the intellectual capital components. The concepts of behavioral integration, behavioral complexity, and related constructs were given due consideration but not explored in depth. Layering these and other theoretical ideas (e.g., dynamic capabilities, paradoxes, microfoundations) more

thoroughly would significantly deepen our understanding of intellectual capital and organizational ambidexterity.

Similarly, to remain at the intellectual capital component level, this study conducted only a limited study of the elements within each component (e.g., structure, systems, and processes within organizational capital). Further research into these elements could deepen our understanding of each component.

There are many layers to the idea of organizational ambidexterity. Researchers have explored from the individual up through the enterprise level. This study focused on top management teams and their impact on the organization. Integrating this study with examinations of other layers would be a worthwhile endeavor to obtain a more holistic picture.

Lastly, this study looked at Combatant Commands, not all joint strategic military headquarters. While the researcher believes, based on field experience, that the conclusions of this study would apply to those organizations, studies of those organizations would be needed to confirm the transferability of this study's findings. The researcher also believes that some of the findings may transfer to other public “uniformed” institutions, and the model is applicable to both private and public institutions.

10.4 Implications for Theory

This study extends work within the field of Strategic Management on configurations of intellectual capital that enable contextual organizational ambidexterity. It's review of behavioral integration (Mehrabi, Coviello and Ranaweera, 2021; Oehmichen et al., 2017; Carmeli and Halevi, 2009; Lubatkin et al., 2006) within social capital confirms prior works and adds insight to how top management teams achieve it effectively. With this study's focus on top management teams, it also extends the work done on how organizational ambidexterity is managed within organizations (Martin, Keller and Fortwengel, 2019; Mom et al., 2019; Simsek, 2009; Hambrick, 2007; Hambrick, Cho and Chen, 1996) by providing insight into how they address the challenges of balancing exploration and exploitation. This study collaborates several studies (Youndt and Snell, 2020; Kang and Snell, 2009; Kang, Morris and Snell, 2007;

Youndt, Subramaniam and Snell, 2004) that have identified that organizations do not consider their intellectual capital profiles when configuring or adjusting their organizations.

This study has taken the next step in developing intellectual capital models that can further knowledge on how to harmonize intellectual capital for effective organizational ambidexterity. Kang and Snell's 2009 framework was novel at the time and provided a solid foundation for several studies to examine both intellectual capital and organizational ambidexterity. Those reviews identified gaps that this study has begun to fill. By providing a model that facilitates consideration of the use of all components, future studies will be able to examine in greater depth how organizations utilize their various forms of capital to succeed or fail.

For several prior studies that reported conflicting results, this model enables them to return to the data and address unanswered questions. Kang and Snell (2009) believed that mechanical organizational capital would hinder exploration and support exploitation. In a 2011 study of law firms, the data they collected led them to question that belief and ponder whether a mechanical organizational capital archetype could also support exploration. The Harmonized Spectrum Model suggests that their study groups were not "Mechanical" but rather closer to the "Adaptive" marker. The same may be true for Gilson et.al (2005), Subramaniam and Youndt (2005), and Jansen et al., (2006) who observed that "Cooperative" groups, which were believed to focus on exploitation, could also support exploration. If their study groups were closer to the middle point, the "Fusion" setting where Combatant Commands sit, then Kang and Snell's original belief, and other studies' findings, might still hold true.

Additionally, this model, by expanding archetypes to graduated spectrums, provides the ability to tune human, social, and organizational capital in ways that gain and maintain environmental fit (Koryak et al., 2018; Luger, Raisch and Schimmer, 2018; Simsek, 2009; Hambrick, Cho and Chen, 1996).

By examining an organization that displays both structural and contextual organizational ambidexterity, this study agrees with other studies that have found that TMTs must display contextual organizational ambidexterity to reconcile the structural elements below them, and guide the contextual work done around them (Birkinshaw

and Gupta, 2013; Bledow, Frese and Mueller, 2011; Raisch et al., 2009; Birkinshaw and Gibson, 2004; O'Reilly III and Tushman, 2004).

10.5. Future Research / Recommendations for Theory

This study heeded the call to explore the impact of intellectual capital configurations on organizational ambidexterity. In doing so, it focused on one level of U.S. Combatant Command top management teams. Future researchers should extend this research by looking at the layers above (Three- and Four-Star Generals and Admirals) and below (mid-level managers). It should also examine in greater depth the impact of Government Service (GS) civilian employees and other employees who work in and around the military top management team.

Multiple interviewees and relevant literature questioned the concept of “jointness” – whether it had gone too far, whether it had gone far enough, if it had enabled groupthink, and how it impacted the ability to innovate. Since jointness and behavioral integration are nearly synonymous, further research into military jointness could increase our understanding of behavioral integration, behavioral complexity, and internal conflict as a microfoundation of organizational ambidexterity.

This study explored intellectual capital and organizational ambidexterity in a new context. Previous work had been done in the private sector within knowledge-worker-intensive industries. Future work comparing the U.S. military to those of other nations could uncover factors not considered in this research. Similarly, research into other public institutions (e.g., Law Enforcement Agencies) could add significantly to this body of work.

Currently, this study envisions that examinations of organizations using the Harmonized Spectrums Model will be conducted qualitatively. Developing quantitative tools to chart organizations across the four lenses (three components and the overall picture) would significantly enhance the utility of this model.

Lastly, because this study focused on a better understanding of intellectual capital configurations and organizational ambidexterity, it did not delve deeply into how to leverage various factors to tune the intellectual capital components. This study calls

for deeper research into how to align an organization to the intellectual capital profile it desires.

10.6. Implications for Practitioners.

This study can help practitioners understand the need for a holistic assessment of their intellectual capital profile and for developing a plan to adjust it if necessary. By envisioning the components as spectra rather than archetypes, practitioners can plot their current status, use it to discuss what is aiding or hindering their ability to be organizationally ambidextrous, and then evaluate which management practices will help them tune the intellectual capital components to align with their environment. Top management teams could also use it to discuss their future intellectual capital profiles as organizational changes (e.g., restructuring) are projected.

This Harmonized Spectrum Model can serve as a means to facilitate explicit conversations about the tacit aspects of organizations. During interviews, the idea of a spectrum between the two archetypes prompted multiple conversations that helped both the interviewer and the interviewee better understand the phenomenon under discussion. The study's author concludes that a fully developed model, which was not created until after the interviews, would have elicited even deeper conversations and revealed greater nuance. management practitioners, Chiefs of Staff, and others could use this model to see themselves more clearly and chart a path toward more effective organizational ambidexterity.

Additionally, this study may encourage practitioners to devote greater effort to matching employees to billets by capitalizing on their individual tendencies. Placing employees who think more as generalists into specialist roles wastes their potential and leaves open the opportunities for error (e.g., not understanding the nuances of the role), while placing specialists in generalist roles potentially paves the way for tactical solutions that don't solve the strategic problems the organization faces, or for missed opportunities when that employee focuses on what they know and misses things in areas that are not their forte.

You need some generalists, and you need some specific knowledge players. You need people who know how many bottles of water a person needs to drink at this temperature degree, in this climate. We need those kinds of people. But what we

really were not seeing in there was the people that could look...and say “Here's the power players, here's the resources available, here's the problem set we need to solve. How do we connect those together without us trying to do it.”
(Navy 5)

10.7 Recommendations for Practitioners

Practitioners seeking to apply the findings of this study should focus on two key areas. First, they can use the spectrums aspect of the model to map their intellectual capital and how it currently supports organizational ambidexterity. Uncovering the factors that push organizations toward exploitation or exploration within each intellectual capital component enables a deeper understanding of the organization and yields valuable insights. Bringing the three lenses together to view an overall intellectual capital profile will facilitate explicit discussions of how these factors interact and how they contribute to the current profile.

Second, practitioners can consider the instruments available to tune each component and their potential impact by comparing their organization with the military headquarters examined in this study. They will not be identical, but the process of reviewing what is achievable and what isn't within an organization's context can help chart a path toward an intellectual capital and organizational ambidexterity configuration that is aligned with its environment.

10.8. Conclusion

Youndt et al. cautioned that while it is unavoidable during research to focus on subcategories of intellectual capital, doing so risks losing sight of the whole intellectual capital picture (2004, p.336). This study heeded that warning while also answering the call by many (Christofi, Vrontis and Cadogan, 2021; Dean, 2021; Mayberry et al., 2021; Pertusa-Ortega et al., 2021; Jackson et al., 2020; Youndt and Snell, 2020; Fourné et al., 2019; Luger, Raisch and Schimmer, 2018; Turner, Maylor and Swart, 2015; Kang and Snell, 2009; Gupta, Smith and Shalley, 2006; Birkinshaw and Gibson, 2004; Youndt, Subramaniam and Snell, 2004) to further our understanding of intellectual capital theory's contributions to organizational ambidexterity theory. It has explored a fresh context and provided a new model to further our understanding of how organizations

deal with the exploration vs. exploitation challenges identified by James March in 1991 but examined by the U.S. Congress (Subcommittee on National Security and International Operations of the Committee on Government Operations, United States Senate (90th Congress, 2nd Session), 1968) as early as 1968. By reinvigorating work conducted by Kang and Snell over 15 years ago, this study takes the next step in providing the field of Strategic Management and with tools to better understand, visualize, and explain how intellectual capital influences an organization's ambidexterity. It calls on both fields to continue this academic journey in the never-ending quest to deepen our understanding of the management discipline.

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Appendix A – Interview Questions

Interview Questions

Bold = Top level Questions. These were asked.

Regular = Follow up questions. These might have been asked based off timing, previous answers, etcetera.

General

1. **What Joint HQs have you been a part of?**
 - a. **When? Billet? Initial thoughts?**
2. **What service HQs have you been a part of? (Higher Headquarters, not lower level)**
 - a. **When? Billet? Initial thoughts?**
3. Do you consider yourself a specialist or generalist? Why?
4. How would you define a specialist? A generalist?

Decision Making

5. Are you a more analytical or intuitive decision maker?
6. Of the decision-making models you know/learned, which one do you think best describes the Service HQ and the CCMD HQ you served on?
** This question was removed from 'Top 12' list after six interviews. Interviewees struggled to remember models and no data relevant to this study was provided in the first six interviews. The question did lead to challenges with future questions as the interviewees were then confused where the questioning was going. After its removal, interviews were smoother, and produced more useful data.*

Service Culture – Social Context

7. **How would you describe the cultures of senior officers in the USN, USAF, USA, USMC? Particularly at the CCMD HQ level (Col – 2 Star)**
8. What do you think are the key attributes that each services culture inculcates in its SENIOR officer corps?
9. Do you think National Security Professionals are a different breed? If so, how?
10. **Do you think the services send GOs to CCMDs with the right mix of skills?**
 - a. Are some more specialist-oriented? Who and Why?
 - b. Are some more generalist-oriented? Who and Why?
11. **How well do you think the services blend on CCMD staffs? [Social Context / Org Structure]**
12. What are the strengths and weaknesses of the blends you've seen?
13. **What are some key differences you have seen between your Service HQ experience and your Joint CCMD HQ experience?**
14. How well do you think we structure CCMDs with the various service officers that are brought in? (Right services to right billets? Why or why not?) [Org Structure]

Org Structure

15. What do you think about how we staff senior officers (branch chiefs, DJDirs, J-Dirs, etc.)?
16. What have you wanted to change about how we organize CCMDs?
** Question added after 5 U.S. Interviews to elicit more data on organizational structure.*
17. **Do you think CCMD Hqs are more organic in their structure or more Mechanistic? What about your Service's HQ? Strengths and weaknesses of CCMD / Service HQ structure? [exploring Kang & Snell Architecture Model]**
18. Do you think there was a good blend of specialists and/or generalists on those staffs to both explore new ideas and exploit current opportunities & processes? Why? Seized opportunities vs missed opportunities? [exploring Kang & Snell Architecture Model]
19. **How cooperative (social clanish) vs entrepreneurial (explorers, mavericks, etc) were the officers on the Service HQ and CCMD HQ you served on? Was that good or bad? Why? [exploring Kang & Snell Architecture Model]**

Org Learning & PME

20. **How well do you think the staffs you were on adapted and learned? Does the blend of officers you've seen help or hinder adaptation and learning? How and why? [Org Learning]**
**Moved from Service Culture Section after 5 U.S. interviews for a better flow of discussion.*
21. What are your opinions on how we execute PME & JPME w/in your service and the others?
22. Comparing and Contrasting your Service HQ with the CCMD HQ you served on, were people rewarded more for:
 - a. Error avoidance or embracing errors? [exploring Kang & Snell HRM Model]
 - b. Cooperating (go along to get along) or creative destruction (changing things to improve them)? [exploring Kang & Snell HRM Model]
 - c. Being good at their specific job or networking and making connections? [exploring Kang & Snell HRM Model]
 - d. Exploiting vs Exploring?
 - e. Being ambidextrous (both exploiting and exploring)?
23. How well did both HQ deal with utilizing the strengths of individuals, teams and the whole organization? [exploring 4I model – how things flowed]
24. **How well did either HQ assimilate new ideas from individuals into teams/groups and into the organization? [exploring 4I feed forward]**
 - f. What were the reasons it did well/poorly? [exploring interpreting/integrating from 4I model]
 - g. Did some service officers do better than others? [exploring ability to interpret from 4I model]
25. How well did both HQ do assimilating new officers into the CCMD structure, culture, and processes? [exploring 4I feedback]
** Melded w/ Previous Question after 5 interviews. **

26. Do you think the CCMD HQ did a good job developing shared understanding among individuals and teams? Why or why not?
- h. What were the obstacles? [Exploring Integration from 4I model]

Wrap Up

- 27. Any last thoughts on Generalists vs Specialists or Combatant Commands?**
- 28. Thoughts on the researcher's hypothesis on Services?**
- 29. Is there anything I missed?

Appendix B – Analysis Codes & Themes

Codes used in NVivo 14/15

- Adaptation
- Air Force – specific
- Army – specific
- Billet Selection [Added during coding]
- Blend & Integrate [Added during coding]
 - * This code was very similar to “Jointness” below, but was added as the researcher became interested in the idea of “Jointness” versus the ability of service members to actually integrate.
- Combatant Command Problems – Overview [Added during coding]
- Culture – Service
 - o Air Force
 - o Army
 - o Marine Corps
 - o Navy
- Decision Making
- Design – Criteria for Assignment
- Design – How people are chosen
- Design – Structure
 - o Cooperative & Entrepreneurial
 - o Cross-Functional Teams [Added during coding]
 - o Organic & Rigid
- Experts (Specialists) – Fail to transition to Generalist as become a GeneralAdmiral [Added during coding]
- Generalist-Specialist Mix
- Generals / Admirals – Generalists
- Jointness
- Learning – Assimilation of new ideas
- Marine Corps – Specific
- Navy – Specific
- Professional Military Education (PME)
- Span of Control [Added during coding]
- Specialists – by rank [Added during coding]
- Transition – Fail (Service to National Security Professional or Joint) [Added during coding]
- Transition – Success [Added during coding]

Appendix C – Ethics Documentation

<u>Participant Information Sheet</u> <u>[Specialists vs Generalist in Military Organizations Study]</u>
1) Background The School of Business and Society, specifically PhD researcher Stephen K. Van Riper at the University of York would like to invite you to take part in the following research project. Before agreeing to take part, please read this information sheet carefully and let us know if anything is unclear or you would like further information. Our contact details are: [Stephen K. Van Riper, 44 North Parade, York YO307AB. Email: skvr500@york.ac.uk. Phone: +447377222887.
2) What is the purpose of the study? The study is designed to improve frameworks that aid organizations in seeing and adjusting their mix of specialists and generalists. Since how organizations, in this case U.S. Military Joint/Combined Headquarters, organize matters a great deal toward how effective the organization can be, this study is aimed at helping those headquarters find the right balance of generalists and specialists (i.e., subject matter experts or SMEs). You are being invited to be interviewed by the researcher about your time on two types of headquarters staffs: U.S. military service specific staffs (homogenous) and joint/combined staffs (a mix of multiple U.S. military services and their corresponding cultures). The information you provide will allow comparison of the two types of headquarters and improvement of several organizational design and learning frameworks. Because some of the information you may provide could be sensitive (e.g., make a political leader potentially look ineffective), all relevant information will be anonymized and you will have the opportunity to: 1) not answer questions posed, 2) review transcripts to ensure sensitive material is expunged, and 3) withdraw your participation anytime before January 2025. If you require support during or after the interview, due to any emotional distress, the researcher can direct you to multiple Dept of Defense support organizations.
3) Why have I been invited to take part? You have been invited to take part because you are 18 years or older and have served in organizations that are relevant to this study.
4) Do I have to take part? No, participation is optional. If you do decide to take part, you will be given a copy of this information sheet for your records. You will be asked to complete a participant consent form to show that you understand what taking part involves. You can change your mind about taking part at any time during the interview without giving a reason and can withdraw from the study completely up to 1 January 2025. Beyond this point, your data will have been included in the study and it will not be possible to remove it.
5) Will you share my data with anyone else? Potentially. If the Department of Defense, or one of the U.S. Military Services requests information in support of improving Joint Headquarters, then the researcher may share anonymized data. At no point will any data be provided that can identify you in any way.

6) How long will you keep my data?

I will keep the recording and notes of your interview until you have validated the produced transcript. At that time recordings and notes will be destroyed.

I will keep anonymized transcripts (includes no identifying information) for 10 years. At that point I will destroy all data.

7) Will I be identified in any research outputs?

You will not be identified in analysed data or in research outputs. All identifying information will be coded during transcription. You, anyone you mention, events, dates, and locations will all be coded to prevent identification of any individual in transcripts and research outputs.

8) Questions or concerns

This research has been ethically reviewed and approved by the University of York Economics, Law, Management, Politics, and Sociology (ELMPS) Ethics Committee. If you have any questions about this participant information sheet or concerns about how your data is being processed, please contact Leo McCann (leo.mccann@york.ac.uk) in the first instance. If you are still dissatisfied, please contact the ELMPS Ethics Committee at elmps-ethics-group@york.ac.uk or the University's Data Protection Officer at dataprotection@york.ac.uk.

Please read the separate Privacy Notice sheet which explains how personal data will be used within a research project at the University of York

Privacy Notice.

This sheet explains how personal data will be used within a research project at the University of York. For details specific to the project, please see the participant information sheet given to you by the project team. For this project, the University of York is the [Data Controller](#). We are registered with the Information Commissioner's Office. [Our registration number](#) is Z4855807.

What information do we have and where do we get your data from?

Please look at the participant information sheet given to you by the person telling you about this project. If you have any questions, you can ask them to explain.

What is our legal basis for processing your data?

Privacy law (the UK General Data Protection Regulation (GDPR) and Data Protection Act 2018) requires us to have a legal reason to process your personal data. Our reason is we need it to perform a public task¹. This is because the University has a [public function](#), which includes carrying out research projects². We need to use personal data in order to carry out this research project.

Information about your health, ethnicity, sexual identity and other sensitive information is called [“special category” data](#). We have to have an additional legal reason to use this data, because it is sensitive. Our reason is that it is needed for research purposes³. All research projects at the University follow our [research ethics policies](#).

How do we use your data?

Please look at the participant information sheet given to you by the person telling you about this project. If you have any questions, you can ask them to explain.

Who do we share your data with?

The participant information sheet tells you any people and organisations your data will be shared with. As well as this, we use computer software or systems to hold and manage data. Other companies only provide the software, system or storage. They are not allowed to use your data for their own reasons. We have agreements in place when we share data. These agreements meet legal requirements to ensure your data is protected.

How do we keep your data secure?

¹This refers to [UK GDPR Article 6 \(1\) \(e\)](#): processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller

² [Our charter and statutes](#) states: 4.f. To provide instruction in such branches of learning as the University may think fit and to make provision for research and for the advancement and dissemination of knowledge in such manner as the University may determine.

³ This refers to [UK GDPR Article 9 \(2\) \(j\)](#): processing is necessary for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes in accordance with Article 89(1) based on Union or Member State law which shall be proportionate to the aim pursued, respect the essence of the right to data protection and provide for suitable and specific measures to safeguard the fundamental rights and the interests of the data subject.

THE UNIVERSITY *of York*

The University is serious about keeping your data secure and protecting your rights to privacy. We don't ask you for data we don't need, and only give access to people who need to know. We think about security when planning projects, to make sure they work well. Our IT security team checks regularly to make sure we're taking the right steps. For more details see [our security webpages](#).

How do we transfer your data safely internationally?

If your data is stored or processed outside the UK, we follow legal requirements to make sure that the same level of privacy rules still apply.

How long will we keep your data?

The University has rules in place for [how long research data can be kept](#) when the research project is finished. Please see the participant information sheet given to you by the person telling you about this project for more information.

What rights do you have in relation to your data?

[You have rights over your data](#). The participant information sheet explains how you can stop participating in the study, and what will happen to your data if you do. If you want to get a copy of your data, or talk to us about any other rights, please contact us using the details below.

Questions or concerns

If you have any questions or concerns about how your data is being processed, please use the contact details provided to you by the person telling you about this project. If you have further questions, the University's Data Protection Officer can be contacted at dataprotection@york.ac.uk or by writing to: **Data Protection Officer, University of York, Heslington, York, YO10 5DD.**

Right to complain

If you are unhappy with how the University has handled your personal data, please contact our Data Protection Officer using the details above, so that we can try to put things right. If you are unhappy with our response, you have a right to [complain to the Information Commissioner's Office](#). You can also contact the Information Commissioner's Office by post to **Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF** or by phone on **0303 123 1113**.

CONSENT FORM – Specialists vs Generalists in Military Orgs Study

Researcher: Stephen K. Van Riper

1. This form is for you to state whether or not you agree to take part in the study. Please read and answer every question. If there is anything you do not understand, or if you want more information, please ask the researcher.

Have you read and understood the information sheet about the study? Yes ☐ No ☐

Have you had an opportunity to ask questions about the study? Yes ☐ No ☐

Do you understand that the information you provide will be held in confidence by the researcher? Yes ☐ No ☐

Do you understand that you will be provided anonymity?
Identifying information will not be included in transcripts and recordings will be deleted upon validation of transcript. Yes ☐ No ☐

Do you understand that you may withdraw from the study any time before January of 2025 for any reason? Yes ☐ No ☐

Do you understand that the information you provide may be used in future research? Yes ☐ No ☐

Do you agree to take part in the study? Yes ☐ No ☐

If yes, do you agree to your interviews being recorded? Yes ☐ No ☐
(You may take part in the study without agreeing to this).

All data is held by the University of York in accordance with the Data Protection Act.

Your name (in BLOCK letters): _____

Your signature: _____

Interviewer's name: _____

Date: _____